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# Multinational Comparisons of Health Systems Data, 2006

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# I. Overview



International data allow policymakers to compare the performance of their own health care system to other countries. In this chartbook, we use data collected by the Organization for Economic Cooperation and Development (OECD) to compare the health care systems and performance in nine industrialized countries—Australia, Canada, France, Germany, Japan, the Netherlands, New Zealand, the United Kingdom, and the United States. Whenever possible, we also present the value for the median value of all 30 members of the OECD.

The chartbook is organized into seven sections:

- Total Spending and Sources of Health Care Financing
- Hospitals
- Long-Term Care and Home Health Care
- Physicians
- Pharmaceuticals and Immunizations
- Non-Medical Determinants of Health
- Disease-Specific Mortality



## Methods

The source for most of the data is the OECD. The data were sent to each country for them to review. Any additional sources are noted on individual charts. Every effort is made to standardize the comparisons, but countries inevitably differ in their definitions of terms and how they collect the data. The most recent year is used whenever possible, but when it is not available for a specific country, data from earlier years are substituted and the substitution is noted on the chart. All health spending were adjusted to U.S. dollars using purchasing power parities, a common method of adjusting for cost-of-living differences. Because of concerns about data comparability, the comparisons should be seen as guides to relative orders of magnitude rather than as indicators of precise differences. Detailed methodological notes and definitions are provided in the appendix.



## Total Spending and Sources of Health Care Financing

- In 2004, per capita spending for all health care services ranged from a high of \$6,102 in the United States to a low of \$2,083 in New Zealand. The median for all 30 OECD countries was \$2,571. The United States spent 15.3% of GDP on health care services compared to 8.7% in the median OECD country. Over the last ten years, Australia had the fastest average annual growth rate of real health spending per capita and Germany the slowest.
- Among all OECD countries, the United States had the highest level of spending from public sources in 2004. This is somewhat surprising because only one quarter of all Americans have publicly financed health insurance.
- The United States spent over 17 times more than the median OECD country on private health care spending (excluding out-of-pocket spending). While private health insurance coverage is the most common source of health insurance coverage in the United States, in other countries private insurance is usually supplementary to public insurance coverage.
- Out-of-pocket spending per capita in the United States was more than twice as high as in the median OECD country.
- As of 2005, the United Kingdom's public investment per capita in Health Information Technology (HIT) was nearly 450 times that of the United States.





## Hospitals

- In 2004, the United States spent the most per capita on hospital services. Canada and Japan spent the least per capita on hospital services. One component of hospital spending is inpatient acute care spending per day. Inpatient acute care spending per day in the United States was nearly three times the median OECD country and over five times more than Japan.
- The United States has the fewest annual inpatient acute care days per capita; Japan has three times more. Japan also has the most acute care beds per 1,000 people. The United States and the Netherlands have the least number of acute care hospital beds per 1,000 people.
- Japan has the longest average length of hospital stay while the United States and France have the shortest.

## Long-Term Care and Home Health Care

- Canada and the Netherlands spent the most on long-term institutional care per capita. France spent the least on long-term institutional care per capita. Canada had the most long-term care beds per 1,000 people over the age of 65 in 2004 and the United Kingdom the fewest.



## Physicians

- The United States spent almost three times the median OECD country on physician services per capita in 2004. The nine countries had between 2.0 and 3.6 physicians per 1,000 people.
- The United Kingdom experienced the fastest increase in practicing physicians per 1,000 people between 1994 and 2004 while Canada had no change.
- The number of physician visits per capita is relatively similar in all nine of the countries except for Japan and New Zealand. Japan had many more physician visits, and the United States and New Zealand had fewer.

## Pharmaceuticals and Immunizations

- The United States spent two times the OECD median per capita on pharmaceuticals in 2004. The Netherlands spent the least on pharmaceuticals per capita among the nine countries.
- Spending for pharmaceuticals increased the fastest between 1994 and 2004 in Australia and the United States. Japan had the slowest average annual growth rate in real pharmaceutical spending.
- Australia had the highest percentage of people over the age of 65 immunized against influenza. In New Zealand, Germany, and Japan, less than 50% of people over the age of 65 were immunized against influenza in 2004.



