Multinational Comparisons of Health Systems Data, 2002

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Contents

I. Overview

International comparisons of health care systems offer valuable tools to health ministers, policymakers, and academics wishing to evaluate the performance of their country's system. The data can point to areas in which a country is doing well or poorly relative to others and areas where it is simply making different choices.

The Organization for Economic Cooperation and Development (OECD) is an international organization representing 30 industrialized countries that share a commitment to democracy and a market economy.[1] The OECD produces reports and data on a wide range of economic and social issues, including the OECD Health Data series, an annual release of data on various aspects of health and health care in the member countries. Working with statistical offices in each member country, the OECD produces the most accurate and comprehensive international health care data available on the 30 nations.

This chartbook presents data comparing the health care systems of eight OECD members—Australia, Canada, France, Germany, Japan, New Zealand, the United Kingdom (U.K.), and the United States (U.S.). It compares the performance of each country's health system among nine dimensions: Total Health Care Spending; Public and Private Health Care Financing; Role of Public Insurance Program Coverage; Hospital Spending, Capacity, and Utilization; Pharmaceutical Spending; Spending on Physician Services and Health Care Workforce; Medical Procedures Involving Sophisticated Technology; Health Status; and Nonmedical Determinants of Health. Also, for comparison purposes, the value of the median for all 30 OECD countries is presented.[2] Data were obtained from OECD Health Data 2002 and subsequent updates. The chartbook also briefly summarize the health care financing and delivery systems of all eight countries.

Although every effort was made to standardize the comparisons, countries inevitably differ in their definitions of terms. Furthermore, some of the numbers are preliminary estimates. Wherever possible, the most recent year with relatively complete data was used; however, data from earlier years was sometimes substituted when the most recent data were not available for a specific country. The comparisons should therefore be seen as guides to relative orders of magnitude rather than as indicators of precise differences.

Health ministers, policymakers, and academics ultimately would like to be able to use these international data to determine whether their nation's health system is receiving value for the money invested and whether it is achieving the quality of care and outcomes that are possible. Because most expenditures in the health sector are for medical services, a critical question is whether specific investments in medical care have a "payoff" and whether the expenditures can be justified given the opportunity costs of spending for other goods and services.

An equally important question is whether spending more means that a country is buying better quality and more effective care. Unfortunately, this question is difficult to answer without more information on the quality and outcomes of health care provided. The quality and outcome measures currently available in the OECD data, such as longevity and mortality rates for various causes, are influenced by many factors in addition to the health care system.

Reflecting this need, The Commonwealth Fund launched an initiative to develop a common set of quality indicators that could be used for benchmarking and comparing health system performance across countries. Based on criteria of relevance, validity, reliability, actionability, cross-national data availability, and comparability, the initial list will include process and outcome indicators for cancer, heart disease, diabetes, stroke, organ transplant; measures of prevention and health promotion, such as vaccination and smoking rates; as well as indicators of broader system performance, such as responsiveness. A core set of quality indicators will be available in early 2003 for Australia, Canada, New Zealand, the U.K., and the U.S. Beginning in 2003, the OECD Healthcare Quality Indicators Project will expand this initiative to an additional 12 countries. This chartbook presents comparisons based on OECD data that are currently available. With international cooperation, it is hoped that in the future we will be better able to compare health systems' performance as well as existing quality indicators.

FINDINGS

Total Health Care Spending

The share of gross domestic product (GDP) devoted to health care in 2000 varied from 7.3 percent in the U.K. to 13.0 percent in the U.S. Between 1990 and 2000, the share of GDP devoted to health increased in all eight countries. During this period, Canada had the smallest increase, while Japan had the largest increase.

The OECD median percentage of GDP spent on health care increased from 7.4 percent to 8.0 percent between 1990 and 2000. Approximately one of every 12 dollars was spent on health care in the median OECD country in 2000.

Another indicator of total health care spending is the average amount spent per capita. It is necessary to adjust per capita expenditures for differences in the prices of goods in different countries using purchasing power parities. Per capita spending differences among the eight countries were substantial. For example, 2000 per capita spending in the U.S. was nearly three times greater than in New Zealand. In all eight countries, per capita spending on health care services during the 1990s increased faster than general inflation.

Variations in the share of GDP spent on health care and variations in per capita spending raise the issue of whether certain countries are receiving value for the money they spend. Sections that follow attempt to address this question.

Public and Private Health Care Financing

Approximately three-quarters of health care was publicly funded in all countries except the U.S. In these seven countries, public funds are used to provide universal health care coverage. In the U.S., public financing is mainly used to cover the elderly, the disabled, and certain low-income individuals. Public sources represent 44 percent of total funding in the U.S.

In 2000, publicly financed health care spending per capita ranged from $1,266 in New Zealand to $2,063 in Germany. The percentage of GDP devoted to public financing of the health care system ranged from 5.8 percent in the U.S. to 8.0 percent in Germany. Per capita spending and the percentage of GDP spent on health care from public sources in the U.S. are similar to levels in the other seven countries. However, as noted earlier, a much smaller proportion of the population is covered by public insurance in the U.S.

Privately financed health care includes expenditures for both private health insurance and out-of-pocket spending. The U.S. spent 7.2 percent of GDP on privately financed health care. Germany, the country with the second-highest level, spent 2.6 percent, and the U.K. spent the smallest, 1.4 percent. Private health care spending per capita was four to eight times higher in the U.S. than in the seven other countries.

Private health insurance is used very differently in the eight countries (see "Country Summaries" beginning on page 67). In some countries, private health insurance is used to pay for services that are not covered by public insurance. For example, in the U.S., more than 70 percent of the population holds some form of private health insurance, since private insurance is the main source of health insurance coverage. In Germany, private health insurance is an option for the most affluent. Private insurance is also commonly used in Australia, New Zealand, and the U.K. to allow for choice of and more ready access to specialists, avoidance of queues for elective surgery, and higher standards of comfort and privacy in private hospitals than might be available in the public system. In Canada, private insurance is not permitted to duplicate publicly insured services; it can, however, cover services not offered by the government.

A key function of private insurance in many countries is to pay for patient cost-sharing fees, deductibles, or copayments for services such as physician visits, inpatient hospitalization, outpatient pharmaceuticals, or physical therapy. This is common in Australia, France, New Zealand, and the United States.

Out-of-pocket payments can be a financial burden for individuals, particularly those with chronic conditions or low incomes. In 2000, Americans spent, on average, $707 out-of-pocket for health services—substantially higher than that spent in the other seven countries. Average out-of-pocket spending was lowest in the U.K., $171 in 2000.

Role of Public Insurance Program Coverage

In six of the eight countries, public insurance coverage is universal. In Germany, everyone below a certain level of income is required to purchase health insurance coverage through the sickness funds. Only 8 percent of the German population, those with annual earnings above a certain income threshold, do not have to purchase health insurance. In the U.S., 45 percent of the population has public insurance coverage. One of seven Americans—41 million people—is uninsured, with neither public nor private coverage.

Public coverage may not cover all services. Which specific services are covered varies from country to country. For example, in five of the eight countries, pharmaceuticals are publicly covered. However, only 50 percent of Canadians have public coverage for pharmaceuticals, with public coverage varying by province, by income, and by age. In the U.S., only 12 percent of the population has

public pharmaceutical coverage. Americans and Canadians can purchase private coverage for pharmaceuticals, but the number doing so is not published by the OECD. In Germany, the most affluent are able to purchase private coverage for pharmaceuticals.

Hospital Spending, Capacity, and Utilization

Hospital care was the largest component of health care spending in all eight countries in 2000. From 2.3 percent (Japan) to 4.2 percent (U.S.) of GDP was spent on hospital care that year. Hospital spending per capita also varied significantly among countries, with the U.S. spending more than twice as much per capita as Germany, Australia, or Japan.

Hospital spending is a function of admission rates, length of stay, and cost per day. Hospital admission rates for acute care were twice as high in Germany and France as they were in the U.S. and Canada. The average length of a hospital stay was nearly twice as long in Germany as in New Zealand. Average lengths of stay, even for specific conditions such as acute myocardial infarction and normal delivery, also varied by a factor of two or more. Given that all eight countries share a common clinical literature, differences in length of stay may be reflective of the way countries reimburse care and control utilization.

The U.S. had the fewest number of acute care hospital beds per 1,000 population, the second-lowest rate of hospital admissions for acute care, and the shortest length of stay for acute myocardial infarction and normal delivery per capita. Yet, U.S. hospital costs were far higher than in other countries, suggesting a pattern of shorter but more resource-intensive hospital care. Although data on hospital expenditures per day are not available from the OECD, simple division would suggest that the U.S. had considerably higher hospital expenditures per day in 2000 than did the other countries.

Pharmaceutical Spending

Pharmaceutical spending was the second-largest component of health care spending in three of the eight countries (Canada, France, and Germany). Pharmaceutical spending represented between 1 and 2 percent of GDP in each country in 2000. Growth in spending for pharmaceuticals outpaced inflation in all eight countries during the 1990s. Pharmaceutical spending increased an average of 7 percent per year in Australia during the decade.

In 2000, pharmaceutical spending per capita was highest in the U.S., at $556, and lowest in New Zealand, at $210. The public share of pharmaceutical spending varied from 18 percent in the U.S. to 71 percent in New Zealand.

Spending for Physician Services and Health Care Workforce

Physician services were the second-largest component of health care spending in three countries in 2000 (Australia, Japan, and the U.S.). From 1 percent (Germany) to 3 percent (U.S.) of GDP was spent on physician services in 2000. In per capita terms, spending on physician services was the highest in the U.S.—twice as high as in Japan and four times as high as in Germany.

Growth in the number of physicians increased faster than growth in population in all eight countries during the 1990s, except for Canada. In Canada, the physician-to-population ratio was the same in 2000 as in 1990. The highest physician-to-population ratio in 2000 was Germany's: every 1,000 people were served by 3.6 practicing physicians. In the U.K., the availability of physicians was half that of Germany, 1.8 per 1,000 people. Despite the variety in their availability, the average number of physician visits per capita in 2000 was almost identical in all countries, except for Japan.

The number of physician visits per capita in the U.S. was similar to that in most of the other countries, as was the number of physicians per capita. U.S. expenditures for physician services, however, were at least double those of the other nations.

The availability of nurses varied considerably. New Zealand had the most nurses per capita (9.7 per 1,000 population) while France had the fewest (6.5 per 1,000). The number of practicing nurses relative to the population increased in six of the eight countries during the 1990s, the exceptions being Australia and Canada. The number of nurses per acute-care hospital bed increased in the previous decade in the four countries with available data. In 1999, there were nearly three times as many nurses per acute-care hospital bed in Australia as in France.

Medical Procedures Involving Sophisticated Technology

The level of access to high-tech medical equipment, such as magnetic resonance imaging (MRI) units and computer tomography (CT) scanners, varied widely across the eight countries in 2000, as did utilization of procedures involving sophisticated technology. Japan

had substantially more MRI units and CT scanners per capita than the other countries. Looking at the other seven countries, the U.S. and Germany had the most MRIs, while Australia and Germany had the most CT scanners.

Differences in utilization rates for two procedures with comparable data were striking. In 2000, the number of coronary angioplasties performed in the U.S. per 100,000 population was more than double that in Germany and more than seven times that in England. Although these utilization figures are not adjusted for the underlying prevalence of disease, the magnitude of this difference suggests substantially different patterns in treatment and technological diffusion across countries.

The number of patients undergoing dialysis in Japan per 100,000 people was nearly twice as high as in the U.S. and six times as high as in the U.K. in 2000. This could be because Japan essentially treats all end-stage renal disease (ESRD) patients with dialysis. Owing to cultural issues relating to organ donation, Japan has virtually no transplant program. The other countries have active transplant programs.

Health Status

As noted earlier, the calculation of value for resources consumed requires measurement of health status. Work is under way to increase the availability of comparable indicators.

While internationally comparable data on health status are sparse, disease-specific mortality rates are one type of available outcome data. More analysis, however, is needed to determine if the results are attributable to differences in the medical care provided or to some other factors. Nonetheless, the data are valuable for the questions they raise about the variation in health and health care across countries.

Mortality resulting from acute myocardial infarction, for example, was much lower in France and Japan than in the other countries. Diabetes mortality was highest in the U.S., about three times the rate in Japan. Breast cancer–related death rates in Japan were as much as one-third the rates in the other countries.

Nonmedical Determinants of Health

There are many nonmedical determinants of health. Two major ones are cigarette smoking and obesity. In all eight countries, from one-fifth to one-third of the population smoked regularly in 2000. The smoking rate was lowest in the U.S. and highest in Japan. If obesity is defined by a body mass index greater than 30, then 26 percent of the U.S. population was obese in 1999. In Japan, only 3 percent of the population was obese in 2000.

CONCLUSION

Variation is considerable across the eight countries in health care spending, capacity, and utilization. Health ministers, policymakers, and academics attempting to evaluate whether variations in health care spending, numbers of physicians and nurses, availability of hospital services and sophisticated technology, access to health insurance, and utilization of medical services are associated with health outcomes and health status have been frustrated with the lack of comparable outcome or health status data. With the support of The Commonwealth Fund and the OECD, and through the efforts of a number of countries, substantial improvements are being made in this area, and additional data should be forthcoming.

II. Total Health Care Spending[1,3]

- Countries spent between 7.3 percent (United Kingdom) and 13.0 percent (United States) of their gross domestic product (GDP) on health care in 2000.
- Health care spending is an increasing share of GDP: the percentage of GDP spent on health care increased in all eight countries between 1990 and 2000.
- Health care spending per capita in the United States was more than twice the OECD median in 2000.
- Health care spending per capita grew most rapidly between 1990 and 2000 in Japan and the United Kingdom and least rapidly in Canada.
- Health care spending per capita increased 2 percent to 4 percent faster than overall inflation during the 1990s in all eight countries.

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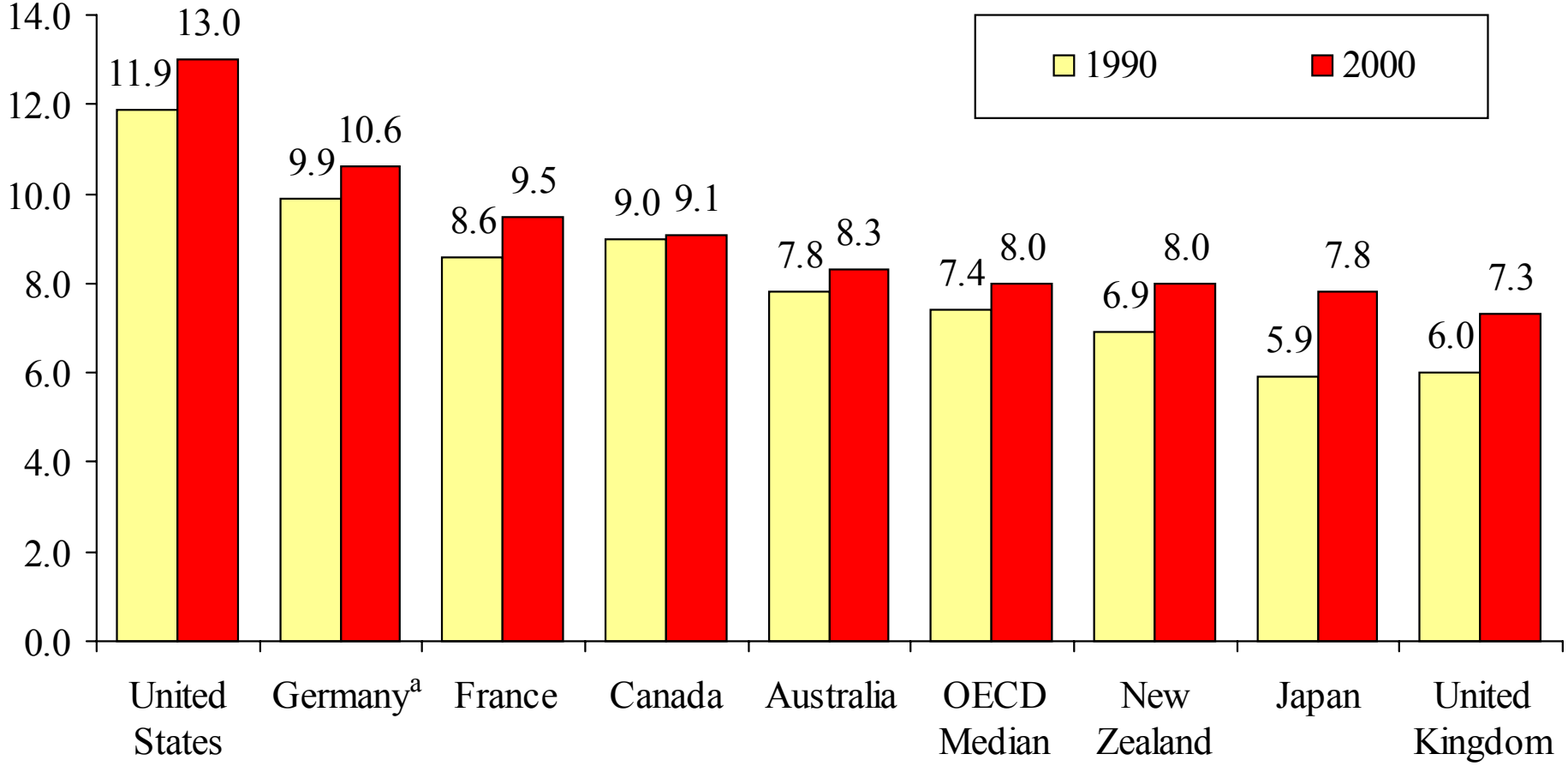
Chart II-1

Percentage of Gross Domestic Product (GDP) Spent on Health Care in 1990 and 2000[2,3,4,5]



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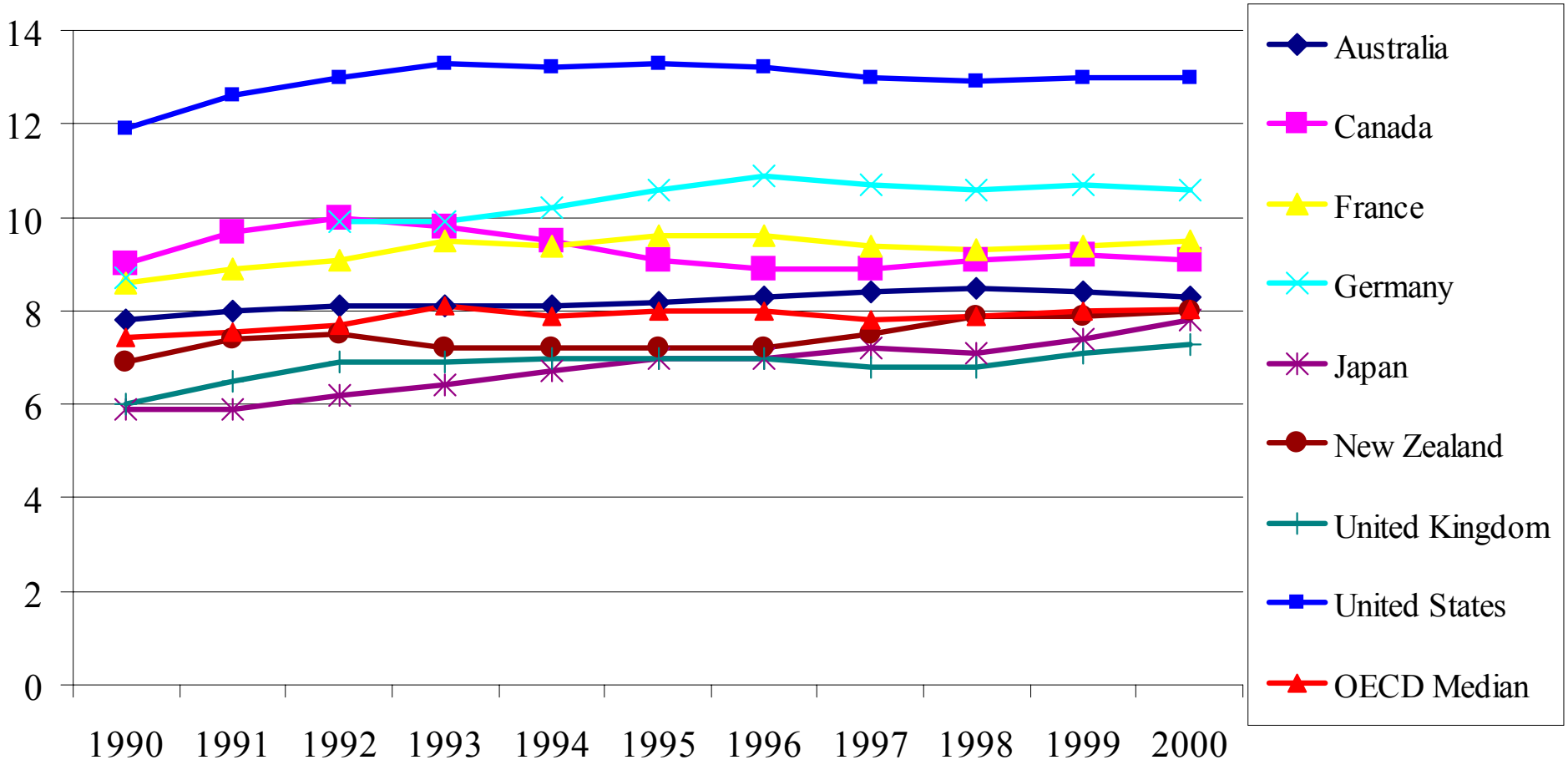
[a] 1992–2000

Source: OECD Health Data 2002

Chart II-2

Percentage of GDP Spent on Health Care from 1990 to 2000



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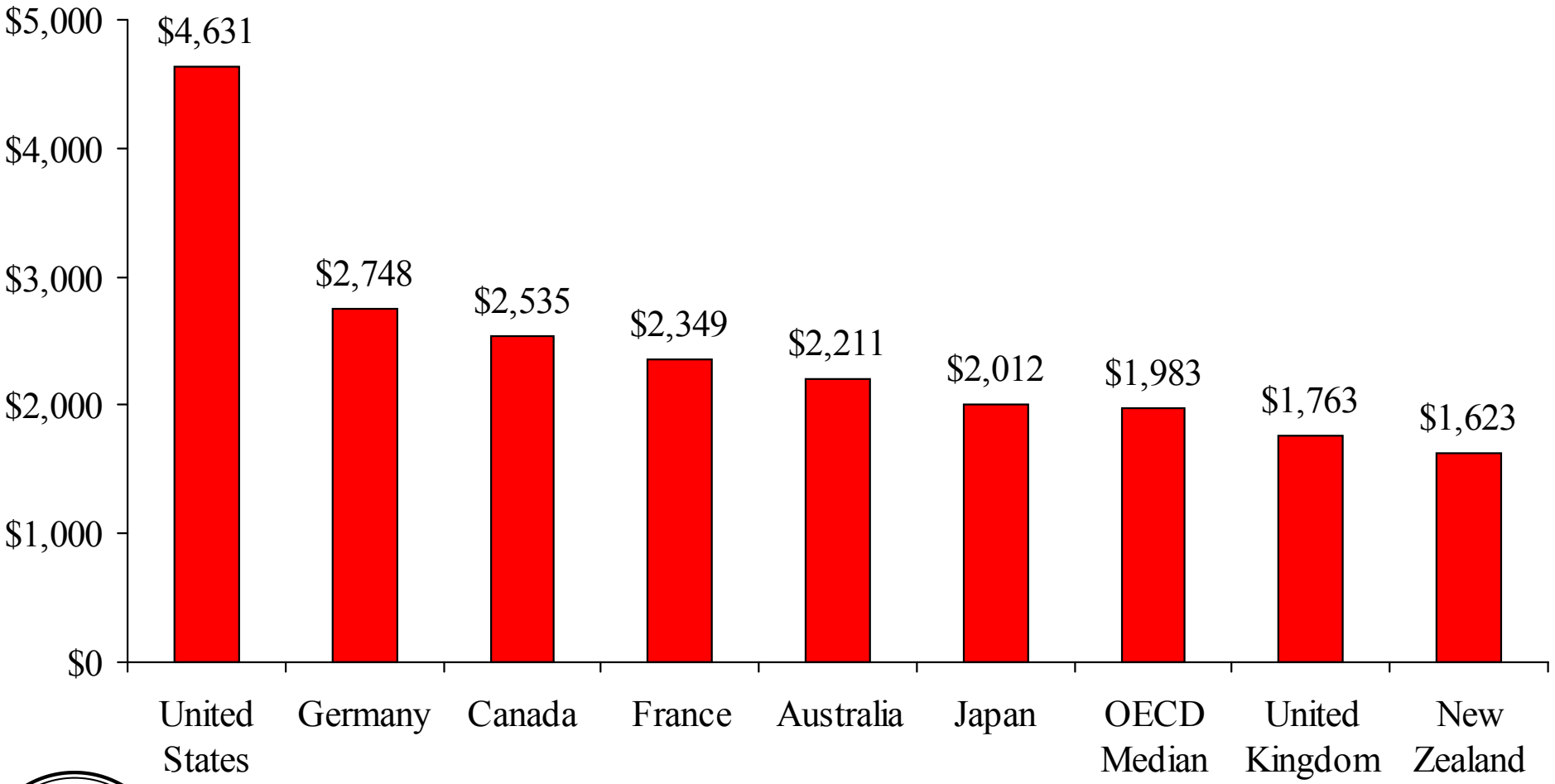
Source: OECD Health Data 2002

Chart II-3

Health Care Spending per Capita in 2000

Adjusted for Differences in the Cost of Living[6]



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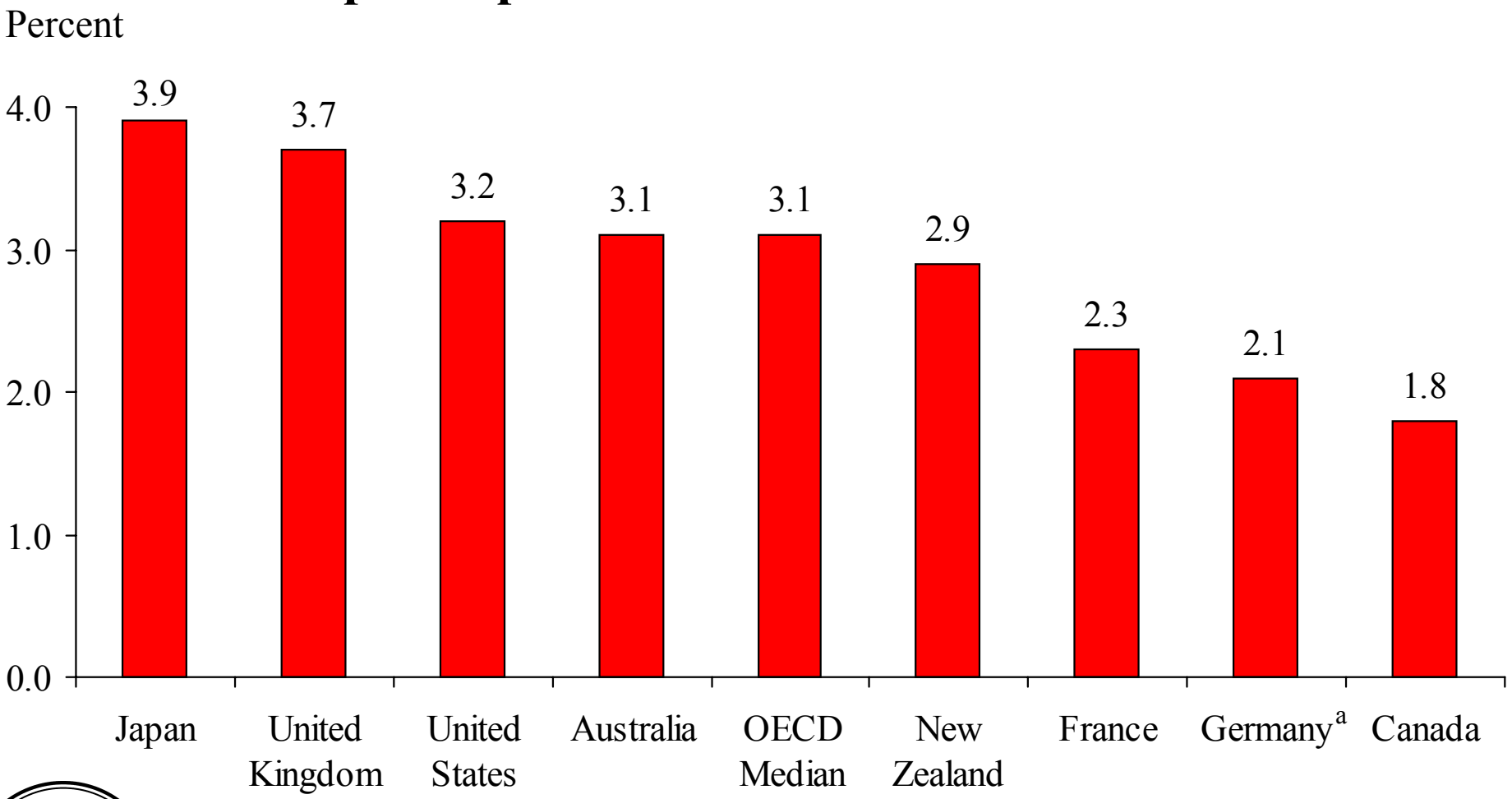
Source: OECD Health Data 2002

Chart II-4

Average Annual Growth Rate of Real Health Care Spending per Capita Between 1990 and 2000[7,8]



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[a] 1992–2000

Sources: OECD Health Data 2002; U.K. Department of Health

III. Public and Private Health Care Financing

- Approximately three-quarters of health care spending was publicly financed in all countries except the United States in 2000.
- The eight countries spent between 5.8 percent and 8.0 percent of GDP on publicly financed health care in 2000.
- The United States spent approximately the same portion of the country's GDP on publicly financed health care as most other OECD countries in 2000, although public programs covered only 45 percent of the U.S. population.
- Per capita spending on publicly financed health care ranged from $1,266 in New Zealand to $2,063 in Germany in 2000.
- The United States spent 7.2 percent of GDP on privately financed health care in 2000 while Germany, the country with the second-highest level, spent 2.6 percent.

