

## **APPENDIX C. NATIONAL AND INTERNATIONAL HEALTH CARE EXPENDITURES AND HEALTH INSURANCE COVERAGE**

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### **NATIONAL HEALTH EXPENDITURES**

In 1994, the Nation's health care bill totaled \$949.4 billion for the 271 million persons residing in the United States (Levit, Lazenby, & Sivarajan, 1996). In 1965, the year prior to the beginning of the Medicare and Medicaid Programs, national health expenditures were only \$41.1 billion (see table C-1).

Adjusting for inflation, health care expenditures increased substantially from 1965 to 1994, rising from \$193.6 billion in 1965 (in constant 1994 dollars) to \$949.4 billion in 1994 (see table C-2). The annual rate of increase in inflation-adjusted per capita expenditures was 4.8 percent from 1980 to 1985 and 5.0 percent from 1985 to 1990 (table C-3). After increasing by 5.2 percent between 1991 and 1992, however, health expenditure growth per capita decelerated to 2.9 percent for 1992 to 1993 and 2.7 percent for 1993 to 1994. This is the slowest growth recorded in more than three decades.

TABLE C-1.—NATIONAL HEALTH EXPENDITURES, SELECTED CALENDAR YEARS 1960–2005  
 [Dollar amounts in billions]

| Spending category   | 1960   | 1965   | 1970   | 1975    | 1980    | 1985    | 1990    | 1991    | 1992    | 1993    | 1994    | 2000 <sup>1</sup> | 2005 <sup>1</sup> |
|---|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|-------------------|
| Percent of GDP .....  | 5.1    | 5.7    | 7.1    | 8.0     | 8.9     | 10.2    | 12.1    | 12.9    | 13.3    | 13.6    | 13.7    | 16.1              | 18.0              |
| Health services and supplies .....  | 25.2   | 37.7   | 67.9   | 122.3   | 235.6   | 411.8   | 672.9   | 736.3   | 806.0   | 863.1   | 919.2   | 1,315.5           | 1,908.0           |
| Personal health care .....  | 23.6   | 35.2   | 63.8   | 114.5   | 217.0   | 376.4   | 614.7   | 676.2   | 739.8   | 786.5   | 831.7   | 1,315.5           | 1,908.0           |
| Hospital care .....   | 9.3    | 14.0   | 28.0   | 52.6    | 102.7   | 168.3   | 256.4   | 282.3   | 305.3   | 324.2   | 338.5   | 512.4             | 713.4             |
| Physicians' services .....  | 5.3    | 8.2    | 13.6   | 23.9    | 45.2    | 83.6    | 146.3   | 158.6   | 174.7   | 181.1   | 189.4   | 283.1             | 417.5             |
| Dentists' services .....  | 2.0    | 2.8    | 4.7    | 8.0     | 13.3    | 21.7    | 31.6    | 33.3    | 37.0    | 39.2    | 42.2    | 61.2              | 85.9              |
| Other professional services .....   | 0.6    | 0.9    | 1.4    | 2.7     | 6.4     | 16.6    | 34.7    | 38.3    | 42.1    | 46.3    | 49.6    | 97.4              | 149.3             |
| Home health care .....  | 0.1    | 0.1    | 0.2    | 0.6     | 2.4     | 5.6     | 13.1    | 16.1    | 19.6    | 23.0    | 26.2    | 61.3              | 105.1             |
| Drugs and other medical<br>nondurables .....                                  | 4.2    | 5.9    | 8.8    | 13.0    | 21.6    | 37.1    | 59.9    | 65.6    | 71.3    | 75.2    | 78.6    | 126.8             | 182.3             |
| Vision products and other<br>medical durables .....                           | 0.6    | 1.0    | 1.6    | 2.5     | 3.8     | 6.7     | 10.5    | 11.2    | 11.9    | 12.6    | 13.1    | 20.5              | 28.7              |
| Nursing home care .....   | 0.8    | 1.5    | 4.2    | 8.7     | 17.6    | 30.7    | 50.9    | 57.2    | 62.3    | 67.0    | 72.3    | 122.8             | 182.2             |
| Other personal health care .....  | 0.7    | 0.8    | 1.3    | 2.5     | 4.0     | 6.1     | 11.2    | 13.6    | 15.6    | 17.8    | 21.8    | 30.1              | 43.6              |
| Program administration and net<br>cost of private health insur-<br>ance ..... | 1.2    | 1.9    | 2.7    | 4.9     | 11.8    | 23.8    | 38.6    | 38.7    | 42.8    | 51.0    | 58.7    | 78.0              | 108.7             |
| Government public health<br>activities .....                                  | 0.4    | 0.6    | 1.3    | 2.9     | 6.7     | 11.6    | 19.6    | 21.4    | 23.4    | 25.7    | 28.8    | 35.5              | 46.0              |
| Research and construction of<br>medical facilities .....                      | 1.7    | 3.4    | 5.3    | 8.4     | 11.6    | 16.4    | 24.5    | 24.9    | 27.6    | 29.2    | 30.2    | 42.7              | 55.8              |
| Total .....   | \$26.9 | \$41.1 | \$73.2 | \$130.7 | \$247.2 | \$428.2 | \$687.5 | \$761.3 | \$833.6 | \$892.3 | \$949.4 | \$1,471.7         | \$2,118.5         |

<sup>1</sup> Estimates prepared by the Congressional Budget Office, February 1995.

Note.—Numbers may not add to totals due to rounding.

Source: Health Care Financing Administration, Office of the Actuary.

TABLE C-2.—NATIONAL HEALTH EXPENDITURES IN CONSTANT 1994 DOLLARS, SELECTED CALENDAR YEARS 1960–94  
 [Dollar amounts in billions]

| Spending category   | 1960           | 1965           | 1970           | 1975           | 1980           | 1985           | 1990           | 1991           | 1992           | 1993           | 1994           |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Health services and supplies .....                                    | 126.1          | 177.4          | 259.3          | 337.0          | 423.8          | 567.2          | 763.0          | 801.2          | 851.4          | 885.2          | 919.2          |
| Personal health care .....  | 118.4          | 165.4          | 243.8          | 315.4          | 390.4          | 518.5          | 697.0          | 735.8          | 781.4          | 806.6          | 831.7          |
| Hospital care .....   | 46.5           | 66.1           | 107.0          | 144.8          | 184.7          | 231.8          | 290.8          | 307.2          | 322.4          | 332.5          | 338.5          |
| Physicians' services .....  | 26.5           | 38.5           | 51.9           | 65.9           | 81.4           | 115.2          | 165.9          | 172.6          | 184.5          | 185.8          | 189.4          |
| Dentists' services .....  | 9.8            | 13.1           | 17.8           | 21.9           | 24.0           | 29.8           | 35.8           | 36.3           | 39.1           | 40.2           | 42.2           |
| Other professional services .....                                     | 3.0            | 4.1            | 5.4            | 7.5            | 11.4           | 22.9           | 39.3           | 41.6           | 44.5           | 47.5           | 49.6           |
| Home health care .....  | 0.3            | 0.4            | 0.8            | 1.7            | 4.3            | 7.6            | 14.9           | 17.5           | 20.7           | 23.6           | 26.2           |
| Drugs and other medical nondurables .....                             | 21.3           | 27.7           | 33.7           | 35.9           | 38.9           | 51.0           | 67.9           | 71.4           | 75.3           | 77.1           | 78.6           |
| Visions products and other medical durables .....                     | 3.2            | 4.7            | 6.2            | 7.0            | 6.8            | 9.3            | 11.9           | 12.2           | 12.6           | 12.9           | 13.1           |
| Nursing home care .....   | 4.3            | 6.9            | 16.1           | 23.9           | 31.7           | 42.3           | 57.7           | 62.2           | 65.8           | 68.7           | 72.3           |
| Other personal health care .....                                      | 3.5            | 3.9            | 5.0            | 6.8            | 7.2            | 8.4            | 12.7           | 14.8           | 16.5           | 18.3           | 21.8           |
| Program administration and net cost of private health insurance ..... | 5.8            | 9.1            | 10.4           | 13.5           | 21.3           | 32.7           | 43.8           | 42.1           | 45.2           | 52.3           | 58.7           |
| Government public health activities .....                             | 1.8            | 2.9            | 5.1            | 8.1            | 12.1           | 16.0           | 22.2           | 23.3           | 24.7           | 26.3           | 28.8           |
| Research and construction of medical facilities .....                 | 8.5            | 16.2           | 20.4           | 23.1           | 20.9           | 22.5           | 27.8           | 27.1           | 29.1           | 29.9           | 30.2           |
| <b>Total .....</b>  | <b>\$134.6</b> | <b>\$193.6</b> | <b>\$279.8</b> | <b>\$360.1</b> | <b>\$444.7</b> | <b>\$589.8</b> | <b>\$790.8</b> | <b>\$828.3</b> | <b>\$880.5</b> | <b>\$915.1</b> | <b>\$949.4</b> |

Note.—Constant dollar expenditures are calculated using the consumer price index for all urban consumers (CPI-U).  
 Source: Health Care Financing Administration, Office of the Actuary.

TABLE C-3.—NATIONAL HEALTH EXPENDITURES: PER CAPITA AMOUNTS IN CONSTANT 1994 DOLLARS, SELECTED CALENDAR YEARS 1960-94

| Spending category   | 1960  | 1965  | 1970    | 1975    | 1980    | 1985    | 1990    | 1991    | 1992    | 1993    | 1994    |
|---|-------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Total .....   | \$706 | \$949 | \$1,303 | \$1,604 | \$1,891 | \$2,389 | \$3,047 | \$3,158 | \$3,321 | \$3,416 | \$3,510 |
| Health services and supplies .....                                    | 663   | 869   | 1,207   | 1,501   | 1,802   | 2,296   | 2,940   | 3,054   | 3,211   | 3,304   | 3,396   |
| Personal health care .....  | 623   | 811   | 1,135   | 1,405   | 1,660   | 2,100   | 2,688   | 2,806   | 2,947   | 3,011   | 3,074   |
| Hospital care .....   | 245   | 324   | 496     | 645     | 786     | 939     | 1,120   | 1,171   | 1,216   | 1,241   | 1,251   |
| Physicians' services .....  | 139   | 189   | 241     | 293     | 346     | 487     | 639     | 658     | 696     | 693     | 700     |
| Dentists' services .....  | 52    | 64    | 83      | 96      | 102     | 121     | 138     | 138     | 147     | 150     | 156     |
| Other professional services .....                                     | 16    | 20    | 25      | 33      | 49      | 93      | 152     | 159     | 168     | 166     | 183     |
| Home health care .....  | 1     | 2     | 4       | 8       | 18      | 31      | 57      | 67      | 78      | 88      | 97      |
| Drugs and other medical nondurables .....                             | 112   | 136   | 157     | 160     | 165     | 207     | 262     | 272     | 284     | 288     | 290     |
| Vision products and other medical durables .....                      | 17    | 23    | 29      | 31      | 29      | 38      | 46      | 46      | 48      | 48      | 49      |
| Nursing home care .....   | 22    | 34    | 75      | 106     | 135     | 171     | 223     | 237     | 248     | 257     | 267     |
| Other personal health care .....                                      | 18    | 19    | 23      | 30      | 31      | 34      | 49      | 58      | 62      | 68      | 81      |
| Program administration and net cost of private health insurance ..... | 31    | 44    | 48      | 60      | 91      | 133     | 169     | 161     | 170     | 195     | 217     |
| Government public health activities .....                             | 10    | 14    | 24      | 36      | 51      | 65      | 56      | 89      | 93      | 98      | 107     |
| Research and construction of medical facilities .....                 | 45    | 79    | 95      | 103     | 89      | 91      | 107     | 103     | 110     | 112     | 112     |
| Average annual percentage increase .....                              | 60-65 | 65-70 | 70-75   | 75-80   | 80-85   | 85-90   | 92-93   | 93-94   | .....   | .....   | .....   |
| Total .....   | 6.0   | 6.5   | 4.2     | 3.4     | 4.8     | 5.0     | 2.9     | 2.7     | .....   | .....   | .....   |
| Health services and supplies .....                                    | 5.6   | 6.8   | 4.4     | 3.7     | 5.0     | 5.1     | 2.9     | 2.8     | .....   | .....   | .....   |
| Personal health care .....  | 5.4   | 7.0   | 4.4     | 3.4     | 4.8     | 5.0     | 2.2     | 2.1     | .....   | .....   | .....   |
| Hospital care .....   | 5.8   | 9.0   | 5.3     | 4.0     | 3.6     | 5.2     | 2.1     | 0.8     | .....   | .....   | .....   |
| Physicians' services .....  | 6.3   | 5.0   | 4.0     | 3.4     | 6.2     | 5.2     | -0.4    | 1.0     | .....   | .....   | .....   |

Note.—Constant dollar expenditures are calculated using the consumer price indices for all urban consumers (CPI-U). Average annual amounts are calculated on unrounded numbers.

Source: Health Care Financing Administration, Office of the Actuary.

Hospital care expenditures were the largest component of national health expenditures at \$338.5 billion or 36 percent in 1994. In terms of per capita spending, \$1,251 was spent for hospital care in 1994 (see table C-3). Hospital expenditures increased only 4.4 percent in 1994, the third consecutive year of decelerated growth. Spending for physician services in 1994 grew to \$189.4 billion, almost 20 percent of national health expenditures.

The share of personal health expenditures funded by the public sector increased from 39.5 percent in 1990 to 43.5 percent in 1994, the highest level ever (see table C-4).<sup>1</sup> The Federal Government accounted for 33.7 percent (\$280 billion) of personal health spending (including payments for both Medicare and Medicaid), and 9.8 percent (\$81.8 billion) was paid by State and local government.

In 1994, private health insurance payments (including premiums paid for both employers and employees) were 32.1 percent (\$266.8 billion) of personal health expenditures. Twenty-one percent (\$174.9 billion) was paid by direct (out-of-pocket) payments by individuals. Philanthropy and in-plant health services accounted for 3.4 percent.

#### **EXPENDITURES FOR HOSPITAL CARE**

In 1994, the 36 percent of total national health expenditures spent on hospitals was 6 percentage points less than in 1980. Table C-5 shows several measures of costs incurred by community hospitals, which include all non-Federal short-term general hospitals. These hospitals' total expenses (including inpatient and outpatient acute and post-acute care, as well as nonpatient care activities) reached \$308.4 billion in 1995. This was up 5.3 percent from the previous year. Combined with the 5.0-percent increase in 1994, this produced the smallest 2-year rise in hospital costs in at least 30 years. That inpatient expenses increased more slowly than total expenses reflects the growing share of activity in the hospital outpatient setting.

The average cost of a day of hospital care (adjusted to reflect outpatient services) rose by 6.3 percent to \$1,127 in 1995. The higher rate of growth in expenses per day reflects a decrease in the number of hospital days (see the discussion of average length of stay below). However, combined with the 6.0-percent increase in 1994, this also produced the lowest 2-year increase in three decades. In fact, hospital costs per day grew more slowly in 1994 and 1995 than in any two single years since data on this measure have been available.

The average cost per case (also adjusted to reflect outpatient care) rose to \$6,427 in 1995, an increase of only 1.8 percent. This represents the fifth consecutive decline in this growth rate. In 1994 and 1995, the increase in costs per case averaged 1.9 percent per year, compared with 9.1 percent from 1985 through 1992 and 14.0 percent from 1975 through 1982.

<sup>1</sup>Personal health expenditures accounted for 88 percent of national health expenditures in 1994. The remaining 12 percent was expended on program administration; administrative costs of private health insurance and profits earned by private health insurance; noncommercial health research; new construction; and government public health activities.

TABLE C-4.—PERSONAL HEALTH CARE EXPENDITURES: AGGREGATE AMOUNTS AND PERCENTAGE DISTRIBUTION, SELECTED CALENDAR YEARS 1960–2005

| Spending category              | 1960   | 1965   | 1970   | 1975   | 1980    | 1985    | 1990    | 1991    | 1992    | 1993    | 1994    | 2000 <sup>1</sup> | 2005 <sup>1</sup> |
|--------------------------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|-------------------|-------------------|
| Amount in billions of dollars  |        |        |        |        |         |         |         |         |         |         |         |                   |                   |
| Private                        | \$18.5 | \$27.9 | \$41.3 | \$69.2 | \$130.0 | \$228.4 | \$371.7 | \$399.6 | \$431.5 | \$452.3 | \$469.9 | \$691.4           | \$943.7           |
| Private health insurance       | 5.0    | 8.7    | 14.8   | 28.4   | 62.0    | 113.8   | 201.8   | 221.2   | 242.7   | 256.4   | 266.8   | 411.0             | 571.2             |
| Out-of-pocket payments         | 13.1   | 18.5   | 24.9   | 38.1   | 60.3    | 100.6   | 148.4   | 155.1   | 164.4   | 169.4   | 174.9   | 227.4             | 294.7             |
| Other private sources of funds | 0.4    | 0.7    | 1.6    | 2.7    | 7.8     | 14.1    | 21.5    | 23.3    | 24.3    | 26.6    | 28.2    | 53.0              | 77.8              |
| Public                         | 5.1    | 7.3    | 22.5   | 45.3   | 87.3    | 148.0   | 243.0   | 276.6   | 308.3   | 334.1   | 361.8   | 624.1             | 964.3             |
| Federal                        | 2.1    | 3.0    | 14.7   | 30.9   | 63.4    | 111.3   | 178.1   | 205.7   | 234.4   | 256.8   | 280.0   | 493.6             | 775.5             |
| State and local                | 3.0    | 4.3    | 7.8    | 14.4   | 23.6    | 36.7    | 64.9    | 70.8    | 73.9    | 77.3    | 81.8    | 130.5             | 188.8             |
| Total                          | 23.6   | 35.2   | 63.8   | 114.5  | 217.0   | 376.4   | 614.7   | 676.2   | 739.8   | 786.5   | 831.7   | 1,315.5           | 1,908.0           |
| Percentage distribution        |        |        |        |        |         |         |         |         |         |         |         |                   |                   |
| Private                        | 78.3   | 79.4   | 64.7   | 60.4   | 59.9    | 60.7    | 60.5    | 59.1    | 58.3    | 57.5    | 56.5    | 52.6              | 49.5              |
| Private health insurance       | 21.2   | 24.7   | 23.2   | 24.8   | 28.6    | 30.2    | 32.8    | 32.7    | 32.8    | 32.6    | 32.1    | 31.2              | 29.9              |
| Out-of-pocket payments         | 55.3   | 52.7   | 39.0   | 33.3   | 27.8    | 26.7    | 24.1    | 22.9    | 22.2    | 21.5    | 21.0    | 17.3              | 15.4              |
| Other private sources of funds | 1.8    | 2.0    | 2.6    | 2.4    | 3.6     | 3.7     | 3.5     | 3.4     | 3.3     | 3.4     | 3.4     | 4.0               | 4.1               |
| Public                         | 21.7   | 20.6   | 35.3   | 39.6   | 40.1    | 39.3    | 39.5    | 40.9    | 41.7    | 42.5    | 43.5    | 47.4              | 50.5              |
| Federal                        | 9.0    | 8.4    | 23.0   | 27.0   | 29.2    | 29.6    | 29.0    | 30.4    | 31.7    | 32.7    | 33.7    | 37.5              | 40.6              |
| State and local                | 12.6   | 12.2   | 12.2   | 12.5   | 10.9    | 9.7     | 10.6    | 10.5    | 10.0    | 9.8     | 9.8     | 9.9               | 9.9               |
| Total                          | 100.0  | 100.0  | 100.0  | 100.0  | 100.0   | 100.0   | 100.0   | 100.0   | 100.0   | 100.0   | 100.0   | 100.0             | 100.0             |

<sup>1</sup> Estimates prepared by the Congressional Budget Office, February 1995.

