

**APPENDIX C - NATIONAL AND INTERNATIONAL HEALTH CARE  
EXPENDITURES AND HEALTH INSURANCE COVERAGE****CONTENTS**

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**NATIONAL HEALTH EXPENDITURES**

In 1965, the year prior to the beginning of the Medicare and Medicaid Programs, national health expenditures were \$41.0 billion. After adjusting for inflation, this spending figure represented \$188.7 billion, or \$944 per capita in constant 2001 dollars. Health care expenditures increased substantially over the next 36 years. In 2001, the most recent year for which data are available, the Nation's health care bill was \$1,424.5 billion, or \$5,034 per capita (Tables C-1, C-2, and C-3).

The average annual rate of increase in real (i.e., adjusted for inflation) per capita expenditures was 5.8 percent from 1985 to 1990. The rate decelerated to 3.5 percent for the period from 1990 to 1995, and decelerated further to 3.1 percent from 1995 to 2000. It has been argued that this relatively low rate of growth in health expenditures during the 1990s was due to the influence of managed care. However, in recent years, expenditures have grown at rates higher than the average rates experienced during the 1990s. Real per capita health expenditures grew 5.1 percent in 2001. Real per capita health spending is projected to grow at an average annual rate of 4.7 percent between 2001 and 2005, then decelerate to an average rate of 3.6 percent between 2005 and 2010 (Table C-3).

TABLE C-1--NATIONAL HEALTH EXPENDITURES, AGGREGATE AMOUNTS FOR  
SELECTED CALENDAR YEARS 1965-2010

Spending category	Amount in Billions of Dollars										
	1965	1970	1975	1980	1985	1990	1995	2000	2001	2005	2010
Health services and supplies	37.4	67.3	121.0	233.5	409.1	669.6	957.6	1,262.3	1,372.6	1,841.3	2,609.3
Personal health care	34.7	63.2	113.0	214.6	372.3	609.4	865.7	1,137.6	1,236.4	1,638.4	2,315.1
Hospital care	13.8	27.6	51.9	101.5	166.6	253.9	343.6	416.5	451.2	576.2	770.9
Physician and clinical services	8.3	14.0	24.8	47.1	89.8	157.5	220.5	288.8	313.6	407.0	571.1
Dental services	2.8	4.7	8.0	13.3	21.7	31.5	44.5	60.7	65.6	82.8	107.8
Other professional services	0.5	0.7	1.4	3.6	8.5	18.2	28.5	38.8	42.3	55.5	79.8
Home health care	0.1	0.2	0.6	2.4	5.6	12.6	30.5	31.7	33.2	43.7	60.4
Nursing home care	1.5	4.2	8.7	17.7	30.7	52.7	74.6	93.8	98.9	119.8	159.1
Prescription drugs	3.7	5.5	8.1	12.0	21.8	40.3	60.8	121.5	140.6	228.6	373.3
Non-durable medical products (excluding prescription drugs)	2.2	3.3	4.9	9.8	16.0	22.5	25.6	31.2	31.8	37.6	47.6
Durable medical equipment	1.0	1.6	2.6	3.9	6.5	10.6	14.2	17.8	18.4	23.0	31.2
Other personal health care	0.8	1.3	2.0	3.3	5.3	9.6	22.9	36.7	40.9	64.2	114.0
Government administration and net cost of private health insurance	2.0	2.8	5.1	12.1	25.2	40.0	60.4	80.7	89.7	138.2	197.3
Government public health activities	0.6	1.4	2.9	6.7	11.6	20.2	31.4	44.1	46.4	64.6	96.9
Research	1.5	2.0	3.3	5.5	8.3	12.7	17.1	29.1	32.8	42.2	61.9
Construction	2.1	3.8	5.6	6.8	9.4	13.7	15.5	18.6	19.2	23.8	31.1
<b>Total</b>	<b>41.0</b>	<b>73.1</b>	<b>129.8</b>	<b>245.8</b>	<b>426.8</b>	<b>696.0</b>	<b>990.1</b>	<b>1,310.0</b>	<b>1,424.5</b>	<b>1,907.3</b>	<b>2,702.2</b>
	Percent of Total National Health Expenditures										
	1965	1970	1975	1980	1985	1990	1995	2000	2001	2005	2010
Health services and supplies	91.1	92.2	93.2	95.0	95.8	96.2	96.7	96.4	96.4	96.5	96.6
Personal health care	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Hospital care	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Physician and clinical services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Dental services	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other professional services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Home health care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nursing home care	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Prescription drugs	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Non-durable medical products (excluding prescription drugs)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Durable medical equipment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other personal health care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Government administration and net cost of private health insurance	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Government public health activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Centers for Medicare and Medicaid Services, Office of the Actuary. Percentages calculated by Congressional Research Service.

TABLE C-2--NATIONAL HEALTH EXPENDITURES IN CONSTANT 2001 DOLLARS,  
SELECTED CALENDAR YEARS 1965-2010

Spending category	[In Billions of dollars]										
	1965	1970	1975	1980	1985	1990	1995	2000	2001	2005	2010
Health services and supplies	171.9	253.5	330.6	447.9	607.4	846.9	1,068.0	1,292.2	1,372.6	1,708.8	2,121.1
Personal health care	159.8	237.9	308.8	411.7	552.9	770.8	965.6	1,164.5	1,236.4	1,520.5	1,882.0
Hospital care	63.6	104.0	141.9	194.8	247.3	321.2	383.2	426.4	451.2	534.7	626.6
Physician and clinical services	38.3	52.6	67.8	90.3	133.4	199.3	246.0	295.7	313.6	377.7	464.2
Dental services	12.9	17.6	21.7	25.6	32.1	39.8	49.6	62.2	65.6	76.8	87.7
Other professional services	2.5	2.8	3.8	6.9	12.6	23.0	31.8	39.7	42.3	51.6	64.9
Home health care	0.4	0.8	1.7	4.6	8.4	15.9	34.1	32.5	33.2	40.6	49.1
Nursing home care	6.8	15.9	23.7	33.9	45.6	66.7	83.2	96.0	98.9	111.2	129.3
Prescription drugs	17.1	20.7	22.0	23.1	32.4	51.0	67.8	124.4	140.6	212.2	303.5
Non-durable medical products (excluding prescription drugs)	10.2	12.5	13.5	18.8	23.7	28.4	28.5	31.9	31.8	34.9	38.7
Durable medical equipment	4.6	6.2	7.2	7.4	9.6	13.4	15.8	18.2	18.4	21.4	25.3
Other personal health care	3.6	4.8	5.4	6.3	7.8	12.2	25.6	37.5	40.9	59.6	92.7
Government administration and net cost of private health insurance	9.2	10.4	13.8	23.3	37.4	50.6	67.4	82.6	89.7	128.3	160.4
Government public health activities	2.9	5.1	8.0	12.9	17.2	25.6	35.1	45.1	46.4	60.0	78.7
Research	7.0	7.4	9.1	10.5	12.3	16.0	19.1	29.8	32.8	39.1	50.3
Construction	9.8	14.2	15.2	13.1	14.0	17.4	17.3	19.0	19.2	22.1	25.3
<b>Total</b>	<b>188.7</b>	<b>275.1</b>	<b>354.9</b>	<b>471.4</b>	<b>633.8</b>	<b>880.3</b>	<b>1,104.4</b>	<b>1,341.0</b>	<b>1,424.5</b>	<b>1,770.1</b>	<b>2,196.7</b>

Note- Constant dollar amounts were calculated using the gross domestic product (GDP) implicit price deflator.

Source: Congressional Research Service based on data from the Centers for Medicare and Medicaid Services, Office of the Actuary.

TABLE C-3--NATIONAL HEALTH EXPENDITURES: PER CAPITA AMOUNTS IN CONSTANT 2001 DOLLARS AND AVERAGE ANNUAL PERCENTAGE INCREASES, SELECTED CALENDAR YEARS 1965-2010

Spending category	Dollar amount per capita, in constant 2001 dollars										
	1965	1970	1975	1980	1985	1990	1995	2000	2001	2005	2010
Health services and supplies	860	1,207	1,503	1,947	2,510	3,334	3,985	4,615	4,850	5,846	6,975
Personal health care	799	1,133	1,404	1,790	2,285	3,035	3,603	4,159	4,369	5,202	6,189
Hospital care	318	495	645	847	1,022	1,264	1,430	1,523	1,594	1,829	2,061
Physician and clinical services	192	251	308	393	551	784	918	1,056	1,108	1,292	1,527
Dental services	64	84	99	111	133	157	185	222	232	263	288
Other professional services	12	13	17	30	52	90	119	142	150	176	213
Home health care	2	4	8	20	35	63	127	116	117	139	161
Nursing home care	34	76	108	147	188	262	310	343	350	380	425
Prescription drugs	85	99	100	100	134	201	253	444	497	726	998
Non-durable medical products (excluding prescription drugs)	51	60	61	82	98	112	106	114	112	119	127
Durable medical equipment	23	30	33	32	40	53	59	65	65	73	83
Other personal health care	18	23	25	27	32	48	95	134	144	204	305
Government administration and net cost of private health insurance	46	50	63	101	155	199	251	295	317	439	257
Government public health activities	14	24	37	56	71	101	131	161	164	205	259
Research	35	35	41	46	51	63	71	106	116	134	165
Construction	49	68	69	57	58	68	64	68	68	76	83
Total	944	1,310	1,613	2,050	2,619	3,466	4,121	4,789	5,034	6,056	7,224
	Average Annual Percentage Increase										
	1965- 1970	1970- 1975	1975- 1980	1980- 1985	1985- 1990	1990- 1995	1995- 2000	2000- 2001	2001- 2005	2005- 2010	
Health services and supplies	7.0	4.5	5.3	5.2	5.8	3.6	3.0	5.1	4.8	3.6	
Personal health care	7.2	4.4	5.0	5.0	5.8	3.5	2.9	5.1	4.5	3.5	
Hospital care	9.3	5.4	5.6	3.8	4.3	2.5	1.3	4.7	3.5	2.4	
Physician and clinical services	5.5	4.2	5.0	7.0	7.3	3.2	2.8	5.0	3.9	3.4	
Dental services	5.4	3.4	2.4	3.6	3.4	3.4	3.7	4.4	3.2	1.9	
Other professional services	1.7	5.2	11.8	11.6	11.7	5.6	3.6	5.4	4.2	3.9	
Home health care	14.0	14.4	20.7	11.8	12.6	15.2	-1.8	1.0	4.3	3.1	

TABLE C-3--NATIONAL HEALTH EXPENDITURES: PER CAPITA AMOUNTS IN CONSTANT 2001 DOLLARS  
AND AVERAGE ANNUAL PERCENTAGE INCREASES, SELECTED CALENDAR YEARS 1965-2010-  
continued

Spending category	Average Annual Percentage Increase											
	1965- 1970	1970- 1975	1975- 1980	1980- 1985	1985- 1990	1990- 1995	1995- 2000	2000- 2001	2001- 2005	2005- 2010	2001- 2005	2005- 2010
Nursing home care	17.4	7.3	6.5	5.0	6.9	3.4	2.0	1.9	2.1	2.3	2.1	2.3
Prescription drugs	2.9	0.3	0.1	5.9	8.5	4.7	11.9	11.8	10.0	6.6	10.0	6.6
Non-durable medical products (excluding prescription drugs)	3.2	0.6	5.9	3.7	2.7	-1.0	1.4	-1.6	1.5	1.3	1.5	1.3
Durable medical equipment	5.1	2.0	-0.3	4.2	5.9	2.3	1.9	0.1	3.0	2.6	3.0	2.6
Other personal health care	4.9	1.7	2.0	3.4	8.2	14.7	7.0	7.7	9.0	8.4	9.0	8.4
Government administration and net cost of private health insurance	1.5	4.8	10.0	8.8	5.2	4.8	3.2	7.5	8.5	3.7	8.5	3.7
Government public health activities	11.2	8.5	9.0	4.8	7.3	5.4	4.3	1.7	5.8	4.8	5.8	4.8
Research	0.0	3.3	2.0	2.3	4.4	2.5	8.4	9.0	3.7	4.3	3.7	4.3
Construction	6.7	0.4	-3.8	0.4	3.4	-1.2	1.0	-0.2	2.8	1.9	2.8	1.9
Total NHE	6.8	4.3	4.9	5.0	5.8	3.5	3.1	5.1	4.7	3.6	4.7	3.6

Note - Constant dollar amounts were calculated using the gross domestic product (GDP) implicit price deflator.

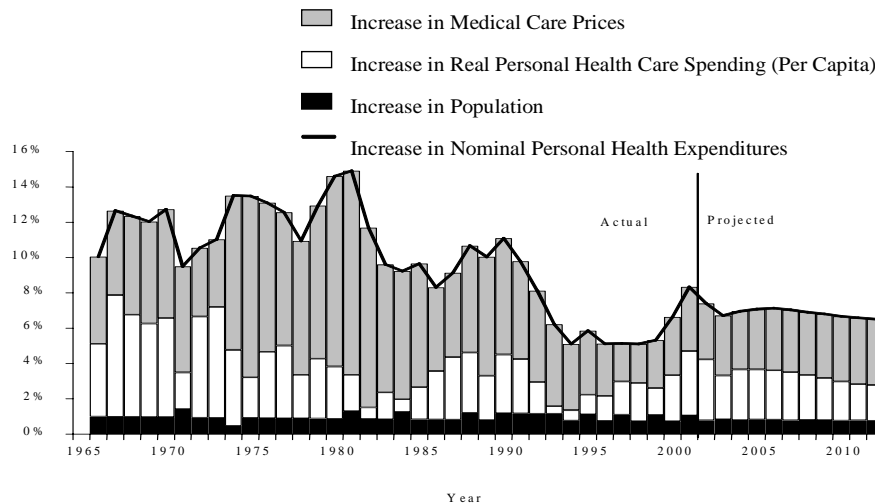
Source: Congressional Research Service based on data from the Centers for Medicare and Medicaid Services, Office of the Actuary.

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The majority of health spending is for personal health care services that treat or prevent illness and disease in individuals. In 2001, 86.8 percent of all health spending (\$1,236.4 billion) was for personal health care. The remaining 13.2 percent (\$188.1 billion) was spent on health program administration; administrative costs and profits earned by private health insurers; public health activities; noncommercial health research; and construction of health facilities (Table C-1).