## Non-Medical Determinants of Health

- Almost one-third of the population in the Netherlands and Japan were daily tobacco smokers in 2004. Canada and the United States had the lowest rates of daily tobacco smoking. The United States population much more likely to be obese than other countries. Japan had the lowest obesity prevalence.

## Disease-Specific Mortality

- Potential years of life lost is one commonly used indicator for assessing premature mortality.
- France had the highest potential years of life lost due to malignant neoplasms per 100,000 people; Japan had the least. The United States had twice as many potential years of life lost due to diseases of the circulatory system per 100,000 people as France. For every 100,000 people, the United States had four times as many potential years of life lost due to diabetes compared to Japan. The United States also had the greatest number of potential years of life lost due to diseases of the respiratory system.
- In 2004, the United States had the greatest number of deaths per 100,000 people due to surgical or medical mishaps. Compared to the United States, Japan and the Netherlands had less than one-third as many deaths due to surgical or medical mishaps. These deaths are not due to negligence or other unlawful conduct.



## Summary

- In 2004, the United States continued the trend of spending the most per capita on health care services among the 30 OECD countries. The United States also spent the greatest proportion of GDP on health care services. International comparisons reveal three areas that are partially responsible for the higher spending in the United States: hospital spending per acute care day, spending on physician services, and prices of pharmaceuticals. In each of these three categories, the United States spent significantly more than the next highest country. Resources and utilization rates in the United States are low, as seen by data for acute care days, acute care hospital beds, and the average annual number of physician visits. The United States spent the most on publicly financed and privately financed health insurance. The United States had the least public investment per capita in Health Information Technology. In terms of outcome measurements, the United States had the most potential years of life lost due to circulatory diseases, respiratory diseases, and diabetes.



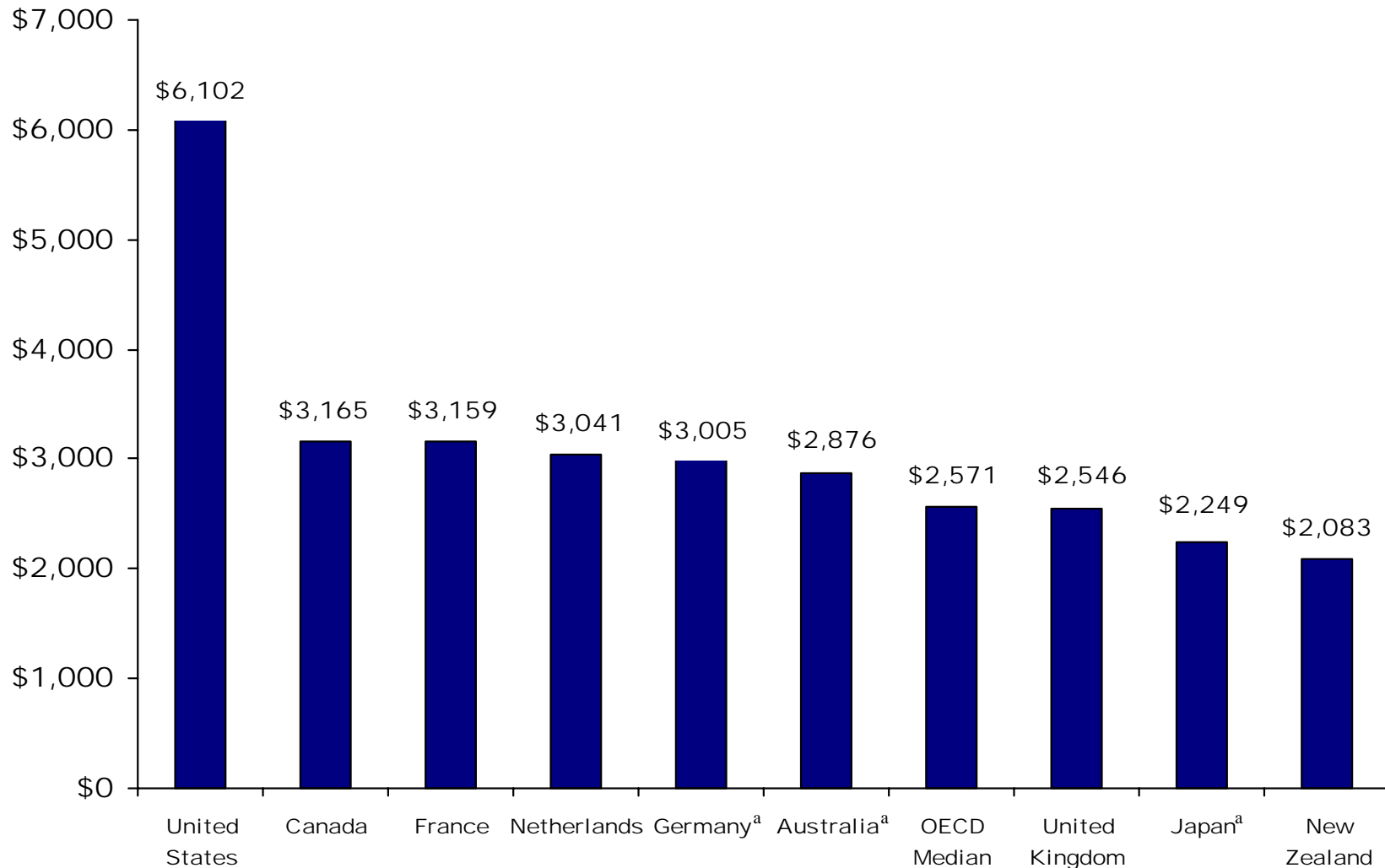
## II. Total Spending and Sources of Health Care Financing