Note.—Numbers may not add to totals due to rounding. Percentage amounts are calculated on unrounded numbers.

Source: Health Care Financing Administration, Office of the Actuary.

TABLE C-5.—SELECTED DATA ON COMMUNITY HOSPITAL EXPENSES, 1965-95

| Year | Total expenses       |                | Expenses per adjusted inpatient day |                | Expenses per adjusted admission |                | Inpatient expenses <sup>1</sup> |                |
|------|----------------------|----------------|-------------------------------------|----------------|---------------------------------|----------------|---------------------------------|----------------|
|      | Amount (in billions) | Percent change | Amount                              | Percent change | Amount                          | Percent change | Amount (in billions)            | Percent change |
| 1965 | \$9.220              | 8.6            | \$41                                | 7.5            | \$315                           | 8.1            | \$8.414                         | 8.7            |
| 1966 | 10.497               | 13.8           | 46                                  | 11.4           | 356                             | 13.1           | 9.611                           | 14.2           |
| 1967 | 12.624               | 20.3           | 53                                  | 15.3           | 425                             | 19.1           | 11.551                          | 20.2           |
| 1968 | 14.720               | 16.6           | 59                                  | 11.5           | 482                             | 13.4           | 13.372                          | 15.8           |
| 1969 | 17.247               | 17.2           | 68                                  | 15.4           | 551                             | 14.5           | 15.636                          | 16.9           |
| 1970 | 20.261               | 17.5           | 78                                  | 13.8           | 608                             | 10.3           | 18.329                          | 17.2           |
| 1971 | 22.496               | 11.0           | 87                                  | 12.3           | 670                             | 10.1           | 20.269                          | 10.6           |
| 1972 | 25.223               | 12.1           | 96                                  | 10.3           | 729                             | 8.8            | 22.622                          | 11.6           |
| 1973 | 28.248               | 12.0           | 105                                 | 9.2            | 784                             | 7.5            | 25.173                          | 11.3           |
| 1974 | 32.759               | 16.0           | 118                                 | 12.3           | 873                             | 11.4           | 29.077                          | 15.5           |
| 1975 | 38.492               | 17.5           | 138                                 | 16.4           | 1,017                           | 16.5           | 33.971                          | 16.8           |
| 1976 | 45.842               | 19.1           | 158                                 | 15.0           | 1,168                           | 14.8           | 40.321                          | 18.7           |
| 1977 | 53.006               | 15.6           | 181                                 | 14.3           | 1,312                           | 12.3           | 46.437                          | 15.2           |
| 1978 | 59.802               | 12.8           | 203                                 | 12.1           | 1,466                           | 11.8           | 52.131                          | 12.3           |
| 1979 | 67.833               | 13.4           | 226                                 | 11.5           | 1,618                           | 10.4           | 59.060                          | 13.3           |
| 1980 | 79.340               | 17.0           | 256                                 | 12.9           | 1,836                           | 13.5           | 68.962                          | 16.8           |
| 1981 | 94.187               | 18.7           | 299                                 | 16.9           | 2,155                           | 17.4           | 81.634                          | 18.4           |
| 1982 | 109.091              | 15.8           | 348                                 | 16.2           | 2,489                           | 15.5           | 94.346                          | 15.6           |
| 1983 | 120.220              | 10.2           | 391                                 | 12.4           | 2,742                           | 10.2           | 103.361                         | 9.6            |
| 1984 | 126.028              | 4.8            | 443                                 | 13.3           | 2,947                           | 7.5            | 107.005                         | 3.5            |
| 1985 | 134.043              | 6.4            | 493                                 | 11.3           | 3,226                           | 9.5            | 111.416                         | 4.1            |
| 1986 | 146.032              | 8.9            | 535                                 | 8.6            | 3,527                           | 9.3            | 119.286                         | 7.1            |
| 1987 | 161.322              | 10.5           | 581                                 | 8.6            | 3,860                           | 9.5            | 129.824                         | 8.8            |
| 1988 | 177.770              | 10.2           | 632                                 | 8.8            | 4,194                           | 8.7            | 140.482                         | 8.2            |
| 1989 | 195.378              | 9.9            | 690                                 | 9.3            | 4,586                           | 9.3            | 152.147                         | 8.3            |

TABLE C-5.—SELECTED DATA ON COMMUNITY HOSPITAL EXPENSES, 1965–95—Continued

| Year       | Total expenses       |                | Expenses per adjusted inpatient day |                | Expenses per adjusted admission |                | Inpatient expenses <sup>1</sup> |                |
|------------|----------------------|----------------|-------------------------------------|----------------|---------------------------------|----------------|---------------------------------|----------------|
|            | Amount (in billions) | Percent change | Amount                              | Percent change | Amount                          | Percent change | Amount (in billions)            | Percent change |
| 1990 ..... | 217.113              | 11.1           | 765                                 | 10.7           | 5,021                           | 9.5            | 165.792                         | 9.0            |
| 1991 ..... | 238.633              | 9.9            | 844                                 | 10.3           | 5,461                           | 8.8            | 178.401                         | 7.6            |
| 1992 ..... | 260.994              | 9.4            | 927                                 | 9.9            | 5,905                           | 8.1            | 191.401                         | 7.3            |
| 1993 ..... | 278.880              | 6.9            | 1,000                               | 7.8            | 6,188                           | 4.8            | 202.055                         | 5.6            |
| 1994 ..... | 292.801              | 5.0            | 1,060                               | 6.0            | 6,312                           | 2.0            | 207.918                         | 2.9            |
| 1995 ..... | 308.411              | 5.3            | 1,127                               | 6.3            | 6,427                           | 1.8            | 214.594                         | 3.2            |

<sup>1</sup> Inpatient expenses estimated from total expenses, based on the proportion of inpatient to total revenues.

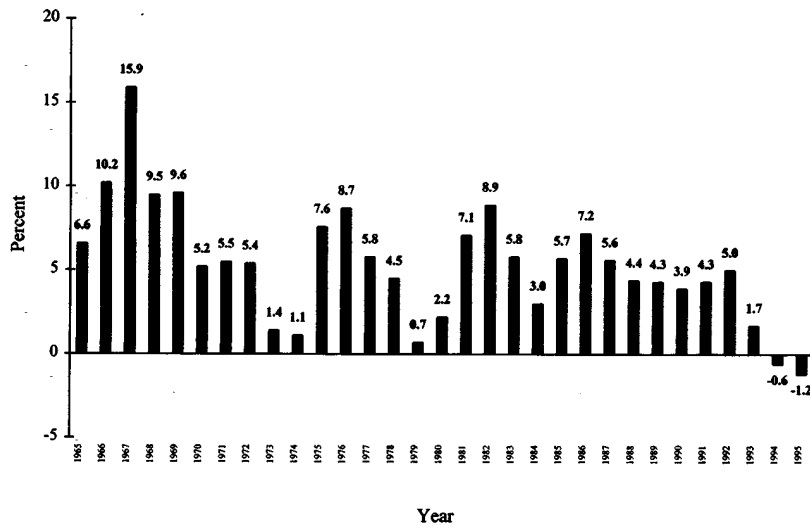
Note.—Admissions and inpatient days are adjusted to reflect the volume of outpatient visits as well as inpatient admissions and days.

Source: Prospective Payment Assessment Commission analysis of data from the American Hospital Association National Hospital Panel Survey.



Chart C-1 presents the real annual growth in expenses per adjusted admission. This chart provides a clearer picture of the actual rate of increase in costs per case by removing the effects of general inflation. Even after taking inflation into account, the recent trend in hospital costs differs sharply from previous years. In 1994, hospital costs per case rose more slowly than inflation for the first time. In 1995, costs per case grew even more slowly relative to inflation.

CHART C-1. REAL ANNUAL CHANGES IN HOSPITAL EXPENSES PER ADJUSTED ADMISSION (IN PERCENT), 1965-95



Source: Prospective Payment Assessment Commission analysis of data from the American Hospital Association National Hospital Panel Survey.

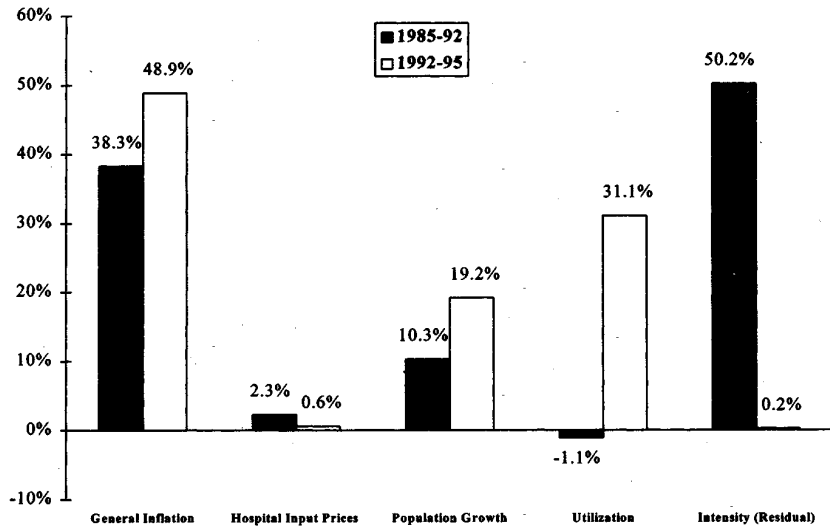
A variety of factors other than general inflation contribute to aggregate changes in hospital costs, and the roles of these factors may vary widely over time. Chart C-2 displays the contributions of five factors: general inflation, hospital input prices, population growth, utilization, and intensity. Between 1985 and 1992, total hospital expenses rose at an annual rate of 10 percent. The largest contributor to this increase was the intensity of hospital care; that is, the resources used per patient. During this period, general inflation also accounted for a large share of the increase in hospital expenses. Hospital input prices rose only slightly faster than the general price level, and hospital utilization per person actually fell (as the number of adjusted admissions grew more slowly than the population).

Between 1992 and 1995, the increase in total hospital expenses was only 5.7 percent per year. Because of this, although it slowed from 3.8 percent between 1985 and 1992 to 2.8 percent between 1992 and 1995, general inflation accounted for almost half of the

hospital cost increase in the latter period. Hospital utilization per person, which had fallen in the earlier period, rose substantially between 1992 and 1995, accounting for a large share of the growth in hospital expenses. Finally, intensity, which had been the major contributor to cost growth in the earlier period, was almost level between 1992 and 1995.

Expenditures for hospital care are financed primarily by third parties, as shown in table C-6. In 1993, private health insurers paid 36.1 percent of the total, Medicare 28.4 percent, and Medicaid (including both the Federal and State shares) 13.0 percent. The share financed by out-of-pocket payments from individuals was only 2.8 percent in 1993, down from 5.2 percent in 1985.

CHART C-2. FACTORS CONTRIBUTING TO GROWTH OF TOTAL HOSPITAL EXPENSES, 1985-92 AND 1992-95



Note.—Hospital expenses grew at an annual rate of 10.0 percent between 1985 and 1992 and 5.7 percent between 1992 and 1995.

Source: Prospective Payment Assessment Commission.

TABLE C-6.—NATIONAL EXPENDITURES FOR HOSPITAL CARE BY SOURCE OF FUNDS, 1980, 1985, 1990, 1995, AND 1990-93  
 [Amounts in billions]

| Source of payment              | 1980    |         | 1985    |         | 1990    |         | 1991    |         | 1992    |         | 1993    |         |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                | Amount  | Percent | Amount  | Percent | Amount  | Percent | Amount  | Percent | Amount  | Percent | Amount  | Percent |
| Total .....                    | \$102.7 | 100.0   | \$168.2 | 100.0   | \$256.5 | 100.0   | \$282.3 | 100.0   | \$306.0 | 100.0   | \$326.6 | 100.0   |
| Out of pocket .....            | 5.3     | 5.2     | 8.8     | 5.2     | 9.8     | 3.8     | 9.6     | 3.4     | 9.0     | 2.9     | 9.1     | 2.8     |
| Third-party payments .....     | 97.4    | 94.8    | 159.4   | 94.8    | 246.8   | 96.2    | 272.7   | 96.6    | 297.0   | 97.1    | 317.4   | 97.2    |
| Private health insurance ..... | 38.7    | 37.7    | 61.0    | 36.3    | 95.7    | 37.3    | 102.8   | 36.4    | 109.1   | 35.7    | 117.8   | 36.1    |
| Other private funds .....      | 5.0     | 4.9     | 8.3     | 4.9     | 13.8    | 5.4     | 15.1    | 5.3     | 15.9    | 5.2     | 16.8    | 5.2     |
| Government .....               | 53.7    | 52.3    | 90.1    | 53.6    | 137.3   | 53.5    | 154.8   | 54.8    | 172.0   | 56.2    | 182.9   | 56.0    |
| Federal .....                  | 40.9    | 39.8    | 71.1    | 42.3    | 103.4   | 40.3    | 120.3   | 42.6    | 137.3   | 44.9    | 149.2   | 45.7    |
| Medicare .....                 | 26.3    | 25.6    | 48.9    | 29.1    | 68.5    | 26.7    | 74.9    | 26.5    | 84.2    | 27.5    | 92.7    | 28.4    |
| Medicaid <sup>1</sup> .....    | 4.6     | 4.4     | 7.4     | 4.4     | 14.9    | 5.8     | 23.4    | 8.3     | 30.1    | 9.8     | 32.1    | 9.8     |
| Other Federal .....            | 9.9     | 9.7     | 14.8    | 8.8     | 20.0    | 7.8     | 22.0    | 7.8     | 23.0    | 7.5     | 24.4    | 7.5     |
| State and local .....          | 12.8    | 12.5    | 19.0    | 11.3    | 33.9    | 13.2    | 34.5    | 12.2    | 34.7    | 11.3    | 33.7    | 10.3    |
| Medicare <sup>2</sup> .....    | 3.9     | 3.8     | 6.3     | 3.7     | 11.6    | 4.5     | 11.1    | 3.9     | 10.9    | 3.6     | 10.3    | 3.2     |
| Other State and local .....    | 8.9     | 8.7     | 12.8    | 7.6     | 22.3    | 8.7     | 23.4    | 8.3     | 23.7    | 7.8     | 23.4    | 7.2     |

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

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

Source: Prospective Payment Assessment Commission analysis of data from the Health Care Financing Administration, Office of the Actuary.

## TRENDS IN HOSPITAL UTILIZATION

## ADMISSIONS

From 1978 through 1983, total inpatient admissions increased at an annual rate of 1.0 percent, and admissions for persons 65 and over increased an average of 4.8 percent per year, as shown in table C-7. With the introduction of Medicare's prospective payment system (PPS) in 1983, the number of elderly patients declined sharply, contrary to most expectations. Admissions of patients under 65, however, fell even more during the first few years of PPS and had been decreasing for several years before that. From 1987 through 1992, total admissions continued to decrease, but at a slower rate, due to an increase among the older population. In 1993, overall admissions increased for the first time in 12 years, due to a slower rate of decline in younger patients and a continuing increase in those 65 and over. This trend has continued, and the increase in total admissions of 1.4 percent in 1995 was the largest in 15 years.

TABLE C-7.—ANNUAL CHANGE IN HOSPITAL ADMISSIONS BY AGE GROUP, 1978-95

| Year                           | Percent change in admissions |          |             |
|--------------------------------|------------------------------|----------|-------------|
|                                | All                          | Under 65 | 65 and over |
| 1978 .....                     | 0.4                          | -1.0     | 4.9         |
| 1979 .....                     | 2.7                          | 1.7      | 5.3         |
| 1980 .....                     | 2.9                          | 1.5      | 6.7         |
| 1981 .....                     | 0.9                          | 0.0      | 3.0         |
| 1982 .....                     | 0.0                          | -1.6     | 4.1         |
| 1983 .....                     | -0.5                         | -2.8     | 4.7         |
| 1984 .....                     | -3.7                         | -4.2     | -2.6        |
| 1985 .....                     | -4.9                         | -4.7     | -5.2        |
| 1986 .....                     | -2.1                         | -2.5     | -1.0        |
| 1987 .....                     | -0.6                         | -1.0     | 0.4         |
| 1988 .....                     | -0.4                         | -1.6     | 2.0         |
| 1989 .....                     | -1.0                         | -2.0     | 1.2         |
| 1990 .....                     | -0.5                         | -1.6     | 1.7         |
| 1991 .....                     | -1.1                         | -2.9     | 2.5         |
| 1992 .....                     | -0.8                         | -2.2     | 1.7         |
| 1993 .....                     | 0.7                          | -0.5     | 2.9         |
| 1994 .....                     | 0.9                          | 0.2      | 2.0         |
| 1995 .....                     | 1.4                          | 0.4      | 2.9         |
| Average annual percent change: |                              |          |             |
| 1978-83 .....                  | 1.0                          | -0.4     | 4.8         |
| 1984-86 .....                  | -3.5                         | -3.8     | -3.0        |
| 1987-92 .....                  | -0.7                         | -1.9     | 1.6         |
| 1993-95 .....                  | 1.0                          | 0.0      | 2.6         |

Source: Prospective Payment Assessment Commission analysis of data from the American Hospital Association National Hospital Panel Survey.