A combination of factors can cause personal health care spending to increase: rising prices, population growth, increases in the quantity of medical services each person receives, advances in medical knowledge and technology, and other factors. Chart C-1 depicts the share of personal health care spending growth attributable to increases in medical care prices, increases in population, and increases in real per capita health expenditures (what some experts describe as the “intensity” of care). For much of the time period shown in Chart C-1, prices played a larger role in personal health spending increases than population or non-price factors (e.g., improved medical technology or higher utilization). During the late 1990s, medical care prices, constrained by managed care, grew at lower rates than in any other year shown. Price growth is projected to increase during the next decade, though not to the high levels experienced during the 1970s and 1980s.

CHART C-1--FACTORS INFLUENCING GROWTH IN NOMINAL PERSONAL HEALTH CARE EXPENDITURES, 1965-2012



Source: Congressional Research Service analysis of data from the Centers for Medicare and Medicaid Services, Office of the Actuary.

Hospital care and physician services are the two largest categories of personal health care spending. In 2001, they accounted for 31.7 percent (\$451.2 billion) and 22.0 percent (\$313.6 billion), respectively, of total national health expenditures (Table C-1). Another major service area, prescription drugs, grew from 5.8 percent of all national health expenditures in 1990 to 9.9 percent in 2001. In real per capita terms, spending on prescription drugs increased 11.8 percent over 2000 levels, making this category of personal health care the fastest growing. It is projected to remain the fastest growing category of personal health care in the near future (Table C-3).

Direct payments for personal health care come from five general sources: consumer payments out-of-pocket, payments by private insurance companies, Federal funds, State and local funds, and “other” private funds. Out-of-pocket payments include payments by those without health insurance. Out-of-pocket payments also include payments by the insured for deductibles, coinsurance, and costs not covered by insurance (excluding premiums). “Other” private funds consist mostly of philanthropic contributions to the health care system.

Ultimately, all health care spending is paid for by individuals through direct payments, cost-sharing, insurance premiums, taxes, and charitable contributions. However, most of these payments are redistributed; what a person pays does not necessarily reflect how much health care that person receives. One who pays relatively high taxes might not have any of their health care financed by the government. Similarly, there are some people who pay health insurance premiums, yet use less care than the sum of the premiums paid. Only when individuals pay directly for the cost of treatment (either because they are uninsured or because they have not met their deductible) do personal expenditures directly reflect the amount of care received.

Table C-4 shows the percent of personal health care spending attributable to each source. In 1965, 52.3 percent of all personal health care was financed out-of-pocket, whereas private insurance paid for 25.1 percent and the Federal government paid for 8.1 percent. In 2001, only 16.6 percent of personal health care was paid out-of-pocket while private insurance paid for 35.4 percent and the Federal government paid for 32.9 percent. Much of the increase in the Federal government’s share of health spending occurred during the 1960s, when the Medicare and Medicaid programs were introduced.

### **EXPENDITURES FOR HOSPITAL CARE**

Based on data from the Centers for Medicare and Medicaid Services (CMS), hospitals accounted for 31.7 percent of total national health expenditures in 2001, down from 41.3 percent in 1980. A different data source, the National Center for Health Statistics, provides expenses incurred by hospitals based on ownership structure (Table C-5). Total expenses for hospitals of all types reached \$395.4 billion in 2000, up 6.0 percent from the previous year. This increase is higher than in recent years; expenses for hospitals of all types increased 3.9 percent in 1998 and 4.9 percent in 1999. However, the growth in 2000 is still lower than the average growth that occurred during the late 1970s



TABLE C-4--PERSONAL HEALTH CARE EXPENDITURES, AGGREGATE AMOUNTS AND PERCENTAGE DISTRIBUTION, SELECTED CALENDAR YEARS 1965-2010

Source of funding	1965	1970	1975	1980	1985	1990	1995	2000	2001	2005	2010
	Amount in billions of dollars										
Private	27.7	40.9	68.0	128.0	225.6	371.5	478.4	648.1	699.4	935.7	1,308.5
Private health insurance	8.7	14.1	27.5	60.6	111.3	203.6	288.2	397.1	437.2	604.4	865.7
Out-of-pocket	18.2	25.1	37.4	58.2	95.5	137.3	146.2	194.7	205.5	262.4	352.7
Other private	0.8	1.8	3.1	9.2	18.8	30.6	44.1	56.3	56.7	68.9	90.1
Public	7.1	22.3	45.0	86.6	146.7	237.9	387.2	489.5	537.0	702.7	1,006.6
Federal	2.8	14.5	30.6	62.8	109.7	174.2	296.5	371.1	406.6	523.6	744.6
State and local	4.3	7.8	14.4	23.8	37.0	63.7	90.8	118.4	130.4	179.1	262.0
Total	34.7	63.2	113.0	214.6	372.3	609.4	865.7	1,137.6	1,236.4	1,638.4	2,315.1
	Percentage distribution										
Private	79.6	64.8	60.2	59.7	60.6	61.0	55.3	57.0	56.6	57.1	56.5
Private health insurance	25.1	22.3	24.4	28.3	29.9	33.4	33.3	34.9	35.4	36.9	37.4
Out-of-pocket	52.3	39.7	33.1	27.1	25.6	22.5	16.9	17.1	16.6	16.0	15.2
Other private	2.2	2.8	2.7	4.3	5.1	5.0	5.1	4.9	4.6	4.2	3.9
Public	20.4	35.2	39.8	40.3	39.4	39.0	44.7	43.0	43.4	42.9	43.5
Federal	8.1	22.9	27.1	29.3	29.5	28.6	34.2	32.6	32.9	32.0	32.2
State and local	12.3	12.3	12.7	11.1	10.0	10.5	10.5	10.4	10.6	10.9	11.3

Source: Centers for Medicare and Medicaid Services, Office of the Actuary. Percentages calculated by Congressional Research Service

TABLE C-5-- HOSPITAL EXPENSES BY TYPE OF OWNERSHIP, SELECTED CALENDAR YEARS  
1975-2000

Type of hospital	1975	1980	1985	1990	1995	1997	1998	1999	2000
All hospitals									
			Total expenses in billions of dollars						
Federal	48.7	91.9	153.3	234.9	320.3	342.3	355.5	372.9	395.4
Non-federal <sup>1</sup>	4.5	7.9	12.3	15.2	20.2	22.7	22.6	23.7	23.9
Community <sup>2</sup>	44.2	84.0	141.0	219.6	300.0	319.6	332.9	349.2	371.5
Non-profit	39.0	76.9	130.5	203.7	285.6	305.8	318.8	335.2	356.6
For profit	27.9	55.8	96.1	150.7	209.6	225.3	238.0	251.5	267.1
State-local government	2.6	5.8	11.5	18.8	26.7	31.2	31.7	31.2	35.0
	8.5	15.2	22.9	34.2	49.3	49.3	49.1	52.5	54.5
			Expenses per inpatient day						
Community <sup>2</sup>	151	245	460	687	968	1,033	1,067	1,103	1,149
Non-profit	150	246	463	692	994	1,074	1,111	1,140	1,182
For profit	146	257	500	752	947	962	968	999	1,057
State-local government	157	239	433	634	878	914	949	1,007	1,064
			Expenses per inpatient stay						
Community <sup>2</sup>	1,165	1,851	3,245	4,947	6,216	6,262	6,386	6,512	6,649
Non-profit	1,178	1,902	3,307	5,001	6,279	6,393	6,526	6,608	6,717
For profit	968	1,676	3,033	4,727	5,425	5,219	5,262	5,350	5,642
State-local government	1,197	1,750	3,106	4,838	6,445	6,475	6,612	6,923	7,106

<sup>1</sup>The category of non-Federal hospitals is comprised of psychiatric, tuberculosis and other respiratory disease hospitals, and long-term and short-term general and other special hospitals.

<sup>2</sup>Community hospitals are non-Federal short-term general and special hospitals whose facilities and services are available to the public. Excludes hospital units in institutions such as prison and college infirmaries, facilities for the mentally retarded, and alcoholism and chemical dependency hospitals. Special hospitals include obstetrics and gynecology; eye, ear, nose and throat; rehabilitation; and orthopedic.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. *Health, United States, 2002*.

TABLE C-6 -- NATIONAL EXPENDITURES ON HOSPITAL CARE BY SOURCE OF FUNDS,  
SELECTED CALENDAR YEARS 1965-2010

Source of funding	1965	1970	1975	1980	1985	1990	1995	2000	2001	2005	2010
	Amount in billions of dollars										
Out-of-pocket	2.7	2.5	4.3	5.3	8.8	11.2	10.5	13.1	13.8	17.4	22.6
Third-party	11.1	25.1	47.6	96.3	157.8	242.7	333.1	403.4	437.4	558.7	748.2
Private health insurance	5.7	9.0	17.1	36.1	58.6	97.1	111.1	139.3	152.1	202.7	273.5
Other private	0.3	0.9	1.4	5.0	8.2	10.4	14.6	22.0	22.1	28.3	37.5
Government	5.1	15.2	29.0	55.2	91.0	135.2	207.3	242.1	263.1	327.7	437.2
Federal	2.0	9.9	20.1	41.5	71.2	102.7	167.2	193.0	209.4	262.0	356.3
Medicare	0.0	5.4	11.5	26.4	48.9	67.8	108.0	125.9	135.0	165.6	231.3
Medicaid (incl. SCHIP expansion) <sup>1</sup>	0.0	1.4	2.8	5.7	8.5	16.4	35.9	41.3	45.0	60.1	78.9
Other federal	2.0	3.1	5.7	9.4	13.8	18.5	23.3	25.8	29.4	36.3	46.0
State and local	3.1	5.3	8.9	13.7	19.8	32.4	40.2	49.1	53.7	65.7	80.8
Medicaid (incl. SCHIP expansion) <sup>2</sup>	0.0	1.2	2.3	4.8	7.1	11.2	18.6	29.0	32.4	43.5	57.3
Other state and local	3.1	4.1	6.6	8.8	12.7	21.2	21.6	20.1	21.3	22.2	23.6
Total	13.8	27.6	51.9	101.5	166.6	253.9	343.6	416.5	451.2	576.2	770.9
	Percent of total hospital expenditures										
Out-of-pocket	19.8	9.1	8.4	5.2	5.3	4.4	3.0	3.2	3.1	3.0	2.9
Third-party	80.2	90.9	91.6	94.8	94.7	95.6	97.0	96.8	96.9	97.0	97.1
Private health insurance	41.2	32.6	33.0	35.6	35.2	38.3	32.3	33.4	33.7	35.2	35.5
Other private	1.9	3.3	2.8	4.9	4.9	4.1	4.3	5.3	4.9	4.9	4.9
Government	37.1	55.1	55.9	54.3	54.6	53.2	60.3	58.1	58.3	56.9	56.7
Federal	14.6	35.9	38.7	40.9	42.7	40.5	48.7	46.3	46.4	45.5	46.2
Medicare	0.0	19.4	22.2	26.0	29.3	26.7	31.4	30.2	29.9	28.7	30.0
Medicaid (incl. SCHIP expansion) <sup>1</sup>	0.0	5.2	5.5	5.7	5.1	6.4	10.5	9.9	10.0	10.4	10.2
Other federal	14.6	11.4	11.0	9.2	8.3	7.3	6.8	6.2	6.5	6.3	6.0
State and local	22.4	19.1	17.2	13.5	11.9	12.8	11.7	11.8	11.9	11.4	10.5
Medicaid (incl. SCHIP expansion) <sup>2</sup>	0.0	4.4	4.5	4.8	4.3	4.4	5.4	7.0	7.2	7.6	7.4
Other state and local	22.4	14.7	12.7	8.7	7.6	8.4	6.3	4.8	4.7	3.9	3.1

<sup>1</sup> Federal share only.

<sup>2</sup> State and local share only.

Source: Centers for Medicare and Medicaid Services, Office of the Actuary. Percentages calculated by Congressional Research Service

and the 1980s. From 1975 to 1980, hospital expenses grew at an average annual rate of 13.5 percent. From 1980 to 1985, hospital expenses grew at an average annual rate of 10.8 percent. From 1985 to 1990, hospital expenses grew at an average annual rate of 8.9 percent.

Based on data from CMS, expenditures for hospital care are financed primarily by third parties, as shown in Table C-6. In 2001, private health insurers paid 33.7 percent of total hospital expenditures. Medicare financed 29.9 percent of hospital spending in 2001, and Medicaid (including both the Federal and State shares) financed 17.2 percent of hospital spending. The share financed by out-of-pocket payments from individuals was only 3.1 percent in 2001, down from 19.8 percent in 1965.

## **TRENDS IN HOSPITAL UTILIZATION**

### **ADMISSIONS**

Hospital utilization in the United States has undergone major change in the past twenty years, greatly influenced by technology, health care policy, and population dynamics. During the 1970s, hospital admissions increased consistently and had reached highs of over 36 million in the early 1980s. With the introduction of Medicare's prospective payment system (PPS) in 1983, which encouraged more cost efficient treatment methods, admissions declined dramatically for several years, as shown in Table C-7. After 1987, total admissions continued to decrease, though more slowly, and reached a low of 30.7 million in 1994. Since 1994, hospital admissions again have increased each year, due in part to the growing health care needs of adults 65 and older. The largest increases, since 1999, also may be attributable to the weakening impact of managed care. Close to 34 million people were admitted to hospitals in 2001, a level roughly comparable to that of 1985.

Another significant trend that has developed since the implementation of Medicare's PPS has been the increasing provision of health care services in more cost-effective outpatient settings favored by insurers. This has been made possible by scientific and technological advances which allowed surgical procedures to be completed safely in a shorter amount of time. Total outpatient visits more than doubled from 212 million in 1984 to 538 million in 2001, steadily growing by an average of over 5 percent each year (Table C-7).