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- Private health care spending per capita in the United States was 4 to 8 times higher than in the other seven countries in 2000.
- In the United States, private health insurance is used much differently than in the other countries, typically providing primary coverage for medical care rather than coverage that is supplementary to public insurance.
- Out-of-pocket spending for uncovered services and cost-sharing varied considerably across countries in 2000, with individuals in the United States experiencing the highest out-of-pocket costs ($707) and those in the United Kingdom the lowest ($171).

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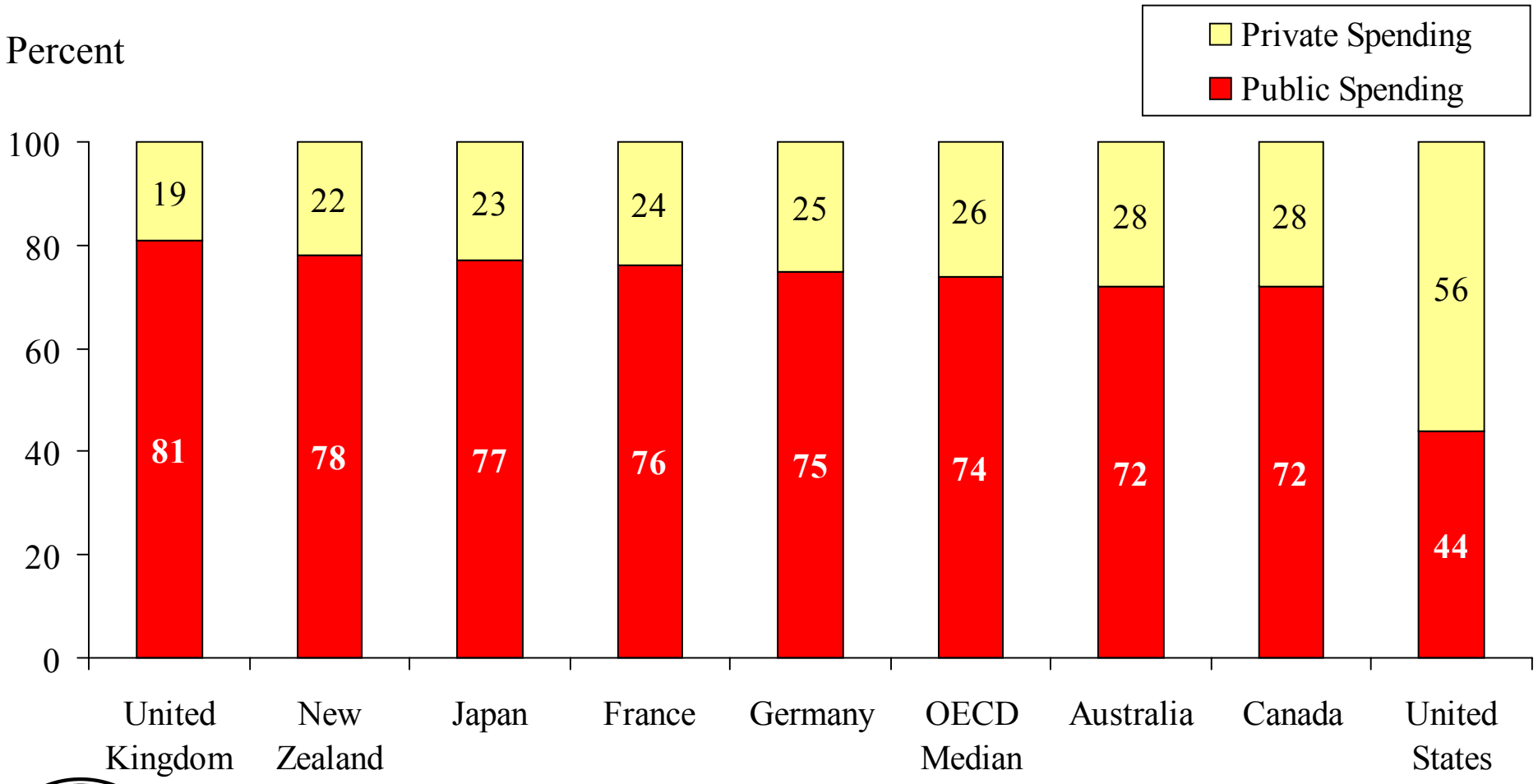
Chart III-1

Public Versus Private Health Care Spending in 2000



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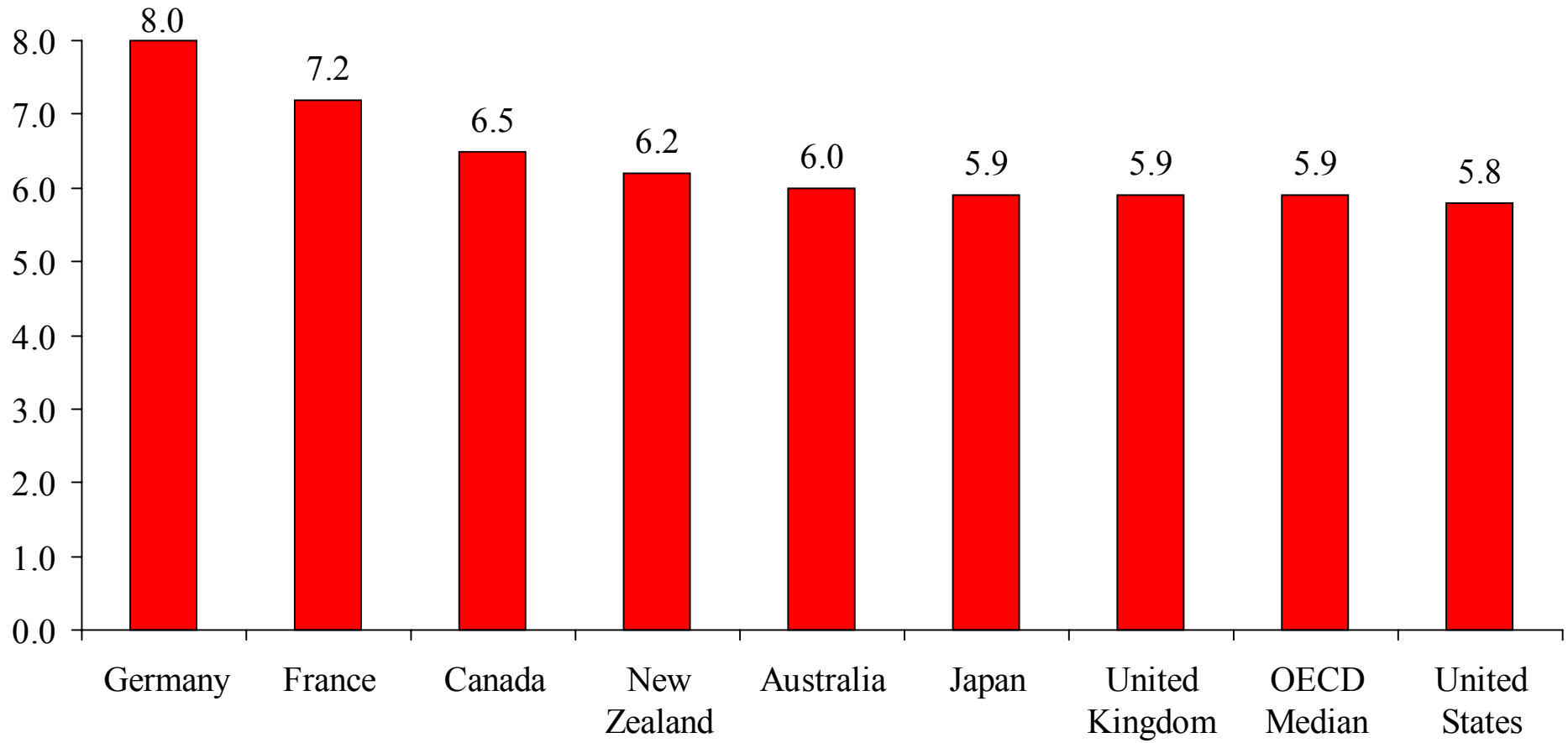
Source: OECD Health Data 2002

Chart III-2

Public Spending on Health Care as a Percentage of GDP in 2000



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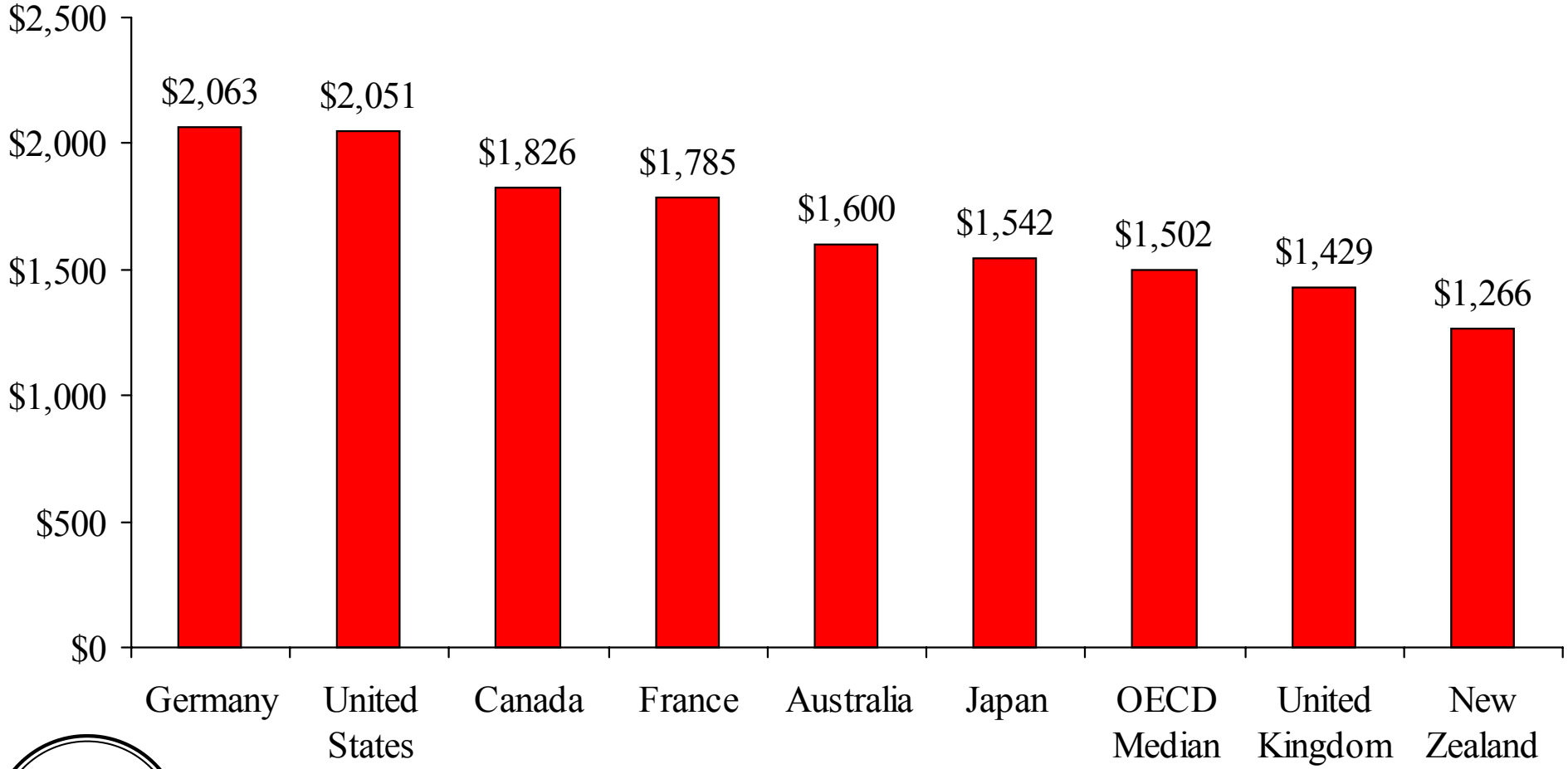
Source: OECD Health Data 2002

Chart III-3

Public Spending on Health Care per Capita in 2000

Total Public Spending Divided by Total National Population, Adjusted for Differences in the Cost of Living[9]



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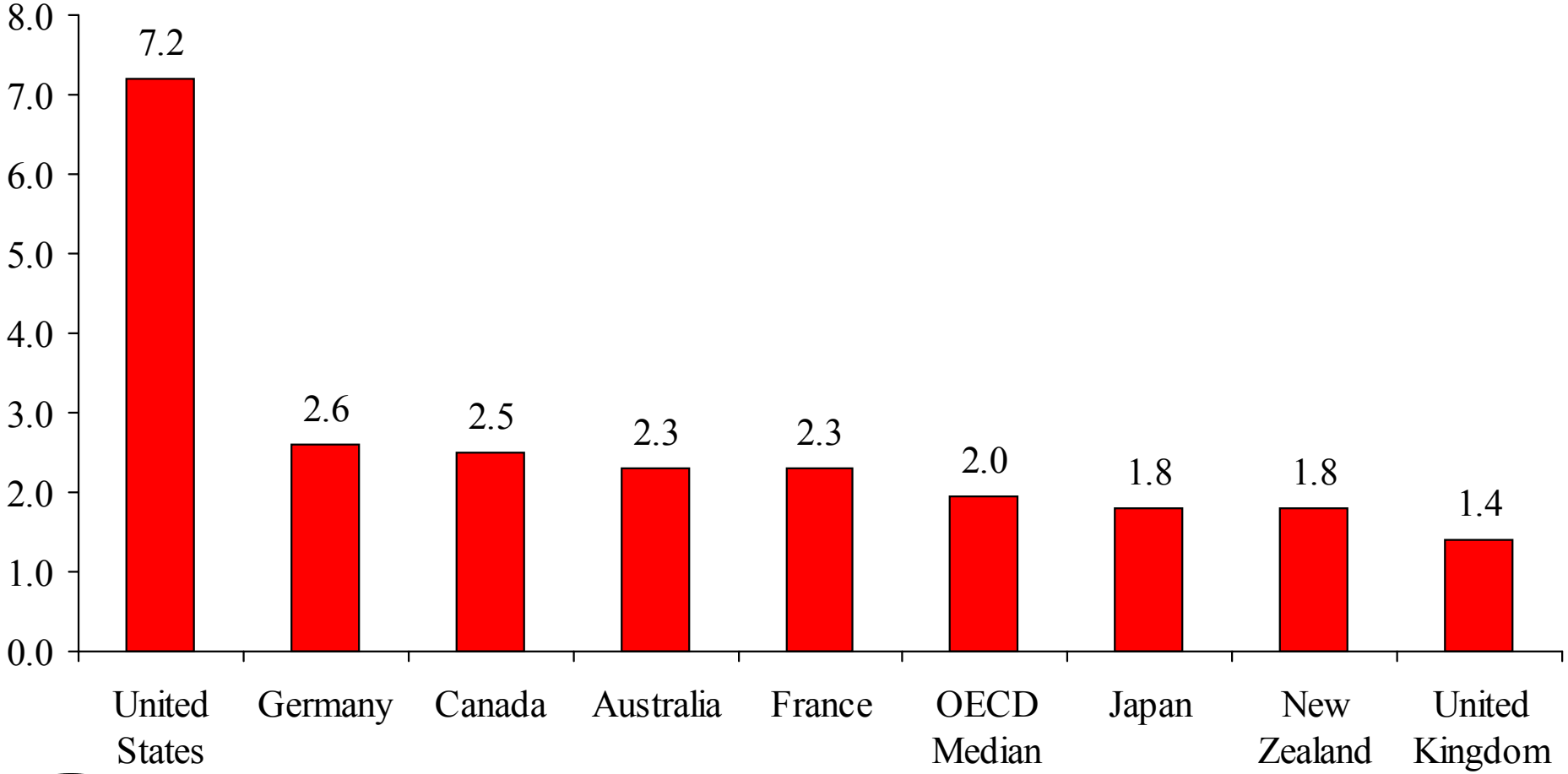
Source: OECD Health Data 2002

Chart III-4

Private Spending on Health Care as a Percentage of GDP in 2000[10,11]



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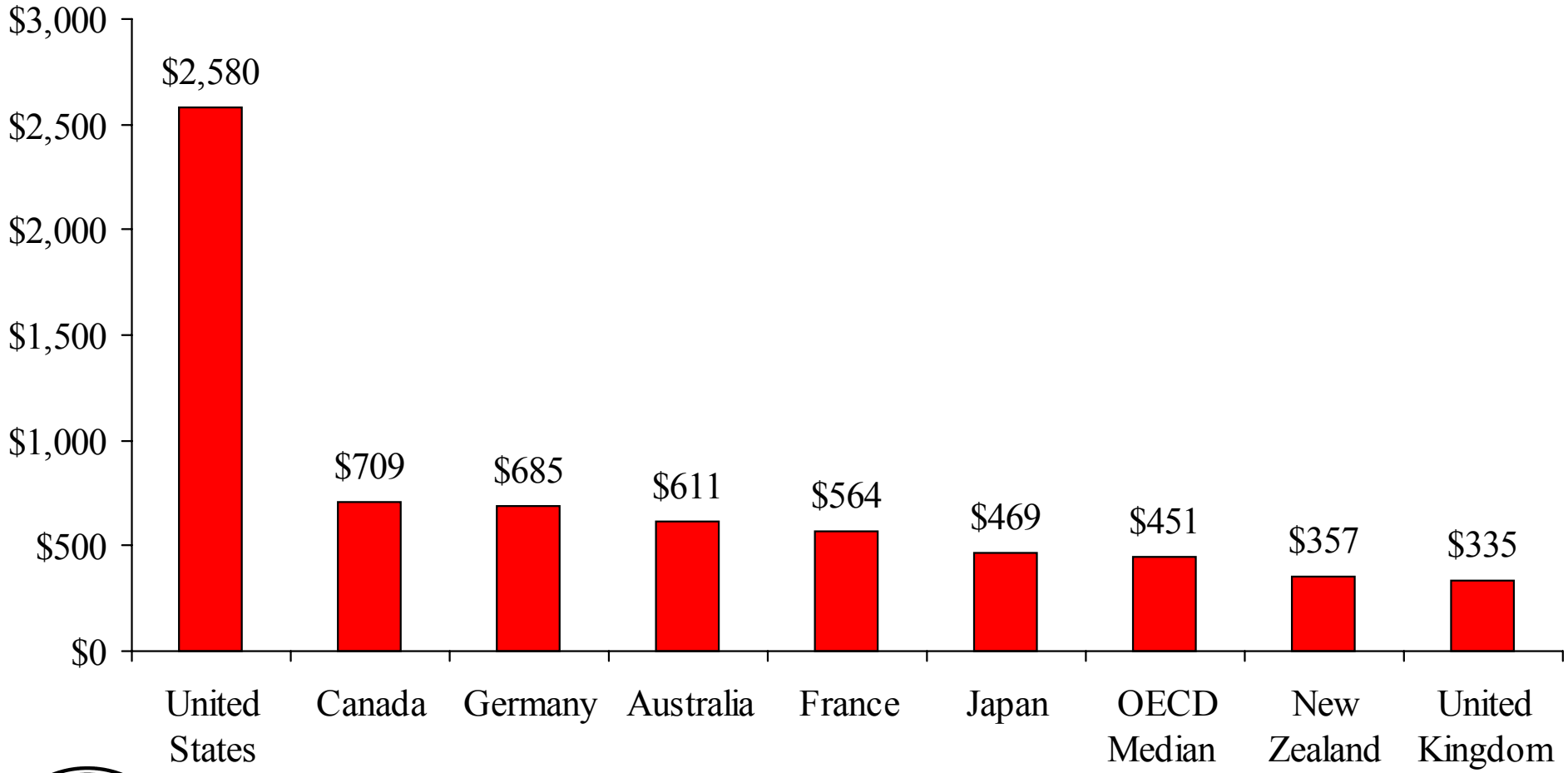
Source: OECD Health Data 2002

Chart III-5

Private Spending on Health Care per Capita in 2000

Adjusted for Differences in the Cost of Living[9]



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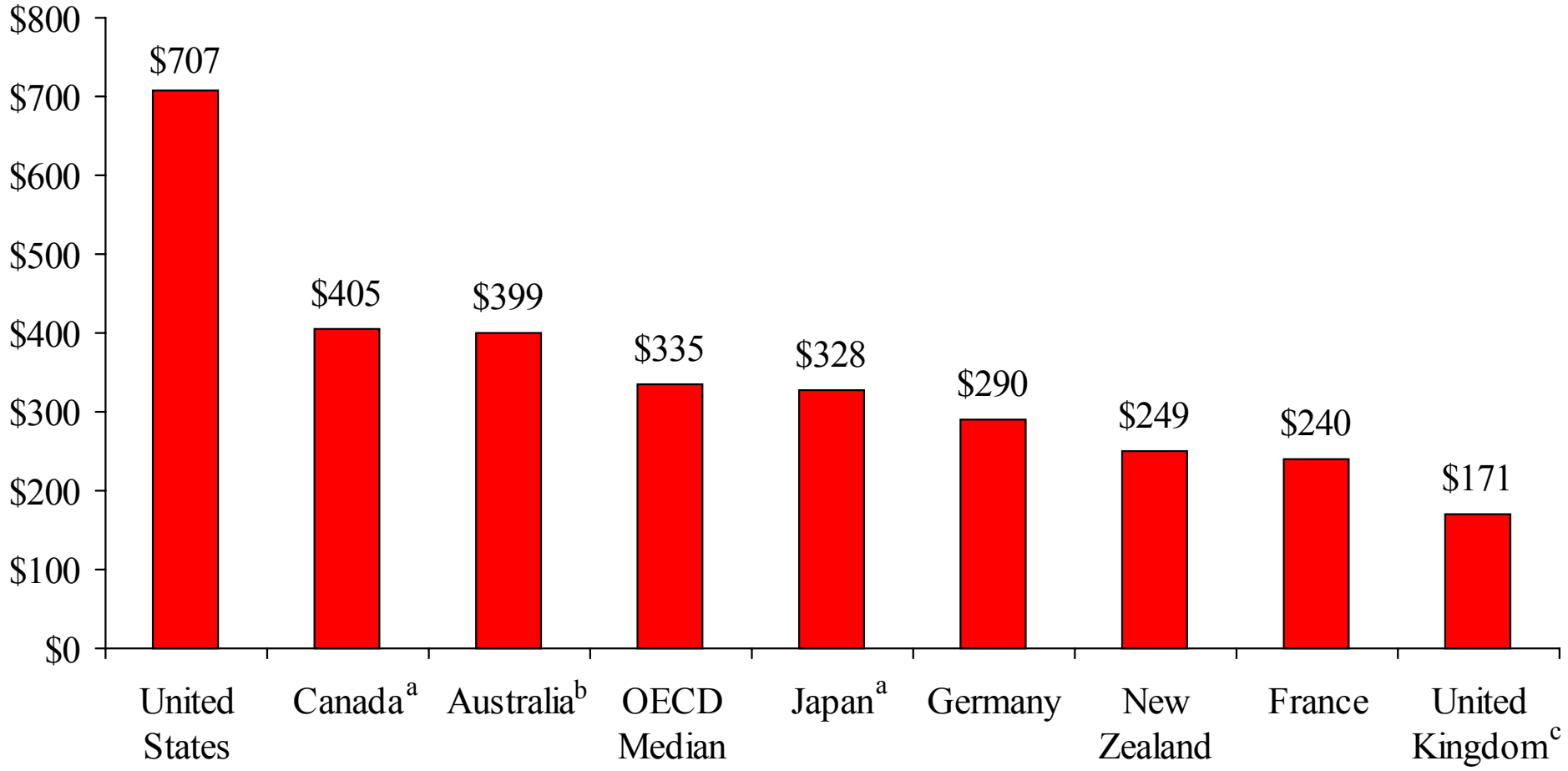
Source: OECD Health Data 2002

Chart III-6

Out-of-Pocket Health Care Spending per Capita in 2000

Adjusted for Differences in the Cost of Living[12,13]



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[a] 1999
[b] 1998
[c] 1996

Source: OECD Health Data 2002

IV. Role of Public Insurance Program Coverage[14]

- In the United States, fewer than half the population received health insurance coverage from government and public programs in 2000.
- In Germany, the most affluent are permitted to self-insure or buy private health insurance coverage. Nearly all of them (about 8% of the population) purchase private health insurance.
- The United States is the only country with a large portion of its population (one of seven) without health insurance coverage.[15]
- Germany, Canada, and the United States did not have universal public coverage for pharmaceuticals in 2000.