## AVERAGE LENGTH OF STAY

Before the implementation of PPS, the average length of stay for all patients was relatively constant between 7.0 and 7.2 days, as shown in table C-8. With the introduction of PPS, however, there was a significant drop in length of stay. From 1982 to 1984, the average stay fell from 7.2 days to 6.7 days for all patients and from 10.4 days to 8.9 days for patients 65 and over. Average length of stay stabilized at these levels throughout the rest of the 1980s, but has declined again in the 1990s. Hospital stays for elderly patients were 1.6 days shorter, on average, in 1995 than in 1990, and for patients under 65 the average stay was 0.6 days shorter. This decline was even steeper than in the first years of PPS.

TABLE C-8.—AVERAGE LENGTH OF STAY AND ANNUAL CHANGE BY AGE GROUP, 1978–95

| Year                           | All                              |                | Under 65                         |                | 65 and over                      |                |
|--------------------------------|----------------------------------|----------------|----------------------------------|----------------|----------------------------------|----------------|
|                                | Average length of stay (in days) | Percent change | Average length of stay (in days) | Percent change | Average length of stay (in days) | Percent change |
| 1978                           | 7.2                              | -0.3           | 6.0                              | -0.9           | 10.6                             | -1.2           |
| 1979                           | 7.1                              | -1.0           | 5.9                              | -1.2           | 10.4                             | -1.9           |
| 1980                           | 7.2                              | 0.5            | 5.9                              | -0.2           | 10.4                             | -0.1           |
| 1981                           | 7.2                              | 0.4            | 5.9                              | 0.1            | 10.4                             | -0.1           |
| 1982                           | 7.2                              | -0.6           | 5.9                              | -0.6           | 10.1                             | -2.3           |
| 1983                           | 7.0                              | -2.0           | 5.8                              | -1.7           | 9.7                              | -4.4           |
| 1984                           | 6.7                              | -5.1           | 5.6                              | -3.5           | 8.9                              | -7.5           |
| 1985                           | 6.5                              | -1.7           | 5.5                              | -1.3           | 8.8                              | -2.1           |
| 1986                           | 6.6                              | 0.6            | 5.6                              | 0.5            | 8.8                              | 0.4            |
| 1987                           | 6.6                              | 0.8            | 5.6                              | 0.4            | 8.9                              | 1.0            |
| 1988                           | 6.6                              | -0.1           | 5.6                              | -0.3           | 8.8                              | -0.7           |
| 1989                           | 6.6                              | 0.1            | 5.5                              | -0.7           | 8.8                              | 0.2            |
| 1990                           | 6.6                              | -1.1           | 5.4                              | -1.5           | 8.7                              | -1.5           |
| 1991                           | 6.5                              | -1.4           | 5.3                              | -2.1           | 8.5                              | -2.0           |
| 1992                           | 6.4                              | -1.6           | 5.2                              | -1.9           | 8.3                              | -2.2           |
| 1993                           | 6.2                              | -2.8           | 5.1                              | -1.8           | 7.9                              | -4.7           |
| 1994                           | 6.0                              | -3.8           | 4.9                              | -3.8           | 7.6                              | -4.2           |
| 1995                           | 5.7                              | -4.2           | 4.8                              | -2.4           | 7.1                              | -6.6           |
| Average annual percent change: |                                  |                |                                  |                |                                  |                |
| 1978-83                        |                                  | -0.5           |                                  | -0.8           |                                  | -1.7           |
| 1984-86                        |                                  | -2.1           |                                  | -1.4           |                                  | -3.1           |
| 1987-92                        |                                  | -0.6           |                                  | -1.0           |                                  | -0.9           |
| 1993-95                        |                                  | -3.6           |                                  | -2.7           |                                  | -5.2           |

Source: Prospective Payment Assessment Commission analysis of data from the American Hospital Association National Hospital Panel Survey.

## HOSPITAL OCCUPANCY

Table C-9 shows that, with slight increases in admissions and stable average length of stay, occupancy rates were over 70 percent in the early 1980s. The number of hospital beds was increasing, ex-

ceeding 1 million by 1983. During the early years of PPS, however, occupancy rates decreased dramatically. From 1983 to 1986, the aggregate occupancy rate fell from 72.2 percent to 63.4 percent. There was a slight increase in occupancy rates in the late 1980s, but the sharp reduction in average length of stay lowered the occupancy rate below 60 percent by 1995, despite almost 130,000 fewer beds than in 1983.

TABLE C-9.—INPATIENT HOSPITAL OCCUPANCY RATE AND NUMBER OF BEDS, 1978-96

| Year                           | Occu-<br>pancy<br>rate (in<br>percent) | Percent<br>change | Number of<br>beds | Percent<br>change |
|--------------------------------|--|-------------------|-------------------|-------------------|
| 1978 .....                     | 73.7                                   | -0.8              | 954,001           | 0.9               |
| 1979 .....                     | 74.5                                   | 1.0               | 959,269           | 0.6               |
| 1980 .....                     | 76.1                                   | 2.2               | 970,456           | 1.2               |
| 1981 .....                     | 75.8                                   | -0.4              | 986,917           | 1.7               |
| 1982 .....                     | 74.5                                   | -1.6              | 997,720           | 1.1               |
| 1983 .....                     | 72.2                                   | -3.1              | 1,003,658         | 0.6               |
| 1984 .....                     | 66.7                                   | -7.6              | 992,616           | -1.1              |
| 1985 .....                     | 63.6                                   | -4.7              | 974,559           | -1.8              |
| 1986 .....                     | 63.4                                   | -0.3              | 963,133           | -1.2              |
| 1987 .....                     | 64.1                                   | 1.2               | 954,458           | -0.9              |
| 1988 .....                     | 64.6                                   | 0.8               | 942,306           | -1.3              |
| 1989 .....                     | 64.8                                   | 0.3               | 930,994           | -1.2              |
| 1990 .....                     | 64.5                                   | -0.6              | 921,447           | -1.0              |
| 1991 .....                     | 63.5                                   | -1.4              | 911,781           | -1.0              |
| 1992 .....                     | 62.3                                   | -1.9              | 907,661           | -0.5              |
| 1993 .....                     | 61.4                                   | -1.5              | 901,669           | -0.7              |
| 1994 .....                     | 60.3                                   | -1.7              | 890,575           | -1.2              |
| 1995 .....                     | 59.7                                   | -1.1              | 874,250           | -1.8              |
| Average annual percent change: |  |                   |                   |                   |
| 1978-83 .....                  |  | -0.5              |                   | 1.0               |
| 1984-86 .....                  |  | -4.2              |                   | -1.4              |
| 1987-92 .....                  |  | -0.3              |                   | -1.0              |
| 1993-95 .....                  |  | -1.4              |                   | -1.2              |

Source: Prospective Payment Assessment Commission analysis of data from American Hospital Association National Hospital Panel Survey.

#### HOSPITAL EMPLOYMENT

Hospitals experienced a significant downturn in total employment levels at the time PPS was introduced, as shown in table C-10. During 1984 and 1985, full-time equivalent employees declined by 2.3 percent. From 1986 through 1993, however, hospital employment increased. During the late 1970s and through the 1980s, growth in the number of part-time personnel exceeded growth in the number of full-time personnel in every year. In 1992, however, the number of full-time personnel grew faster than the number of part-time personnel for the first time in more than 20 years. This trend continued in 1993, but the increase in both types of personnel slowed dramatically. In 1994 and 1995, hospital employment

declined for the first time since the early years of PPS. This was only the second such period in the past three decades.

TABLE C-10.—ANNUAL CHANGE IN HOSPITAL EMPLOYMENT, 1978–95

| Year                           | Percent change in: |            |           |           |
|--------------------------------|--------------------|------------|-----------|-----------|
|                                | Total FTEs         | Personnel— |           |           |
|                                |                    | Total      | Full-time | Part-time |
| 1978 .....                     | 3.7                | 4.1        | 3.3       | 6.8       |
| 1979 .....                     | 3.5                | 3.9        | 2.9       | 6.7       |
| 1980 .....                     | 4.7                | 5.2        | 4.0       | 9.1       |
| 1981 .....                     | 5.4                | 6.0        | 4.8       | 9.4       |
| 1982 .....                     | 3.7                | 3.7        | 3.6       | 4.1       |
| 1983 .....                     | 1.4                | 1.5        | 1.2       | 2.3       |
| 1984 .....                     | -2.3               | -2.1       | -2.6      | -0.8      |
| 1985 .....                     | -2.3               | -2.0       | -2.7      | -0.1      |
| 1986 .....                     | 0.3                | 0.4        | 0.2       | 0.9       |
| 1987 .....                     | 0.7                | 0.9        | 0.4       | 2.3       |
| 1988 .....                     | 1.1                | 1.4        | 0.7       | 3.3       |
| 1989 .....                     | 1.6                | 1.9        | 1.2       | 3.6       |
| 1990 .....                     | 2.1                | 2.3        | 1.8       | 3.6       |
| 1991 .....                     | 0.6                | 0.7        | 0.6       | 1.0       |
| 1992 .....                     | 1.6                | 1.5        | 1.7       | 0.9       |
| 1993 .....                     | 0.7                | 0.6        | 0.8       | 0.2       |
| 1994 .....                     | -0.8               | -0.8       | -0.7      | -0.9      |
| 1995 .....                     | -1.4               | -1.4       | -1.5      | -0.9      |
| Average annual percent change: |                    |            |           |           |
| 1978–83 .....                  | 3.7                | 4.1        | 3.3       | 6.4       |
| 1984–86 .....                  | -1.4               | -1.2       | -1.7      | 0.0       |
| 1987–92 .....                  | 1.3                | 1.5        | 1.1       | 2.4       |
| 1993–95 .....                  | -0.5               | -0.5       | -0.5      | -0.5      |

Source: Prospective Payment Assessment Commission analysis of data from the American Hospital Association National Hospital Panel Survey.

### EXPENDITURES FOR PHYSICIANS' SERVICES

Personal health care expenditures for physicians' services were \$189.4 billion in 1994, an increase of 4.6 percent from the previous year (see table C-11). In 1994, 20 percent of national health expenditures and 23 percent of personal health expenditures were for physicians' services (see table C-1).

Third-party (public expenditures and private insurance) payments financed over four-fifths of physicians' services. In 1994, private health insurance paid \$89.5 billion (47 percent) for such services. Public programs paid \$60.9 billion (32.1 percent) for such services, of which \$36.1 billion was Federal Medicare payments. Patients or their families paid \$35.8 billion (18.9 percent) for physicians' services (see table C-11).

TABLE C-11.—EXPENDITURES FOR PHYSICIAN SERVICES<sup>1</sup> BY SOURCE OF FUNDS, SELECTED YEARS 1980-94  
 [Amounts in billions]

| Source of payment                    | 1980   |         | 1985   |         | 1990   |         | 1991   |         | 1992   |         | 1993   |         | 1994   |         |
|--------------------------------------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|
|                                      | Amount | Percent | Amount | Percent | Amount | Percent | Amount | Percent | Amount | Percent | Amount | Percent | Amount | Percent |
| Out-of-pocket payments .....         | \$14.8 | 32.4    | \$24.3 | 29.1    | \$35.4 | 24.2    | \$35.6 | 22.4    | \$37.0 | 21.7    | \$37.0 | 20.4    | \$35.8 | 18.9    |
| Third-party payments                 | 30.6   | 67.6    | 59.3   | 70.9    | 110.9  | 75.8    | 123.1  | 77.8    | 136.7  | 78.3    | 144.1  | 79.6    | 153.5  | 81.1    |
| Private health insurance .....       | 17.1   | 37.9    | 23.4   | 36.9    | 63.3   | 43.2    | 71.4   | 45.0    | 81.5   | 46.6    | 85.3   | 47.1    | 89.5   | 47.3    |
| Other private funds .....            | 0.4    | 0.8     | 1.4    | 1.6     | 2.7    | 1.8     | 2.5    | 1.6     | 2.5    | 1.5     | 2.7    | 1.5     | 3.0    | 1.6     |
| Government .....                     | 13.1   | 28.9    | 24.5   | 29.3    | 45.0   | 30.7    | 49.2   | 31.0    | 52.7   | 30.2    | 56.0   | 30.9    | 60.9   | 32.1    |
| Federal .....                        | 10.0   | 22.1    | 19.5   | 23.4    | 35.9   | 24.5    | 38.6   | 24.3    | 40.9   | 23.4    | 44.0   | 24.3    | 48.6   | 25.7    |
| Medicare .....                       | 8.0    | 17.6    | 16.5   | 19.7    | 29.5   | 20.2    | 30.8   | 19.4    | 31.7   | 18.2    | 33.9   | 18.7    | 36.1   | 20.1    |
| Medicaid .....                       | 1.4    | 3.1     | 2.0    | 2.4     | 4.2    | 2.8     | 5.3    | 3.4     | 6.6    | 3.8     | 7.6    | 4.2     | 8.0    | 4.2     |
| Other Federal programs .....         | 0.6    | 1.4     | 1.1    | 1.3     | 2.2    | 1.5     | 2.5    | 1.6     | 2.5    | 1.4     | 2.6    | 1.4     | 2.5    | 1.3     |
| State and local .....                | 3.1    | 6.9     | 4.9    | 5.9     | 9.1    | 6.2     | 10.6   | 6.7     | 11.8   | 6.8     | 12.0   | 6.6     | 12.3   | 6.5     |
| Medicaid .....                       | 1.1    | 2.5     | 1.5    | 1.9     | 2.9    | 2.0     | 3.8    | 2.4     | 4.5    | 2.6     | 5.0    | 2.8     | 5.4    | 2.9     |
| Other State and local programs ..... | 2.0    | 4.3     | 3.4    | 4.0     | 6.2    | 4.2     | 6.7    | 4.3     | 7.3    | 4.2     | 7.0    | 3.9     | 6.9    | 3.6     |
| Total .....                          | 45.2   | 100.0   | 83.6   | 100.0   | 146.3  | 100.0   | 158.6  | 100.0   | 174.7  | 100.0   | 181.1  | 100.0   | 189.4  | 100.0   |

<sup>1</sup> Encompasses the cost of all services and supplies provided in physicians' offices, the cost for services of privately billing physicians in hospitals and other institutions, and the cost of diagnostic work performed in independent clinical laboratories. The salaries of staff physicians are counted with expenditures for the services of the employing institution.

Note.—Numbers may not add to totals because of rounding.

Source: Health Care Financing Administration, Office of the Actuary.



Inflation continues to affect the growth in spending for physicians' services. Physicians' fees rose more rapidly (4.5 percent in 1995) than prices in the economy as a whole (2.8 percent) as measured by the consumer price index (CPI) (see table C-12).

TABLE C-12.—ANNUAL PERCENTAGE CHANGES IN SELECTED COMPONENTS OF THE CONSUMER PRICE INDEX (CPI-U),<sup>1</sup> 1965-95

| Year | All items | All items less medical care | Medical care total | Physicians' services |
|------|-----------|-----------------------------|--------------------|----------------------|
| 1965 | 1.6       | 1.6                         | 2.4                | 3.6                  |
| 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                | 11.4                 |
| 1977 | 6.5       | 6.3                         | 9.6                | 9.1                  |
| 1978 | 7.6       | 7.6                         | 8.4                | 8.4                  |
| 1979 | 11.3      | 11.5                        | 9.2                | 9.1                  |
| 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                  |

<sup>1</sup> Consumer price index (CPI) for all urban (U) consumers.

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

The American Medical Association reports that, over the 10 years from 1984 to 1994, physician income rose an average 5 percent a year. The average physician net income in 1994, however, experienced the first decrease ever recorded by the AMA. After expenses but before taxes, physician income was \$182,400, a 3.6 percent decrease from \$189,300 in 1993 (see table C-13).