TABLE C-7—ANNUAL NUMBER AND CHANGE IN HOSPITAL ADMISSIONS, TOTAL OUTPATIENT VISITS, AND EMERGENCY DEPARTMENT VISITS, 1980-2001<sup>1</sup>

Year	Admissions	Percent Change	Total Outpatient Visits	Percent Change	Emergency Department Visits <sup>2</sup>	Percent Change
1980	36,143,445	—	202,309,969	—	77,245,450	—
1981	36,438,232	0.8	202,767,648	0.2	77,492,569	0.3
1982	36,379,446	-0.2	248,123,640	22.4	75,981,004	-2.0
1983	36,151,780	-0.6	210,044,017	-15.3	72,721,575	-4.3
1984	35,155,462	-2.8	211,961,312	0.9	72,980,188	0.4
1985	33,448,631	-5.9	218,716,402	3.2	74,546,904	2.1
1986	32,378,796	-3.2	231,911,949	6.0	76,601,412	2.8
1987	31,600,817	-2.4	245,523,911	5.9	78,287,282	2.2
1988	31,452,835	-0.5	269,129,322	10.2	81,259,787	3.8
1989	31,116,048	-1.1	285,711,585	6.5	84,305,300	3.7
1990	31,181,046	0.2	301,329,000	5.5	86,692,503	2.8
1991	31,064,283	-0.4	322,047,875	6.9	88,533,073	2.1
1992	31,033,557	-0.1	348,521,652	8.2	90,768,575	2.5
1993	30,748,051	-0.9	366,884,946	5.7	92,554,898	2.0
1994	30,718,136	-0.1	382,923,566	4.4	90,497,301	-2.2
1995	30,945,357	0.7	414,344,837	8.2	94,745,938	4.7
1996	31,098,959	0.5	439,863,107	6.2	93,111,952	-1.7
1997	31,576,960	1.5	450,140,010	2.3	92,819,892	-0.3
1998	31,811,673	0.7	474,193,468	5.3	94,771,405	2.1
1999	32,359,042	1.7	495,346,286	4.5	99,484,462	5.0
2000	33,089,467	2.3	521,404,976	5.3	103,144,030	3.7
2001	33,813,589	2.2	538,480,378	3.3	105,957,778	2.7

<sup>1</sup> Survey data for U.S. registered community hospitals (non-federal, short-term general and other special hospitals).

<sup>2</sup> Emergency department visits are included within the category “Total Outpatient Visits.”

<sup>3</sup> AHA categorizes a “visit” as an appearance by an outpatient to a unit of the hospital. Each test, examination, treatment or procedure rendered to an outpatient counts as one “occasion of service.” In 1982, “visits” and “occasions of service” were not reported separately and let to a higher than normal count. This was corrected for 1983.

Source: American Hospital Association. *Hospital Statistics*.

Hospital emergency department visits also continued to rise steadily from 1984 to 1993, though at a slower rate of 2 to 3 percent (Table C-7). The 1986 Emergency Medical Treatment and Labor Act (EMTALA), which required emergency departments to perform a screening examination and treat or stabilize patients for transfer to another facility, may have influenced growth during this time frame. This was followed by several years (1994, 1996, 1997) of decline in total visits, perhaps due to restrictions by insurers. The Balanced Budget Act of 1997, however, required the Medicaid and Medicare programs to reimburse hospitals for emergency care that a reasonable person would consider necessary and many States passed laws with similar “prudent layperson” standards. Since then, hospital emergency department visits have increased by 14 percent from 93 million in 1997 to 106 million 2001. This number is expected to grow as hospital emergency departments are increasingly used as a “safety net” by persons without health insurance.

C-14  
AVERAGE LENGTH OF STAY

Advances in medical technology and drug therapy contributed to a steady decrease in the average length of hospital stay from over 8 days in the late 1960s to 7.1 days in 1982. The implementation of the Medicare PPS system in 1983 caused the average stay to fall further to 6.5 days in 1985. The change was even greater for patients over 65, who saw a decline in length of stay from 10.1 in 1982 to 8.7 in 1985. In the latter part of the 1980s as outpatient visits increased, patients admitted to hospitals tended to be those with more severe illnesses which required longer hospital stays, and the average length of stay became more stable and even increased for those 65 or over. Beginning in the early 1990s, however, declines occurred which were even steeper than in the first years of PPS. The average length of stay in 2001 was at 4.9 for all ages, compared to 6.4 in 1990, a decrease of 23 percent. For persons over the age of 65, the average length of stay declined 33 percent from 8.7 days in 1990 to 5.8 days in 2001. Declines in the past ten years have been attributed to greater insurance coverage of post-acute care alternatives to hospitalization, an increase in managed care and other cost-containment programs, as well as continuing technological advances.

TABLE C-8--AVERAGE LENGTH OF STAY AND ANNUAL CHANGE  
BY AGE GROUP, 1980-2001

Year	All Ages		65 and Older	
	Average Length of Stay in Days	Percent Change	Average Length of Stay in Days	Percent Change
1980	7.3	—	10.7	—
1981	7.2	-1.4	10.5	-1.9
1982	7.1	-1.4	10.1	-3.8
1983	6.9	-2.8	9.7	-4.0
1984	6.6	-4.5	8.9	-8.2
1985	6.5	-1.5	8.7	-2.2
1986	6.4	-1.5	8.5	-2.3
1987	6.4	0.0	8.6	1.2
1988	6.5	1.6	8.9	3.5
1989	6.5	0.0	8.9	0.0
1990	6.4	-1.5	8.7	-2.2
1991	6.4	0.0	8.6	-1.1
1992	6.2	-3.1	8.2	-4.7
1993	6.0	-3.2	7.8	-4.9
1994	5.7	-5.0	7.4	-5.1
1995	5.4	-5.2	6.8	-8.1
1996	5.2	-3.7	6.5	-4.4
1997	5.1	-1.9	6.3	-3.1
1998	5.1	0.0	6.2	-1.6
1999	5.0	-2.0	6.1	-1.6
2000	4.9	-2.0	6.0	-1.6
2001	4.9	0.0	5.8	-3.3

Source: National Center for Health Statistics. National Hospital Discharge Survey of non-federal, short-stay hospitals.

C-15  
HOSPITAL OCCUPANCY

Table C-9 shows that community hospital occupancy rates were over 70 percent in the early 1980s. The number of hospital beds was increasing and exceeded 1 million by 1981. Following the introduction of PPS, however, occupancy rates decreased dramatically. From 1983 to 1986, the aggregate occupancy rate fell from 73.5 percent to 64.3 percent. There was a slight increase in occupancy rates in the late 1980s, but even though the number of hospital beds had been steadily declining, a reduction in the average length of stay lowered the occupancy rate below 63 percent by 1993. Since 1997, there have been slight increases each year in hospital occupancy rates and in 2001 the nationwide rate was at 64.5 percent. During this same period of time, the number of community hospitals steadily declined from 5,830 in 1980 to 4,908 in 2001. With fewer hospitals and beds, the increasing occupancy rate is causing a struggle for some hospitals to cope with growth in patient admissions.

TABLE C-9--NUMBER AND PERCENT CHANGE IN HOSPITALS,  
TOTAL BEDS, AND OCCUPANCY RATE, 1980 - 2001<sup>1</sup>

Year	Community Hospitals	Percent Change	Total Beds	Percent Change	Occupancy Rate	Percent Change
1980	5,830	—	988,387	—	75.6	—
1981	5,813	-0.3	1,003,435	1.5	76.0	0.5
1982	5,801	-0.2	1,012,191	0.9	75.3	-0.9
1983	5,783	-0.3	1,018,482	0.6	73.5	-2.4
1984	5,759	-0.4	1,017,057	-0.1	69.0	-6.1
1985	5,732	-0.5	1,000,678	-1.6	64.8	-6.1
1986	5,678	-0.9	978,375	-2.2	64.3	0.8
1987	5,611	-1.2	958,312	-2.1	64.9	0.9
1988	5,533	-1.4	946,697	-1.2	65.5	0.9
1989	5,455	-1.4	933,318	-1.4	66.2	1.1
1990	5,384	-1.3	927,360	-0.6	66.8	0.9
1991	5,342	-0.9	924,049	-0.4	66.1	-1.0
1992	5,292	-0.9	920,943	-0.3	65.6	-0.8
1993	5,261	-0.6	918,786	-0.2	62.9	-4.1
1994	5,229	-0.6	902,061	-1.8	62.8	-0.2
1995	5,194	-0.7	872,736	-3.3	62.8	0.0
1996	5,134	-1.2	862,352	-1.1	61.6	-1.9
1997	5,057	-1.5	853,287	-1.6	61.8	0.3
1998	5,015	-0.8	839,988	-1.2	62.5	1.1
1999	4,956	-1.2	829,575	-1.2	63.4	1.4
2000	4,915	-0.8	823,560	-0.7	63.9	0.8
2001	4,908	-0.1	825,966	0.3	64.5	0.9

<sup>1</sup> Survey data for U.S. registered community hospitals (non-federal, short-term general and other special hospitals, including separate hospital nursing home units).  
Source: American Hospital Association. *Hospital Statistics*.

C-16  
HOSPITAL EMPLOYMENT

Hospitals experienced a significant downturn in total employment levels at the time PPS was introduced, with the number of full-time equivalent hospital employees (FTEs) declining each year from 1983 to 1986 (Table C-10). Though variable, the number of FTEs increased by 2 to 3 percent through the late 1980s and early 1990s. After jumps of 4.2 percent in 1994 and 5.8 percent in 1995, the growth rate slowed. After reaching a low of 0.2 percent in 1999, it rose to 1.9 percent for both 2000 and 2001. In 2001, almost 4.0 million FTEs were employed in community hospitals. This slower rate of growth since 1996 is attributed to a response to managed care and steps taken by hospitals to assure greater efficiencies in the provision of care. There are concerns, however, that this decline in growth has occurred as the volume of admissions and outpatient visits have risen and the aging of our population puts increasing pressure on the health care delivery system. There are also questions about the quality of care that can continue to be provided by a registered nurse workforce which showed little sign of growth. RNs comprise 24 percent of the workforce in community hospitals, or 958,026 RNs in 2001. (Community hospitals employed 92 percent of the total 1,045,501 registered nurses in all hospitals throughout the United States.)

TABLE C-10--ANNUAL NUMBER AND PERCENT CHANGE IN  
HOSPITAL EMPLOYMENT, 1980 - 2001<sup>1</sup>

Year	Full-Time Equivalent Personnel			
	Total Personnel	Percent Change	Registered Nurses	Percent Change
1980	2,873,064	—	622,052	—
1981	3,033,272	5.6	629,463	1.2
1982	3,305,590	8.9	671,902	6.7
1983	3,095,638	-6.4	698,162	3.9
1984	3,016,850	-2.5	697,814	0.0
1985	2,997,095	-0.6	709,510	1.7
1986	3,024,853	-0.9	736,266	3.8
1987	3,113,607	2.9	758,973	3.1
1988	3,205,112	2.9	770,619	1.5
1989	3,303,286	3.1	791,537	2.7
1990	3,419,519	3.5	809,927	2.3
1991	3,535,294	3.4	840,509	3.8
1992	3,619,849	2.4	858,909	2.2
1993	3,677,000	1.6	868,452	1.1
1994	3,692,316	4.2	890,910	2.6
1995	3,713,887	5.8	893,735	0.3
1996	3,725,000	0.3	895,107	0.2
1997	3,789,752	1.7	901,198	0.6
1998	3,831,068	1.1	929,657	3.2
1999	3,837,964	0.2	938,051	0.9
2000	3,911,412	1.9	957,550	2.1
2001	3,987,274	1.9	958,026	0.1

<sup>1</sup>Survey data for U.S. registered community hospitals (non-federal, short-term general and other special hospitals, including separate hospital nursing home units).

Source: American Hospital Association. *Hospital Statistics*.



**EXPENDITURES FOR PHYSICIANS' SERVICES**

Health care expenditures for physician services were \$313.6 billion in 2001, an increase of 8.6 percent from 2000. This amounted to 22.0 percent of national health expenditures.

Third-party payments financed 88.8 percent of physician services in 2001. Private health insurance was the single largest payer, accounting for 48.1 percent of total spending on physician services. The share of physician services paid by private insurance increased from 35.3 percent in 1980 to 47.8 percent in 1993. After 1993, the share of physician services financed by private insurance remained relatively stable. From 1993 to 2001, private insurance financed between 47.2 percent and 48.6 percent of total physician expenditures. The stabilization in the share of physician services funded by private insurance is likely the result of the increased use of managed care during the 1990s.

Public expenditures on physician services have grown relatively slowly. In 1980, the public sector financed 30.5 percent of all physician payments; in 2001, the public sector financed 33.6 percent of all physician payments. Of the \$105.4 billion spent by the government on physician services in 2001, \$63.9 billion was for the Medicare program. Out-of-pocket payments by individuals for physician services have decreased from 30.2 percent in 1980 to 11.2 percent (\$35.0 billion) in 2001 (Table C-11).

As measured by Consumer Price Index (CPI), inflation in physicians' fees has outpaced that of the U.S. economy as a whole since 1980. The inflation rate of 2.8 percent for 2002, however, is the lowest since 1964 and the same rate of growth as 1999 (Table C-12). Also, the "excess" rate of increase in physician services prices above overall inflation since 1993 decreased to an average 1.2 percentage points per year, down from 2.9 percentage points for the years from 1981 to 1992.

Mean physician net income (after expenses but before taxes) rose from \$144,700 in 1988 to \$205,700 in 2000 (Table C-13). This increase represents an average annual growth rate of 3.0 percent. Average annual increases in physician net income between 1988 and 2000 varied by specialty, geographic area, and employment status. On average, physicians in the specialty of radiology experienced the highest average annual increase in net income between 1988 and 2000 (4.2 percent). Over that same time period, physicians practicing anesthesiology and obstetrics/gynecology experienced the lowest average annual increase in net income (1.9 percent). Physicians in the West North Central region experienced the highest average annual increase in net income between 1988 and 2000 (3.5 percent). (The West North Central region includes North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, and Missouri.) Physicians in the South Atlantic region experienced the lowest average annual increase in net income between 1988 and 2000 (2.2 percent). (The South Atlantic region includes Delaware, the District of Columbia, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida.)

Table C-14 shows the distribution of physicians' net incomes in 2000 by specialty and geographic region. While the average net income of all physicians was \$205,700, one-half of all physicians earned \$175,000 or less. One-fourth of all physicians earned \$123,000 or less, while one-fourth earned \$250,000 or more. Median incomes across all physician specialties remained far apart in 2000. The median income for physician's specializing in diagnostic radiology and cardiovascular diseases was \$300,000, while pediatricians reported median incomes of \$125,000.

On average, 40.8 percent of physician practice revenue is from some form of managed care contract (Table C-15). Of all specialties, obstetrics/gynecology and pediatrics receive the highest percent of revenues from managed care (56.4 percent and 54.9 percent, respectively). Psychiatry received the lowest percent of revenues from managed care, 28.6 percent. The share of practice revenue received from managed care was lowest in East South Central States. (The East South Central region includes Kentucky, Tennessee, Mississippi, and Alabama.) The share of practice revenue received from managed care was highest in New England States. (New England States include Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island.)