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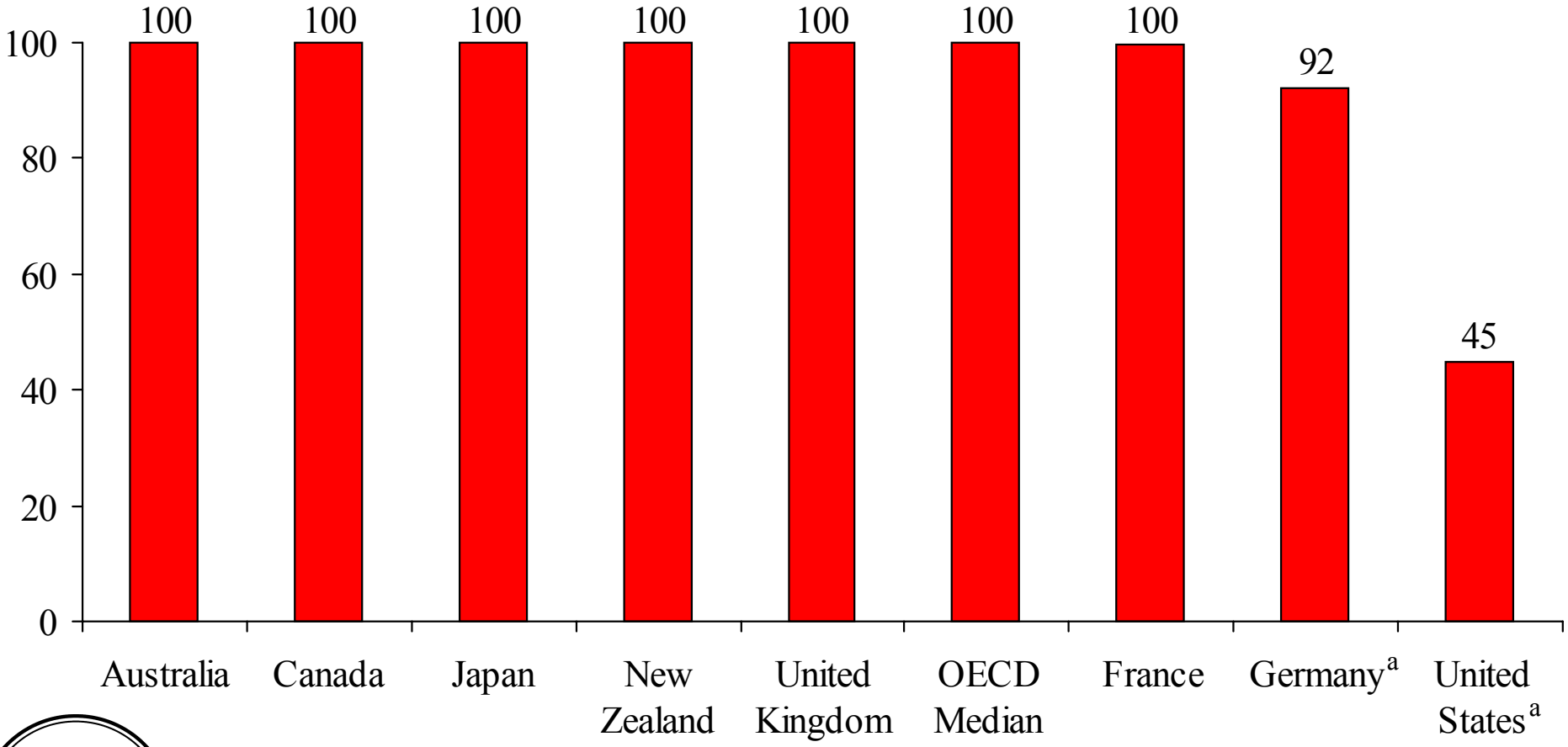
Chart IV-1

Percentage of Total Population with Health Insurance Coverage Through Public Programs in 2000



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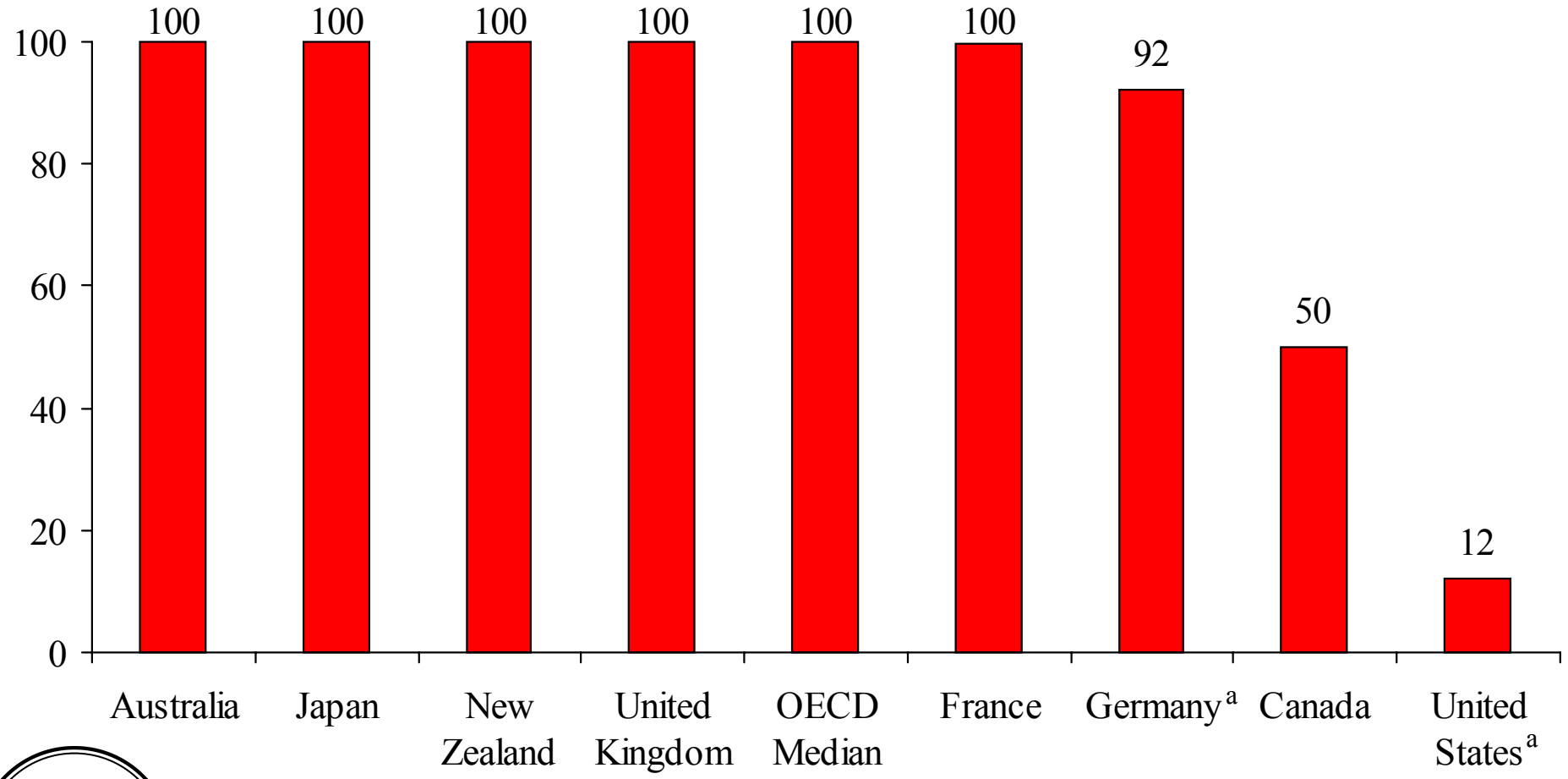
[a] 1997

Source: OECD Health Data 2002

Chart IV-2

Percentage of Total Population with Pharmaceutical Insurance Coverage through Public Programs in 2000



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[a] 1995

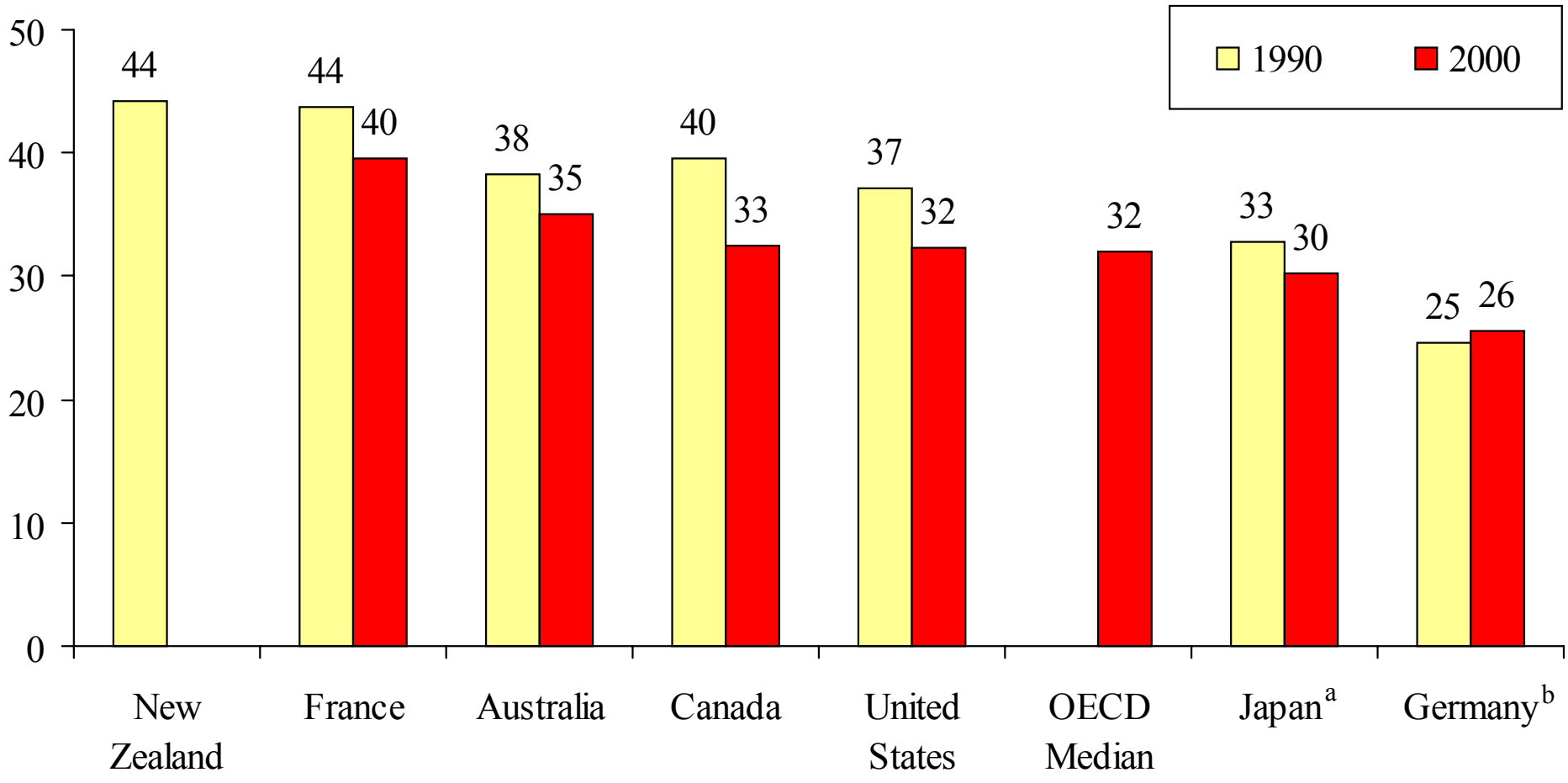
Source: OECD Health Data 2002

V. Hospital Spending, Capacity, and Utilization

- Hospital care represented the largest component of total health care spending in all eight countries in 2000 (see Appendix).[16]
- Hospital spending declined as a share of total health care spending from 1990 to 2000 in all countries except Germany.
- Between 2.3 percent (Japan) and 4.2 percent (United States) of GDP was spent on hospital care in 2000.
- Hospital spending per capita in the United States was substantially higher than in the other countries in 2000.
- Germany had approximately twice as many acute care hospital beds per capita as Canada, the United Kingdom, and the United States in 2000.[17]
- The number of hospital beds per 1,000 population decreased in almost all the countries during the 1990s.
- In 2000, people were approximately twice as likely to be admitted for inpatient acute care in Germany and France as in the United States and Canada.
- The average length of hospital stay for acute care varied widely among the countries.
- Despite a common clinical literature across the eight countries, average length of hospital stay after a heart attack or normal delivery differed by a factor of about two or three.

Chart V-1

Percentage of Total Health Care Spending on Hospital Care[16,18]



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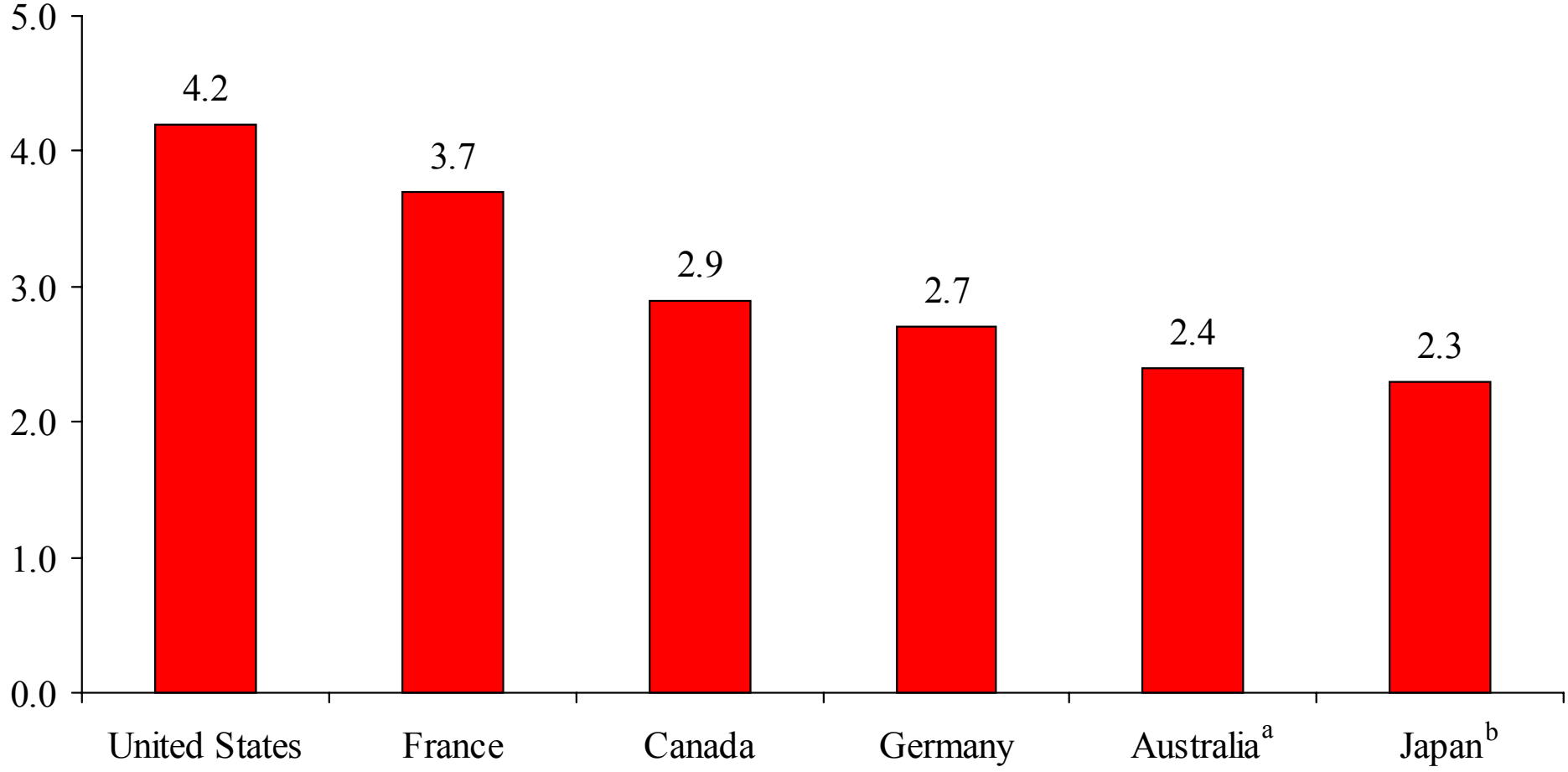
[a] 1990–1999
[b] 1992–2000

Sources: OECD Health Data 2002; Australian Department of Health

Chart V-2

Percentage of GDP Spent on Hospital Care in 2000



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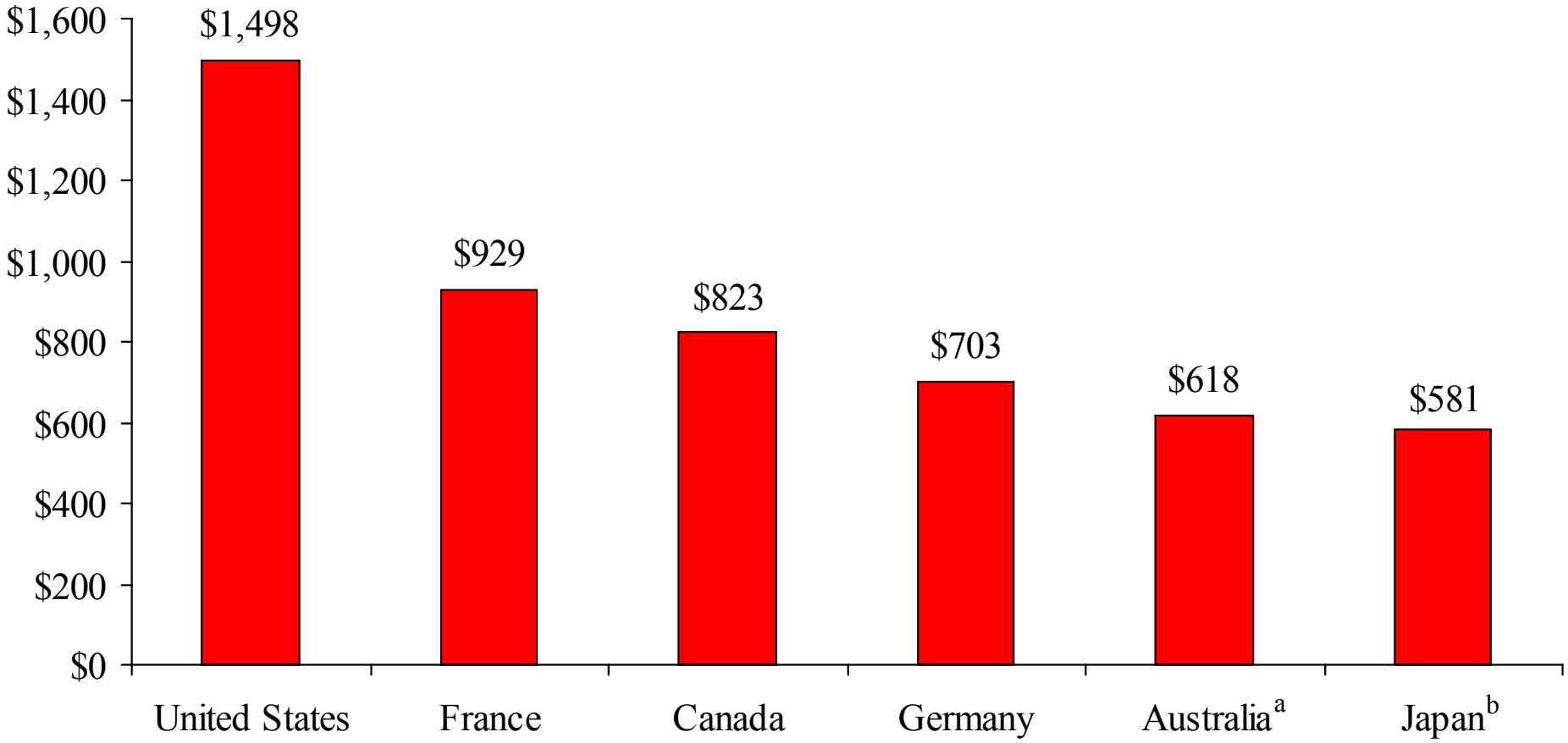
[a] 1998
[b] 1999

Source: OECD Health Data 2002

Chart V-3

Hospital Spending per Capita in 2000

Adjusted for Differences in the Cost of Living[13]



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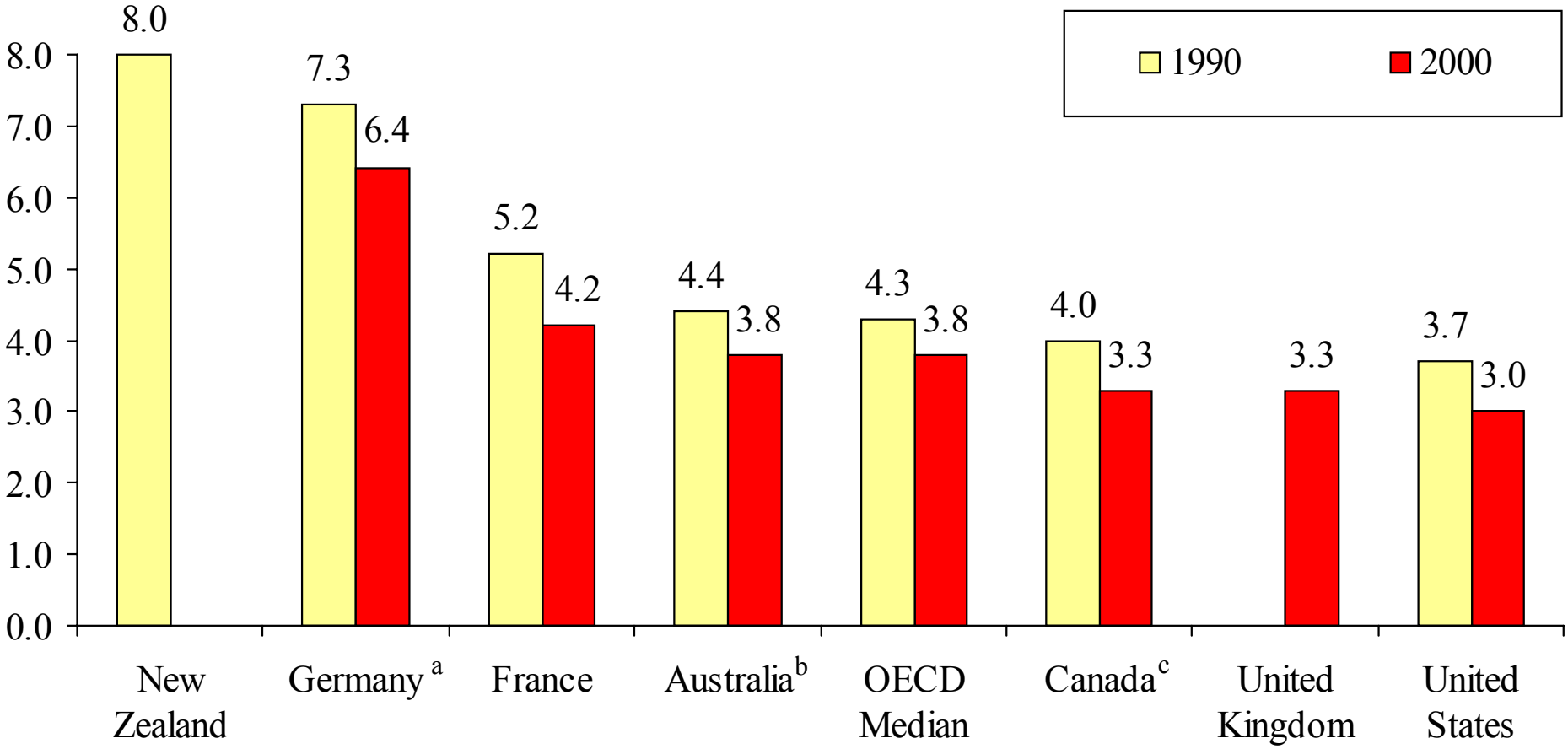
[a] 1998
[b] 1999

Source: OECD Health Data 2002

Chart V-4

Number of Acute Care Hospital Beds per 1,000 Population[17,19]



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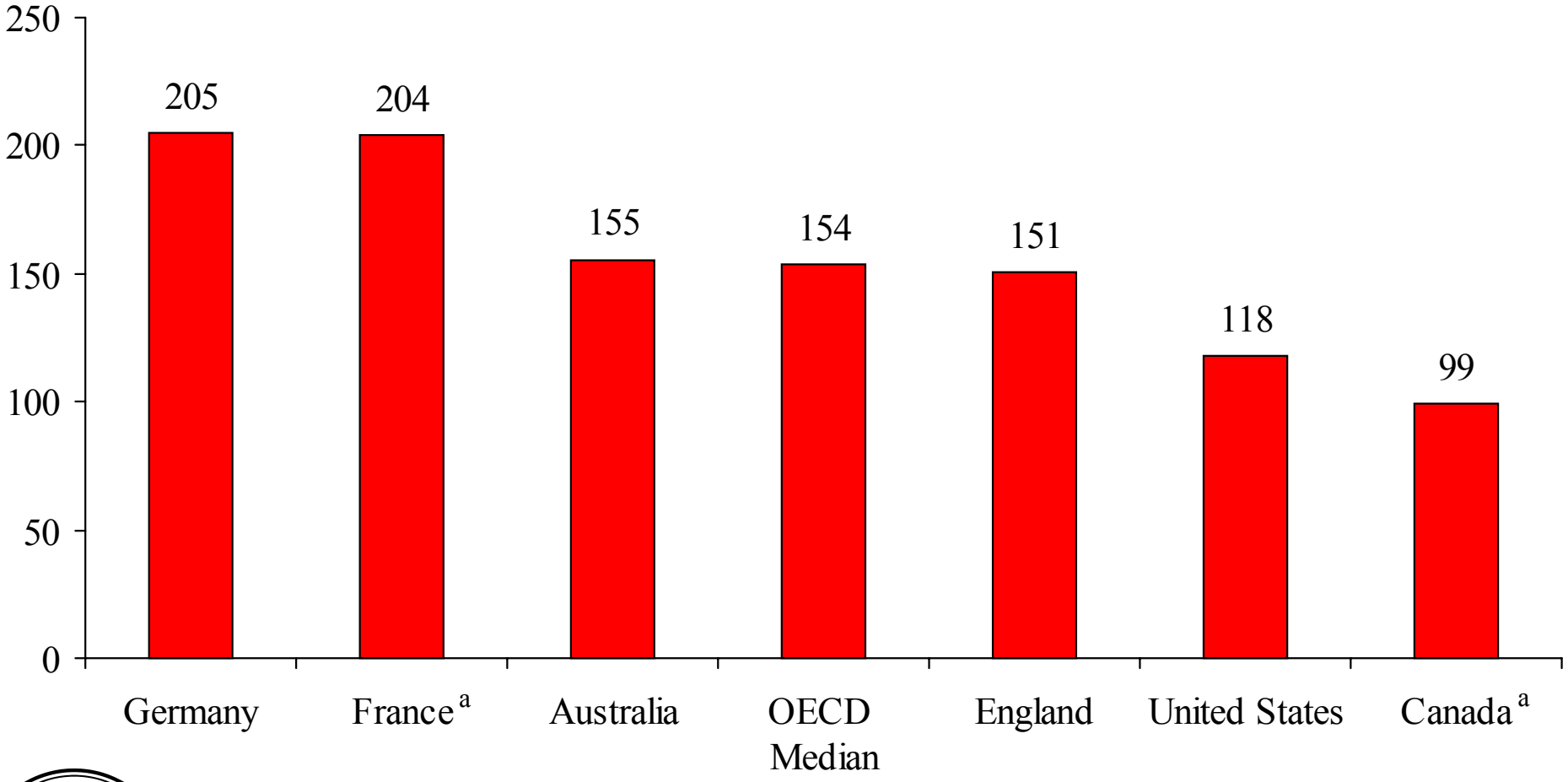
[a] 1992–2000
[b] 1991–1999
[c] 1990–1999

Source: OECD Health Data 2002

Chart V-5

Hospital Admissions for Acute Care per 1,000 Population in 2000[20]



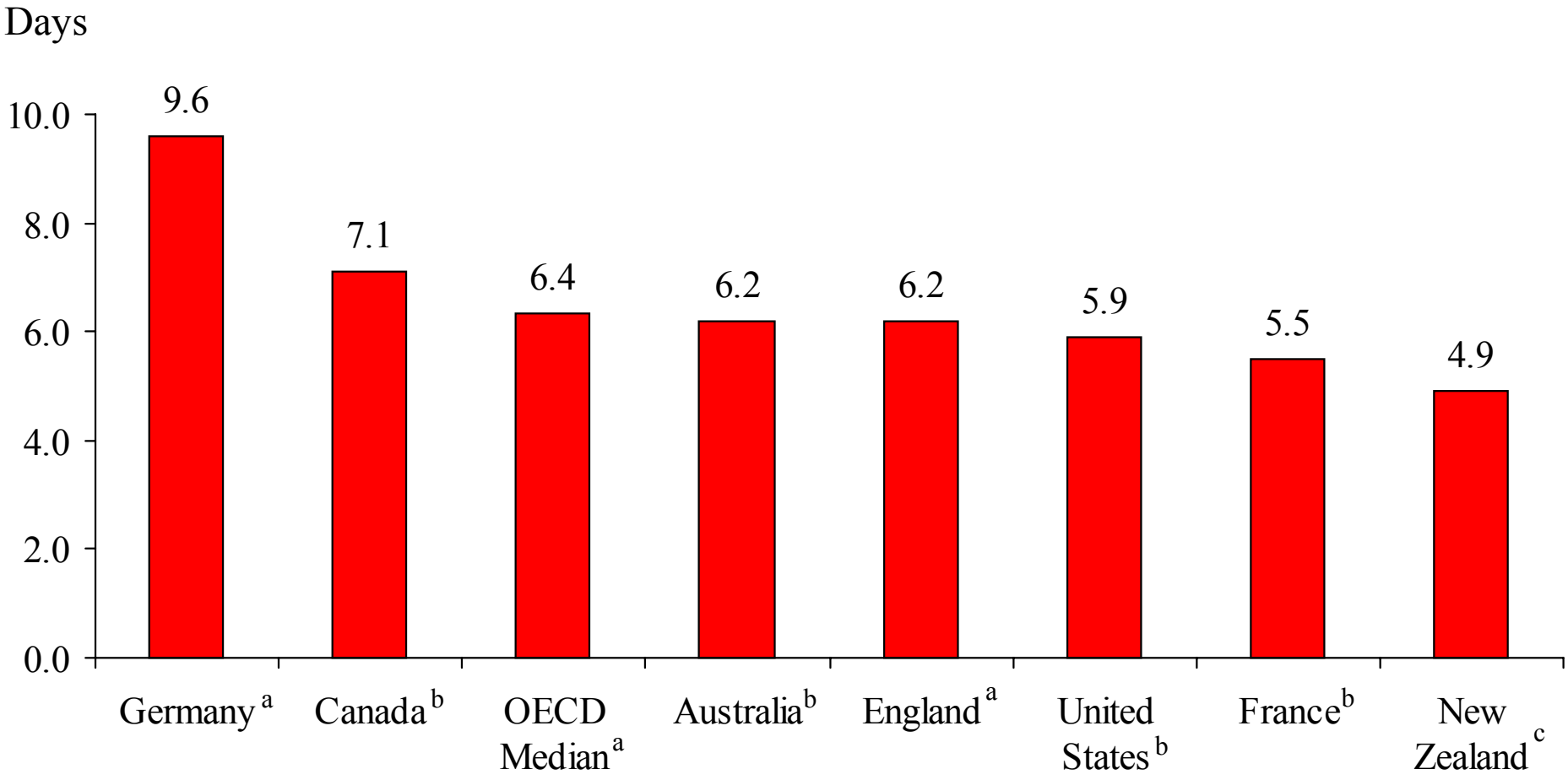
THE COMMONWEALTH FUND

[a] 1999

Sources: OECD Health Data 2002; U.K. Department of Health

Chart V-6

Average Length of Hospital Stay for Acute Care in 1998, 1999, or 2000[21,22]