TABLE C-13.—PHYSICIANS' AVERAGE NET INCOME AFTER EXPENSES BUT BEFORE TAXES, 1983-94

[Average net income<sup>1</sup> in thousands of dollars]

| Category                          | 1983  | 1984  | 1985  | 1986  | 1987  | 1988  | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | Percent Change 1993-94 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------|
| All physicians <sup>2</sup> ..... | 104.1 | 108.4 | 112.2 | 119.5 | 132.3 | 144.7 | 155.8 | 164.3 | 170.6 | 181.7 | 189.3 | 182.4 | -3.6                   |
| Specialty:                        |       |       |       |       |       |       |       |       |       |       |       |       |                        |
| General/family practice .....     | 68.5  | 71.1  | 77.9  | 80.3  | 91.5  | 94.6  | 95.9  | 102.7 | 111.5 | 114.4 | 116.8 | 121.4 | 3.9                    |
| Internal medicine .....           | 93.3  | 103.2 | 101.0 | 109.4 | 121.8 | 130.9 | 146.5 | 152.5 | 149.6 | 162.1 | 180.8 | 174.9 | -3.3                   |
| Surgery .....                     | 145.5 | 151.8 | 155.4 | 162.4 | 187.9 | 207.5 | 220.5 | 236.4 | 233.8 | 250.5 | 262.7 | 255.2 | -2.9                   |
| Pediatrics .....                  | 70.7  | 74.5  | 77.1  | 81.8  | 85.3  | 94.9  | 104.7 | 106.5 | 119.3 | 123.9 | 135.4 | 126.2 | -6.8                   |
| Obstetrics/gynecology .....       | 119.9 | 116.2 | 122.7 | 135.9 | 163.2 | 180.7 | 194.3 | 207.3 | 221.8 | 220.7 | 221.9 | 200.4 | -9.6                   |
| Radiology .....                   | 148.0 | 139.8 | 150.8 | 168.8 | 180.7 | 188.5 | 210.5 | 219.4 | 229.8 | 257.3 | 259.8 | 237.4 | -8.6                   |
| Psychiatry .....                  | 80.0  | 85.5  | 88.6  | 91.5  | 102.7 | 111.4 | 111.7 | 116.5 | 127.6 | 132.1 | 131.3 | 128.5 | -2.1                   |
| Anesthesiology .....              | 144.7 | 145.4 | 140.2 | 150.2 | 163.1 | 194.5 | 185.8 | 207.4 | 221.1 | 231.1 | 224.1 | 218.1 | -2.7                   |
| Census division:                  |       |       |       |       |       |       |       |       |       |       |       |       |                        |
| New England .....                 | 84.5  | 87.3  | 108.3 | 107.1 | 110.6 | 132.9 | 128.3 | 142.5 | 143.8 | 171.2 | 171.5 | 156.1 | -9.0                   |
| Middle Atlantic .....             | 98.6  | 98.4  | 107.9 | 114.6 | 126.1 | 135.0 | 152.5 | 156.1 | 171.0 | 172.4 | 185.3 | 177.8 | -4.0                   |
| East North Central .....          | 114.3 | 109.4 | 118.9 | 126.6 | 137.6 | 147.0 | 155.6 | 172.4 | 174.1 | 187.1 | 199.2 | 191.9 | -3.7                   |
| West North Central .....          | 110.5 | 110.7 | 113.7 | 120.7 | 133.9 | 138.0 | 159.2 | 151.4 | 164.2 | 187.5 | 198.2 | 183.8 | -7.3                   |
| South Atlantic .....              | 106.7 | 114.5 | 112.6 | 119.6 | 133.8 | 156.0 | 165.6 | 169.0 | 168.8 | 186.4 | 192.5 | 189.3 | -1.7                   |
| East South Central .....          | 114.9 | 122.2 | 115.0 | 122.6 | 141.2 | 164.8 | 173.0 | 169.0 | 179.4 | 180.0 | 195.0 | 199.2 | 2.2                    |
| West South Central .....          | 124.4 | 119.1 | 123.3 | 129.0 | 140.4 | 160.7 | 170.5 | 178.8 | 193.3 | 193.8 | 189.1 | 195.5 | 3.4                    |
| Mountain .....                    | 91.4  | 102.3 | 97.5  | 108.5 | 125.5 | 132.1 | 142.6 | 170.9 | 155.0 | 175.7 | 193.2 | 175.4 | -9.2                   |
| Pacific .....                     | 103.1 | 109.4 | 113.6 | 119.0 | 135.4 | 136.0 | 148.1 | 162.5 | 172.4 | 178.1 | 181.2 | 171.8 | -10.7                  |
| Location:                         |       |       |       |       |       |       |       |       |       |       |       |       |                        |
| Nonmetropolitan .....             | 87.2  | 90.9  | 94.2  | 107.7 | 117.9 | 120.9 | 129.4 | 130.5 | 150.4 | 159.2 | 160.0 | NA    | NA                     |
| Metropolitan:                     |       |       |       |       |       |       |       |       |       |       |       |       |                        |
| Less than 1,000,000 .....         | 111.0 | 115.1 | 118.1 | 124.5 | 140.4 | 154.1 | 164.1 | 172.7 | 174.8 | 185.6 | 195.2 | NA    | NA                     |
| 1,000,000 and over .....          | 106.3 | 106.4 | 112.8 | 117.5 | 127.9 | 140.7 | 153.4 | 163.3 | 170.4 | 181.5 | 188.5 | NA    | NA                     |

|                     |       |       |       |       |       |       |       |       |       |       |       |       |      |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Employment Status:  |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Self-employed ..... | 115.9 | 118.6 | 124.5 | 131.1 | 146.2 | 160.0 | 175.3 | 185.6 | 191.0 | 202.3 | 218.0 | 210.2 | -3.6 |
| Employee .....      | 77.6  | 80.4  | 83.8  | 91.7  | 99.6  | 113.0 | 119.2 | 119.8 | 134.0 | 136.1 | 150.7 | 148.2 | -1.7 |

<sup>1</sup> Average net income after expenses but before taxes. These figures include contributions made into pension, profit-sharing, and deferred compensation plans.  
<sup>2</sup> Includes physicians in specialties not reported separately.

NA—Not available.

Source: American Medical Association (1995a and b).

Self-employed physicians, who are more likely to have additional years of experience and be board certified, earned an average of \$210,200 in 1994 in contrast to employee-doctors whose net income was \$148,200. Both of these practice arrangements reported declines in income from 1993.

Declines in income were reported throughout the United States, except for the East South Central and West South Central census regions, which increased by 2.2 and 3.4 percent. Physicians in the East South Central and West South Central regions also had the highest average net incomes (\$199,200 and \$195,500 respectively). The lowest average net incomes (\$156,100) were for physicians in the New England area.

Surgeons continued to have the highest average net incomes in 1994 (\$255,200) and general and family practitioners the lowest (\$121,400). Generalists' incomes appear to be improving relative to those of specialists. Average incomes for general and family practitioners saw a gain of 3.9 percent from 1993 to 1994. Also, while median real incomes for all physicians declined from the previous year, real incomes for those in family practice and internal medicine fell less than those for most specialists (Physician Payment Review Commission, 1996).

Table C-14 shows physicians' median net incomes by specialty. In the decade from 1984 to 1994, the real net income for general and family practitioners increased at an average annual rate of 2 percent. The only other specialty to show an average annual increase over 2 percent in real net income was radiology at 2.4 percent.

Table C-15 shows average physician net incomes in nominal and real (or constant) dollars. Physicians average net income increased 202 percent between 1977 and 1994, but real income, expressed in 1994 dollars, increased only 23 percent (from \$148,000 to \$182,000) during this same time period.

Table C-16 shows the distribution of physicians' net incomes in 1994 for all physicians and selected specialties. While the average net income of all physicians was \$182,400, half of all physicians earned \$150,000 or less. One-fourth of all physicians earned \$105,000 or less, while one-fourth earned \$220,000 or more. Anesthesiologists, radiologists, and surgeons had the highest median incomes, with half earning \$200,000 or more.

TABLE C-14.—MEDIAN PHYSICIAN NET INCOME AFTER EXPENSES BUT BEFORE TAXES, 1984 AND 1994

[In thousands of dollars]

|                                   | Median net income |                 |                           | Average annual per-<br>cent change |                   |
|-----------------------------------|-------------------|-----------------|---------------------------|------------------------------------|-------------------|
|                                   | 1984              | 1994<br>nominal | 1994<br>real <sup>1</sup> | Nominal                            | Real <sup>1</sup> |
| All physicians <sup>2</sup> ..... | \$92              | \$150           | \$105                     | 5.0                                | 1.3               |
| Specialty:                        |                   |                 |                           |                                    |                   |
| General/family practice .....     | 63                | 110             | 77                        | 5.7                                | 2.0               |
| Internal medicine .....           | 90                | 150             | 105                       | 5.2                                | 1.6               |
| Surgery .....                     | 130               | 219             | 154                       | 5.4                                | 1.7               |
| Pediatrics .....                  | 68                | 110             | 77                        | 4.9                                | 1.3               |
| Obstetrics/gynecology .....       | 106               | 182             | 128                       | 5.6                                | 1.9               |
| Radiology .....                   | 122               | 220             | 154                       | 6.1                                | 2.4               |
| Psychiatry .....                  | 80                | 120             | 84                        | 4.1                                | 0.5               |
| Anesthesiology .....              | 150               | 200             | 140                       | 2.9                                | -0.7              |
| Pathology .....                   | 106               | 152             | 107                       | 3.7                                | 0.1               |
| Census division:                  |                   |                 |                           |                                    |                   |
| New England .....                 | 80                | 135             | 95                        | 5.4                                | 1.7               |
| Middle Atlantic .....             | 85                | 140             | 98                        | 5.1                                | 1.4               |
| East North Central .....          | 97                | 164             | 115                       | 5.4                                | 1.7               |
| West North Central .....          | 90                | 150             | 105                       | 5.2                                | 1.6               |
| South Atlantic .....              | 93                | 160             | 112                       | 5.6                                | 1.9               |
| East South Central .....          | 100               | 163             | 114                       | 5.0                                | 1.3               |
| West South Central .....          | 100               | 164             | 115                       | 5.1                                | 1.4               |
| Mountain .....                    | 92                | 146             | 102                       | 4.7                                | 1.1               |
| Pacific .....                     | 95                | 150             | 105                       | 4.7                                | 1.0               |

<sup>1</sup> In 1984 dollars.<sup>2</sup> Includes physicians in specialties not listed separately.

Source: American Medical Association (1986, 1995a).

The continuing survey of physicians' incomes conducted by the magazine *Medical Economics* (Terry, 1993) showed that, on average, physicians received 83 percent of their 1992 gross practice incomes from third parties (see table C-17). On average, 17 percent came from commercial insurers, 14 percent from Blue Shield, 26 percent from Medicare, 10 percent from Medicaid, 10 percent from health maintenance organizations (HMOs) and independent practice associations (IPAs), and 6 percent from preferred provider organizations (PPOs). As table C-17 indicates, the importance of each source of payment varied by specialty. Cardiothoracic surgeons received the highest percentage of gross pay from Medicare (50 percent). Pediatricians, on average, received only 1 percent of their gross income from Medicare, but received the highest percentage of gross pay from Medicaid (24 percent).

TABLE C-15.—AVERAGE PHYSICIAN NET INCOME AFTER EXPENSES BUT BEFORE TAXES,  
1977-94

[Dollars in thousands]

|            | Nominal | Real    |
|------------|---------|---------|
| 1977 ..... | \$60.4  | \$147.7 |
| 1978 ..... | 64.6    | 146.8   |
| 1979 ..... | 77.4    | 158.0   |
| 1980 ..... | NA      | NA      |
| 1981 ..... | 89.9    | 146.6   |
| 1982 ..... | 97.7    | 150.0   |
| 1983 ..... | 104.1   | 154.9   |
| 1984 ..... | 108.4   | 154.6   |
| 1985 ..... | 112.2   | 154.5   |
| 1986 ..... | 119.5   | 161.6   |
| 1987 ..... | 132.3   | 172.6   |
| 1988 ..... | 144.7   | 181.3   |
| 1989 ..... | 155.8   | 186.2   |
| 1990 ..... | 164.3   | 186.3   |
| 1991 ..... | 170.6   | 185.6   |
| 1992 ..... | 181.7   | 191.9   |
| 1993 ..... | 189.3   | 194.1   |
| 1994 ..... | 182.4   | 182.4   |

NA—Not available.

Note.—No data for 1980. Real (1994 dollars) incomes are calculated using the consumer price index for all urban consumers.

Source: CRS analysis of data from American Medical Association (1995a and b).

A subsequent analysis by *Medical Economics* (Walker, 1995) addressed physician income from HMOs and PPOs and the amount in the form of capitation payments (see table C-18). In 1994, almost four-fifths of physicians belonged to at least one managed care plan. HMOs accounted for 22 percent of gross income, preferred provider organizations (PPOs) for 15 percent of gross income, and capitation for 15 percent of gross income.

TABLE C-16.—DISTRIBUTION OF PHYSICIAN NET INCOME AFTER EXPENSES BUT BEFORE TAXES BY SPECIALTY AND CENSUS DIVISION, 1994

[In thousands of dollars]

|                                   | 25th per-<br>centile | 50th per-<br>centile | 75th per-<br>centile | Mean  |
|-----------------------------------|----------------------|----------------------|----------------------|-------|
| All physicians <sup>1</sup> ..... | 105                  | 150                  | 220                  | 182.4 |
| Specialty:                        |                      |                      |                      |       |
| General/family practice .....     | 85                   | 110                  | 144                  | 121.2 |
| Internal medicine .....           | 100                  | 150                  | 199                  | 174.9 |
| Surgery .....                     | 150                  | 219                  | 300                  | 255.2 |
| Pediatrics .....                  | 85                   | 110                  | 150                  | 126.2 |
| Obstetrics/gynecology .....       | 130                  | 182                  | 248                  | 200.4 |
| Radiology .....                   | 165                  | 220                  | 302                  | 237.4 |
| Psychiatry .....                  | 90                   | 120                  | 150                  | 128.5 |
| Anesthesiology .....              | 168                  | 200                  | 262                  | 218.1 |
| Pathology .....                   | 120                  | 152                  | 210                  | 182.5 |
| Census division:                  |                      |                      |                      |       |
| New England .....                 | 98                   | 135                  | 180                  | 156.1 |
| Middle Atlantic .....             | 100                  | 140                  | 220                  | 177.8 |
| East North Central .....          | 117                  | 164                  | 237                  | 191.9 |
| West North Central .....          | 110                  | 150                  | 225                  | 183.8 |
| South Atlantic .....              | 106                  | 160                  | 248                  | 189.3 |
| East South Central .....          | 120                  | 163                  | 230                  | 199.2 |
| West South Central .....          | 110                  | 164                  | 234                  | 195.5 |
| Mountain .....                    | 100                  | 146                  | 209                  | 175.4 |
| Pacific .....                     | 105                  | 150                  | 210                  | 171.8 |

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

Source: American Medical Association (1995a).

TABLE C-17.—THIRD PARTY SOURCES OF PHYSICIAN PAYMENT FOR SELECTED SPECIALTIES, 1992

| Specialty                              | Commercial plans       |                                       |    | Blue Shield            |                                       |    | Medicare               |                                       |          | Medicaid               |                                       |          | HMOs/IPAs              |                                       |  | PPOs                   |                                       |  |
|--|------------------------|---------------------------------------|----|------------------------|---------------------------------------|----|------------------------|---------------------------------------|----------|------------------------|---------------------------------------|----------|------------------------|---------------------------------------|--|------------------------|---------------------------------------|--|
|  | Average annual payment | As per- cent of gross practice income |    | Average annual payment | As per- cent of gross practice income |    | Average annual payment | As per- cent of gross practice income |          | Average annual payment | As per- cent of gross practice income |          | Average annual payment | As per- cent of gross practice income |  | Average annual payment | As per- cent of gross practice income |  |
| Cardiologists .....                    | \$61,400               | 15                                    | 14 | \$177,490              | 46                                    | 5  | \$18,220               | 5                                     | \$27,530 | 6                      | 6                                     | \$16,730 | 4                      | 4                                     |  |                        |                                       |  |
| Cardio/thoracic sur-<br>geons .....    | 61,200                 | 12                                    | 14 | 241,890                | 50                                    | 6  | 31,410                 | 6                                     | 44,000   | 10                     | 4                                     | 17,980   | 4                      | 4                                     |  |                        |                                       |  |
| Family practice .....                  | 33,420                 | 14                                    | 12 | 54,170                 | 22                                    | 11 | 25,320                 | 11                                    | 27,720   | 12                     | 7                                     | 18,140   | 7                      | 7                                     |  |                        |                                       |  |
| Gastroenterologists ..                 | 58,600                 | 14                                    | 15 | 151,640                | 40                                    | 6  | 21,620                 | 6                                     | 32,140   | 10                     | 5                                     | 19,810   | 5                      | 5                                     |  |                        |                                       |  |
| General practice .....                 | 30,870                 | 14                                    | 12 | 45,230                 | 24                                    | 12 | 20,210                 | 12                                    | 23,300   | 10                     | 5                                     | 15,250   | 5                      | 5                                     |  |                        |                                       |  |
| General surgeons .....                 | 62,430                 | 19                                    | 17 | 103,590                | 33                                    | 9  | 26,100                 | 9                                     | 31,890   | 10                     | 6                                     | 20,510   | 6                      | 6                                     |  |                        |                                       |  |
| Pediatricians .....                    | 36,860                 | 15                                    | 14 | 810                    | 1                                     | 24 | 53,800                 | 24                                    | 31,890   | 15                     | 9                                     | 22,830   | 9                      | 9                                     |  |                        |                                       |  |
| Plastic surgeons .....                 | 84,410                 | 20                                    | 14 | 54,450                 | 13                                    | 4  | 13,910                 | 4                                     | 25,960   | 6                      | 7                                     | 30,810   | 7                      | 7                                     |  |                        |                                       |  |
| Psychiatrists .....                    | 38,910                 | 20                                    | 13 | 22,780                 | 11                                    | 6  | 10,870                 | 6                                     | 10,000   | 5                      | 6                                     | 13,190   | 6                      | 6                                     |  |                        |                                       |  |
| Internists .....                       | 31,060                 | 12                                    | 12 | 101,320                | 39                                    | 5  | 12,380                 | 5                                     | 22,230   | 10                     | 6                                     | 16,290   | 6                      | 6                                     |  |                        |                                       |  |
| Neurosurgeons .....                    | 154,920                | 26                                    | 14 | 118,990                | 22                                    | 7  | 35,290                 | 7                                     | 55,620   | 10                     | 7                                     | 39,880   | 7                      | 7                                     |  |                        |                                       |  |
| OBG specialists .....                  | 96,590                 | 24                                    | 20 | 24,290                 | 7                                     | 11 | 47,860                 | 11                                    | 58,280   | 15                     | 11                                    | 48,860   | 11                     | 11                                    |  |                        |                                       |  |
| Orthopedists .....                     | 122,860                | 24                                    | 17 | 95,950                 | 21                                    | 6  | 28,810                 | 6                                     | 43,510   | 9                      | 7                                     | 38,570   | 7                      | 7                                     |  |                        |                                       |  |
| All surgical special-<br>ists .....    | 83,980                 | 20                                    | 16 | 105,590                | 26                                    | 8  | 32,030                 | 8                                     | 41,800   | 10                     | 7                                     | 30,930   | 7                      | 7                                     |  |                        |                                       |  |
| All nonsurgical spe-<br>cialists ..... | 46,460                 | 15                                    | 14 | 87,000                 | 28                                    | 10 | 24,080                 | 10                                    | 28,480   | 10                     | 6                                     | 18,370   | 6                      | 6                                     |  |                        |                                       |  |
| All M.D.s .....                        | 55,600                 | 17                                    | 14 | 86,070                 | 26                                    | 10 | 26,390                 | 10                                    | 32,150   | 10                     | 6                                     | 22,030   | 6                      | 6                                     |  |                        |                                       |  |

Source: Terry (1993).