### **SUPPLY OF HOSPITAL BEDS**

The national supply of community hospital beds per 1,000 population steadily increased from the 1940s, reaching 4.5 beds per 1,000 population in 1980. By 2000, the number of beds dropped to 2.9 per 1,000 population. Among the 9 Census regions, the East South Central experienced the largest increase, from 1.7 per 1,000 population in 1940 to 5.1 in 1980. By 2000, this number had declined to 3.8, but was second in rank to West North Central which had 3.9 beds per 1,000. In contrast, the New England and Pacific regions never rose above their 1940 levels. The Middle Atlantic, East North Central, and Mountain Census regions experienced increases in the 1970s, but are now also below their 1940 levels. While all Census regions experienced a decrease in the number of hospital beds between 1990 and 2000, the New England (-3.0), Mountain (-2.9), and Pacific (-2.5) regions experienced the largest drops in average annual percent changes. The change in the Middle Atlantic region was the smallest at -1.9 percent (Table C-16).

TABLE C-11 -- EXPENDITURES FOR PHYSICIAN SERVICES BY SOURCE OF FUNDS,  
SELECTED CALENDAR YEARS 1965-2010

Source of funding	1965	1970	1975	1980	1985	1990	1995	2000	2001	2005	2010
	Amount in billions of dollars										
Out-of-pocket	4.9	6.5	9.0	14.2	24.5	30.4	26.3	33.4	35.0	43.7	55.3
Third-party	3.5	7.5	15.8	32.8	65.3	127.1	194.3	255.4	278.7	363.3	515.8
Private health insurance	2.8	4.2	7.9	16.6	33.6	67.7	107.1	137.5	150.9	205.1	291.5
Other private	0.1	0.2	0.5	1.8	5.8	11.3	17.6	21.5	22.3	26.3	34.0
Government	0.6	3.1	7.4	14.4	26.0	48.2	69.6	96.3	105.4	131.8	190.3
Federal	0.1	2.3	5.6	11.3	21.1	38.7	56.2	79.8	87.0	105.7	148.8
Medicare	0.0	1.6	3.4	8.2	16.8	30.2	41.7	59.6	63.9	72.7	100.3
Medicaid (incl. SCHIP expansion) <sup>1</sup>	0.0	0.3	1.0	1.4	2.0	4.1	8.7	11.4	12.7	19.0	30.8
Other federal	0.1	0.3	1.1	1.8	2.3	4.4	5.9	8.8	10.4	14.0	17.7
State and local	0.4	0.8	1.9	3.0	5.0	9.4	13.3	16.5	18.5	26.1	41.5
Medicaid (incl. SCHIP expansion) <sup>2</sup>	0.0	0.3	0.8	1.1	1.5	2.9	6.2	7.8	9.0	13.7	22.4
Other state and local	0.4	0.5	1.1	2.0	3.4	6.5	7.2	8.6	9.5	12.4	19.0
Total	8.3	14.0	24.8	47.1	89.8	157.5	220.5	288.8	313.6	407.0	571.1
	Percent of total physician expenditures										
Out-of-pocket	58.5	46.1	36.3	30.2	27.2	19.3	11.9	11.6	11.2	10.7	9.7
Third-party	41.5	53.9	63.7	69.8	72.8	80.7	88.1	88.4	88.8	89.3	90.3
Private health insurance	33.0	30.1	31.7	35.3	37.4	43.0	48.6	47.6	48.1	50.4	51.0
Other private	1.5	1.6	2.1	3.9	6.4	7.2	8.0	7.5	7.1	6.5	6.0
Government	6.9	22.2	30.0	30.5	29.0	30.6	31.5	33.3	33.6	32.4	33.3
Federal	1.6	16.2	22.4	24.1	23.4	24.6	25.5	27.6	27.7	26.0	26.1
Medicare	0.0	11.8	13.8	17.4	18.7	19.1	18.9	20.6	20.4	17.9	17.6
Medicaid (incl. SCHIP expansion) <sup>1</sup>	0.0	2.5	3.9	2.9	2.2	2.6	3.9	3.9	4.0	4.7	5.4
Other federal	1.6	1.9	4.6	3.7	2.5	2.8	2.7	3.1	3.3	3.5	3.1
State and local	5.3	6.0	7.6	6.5	5.5	6.0	6.0	5.7	5.9	6.4	7.3
Medicaid (incl. SCHIP expansion) <sup>2</sup>	0.0	2.1	3.3	2.3	1.7	1.8	2.8	2.7	2.9	3.4	3.9
Other state and local	5.3	3.9	4.3	4.2	3.8	4.1	3.3	3.0	3.0	3.0	3.3

<sup>1</sup> Federal share only.

<sup>2</sup> State and local share only.

Source: Centers for Medicare and Medicaid Services, Office of the Actuary. Percentages calculated by Congressional Research Service

## C-20

TABLE C-12 -- ANNUAL PERCENTAGE CHANGE IN SELECTED  
COMPONENTS OF THE CONSUMER PRICE INDEX FOR  
ALL URBAN CONSUMERS, 1960-2002

Year	All Items	All Items Less Medical Care	Medical Care Total	Physicians' Services
1960	1.7	1.3	3.7	2.8
1961	1.0	1.0	2.7	2.3
1962	1.0	1.0	2.6	3.1
1963	1.3	1.0	2.6	2.2
1964	1.3	1.3	2.1	2.5
1965	1.6	1.6	2.4	3.7
1966	2.9	3.1	4.4	5.6
1967	3.1	2.1	7.2	7.2
1968	4.2	4.2	6.0	5.6
1969	5.5	5.4	6.7	7.0
1970	5.7	5.9	6.6	7.5
1971	4.4	4.1	6.2	7.0
1972	3.2	3.2	3.3	3.0
1973	6.2	6.4	4.0	3.4
1974	11.0	11.2	9.3	9.2
1975	9.1	9.0	12.0	12.1
1976	5.8	5.3	9.5	11.2
1977	6.5	6.3	9.6	9.3
1978	7.6	7.6	8.4	8.4
1980	13.5	13.6	11.0	10.5
1981	10.3	10.4	10.7	11.0
1982	6.2	5.9	11.6	9.4
1983	3.2	2.9	8.8	7.8
1984	4.3	4.1	6.2	6.9
1985	3.6	3.4	6.3	5.9
1986	1.9	1.5	7.5	7.2
1987	3.6	3.5	6.6	7.3
1988	4.1	3.9	6.5	7.2
1989	4.8	4.6	7.7	7.4
1990	5.4	5.2	9.0	7.1
1991	4.2	3.9	8.7	6.0
1992	3.0	2.8	7.4	6.3
1993	3.0	2.7	5.9	5.6
1994	2.6	2.5	4.8	4.4
1995	2.8	2.7	4.5	4.5
1996	3.0	2.8	3.5	3.6
1997	2.3	2.3	2.8	3.0
1998	1.6	1.5	3.2	3.0
1999	2.2	2.1	3.5	2.8
2000	3.4	3.3	4.1	3.7
2001	2.8	2.7	4.6	3.6
2002	1.6	1.4	4.7	2.8

Source: U.S. Department of Labor, Bureau of Labor Statistics

TABLE C-13 – PHYSICIANS' AVERAGE NET INCOME<sup>1</sup> AFTER EXPENSES BUT BEFORE TAXES,  
SELECTED CALENDAR YEARS 1988-2000  
[Amounts in thousands of dollars]

Category	1988	1990	1992	1994	1996	1998	2000	Average Annual Percent Change 1998-2000
<b>Specialty:</b>								
General/family practice	94.6	102.7	114.4	121.4	139.1	142.5	144.7	0.8
Internal medicine	130.9	152.5	162.1	175.1	185.7	182.1	196.1	3.8
Surgery	207.5	236.4	250.5	255.3	275.2	268.2	274.7	1.2
Pediatrics	94.9	106.5	123.9	126.2	140.6	139.6	137.8	-0.6
Obstetrics/gynecology	180.7	207.3	220.7	200.7	231.0	214.4	227.0	2.9
Radiology	188.5	219.4	257.3	237.5	275.1	258.8	310.1	9.5
Psychiatry	111.4	116.5	132.1	128.7	133.7	139.0	145.7	2.4
Anesthesiology	194.5	207.4	231.1	218.4	228.4	230.2	244.7	3.1
<b>Geographic area:</b>								
New England	132.9	142.5	171.2	156.4	169.1	178.9	195.8	4.6
Middle Atlantic	135.0	156.1	172.4	178.0	200.3	192.0	202.2	2.6
East North Central	147.0	172.4	187.1	192.0	199.8	191.9	213.1	5.4
West North Central	138.0	151.4	187.5	183.9	212.6	194.2	208.4	3.6
South Atlantic	156.0	169.0	186.4	189.3	196.4	193.2	203.6	2.7
East South Central	164.8	169.0	180.0	199.3	229.6	231.7	227.8	-0.8
West South Central	160.7	178.8	193.8	195.7	217.5	205.3	226.2	5.0
Mountain	132.1	170.9	175.7	175.6	199.1	187.7	197.3	2.5
Pacific	136.0	162.5	178.1	172.0	184.6	188.3	190.1	0.5
<b>Employment status:</b>								
Self-employed	159.9	185.6	208.3	210.2	231.6	224.3	229.5	1.2
Employee	107.0	119.8	137.6	148.6	159.2	157.8	170.3	3.9
Independent contractor	137.7	147.6	141.0	168.7	181.7	156.3	171.3	4.7
All physicians <sup>3</sup>	144.7	164.3	181.7	182.6	199.0	194.4	205.7	2.9

<sup>1</sup>These figures include contributions made into pension, profit-sharing, and deferred compensation plans.

<sup>2</sup>Data not available for 1999.

<sup>3</sup>Includes physicians in specialties not reported separately.

Source: American Medical Association. *Physician Socioeconomic Statistics*, 2003 Ed. Percentage change calculated by Congressional Research Service.

TABLE C-14--DISTRIBUTION OF PHYSICIAN NET INCOME AFTER  
EXPENSES BUT BEFORE TAXES,  
BY SPECIALTY AND CENSUS DIVISION

[In Thousands of Dollars]

Category	Mean	25th percentile	Median	75th percentile
Specialty:				
General/family practice	144.7	100.0	132.0	170.0
Internal medicine	196.1	120.0	160.0	240.0
General	164.1	110.0	144.0	195.0
Cardiovascular diseases	315.5	210.0	300.0	385.0
Gastroenterology	299.2	160.0	250.0	351.0
Other	204.9	150.0	200.0	250.0
Surgery	274.7	165.0	240.0	325.0
General	263.7	165.0	240.0	300.0
Otolaryngology	214.5	150.0	202.0	280.0
Orthopedic	335.8	200.0	284.0	400.0
Ophthalmology	229.2	150.0	200.0	297.0
Urological	264.5	169.0	225.0	350.0
Other	325.0	175.0	275.0	450.0
Pediatrics	137.8	98.0	125.0	165.0
Obstetrics/gynecology	227.0	150.0	200.0	275.0
Radiology	310.1	210.0	289.0	385.0
Diagnostic	327.7	225.0	300.0	400.0
Other	292.6	190.0	270.0	360.0
Psychiatry	145.7	100.0	135.0	175.0
Anesthesiology	244.7	180.0	250.0	300.0
Pathology	246.5	150.0	230.0	300.0
Other	191.5	140.0	180.0	220.0
Emergency medicine	197.1	150.0	180.0	225.0
Neurology	183.1	125.0	160.0	212.0
Dermatology	219.5	150.0	180.0	240.0
Other	170.7	124.0	160.0	205.0
Geographic area:				
New England	195.8	120.0	180.0	240.0
Middle Atlantic	202.2	120.0	175.0	250.0
East North Central	213.1	132.0	180.0	250.0
West North Central	208.4	136.0	175.0	250.0
South Atlantic	203.6	120.0	168.0	250.0
East South Central	227.8	130.0	190.0	287.0
West South Central	226.2	140.0	190.0	250.0
Mountain	197.3	120.0	160.0	250.0
Pacific	190.1	120.0	160.0	240.0
All physicians <sup>1</sup>	205.7	123.0	175.0	250.0

<sup>1</sup>Includes physicians in specialties not listed separately.

Source: American Medical Association. *Physician Socioeconomic Statistics*, 2003 Ed.

TABLE C-15--AVERAGE PERCENT OF PRACTICE REVENUE FROM  
MANAGED CARE, 2001

Category	Percent
Specialty:	
General/family practice	42.5
Internal medicine	38.0
Surgery	38.3
Pediatrics	54.9
Obstetrics/gynecology	56.4
Radiology	42.0
Psychiatry	28.6
Anesthesiology	48.1
Pathology	34.8
Other	31.8
Geographic area:	
New England	46.0
Middle Atlantic	45.6
East North Central	36.9
West North Central	38.5
South Atlantic	38.8
East South Central	30.3
West South Central	44.9
Mountain	41.6
Pacific	40.9
All physicians <sup>1</sup>	40.8

<sup>1</sup> Includes physicians in specialties not listed separately.

Source: American Medical Association. *Physician Socioeconomic Statistics*, 2003 Ed.