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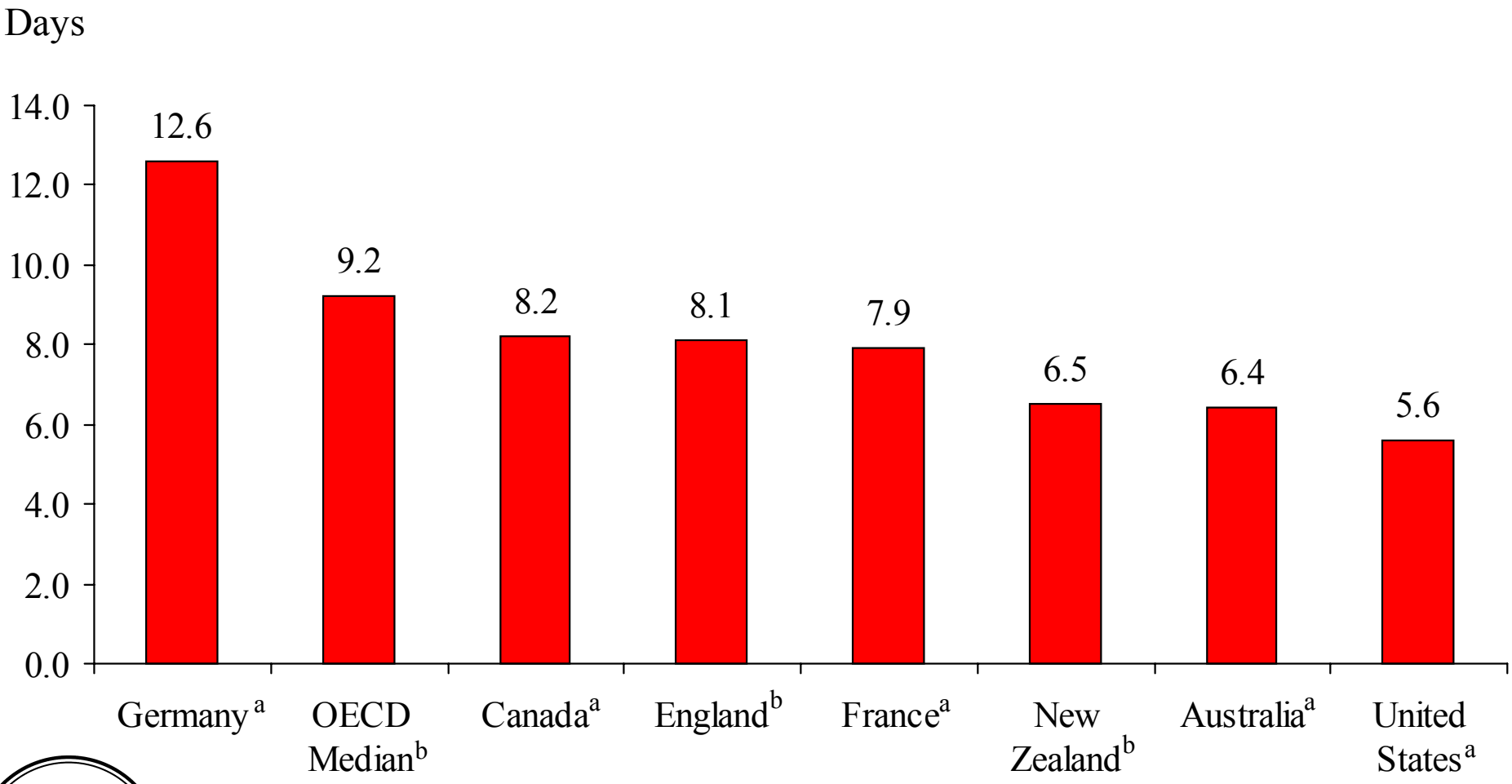
[a] 2000
[b] 1999
[c] 1998

Source: OECD Health Data 2002

Chart V-7

Average Length of Hospital Stay for Acute Myocardial Infarction in 1999 or 2000[21,22]



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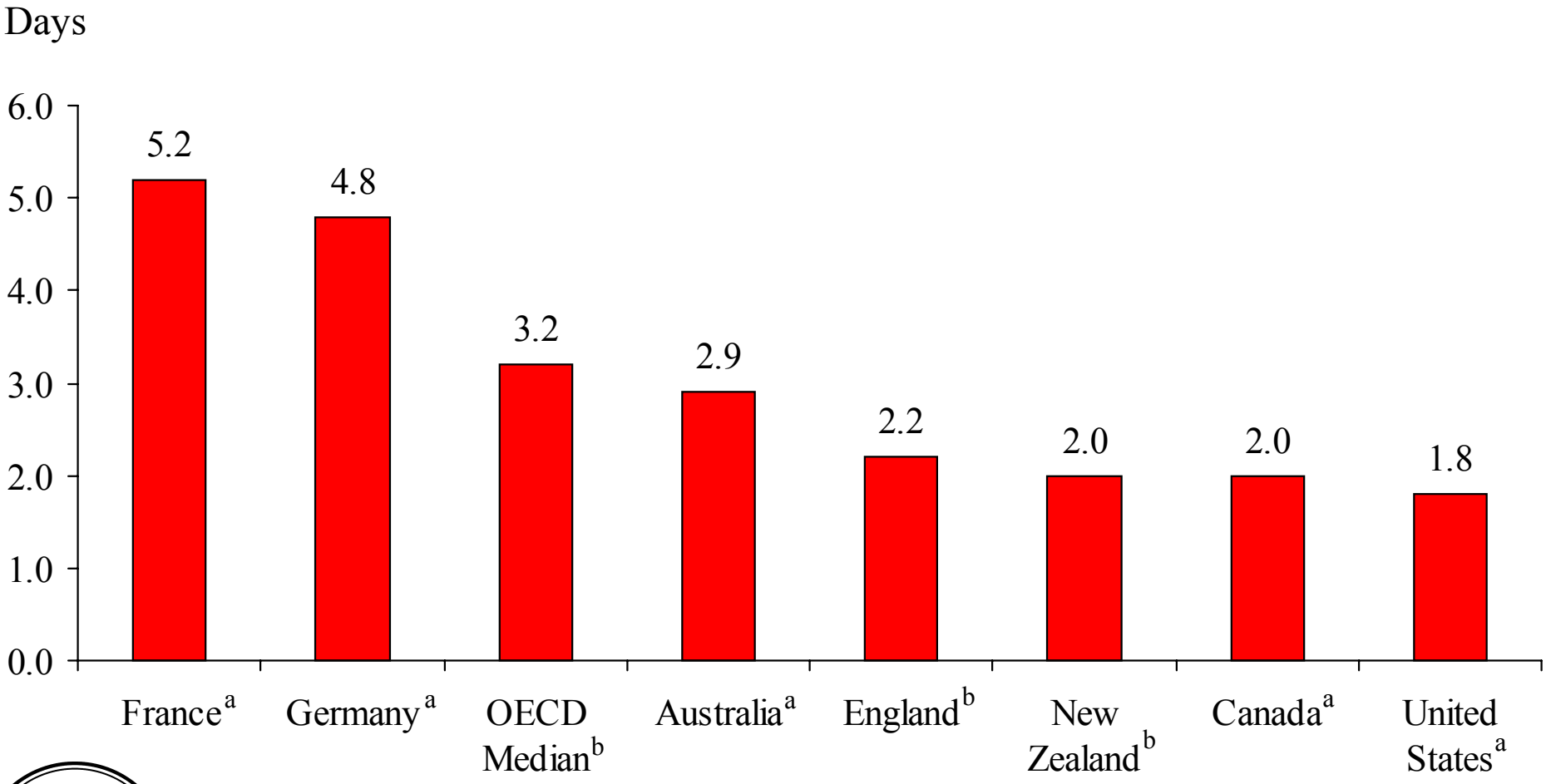
[a] 1999
[b] 2000

Sources: OECD Health Data 2002; U.K. Department of Health

Chart V-8

Average Length of Hospital Stay for Normal Delivery in 1999 or 2000[21,22]



THE COMMONWEALTH FUND

[a] 1999
[b] 2000

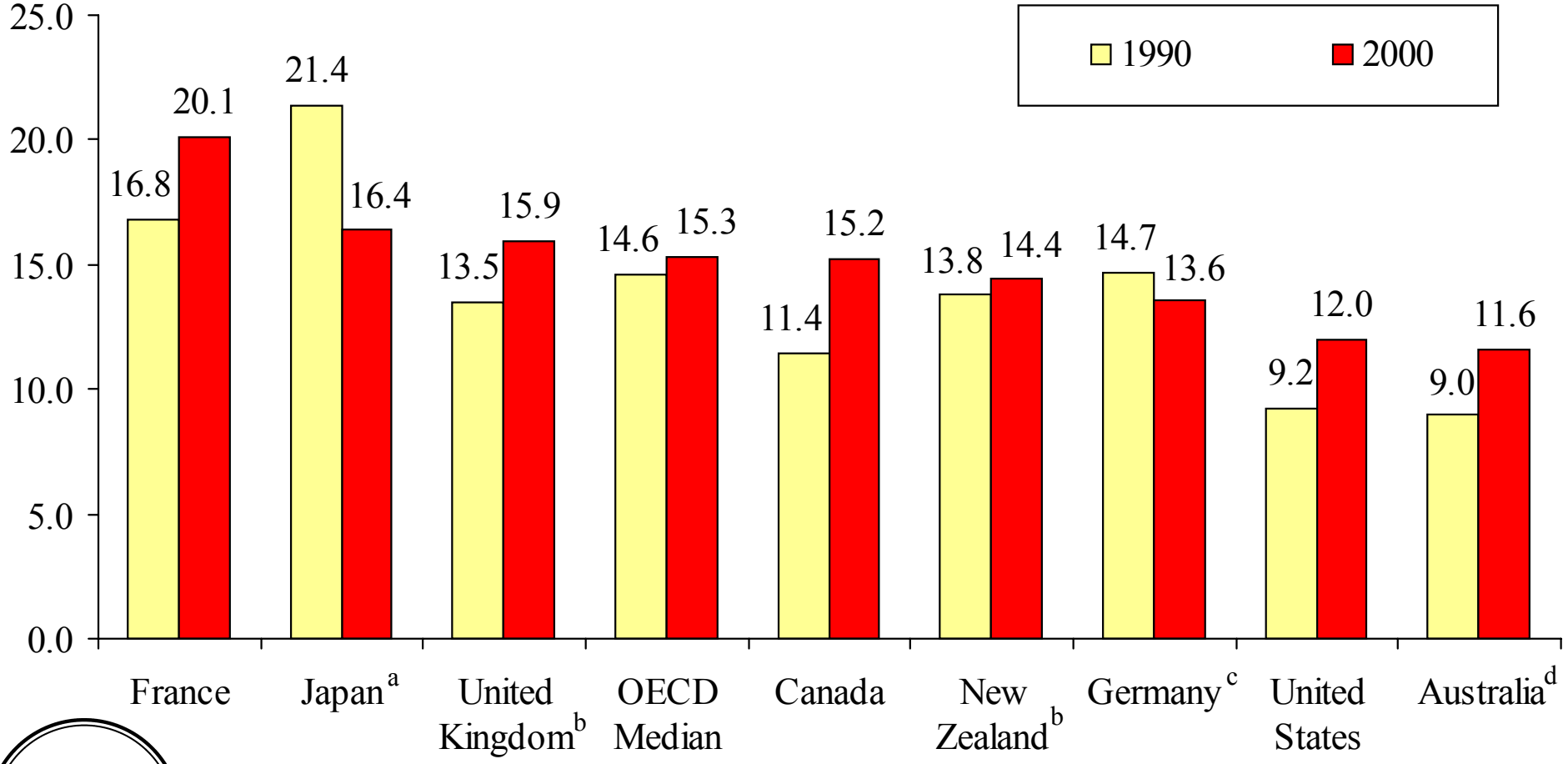
Source: OECD Health Data 2002

VI. Pharmaceutical Spending[23]

- Pharmaceuticals were the second largest component of health care spending in three of the eight countries (Canada, France, and Germany) in 2000 (see Appendix).
- Pharmaceuticals were a growing percentage of total health care spending between 1990 and 2000 in all countries except Germany and Japan.
- The percentage of health care spending on pharmaceuticals ranged from 11.6 percent in Australia to 20.1 percent in France in 2000.
- Between 1.0 percent (Australia) and 1.9 percent (France) of GDP was spent on pharmaceuticals in 2000.
- In 2000, the United States and France spent the most per capita on pharmaceuticals and New Zealand spent the least.
- Pharmaceutical spending per capita increased approximately 1 to 7 percentage points faster than inflation between 1990 and 2000 in all eight countries.
- The public share of pharmaceutical spending varied from 18 percent in the United States to 71 percent in New Zealand in 2000.

Chart VI-1

Percentage of Total Health Care Spending on Pharmaceuticals



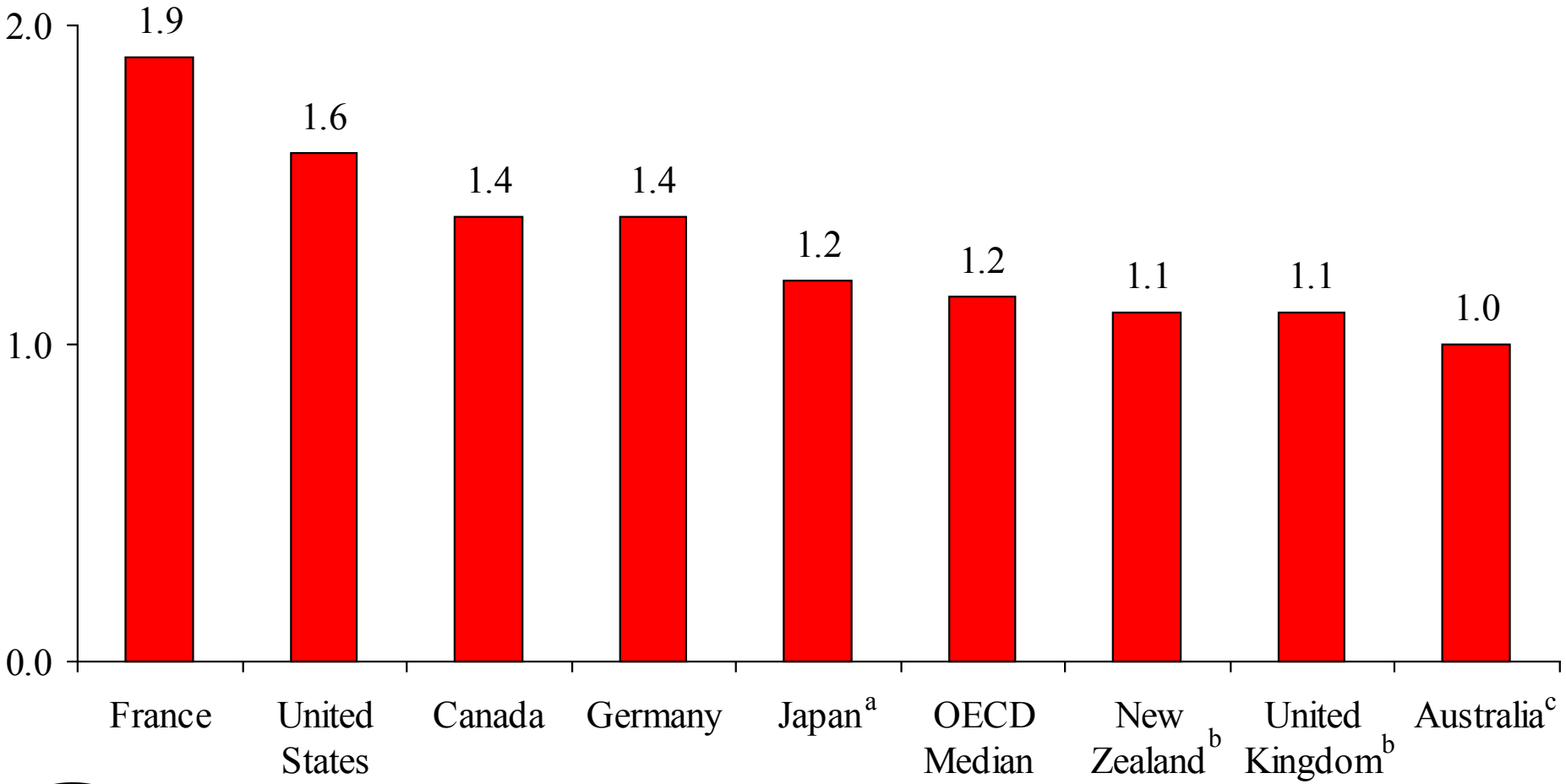
THE COMMONWEALTH FUND

[a] 1990–1999
[b] 1990–1997
[c] 1992–2000
[d] 1990–1998

Source: OECD Health Data 2002

Chart VI-2

Percentage of GDP Spent on Pharmaceuticals in 2000



THE COMMONWEALTH FUND

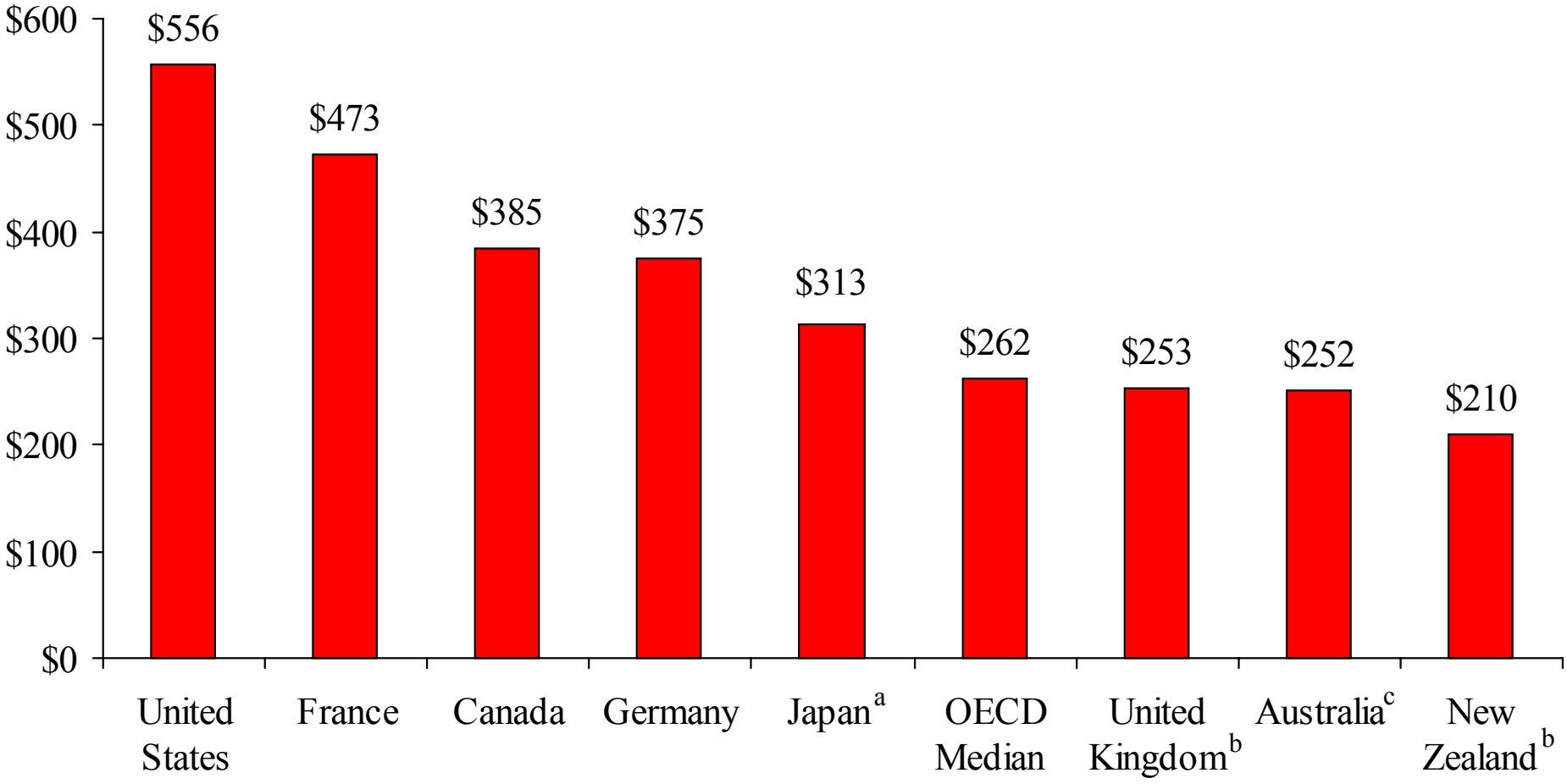
[a] 1999
[b] 1997
[c] 1998

Source: OECD Health Data 2002

Chart VI-3

Spending per Capita on Pharmaceuticals in 2000

Adjusted for Differences in the Cost of Living[13]



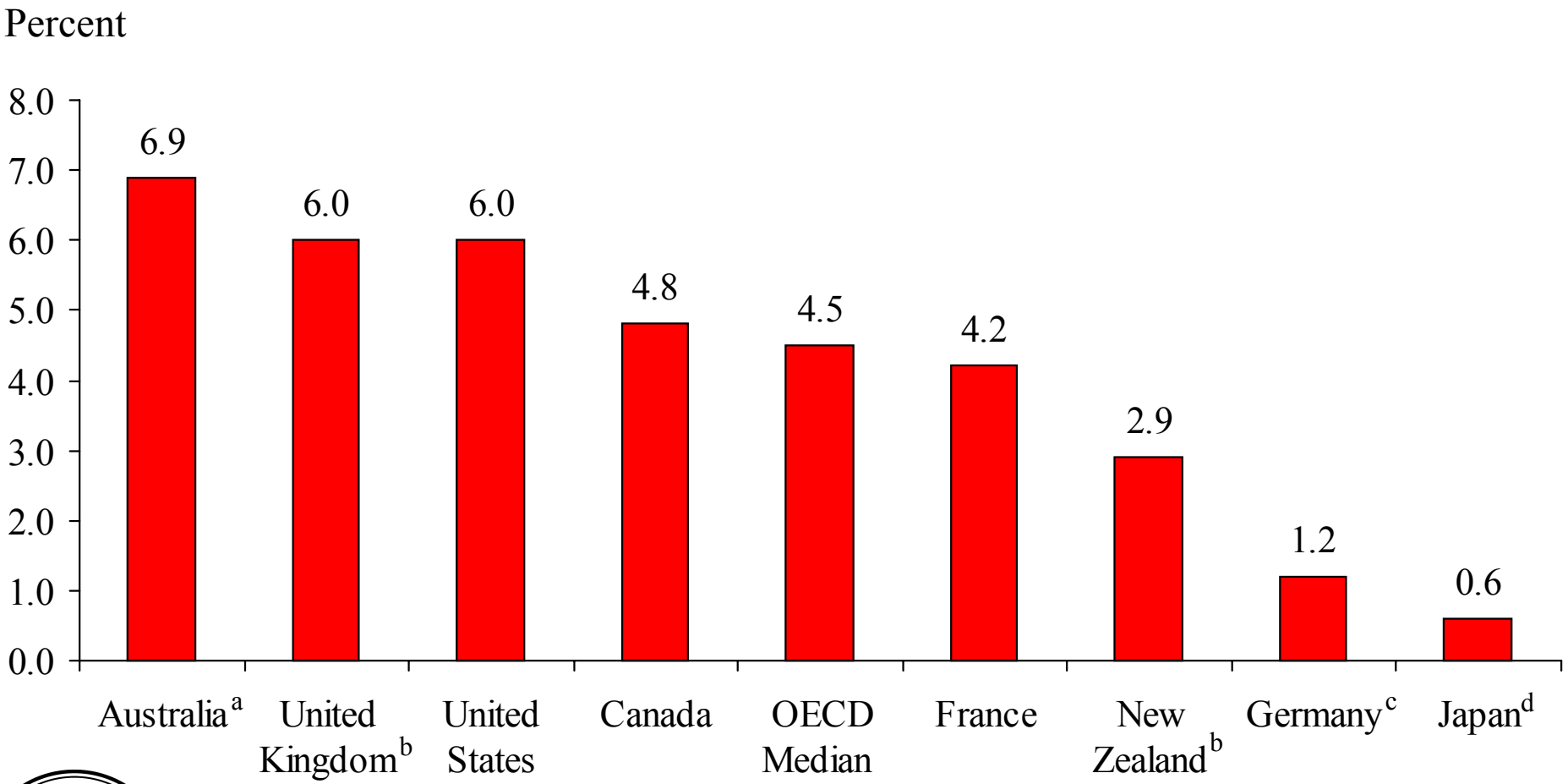
THE COMMONWEALTH FUND

[a] 1999
[b] 1997
[c] 1998

Source: OECD Health Data 2002

Chart VI-4

Average Annual Growth Rate of Real Spending per Capita on Pharmaceuticals Between 1990 and 2000



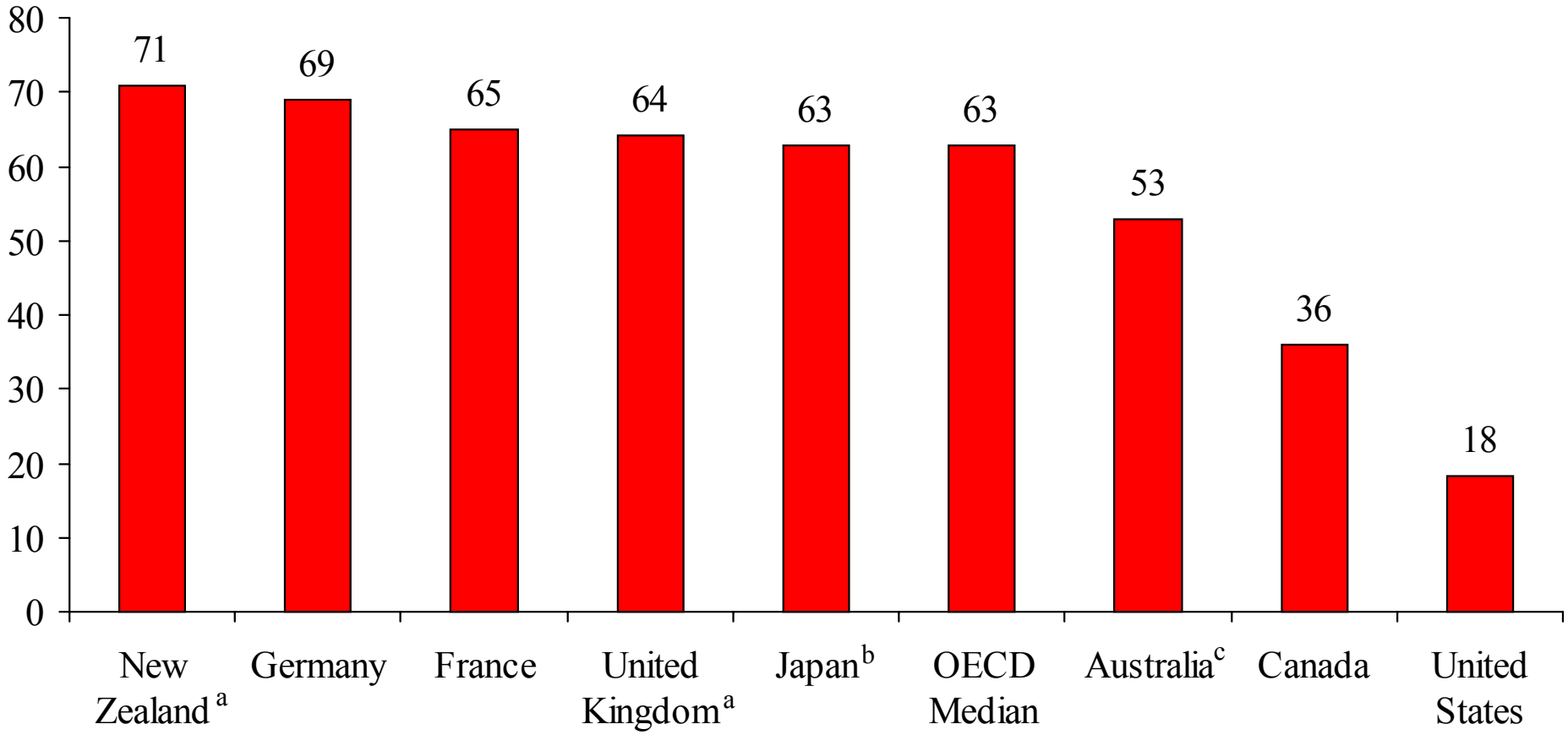
THE COMMONWEALTH FUND

[a] 1990–1998
[b] 1990–1997
[c] 1992–2000
[d] 1990–1999

Source: OECD Health Data 2002

Chart VI-5

Public Financing of Pharmaceuticals as a Percentage of Total Pharmaceutical Spending in 2000



THE COMMONWEALTH FUND

[a] 1997
[b] 1999
[c] 1998

Source: OECD Health Data 2002

VII. Spending on Physician Services[24] and Health Care Workforce

- Physician services were the second largest component of health care spending after hospital services in three of the eight countries (Australia, Japan, and the United States) in 2000 (see Appendix).
- The percentage of health care spending on physician services ranged from 10 percent in Germany to 27 percent in Japan in 2000.
- Between 1.0 percent (Germany) and 2.9 percent (United States) of GDP was spent on physician services in 2000.
- Per capita spending on physician services in 2000 ranged from $271 in Germany to $1,041 in the United States.