TABLE C-18.—PERCENTAGE OF PHYSICIAN GROSS INCOME FROM MANAGED CARE AND CAPITATION BY SPECIALTY, 1994

| Physician specialty                | Percent of 1994 income from: |                                  |            |
|------------------------------------|------------------------------|----------------------------------|------------|
|                                    | HMOs                         | Preferred provider organizations | Capitation |
| Anesthesiologists .....            | 26                           | 20                               | 22         |
| Cardiologists .....                | 13                           | 10                               | 9          |
| Cardio/thoracic surgeons .....     | 21                           | 10                               | 15         |
| Emergency physicians .....         | ( <sup>1</sup> )             | ( <sup>1</sup> )                 | 16         |
| Family practitioners .....         | 21                           | 10                               | 18         |
| Gastroenterologists .....          | 17                           | 12                               | 14         |
| General practitioners .....        | 28                           | 15                               | 24         |
| General surgeons .....             | 19                           | 10                               | 18         |
| Internist .....                    | 20                           | 10                               | 15         |
| Neurosurgeons .....                | 19                           | 15                               | 22         |
| OBG specialists .....              | 32                           | 20                               | 14         |
| Orthopedic surgeons .....          | 19                           | 15                               | 14         |
| Pediatricians .....                | 32                           | 20                               | 22         |
| Plastic surgeons .....             | 17                           | 12                               | 12         |
| Psychiatrists .....                | 18                           | 20                               | 23         |
| Radiologists .....                 | 17                           | 10                               | 17         |
| All surgical specialists .....     | 22                           | 15                               | 15         |
| All nonsurgeons <sup>2</sup> ..... | 21                           | 15                               | 15         |
| All fields .....                   | 22                           | 15                               | 15         |

<sup>1</sup>Insufficient sample.

<sup>2</sup>Includes family practitioners and general practitioners. Gross is the individual physician's share of 1994 practice receipts before professional expenses and income taxes. Figures exclude physicians with no HMO, preferred provider organizations, or capitation contracts.

Source: Walker (1995).

### SUPPLY OF HOSPITAL BEDS

The national supply of community hospital beds per 1,000 population steadily increased from the 1940s, reaching a peak of 4.6 beds per 1,000 population in 1975. By 1991, the number of beds had dropped to 3.6 per 1,000 population and remained at that level in 1992 and 1993. Among the 9 census regions, the area experiencing the largest increase has been the East South Central, where beds increased from 1.7 per 1,000 population in 1940 to 5.1 in 1980, falling back to 4.5 in 1993 (see table C-19).

TABLE C-19.—COMMUNITY HOSPITAL BEDS PER 1,000 POPULATION AND AVERAGE ANNUAL PERCENT CHANGE BY GEOGRAPHIC DIVISION AND STATE, SELECTED YEARS 1940-1993

| Geographic division and State | Beds per 1,000 civilian population |                   |                   |      |      |      |      |      |                        |                      | Average annual percent change |         |         |  |  |
|-------------------------------|------------------------------------|-------------------|-------------------|------|------|------|------|------|------------------------|----------------------|-------------------------------|---------|---------|--|--|
|                               | 1940 <sup>1</sup>                  | 1950 <sup>1</sup> | 1960 <sup>2</sup> | 1970 | 1980 | 1990 | 1992 | 1993 | 1940-60 <sup>1,2</sup> | 1960-70 <sup>2</sup> | 1970-80                       | 1980-90 | 1990-93 |  |  |
| United States .....           | 3.2                                | 3.3               | 3.6               | 4.3  | 4.5  | 3.8  | 3.6  | 3.6  | 0.6                    | 1.8                  | 0.5                           | -1.7    | -1.8    |  |  |
| New England .....             | 4.4                                | 4.2               | 3.9               | 4.1  | 4.1  | 3.4  | 3.3  | 3.3  | -0.6                   | 0.5                  | 0.0                           | -1.9    | -1.0    |  |  |
| Maine .....                   | 3.0                                | 3.2               | 3.4               | 4.7  | 4.7  | 3.8  | 3.7  | 3.6  | 0.6                    | 3.3                  | 0.0                           | -2.1    | -1.8    |  |  |
| New Hampshire .....           | 4.2                                | 4.2               | 4.4               | 4.0  | 3.9  | 3.1  | 3.1  | 3.0  | 0.2                    | -0.9                 | -0.3                          | -2.3    | -1.1    |  |  |
| Vermont .....                 | 3.3                                | 4.0               | 4.5               | 4.5  | 4.4  | 3.1  | 2.9  | 3.4  | 1.6                    | 0.0                  | -0.2                          | -3.4    | 3.1     |  |  |
| Massachusetts .....           | 5.1                                | 4.8               | 4.2               | 4.4  | 4.4  | 3.6  | 3.6  | 3.5  | -1.0                   | 0.5                  | 0.0                           | -2.0    | -0.9    |  |  |
| Rhode Island .....            | 3.9                                | 3.8               | 3.7               | 4.0  | 3.8  | 3.2  | 3.1  | 3.0  | -0.3                   | 0.8                  | -0.5                          | -1.7    | -2.1    |  |  |
| Connecticut .....             | 3.7                                | 3.6               | 3.4               | 3.4  | 3.5  | 2.9  | 2.8  | 2.8  | -0.4                   | 0.0                  | 0.3                           | -1.9    | -1.2    |  |  |
| Middle Atlantic .....         | 3.9                                | 3.8               | 4.0               | 4.4  | 4.6  | 4.2  | 4.2  | 4.3  | 0.1                    | 1.0                  | 0.4                           | -0.9    | 0.8     |  |  |
| New York .....                | 4.3                                | 4.1               | 4.3               | 4.6  | 4.5  | 4.2  | 4.2  | 4.3  | 0.0                    | 0.7                  | -0.2                          | -0.7    | 0.8     |  |  |
| New Jersey .....              | 3.5                                | 3.2               | 3.1               | 3.6  | 4.2  | 3.7  | 4.0  | 3.9  | -0.6                   | 1.5                  | 1.6                           | -1.3    | 1.8     |  |  |
| Pennsylvania .....            | 3.5                                | 3.8               | 4.1               | 4.7  | 4.8  | 4.4  | 4.3  | 4.4  | 0.8                    | 1.4                  | 0.2                           | -0.9    | 0.0     |  |  |
| East North Central .....      | 3.2                                | 3.2               | 3.6               | 4.4  | 4.7  | 4.0  | 3.7  | 3.6  | 0.6                    | 2.0                  | 0.7                           | -1.8    | -2.6    |  |  |
| Ohio .....                    | 2.7                                | 2.9               | 3.4               | 4.2  | 4.7  | 3.9  | 3.7  | 3.6  | 1.2                    | 2.1                  | 1.1                           | -1.8    | -2.6    |  |  |
| Indiana .....                 | 2.3                                | 2.6               | 3.1               | 4.0  | 4.5  | 3.9  | 3.8  | 3.7  | 1.5                    | 2.6                  | 1.2                           | -1.4    | -1.7    |  |  |
| Illinois .....                | 3.4                                | 3.6               | 4.0               | 4.7  | 6.1  | 4.0  | 3.9  | 3.8  | 0.8                    | 1.6                  | 0.8                           | -2.4    | -1.7    |  |  |
| Michigan .....                | 4.0                                | 3.3               | 3.3               | 4.3  | 4.4  | 3.7  | 3.4  | 3.3  | 0.8                    | 2.7                  | 0.2                           | -1.7    | -3.7    |  |  |
| Wisconsin .....               | 3.4                                | 3.7               | 4.3               | 5.2  | 4.9  | 3.8  | 3.7  | 3.5  | -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  | 4.8  | 4.7  | 1.2                    | 2.9                  | 0.2                           | -1.7    | -1.4    |  |  |
| Minnesota .....               | 3.9                                | 4.4               | 4.8               | 6.1  | 5.7  | 4.4  | 4.2  | 4.1  | 1.0                    | 2.4                  | -0.7                          | -2.6    | -2.3    |  |  |
| Iowa .....                    | 2.7                                | 3.2               | 3.9               | 5.6  | 5.7  | 5.1  | 5.0  | 4.8  | 1.9                    | 3.7                  | 0.2                           | -1.1    | -2.0    |  |  |
| Missouri .....                | 2.9                                | 3.3               | 3.9               | 5.1  | 5.7  | 4.8  | 4.7  | 4.6  | 1.5                    | 2.7                  | 1.1                           | -1.7    | -1.4    |  |  |
| North Dakota .....            | 3.5                                | 4.3               | 5.2               | 6.8  | 7.4  | 7.0  | 7.0  | 7.0  | 2.0                    | 2.7                  | 0.8                           | -0.6    | 0.0     |  |  |
| South Dakota .....            | 2.8                                | 4.4               | 4.5               | 5.6  | 5.5  | 6.1  | 6.1  | 6.0  | 2.4                    | 2.2                  | -0.2                          | 1.0     | -0.5    |  |  |
| Nebraska .....                | 3.4                                | 4.2               | 4.4               | 6.2  | 6.0  | 5.4  | 5.3  | 5.2  | 1.3                    | 3.5                  | -0.3                          | -1.0    | -1.3    |  |  |
| Kansas .....                  | 2.8                                | 3.4               | 4.2               | 5.4  | 5.8  | 4.8  | 4.7  | 4.6  | 2.0                    | 2.5                  | 0.7                           | -1.9    | -1.4    |  |  |
| South Atlantic .....          | 2.5                                | 2.8               | 3.3               | 4.0  | 4.5  | 3.7  | 3.6  | 3.5  | 1.4                    | 1.9                  | 1.2                           | -1.9    | -1.8    |  |  |
| Delaware .....                | 4.4                                | 3.9               | 3.7               | 3.7  | 3.6  | 3.0  | 3.1  | 3.1  | -0.9                   | 0.0                  | -0.3                          | -1.8    | 1.1     |  |  |

|                            |       |       |     |     |     |     |     |     |       |      |      |      |      |
|----------------------------|-------|-------|-----|-----|-----|-----|-----|-----|-------|------|------|------|------|
| Maryland .....             | 3.9   | 3.6   | 3.3 | 3.1 | 3.6 | 2.9 | 2.7 | 2.6 | -0.8  | -0.6 | 1.5  | -2.1 | -3.6 |
| District of Columbia ..... | 5.5   | 5.5   | 5.9 | 7.4 | 7.3 | 7.5 | 7.6 | 7.3 | 0.4   | 2.3  | -0.1 | 0.3  | -0.9 |
| Virginia .....             | 2.2   | 2.5   | 3.0 | 3.7 | 4.1 | 3.3 | 3.2 | 3.1 | 1.6   | 2.1  | 1.0  | -2.1 | -2.1 |
| West Virginia .....        | 2.7   | 3.1   | 4.1 | 5.4 | 5.5 | 4.7 | 4.6 | 4.7 | 2.1   | 2.8  | 0.2  | -1.6 | 0.0  |
| North Carolina .....       | 2.2   | 2.6   | 3.4 | 3.8 | 4.2 | 3.4 | 3.4 | 3.3 | 2.2   | 1.1  | 1.0  | -2.1 | -1.0 |
| South Carolina .....       | 1.8   | 2.4   | 2.9 | 3.7 | 3.9 | 3.3 | 3.2 | 3.2 | 2.4   | 2.5  | 0.5  | -1.7 | -1.0 |
| Georgia .....              | 1.7   | 2.0   | 2.8 | 3.8 | 4.6 | 4.0 | 3.9 | 3.9 | 2.5   | 3.1  | 1.9  | -1.4 | -0.8 |
| Florida .....              | 2.8   | 2.9   | 3.1 | 4.4 | 5.1 | 4.0 | 3.8 | 3.8 | 0.5   | 3.6  | 1.5  | -2.4 | -1.7 |
| East South Central .....   | 1.7   | 2.1   | 3.0 | 4.4 | 5.1 | 4.8 | 4.6 | 4.5 | 2.9   | 3.9  | 1.5  | -0.6 | -2.1 |
| Kentucky .....             | 1.8   | 2.2   | 3.0 | 4.0 | 4.5 | 4.4 | 4.3 | 4.2 | 2.6   | 2.9  | 1.2  | -0.2 | -1.5 |
| Tennessee .....            | 1.9   | 2.3   | 3.4 | 4.7 | 5.5 | 4.9 | 4.7 | 4.5 | 3.0   | 3.3  | 1.6  | -1.1 | -2.8 |
| Alabama .....              | 1.5   | 2.0   | 2.8 | 4.3 | 5.1 | 4.6 | 4.5 | 4.5 | 3.2   | 4.4  | 1.7  | -1.0 | -0.7 |
| Mississippi .....          | 1.4   | 1.7   | 2.9 | 4.4 | 5.3 | 5.3 | 4.9 | 4.9 | 3.7   | 4.3  | 1.9  | 0.0  | -2.8 |
| West South Central .....   | 2.1   | 2.7   | 3.3 | 4.3 | 4.7 | 3.9 | 3.7 | 3.8 | 2.3   | 2.7  | 0.9  | -1.8 | -2.6 |
| Arkansas .....             | 1.4   | 1.6   | 2.9 | 4.2 | 5.0 | 4.7 | 4.7 | 4.5 | 3.7   | 3.6  | 1.8  | -0.6 | -1.4 |
| Louisiana .....            | 3.1   | 3.8   | 3.9 | 4.2 | 4.8 | 4.6 | 4.5 | 4.5 | 1.2   | 0.7  | 1.3  | -0.4 | -0.7 |
| Oklahoma .....             | 1.9   | 2.5   | 3.2 | 4.5 | 4.6 | 4.0 | 3.8 | 3.7 | 2.6   | 3.5  | 0.2  | -1.4 | -2.6 |
| Texas .....                | 2.0   | 2.7   | 3.3 | 4.3 | 4.7 | 3.5 | 3.4 | 3.3 | 2.5   | 2.7  | 0.9  | -2.9 | -1.9 |
| Mountain .....             | 3.6   | 3.8   | 3.5 | 4.3 | 3.8 | 3.1 | 2.9 | 2.9 | -0.1  | 2.1  | -1.2 | -2.0 | -2.2 |
| Montana .....              | 4.9   | 5.3   | 5.1 | 5.8 | 5.9 | 5.8 | 5.3 | 5.1 | 0.2   | 1.3  | 0.2  | -0.2 | -4.2 |
| Idaho .....                | 2.6   | 3.4   | 3.2 | 4.0 | 3.7 | 3.2 | 3.2 | 3.1 | 1.0   | 2.3  | -0.8 | -1.4 | -1.1 |
| Wyoming .....              | 3.5   | 3.9   | 4.6 | 5.5 | 3.6 | 4.9 | 4.8 | 4.8 | 1.4   | 1.8  | -4.1 | 3.1  | 0.7  |
| Colorado .....             | 3.9   | 4.2   | 3.8 | 4.6 | 4.2 | 3.2 | 2.9 | 2.9 | -0.1  | 1.9  | -0.9 | -2.7 | -3.2 |
| New Mexico .....           | 2.7   | 2.2   | 2.9 | 3.5 | 3.1 | 2.9 | 2.7 | 2.6 | 0.4   | 1.9  | -1.2 | -0.7 | -3.6 |
| Arizona .....              | 3.4   | 4.0   | 3.0 | 4.1 | 3.6 | 2.7 | 2.5 | 2.5 | -0.6  | 3.2  | 1.3  | -2.8 | -2.5 |
| Utah .....                 | 3.2   | 2.9   | 2.8 | 3.6 | 3.1 | 2.6 | 2.4 | 2.4 | -0.7  | 2.5  | -1.5 | -1.7 | -2.6 |
| Nevada .....               | 5.0   | 4.4   | 3.9 | 4.2 | 4.2 | 2.9 | 2.7 | 2.7 | -1.2  | 0.7  | 0.0  | -3.6 | -2.4 |
| Pacific .....              | 4.1   | 3.2   | 3.1 | 3.7 | 3.5 | 2.7 | 2.6 | 2.5 | -1.4  | 1.8  | -0.6 | -2.6 | -2.5 |
| Washington .....           | 3.4   | 3.6   | 3.3 | 3.5 | 3.1 | 2.5 | 2.4 | 2.3 | -0.1  | 0.6  | -1.2 | -2.1 | -2.7 |
| Oregon .....               | 3.5   | 3.1   | 3.5 | 4.0 | 3.5 | 2.9 | 2.6 | 2.5 | 0.0   | 1.3  | -1.3 | -1.9 | -4.8 |
| California .....           | 4.4   | 3.3   | 3.0 | 3.8 | 3.6 | 2.7 | 2.6 | 2.5 | -1.9  | 2.4  | -0.5 | -2.8 | -2.5 |
| Alaska .....               | ..... | ..... | 2.4 | 2.3 | 2.7 | 2.3 | 2.3 | 2.2 | ..... | -0.4 | 1.6  | -1.6 | -1.5 |
| Hawaii .....               | ..... | ..... | 3.7 | 3.4 | 3.1 | 2.8 | 2.7 | 2.7 | ..... | -0.8 | -0.9 | -1.0 | -1.2 |

<sup>1</sup>1940 and 1950 data are estimated based on published figures. <sup>2</sup>1960 includes hospital units of institutions.

Source: U.S. Public Health Service (1996).

### **SUPPLY OF PHYSICIANS**

National concern about physician shortages in the 1950s and 1960s led to Federal and State initiatives to increase the supply of physicians. Since that time, the number of physicians in the United States has grown rapidly from 334,028 in 1970 to 684,414 in 1994. According to an Institute of Medicine report, this rate has been 1½ times faster than the growth rate of the Nation's population (Lohr, Vanselow, & Detmer, 1996).

Table C-20 indicates that between 1970 and 1994, the number of all physicians per 100,000 civilians grew from 161 to 263, a 63-percent increase. Table C-21 shows variations in the supply of non-Federal physicians relative to population by State. In 1994, the District of Columbia had the highest ratio (693 physicians per 100,000 population) while Mississippi had the lowest ratio (145 physicians per 100,000 population). The number of physicians in the United States is expected to continue to increase until the year 2020 when the Bureau of Health Professions estimates there will be 269 physicians per 100,000 population.