TABLE C-16--COMMUNITY HOSPITAL BEDS PER 1,000 POPULATION AND AVERAGE ANNUAL PERCENT CHANGE BY REGION AND STATE, SELECTED YEARS 1940-2000

Region and State	Beds per 1,000 civilian population										Average annual percent change				
	1940	1950 <sup>1</sup>	1960 <sup>2</sup>	1970	1980	1990 <sup>3</sup>	2000 <sup>3</sup>	1940-1960 <sup>1,2</sup>	1960-1970 <sup>3</sup>	1970-1980	1980-1990 <sup>3</sup>	1990-2000 <sup>3</sup>			
New England	4.4	4.2	3.9	4.1	4.1	3.4	2.5	-0.6	0.5	0.0	-1.9	-3.0			
Maine	3.0	3.2	3.4	4.7	4.7	3.7	2.9	0.6	3.3	0.0	-2.4	-2.4			
New Hampshire	4.2	4.2	4.4	4.0	3.9	3.1	2.3	0.2	-0.9	-0.3	-2.3	-2.9			
Vermont	3.3	4.0	4.5	4.5	4.4	3.0	2.7	1.6	0.0	-0.2	-3.8	-1.0			
Massachusetts	5.1	4.8	4.2	4.4	4.4	3.6	2.6	-1.0	0.5	0.0	-2.0	-3.2			
Rhode Island	3.9	3.8	3.7	4.0	3.8	3.2	2.3	-0.3	0.8	-0.5	-1.7	-3.2			
Connecticut	3.7	3.6	3.4	3.4	3.5	2.9	2.3	-0.4	0.0	0.3	-1.9	-2.3			
Middle Atlantic	3.9	3.8	4.0	4.4	4.6	4.1	3.4	0.1	1.0	0.4	-1.1	-1.9			
New York	4.3	4.1	4.3	4.6	4.5	4.1	3.5	0.0	0.7	-0.2	-0.9	-1.6			
New Jersey	3.5	3.2	3.1	3.6	4.2	3.7	3.0	-0.6	1.5	1.6	-1.3	-2.1			
Pennsylvania	3.5	3.8	4.1	4.7	4.8	4.4	3.4	0.8	1.4	0.2	-0.9	-2.5			
East North Central	3.2	3.2	3.6	4.4	4.7	3.9	2.9	0.6	2.0	0.7	-1.8	-2.9			
Ohio	2.7	2.9	3.4	4.2	4.7	4.0	3.0	1.2	2.1	1.1	-1.6	-2.8			
Indiana	2.3	2.6	3.1	4.0	4.5	3.9	3.2	1.5	2.6	1.2	-1.4	-2.0			
Illinois	3.4	3.6	4.0	4.7	6.1	4.0	3.0	0.8	1.6	0.8	-2.4	-2.8			
Michigan	4.0	3.3	3.3	4.3	4.4	3.7	2.6	-1.0	2.7	0.2	-1.7	-3.5			
Wisconsin	3.4	3.7	4.3	5.2	4.9	3.8	2.9	1.2	1.9	-0.8	-2.5	-2.7			
West North Central	3.1	3.7	4.3	6.7	6.8	4.9	3.9	1.6	2.9	0.2	-1.7	-2.3			
Minnesota	3.9	4.4	4.8	6.1	5.7	4.4	3.4	1.0	2.4	-0.7	-2.6	-2.5			
Iowa	2.7	3.2	3.9	5.6	5.7	5.2	4.0	1.9	3.7	0.2	-1.1	-2.4			
Missouri	2.9	3.3	3.9	5.1	5.7	4.8	3.6	1.5	2.7	1.1	-1.7	-2.8			
North Dakota	3.5	4.3	5.2	6.8	7.4	7.0	6.0	2.0	2.7	0.8	-0.6	-1.5			
South Dakota	2.8	4.4	4.5	5.6	5.5	6.1	5.7	2.4	2.2	-0.2	1.0	-0.7			
Nebraska	3.4	4.2	4.4	6.2	6.0	5.5	4.8	1.3	3.5	-0.3	-0.9	-1.4			
Kansas	2.8	3.4	4.2	5.4	5.8	4.8	4.0	2.0	2.5	0.7	-1.9	-1.8			
South Atlantic	2.5	2.8	3.3	4.0	4.5	3.7	2.9	1.4	1.9	1.2	-1.9	-2.4			
Delaware	4.4	3.9	3.7	3.7	3.6	3.0	2.3	-0.9	0.0	-0.3	-1.8	-2.6			
Maryland	3.9	3.6	3.3	3.1	3.6	2.8	2.1	-0.8	-0.6	1.5	-2.5	-2.8			
District of Columbia	5.5	5.5	5.9	7.4	7.3	7.6	5.8	0.4	2.3	-0.1	0.4	-2.7			



Virginia	2.2	2.5	3.0	3.7	4.1	3.3	2.4	1.6	2.1	1.0	-2.1	-3.1
West Virginia	2.7	3.1	4.1	5.4	5.5	4.7	4.4	2.1	2.8	0.2	-1.6	-0.7
North Carolina	2.2	2.6	3.4	3.8	4.2	3.3	2.9	2.2	1.1	1.0	-2.4	-1.3
South Carolina	1.8	2.4	2.9	3.7	3.9	3.3	2.9	2.4	2.5	0.5	-1.7	-1.3
Georgia	1.7	2.0	2.8	3.8	4.6	4.0	2.9	2.5	3.1	1.9	-1.4	-3.2
Florida	2.8	2.9	3.1	4.4	5.1	3.9	3.2	0.5	3.6	1.5	-2.4	-2.0
East South Central	1.7	2.1	3.0	4.4	5.1	4.7	3.8	2.9	3.9	1.5	-0.8	-2.1
Kentucky	1.8	2.2	3.0	4.0	4.5	4.3	3.7	2.6	2.9	1.2	-0.5	-1.5
Tennessee	1.9	2.3	3.4	4.7	5.5	4.8	3.6	3.0	3.3	1.6	-1.4	-2.8
Alabama	1.5	2.0	2.8	4.3	5.1	4.6	3.7	3.2	4.4	1.7	-1.0	-2.2
Mississippi	1.4	1.7	2.9	4.4	5.3	5.0	4.8	3.7	4.3	1.9	-0.6	-0.4
West South Central	2.1	2.7	3.3	4.3	4.7	3.8	3.0	2.3	2.7	0.9	-2.1	-2.3
Arkansas	1.4	1.6	2.9	4.2	5.0	4.6	3.7	3.7	3.8	1.8	-0.8	-2.2
Louisiana	3.1	3.8	3.9	4.2	4.8	4.6	3.9	1.2	0.7	1.3	-0.4	-1.6
Oklahoma	1.9	2.5	3.2	4.5	4.6	4.0	3.2	2.6	3.5	0.2	-1.4	-2.2
Texas	2.0	2.7	3.3	4.3	4.7	3.5	2.7	2.5	2.7	0.9	-2.9	-2.6
Mountain	3.6	3.8	3.5	4.3	3.8	3.1	2.3	-0.1	2.1	-1.2	-2.0	-2.9
Montana	4.9	5.3	5.1	5.8	5.9	5.8	4.7	0.2	1.3	0.2	-0.2	-2.1
Idaho	2.6	3.4	3.2	4.0	3.7	3.2	2.7	1.0	2.3	-0.8	-1.4	-1.7
Wyoming	3.5	3.9	4.6	5.5	3.6	4.8	3.9	1.4	1.8	-4.1	2.9	-2.1
Colorado	3.9	4.2	3.8	4.6	4.2	3.2	2.2	-0.1	1.9	-0.9	-2.7	-3.7
New Mexico	2.7	2.2	2.9	3.5	3.1	2.8	1.9	0.4	1.9	-1.2	-1.0	-3.8
Arizona	3.4	4.0	3.0	4.1	3.6	2.7	2.1	-0.6	3.2	-1.3	-2.8	-2.5
Utah	3.2	2.9	2.8	3.6	3.1	2.6	1.9	-0.7	2.5	-1.5	-1.7	-3.1
Nevada	5.0	4.4	3.9	4.2	4.2	2.8	1.9	-1.2	0.7	0.0	-4.0	-3.8
Pacific	4.1	3.2	3.1	3.7	3.5	2.7	2.1	-1.4	1.8	-0.6	-2.6	-2.5
Washington	3.4	3.6	3.3	3.5	3.1	2.5	1.9	-0.1	0.6	-1.2	-2.1	-2.7
Oregon	3.5	3.1	3.5	4.0	4.5	2.8	1.9	0.0	1.3	-1.3	-2.2	-3.8
California	4.4	3.3	3.0	3.8	3.6	2.7	2.1	-1.9	2.4	-0.5	-2.8	-2.5
Alaska	-----	-----	-----	2.4	2.3	2.7	2.3	2.3	-0.4	1.6	-1.6	0.0
Hawaii	-----	-----	-----	3.7	3.4	3.1	2.7	2.5	-0.8	-0.9	-1.4	-0.8
United States	3.2	3.3	3.6	4.3	4.5	3.7	2.9	0.6	1.8	0.5	-1.9	-2.4

<sup>1</sup> 1940 and 1950 data are estimated based on published figures.

<sup>2</sup> 1960 includes hospital units of institutions.

TABLE C-16--COMMUNITY HOSPITAL BEDS PER 1,000 POPULATION AND AVERAGE ANNUAL PERCENT  
CHANGE BY REGION AND STATE, SELECTED YEARS 1940-2000-continued

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<sup>3</sup> 1990 Data.

Source: Health, United States, 2002.

**SUPPLY OF PHYSICIANS**

Physician shortages in the 1950s and 1960s led to Federal and State initiatives to increase the supply of physicians. The resulting growth in the number of physicians per capita led to forecasts that an oversupply was imminent and that the nation had too few generalists and too many specialists. In 1994, the Council on Graduate Medical Education (COGME) reported that by the year 2000, “an expected staffing ratio of one physician for every 370 Americans, was more than adequate and the nation would do well to greatly scale back its residency programs and shift training away from specialists and toward primary care.” (Weiner, 2002)

Tables C-17 and C-19 indicate that while the total number of physicians grew by 40 percent from 1970 (334,028) to 1980 (467,679), over the next ten years the number grew at a slower rate (31.7 percent) to 615,241 in 1990. From 1990 to 2000, the total number of physicians grew 32.3 percent to 813,770. In 2000, the total physician-population ratio was 294 per 100,000 persons or one physician for every 340 Americans.

The predicted physician surplus did not materialize, due in part to the lack of sustained impact of managed care. According to the American Medical Association, the percent of physicians in primary care and primary care specialties (general and family practice, internal medicine, obstetrics and gynecology, and pediatrics) has remained relatively stable at approximately 34-40 percent since 1970. (See Tables C-17 and C-19 for number of physicians by specialty.) Some hospitals, however, are now reporting it difficult to recruit specialists such as radiologists, orthopedic surgeons, anesthesiologists, and cardiologists (Thrall, 2003).

There are also concerns about the geographic distribution of physicians and a continuing problem with access to care in more rural areas. Table C-18 shows variations in the supply of non-Federal physicians relative to population by State. In 2000, the District of Columbia had the highest ratio (718 physicians per 100,000 population) while Idaho had the lowest ratio (178 physicians per 100,000 population).

The adequacy of physician supply is once again the subject of debate. Richard Cooper and colleagues at the Medical College of Wisconsin forecast that the demand for physician services will continue to increase as the U.S. economy grows. They warn that as the U.S. population expands and ages, if the per capita number of physicians remains flat, today’s small national shortage of physicians will become a deficit of 200,000 by 2020 (Cooper, 2002). The Council on Graduate Medical Education is reported to be reconsidering its earlier position in the light of a study by Ed Salzberg of the University of

TABLE C-17--PHYSICIAN SUPPLY BY MAJOR CATEGORIES, SELECTED YEARS 1970-2000

Category	1970		1980		1990		2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Federal	29,501	9	17,787	4	20,475	3	19,381	3
Non-Federal	301,323	90	443,502	96	592,166	97	792,149	97
Patient care	278,535	83	376,512	80	503,870	82	647,430	80
Nonpatient care	32,310	10	38,404	9	43,440	8	44,938	6
Primary	134,354	40	170,705	37	213,514	35	274,653	34
Primary care specialties	3,161	1	16,642	4	30,911	5	52,294	6
Male	308,627	92	413,395	88	511,227	83	618,223	76
Female	25,401	8	54,284	12	104,194	17	195,537	24
U.S. graduates	270,637	81	362,307	77	475,394	77	603,869	74
International medical graduates	57,217	17	97,726	21	131,764	21	196,961	24
Canadian graduates	6,174	2	7,646	2	8,263	1	10,717	1
Total physicians <sup>1</sup>	334,028	100	467,679	100	615,421	100	813,770	100
Total physician-population ratio (per 100,000 persons)	161	--	202	--	244	--	294	--

<sup>1</sup> Address unknown excluded from all Federal/non-Federal categories, not-classified, inactive, and address unknown are excluded from patient care/nonpatient care categories.

Note-Total may not equal sum of rounded components.

Source: American Medical Association (2002).

Albany Center for Health Workforce Studies that forecasts a shortage of about 150,000 physicians by 2020 (Romano, 2003).

The long training “pipeline” makes it difficult to predict physician supply. According to the Association of American Medical Colleges (AAMC), since reaching an all-time high of 47,000 for the 1996 entering class, the number of medical school applicants declined to 33,501 for 2002. They projected an increase of 4 to 6 percent for 2003, based on the number of individuals who took the Medical College Admission Test in 2002 and initial applications. While the number of residents in training declined from 98,143 in 1997 to 96,410 in 2001, there was an increase to 98,258 for 2002. The number of medical school graduates remained more stable, though declining slightly from 16,143 in 1998 to 15,640 in 2002 (Table C-20).

The supply of international medical graduates (IMGs) also could have a significant impact on the U.S. physician workforce. IMGs comprised 17 percent of total physicians in 1970. By 2000, this had risen to 24 percent of the total physician population (Table C-17). The number of residency positions occupied by IMGs fluctuated over the period 1971-95. Due to stricter immigration laws and more rigorous competency requirements, IMGs dropped from 41 percent of all residents in 1971 to about 17 percent in 1985. Since then the number of IMGs in training in the United States more than doubled, from 12,509 in 1985 to 25,783 in 2002 (26 percent of all residents in training). In 1998, the Education Commission for Foreign Medical Graduates (ECFMG) began requiring that IMGs pass a basic clinical skills examination. According to the ECFMG, “the number of IMGs seeking and receiving certification has decreased, but the quality of the applicants appears to have improved and the number of IMGs certified annually continues to adequately fill GME positions not taken by U.S. medical graduates.” (Whelan, 2002) While the portion of IMGs in the U.S. physician workforce continues to represent approximately one-quarter of the physicians practicing in the U.S., since 1999, there has been a decrease in the number of foreign nationals and a trend toward a higher percent of U.S. citizens in the pool applying for certification.

There is considerable uncertainty as to whether there is enough evidence to suggest a coming physician shortage. Those who are skeptical that there is a doctor shortage suggest it is limited to problems with recruitment of specialists such as radiologists, orthopedic surgeons, anesthesiologists, and cardiologists, or to hospitals in certain areas because of specific market conditions. They also point to the difficulties in predicting how the economy will shape health care, e.g, if consumer-directed plans become more common, demand for services could fall. New kinds of health care delivery systems also could emerge with changes in licensing allowing clinicians to do some of the work now restricted to doctors (Thrall, 2003).