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Practicing Physicians[25]

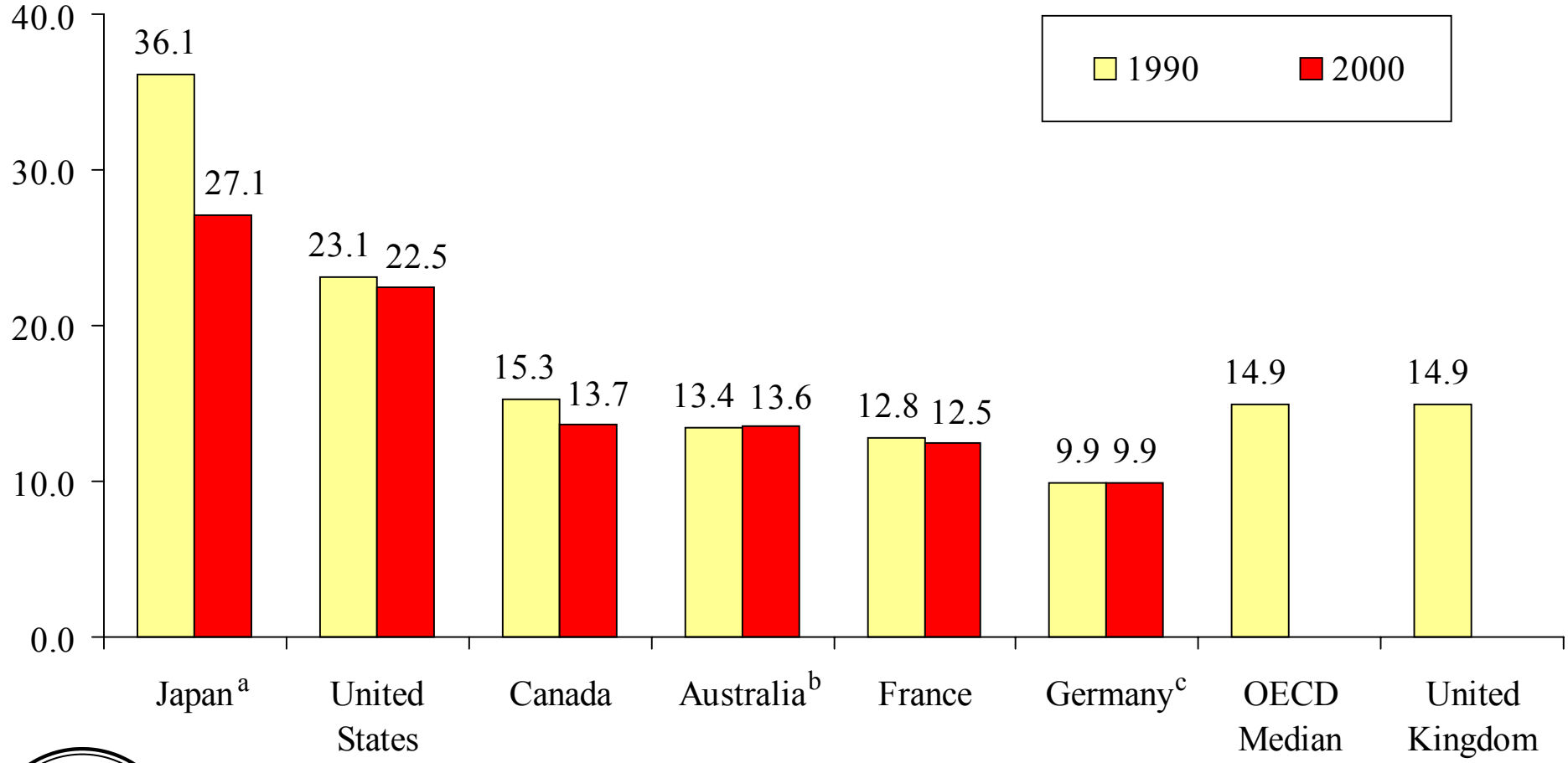
- In all countries except Canada, the physician-to-population ratio increased between 1990 and 2000.
- In the United Kingdom, there was one practicing physician per 556 people, and in Germany, there was one practicing physician per 278 people in 2000.
- All countries had approximately the same number of physician visits per capita except Japan, which had more than twice as many visits.

Practicing Nurses[26]

- In all countries except Australia and Canada, the nurse-to-population ratio increased between 1990 and 2000.
- The number of nurses varied considerably across the countries. New Zealand and Germany had a substantially higher number of practicing nurses per capita than France in 2000.
- The number of nurses per acute care hospital bed remained steady or increased between 1990 and 1999.
- Nurse staffing ratios for acute care in hospitals varied considerably across the eight countries, suggesting different roles for nurses in each country.

Chart VII-1

Percentage of Total Health Care Spending on Physician Services



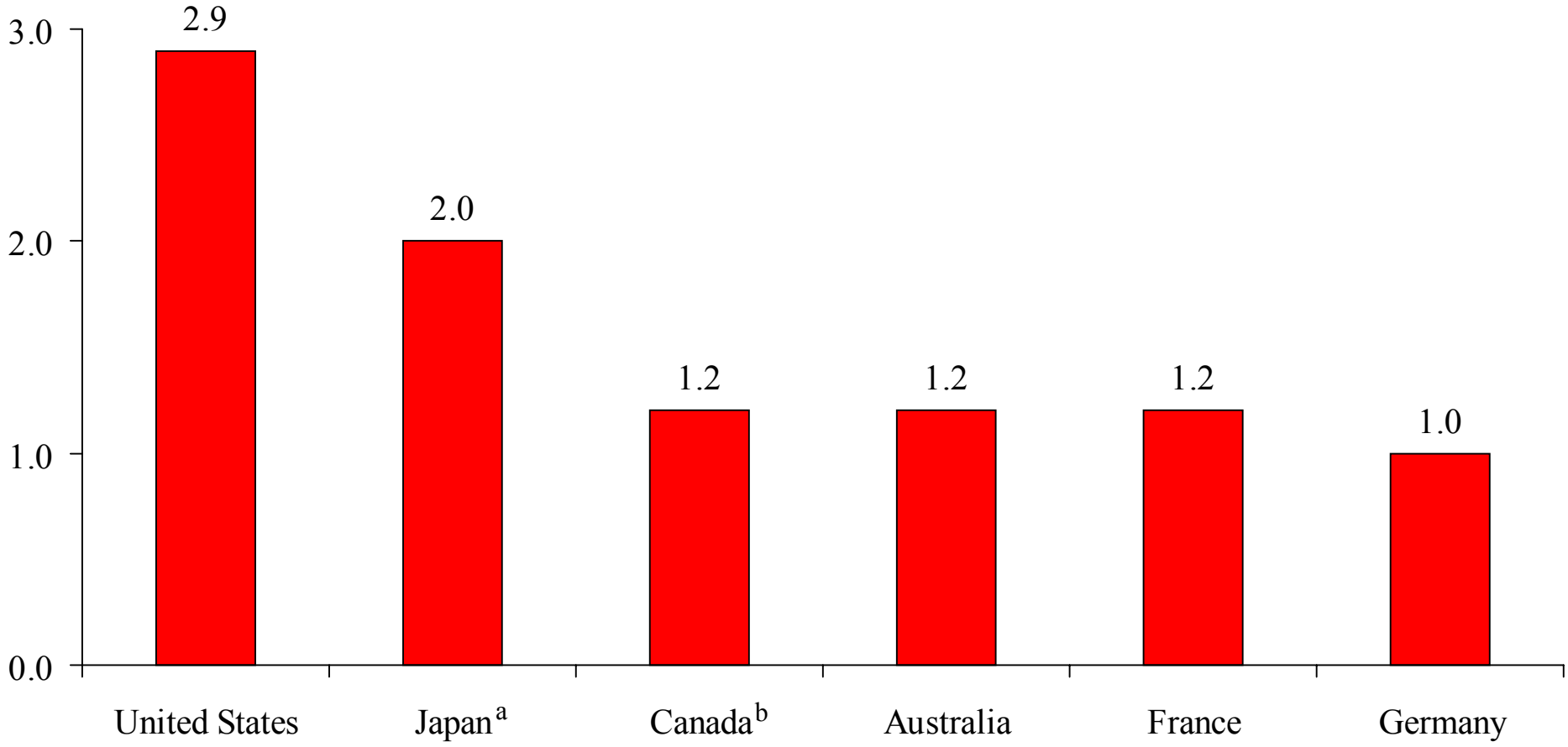
THE COMMONWEALTH FUND

[a] 1990–1999
[b] 1990–1998
[c] 1992–2000

Source: OECD Health Data 2002

Chart VII-2

Percentage of GDP Spent on Physician Services in 2000



THE COMMONWEALTH FUND

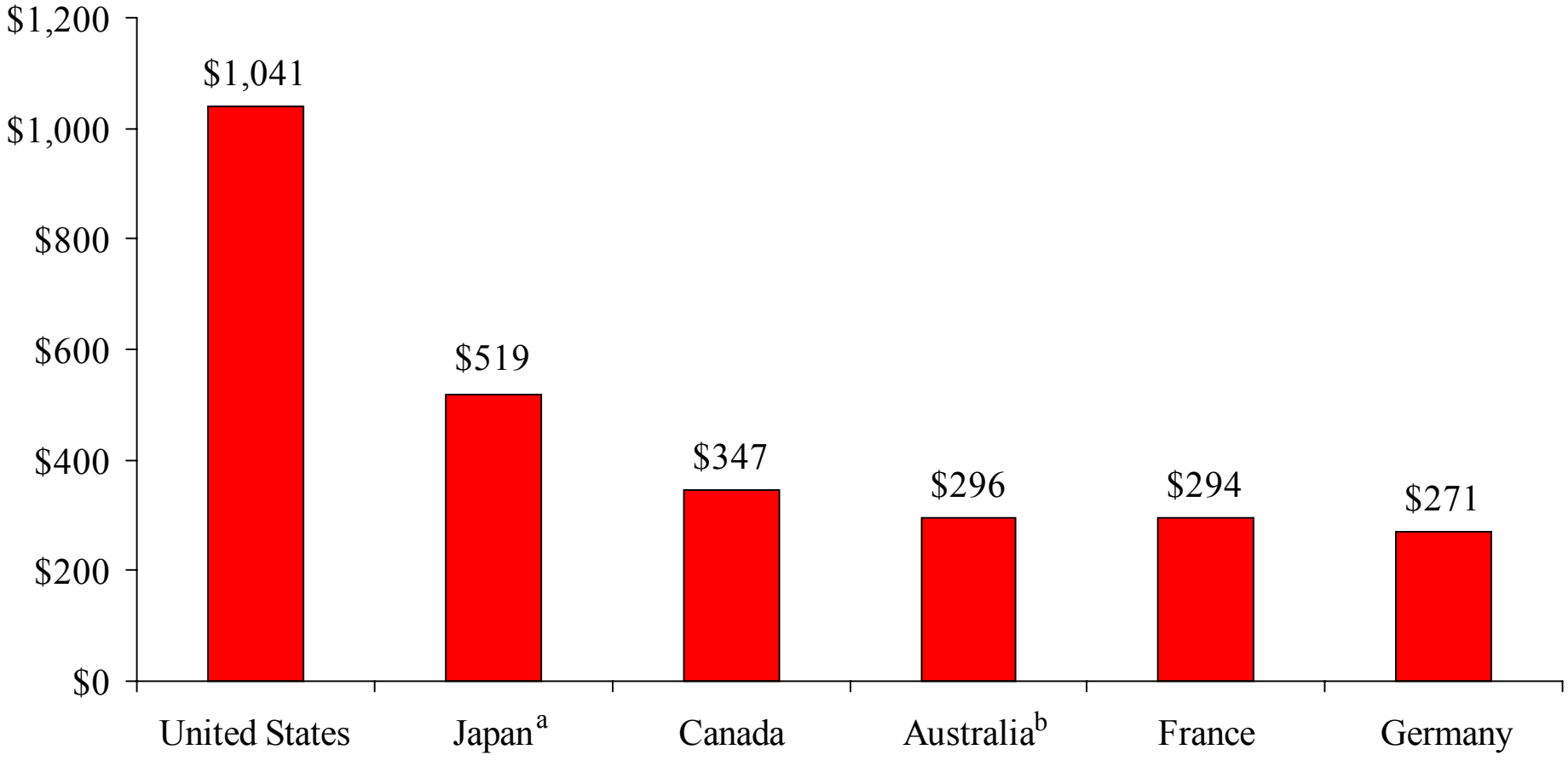
[a] 1999
[b] 1998

Source: OECD Health Data 2002

Chart VII-3

Per Capita Spending on Physician Services in 2000

Adjusted for Differences in the Cost of Living[13]



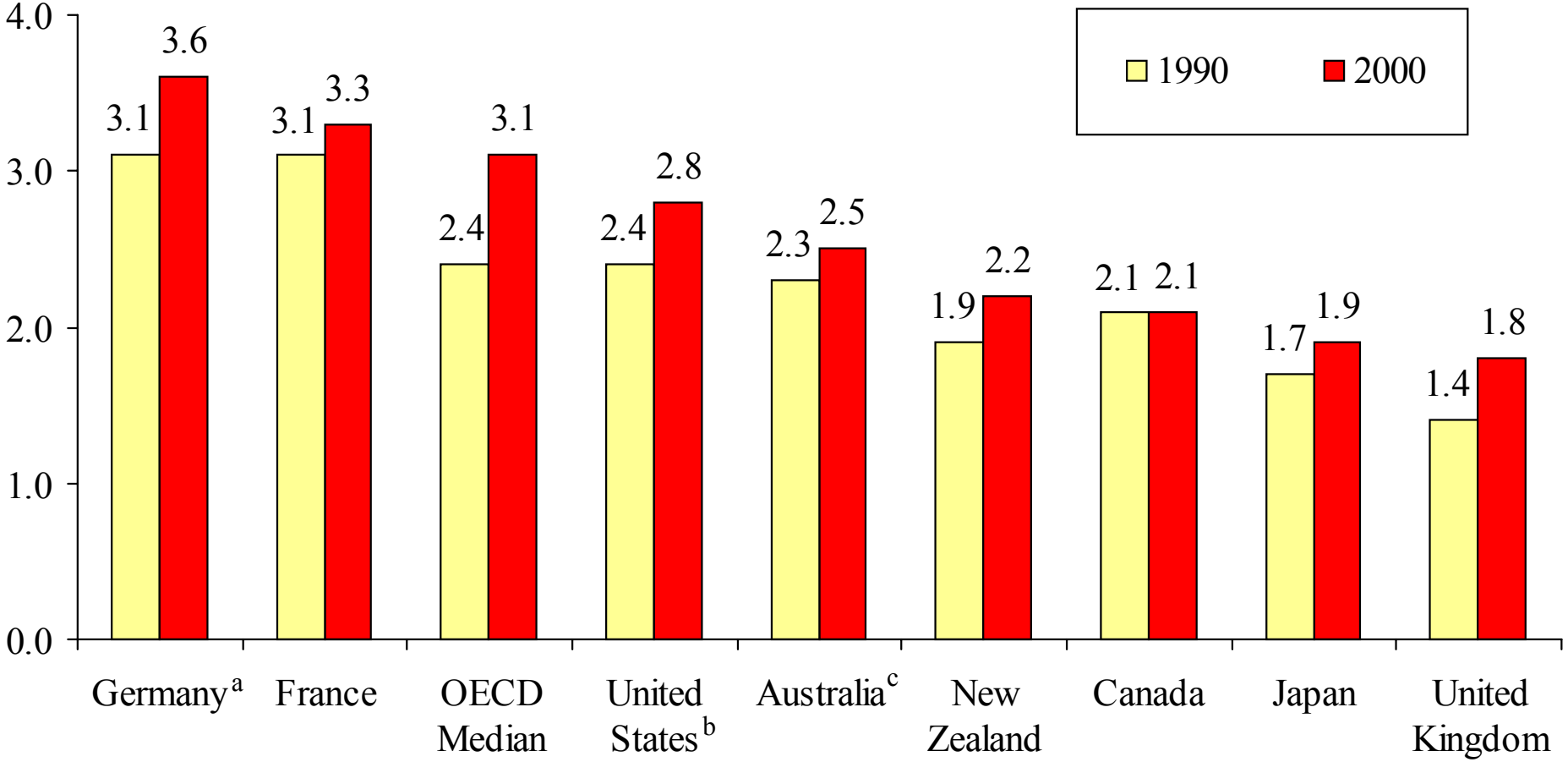
THE COMMONWEALTH FUND

[a] 1999
[b] 1998

Source: OECD Health Data 2002

Chart VII-4

Number of Practicing Physicians per 1,000 Population



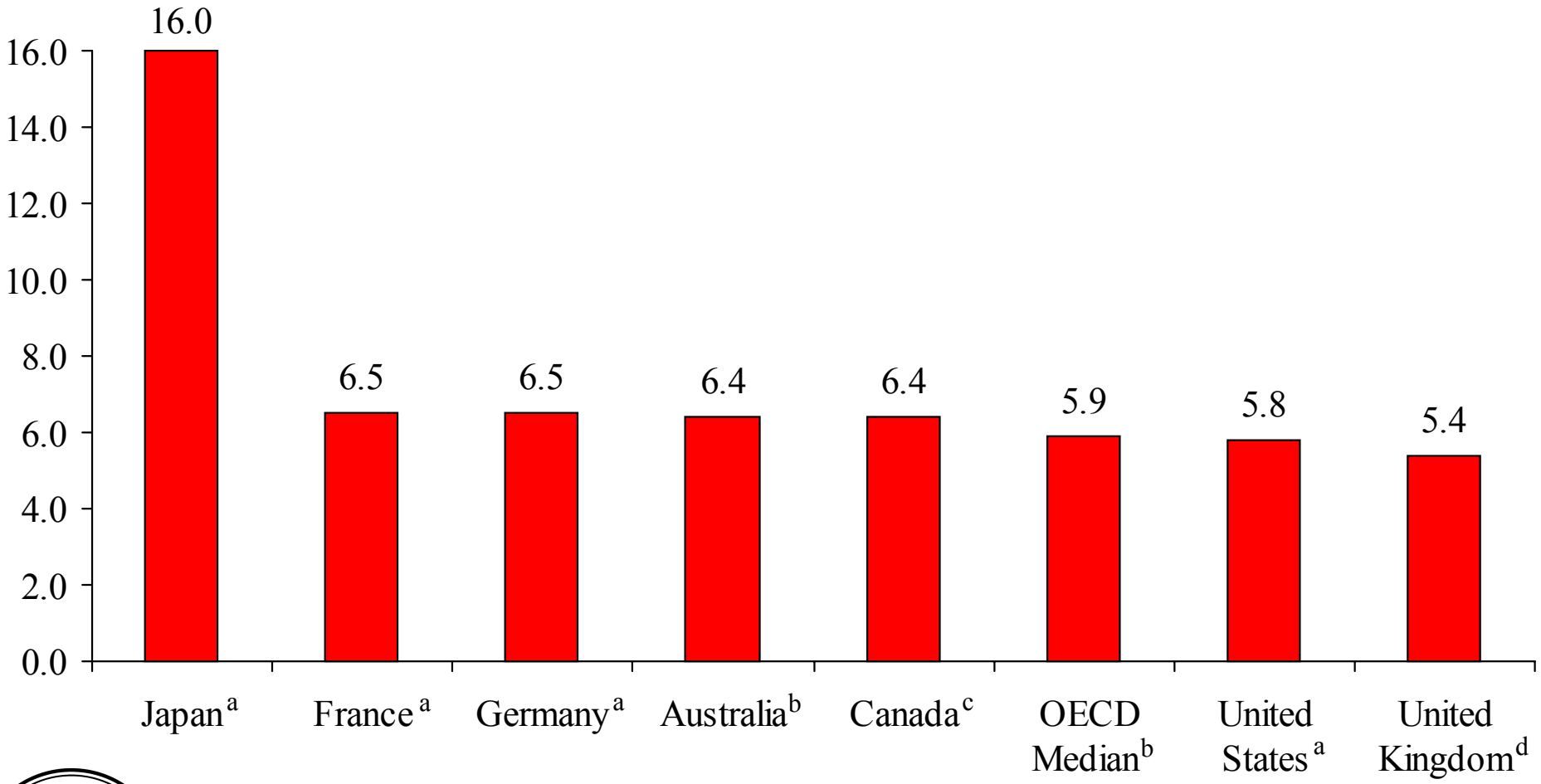
THE COMMONWEALTH FUND

[a] 1992–2000
[b] 1990–1998
[c] 1991–1998

Source: OECD Health Data 2002

Chart VII-5

Annual Number of Physician Visits per Capita[27]



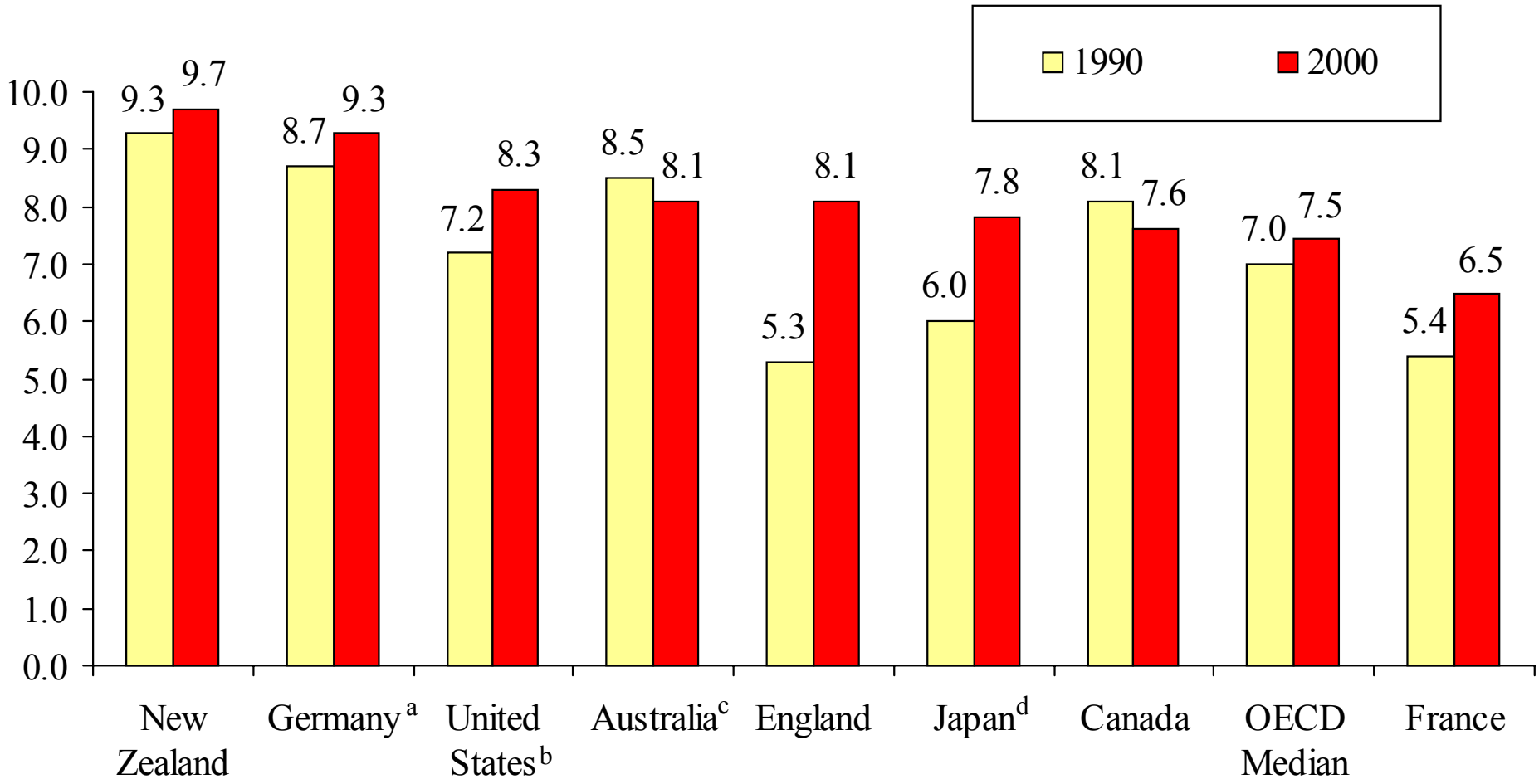
THE COMMONWEALTH FUND

[a] 1996
[b] 2000
[c] 1999
[d] 1998

Source: OECD Health Data 2002

Chart VII-6

Number of Practicing Nurses per 1,000 Population[26]



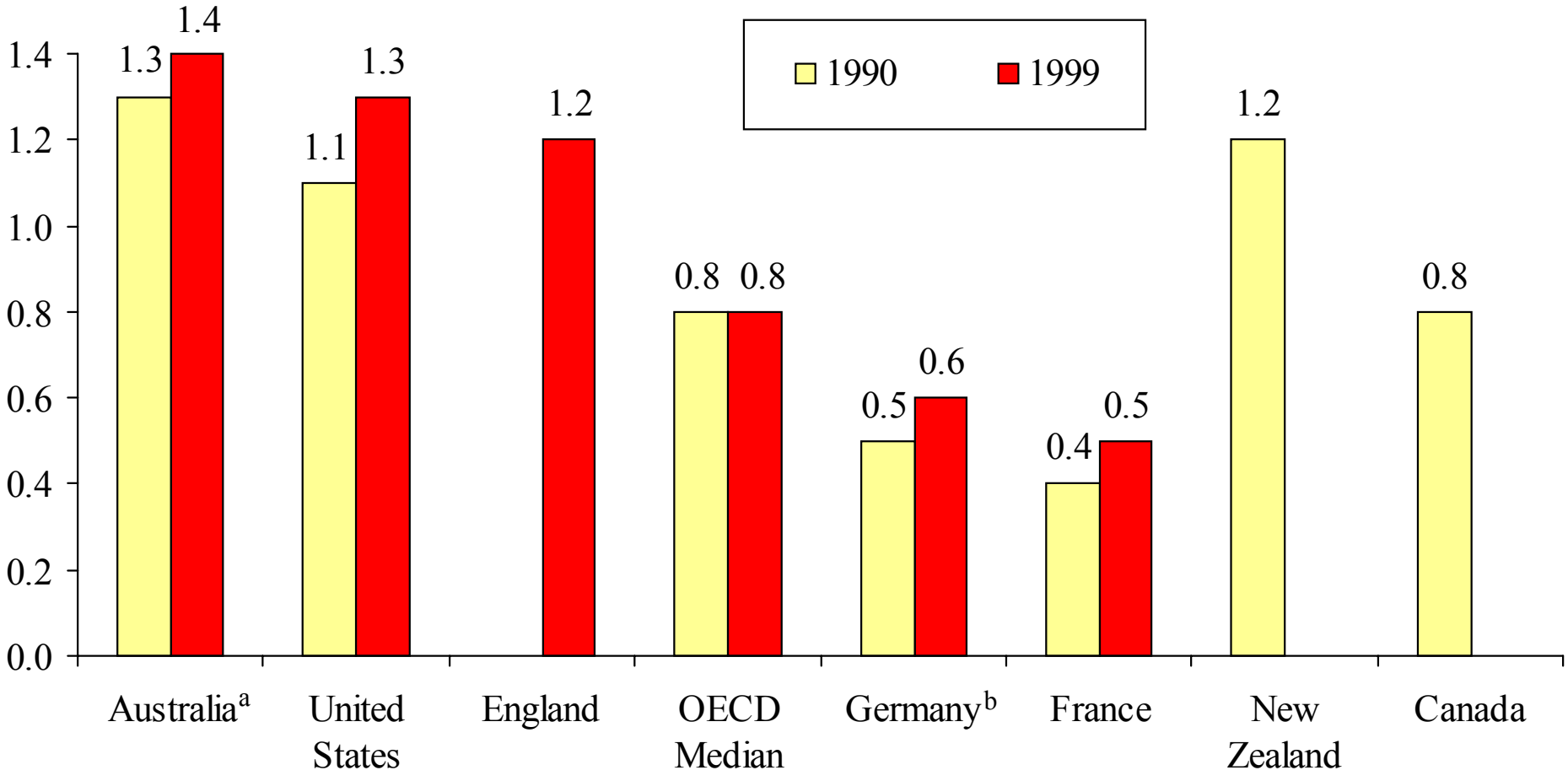
THE COMMONWEALTH FUND

[a] 1993–2000
[b] 1990–1999
[c] 1991–1997
[d] 1990–1998

Sources: OECD Health Data 2002; U.K. Department of Health

Chart VII-7

Number of Nurses per Acute Care Hospital Bed[28,29]



THE COMMONWEALTH FUND

[a] 1991–1999
[b] 1992–1999

Sources: OECD Health Data 2002; U.K. Department of Health

VIII. Medical Procedures Involving Sophisticated Technology

Access to Technology

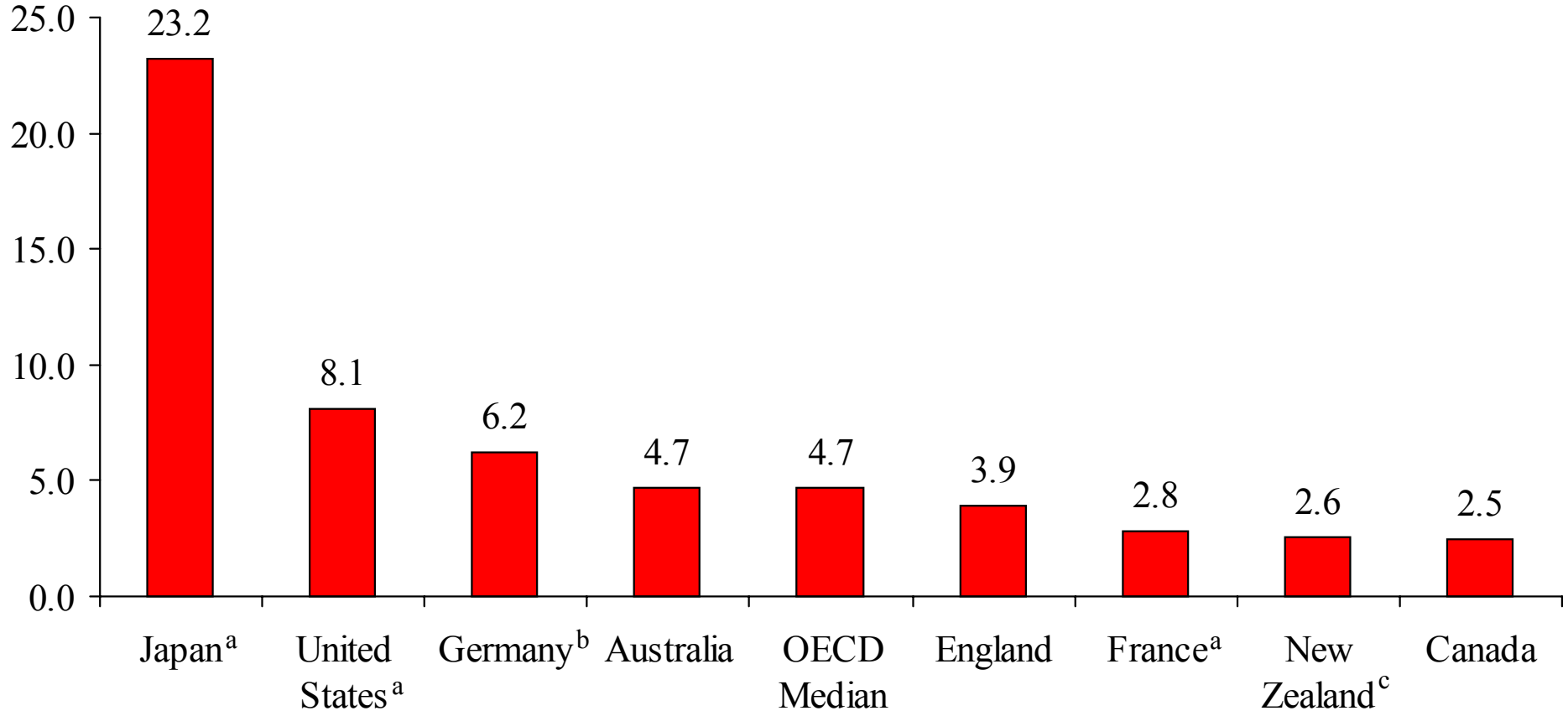
- Japan had nearly three times as many magnetic resonance imaging (MRI) units per capita as the United States and nearly 10 times as many as Canada, New Zealand, and France in 2000.
- Japan had four times as many computer tomography (CT) scanners per capita as Australia and over 10 times as many as Canada and the United Kingdom.