In 1994, about 34 percent of physicians were in primary care specialties, defined as general and family practice, internal medicine, obstetrics/gynecology, and pediatrics (see table C-22 for number of physicians by specialty). The National Resident Matching Program announced in March, 1996, that more than half of U.S. medical school seniors plan to spend at least their first year of residency training in general practice.

In 1994, there were 97,832 residents in training. The number of U.S. medical school graduates, which rose rapidly in the late 1960s and early 1970s, has been relatively stable over the past decade (see table C-23).

Increasing numbers of residency positions are occupied, however, by international medical graduates (IMGs). Due to stricter immigration laws and more rigorous competency requirements, IMGs dropped from over 40 percent of all residents in 1971 to about 17 percent in 1985. Since then, however, the percentage of IMGs in training in the United States increased 88 percent, from 12,509 in 1985 to 23,499 in 1994 and is now at 24 percent of all residents in training (table C-24).

### **HEALTH INSURANCE STATUS IN 1994**

Most people have some form of health insurance. In 1994, an estimated 84.9 percent of the total noninstitutionalized population had public or private coverage during at least part of the year. However, an estimated 39.6 million Americans, or 15.1 percent of the population, were without coverage in 1994. Almost all of the uninsured were under age 65; consequently, 17.0 percent of the nonelderly population were uninsured. This section examines characteristics of both the insured and the uninsured populations in 1994, and reviews trends in health insurance coverage over the 1979-94 period (see Smith & Nuschler, 1996).

TABLE C-20.—PHYSICIAN SUPPLY BY MAJOR CATEGORIES, 1970, 1980, 1990, AND 1994

| Category   | 1970    |         | 1980    |         | 1990    |         | 1994    |         |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
|  | Number  | Percent | Number  | Percent | Number  | Percent | Number  | Percent |
| Total physicians <sup>1</sup>                          | 334,028 | .....   | 467,679 | .....   | 615,421 | .....   | 684,414 | .....   |
| Federal  | 29,501  | 9       | 17,787  | 4       | 20,475  | 3       | 22,454  | 3       |
| Non-Federal  | 301,323 | 91      | 443,502 | 96      | 592,166 | 97      | 660,582 | 97      |
| Metropolitan (non-Federal only)                        | 258,265 | (86)    | 385,365 | (87)    | 521,668 | 88      | 584,727 | (89)    |
| Nonmetropolitan (non-Federal only)                     | 43,058  | (14)    | 58,137  | (13)    | 70,498  | 12      | 75,855  | (12)    |
| Patient care   | 278,535 | 83      | 376,512 | 80      | 503,870 | 82      | 562,456 | 82      |
| Nonpatient care  | 32,310  | 10      | 38,404  | 9       | 43,440  | 8       | 43,012  | 6       |
| Male   | 308,627 | 92      | 413,395 | 88      | 511,227 | 83      | 551,151 | 81      |
| Female   | 25,401  | 8       | 54,284  | 12      | 104,194 | 17      | 133,263 | 20      |
| International medical graduates                        | 57,217  | 17      | 97,726  | 21      | 131,764 | 21      | 154,576 | 23      |
| Total physician-population ratio (per 100,000 persons) | 161     | .....   | 202     | .....   | 244     | .....   | 263     | .....   |

<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.—Numbers may not add due to rounding.  
 Source: American Medical Association (1996).

TABLE C-21.—NON-FEDERAL PHYSICIAN/POPULATION RATIOS AND RANK BY STATE,  
SELECTED YEARS 1970-94

[Ratios: Non-Federal physicians (M.D.s) per 100,000 civilian population]

| State                      | 1970 | 1975 | 1985 | 1990 | 1994 | 1994<br>rank |
|----------------------------|------|------|------|------|------|--------------|
| Alabama .....              | 90   | 103  | 152  | 170  | 190  | 41           |
| Alaska .....               | 74   | 95   | 137  | 155  | 151  | 50           |
| Arizona .....              | 144  | 185  | 220  | 233  | 230  | 23           |
| Arkansas .....             | 92   | 103  | 150  | 165  | 183  | 43           |
| California .....           | 194  | 219  | 266  | 272  | 270  | 11           |
| Colorado .....             | 178  | 186  | 216  | 232  | 246  | 16           |
| Connecticut .....          | 192  | 224  | 302  | 332  | 360  | 5            |
| Delaware .....             | 134  | 155  | 203  | 217  | 235  | 20           |
| District of Columbia ..... | 390  | 467  | 607  | 658  | 693  | 1            |
| Florida .....              | 155  | 185  | 236  | 251  | 258  | 13           |
| Georgia .....              | 108  | 126  | 172  | 187  | 199  | 37           |
| Hawaii .....               | 160  | 185  | 239  | 266  | 273  | 10           |
| Idaho .....                | 94   | 104  | 133  | 142  | 154  | 49           |
| Illinois .....             | 138  | 164  | 217  | 229  | 252  | 14           |
| Indiana .....              | 102  | 116  | 156  | 171  | 189  | 42           |
| Iowa .....                 | 103  | 113  | 149  | 167  | 181  | 44           |
| Kansas .....               | 118  | 137  | 179  | 195  | 212  | 31           |
| Kentucky .....             | 102  | 122  | 162  | 181  | 199  | 36           |
| Louisiana .....            | 120  | 131  | 187  | 200  | 225  | 28           |
| Maine .....                | 111  | 133  | 193  | 208  | 228  | 24           |
| Maryland .....             | 183  | 217  | 334  | 360  | 367  | 4            |
| Massachusetts .....        | 207  | 237  | 331  | 364  | 400  | 2            |
| Michigan .....             | 125  | 145  | 190  | 201  | 218  | 29           |
| Minnesota .....            | 151  | 172  | 223  | 240  | 259  | 12           |
| Mississippi .....          | 84   | 94   | 126  | 144  | 145  | 51           |
| Missouri .....             | 129  | 148  | 195  | 209  | 227  | 25           |
| Montana .....              | 104  | 116  | 155  | 181  | 196  | 40           |
| Nebraska .....             | 116  | 134  | 170  | 185  | 209  | 33           |
| Nevada .....               | 114  | 129  | 173  | 175  | 168  | 47           |
| New Hampshire .....        | 140  | 162  | 207  | 227  | 240  | 19           |
| New Jersey .....           | 146  | 174  | 243  | 267  | 291  | 8            |
| New Mexico .....           | 113  | 130  | 184  | 206  | 218  | 30           |
| New York .....             | 236  | 258  | 318  | 339  | 369  | 3            |
| North Carolina .....       | 111  | 132  | 185  | 209  | 225  | 27           |
| North Dakota .....         | 96   | 106  | 168  | 184  | 211  | 32           |
| Ohio .....                 | 133  | 147  | 199  | 213  | 233  | 21           |
| Oklahoma .....             | 103  | 113  | 149  | 160  | 168  | 46           |
| Oregon .....               | 144  | 171  | 215  | 233  | 242  | 17           |
| Pennsylvania .....         | 152  | 169  | 234  | 256  | 287  | 9            |
| Rhode Island .....         | 160  | 194  | 248  | 277  | 305  | 7            |
| South Carolina .....       | 93   | 114  | 161  | 177  | 196  | 38           |
| South Dakota .....         | 81   | 90   | 143  | 154  | 178  | 45           |
| Tennessee .....            | 119  | 139  | 189  | 210  | 233  | 22           |
| Texas .....                | 117  | 135  | 174  | 188  | 196  | 39           |
| Utah .....                 | 138  | 155  | 185  | 200  | 205  | 35           |
| Vermont .....              | 187  | 207  | 268  | 288  | 306  | 6            |
| Virginia .....             | 125  | 149  | 214  | 233  | 240  | 18           |

TABLE C-21.—NON-FEDERAL PHYSICIAN/POPULATION RATIOS AND RANK BY STATE,  
SELECTED YEARS 1970-94—Continued

[Ratios: Non-Federal physicians (M.D.s) per 100,000 civilian population]

| State                            | 1970 | 1975 | 1985 | 1990 | 1994 | 1994<br>rank |
|----------------------------------|------|------|------|------|------|--------------|
| Washington .....                 | 149  | 168  | 223  | 241  | 251  | 15           |
| West Virginia .....              | 104  | 124  | 171  | 183  | 207  | 34           |
| Wisconsin .....                  | 120  | 137  | 188  | 207  | 226  | 26           |
| Wyoming .....                    | 101  | 108  | 140  | 156  | 160  | 48           |
| United States <sup>1</sup> ..... | 148  | 169  | 220  | 237  | 252  | .....        |

<sup>1</sup> Excludes counts of physicians in U.S. possessions and with unknown addresses.

Source: American Medical Association (1996).

TABLE C-22.—FEDERAL AND NON-FEDERAL PHYSICIANS FOR TOTAL AND OFFICE-BASED  
ACTIVITY BY SPECIALTY 1980, 1990, 1994

| Specialty                          | Federal and non-Federal physicians |                 |        |                 |         |                 |
|------------------------------------|------------------------------------|-----------------|--------|-----------------|---------|-----------------|
|                                    | 1980                               |                 | 1990   |                 | 1994    |                 |
|                                    | Total                              | Office<br>based | Total  | Office<br>based | Total   | Office<br>based |
| Allergy immunology                 | 1,518                              | 1,371           | 3,388  | 2,453           | 3,729   | 2,726           |
| Anesthesiology .....               | 15,958                             | 11,338          | 25,981 | 17,803          | 31,816  | 21,962          |
| Cardiovascular dis-<br>eases ..... | 9,823                              | 6,729           | 15,862 | 10,680          | 18,437  | 12,917          |
| Child psychiatry ....              | 3,217                              | 1,961           | 4,343  | 2,615           | 5,212   | 3,261           |
| Dermatology .....                  | 5,660                              | 4,378           | 7,557  | 6,006           | 8,353   | 6,709           |
| Diagnostic radiol-<br>ogy .....    | 7,048                              | 4,191           | 15,412 | 9,815           | 19,175  | 12,079          |
| Emergency medi-<br>cine .....      | 5,699                              | 3,362           | 14,243 | 8,420           | 17,744  | 10,604          |
| Family practice .....              | 27,530                             | 18,378          | 47,639 | 37,476          | 54,829  | 42,162          |
| Gastroenterology ...               | 4,046                              | 2,737           | 7,493  | 5,200           | 9,087   | 6,707           |
| General practice ...               | 32,519                             | 29,642          | 22,841 | 20,517          | 18,454  | 16,048          |
| General surgery .....              | 34,034                             | 22,426          | 38,376 | 24,520          | 37,902  | 24,209          |
| Internal medicine                  | 71,531                             | 40,617          | 98,349 | 57,950          | 111,427 | 67,897          |
| Neurology .....                    | 5,685                              | 3,253           | 9,237  | 5,595           | 10,921  | 7,131           |
| Neurological sur-<br>gery .....    | 3,341                              | 2,468           | 4,358  | 3,092           | 4,710   | 3,419           |
| Obstetrics/gyne-<br>cology .....   | 26,305                             | 19,513          | 33,697 | 25,485          | 36,649  | 28,211          |
| Ophthalmology .....                | 12,974                             | 10,603          | 16,073 | 13,068          | 17,144  | 14,297          |
| Orthopedic surgery                 | 13,996                             | 10,728          | 19,138 | 14,199          | 21,533  | 16,580          |
| Otolaryngology .....               | 6,553                              | 5,266           | 8,138  | 6,367           | 8,785   | 6,856           |
| Pathology <sup>1</sup> .....       | 13,642                             | 6,081           | 16,584 | 7,494           | 18,253  | 8,963           |
| Pediatrics <sup>2</sup> .....      | 29,462                             | 18,210          | 41,899 | 27,073          | 49,357  | 32,152          |
| Physical med./<br>rehab. ....      | 2,146                              | 1,014           | 4,105  | 2,183           | 5,224   | 3,025           |
| Plastic surgery .....              | 2,980                              | 2,438           | 4,590  | 3,835           | 5,206   | 4,313           |

TABLE C-22.—FEDERAL AND NON-FEDERAL PHYSICIANS FOR TOTAL AND OFFICE-BASED ACTIVITY BY SPECIALTY 1980, 1990, 1994—Continued

| Specialty  | Federal and non-Federal physicians |              |         |              |         |              |
|--|------------------------------------|--------------|---------|--------------|---------|--------------|
|  | 1980                               |              | 1990    |              | 1994    |              |
|  | Total                              | Office based | Total   | Office based | Total   | Office based |
| Psychiatry .....                                   | 27,481                             | 16,004       | 35,163  | 20,146       | 37,702  | 22,551       |
| Pulmonary dis-<br>eases .....                      | 3,715                              | 2,048        | 6,080   | 3,662        | 7,189   | 4,631        |
| Radiology .....                                    | 11,653                             | 7,802        | 8,492   | 6,060        | 7,932   | 5,885        |
| Radiation oncology                                 | 1,581                              | 1,027        | 2,821   | 1,968        | 3,493   | 2,450        |
| Urological surgery                                 | 7,743                              | 6,228        | 9,372   | 7,398        | 9,727   | 7,779        |
| Other specialty .....                              | 5,810                              | 2,418        | 7,254   | 2,656        | 7,643   | 3,323        |
| Other surgical spe-<br>cialties <sup>3</sup> ..... | 2,852                              | 2,261        | 2,945   | 2,389        | 3,273   | 2,459        |
| Other remaining<br>specialties <sup>4</sup> .....  | 6,071                              | 2,549        | 7,822   | 3,316        | 8,354   | 3,706        |
| Unspecified .....                                  | 12,289                             | 4,959        | 8,058   | 1,554        | 6,208   | 2,032        |
| Not classified .....                               | 20,629                             | .....        | 12,678  | .....        | 14,283  | .....        |
| Other categories <sup>5</sup>                      | 32,134                             | .....        | 55,433  | .....        | 64,663  | .....        |
| Total physi-<br>cians .....                        | 467,679                            | 272,000      | 615,421 | 360,995      | 684,414 | 407,044      |

<sup>1</sup> Includes pathology and forensic pathology.

<sup>2</sup> Includes pediatrics, pediatric cardiology, and pediatric allergy.

<sup>3</sup> Includes colon and rectal surgery and thoracic surgery.

<sup>4</sup> Includes aerospace medicine, general preventive medicine, nuclear medicine, occupational medicine, medical genetics, and public health.

<sup>5</sup> Includes inactive and address unknown; these categories are included in total physicians only, not in office-based practice.

Note.—Data for 1990 and 1994 are as of January 1. Data for 1980 are as of December 31.

Source: American Medical Association.

Estimates of health insurance coverage in 1994 are based on analysis of the March 1995 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 1995 CPS reflects respondents' recollections of coverage during all of 1994.<sup>2</sup>

#### HEALTH INSURANCE COVERAGE AND SELECTED POPULATION CHARACTERISTICS

##### Age

Table C-25 provides a breakdown of health insurance coverage by type of insurance and age. In 1994, young adults ages 18 to 24 were the least likely to have health insurance. While 52 percent of this group were covered under an employment-based plan, over

<sup>2</sup> Some analysts have suggested that respondents may actually be reporting their coverage status at the time of the survey, rather than for the previous year. The March 1995 CPS attempted to resolve this controversy by asking about health insurance coverage during the last week, as well as during the last year. Results from these new questions are still being reviewed.



one-fourth (27 percent) had no health insurance. These young adults comprised 10 percent of the U.S. population, but 17 percent of the uninsured population. These individuals are often too old to be covered as dependents on their parents' policies, and as entry-level workers they do not have strong ties to the work force; some may choose to remain uninsured and spend their money on other items. After age 25, the percentage of people with health insurance increases. Of those age 65 and over, 97 percent were covered by Medicare or Medicaid, and 1 percent were uninsured. The remainder of this section focuses on the population under age 65.

TABLE C-23.—MEDICAL SCHOOL GRADUATES, FIRST-YEAR RESIDENTS AND TOTAL RESIDENTS, 1965-94

| Year | Medical school graduates | First-year residents | Total residents |
|------|--------------------------|----------------------|-----------------|
| 1965 | 7,409                    | 9,670                | 31,898          |
| 1966 | 7,574                    | 10,316               | 31,898          |
| 1967 | 7,743                    | 10,419               | 33,743          |
| 1968 | 7,973                    | 10,464               | 35,047          |
| 1969 | 8,059                    | 10,808               | 37,139          |
| 1970 | 8,367                    | 11,552               | 39,463          |
| 1971 | 8,974                    | 12,066               | 42,512          |
| 1972 | 9,551                    | 11,500               | 45,081          |
| 1973 | 10,391                   | 11,031               | 49,082          |
| 1974 | 11,613                   | 11,628               | 52,685          |
| 1975 | 12,714                   | 13,200               | 54,500          |
| 1976 | ( <sup>1</sup> )         | 14,258               | 56,872          |
| 1977 | 13,607                   | 15,900               | 59,000          |
| 1978 | 14,393                   | 16,800               | 63,163          |
| 1979 | 14,966                   | 17,600               | 64,615          |
| 1980 | 15,135                   | 18,702               | 61,465          |
| 1981 | 15,667                   | 18,389               | 69,738          |
| 1982 | 15,985                   | 18,976               | 69,142          |
| 1983 | 15,824                   | 18,794               | 73,000          |
| 1984 | 16,327                   | 19,539               | 75,125          |
| 1985 | 16,319                   | 19,168               | 75,514          |
| 1986 | 16,125                   | 18,183               | 76,815          |
| 1987 | 15,836                   | 18,067               | 81,410          |
| 1988 | 15,887                   | 17,941               | 81,093          |
| 1989 | 15,620                   | 18,131               | 82,000          |
| 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          |

<sup>1</sup> Not available.

Source: American Medical Association (various years).

TABLE C-24.—INTERNATIONAL MEDICAL GRADUATE RESIDENTS BY LOCATION OF EDUCATION AND CITIZENSHIP, SELECTED YEARS 1971-94

|            | Total  | Percent of all residents | U.S. citizens | 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               |
| 1983 ..... | 14,084 | 19                       | 4,961         | 9,123               |
| 1985 ..... | 12,509 | 17                       | 6,868         | 5,609               |
| 1991 ..... | 17,017 | 20                       | 5,107         | 11,910              |
| 1992 ..... | 19,084 | 22                       | 5,015         | <sup>1</sup> 14,069 |
| 1993 ..... | 22,706 | 24                       | 5,056         | 17,650              |
| 1994 ..... | 23,499 | 24                       | 4,285         | 19,214              |

<sup>1</sup> Includes 6,192 permanent resident aliens.