# Chart II-1

## Health Care Spending per Capita in 2004

Adjusted for Differences in Cost of Living

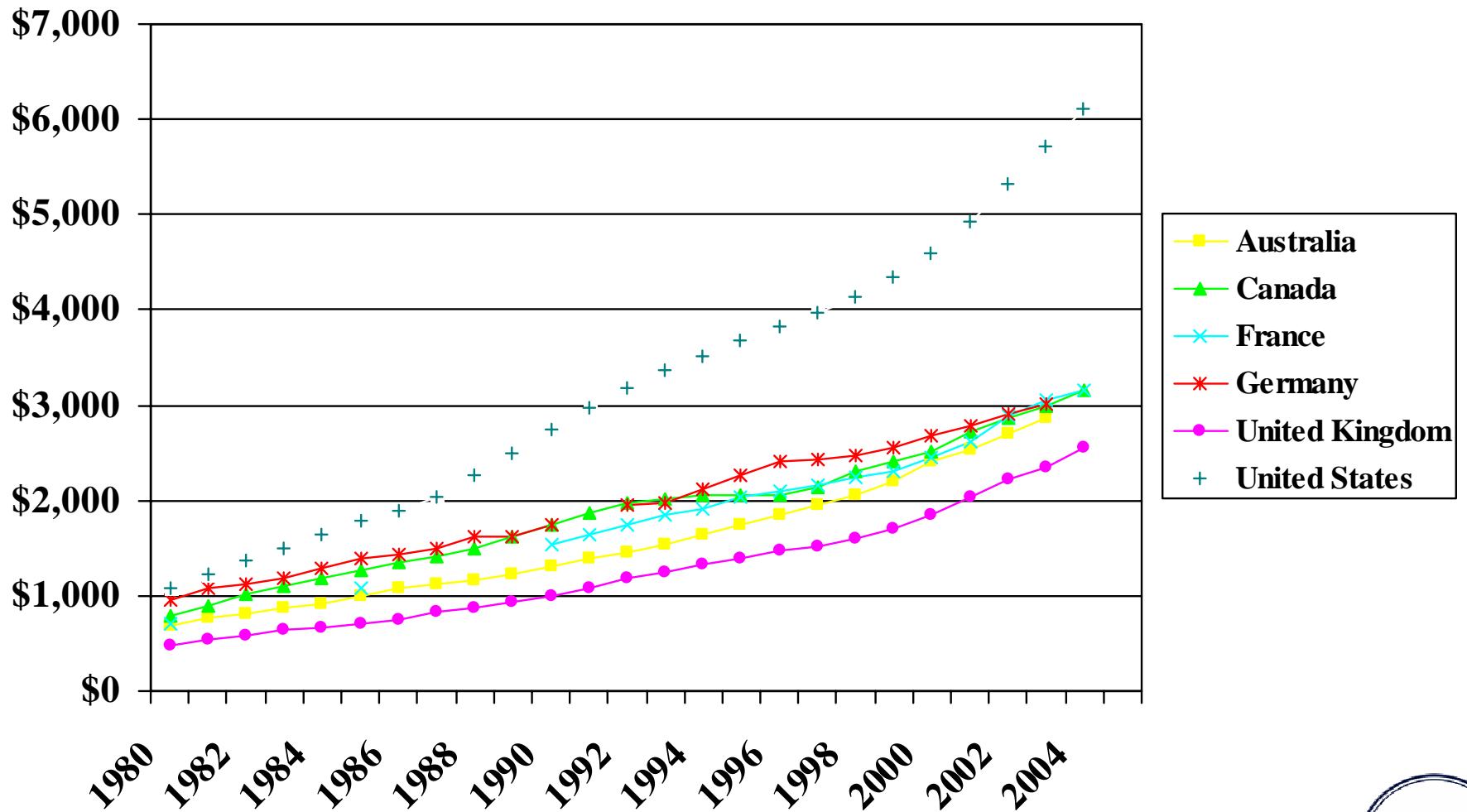


<sup>a</sup>2003



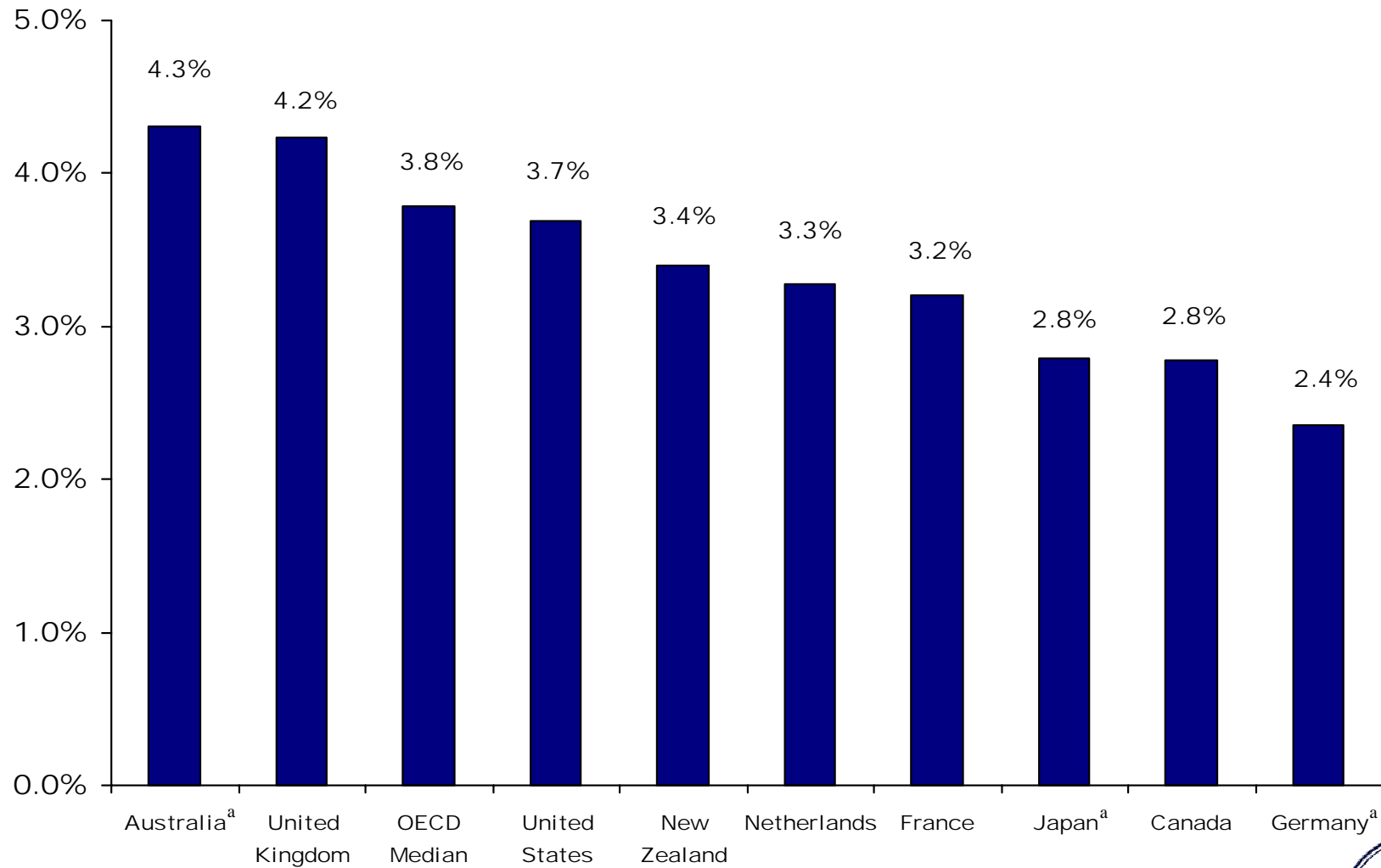
Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart II-2  
 Health Care Spending per Capita  
 from 1980 to 2004  
 Adjusted for Differences in Cost of Living