Utilization

- The number of coronary angioplasty procedures performed in the United States was more than twice that reported in Germany and over seven times that in England.
- The number of patients undergoing dialysis in Japan was nearly twice that in the United States and 6 times that in the United Kingdom in 2000. Unlike the other countries with active transplant programs, virtually all end-stage renal disease (ESRD) treatment in Japan is delivered using dialysis.

Chart VIII-1

Magnetic Resonance Imaging (MRI) Units per One Million Population in 2000[30]



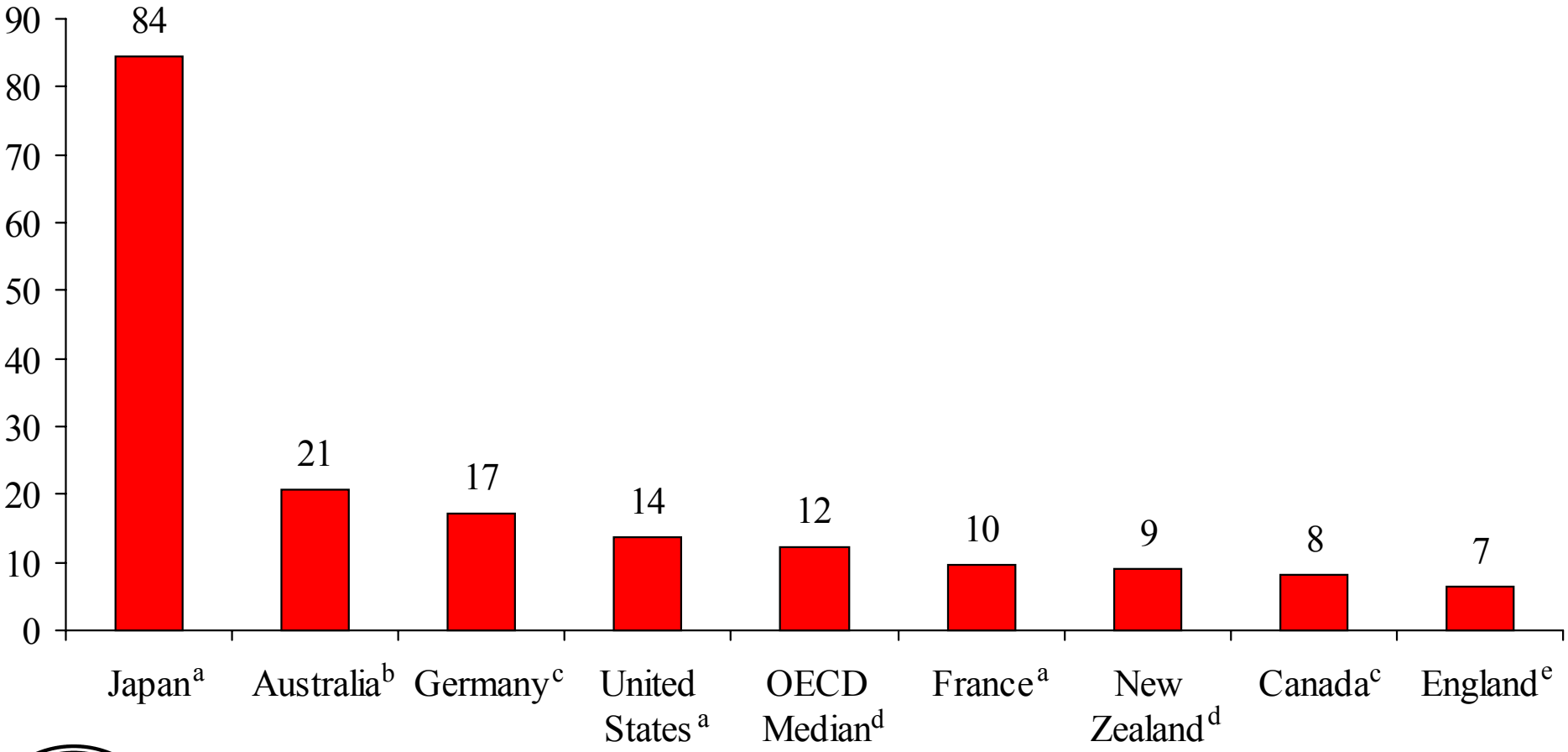
THE COMMONWEALTH FUND

[a] 1999
[b] 1997
[c] 1998

Source: OECD Health Data 2002

Chart VIII-2

Computer Tomography (CT) Scanners per One Million Population[30]



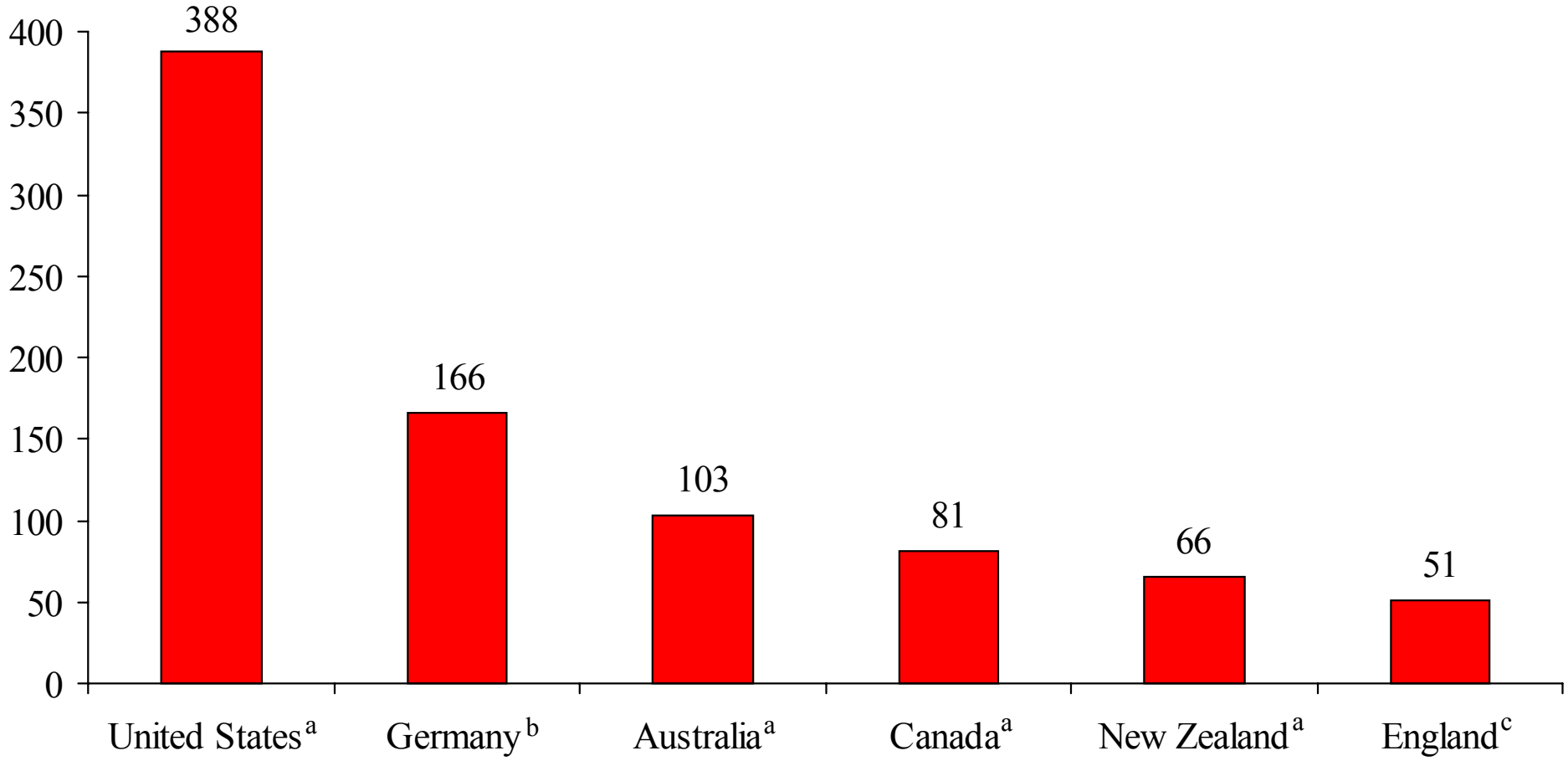
THE COMMONWEALTH FUND

[a] 1999
[b] 1995
[c] 1997
[d] 2000
[e] 2001

Sources: OECD Health Data 2002; U.K. Department of Health

Chart VIII-3

Coronary Angioplasty Procedures per 100,000 Population[31]



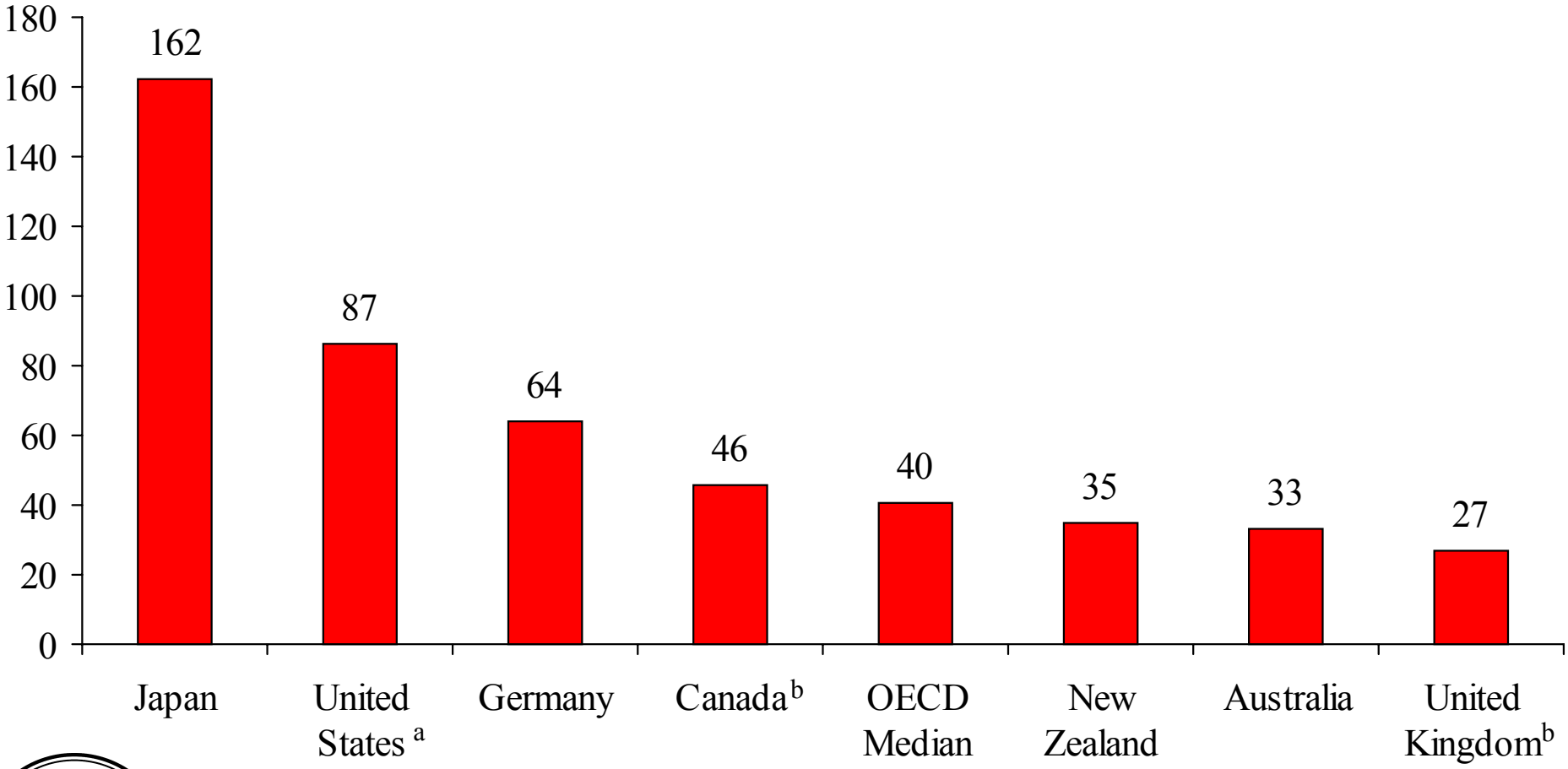
THE COMMONWEALTH FUND

[a] 1999
[b] 1997
[c] 2000

Sources: OECD Health Data 2002; U.K. Department of Health

Chart VIII-4

Number of Patients Undergoing Dialysis per 100,000 Population in 2000[32]



THE COMMONWEALTH FUND

[a] 1998
[b] 1999

Sources: OECD Health Data 2002; The Australia and New Zealand Dialysis and Transplant Registry (www.anzdata.org.au).

IX. Health Status[33]

- People were three times more likely to die of a heart attack in the United Kingdom and New Zealand compared with Japan in 1999.
- The diabetes mellitus mortality rate was the highest in the United States and nearly three times higher than in the United Kingdom and Japan in 1999.
- The breast cancer incidence rate was highest for U.S. women in 1999.
- The mortality rate for breast cancer among women was much lower in Japan than in the other countries in 1999.
- Although the United Kingdom had the lowest incidence of breast cancer after Japan in 1999, the U.K. breast cancer mortality rate was the highest.
- The incidence rate of colon cancer was twice as high in the United States as in the United Kingdom.
- The colon cancer mortality rate was higher in New Zealand than in the other countries in 1999.
- The incidence rates of lung cancer in the United States and Canada were nearly three times higher than in Japan.
- The lung cancer mortality rate was highest in the United States in 1999.

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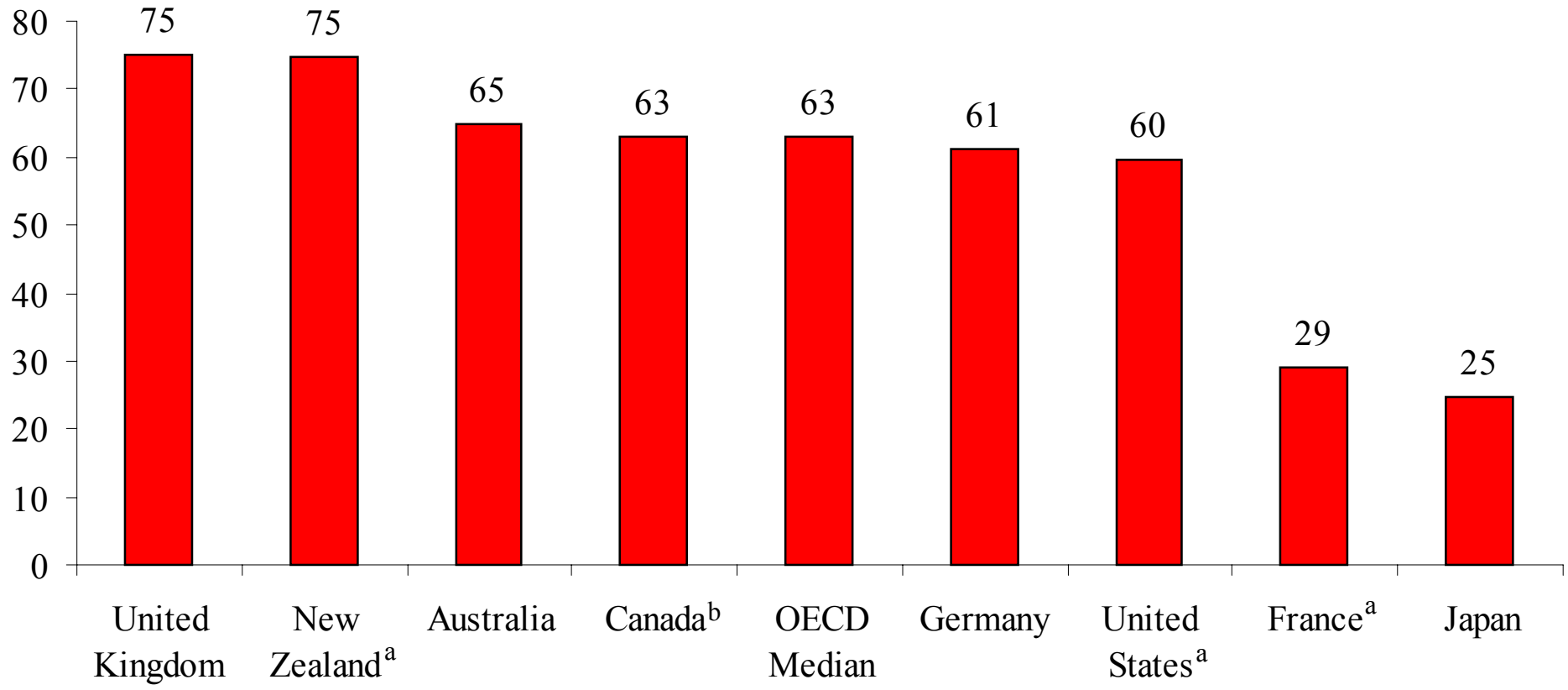
Chart IX-1

Age-Standardized Mortality Rates for Acute Myocardial Infarction per 100,000 Population in 1999



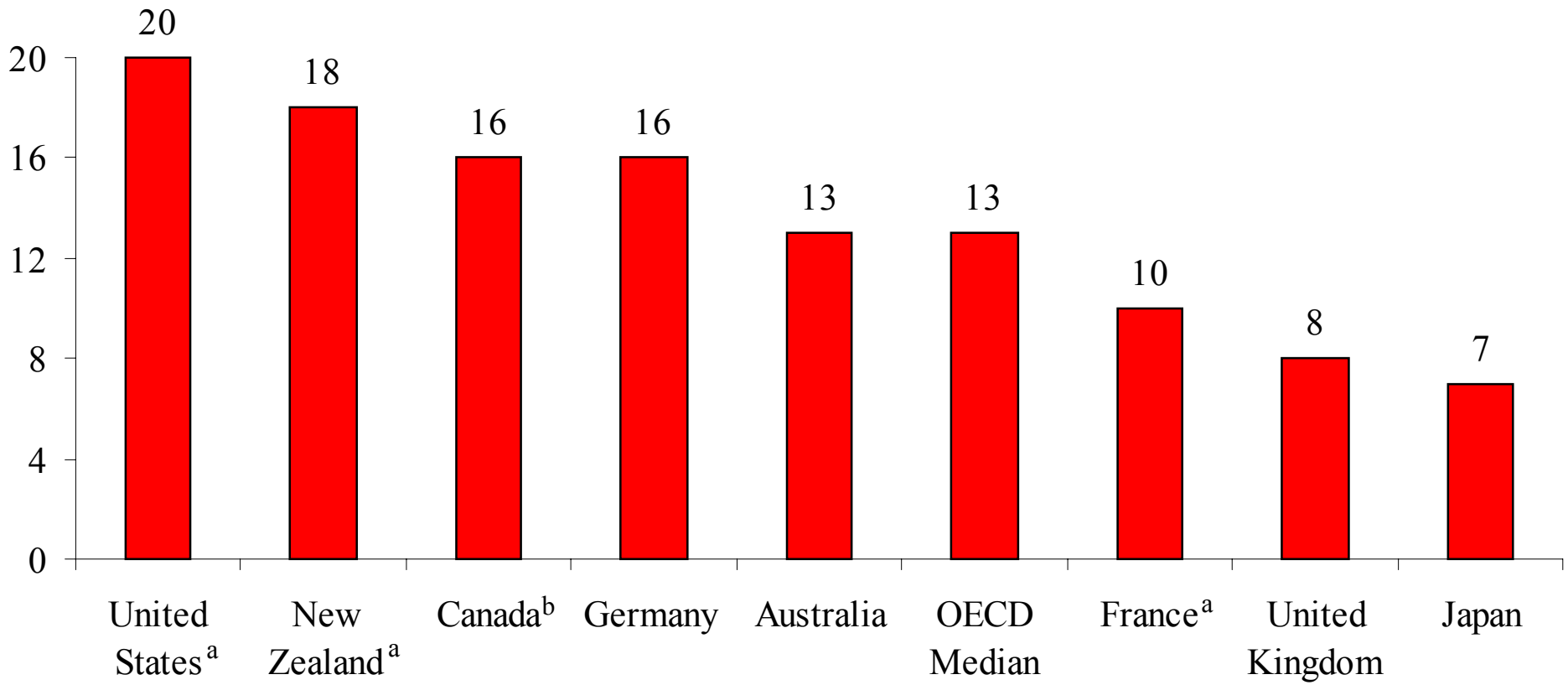
THE COMMONWEALTH FUND

[a] 1998
[b] 1997

Source: OECD Health Data 2002

Chart IX-2

Age-Standardized Mortality Rates for Diabetes Mellitus per 100,000 Population in 1999[34]