Source: American Medical Association (1986 and various years).

TABLE C-25.—HEALTH INSURANCE COVERAGE BY TYPE OF INSURANCE AND AGE, 1994

| Age           | Population (in millions) | Type of insurance <sup>1</sup>          |   |                            |                                 |                     |
|---------------|--------------------------|---|---|----------------------------|---------------------------------|---------------------|
|               |                          | Employment based <sup>2</sup> (percent) | Medicare or Medicaid <sup>3</sup> (percent) | Private nongroup (percent) | Military <sup>3</sup> (percent) | Uninsured (percent) |
| Under 5 ..... | 20.3                     | 57.0                                    | 30.3  | 3.8                        | 2.3                             | 14.0                |
| 5-17 .....    | 50.2                     | 64.2                                    | 20.0  | 5.0                        | 2.2                             | 14.3                |
| 18-24 .....   | 25.2                     | 52.3                                    | 12.8  | 10.5                       | 3.3                             | 26.7                |
| 25-34 .....   | 41.4                     | 65.3                                    | 9.5   | 4.8                        | 1.5                             | 22.0                |
| 35-54 .....   | 73.0                     | 72.8                                    | 7.3   | 6.0                        | 3.0                             | 14.7                |
| 55-59 .....   | 10.8                     | 68.4                                    | 9.5   | 9.2                        | 6.3                             | 13.7                |
| 60-64 .....   | 9.9                      | 61.4                                    | 14.8  | 12.5                       | 7.8                             | 14.1                |
| 65+ .....     | 31.3                     | 35.4                                    | 96.6  | 32.6                       | 5.0                             | 0.9                 |
| Total .....   | 262.1                    | 61.7                                    | 23.4  | 9.4                        | 3.2                             | 15.2                |

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

<sup>2</sup> Group health insurance through employer or union.

<sup>3</sup> Military health care or veterans coverage.

Source: Congressional Research Service analysis of data from the March 1995 Current Population Survey.

#### *Other demographic characteristics*

Table C-26 shows the rate of health insurance coverage by type of insurance and selected demographic characteristics—race, family type, region, and poverty level—for people under age 65. In 1994 whites were most likely to have health insurance (87 percent) while Hispanics were least likely (65 percent). Hispanics comprised 11 percent of the under 65 population, but were 23 percent of the uninsured population; comparable numbers for blacks were 13 percent and 16 percent, respectively. The rate of employment-based health

coverage was highest among whites (72 percent) and the rate of Medicaid/Medicare coverage was highest for blacks (29 percent).<sup>3</sup>

TABLE C-26.—HEALTH INSURANCE COVERAGE BY TYPE OF INSURANCE AND DEMOGRAPHIC CHARACTERISTICS FOR PEOPLE UNDER AGE 65, 1994

|  | Population<br>(in millions) | Type of insurance <sup>1</sup>                |                                      |                    |                        |
|--|-----------------------------|---|--------------------------------------|--------------------|------------------------|
|  |                             | Employment<br>based <sup>2</sup><br>(percent) | Medicaid or<br>Medicare<br>(percent) | Other <sup>3</sup> | Uninsured<br>(percent) |
| <b>Race/ethnicity:</b>                           |                             |   |                                      |                    |                        |
| White .....                                      | 166.1                       | 72.3  | 9.0                                  | 10.0               | 13.3                   |
| Black .....                                      | 30.5                        | 49.9  | 28.9                                 | 6.8                | 21.0                   |
| Hispanic .....                                   | 26.1                        | 40.6  | 23.0                                 | 4.6                | 35.3                   |
| Other .....                                      | 8.2                         | 59.3  | 16.4                                 | 9.2                | 21.1                   |
| <b>Family type:</b>                              |                             |   |                                      |                    |                        |
| Female-headed with chil-<br>dren .....           | 29.1                        | 36.3  | 44.5                                 | 6.5                | 19.0                   |
| Male- or two-parent-head-<br>ed w/children ..... | 115.2                       | 72.9  | 10.0                                 | 7.2                | 14.5                   |
| No children .....                                | 86.5                        | 64.9  | 7.7                                  | 12.1               | 19.8                   |
| <b>Region:</b>                                   |                             |   |                                      |                    |                        |
| Northeast .....                                  | 44.5                        | 67.9  | 13.1                                 | 7.4                | 15.1                   |
| Midwest .....                                    | 54.1                        | 71.2  | 12.5                                 | 8.8                | 12.2                   |
| South .....                                      | 81.0                        | 62.8  | 13.6                                 | 9.7                | 19.4                   |
| West .....                                       | 51.2                        | 60.6  | 14.7                                 | 9.2                | 20.3                   |
| <b>Poverty level:</b>                            |                             |   |                                      |                    |                        |
| <1.0 of poverty .....                            | 34.9                        | 15.0  | 49.5                                 | 9.1                | 31.8                   |
| 1.0–1.49 of poverty .....                        | 20.9                        | 38.1  | 24.8                                 | 10.8               | 32.9                   |
| 1.5–1.99 of poverty .....                        | 21.6                        | 55.6  | 13.5                                 | 10.3               | 26.3                   |
| 2.0+ of poverty .....                            | 153.4                       | 81.8  | 3.8                                  | 8.5                | 10.3                   |
| <b>Total .....</b>                               | <b>230.8</b>                | <b>65.3</b>                                   | <b>13.5</b>                          | <b>9.0</b>         | <b>17.1</b>            |

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

<sup>2</sup>Group health insurance through employer or union.

<sup>3</sup>Private nongroup health insurance, veterans coverage, or military health care.

Source: Congressional Research Service analysis of data from the March 1995 Current Population Survey.

People in male-headed or two-parent families with children were most likely to be insured (86 percent), followed by those in female-headed families with children (81 percent) and in families with no children (80 percent). While the rates of coverage were similar for male-present (one- or two-parent) and female-headed (single-parent) families with children, the sources of coverage were quite different: coverage was employment based for 73 percent of male-present families compared to 36 percent of female-headed families, while coverage came from Medicaid/Medicare for 10 percent of male-present families compared to 44 percent of female-headed families.

<sup>3</sup>Medicaid covered 12 percent of the nonelderly population and Medicare covered 2 percent. About 27 percent of blacks had Medicaid coverage.

People living in the Midwest were more likely to have insurance (88 percent), than people in the Northeast (85 percent), South (81 percent), and West (80 percent). About 70 percent of those living in the Northeast and Midwest had employment-based health insurance compared to about 60 percent in the South and West.

Among individuals with incomes at least two times the poverty level, 90 percent had health insurance compared to 68 percent of the poor (i.e., those with incomes less than one times the poverty level). The poor accounted for 15 percent of the under 65 population, but comprised 28 percent of the uninsured. Only 15 percent of the poor received health coverage through employment, while 50 percent had either Medicaid or Medicare. Over 80 percent of people with incomes at least two times the poverty level were covered through an employer, and 4 percent had Medicaid/Medicare.

#### *Employment characteristics*

Table C-27 shows the rate of health insurance coverage by employment characteristics for people under age 65 who were workers or their dependents. In 1994, the rate of employment-based health insurance coverage increased as firm size increased. Among workers and dependents of workers in large firms (1,000 or more employees), 92 percent were insured compared to 67 percent in small firms (under 10 employees). People in small firms accounted for 15 percent of the under 65 population but 29 percent of the uninsured. Insurance coverage varied according to industry as well. Agriculture, personal services, and construction had the highest proportion of uninsured workers and dependents—over 30 percent. Employment-based coverage was most likely for workers and dependents in public administration, mining, and manufacturing of durable goods. Among workers, 86 percent of those employed full time, full year had health insurance and it was most often obtained through their employment (78 percent); their dependents had comparable levels of coverage. Workers with part-time, part-year employment had an insured rate of 67 percent. Workers who worked less than full time, full year and their dependents comprised 21 percent of the population, but 33 percent of the uninsured, while nonworkers were 12 percent of the population and 17 percent of the uninsured.

#### CHARACTERISTICS OF THE UNINSURED POPULATION UNDER AGE 65

As reported above, people who lack health insurance differ from the population as a whole: they are more likely to be poor, young adults, Hispanic, and work for small firms. Chart C-3 illustrates selected characteristics of the uninsured population under age 65 in 1994—age, race, poverty level, region, firm size, and labor force ties. One-fourth (25 percent) of the uninsured were under age 18, and 56 percent were white. A large proportion (40 percent) had incomes two or more times the poverty level, while 28 percent were poor. Forty percent of the uninsured lived in the South, and 29 percent worked or were dependents of workers in small firms (one to nine employees). Half were full-time, full-year workers or their dependents, 33 percent had less than full time attachment to the labor force, and 17 percent had no labor force ties.

TABLE C-27.—HEALTH INSURANCE COVERAGE BY EMPLOYMENT CHARACTERISTICS <sup>1</sup>  
FOR PEOPLE UNDER AGE 65, 1994

|                            | Population<br>(in millions) | Type of insurance <sup>2</sup>            |   |                                 |                        |
|----------------------------|-----------------------------|---|---|---------------------------------|------------------------|
|                            |                             | From own<br>job <sup>3</sup><br>(percent) | From other's<br>job <sup>3</sup><br>(percent) | Other <sup>4</sup><br>(percent) | Uninsured<br>(percent) |
| Firm size: <sup>5</sup>    |                             |   |   |                                 |                        |
| Under 10 .....             | 34.4                        | 19.3                                      | 19.8  | 30.3                            | 33.2                   |
| 10–24 .....                | 16.3                        | 27.6                                      | 26.7  | 21.1                            | 27.7                   |
| 25–99 .....                | 25.3                        | 35.8                                      | 32.7  | 16.1                            | 19.4                   |
| 100–499 .....              | 29.6                        | 40.0                                      | 38.9  | 12.6                            | 12.7                   |
| 500–999 .....              | 12.0                        | 43.1                                      | 40.0  | 10.6                            | 10.2                   |
| 1,000+ .....               | 84.6                        | 42.7                                      | 42.5  | 11.5                            | 8.2                    |
| Industry: <sup>5</sup>     |                             |   |   |                                 |                        |
| Agriculture .....          | 5.7                         | 16.0                                      | 17.2  | 33.8                            | 34.9                   |
| Mining .....               | 1.5                         | 35.6                                      | 49.7  | 8.3                             | 9.9                    |
| Construction .....         | 13.9                        | 25.1                                      | 27.7  | 20.1                            | 30.2                   |
| Durable goods .....        | 23.0                        | 40.2                                      | 44.5  | 8.8                             | 10.1                   |
| Nondurable goods .....     | 16.4                        | 40.1                                      | 40.0  | 11.5                            | 12.6                   |
| Transportation .....       | 15.9                        | 39.7                                      | 42.0  | 10.7                            | 11.9                   |
| Wholesale trade .....      | 8.5                         | 37.8                                      | 38.3  | 13.8                            | 13.6                   |
| Retail trade .....         | 27.0                        | 29.1                                      | 26.1  | 22.7                            | 25.7                   |
| Finance/insurance .....    | 12.4                        | 42.9                                      | 38.4  | 12.6                            | 9.8                    |
| Business services .....    | 11.4                        | 27.9                                      | 25.1  | 23.6                            | 26.9                   |
| Personal services .....    | 5.9                         | 21.5                                      | 19.1  | 30.6                            | 32.9                   |
| Entertainment .....        | 2.6                         | 32.3                                      | 28.2  | 21.2                            | 23.2                   |
| Professional serv. ....    | 44.0                        | 42.1                                      | 36.8  | 14.8                            | 10.6                   |
| Public admin. ....         | 13.9                        | 43.3                                      | 48.1  | 12.5                            | 3.8                    |
| Labor force attachment     |                             |   |   |                                 |                        |
| workers:                   |                             |   |   |                                 |                        |
| Full time, full year ..... | 76.5                        | 78.5                                      | 1.1   | 9.0                             | 14.4                   |
| Part time, full year ..... | 6.5                         | 41.2                                      | 6.4   | 25.5                            | 30.4                   |
| Full time, part year ..... | 16.5                        | 49.3                                      | 3.6   | 20.9                            | 30.0                   |
| Part time, part year ..... | 7.3                         | 25.8                                      | 8.2   | 37.0                            | 32.7                   |
| Dependents: <sup>1</sup>   |                             |   |   |                                 |                        |
| Full time, full year ..... | 76.5                        | 0.6                                       | 78.6  | 13.9                            | 11.5                   |
| Part time, full year ..... | 3.9                         | 0.7                                       | 52.3  | 29.9                            | 21.4                   |
| Full time, part year ..... | 11.3                        | 0.3                                       | 52.7  | 36.9                            | 18.2                   |
| Part time, part year ..... | 3.6                         | 0.4                                       | 30.9  | 54.9                            | 19.3                   |
| Not in labor force .....   | 28.7                        | <sup>6</sup> 9.8                          | <sup>6</sup> 10.4                             | 61.0                            | 23.3                   |
| <b>Total .....</b>         | <b>230.8</b>                | <b>33.0</b>                               | <b>32.4</b>                                   | <b>21.7</b>                     | <b>17.1</b>            |

<sup>1</sup>For dependents, employment characteristics are for the person providing dependent coverage under employment-based or private insurance. If other coverage, characteristics are from the head of household or spouse if head not employed.

<sup>2</sup>People may have more than one source of health insurance.

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

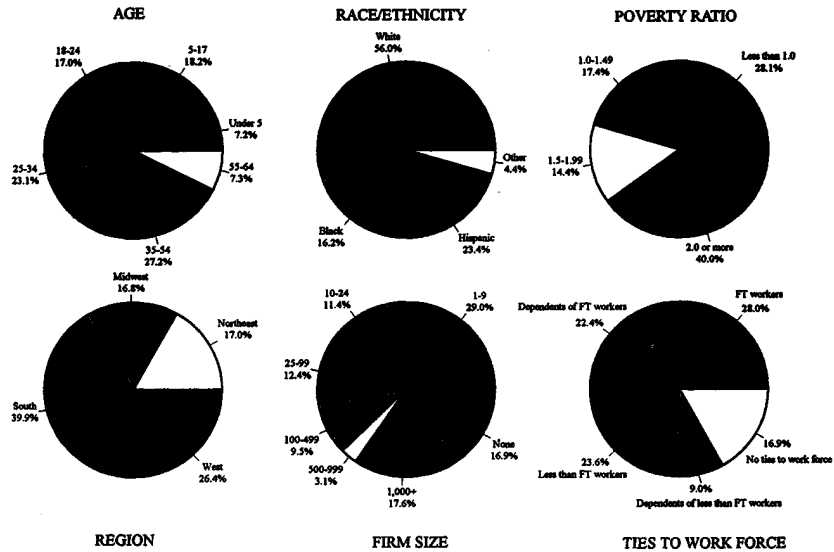
<sup>4</sup>Medicare, Medicaid, private nongroup health insurance, veterans coverage, and military health.

<sup>5</sup>For persons who worked and their dependents.

<sup>6</sup>Person was retired, disabled, or answered questions inconsistently.

Source: Congressional Research Service analysis of data from the March 1995 Current Population Survey.

CHART C-3. CHARACTERISTICS OF THE UNINSURED POPULATION UNDER AGE 65, 1994



Note.—Totals may not sum to 100 percent due to rounding.

Source: Congressional Research Service analysis of data from the March 1995 Current Population Survey.

TRENDS IN HEALTH INSURANCE COVERAGE

Trends in coverage by type of insurance for the noninstitutionalized U.S. population under age 65 are shown in table C-28. Data for 1980 are not available because the CPS omitted some health insurance questions for that year. Changes in the CPS questionnaire, on which these rates are based, preclude direct comparisons between three time periods: 1979-86, 1987-93, and 1994.<sup>4</sup>

<sup>4</sup>Beginning with the 1987 data, the survey asked about employment-based coverage for all persons over 14, when before only workers were asked about such coverage. Moreover, the newer surveys included additional questions regarding coverage of children. As a result, the number of people with employment-based coverage increased, especially among retirees, and the number of children with coverage also increased.

Beginning with the 1994 data, the survey asked additional questions about private health insurance, and changed the order of questions such that questions about private coverage preceded questions about other forms of health insurance. As a result, the number of people estimated to have private coverage increased, and the distribution of coverage between group and nongroup shifted towards more group coverage. Care must be exercised when considering these numbers. Also note that individuals may have had more than one source of coverage.

TABLE C-28.—HEALTH INSURANCE COVERAGE FOR THE NONINSTITUTIONALIZED U.S. POPULATION UNDER 65, 1979-94<sup>1</sup>  
 [Numbers in thousands]

| 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 |
| 1979 <sup>5</sup> | 133,074                       | 68.6    | 17,031                  | 8.8     | 32,631             | 16.8    | 28,451    | 14.7    | 197,104 | 100.0   |
| 1981 <sup>5</sup> | 137,158                       | 67.9    | 18,520                  | 9.2     | 32,392             | 16.0    | 30,487    | 15.1    | 201,926 | 100.0   |
| 1982              | 135,991                       | 66.8    | 18,326                  | 9.0     | 31,699             | 15.6    | 32,496    | 16.0    | 203,674 | 100.0   |
| 1983              | 134,908                       | 65.7    | 18,501                  | 9.0     | 30,505             | 14.9    | 34,796    | 17.0    | 205,322 | 100.0   |
| 1984              | 134,936                       | 65.2    | 18,701                  | 9.0     | 30,653             | 14.8    | 36,544    | 17.7    | 206,998 | 100.0   |
| 1985              | 137,461                       | 65.7    | 18,711                  | 8.9     | 29,924             | 14.3    | 36,741    | 17.6    | 209,272 | 100.0   |
| 1986 <sup>1</sup> | 138,919                       | 66.0    | 19,095                  | 9.1     | 29,014             | 13.8    | 36,818    | 17.5    | 210,579 | 100.0   |
| 1987 <sup>1</sup> | 143,497                       | 67.5    | 19,919                  | 9.4     | 25,957             | 12.2    | 30,673    | 14.4    | 212,495 | 100.0   |
| 1988              | 144,136                       | 67.2    | 20,437                  | 9.5     | 25,009             | 11.7    | 32,368    | 15.1    | 214,508 | 100.0   |
| 1989              | 144,716                       | 66.9    | 20,762                  | 9.6     | 25,603             | 11.8    | 33,039    | 15.3    | 216,426 | 100.0   |
| 1990              | 142,520                       | 65.2    | 23,821                  | 10.9    | 25,723             | 11.8    | 34,352    | 15.7    | 218,551 | 100.0   |
| 1991              | 142,359                       | 64.5    | 26,170                  | 11.9    | 25,034             | 11.4    | 35,069    | 15.9    | 220,589 | 100.0   |
| 1992 <sup>6</sup> | 141,262                       | 62.5    | 28,924                  | 12.8    | 26,017             | 11.5    | 38,222    | 16.9    | 226,119 | 100.0   |
| 1993              | 140,439                       | 61.3    | 31,398                  | 13.7    | 27,706             | 12.1    | 39,349    | 17.2    | 228,973 | 100.0   |
| 1994              | 150,663                       | 65.3    | 31,177                  | 13.5    | 20,665             | 8.9     | 39,428    | 17.1    | 230,838 | 100.0   |

<sup>1</sup> Questionnaire changes effective in 1987 and 1994 make numbers not strictly comparable over time. Beginning with 1987 data, the survey asked all persons over 14, not just workers, about employment-based health coverage, and included additional questions regarding coverage of children. 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.