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart II-3  
Average Annual Growth Rate of  
Real Health Care Spending per Capita, 1994–2004



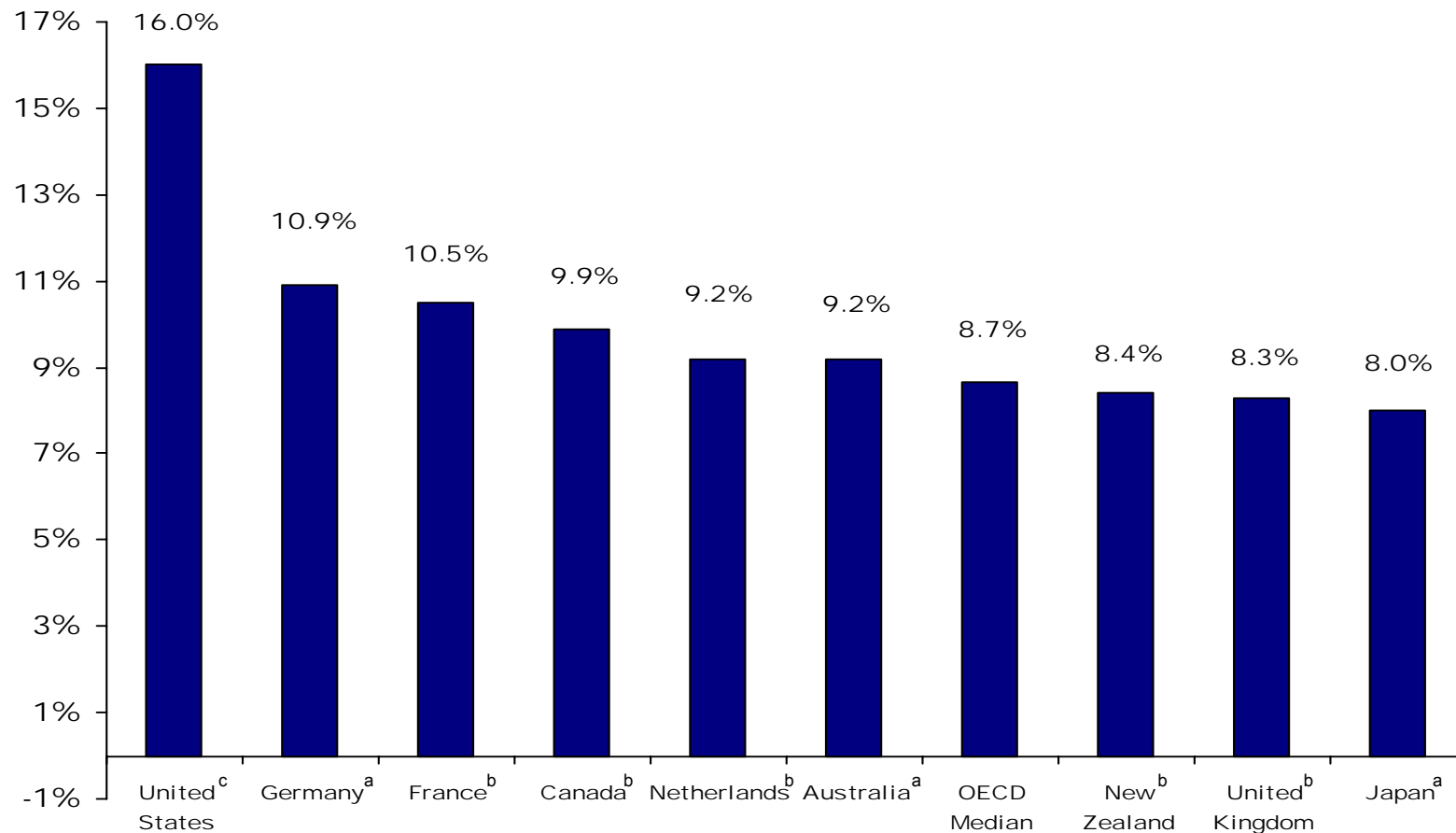
<sup>a</sup>1994–2003



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.