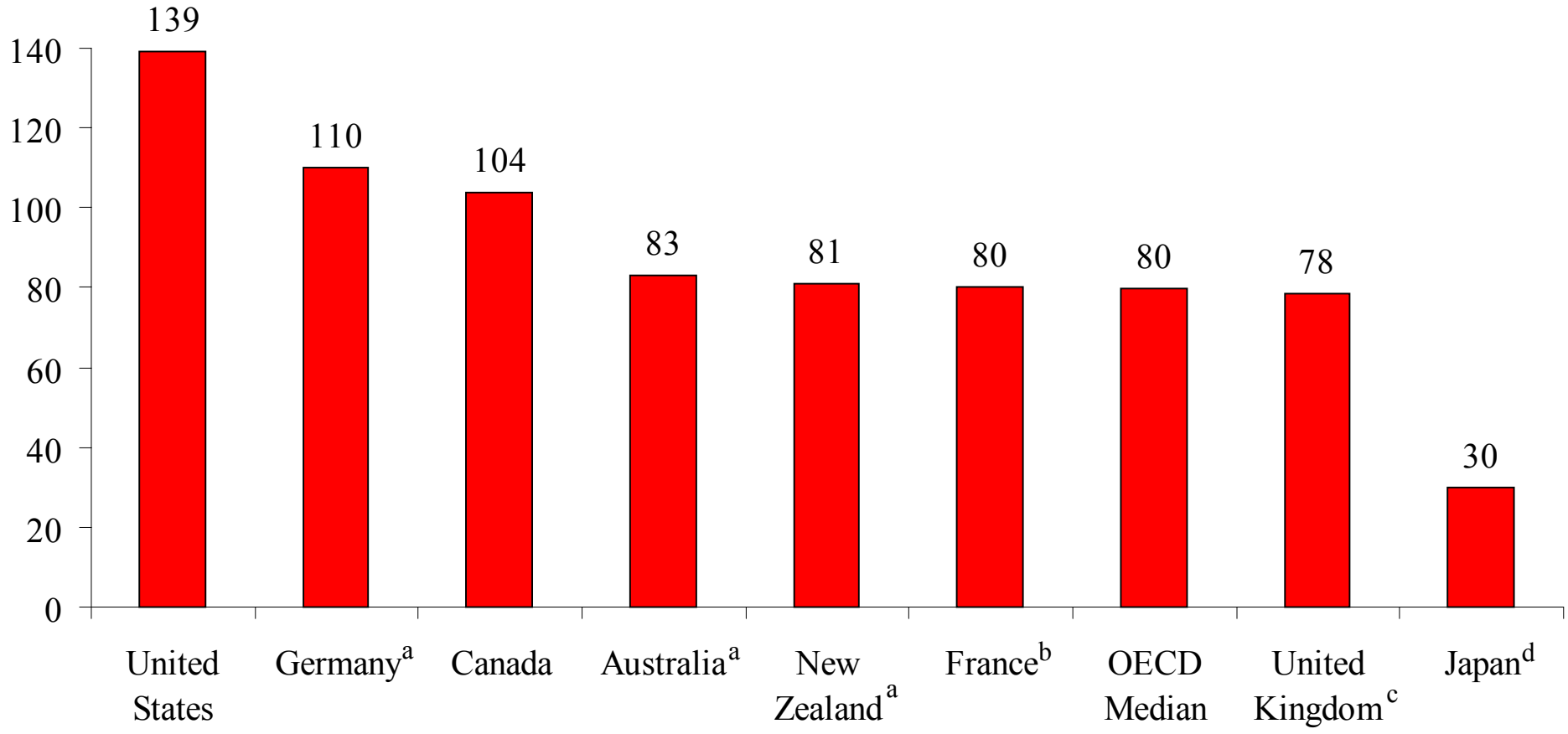
THE COMMONWEALTH FUND

[a] 1998
[b] 1997

Source: OECD Health Data 2002

Chart IX-3

Incidence Rates for Breast Cancer per 100,000 Females in 1999



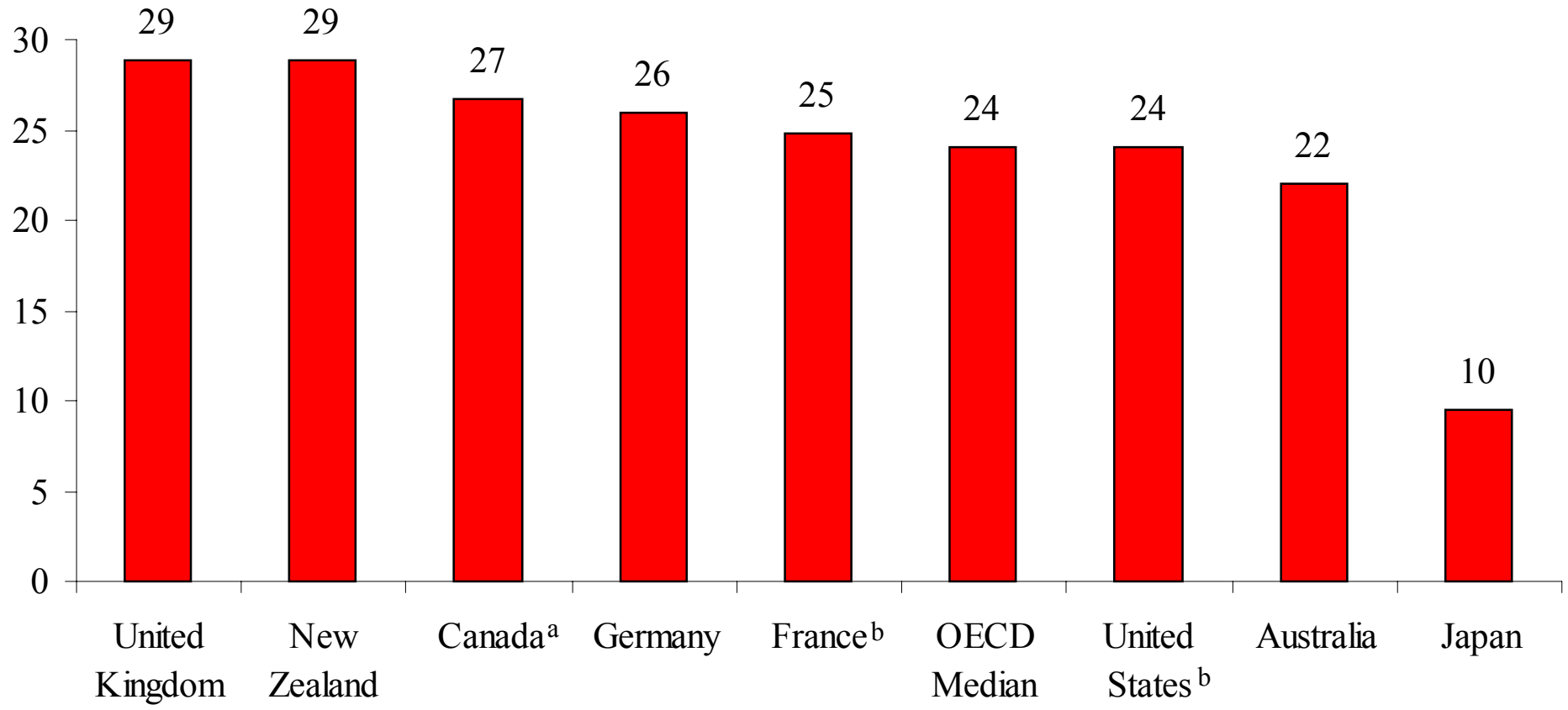
THE COMMONWEALTH FUND

[a] 1998
[b] 1995
[c] 1997
[d] 1996

Source: OECD Health Data 2002

Chart IX-4

Age-Standardized Mortality Rates for Breast Cancer per 100,000 Females in 1999



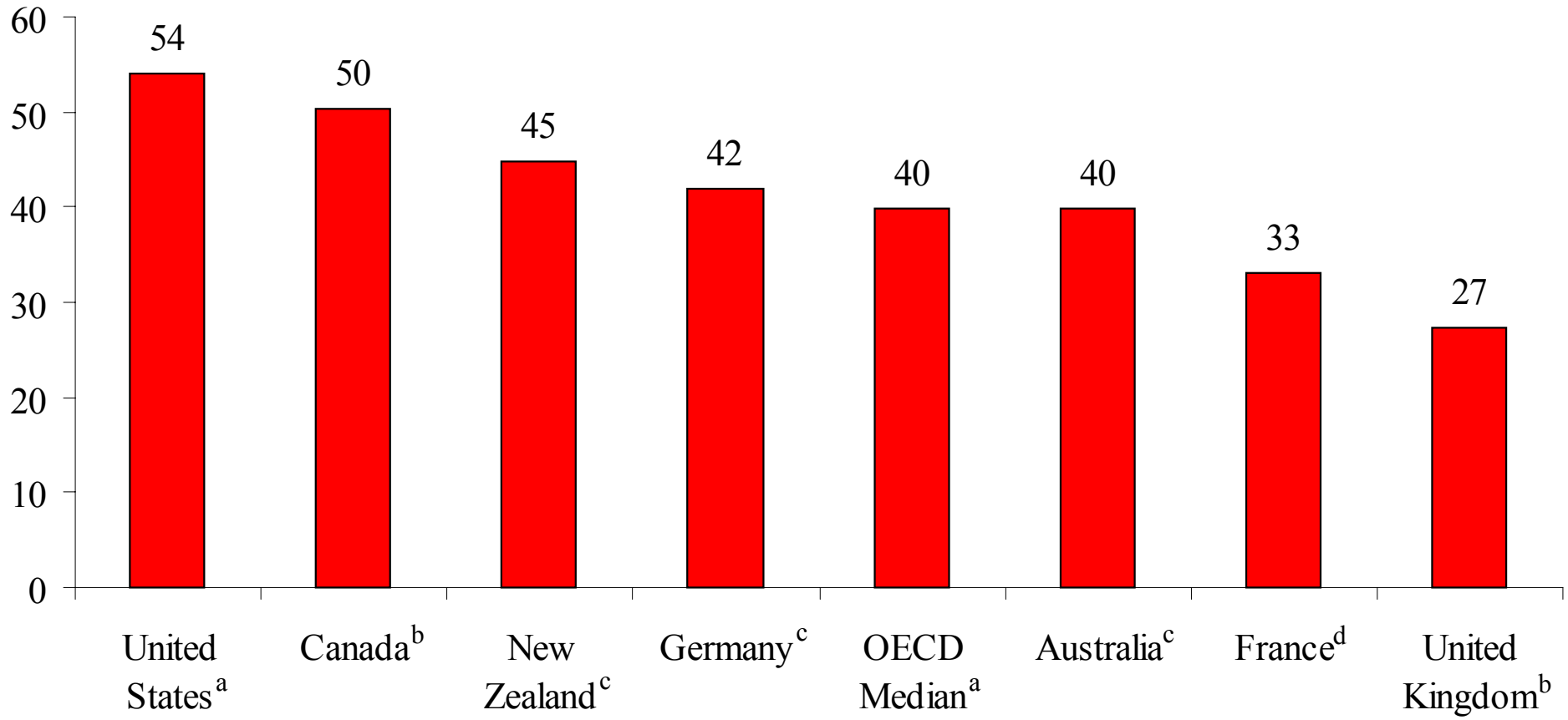
THE COMMONWEALTH FUND

[a] 1997
[b] 1998

Source: OECD Health Data 2002

Chart IX-5

Incidence Rates for Colon Cancer per 100,000 Population



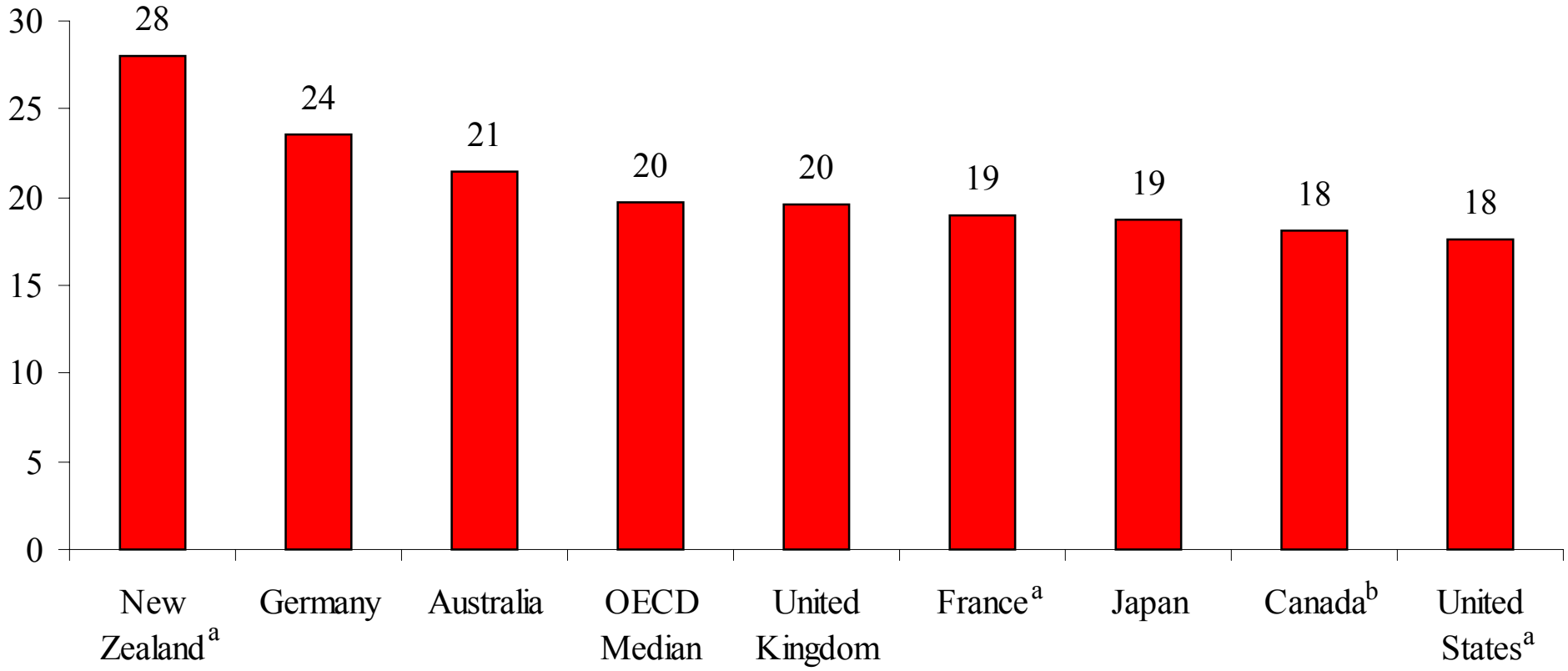
THE COMMONWEALTH FUND

[a] 1999
[b] 1997
[c] 1998
[d] 1995

Source: OECD Health Data 2002

Chart IX-6

Age-Standardized Mortality Rates for Colon Cancer per 100,000 Population in 1999



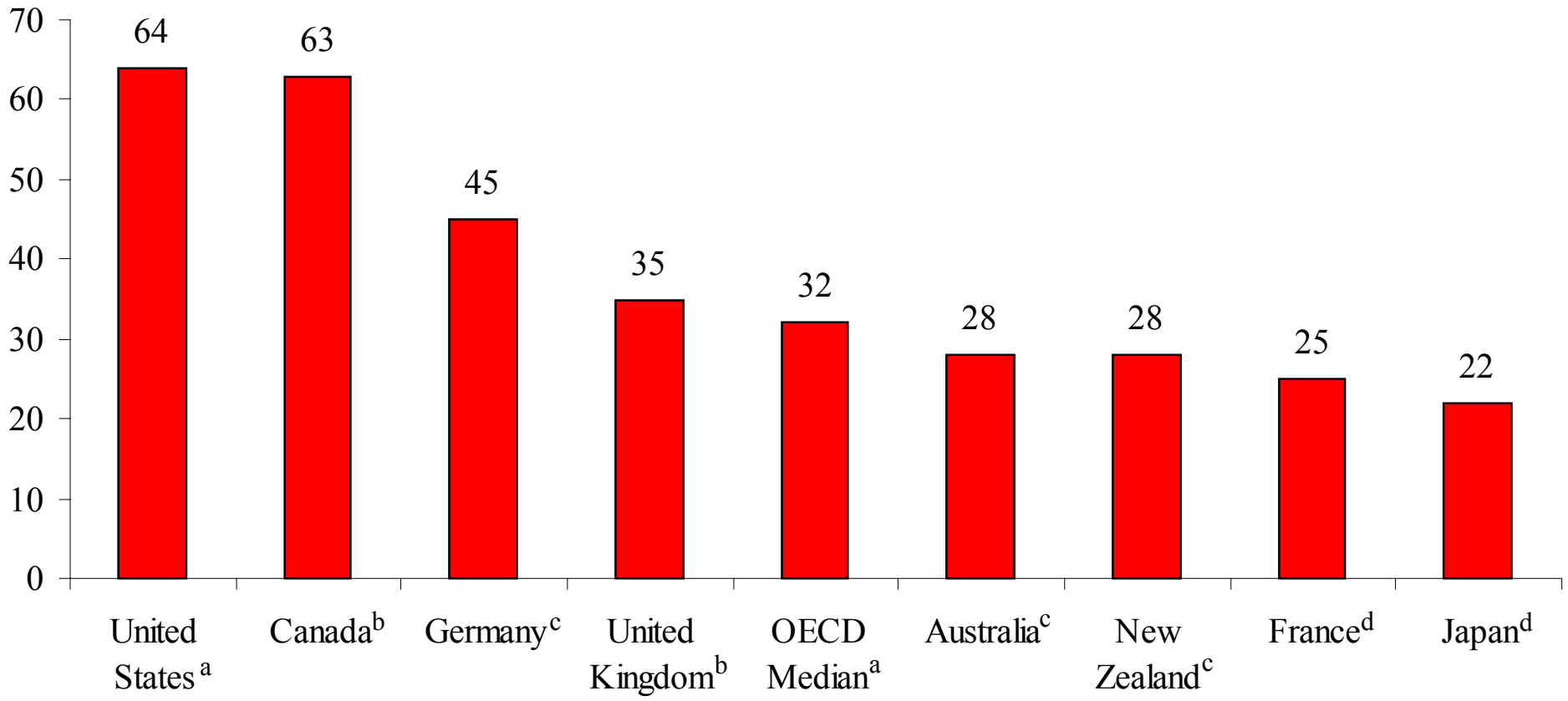
THE COMMONWEALTH FUND

[a] 1998
[b] 1997

Source: OECD Health Data 2002

Chart IX-7

Incidence Rates for Lung Cancer per 100,000 Population



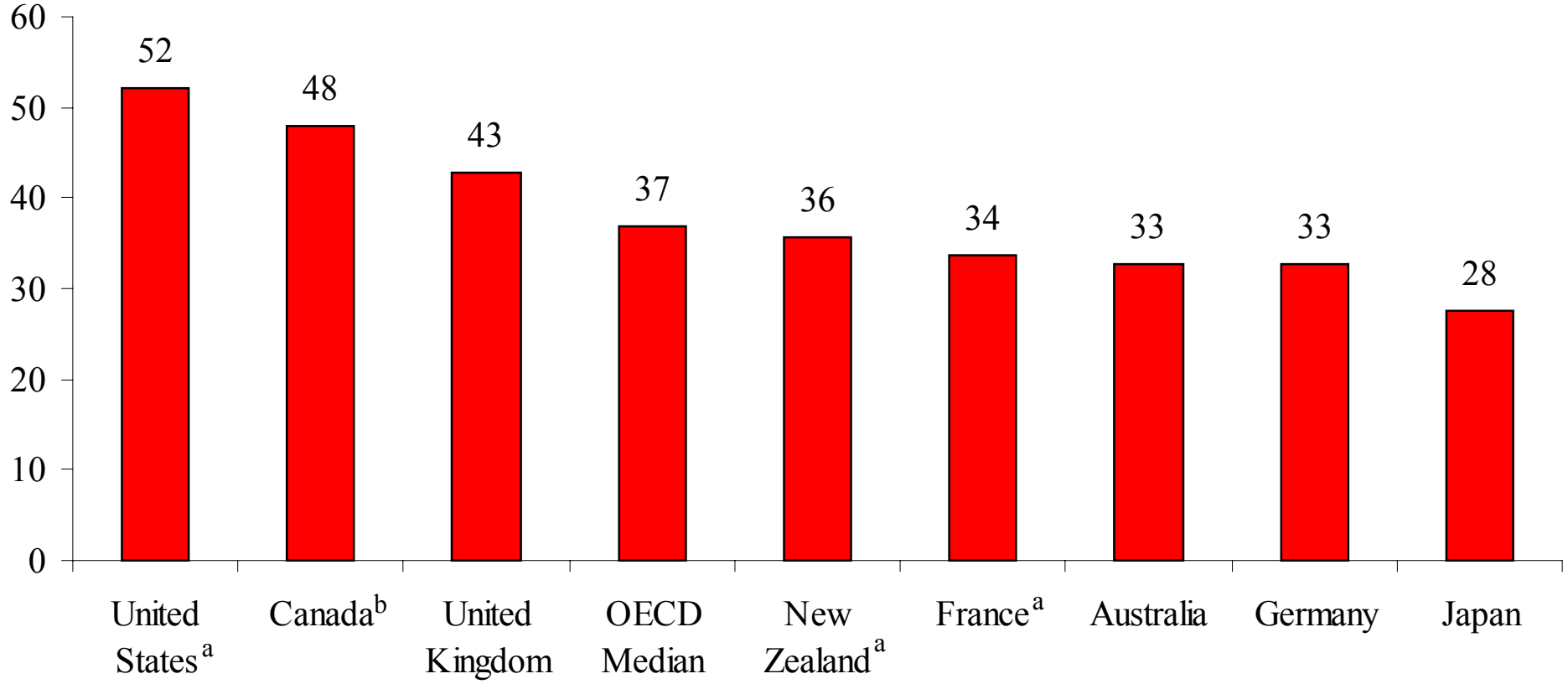
THE COMMONWEALTH FUND

[a] 1999
[b] 1997
[c] 1998
[d] 1995

Source: OECD Health Data 2002

Chart IX-8

Age-Standardized Mortality Rates for Lung Cancer per 100,000 Population in 1999



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[a] 1998
[b] 1997

Source: OECD Health Data 2002

X. Nonmedical Determinants of Health

Tobacco Consumption

- The prevalence of smoking decreased between 1990 and 2000 in all the countries except Germany.
- The percentage of people who reported being daily smokers was the highest in Japan and the lowest in the United States in 2000.
- The United States had relatively low smoking rates in 1990 and 2000 but the highest lung cancer mortality rate in 1998.

Obesity

- Over 20 percent of the population in the United States and Australia was obese (body mass index greater than 30) in 1999.

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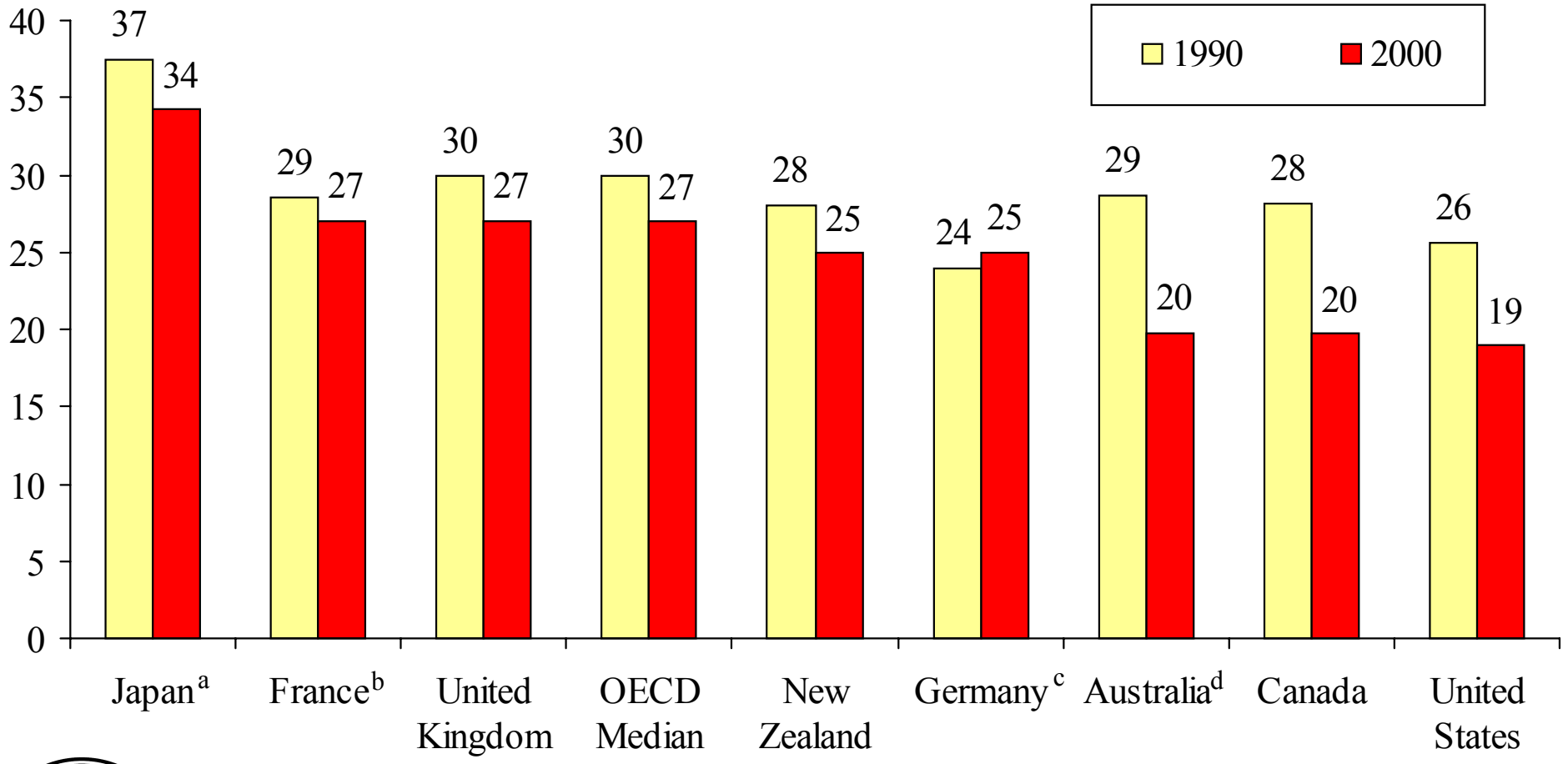
Chart X-1

Percentage of Adults Who Reported Being Daily Smokers[35]



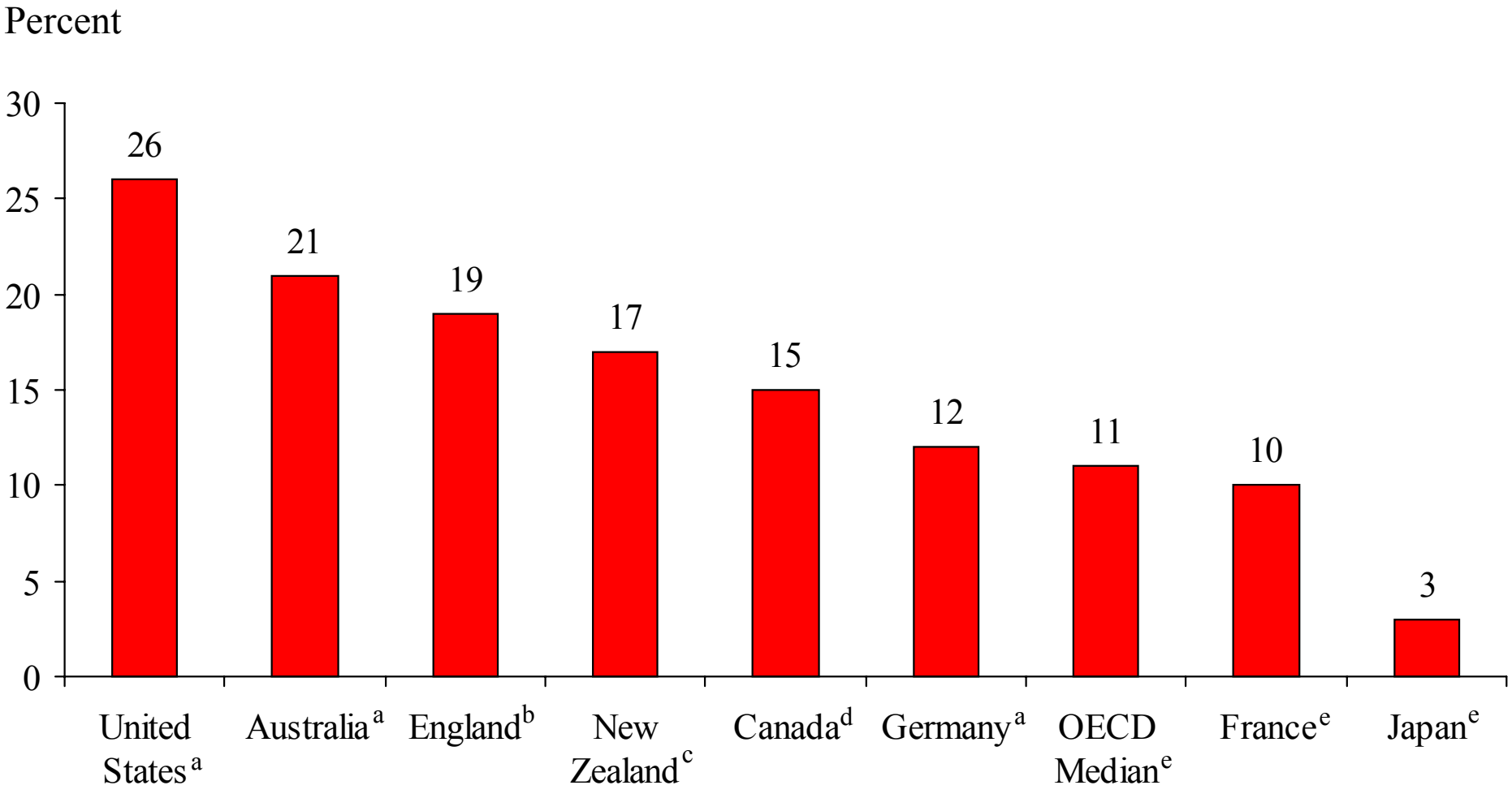
THE COMMONWEALTH FUND

[a] 1990–1999
[b] 1990–2001
[c] 1992–1999
[d] 1989–2001

Source: OECD Health Data 2002

Chart X-2

Obesity (BMI > 30) Prevalence[36]



THE COMMONWEALTH FUND

[a] 1999
[b] 1998
[c] 1997
[d] 2001
[e] 2000

Sources: OECD Health Data 2002; U.K. Department of Health

XI. Country Summaries

The Australian Health Care System

Who is covered?

Coverage is universal.

What is covered?

- Services: Some preventive services; inpatient and outpatient hospital care; physician services; inpatient and outpatient drugs; mental health care; and rehabilitation. Free choice of general practitioner.
- Cost-sharing: Medicare reimburses 75 percent of the scheduled fee for private inpatient services and 85 percent of ambulatory services. Doctors are free to charge above the scheduled fee or they may direct bill the government when there is no patient charge. Seventy percent of medical services are bulk billed. Prescription pharmaceuticals have a patient copayment. Out-of-pocket payments account for 18 percent of health care expenditures.

How are revenues generated?

- National Health Insurance (Medicare): Compulsory national health insurance administered by the federal government. National health insurance is funded by a mixture of general tax revenue, a 1.5 percent levy on taxable income (which accounts for 17.8% of federal outlays on health), state revenue, and fees paid by patients. Additionally, a Medicare Levy Surcharge applies to high-income individuals without private health insurance. The government funds 70 percent of health care expenditures (47% federal and 23% state).
- Private Insurance: Primarily not-for-profit mutual insurers cover the gap between Medicare benefits and scheduled fees for inpatient services. Doctors may bill above the scheduled fee. Private insurers also offer private hospital treatment, choice of specialists, and avoidance of queues for elective surgery.
- Private insurance covers 44 percent of the population and accounts for 11 percent of health care expenditures. Through a rebate, 30 percent of private insurance premiums are paid by the government.

How is the delivery system organized?

- Physicians: Primary care physicians act as gatekeepers. Physicians generally are reimbursed under a fee-for-service system. The government sets the fee schedules, but these are not maximum prices.
- Hospitals: Primarily public, run by the states. The states pay for public hospitals with federal government assistance negotiated through five-year agreements. Physicians in public hospitals are either salaried (but may have private practices and fee-for-service income) or paid on a per-session basis.
- Government: The federal government has control over hospital benefits, pharmaceuticals, and medical services. States are charged with operating public hospitals and regulating all hospitals, nursing homes, and community-based general services.

How are costs controlled?

- Australia controls its health care costs through a combination of global hospital budgets, fee schedules, limited diffusion of technology, copayments for pharmaceuticals, and waiting lists. The government also restricts the number of medical students and Medicare-licensed providers.

Relative Ranking over Time

The following table shows the performance of Australia compared with the other 29 OECD member countries over time for selected indicators. Because the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of Australia compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	2000
Health Care Spending per Capita	89	64	63
Health Care Spending, Percentage of GDP	89	65	70
Pharmaceutical Spending per Capita	—	16	37[b]
Practicing Physicians per 1,000 Population	58	48[c]	34[b]
Hospital Beds per 1,000 Population	78	79	52[a]
Average Length of Inpatient Stay	—	—	42[a]
Physician Visits per Capita	—	33	76

[a] 1999 data

[b] 1998 data

[c] 1981 data

The Canadian Health Care System

Who is covered?

Coverage is universal for residents of Canada.

What is covered?

- Services: The federal government requires that provincial health insurance plans cover all medically necessary physician and hospital services to qualify for full cash transfers. The federal government is also directly responsible for health care services for specific groups, including the Royal Canadian Mounted Police, members of the armed forces, veterans, status Indians and Inuit, and inmates in federal jails.
- Provinces/territories, the federal government, and municipal governments provide additional benefits to different groups (i.e., seniors, social assistance recipients, etc.). Benefits include prescription drugs, dental care, home care, aids to independent living, and ambulance services.
- Cost-sharing: No cost-sharing for insured physician and hospital services.

How are revenues generated?

- National Health Insurance (Medicare): Public health insurance plans are administered by the provinces/territories and funded by general taxation and dedicated taxes. Federal contributions to provinces/territories are tied to population and other factors and conditional to compliance with the *Canada Health Act.* Public funding accounts for just under 72 percent of total health care expenditures.
- Private Insurance: The majority of Canadians have supplemental private insurance coverage through group plans, which extends the range of insured services to include dental care, prescription drugs, rehabilitation services, private care nursing, and private rooms in hospitals. The private health sector represents approximately 28 percent of total health care expenditures.

How is the delivery system organized?

- Physicians: Most physicians are in private practice and are remunerated on a fee-for-service basis, however, in 2000–01, one of four Canadian physicians received some payments for clinical care through alternative payment plans. In total, about 11 percent of total clinical payments to physicians are now through these types of arrangements. Provincial/territorial medical associations generally negotiate the fee schedule for insured services with provincial/ territorial health ministries. Physicians must opt out of the public system of payment to have the right to charge their own rates for medically necessary services.
- Hospitals: Primarily public and private nonprofit hospitals that operate under global budgets or regional budgets with some fee-for-service payment. Less than 5 percent of Canadian hospitals are privately owned, and these are mostly long-term care facilities.
- Government: Provincial/territorial governments have the authority to regulate health providers, however, they typically delegate control over physicians and other providers to professional "colleges" whose duty is to license providers and set standards for practice.

How are costs controlled?

- Cost-control measures include mandatory annual global budgets for hospitals/health regions, negotiated fee schedules for health care providers, formularies for public drug plans, and limits on the diffusion of technology.