<sup>2</sup> Group health insurance through employer or union.

<sup>3</sup> Medicare or Medicaid.

<sup>4</sup> Private nongroup health insurance, veteran's coverage, or military health care.

<sup>5</sup> Data not available for 1980 because the survey omitted some health insurance questions.

<sup>6</sup> Based on revised weights from the 1990 Census.

Note.—Persons may have more than one type of coverage; percents may total to more than 100. Data for 1980 not available because some health-related questions were omitted from the Current Population Survey that year.

Source: Congressional Research Service analysis of data from the March 1995 Current Population Surveys.

Between 1979 and 1986, the percent covered by all forms of health insurance decreased, with a decrease of 3 percentage points between 1979 and 1984 and a slight increase between 1984 and 1986, but not to levels shown previously. Between 1979 and 1986, the percent of the population insured by government programs remained roughly stable, and the percents with employment-based and other coverage steadily declined. Between 1987 and 1993, the percent covered also declined by about 3 percentage points, from about 86 percent to 83 percent. During this period, the percent with employment-based coverage continued to decline steadily, the percent with Medicare or Medicaid increased, the percent with other types of coverage declined and then rose to about where it was in 1987, and the percent uninsured continued to steadily increase. In 1994, the percent covered was about the same as in 1993 (83 percent), while the percent covered under government programs declined slightly. The large changes between 1993 and 1994 in employment-based and other coverage, which includes private nongroup coverage, appear to be a function of changes in the CPS questionnaire.

Differences in coverage between 1986 and 1987, and between 1993 and 1994, are a function both of changes in the CPS questionnaire and actual changes in coverage. Assuming that all differences between 1986 and 1987, and between 1993 and 1994, are due to questionnaire changes and no changes in coverage patterns occurred during these transition periods, we can estimate trends from 1979 to 1994. Over this period, the percent with employment-based coverage decreased by about 9 percentage points. From 1979 through 1986, the percent with employment-based coverage declined by 2.6 percent points, from 68.6 to 66.0 percent. From 1987 through 1993, the decline was 6.2 percentage points. If we assume no change in insurance coverages from 1986 to 1987, and from 1993 to 1994, the total decline from 1979 to 1994 was 8.8 percentage points (i.e., 2.6 percentage points plus 6.2 percentage points). Note that the decreases in coverage do not equal the increases in uninsured because some individuals had more than one type of coverage. Similarly, over the 1979-94 period, the percent with Medicaid or Medicare increased by about 5 percentage points, the percent with other types of coverage declined by about 3 percentage points, and the percent uninsured increased by approximately 6 percentage points.

#### **UNCOMPENSATED CARE COSTS IN PPS HOSPITALS, 1980-94**

Uncompensated care is a term used to describe services provided to patients who are unable or unwilling to pay. It includes charity care and bad debts. Charity care is care for which no payment is expected. Bad debts are charges not paid by uninsured individuals, including copayments not paid by insured individuals. For this analysis, hospital charges have been adjusted to reflect the cost of care that was provided but not paid for.

Public hospitals and some private institutions receive government operating subsidies that at least partially offset their uncompensated care costs. These subsidies are not always directed specifically toward charity care, but they nonetheless serve to lessen



the burden of a high charity care load. This analysis examines uncompensated care both before and net of government subsidies.

The financial burden of uncompensated care increased substantially in the first half of the 1980s, as shown in table C-29. Between 1980 and 1986, uncompensated care costs before government subsidies grew at an annual rate of 14.7 percent, rising from \$3.9 billion to \$8.9 billion. By 1992, uncompensated care costs had grown to \$14.9 billion. After 1992, this trend leveled off, with uncompensated care rising at 6.1 percent per year. While uncompensated care was rising rapidly during the 1980s, government subsidies were increasing at a much slower rate. In 1980, the proportion of uncompensated care costs offset by State and local government operating subsidies was 27.8 percent. By 1986, that proportion had fallen to 22.3 percent, and by 1992, subsidies to all community hospitals equalled only 18.9 percent of uncompensated care costs. In the early 1990s, subsidies have grown more rapidly, although they still covered less than 20 percent of uncompensated care in 1994. In that year, uncompensated care losses—that is, costs net of government subsidies—totaled \$13.5 billion.

These trends are reflected in chart C-4, which compares uncompensated care costs to total hospital expenses in each year. In 1980, 5.5 percent of the resources expended by community hospitals were for patients that could not or would not pay for their care. After accounting for government subsidies, the uncompensated care burden was 3.9 percent. By 1986, uncompensated care costs hit their peak of 6.4 percent of total expenses, and uncompensated care losses rose to 4.9 percent. In the early 1990s, uncompensated care costs have fallen to about 6 percent of total expenses, while uncompensated care losses have stayed at just under 5 percent of total expenses.

The burden of uncompensated care is borne by hospitals in every group, but some types of hospitals devote a higher percentage of their resources than others to this care (see table C-30). Hospitals in large urban areas (metropolitan areas with populations of 1 million or greater) had uncompensated care costs equal to 6.2 percent of their total expenses in 1994, compared with 5.4 percent for other urban areas and 5.1 percent for rural hospitals. However, hospitals in the major cities also receive the bulk of subsidies from State and local governments, so their uncompensated care losses were about the same as for other hospitals.

Among major teaching hospitals (those with at least 0.25 residents per bed), there is a sharp difference between those that are public and those that are privately owned: Public major teaching hospitals in 1994 devoted 17.6 percent of their resources to patients who could not or would not pay, and sustained losses on these patients equal to 8.0 percent of their total costs. Other hospitals sustained much smaller losses, and there were no major differences by teaching status. Hospitals that receive Medicare disproportionate share payments (see the discussion in appendix D) tend to sustain greater losses on uncompensated care, and urban government hospitals also devote a greater proportion of their resources to this care. Proprietary hospitals provide somewhat less uncompensated care than voluntary hospitals.

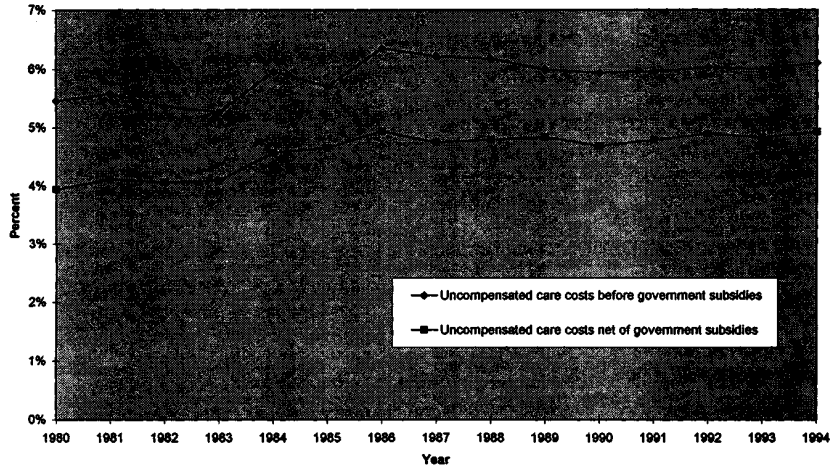
TABLE C-29.—COMMUNITY HOSPITAL UNCOMPENSATED CARE COSTS AND GOVERNMENT OPERATING SUBSIDIES, SELECTED YEARS 1980-92

|   | Amount (billions) |       |        |        |        | Average annual percent change |         |         |
|---|-------------------|-------|--------|--------|--------|-------------------------------|---------|---------|
|   | 1980              | 1986  | 1992   | 1993   | 1994   | 1980-86                       | 1986-92 | 1992-94 |
| Uncompensated care costs before government subsidies .....                                | \$3.9             | \$8.9 | \$14.9 | \$15.9 | \$16.8 | 14.7                          | 8.9     | 6.1     |
| Government operating subsidies <sup>1</sup> .....   | 1.1               | 2.0   | 2.8    | 3.1    | 3.2    | 10.5                          | 6.0     | 7.1     |
| Uncompensated care costs net of government subsidies .....                                | 2.8               | 6.9   | 12.1   | 12.8   | 13.5   | 16.1                          | 9.7     | 5.8     |
| Proportion of uncompensated care costs covered by government subsidies (in percent) ..... | 27.8              | 22.3  | 18.9   | 19.5   | 19.3   |                               |         |         |

<sup>1</sup> Government operating subsidies include all subsidies from State and local government; up to total uncompensated care costs at each hospital.

Source: Prospective Payment Assessment Commission analysis of data from the American Hospital Association Annual Survey of Hospitals.

CHART C-4. UNCOMPENSATED CARE AS A PERCENTAGE OF TOTAL COMMUNITY HOSPITAL EXPENSES, 1980-94



Note.—Government operating subsidies include all subsidies from State and local government, up to total uncompensated care costs for each hospital.

Source: Prospective Payment Assessment Commission analysis of data from the American Hospital Association Annual Survey of Hospitals.

TABLE C-30.—COMMUNITY HOSPITAL UNCOMPENSATED CARE COSTS AS A PROPORTION OF TOTAL COSTS, BY HOSPITAL GROUP, 1994

[In percent]

| Hospital group                           | Uncompensated care costs, before government subsidies | Uncompensated care costs, net of government subsidies |
|--|---|---|
| Large urban .....                        | 6.2   | 4.8   |
| Other urban .....                        | 5.4   | 4.7   |
| Rural .....                              | 5.1   | 4.7   |
| Major teaching, public .....             | 17.6  | 8.0   |
| Major teaching, nonpublic .....          | 5.1   | 4.7   |
| Other teaching .....                     | 4.7   | 4.6   |
| Nonteaching .....                        | 4.8   | 4.5   |
| Disproportionate share large urban ..... | 7.7   | 5.6   |
| Disproportionate share other urban ..... | 6.1   | 5.1   |
| Disproportionate share rural .....       | 6.0   | 5.7   |
| Nondisproportionate share .....          | 4.0   | 3.9   |
| Voluntary .....                          | 4.6   | 4.5   |
| Proprietary .....                        | 4.0   | 4.0   |
| Urban government .....                   | 14.2  | 6.7   |
| Rural government .....                   | 5.9   | 4.6   |

Note.—Government operating subsidies include all subsidies from State and local government, up to total uncompensated care costs at each hospital.

Source: Prospective Payment Assessment Commission analysis of data from the American Hospital Association Annual Survey of Hospitals.

### INTERNATIONAL HEALTH SPENDING

This section analyzes trends in health expenditures for 24 Organization for Economic Cooperation and Development (OECD) countries from 1970 to 1993. Table C-31 illustrates total health expenditures as a percentage of gross domestic product (GDP). In 1970, the mean percent of GDP spent on health care by OECD countries was 5.1 percent with the United States being 45 percent higher than the average with 7.4 percent. By 1993, the overall mean percent of GDP devoted to health expenditures had increased to 8.3 percent while U.S. health spending as a share of GDP had increased to 14.1 percent, some 70 percent greater than the OECD average.

The second to the last column in table C-31 presents per capita health expenditures denominated in U.S. dollars. The last column illustrates public health expenditures as a percent of total health spending. This public percentage ranged from 43.9 in the United States to over 90 in Luxembourg and Norway. The OECD average was 75.4 percent.

TABLE C-31 — TOTAL HEALTH EXPENDITURES AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT [GDP], PER CAPITA HEALTH SPENDING, AND PERCENTAGE OF MEDICAL EXPENDITURES COVERED BY PUBLIC INSURANCE SCHEME, FOR SELECTED CALENDAR YEARS 1970-93

| Country              | Year |      |      |      |      |      |      |      |      |      | Per capita<br>1993 | Percent<br>public |
|----------------------|------|------|------|------|------|------|------|------|------|------|--------------------|-------------------|
|                      | 1970 | 1980 | 1985 | 1990 | 1991 | 1992 | 1993 | 1993 | 1993 | 1993 |                    |                   |
| Australia .....      | 5.7  | 7.3  | 7.7  | 8.2  | 8.5  | 8.8  | 8.5  | 8.5  | 8.5  | 8.5  | \$1,493            | 67.7              |
| Austria .....        | 5.4  | 7.9  | 8.1  | 8.4  | 8.6  | 8.8  | 8.4  | 8.6  | 8.8  | 9.3  | 1,777              | 66.2              |
| Belgium .....        | 4.1  | 6.6  | 7.4  | 7.6  | 8.1  | 8.2  | 7.6  | 8.1  | 8.2  | 8.3  | 1,601              | 88.9              |
| Canada .....         | 7.1  | 7.4  | 8.5  | 9.4  | 10.0 | 10.3 | 9.4  | 10.0 | 10.3 | 10.2 | 1,971              | 71.9              |
| Denmark .....        | 6.1  | 6.8  | 6.3  | 6.3  | 6.6  | 6.5  | 6.3  | 6.6  | 6.5  | 6.7  | 1,296              | 82.6              |
| Finland .....        | 5.7  | 6.5  | 7.3  | 8.0  | 9.1  | 9.4  | 8.0  | 9.1  | 9.4  | 8.8  | 1,363              | 79.3              |
| France .....         | 5.8  | 7.6  | 8.5  | 8.9  | 9.1  | 9.4  | 8.9  | 9.1  | 9.4  | 9.8  | 1,835              | 74.4              |
| Germany .....        | 5.9  | 8.4  | 8.7  | 8.3  | 8.4  | 8.7  | 8.3  | 8.4  | 8.7  | 8.6  | 1,815              | 70.2              |
| Greece .....         | 4.0  | 4.3  | 4.9  | 5.3  | 5.3  | 5.4  | 5.3  | 5.3  | 5.4  | 5.7  | 500                | 75.8              |
| Iceland .....        | 5.2  | 6.4  | 7.0  | 8.2  | 8.4  | 8.5  | 8.2  | 8.4  | 8.5  | 8.3  | 1,564              | 83.9              |
| Ireland .....        | 5.6  | 9.2  | 8.2  | 7.0  | 7.4  | 7.1  | 7.0  | 7.4  | 7.1  | 6.7  | 922                | 76.7              |
| Italy .....          | 5.2  | 6.9  | 7.0  | 8.1  | 8.4  | 8.5  | 8.1  | 8.4  | 8.5  | 8.5  | 1,523              | 73.1              |
| Japan .....          | 4.6  | 6.6  | 6.5  | 6.6  | 6.7  | 6.9  | 6.6  | 6.7  | 6.9  | 7.3  | 1,495              | 71.8              |
| Luxembourg .....     | 4.1  | 6.8  | 6.8  | 7.2  | 7.3  | 7.4  | 7.2  | 7.3  | 7.4  | 6.9  | 1,993              | 91.0              |
| Netherlands .....    | 6.0  | 8.0  | 8.0  | 8.2  | 8.4  | 8.6  | 8.2  | 8.4  | 8.6  | 8.7  | 1,531              | 77.7              |
| Norway .....         | 5.0  | 6.6  | 6.4  | 7.5  | 8.0  | 8.3  | 7.5  | 8.0  | 8.3  | 8.2  | 1,592              | 93.3              |
| New Zealand .....    | 5.2  | 7.2  | 6.5  | 7.3  | 7.7  | 7.7  | 7.3  | 7.7  | 7.7  | 7.7  | 1,179              | 77.2              |
| Portugal .....       | 3.1  | 5.9  | 7.0  | 5.4  | 5.9  | 6.0  | 5.4  | 5.9  | 6.0  | 7.3  | 866                | 55.5              |
| Spain .....          | 3.7  | 5.6  | 5.7  | 6.6  | 6.5  | 7.0  | 6.6  | 6.5  | 7.0  | 7.3  | 972                | 78.6              |
| Sweden .....         | 7.2  | 9.4  | 8.9  | 8.6  | 8.5  | 7.9  | 8.6  | 8.5  | 7.9  | 7.5  | 1,266              | 82.9              |
| Switzerland .....    | 5.2  | 7.3  | 8.1  | 8.4  | 9.0  | 9.3  | 8.4  | 9.0  | 9.3  | 9.9  | 2,283              | 69.0              |
| Turkey .....         | NA   | 4.0  | 2.8  | 4.0  | 4.7  | 4.1  | 4.0  | 4.7  | 4.1  | NA   | NA                 | NA                |
| United Kingdom ..... | 4.5  | 5.8  | 6.0  | 6.2  | 6.6  | 7.1  | 6.2  | 6.6  | 7.1  | 7.1  | 1,213              | 83.0              |
| United States .....  | 7.4  | 9.2  | 10.8 | 12.6 | 13.2 | 13.6 | 12.6 | 13.2 | 13.6 | 14.1 | 3,299              | 43.9              |
| OECD average .....   | 5.1  | 7.0  | 7.2  | 7.6  | 7.9  | 8.1  | 7.6  | 7.9  | 8.1  | 8.3  | 1,537              | 75.4              |

NA—Not available.

Source: Schieber, Poulhier, & Greenwald (1994) and Health Care Financing Administration.

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