TABLE C-18--NON-FEDERAL PHYSICIAN/POPULATION RATIOS<sup>1</sup>  
AND RANK BY STATE, SELECTED YEARS 1970-2000

State	1970	1975	1985	1990	1995	2000	2000 rank
Alabama	90	103	152	170	202	218	41
Alaska	74	95	137	155	164	194	48
Arizona	144	185	220	233	239	230	36
Arkansas	92	103	150	165	192	208	44
California	194	219	266	272	275	281	13
Colorado	178	186	216	232	257	263	21
Connecticut	192	224	302	332	372	385	5
Delaware	134	155	203	217	246	261	24
District of Columbia	390	467	607	658	714	718	1
Florida	155	185	236	251	269	280	14
Georgia	108	126	172	187	214	225	38
Hawaii	160	185	239	266	283	300	10
Idaho	94	104	133	142	162	178	51
Illinois	138	164	217	229	265	285	11
Indiana	102	116	156	171	200	219	40
Iowa	103	113	149	167	189	199	45
Kansas	118	137	179	195	223	234	35
Kentucky	102	122	162	181	211	230	37
Louisiana	120	131	187	200	241	268	19
Maine	111	133	193	208	235	277	15
Maryland	183	217	334	360	384	406	4
Massachusetts	207	237	331	364	420	448	2
Michigan	125	145	190	201	232	250	27
Minnesota	151	172	223	240	267	284	12
Mississippi	84	94	126	144	155	181	50
Missouri	129	148	195	209	236	246	28
Montana	104	116	155	181	214	236	33
Nebraska	116	134	170	185	220	245	29
Nevada	114	129	173	175	178	196	47
New Hampshire	140	162	207	227	248	275	16
New Jersey	146	174	243	267	302	323	8
New Mexico	113	130	184	206	229	238	31
New York	236	258	318	339	391	409	3
North Carolina	111	132	185	209	239	255	26
North Dakota	96	106	168	184	224	242	30
Ohio	133	147	199	213	242	262	23
Oklahoma	103	113	149	160	177	184	49
Oregon	144	171	215	233	250	265	20
Pennsylvania	152	169	234	256	301	318	9
Rhode Island	160	194	248	277	328	357	7
South Carolina	93	114	161	177	212	234	34
South Dakota	81	90	143	154	187	214	43
Tennessee	119	139	189	210	247	263	22
Texas	117	135	174	188	206	217	42
Utah	138	155	185	200	216	221	39
Vermont	187	207	268	288	316	375	6
Virginia	125	149	214	233	253	272	18
Washington	149	168	223	241	259	274	17
West Virginia	104	124	171	183	216	238	32
Wisconsin	120	137	188	207	239	257	25
Wyoming	101	108	140	156	176	197	46
United States <sup>1</sup>	148	169	220	237	264	288	----

<sup>1</sup>The ratios are for non-Federal physicians per 100,000 civilian population. Excludes counts of physicians in U.S. possessions and with unknown addresses.  
Source: American Medical Association, 2002.

TABLE C-19 -- PHYSICIANS TOTAL AND BY SPECIALTY, PERCENT DISTRIBUTION,  
AND PERCENT GROWTH, FOR 1970, 1980, 1990, AND 2000

Specialty	1970			1980			1990			2000			Percent Change			
	Total	Percent Distribution	Total	Percent Distribution	Total	Percent Distribution	Total	Percent Distribution	Total	Percent Distribution	Total	Percent Distribution	1970- 1980	1980- 1990	1990- 2000	2000
Aerospace medicine	1,188	0.4	587	0.1	687	0.1	473	0.1	473	0.1	473	0.1	-50.6	17.0	-31.1	-60.2
Allergy/immunology	1,719	0.5	1,518	0.3	3,388	0.6	3,998	0.6	3,388	0.6	3,998	0.5	-11.7	123.2	18.0	132.5
Anesthesiology	10,860	3.3	15,958	3.4	25,981	4.2	35,715	4.2	25,981	4.2	35,715	4.4	46.9	62.8	37.4	228.7
Cardiovascular diseases	6,476	1.9	9,823	2.1	15,862	2.6	21,025	2.6	15,862	2.6	21,025	2.6	51.7	61.5	32.5	224.6
Child psychiatry	2,090	0.6	3,217	0.7	4,343	0.7	6,158	0.7	4,343	0.7	6,158	0.7	56.5	32.8	41.8	194.6
Colon/rectal surgery	667	0.2	719	0.2	882	0.1	1,127	0.1	882	0.1	1,127	0.1	7.8	22.7	27.7	68.9
Dermatology	4,003	1.2	5,660	1.2	7,557	1.2	9,675	1.2	7,557	1.2	9,675	1.2	41.4	33.5	28.0	141.6
Diagnostic radiology	1,968	0.6	7,048	1.5	15,412	2.5	21,104	2.5	15,412	2.5	21,104	2.6	258.1	118.7	36.9	972.3
Emergency medicine <sup>1</sup>	0		5,699	1.2	14,243	2.3	23,064	2.8	14,243	2.3	23,064	2.8			149.9	61.9
Family practice <sup>2</sup>	0		27,530	5.9	47,639	7.7	71,635	8.8	47,639	7.7	71,635	8.8			73.0	50.4
Forensic pathology	200	0.1	240	0.1	414	0.1	577	0.1	414	0.1	577	0.1	20.0	72.5	39.4	188.5
Gastroenterology	2,010	0.6	4,046	0.9	7,493	1.2	10,627	1.3	7,493	1.2	10,627	1.3	101.3	85.2	41.8	428.7
General practice	57,948	17.3	32,519	7.0	22,841	3.7	15,213	1.9	22,841	3.7	15,213	1.9	-43.9	-29.8	-33.3	-73.7
General preventative medicine	804	0.2	810	0.2	1,036	0.2	1,718	0.2	1,036	0.2	1,718	0.2	0.7	27.9	65.8	113.7
General surgery	29,761	8.9	34,034	7.3	38,376	6.2	36,650	4.5	38,376	6.2	36,650	4.5	14.4	12.8	4.7	23.1
Internal medicine	41,872	12.5	71,531	15.3	98,349	16.0	134,539	16.5	98,349	16.0	134,539	16.5	70.8	37.5	36.8	221.3
Medical genetics <sup>3</sup>	0		0		0		361	0.1	0		361	0.1				
Neurology	3,074	0.9	5,685	1.2	9,237	1.5	12,333	1.5	9,237	1.5	12,333	1.5	84.9	62.5	33.5	301.2
Neurological surgery	2,578	0.8	3,341	0.7	4,358	0.7	4,997	0.6	4,358	0.7	4,997	0.6	29.6	30.4	14.6	93.8
Nuclear medicine <sup>1</sup>	0		0		1,340	0.2	1,448	0.2	1,340	0.2	1,448	0.2				
Obstetrics/gynecology	18,876	5.7	26,305	5.6	33,697	5.5	40,241	5.0	33,697	5.5	40,241	5.0	39.4	28.1	19.4	113.2
Occupational medicine	2,713	0.8	2,358	0.5	2,744	0.4	2,990	0.4	2,744	0.4	2,990	0.4	-13.1	16.4	9.0	10.2
Ophthalmology	9,927	3.0	12,974	2.8	16,073	2.6	18,126	2.2	16,073	2.6	18,126	2.2	30.7	20.8	12.8	82.6
Orthopedic surgery	9,620	2.9	13,996	3.0	19,138	3.1	22,287	2.7	19,138	3.1	22,287	2.7	45.5	36.7	16.4	131.7
Otolaryngology	5,409	1.6	6,553	1.4	8,138	1.3	9,417	1.2	8,138	1.3	9,417	1.2	21.1	24.2	15.7	74.1
Pathology-anatomic/clin	10,283	3.1	13,402	2.9	16,710	2.6	18,220	2.2	16,710	2.6	18,220	2.2	30.3	20.7	12.7	77.2
Pediatrics	18,332	5.5	28,803	6.2	40,893	6.6	62,386	7.7	40,893	6.6	62,386	7.7	57.1	42.0	52.5	240.3
Pediatric cardiology	487	0.1	659	0.1	1,006	0.2	1,536	0.2	1,006	0.2	1,536	0.2	35.3	52.7	52.7	215.4

TABLE C-19 -- PHYSICIANS TOTAL AND BY SPECIALTY, PERCENT DISTRIBUTION, AND PERCENT GROWTH, FOR 1970, 1980, 1990, AND 2000--continued

Specialty	1970			1980			1990			2000			Percent Change			
	Total	Percent Distribution	Total	Total	Percent Distribution	Total	Total	Percent Distribution	Total	Total	Percent Distribution	Total	1970-1980	1980-1990	1990-2000	2000
Physical medicine/rehabilitation	1,479	0.4	2,146	0.5	4,105	0.7	6,512	0.8	45.1	91.3	58.5	340.0				
Plastic surgery	1,600	0.5	2,980	0.6	4,590	0.7	6,200	0.8	86.3	54.0	35.1	287.5				
Psychiatry	21,146	6.3	27,481	5.9	35,163	5.7	39,457	4.8	30.0	28.0	12.2	86.5				
Public health	3,029	0.9	2,316	0.5	2,015	0.3	1,830	0.2	-23.5	-13.0	-9.2	-39.6				
Pulmonary diseases	2,315	0.7	3,715	0.8	6,080	1.0	8,706	1.1	60.5	63.7	43.2	276.0				
Radiology	10,524	3.2	11,653	2.5	8,492	1.4	8,661	1.1	10.7	-27.1	1.9	-17.7				
Radiation oncology	868	0.3	1,581	0.3	2,821	0.5	3,904	0.5	82.1	78.4	38.4	349.7				
Thoracic surgery	1,809	0.5	2,133	0.5	2,063	0.3	4,953	0.6	17.9	-3.3	140.0	173.7				
Urological surgery	5,795	1.7	7,743	1.7	9,372	1.5	10,302	1.3	33.6	21.0	9.9	77.7				
Other specialty	6,929	2.1	5,810	1.2	7,254	1.2	5,794	0.7	-16.1	24.9	-20.1	-16.3				
Unspecified	12,486	3.7	12,289	2.6	8,058	1.3	8,327	1.0	-1.6	-34.4	3.3	-33.3				
Inactive	19,621	5.9	25,744	5.5	52,653	8.6	75,168	9.2	31.2	104.5	42.8	283.0				
Not classified	<sup>4</sup>	<sup>4</sup>	20,629	4.4	12,678	2.1	45,136	5.5	<sup>4</sup>	-38.5	256.0	<sup>4</sup>				
Address unknown	3,204	1.0	6,390	1.4	2,780	0.5	1,098	0.1	99.4	-56.5	-60.5	-65.7				
Total physicians	334,028	100.0	467,679	100.0	615,421	100.0	813,770	100.0	40.0	31.6	32.2	143.6				

<sup>1</sup> Data were not available for emergency medicine prior to 1980 and nuclear medicine prior to 1985.

<sup>2</sup> Data on family practice were not available prior to 1975.

<sup>3</sup> Data on medical genetics were not available prior to 1994.

<sup>4</sup> Not classified was established in 1970 but complete data were not available until 1972.

Note--Data for 1990 are as of January 1. Data for all other years are as of December 31. The total for 1970 includes 358 not classified physicians.

Source: American Medical Association (2002).



## C-33

TABLE C-20 -- MEDICAL SCHOOL GRADUATES, FIRST-YEAR RESIDENTS, AND TOTAL RESIDENTS, SELECTED YEARS 1965-2002

Year	Medical school graduates	First-year residents	Total residents
1965	7,409	9,670	31,898
1970	8,367	11,552	39,463
1975	12,714	13,200	54,500
1980	15,135	18,702	61,465
1985	16,319	19,168	75,514
1990	15,336	18,322	82,902
1991	15,481	19,497	86,217
1992	15,386	19,794	88,620
1993	15,512	21,616	96,469
1994	15,579	19,293	97,832
1995	15,911	21,372	98,035
1996	15,902	21,394	98,076
1997	15,953	21,808	98,143
1998	16,143	21,732	97,383
1999	15,824	22,320	97,989
2000	15,901	NA	96,806
2001	15,810	21,254	96,410
2002	15,640	21,864	98,258

NA- Not available

Source: American Medical Association (various years).

TABLE C-21 -- INTERNATIONAL MEDICAL GRADUATE RESIDENTS<sup>1</sup> BY CITIZENSHIP, SELECTED YEARS 1971-2002

Year	Total	Percent of all residents	U.S. residents	Foreign nationals
1971	17,515	41	1,063	16,452
1976	16,634	29	1,783	14,851
1981	11,596	17	2,908	8,688
1985	12,509	17	6,868	5,609
1991	17,017	20	5,107	11,910
1992	19,084	22	5,015	14,069 <sup>2</sup>
1993	22,706	24	5,056	17,650
1994	23,499	24	4,285	19,214
1995	24,982	25	4,030	20,952
1996	24,703	25	3,817	20,886
1997	25,531	26	3,979	21,552
1998	25,415	26	4,350	21,065
1999	25,880	26	4,447	21,433
2000	24,707	26	4,984	19,723
2001	25,403	26	5,404	19,999
2002	25,783	26	5,835	19,948

<sup>1</sup> International medical graduates are defined by location of education.

<sup>2</sup> Includes 6,192 permanent resident aliens.

Source: American Medical Association (various years).

**HEALTH INSURANCE STATUS IN 2002**

Most people have some form of health insurance. In 2002, an estimated 84.8 percent of the total noninstitutionalized population had public or private coverage during at least part of the year. However, an estimated 43.6 million Americans, or 15.2 percent of the population, were without coverage in 2002. Almost all the uninsured were under age 65; consequently, 17.2 percent of the nonelderly population was uninsured. This section examines characteristics of both the insured and the uninsured populations in 2002 (Peterson, 2003), and reviews trends in health insurance coverage over the 1987–2002 period.

Estimates of health insurance coverage in 2002 are based on analysis of the March 2003 Current Population Survey (CPS), a household survey by the Department of Commerce's Census Bureau. Each year's March CPS asks whether individuals had coverage from selected sources of health insurance at any time during the preceding calendar year. Thus, the March 2003 CPS reflects respondents' recollection of coverage during all of 2002.<sup>1</sup>

**HEALTH INSURANCE COVERAGE AND SELECTED POPULATION CHARACTERISTICS***Age*

Table C-22 provides a breakdown of health insurance coverage by type of insurance and age. In 2002, compared to other age groups, those under age 5 had the highest rates of coverage in Medicaid, the State Children's Health Insurance Program (SCHIP), or some other program for low-income individuals (30 percent). Young adults ages 19 to 24 were the most likely to have gone without health insurance for the entire year. While most in this age group (55 percent) were covered under an employment-based plan, 31 percent had no health insurance. Young adults are often too old to be covered as dependents on their parents' policies and, as entry-level workers, do not have strong ties to the work force. In addition, some may feel that they are in good health and choose to remain uninsured, spending their money on other items. After age 25, the percentage of people without health insurance decreases. Of those age 65 and over, 95 percent were covered by Medicare, and less than 1 percent were uninsured for the entire year. The remainder of this section focuses on the population under age 65.