## Chart II-4 Percentage of Gross Domestic Product Spent on Health Care in 2004



<sup>a</sup>2003

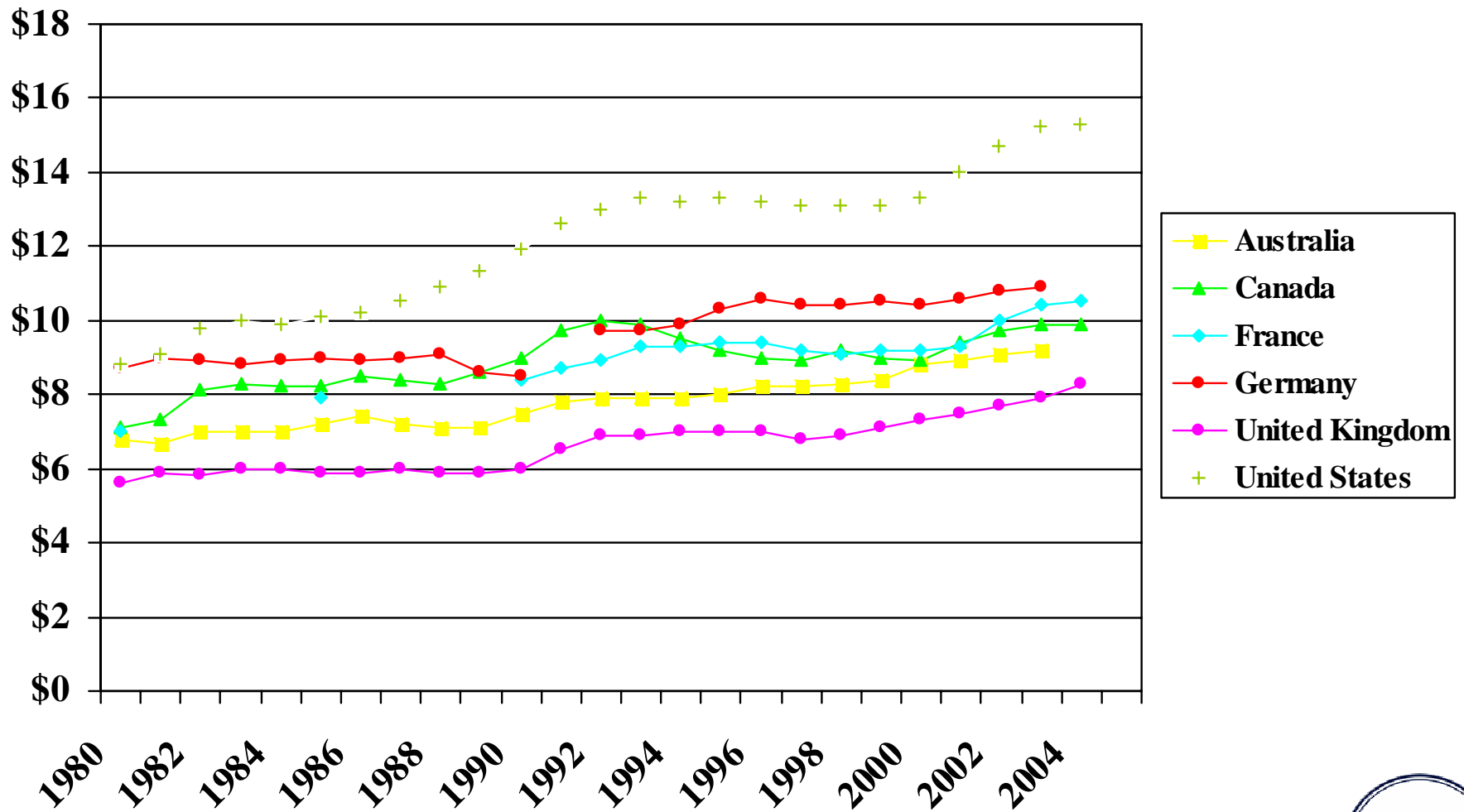
<sup>b</sup>2004

<sup>c</sup>2004 number for US from C. Smith et al., "National Health Spending in 2004: Recent Slowdown Led by Prescription Drug Spending," *Health Affairs*, Jan./Feb. 2006 25(1):186-96.