Relative Ranking over Time

The following table shows the performance of Canada compared with the other 29 OECD member countries over time for selected indicators. Because the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of Canada compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	2000
Health Care Spending per Capita	94	80	83
Health Care Spending, Percentage of GDP	100	69	87
Pharmaceutical Spending per Capita	—	58	89
Practicing Physicians per 1,000 Population	79[b]	44	21
Hospital Beds per 1,000 Population	28	36	32[a]
Average Length of Inpatient Stay	8	27	62[a]
Physician Visits per Capita	—	72	79[a]

[a] 1999 data

[b] 1961 data

The French Health Care System

Who is covered?

Coverage is universal.

What is covered?

- Services: Compulsory benefit package includes preventive services; inpatient and outpatient hospital care; physician services; mental health care; long-term care; limited dental care; prescription drugs; and rehabilitation. Free choice of ambulatory care physicians.
- Cost-sharing (*ticket moderateur*): 35 percent for physician fees under the normal fee schedule. Supplemental coverage often covers part of the cost-sharing for drugs. Out-of-pocket payments account for 17 percent of health care expenditures.

How are revenues generated?

- Public Sickness Insurance Funds (SIFs): Not-for-profit, nongovernmental bodies (although regulated by the government), with national headquarters and regional networks. SIFs are financed through the general social security financing system, with a universal contribution (CSG) of nearly 7 percent levied on all incomes. Employer-based contributions are nearly 13 percent of wages (contributions from employers represent about 70% of employer-based contributions and those from employees represent about 30%). There is no upper earnings limit. SIFs cover 99 percent of the population and account for 75 percent of health care expenditures.
- Mutual Insurance Funds (MIFs) and Private Health Insurance (PHI): In addition to compulsory payroll contributions to the sickness funds, the *mutuelles* and private health insurance provide supplemental, voluntary insurance to cover cost-sharing arrangements (*ticket moderateur*) and extra billings. MIFs and PHI cover about 80 percent of the population and account for 8 percent of health care expenditures.

How is the delivery system organized?

- Physicians: General practitioners have no formal gatekeeper function. Physicians are self-employed and are paid on a fee-for-service basis. Physicians often have multiple practices across public and private hospitals, and private practice. Patients pay physicians' bills and are reimbursed by SIFs and then by private insurers, although third party billing has been progressively implemented under the *Carte Vitale*.
- Hospitals: Private hospitals are both for-profit and not-for-profit, usually with fee-for-service doctors. Public hospitals employ salaried doctors and are under direct regulation by the ministry of health.
- Government: The French government regulates contribution rates paid to sickness funds, sets global budgets and salaries for public hospitals, and 'de facto' sets the level of fees under national fee schedule negotiations.

How are costs controlled?

- Emphasis is placed on global budgeting, setting moderate fee schedules, and cost-sharing arrangements.
- Total health care expenditures account for 10 percent of France's GDP.

Relative Ranking over Time

The following table shows the performance of France compared with the other 29 OECD member countries over time. Because the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of France compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	2000
Health Care Spending per Capita	61	72	77
Health Care Spending, Percentage of GDP	67	73	90
Pharmaceutical Spending per Capita	—	—	96
Practicing Physicians per 1,000 Population	46	63	48
Hospital Beds per 1,000 Population	48	61	64
Average Length of Inpatient Stay	—	58	25[b]
Physician Visits per Capita	—	38	70[a]

[a] 1996 data

[b] 1999 data

The German Health Care System

Who is covered?

Up to the determined income level, everyone has to enroll with any of the Sickness Insurance Funds (SIFs) offering the same comprehensive health care coverage. Individuals above that income level have the right to opt out to obtain private coverage instead.

What is covered?

- Services: Statutory benefit package includes preventive services; inpatient and outpatient hospital care; physician services; mental health care; dental care; prescription drugs; rehabilitation; and sick leave compensation. Long-term care is covered by a separate insurance scheme. Free choice of ambulatory care physicians.
- Cost-sharing: Traditionally few cost-sharing provisions confined to copayments for prescription drugs, dental care and medical aides. Out-of-pocket payments (nonconventional therapy, homeopathic treatment, OTC drugs, others) accounted for 11 percent of health care expenditures.

How are revenues generated?

- Sickness Insurance Funds (SIFs): There are 396 SIFs autonomous, not-for-profit, nongovernmental bodies (although regulated by the government). They are funded by compulsory payroll contributions averaging 14 percent of wages, equally shared by employers and employees. SIFs cover approximately 88 percent of the population. Dependents are covered through the primary SIF enrollee. While the unemployed continue to contribute to the SIF proportionate to their unemployment entitlements, health care costs incurred by long-term unemployed (> 6–12 months), asylum seekers, and the homeless, are financed through general revenues. In 1998, SIFs accounted for 81 percent of health care expenditures.
- Private Insurance: Private insurance, which provides health insurance based on voluntary, individual premiums, covers 8.9 percent of the population (the affluent, the self-employed, and civil servants). Private insurance accounts for 8 percent of health care expenditures.

How is the delivery system organized?

- Physicians: General practitioners have no formal gatekeeper function. All physicians in the outpatient sector are paid on a fee-for-service basis. Representatives of the sickness funds negotiate with the regional associations of physicians to determine aggregate payments.
- Hospitals: Hospitals are mainly nonprofit, both private and public. They are staffed with salaried doctors. Senior doctors may also treat privately insured patients on a fee-for-service basis. Representatives of the sickness funds negotiate payment rates with hospitals at the regional level. A new payment system based on diagnosis-related group (DRG) per-admission payments was introduced in 2000.
- Government: The German government delegates regulation to the self-governing corporatist bodies of both the sickness funds and the medical providers' associations. However, given lack of efficacy and compliance, the Government is increasingly willing to replace the self-regulating system and delegate more purchasing powers to the sickness funds.

How are costs controlled?

- The government imposes sectorwide budgets for physician and hospital services. Budget ceilings for prescription drugs were abolished in early 2001, leading to an unprecedented increase of expenditures for pharmaceuticals increasing financial strain on the SIFs. Health care reforms in the 1990s included increased competition among sickness funds; the introduction of a per-admission hospital payment system; the control of physician supply; and moderate cost-sharing provisions.

Relative Ranking over Time

The following table shows the performance of Germany compared with the other 29 OECD member countries over time. Because the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of Germany compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	2000
Health Care Spending per Capita	—	92	93
Health Care Spending, Percentage of GDP	—	88	93
Pharmaceutical Spending per Capita	—	95	81
Practicing Physicians per 1,000 Population	92	85	90
Hospital Beds per 1,000 Population	61	71	88
Average Length of Inpatient Stay	54	65	96
Physician Visits per Capita	—	92	70[a]

[a] 1996 data

The Japanese Health Care System

Who is covered?

Coverage is universal.

What is covered?

- Services: Preventive services; inpatient and outpatient services; physician services; mental health care; long-term and home care; dental care; prescription drugs; and rehabilitation. Free choice of general practitioner.
- Cost-sharing: Cost-sharing provisions range from 20 percent to 30 percent of charges. Out-of-pocket payments account for 17 percent of health care expenditures.

How are revenues generated?

- Employees' Health Insurance (EHI) System: About 1,900 not-for-profit, nongovernmental bodies, and one governmental body. Premiums are funded by compulsory payroll contributions (8% of wages), equally shared by employers and employees.
  - Company-Managed Health Insurance (CMHI): Covers employees of large corporations and their dependants.
  - Government-Managed Health Insurance (GMHI): Covers employees of medium-sized and small companies and their dependents.
- National Health Insurance (NHI): Covers the self-employed, pensioners and their dependents, and trade associations. Local governments act as insurers. Premiums are calculated on the basis of income, the number of individuals in the insured household, and assets.

  Overall, premiums account for 53 percent of health care expenditures. The federal government pays 24 percent of medical care expenditures while local governments pay 8 percent.

How is the delivery system organized?

- Physicians: Physicians have no formal gatekeeper function. Most are in private practice and are paid through a uniform fee schedule. Medical and pharmaceutical practices are often combined, and a large portion of physicians' incomes is derived from prescriptions.
- Hospitals: Primarily private, with some public hospitals. Hospitals combine acute and long-term care functions and are paid according to a uniform fee schedule. Hospital-based physicians are salaried.
- Government: The Japanese government acts as regulator (e.g., by setting the fee schedule) and insurer. It also subsidizes health care spending for the elderly, employees of small enterprises, and the self-employed.

How are costs controlled?

- A nationally uniform fee schedule has been adopted by nearly all providers. Volume is controlled by retrospective utilization review of services and adjustment of payment rates.

Relative Ranking over Time

The following table shows the performance of Japan compared with the other 29 OECD member countries over time. Because the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of Japan compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	2000
Health Care Spending per Capita	17	40	53
Health Care Spending, Percentage of GDP	17	46	47
Pharmaceutical Spending per Capita	—	100	63[a]
Practicing Physicians per 1,000 Population	42	19	17
Hospital Beds per 1,000 Population	39	86	—
Average Length of Inpatient Stay	100	100	—
Physician Visits per Capita	—	100	96[b]

[a] 1999 data

[b] 1996 data

The New Zealand Health Care System

Who is covered?

Coverage is universal.

What is covered?

- Services: Preventive services; inpatient and outpatient hospital care; physician services; inpatient and outpatient drugs; mental health care; dental care for school children; public health; and disability support services. Free choice of general practitioner.
- Cost-sharing: Income-related copayments are required for general practitioner (GP) services and nonhospital drugs. Health care is free for children under age 6. Out-of-pocket payments account for 17 percent of health care expenditures.

How are revenues generated?

- General taxation: Public funding is derived from taxation. It accounts for about 77 percent of health care expenditures.
- The government sets a global budget annually for publicly funded health services. This is distributed to District Health Boards (DHBs). DHBs provide services at government-owned facilities (about one-half, by value, of all health services) and purchase other services from privately owned providers, such as general practitioners (many of whom are grouped as Independent Practitioner Associations, or IPAs), disability support services, and community care.
- Out-of-pocket expenditures: People pay fee-for-service copayments to GPs and for pharmaceuticals and some private hospital or specialist care. In addition, complementary and alternative medicines and therapies are paid for out-of-pocket.
- Private Insurance: Not-for-profit insurers generally cover private medical care. Private insurance is most commonly used to cover cost-sharing requirements, elective surgery in private hospitals, and specialist outpatient consultations. About one-third of New Zealanders have private health insurance and it accounts for approximately 6 percent of total health care expenditures.

How is the delivery system organized?

- Physicians: GPs act as gatekeepers and are independent, self-employed providers paid through a combination of payment methods: fee-for-service, partial government subsidy and, in some cases, negotiated contracts through IPAs. Consultants (specialists) working for District Health Boards are salaried but may supplement their salaries through treatment of private patients in private (noncrown) hospitals.
- Primary Health Organizations (PHOs): New organizations being formed under recent government policy to target areas of greatest health need and take a population approach to primary health care. They will have a range of different health practitioners on staff and be funded partly by capitation and partly by fee-for-service.
- District Health Boards: The Boards are partly elected by the people of a geographic area (there are 21 in the country) and partly appointed by the Minister of Health. The Boards are responsible for determining the health and disability support service needs of the population living in their districts, and planning, providing, and purchasing those services. A Board's organization has a funding arm and a service provision arm, operating government-owned hospitals, health centers, and community services.
- Government: New Zealand's government has responsibility for legislation, regulation, and general policy matters, funds 76 percent of health care expenditures, and owns DHB assets.

How are costs controlled?

- The government sets an annual publicly funded health budget. In addition, New Zealand is shifting from open-ended, fee-for-service arrangements to contracting and funding mechanisms such as capitation. "Booking systems" are being introduced to replace waiting lists to ensure that elective surgery services are targeted to those people best able to benefit. Early intervention and health promotion and disease prevention are being emphasized in primary care and by DHBs.

Relative Ranking over Time

The following table shows the performance of New Zealand compared with the other 29 OECD member countries over time for selected indicators. Because the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of New Zealand compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	2000
Health Care Spending per Capita	83	32	37
Health Care Spending, Percentage of GDP	72	27	57
Pharmaceutical Spending per Capita	—	37	22[b]
Practicing Physicians per 1,000 Population	50	26	24
Hospital Beds per 1,000 Population	89	57	—
Average Length of Inpatient Stay	23	19	15[a]
Physician Visits per Capita	—	38	—

[a] 1998 data

[b] 1997 data

The United Kingdom Health Care System

Who is covered?

Coverage is universal.

What is covered?

- Services: Publicly funded coverage through the National Health Service includes preventive services; inpatient and outpatient hospital care; physician services; inpatient and outpatient drugs; dental care; mental health care; and rehabilitation. Free choice of general practitioner.
- Cost-sharing: There are relatively few cost-sharing arrangements for covered services (e.g., drugs prescribed by family doctors are subject to a prescription charge, but many patients are exempt; dentistry services are subject to copayments). Out-of-pocket payments account for 8 percent of health care expenditures.

How are revenues generated?

- National Health Service (NHS): The NHS is administered by the NHS Executive, its regional office, and by Health Authorities. In 1997, the new government shifted from the internal market to integrated care, partnerships, and long-term service agreements between providers and commissioners. More recent policy developments include an expansion of patient choice and a move to case-mix reimbursement of hospitals. The NHS, which is funded by a combination of general taxation and national insurance contributions, accounts for 81 percent of health care expenditures.
- Private Insurance: A combination of for-profit and not-for-profit insurers covers private medical care, which plays a complementary role to the NHS. Private insurance offers choice of specialists, avoidance of queues for elective surgery, and higher standards of comfort and privacy than the NHS. Private insurance covers 12 percent of the population and accounts for 3 percent of health care expenditures.

How is the delivery system organized?

- Physicians: General practitioners (GPs) act as gatekeepers and are brought together in Primary Care Trusts (PCTs), which have budgets for most of the care of their enrolled population and responsibility for the provision of primary and community services. Most GPs are paid directly by the government through a combination of methods: salary, capitation, and fee-for-service, but some are employed locally. A new GP contract is about to introduce greater use of local contracting and quality incentives. Private providers set their own fee-for-service rates but are not generally reimbursed by the public system.
- Hospitals: Primarily semiautonomous, self-governing public trusts that contract with PCTs. Consultants (specialist physicians) work mainly in NHS Trust hospitals but may supplement their salary by treating private patients.
- Government: Responsibility for health legislation and general policy matters rests with Parliament at Westminster and in Scotland and with the Assemblies in Wales and Northern Ireland.

How are costs controlled?

- The government sets the budget for the NHS on a three-year cycle. To control utilization and costs, the United Kingdom has controlled physician training, capital expenditure, pay, and PCT revenue budgets. There are also waiting lists. In addition, a centralized administrative system results in lower overhead costs. Other mechanisms that contribute to improved value for money include arrangements for the systematic appraisal of new technologies (the National Institute for Clinical Excellence) and for monitoring the quality of care delivered (the Commission for Health Improvement).

Relative Ranking over Time

The following table shows the performance of the United Kingdom compared with the other 29 OECD member countries over time for selected indicators. Because the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of the United Kingdom compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	2000
Health Care Spending per Capita	67	24	43
Health Care Spending, Percentage of GDP	56	19	37
Pharmaceutical Spending per Capita	—	53	41[c]
Practicing Physicians per 1,000 Population	17	15	14
Hospital Beds per 1,000 Population	58[d]	39	44
Average Length of Inpatient Stay	92	69	46[a]
Physician Visits per Capita	—	66	59[b]

[a] 2000 data
[b] 1998 data
[c] 1997 data
[d] 1961 data

The United States Health Care System

Who is covered?

Public and private health insurance covers 86 percent of the population.

What is covered?

- Services: Benefit packages vary according to type of insurance, but often include inpatient and outpatient hospital care and physician services. Many also include preventive services, dental care, and prescription drug coverage.
- Cost-sharing: Cost-sharing provisions vary by type of insurance. Out-of-pocket payments account for 15 percent of health care expenditures.

How are revenues generated?

- Medicare: Social insurance program for the elderly, some of the disabled under age 65, and those with end-stage renal disease. Administered by the federal government, Medicare covers 13 percent of the population. The program is financed through a combination of payroll taxes, general federal revenues, and premiums. It accounts for 17 percent of total health care expenditures.
- Medicaid: Joint federal–state health insurance program covering certain groups of the poor. Medicaid is administered by the states, which operate within broad federal guidelines. It covers 10 percent of the population and accounts for 16 percent of total health care expenditures.
- Private Insurance: Provided by more than 1,200 not-for-profit and for-profit health insurance companies regulated by state insurance commissioners. Private health insurance can be purchased by individuals, or it can be funded by voluntary premium contributions shared by employers and employees on a negotiable basis. Private insurance covers 72 percent of the population, including individuals covered by both public and private insurance. It accounts for 34 percent of total health care expenditures.
- Others: Private and public funds account for 18 percent of expenditures.

How is the delivery system organized?

- Physicians: General practitioners have no formal gatekeeper function, except within some managed care plans. The majority of physicians are in private practice. They are paid through a combination of methods: charges, discounted fees paid by private health plans, capitation rate contracts with private plans, public programs, and direct patient fees.
- Hospitals: For-profit, nonprofit, and public hospitals. Hospitals are paid through a combination of methods: charges, per admission, and capitation.
- Government: The federal government is the single largest health care insurer and purchaser.

How are costs controlled?

- In recent years, payers have attempted to control cost growth through a combination of selective provider contracting, discount price negotiations, utilization control practices, risk-sharing payment methods, and managed care.

Relative Ranking over Time

The following table shows the performance of the United States compared with the other 29 OECD member countries over time for selected indicators. Because the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of the United States compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	2000
Health Care Spending per Capita	100	100	100
Health Care Spending, Percentage of GDP	94	92	100
Pharmaceutical Spending per Capita	—	84	100
Practicing Physicians per 1,000 Population	88	52	38[b]
Hospital Beds per 1,000 Population	50	29	24
Average Length of Inpatient Stay	31	12	35[a]
Physician Visits per Capita	—	55	66[c]

[a] 1999 data

[b] 1998 data

[c] 1996 data

XII. Appendix

Health Spending Distribution

		Percentage of Total Health Care Spending for			
		Hospital Care	**Physician Services**	**Pharmaceuticals**	**Other**
Australia	1990	38.3	13.4	9.0	39.3
	2000	35.1	13.6	11.6	39.7
Canada	1990	39.5	15.3	11.4	33.8
	2000	32.5	13.7	15.2	38.6
France	1990	43.8	12.8	16.8	26.6
	2000	39.5	12.5	20.1	27.9
Germany	1992	24.6	9.9	14.7	50.8
	2000	25.6	9.9	13.6	50.9
Japan	1990	32.8	36.1	21.4	9.7
	1999	30.4	27.1	16.4	26.1
New Zealand	1990	44.2	—	13.8	—
	1997	—	—	14.4	—
United Kingdom	1990	—	14.9	13.5	—
	1997	—	—	15.9	—
United States	1990	37.2	23.1	9.2	30.5
	2000	32.3	22.5	12.0	33.2

Note: “Other” includes all spending not captured in the other three categories. This could include outpatient hospital services, screening and laboratory services, durable medical equipment, long-term care, and other services. The specific definitions of spending categories vary among the eight countries.

Sources: OECD Health Data 2002; Australian Department of Health

XIII. Endnotes

[1] **Definition:** The 30 OECD countries are Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

[2] **Method:** OECD median: Throughout the chartbook, there must be data from at least 15 of the 30 countries to present the OECD median. Missing data were substituted with data from the closest years (±3 years) for calculation of the median. For the per capita spending data, any figures substituted from different years were adjusted for inflation using the U.S. consumer price index (CPI) and expressed in purchasing-power-parity U.S. dollars at 2000 price levels.

[3] **Definition:** Total health care spending includes personal health care (inpatient, ambulatory, medical goods), collective programs (promotion and prevention, maternal and child health, administration, etc.), and investment (physical assets as well as new knowledge). There are some differences in the specific definitions used in each country. For example, some private spending is not included in total health care spending for the United Kingdom and Japan. For complete definitions, please refer to the OECD Health Data 2002.

[4] **Definition:** Throughout the chartbook, 1990 data for Germany were replaced by data for 1992 because from 1992 onward the data refers to Germany after reunification.

[5] **Definition:** Gross domestic product (GDP) is defined as total final expenditures at purchasers' prices (including the free on board value of goods and services) less the value of imports of goods and services.

[6] **Method:** Throughout the chartbook, purchasing power parities were used to adjust for differences in cost of living across countries by comparing prices for a fixed market basket of goods. The basket of goods used here is broad-based, not health-based.

[7] **Method:** The average annual growth rates were calculated in units of each country's national currency adjusting for general inflation using each country's GDP price deflator.

[8] **Method:** The real growth in per capita health care spending for the United Kingdom was calculated for financial years 1990–91 to 2000–01. For reference, the data used are gross National Health Service (NHS) expenditures per capita in real terms (1990–01 to 2000–01) on a resource accounting stage 1 basis. The gross domestic product deflators came from the U.K. Treasury's latest release on June 28, 2002. The population figures are official estimates based on the 1991 census from National Statistics. This methodology produces a rate that is 0.1 percent different from that reported in the OECD Health Data 2002 (3.8%).

[9] **Definition:** Public and private health care spending per capita was calculated by dividing total public or private health care spending by total population. It does not reflect differences in the sources of public and private health care revenues. For example, there are differences among countries in the percentage of the population covered by private health insurance.

[10] **Definition:** Private expenditures on health care include the privately funded part of total health care expenditures. Private sources of funds include out-of-pocket payments (both over-the-counter and cost-sharing), private insurance programs, charities, and occupational health care.

[11] **Method:** The United Kingdom data include nursing homes. The private sector in the United Kingdom provides a substantially greater portion of nursing home services than hospital services.

[12] **Definition:** Household out-of-pocket expenditures comprise cost-sharing, self-medication, and other expenditures paid directly by private households, irrespective of whether the contact with the health care system was established on referral or on the patient's own initiative.

[13] **Method:** Missing data for the year 2000 were replaced with data from the closest years, which were converted into 2000 U.S. dollars. The adjustment for inflation was done using the U.S. Consumer Price Index.

[14] **Definition:** The share of the population that is eligible to receive health care goods and services that are included in total public health expenditures. Coverage is therefore independent of the scope of cost-sharing. Every person that is eligible for medical goods and services that would be reported under total public health expenditures is, according to this definition, covered for (total) health care.

[15] Mills, Robert J. 2001. "Current Population Report: Health Insurance Coverage 2000." U.S. Department of Commerce, Economics and Statistics Administration, Census Bureau.

[16] **Definition:** Hospital spending refers to what the OECD terms "curative and rehabilitative inpatient care." The OECD Health Data 2002 notes explain: "An episode of curative care is one in which the principal medical intent is to relieve symptoms of illness or injury, to reduce the severity of an illness or injury or to protect against exacerbation and/or complication of an illness and/or injury which could threaten life or normal function. Rehabilitative care comprises services where the emphasis lies on improving the functional levels of the persons served and where the functional limitations are either due to a recent event of illness or injury or of a recurrent nature (regression or progression). Included are services delivered to persons where the onset of disease or impairment to be treated occurred further in the past or has not been subject to prior rehabilitation services." Although spending for hospital outpatient services is not included in this definition, there are differences in definitions between countries. In Canada and the United States, expenditures on curative and rehabilitative inpatient care include spending on hospital outpatient care in all years. In the United Kingdom, spending on same-day admissions is included, but not other outpatient services. In the other five countries, outpatient services are not included.

[17] **Definition:** Acute care is care in which the principal clinical intent is to do one or more of the following: manage labor (obstetric), cure illness or provide definitive treatment of injury, perform surgery, relieve symptoms of illness or injury (excluding palliative care), reduce the severity of illness or injury, protect against exacerbation and/or complication of an illness and/or injury that could threaten life or normal functions, or perform diagnostic or therapeutic procedures. Psychiatric care and outpatient surgery cases are excluded.

[18] **Method:** The definition of hospital spending in the OECD data may have changed between 1990 and 2000. For example, Australia until 1998 reported hospital expenditures including outpatient care provided in hospitals, and since then has reported only inpatient hospital expenditures. The OECD median for 1990 is not available because data are available for only 14 countries.

[19] **Definition:** Acute care hospital beds are beds accommodating patients for acute care. Psychiatric beds and day beds are excluded. Acute care beds were defined in previous versions of OECD Health Data until the 1980s as beds accommodating patients in a hospital or hospital department whose average length of stay was 30 days or less. Later versions specify 18 days or less. **Method:** The U.K. Department of Health asked to remove the 1990 data.

[20] **Method:** Hospital admission rates for acute care in the United Kingdom are available for England only from 1989 onward. Data also include an estimate of private sector admissions.

[21] **Definition:** Average length of stay (ALOS) was computed by dividing the number of days stayed (from the date of admission in an inpatient institution) by the number of separations (discharges plus deaths) during the year. Psychiatric admissions and outpatient surgery cases were excluded. **Method:** Some countries may include deaths and discharges (separations) as well as same-day separations. Caution should be exercised when making international comparisons because of the possibility that countries may provide data for different types of institutions.

[22] **Method:** ALOS for acute care, acute myocardial infarction, and normal delivery in the United Kingdom are available for England only. Data include NHS admissions only (the private sector is excluded).

[23] **Definition:** Total expenditures on pharmaceuticals include pharmaceuticals and other medical nondurables comprising pharmaceuticals such as medicinal preparations, branded and generic medicines, drugs, patent medicines, serums and vaccines, vitamins and minerals, and oral contraceptives.

[24] **Definition:** Spending on physician services includes expenditures on professional health services provided by general practitioners and specialists.

[25] **Definition:** "Practicing physicians" is defined as the number of physicians, general practitioners, and specialists (including the self-employed) who are actively practicing medicine in public and private institutions. Differences exist across the countries in the types of services provided by physicians and in which practitioners are counted as physicians. **Method:** The U.K. figures do not include the private sector or nonpracticing physicians.

[26] **Definition:** "Practicing nurses" is defined as the total number of nurses certified/registered and actively practicing in public and private hospitals, clinics and other health care facilities, including the self-employed. **Method:** The United Kingdom is represented by data for England, which include headcount figures for those nurses working in the NHS or the private sector. German data are in full-time equivalents (FTEs). In France, the FTE method is used for nurses in public and private hospitals.

[27] **Definition:** The annual number of physician visits per capita is defined as the number of contacts with an ambulatory care physician divided by the population. Contacts in outpatient wards should be included. **Method:** The number of physician contacts according to the above definition is only a crude measure of the volume of services provided. A simple comparison of physician visits per capita ignores differences in the duration of the visit, scope of services offered, use of telephone consultations, quality of care provided, level of skill/training of the physician, and provision of outpatient surgery in physician offices. The U.K. figures do not include the private sector. The U.K. and U.S. data are from surveys, the remaining data are from administrative sources.

[28] **Definition:** The number of nurses per acute care bed is defined as the number of full-time equivalent first- and second-level nurses employed in hospitals and other institutions, where the primary focus of activity is on acute care delivered to inpatients, divided by the number of available beds. The definition does not account for differences between countries in the severity of illness of hospitalized individuals.

[29] **Method:** The U.K. data are represented by a figure from England, which is the number of qualified nurses in NHS hospitals working in acute, geriatric, and maternity care, divided by the number of NHS acute, geriatric, and maternity beds. The U.K. Department of Health asked to remove the 1990 data.

[30] **Method:** The U.S. data on MRIs and CTs show the number of hospitals with this equipment, not the actual number of MRIs and CTs. Some hospitals may have more than one unit, and some units may not be located in hospitals. The U.K. data are represented by data from England only and are the most accurate estimates provided by that country.

[31] **Method:** The data for the United Kingdom are represented by data from England representing the number of angioplasties carried out in the NHS per 100,000 population. This number is likely to be underestimated because a substantial number of these procedures are carried out in the private sector, which is not included in the current data.

[32] **Definition:** The number of patients undergoing dialysis treatments includes hospital/center and home haemodialysis/ haemoinfiltration, intermittent peritoneal dialysis, continuous ambulatory peritoneal dialysis (CAPD), and continuous cyclical peritoneal dialysis (CCPD) on December 31 of each year.

[33] **Method:** Mortality and incidence rates have been age-standardized to a world standard population. The German incidence figures have not been age-standardized and are crude rates.

[34] **Method:** Diabetes mellitus coding practices may differ among countries.

[35] **Definition:** "Daily smokers" is defined as the percentage of the population age 15 and older who report that they are daily smokers. **Method:** International comparability is limited because of the lack of standardization in the measurement of smoking habits in health interview surveys across OECD countries. There is variation in the wording of the question, the response categories, and the related administrative methods. For Australia, the age is 16 and older. For Japan, estimates of the total population of daily smokers for all years have been calculated by the OECD Secretariat as the unweighted average of the male and female rates. For the United Kingdom, the age is 16 and older for Great Britain only. For the United States, the age is 18 and older.

[36] **Definition:** "Obesity" is defined as a body mass index (BMI) of 30 kg/m2 or more. **Method:** Figures are based on national health interview survey data from populations age 15 and older. For Australia, the age is 18 and older. For Canada, the age is 20 to 64. For Japan, the age is 20 and older. For the United Kingdom, the age is 16 and older. The total percentage of the population (persons) was calculated by applying *Health Survey for England* male/female percentages to the male/female populations of England and summing both as a proportion of the total population of England.