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<sup>1</sup> Some analysts have suggested that respondents actually may be reporting their coverage status at the time of the survey, rather than for the previous year.

TABLE C-22--HEALTH INSURANCE COVERAGE BY TYPE OF INSURANCE AND AGE, 2002

Age	Population (in millions)	Type of insurance <sup>1</sup> (in percent)					Uninsured	
		Employment based <sup>2</sup>	Private nongroup	Medicare	Medicaid or other public <sup>3</sup>	Military/ Veterans coverage	Percent	Millions
Under 5	19.8	59.6	4.5	0.8	29.7	3.2	11.1	2.2
5-18	57.5	65.4	5.6	0.7	21.3	2.9	12.4	7.1
19-24	23.5	55.3	5.7	0.7	9.8	2.8	31.4	7.4
25-34	39.2	63.9	5.3	1.2	7.1	2.4	24.9	9.8
35-54	84.3	72.7	7.0	2.7	5.9	2.9	15.9	13.4
55-61	20.6	70.2	10.4	6.7	6.2	5.0	12.6	2.6
62-64	6.8	61.9	13.6	14.8	7.4	6.7	13.5	0.9
65+	34.2	34.4	29.6	95.3	9.6	6.6	0.8	0.3
Total	285.9	62.7	9.3	13.5	11.6	3.5	15.2	43.6

<sup>1</sup> People may have had more than one source of health insurance over the course of the year; therefore percentages may total more than 100.

<sup>2</sup> Group health insurance through current or former employer or union. Excludes military and veterans coverage.

<sup>3</sup> Nonmilitary. Includes State Children's Health Insurance Program (SCHIP) and other State programs for low-income individuals.

Source: Congressional Research Service analysis of data from the March 2003 Current Population Survey.

#### *Other Demographic Characteristics*

Table C-23 shows the rate of health insurance coverage by type of insurance and selected demographic characteristics — race, family type, region, poverty level, and citizenship — for people under age 65. In 2002, whites were least likely to be uninsured (12 percent), while Hispanics were most likely (34 percent). The rate of employment-based health coverage was highest among whites (74 percent), and the rate of public coverage was highest among blacks (25 percent).<sup>2</sup>

People residing in two-parent families were most likely to have employment-based health insurance (74 percent) and least likely to be uninsured (13 percent). People in a family headed by a single mother were most likely to have public coverage (37 percent), compared to other family types, while people in a family headed by a single father were most likely to be uninsured (28 percent). Although people in single-father families were more likely to have employment-sponsored health insurance than those in single-mother families,

<sup>2</sup> "Public coverage" includes Medicare, Medicaid, the State Children's Health Insurance Program (SCHIP) and any other health insurance program for low-income individuals, but excludes military and veterans coverage. Hispanics may be of any race. In this report, whites, blacks, and Asians are those who are non-Hispanic and report only one race. Among non-Hispanics, individuals who report any other single race (e.g., American Indian) or multiple races are categorized as "other."

that difference was eclipsed by the higher rates of public coverage in single-mother families.

TABLE C-23--HEALTH INSURANCE COVERAGE BY TYPE OF INSURANCE AND DEMOGRAPHIC CHARACTERISTICS FOR PEOPLE UNDER AGE 65, 2002

Population (in millions)	Type of insurance <sup>1</sup>			Uninsured		
	Employment based <sup>2</sup>	Public <sup>3</sup>	Other <sup>4</sup>	Percent	Millions	
Race/ethnicity:						
White	166.4	74.3	9.4	10.8	12.4	20.7
Black	31.7	54.0	25.3	6.9	21.5	6.8
Hispanic	37.3	44.5	20.8	5.1	34.0	12.7
Asian	10.4	64.3	9.7	11.7	19.7	2.1
Other	5.8	58.4	21.6	11.0	18.4	1.1
Family type:						
Two parents	112.7	74.0	10.5	9.6	12.6	14.2
Single dad with children	7.3	50.5	20.8	6.7	28.0	2.0
Single mom with children	30.4	44.8	37.1	4.8	20.1	6.1
No children	101.3	65.8	8.9	10.9	20.7	20.9
Region:						
Northeast	46.8	69.7	13.8	6.6	15.0	7.0
Midwest	57.0	73.0	11.8	8.1	13.2	7.5
South	89.3	63.1	13.9	10.8	19.8	17.7
West	58.6	62.9	13.8	11.2	19.0	11.2
Income-to-poverty ratio: <sup>5</sup>						
Less than 100	31.0	20.0	44.3	7.3	33.6	10.4
100-149	21.6	35.7	30.5	8.6	32.2	7.0
150-199	21.2	52.4	19.5	8.5	26.8	5.7
200+	177.2	80.3	5.1	10.1	11.3	20.0
Citizenship:						
Native	221.9	68.8	13.8	9.8	14.5	32.3
Naturalized	10.3	64.4	9.2	9.5	21.6	2.2
Non-Citizens	19.5	41.5	10.4	5.9	45.3	8.8
Total	251.7	66.50	13.40	9.50	17.20	43.3

<sup>1</sup>People may have more than one source of coverage; percentages may total to more than 100.

<sup>2</sup>Group health insurance through current or former employer or union. Excludes military and veterans coverage.

<sup>3</sup>Includes Medicare, Medicaid, the State Children's Health Insurance Program (SCHIP), and other state programs for low-income individuals. Excludes military and veterans coverage.

<sup>4</sup>Private nongroup health insurance, military or veterans coverage.

<sup>5</sup>In 2002, the poverty threshold for a family of four with two children was \$18,244. Approximately 616,000 children are excluded from CPS-based poverty analyses because they are living with a family to which they are unrelated. These are usually foster children.

Source: Congressional Research Service analysis of data from the March 2003 Current Population Survey.

People were less likely to be uninsured if they lived in the Midwest (13 percent) or the Northeast (15 percent) than if they lived in the South (20 percent) or West (19 percent). At least 70 percent of those living in the Northeast and Midwest had employment-based health insurance, compared to 63 percent in the South and the West.

TABLE C-24--HEALTH INSURANCE COVERAGE BY EMPLOYMENT CHARACTERISTICS<sup>1</sup> FOR PEOPLE UNDER AGE 65, 2002

	Population (millions)	Type of insurance <sup>2</sup>			Uninsured	
		From own job <sup>3</sup>	From other's job <sup>3</sup>	Other <sup>4</sup>	Percent	Millions
People in families with a worker <sup>5</sup>	216.5	36.2	38.0	18.2	16.3	35.3
Firm size <sup>1,5</sup>						
Under 10	37.0	19.7	20.4	31.1	34.3	12.7
10-24	18.5	30.2	28.8	21.3	26.0	4.8
25-99	27.4	36.9	35.4	17.6	18.5	5.1
100-499	31	40.8	42.4	14.1	11.9	3.7
500-999	12.6	42.3	45.7	12.3	9.4	1.2
1,000 +	90.1	41.6	45.3	14.7	8.8	7.9
Industry <sup>1,5</sup>						
Arts, entertainment, recreation, food services, accommodation	14.4	26.3	20.5	25.2	33.7	4.9
Agriculture, forestry, fishing and hunting	3.2	19.2	23.6	32.7	30.9	1.0
Other services	8.9	26.4	24.5	26.5	29.4	2.6
Construction	18.4	25.9	31.8	19.3	29	5.3
Wholesale, retail trade	29.1	35.9	34.6	19.6	18.3	5.3
Professional, management, administrative services	21.6	35.3	36.1	18.7	18.2	3.9
Transportation, utilities	13	36.7	44.3	14.1	13.5	1.7
Manufacturing	32	38.9	45.8	11.8	11.3	3.6
Educational, health, and social services	40.5	42.6	40.1	17.6	10.5	4.2
Mining	1.3	35.7	51.4	13.9	9.5	0.1
Finance, insurance, real estate, rental and leasing	15.4	39.9	44.7	14.7	9.4	1.4
Information	6.4	42.4	44.2	12.8	9.0	0.6
Public administration	10.5	45.9	48.5	11.8	5.1	0.5
Armed forces, military	1.8	16.0	28.8	100.0	0.0	0.0
Labor force attachment <sup>1,5</sup>						
Full time, full year	171.7	38.2	41.5	15.0	13.8	23.7

TABLE C-24--HEALTH INSURANCE COVERAGE BY EMPLOYMENT CHARACTERISTICS<sup>1</sup> FOR PEOPLE UNDER AGE 65, 2002-continued

	Population (millions)	Type of insurance <sup>2</sup>			Uninsured	
		From own job <sup>3</sup>	From other's job <sup>3</sup>	Other <sup>4</sup>	Percent	Millions
Full time, part year	25.6	32.2	27.8	27.1	23.8	6.1
Part time, full year	11.1	26.8	23.3	30.4	27.4	3.0
Part time, part year	8.2	20.9	16.5	41.2	30.2	2.5
People in families without a worker <sup>5</sup>	28.0	13.8 <sup>6</sup>	9.6	54.6	28.5	8.0
People with coverage outside the home	7.2	7.7	100	17.1	0.0	0.0
Total	251.7	32.9	36.6	22.2	17.2	43.3

<sup>1</sup>The employment characteristics are those of the policyholder. In families without private coverage, "workers" are the family head or, if the head is not employed, the spouse. For "dependents," the employment characteristics are those of the person providing dependent coverage or, if the dependent has no private health insurance, of the head of household or spouse.

<sup>2</sup> People may have more than one source of health insurance during the year; therefore percentages may total more than 100.

<sup>3</sup> Group health insurance through current or former employer or union.

<sup>4</sup> Medicare, Medicaid, the State Children's Health Insurance Program (SCHIP), and other government coverage, nongroup health insurance, and military and veterans coverage.

<sup>5</sup> For persons who worked and their dependents and who did not receive private coverage through a person not in the household.

<sup>6</sup> Nearly 90 percent of these policyholders (i.e., those who did not work during the year but had employment-based coverage in their name) were retirees, were ill or disabled, or were at home with the family and probably received coverage through their former employer.

Source: CRS analysis of data from the March 2003 CPS.

Among individuals with incomes at least two times the poverty level, 11 percent went without health insurance compared to 34 percent of the poor (i.e., those with incomes below the poverty level). Only 20 percent of the poor received health coverage through employment, and 44 percent had public coverage. Eighty percent of people with incomes at least two times the poverty level were covered through an employer, and only 5 percent had public coverage.

Non-citizens were more likely to be uninsured than people born with U.S. citizenship (i.e., “native”) — 45 percent versus 15 percent, respectively. Non-citizens accounted for 8 percent of the population under 65 but were 20 percent of the uninsured. About 42 percent of non-citizens were covered through employment, compared to 69 percent of native citizens.

#### *Employment characteristics*

For the second year in a row, the prevalence of job-related health insurance fell, to 67 percent among the nonelderly in 2002. Table C-24 shows the rate of health insurance coverage by the employment characteristics of the primary worker in the family. In 2002, only 9 percent of workers in large firms (1,000 or more employees) and their dependents were uninsured, compared to 34 percent in small firms (less than 10 employees). People who reported working in small firms and their dependents accounted for 15 percent of the under 65 population but 29 percent of the uninsured. Insurance coverage varied according to industry, as well. The category of arts, entertainment, recreation, accommodation and food services had the highest proportion of uninsured workers and dependents (34 percent). Only 5 percent of those associated with employment in public administration were uninsured, and none of those associated with employment in the armed forces were uninsured.

### CHARACTERISTICS OF THE UNINSURED POPULATION UNDER AGE 65

People who lack health insurance differ from the population as a whole: they are more likely to be young adults, poor, Hispanic, or employees in small firms. Chart C-2 illustrates selected characteristics of those under age 65 who were uninsured for 2002. Approximately 17 percent of the uninsured were 19 to 24 years old, even though this age group represents less than 9 percent of the under 65 population.

Although Hispanics were more likely to be uninsured than any other racial or ethnic group, they made up less than 30 percent of the uninsured. Whites (non-Hispanics who report being only white) were the most numerous racial or ethnic group among the uninsured.

More than half (55 percent) of the uninsured were full time, full year workers or their spouses and children. Approximately 18 percent had no attachment to the labor force. More than three-quarters of the uninsured were above the poverty level. Even though the poor accounted for only 12 percent of

the under 65 population, they represented 24 percent of the uninsured. For the second year in a row, more than a quarter of the uninsured were not native-born citizens (that is, they were either not citizens or were naturalized citizens).

#### TRENDS IN HEALTH INSURANCE COVERAGE

Historical trends in coverage by type of insurance for the noninstitutionalized U.S. population under age 65 are shown in Table C-25. Because of changes in the CPS questionnaire, direct comparisons of the years shown can only be made within these three time periods: 1987-1993, 1994-1999, and 1999-2002.

Beginning with 1994 data, the survey included additional questions about private coverage and the order of questions was altered such that questions about private coverage preceded questions about other forms of health insurance. Consequently, differences in coverage between 1993 and 1994 are a function of changes in the CPS questionnaire in addition to actual changes in coverage. It is not possible to assess the impact of each on the estimate for 1994. Beginning with 1999 data, the survey included a followup question to those who reported no source of insurance to confirm that they were indeed uninsured. This question resulted in the release of new estimates for 1999, reducing the number of uninsured estimated through the survey. Table C-25 first shows the 1999 results before the verification question was asked, followed by the results that reflect the impact of the verification question, which is now standard in the survey.

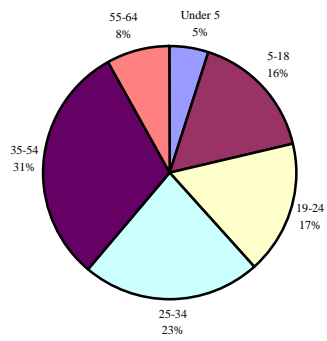
Between 1987 and 1993, the percentage of nonelderly Americans without health insurance increased by about 3 percentage points, from about 14 percent to 17 percent. During this period, the percent with employment-based coverage declined steadily, the percent with Medicare or Medicaid increased, and the percent uninsured continued to steadily increase.