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart II-5  
 Percentage of Gross Domestic Product  
 Spent on Health Care from 1980 to 2004  
 Adjusted for Differences in Cost of Living

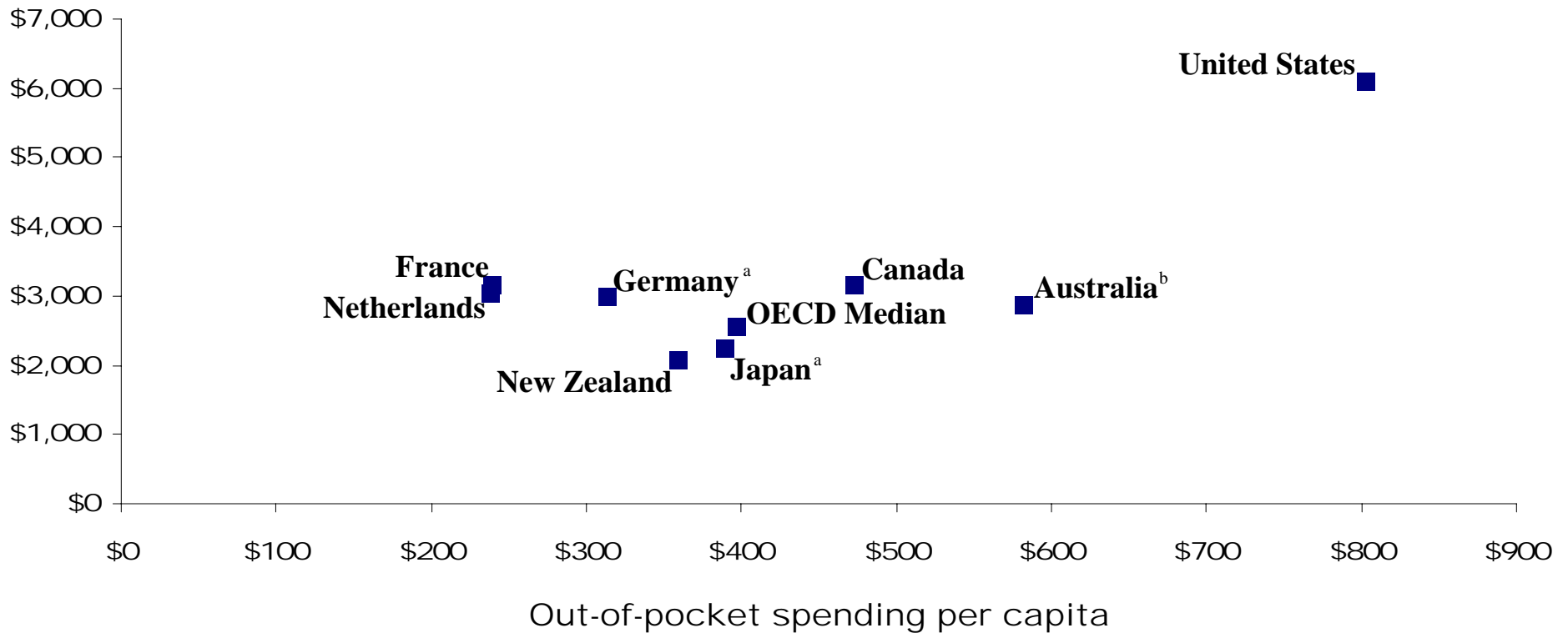


Source: The Commonwealth Fund, calculated from OECD Health Data 2006.