Between 1994 and 1999, the percent with employment-based coverage increased by 2.5 percentage points from 65.3 to 67.8 percent. Between 2000 and 2002, the percent with employment-based coverage declined for the first time since the early 1990s. From 1999 to 2002, the number of people with government-provided health insurance increased by 5.1 million. Following declines in the number of uninsured from 1998 to 2000, the number of uninsured rose in 2001 and 2002 — to 43.3 million (17.2 percent of the nonelderly population) in 2002.

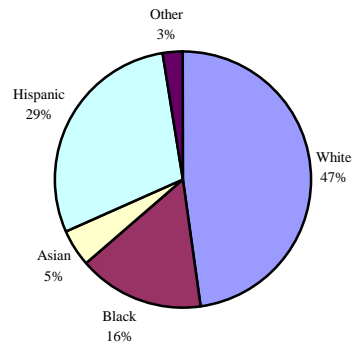


CHART C-2--CHARACTERISTICS OF THE UNINSURED POPULATION UNDER AGE 65, 2002

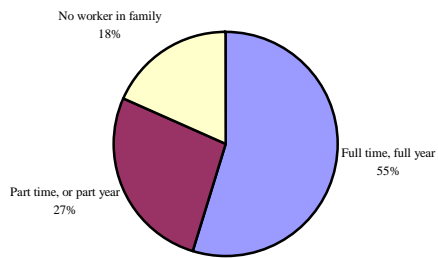
**AGE**



**RACE/ETHNICITY**



**TIES TO WORK FORCE**



**INCOME-TO-POVERTY RATIO**

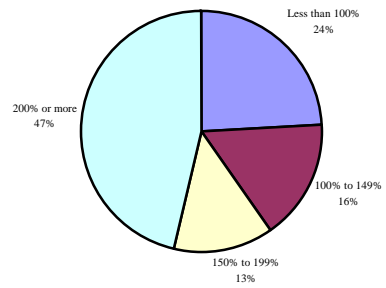
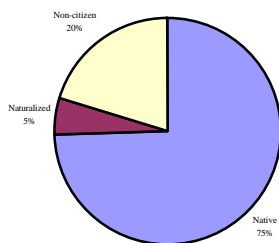
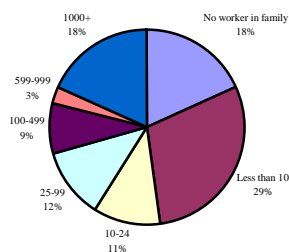


CHART C-2--CHARACTERISTICS OF THE UNINSURED POPULATION  
UNDER AGE 65, 2002-continued

**CITIZENSHIP**



**FIRM SIZE**



Note--Totals may not sum to 100 percent due to rounding. Hispanics may be of any race. In this chart, whites, blacks and Asians are those who are non-Hispanic and report only one race. Among non-Hispanics, individuals who report any other single race (e.g., American Indian) or multiple races are categorized as "other." "Firm size" and "ties to work force" reflect the employment characteristics of the primary worker in families where someone is working. Those characteristics were applied to those individuals' "dependents" — their spouses and children. Employed policyholders of private coverage are first to be assigned as primary workers. For those in families without private coverage, persons' employment characteristics are those of the family head or, if the head is not employed and the spouse is, the spouse.

Source: Congressional Research Service analysis of data from the March 2003 Current Population Survey.

TABLE C-25--HEALTH INSURANCE COVERAGE FOR THE NONINSTITUTIONALIZED  
U.S. POPULATION UNDER 65, 1987-2002<sup>1</sup>

[Numbers in Millions]

Year	Employment based <sup>2</sup>		Government <sup>3</sup>		Other <sup>4</sup>		Uninsured		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1987	143.5	67.5	19.9	9.4	26.0	12.2	30.7	14.4	212.5	100.0
1988	144.1	67.2	20.4	9.5	25.0	11.7	32.4	15.1	214.5	100.0
1989	144.7	66.9	20.8	9.6	25.6	11.8	33.0	15.3	216.4	100.0
1990	142.5	65.2	23.8	10.9	25.7	11.8	34.4	15.7	218.6	100.0
1991	142.4	64.5	26.2	11.9	25.0	11.4	35.1	15.9	220.6	100.0
1992 <sup>5</sup>	141.3	62.5	28.9	12.8	26.0	11.5	38.2	16.9	226.1	100.0
1993	140.4	61.3	31.4	13.7	27.7	12.1	39.3	17.2	229	100.0
1994 <sup>1</sup>	150.7	65.3	31.2	13.5	20.7	8.9	39.4	17.1	230.8	100.0
1995	152.1	65.4	31.6	13.6	19.1	8.2	40.3	17.3	232.7	100.0
1996	153.9	65.5	31.1	13.3	18.6	7.9	41.4	17.6	234.9	100.0
1997	157.1	66.3	27.8	11.7	24.5	10.3	43.1	18.2	237	100.0
1998	160.8	67.2	26.9	11.3	24.0	10.0	43.9	18.4	239.3	100.0
1999 <sup>1,6</sup>	164.8	67.8	26.9	11.1	23.1	9.5	43.1	17.7	243.3	100.0
1999 <sup>7</sup>	167.3	68.8	28.6	11.8	23.4	9.6	40.0	16.4	243.3	100.0
2000	170.5	69.3	29.6	12.0	22.7	9.2	39.6	16.1	246	100.0
2001	168.8	68.0	31.9	12.8	22.8	9.2	40.9	16.5	248.3	100.0
2002	167.4	66.5	33.7	13.4	23.9	9.5	43.3	17.2	251.7	100.0

<sup>1</sup> Questionnaire changes effective in 1994 and 1999 make numbers not strictly comparable over time. Beginning with 1994 data, the survey included additional questions about private coverage and the order of questions was altered such that questions about private coverage preceded questions about other forms of health insurance. Beginning with 1999 data, the survey included a followup question to those who reported no source of insurance to confirm that they were indeed uninsured. This question resulted in the release of new estimates for 1999, reducing the number of uninsured estimated through the survey. The table first shows the 1999 results before the verification question was asked followed by the results that reflect the impact of the verification question, which is now standard in the survey.

<sup>2</sup> Group health insurance through current or former employer or union. Excludes military or veterans coverage.

<sup>3</sup> Medicare or Medicaid. For 1999 and after, this also includes other State programs for low-income individuals.

<sup>4</sup> Private nongroup health insurance, military and veterans coverage.

<sup>5</sup> Based on revised weights from the 1990 Census.

**TABLE C-25--HEALTH INSURANCE COVERAGE FOR THE NONINSTITUTIONALIZED  
U.S. POPULATION UNDER 65, 1987-2002<sup>1</sup> -continued**

<sup>6</sup> Based on expanded sample size and on revised weights from the 2000 Census.

<sup>7</sup> Includes impact of verification question in the revised CPS questionnaire.

Note-Persons may have more than one type of coverage; percentages may total to more than 100.

Source: Congressional Research Service analysis of data from the March Current Population Surveys, various years.

### **INTERNATIONAL HEALTH SPENDING**

This section analyzes trends in health expenditures for the 29 Organization for Economic Cooperation and Development (OECD) countries from 1960 to 2000. Table C-26 illustrates total health expenditures as a percentage of gross domestic product (GDP). Of the countries reporting data in 1960, the mean percent of GDP spent on health care was 4.0 percent. In 2000, the mean percent of GDP spent on health care by OECD countries was 8.1 percent. For all years for which data are available, the share of GDP spent on health care by the United States was higher than the OECD average. Since 1982, the United States has spent a larger share of its GDP on health care than any other OECD nation.

In terms of dollars per capita, the United States spent \$4,631 on health care in 2000, more than double the OECD average of \$1,967. The per capita amount spent in the United States was the highest of all the OECD countries for which data are available. Switzerland spent \$3,222 per capita on health care, the second-highest amount of all OECD nations.

The public sector plays a relatively small role in financing U.S. health care costs compared to other OECD countries. In 2000, 44.3 percent of health care in the United States was financed by the government. This share is smaller than any other OECD country. By contrast, the public sector funded 91.4 percent of health care in the Czech Republic in 2000. This share is larger than any other OECD country.

TABLE C-26 -- TOTAL HEALTH EXPENDITURES AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT, PER CAPITA HEALTH SPENDING AND PERCENTAGE OF MEDICAL EXPENDITURES PUBLICLY FUNDED, OECD COUNTRIES FOR SELECTED CALENDAR YEARS 1960-2000

Country	Percent of GDP											Per capita		Percent public	
	1960	1965	1970	1975	1980	1985	1990	1995	1999	2000	2000	2000	2000	2000	
Australia	4.3	--	--	7.2	7.0	7.4	7.8	8.2	8.4	8.3	2,211	8.3	2,211	72.4	
Austria	4.3	4.5	5.3	7.1	7.6	6.6	7.1	8.6	8.1	8.0	2,162	8.0	2,162	69.7	
Belgium	--	--	4.0	5.8	6.4	7.2	7.4	8.7	8.7	8.7	2,269	8.7	2,269	71.2	
Canada	5.4	5.9	7.0	7.1	7.1	8.2	9.0	9.1	9.2	9.1	2,535	9.1	2,535	72.0	
Czech Republic	--	--	--	--	--	--	5.0	7.3	7.2	7.2	1,031	7.2	1,031	91.4	
Denmark	--	--	--	8.9	9.1	8.7	8.5	8.2	8.5	8.3	2,420	8.3	2,420	82.1	
Finland	3.9	4.9	5.6	6.2	6.4	7.2	7.9	7.5	6.9	6.6	1,664	6.6	1,664	75.1	
France	--	--	--	--	--	--	8.6	9.6	9.4	9.5	2,349	9.5	2,349	76.0	
Germany	4.8	5.1	6.3	8.8	8.8	9.3	8.7	10.6	10.7	10.6	2,748	10.6	2,748	75.1	
Greece	--	--	6.1	--	6.6	--	7.5	8.9	8.7	8.3	1,399	8.3	1,399	55.5	
Hungary	--	--	--	--	--	--	--	7.5	6.8	6.8	841	6.8	841	75.7	
Iceland	3.3	3.9	4.9	5.8	6.1	7.2	7.9	8.2	8.7	8.9	2,608	8.9	2,608	84.4	
Ireland	3.6	4.0	5.1	7.4	8.4	7.6	6.6	7.2	6.8	6.7	1,953	6.7	1,953	75.8	
Italy	--	--	--	--	--	--	8.0	7.4	7.8	8.1	2,032	8.1	2,032	73.7	
Japan	3.0	4.5	4.5	5.6	6.4	6.6	5.9	7.0	7.4	7.8	2,012	7.8	2,012	76.7	
Korea	--	--	--	--	--	4.3	4.8	4.7	5.6	5.9	893	5.9	893	44.4	
Luxembourg	--	--	3.6	4.9	5.9	5.9	6.1	6.4	6.0	--	--	--	--	--	
Mexico	--	--	--	--	--	--	4.4	5.6	5.4	5.4	490	5.4	490	46.4	
Netherlands	--	--	--	7.2	7.5	7.3	8.0	8.4	8.2	8.1	2,246	8.1	2,246	67.5	
New Zealand	--	--	5.1	6.6	5.9	5.2	6.9	7.2	7.9	8.0	1,623	8.0	1,623	78.0	
Norway	2.9	3.5	4.4	5.9	7.0	6.7	7.8	8.0	8.8	7.8	2,362	7.8	2,362	85.2	
Poland	--	--	--	--	--	--	5.3	6.0	6.2	--	--	--	--	--	
Portugal	--	--	2.6	5.4	5.6	6.0	6.2	8.3	8.4	8.2	1,441	8.2	1,441	71.2	
Slovak Republic	--	--	--	--	--	--	--	--	5.8	5.9	690	5.9	690	89.6	
Spain	1.5	2.5	3.6	4.7	5.4	5.4	6.6	7.7	7.7	7.7	1,556	7.7	1,556	69.9	
Sweden	4.5	5.3	6.9	7.7	9.1	8.7	8.5	8.1	--	--	--	--	--	--	

Switzerland	4.9	4.6	5.6	7.2	7.6	8.0	8.5	10.0	10.7	10.7	3,222	55.6
Turkey	--	--	2.4	2.7	3.3	2.2	3.6	3.4	--	--	--	--
United Kingdom	3.9	4.1	4.5	5.5	5.6	5.9	6.0	7.0	7.1	7.3	1,763	81.0
United States	5.1	5.6	6.9	7.8	8.7	10.0	11.9	13.3	13.0	13.0	4,631	44.3
OECD Average /1/	4.0	4.5	5.0	6.5	6.9	6.9	7.2	7.9	8.0	8.1	1,967	71.5

<sup>1</sup> Represents only those countries that have data reported for the given year.

Note: Foreign per capita amounts converted to U.S. dollars using purchasing power parities (PPPs).

Source: Organization for Economic Cooperation and Development. *OECD Health Data 2002*. OECD average calculated by Congressional Research

**REFERENCES**

- American Hospital Association. *Hospital Statistics*. Individual years, 1981-2003.
- American Medical Association. (various years). JAMA [Each year of this journal devotes an issue to medical education. The most recent is 2002. 290(9).]
- American Medical Association. (1998a). Physician marketplace statistics 1997/98. Chicago.
- American Medical Association. (1998b). Socioeconomic characteristics of medical practice 1997/98. Chicago.
- American Medical Association. (1999). Physician Socioeconomic Statistics, 1999-2000 Edition. Chicago.
- American Medical Association. (2002). Physician Characteristics and Distribution in the United States, 2002-2003 Edition. Chicago.
- Association of American Medical Colleges. (2003, October 30). Decline of medical school applicants continues in 2002. Press Release.
- Cooper, Richard A. (2002, January/February). Economic and demographic trends signal an impending physician shortage. *Health Affairs*, 21 (1), 140-154.
- National Center for Health Statistics. *Health, United States, 2002*.
- National Center for Health Statistics. *National Hospital Discharge Survey*. Individual years, 1980-2001.
- Romano, Michael. (2003, June 16). The vanishing doctor surplus. *Modern Healthcare*, 33 (25), 28.
- Thrall, Terese Hudson. (2003, February). Mds: [missing doctors?]. *Hospitals & Health Networks*, 77 (2) 32-36.
- Weiner, Jonathan P. (2002, January/February). A shortage of physicians or a surplus of assumptions?. *Health Affairs*, 21 (1), 160-162.
- Whelan, Gerald P. (2002, September 4). The changing pool of international medical graduates seeking certification training in U.S. graduate medical education programs. *JAMA*, 288 (9), 1079-1084.