# Chart II-6 Americans Spend More Out-of-Pocket on Health Care Expenses

Total health care spending per capita



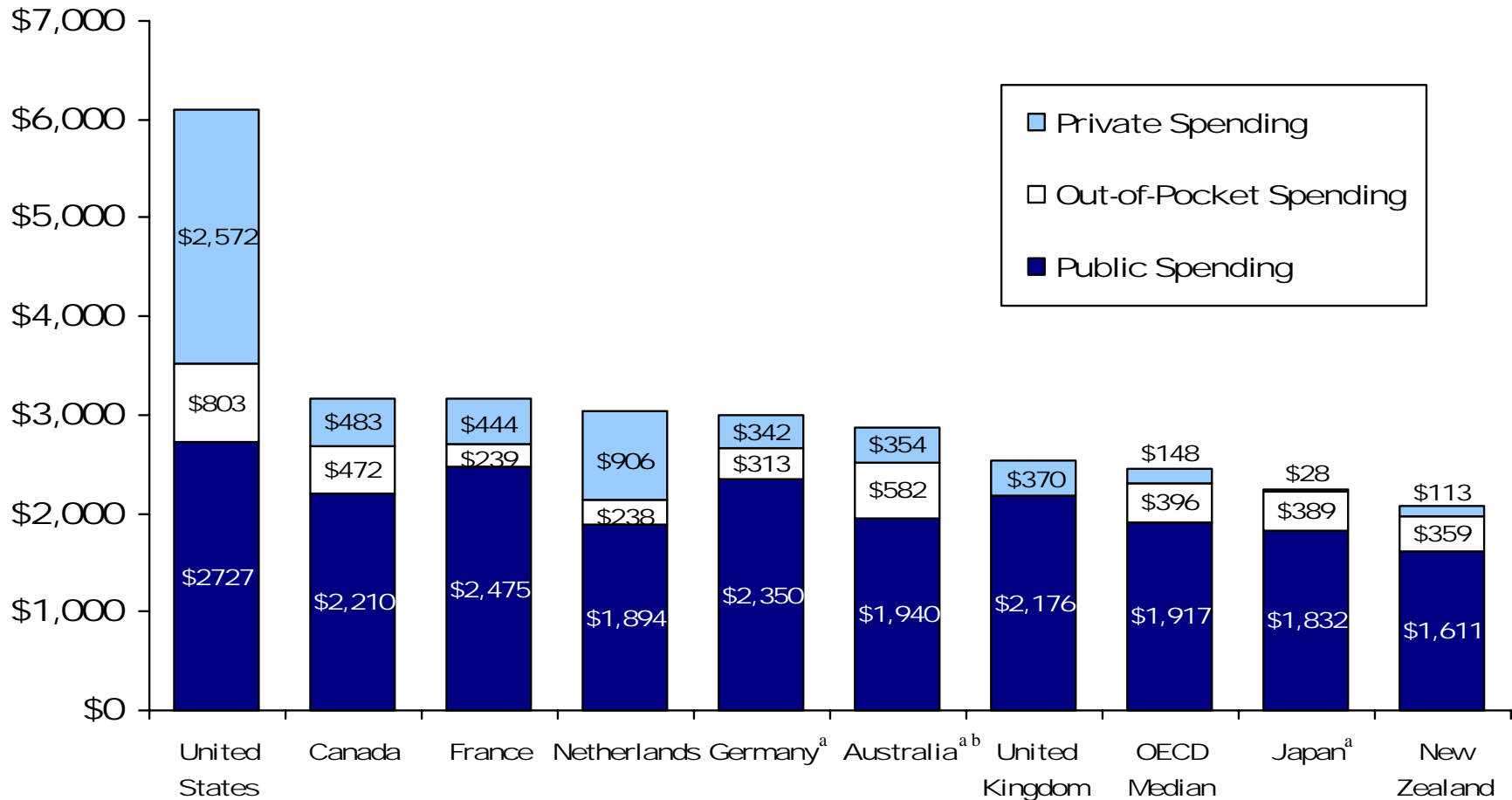
<sup>a</sup>2003

<sup>b</sup>2003 Total Health Care Spending, 2002 OOP Spending



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart II-7  
 Health Care Expenditure per Capita  
 by Source of Funding in 2004  
 Adjusted for Differences in Cost of Living



<sup>a</sup>2003

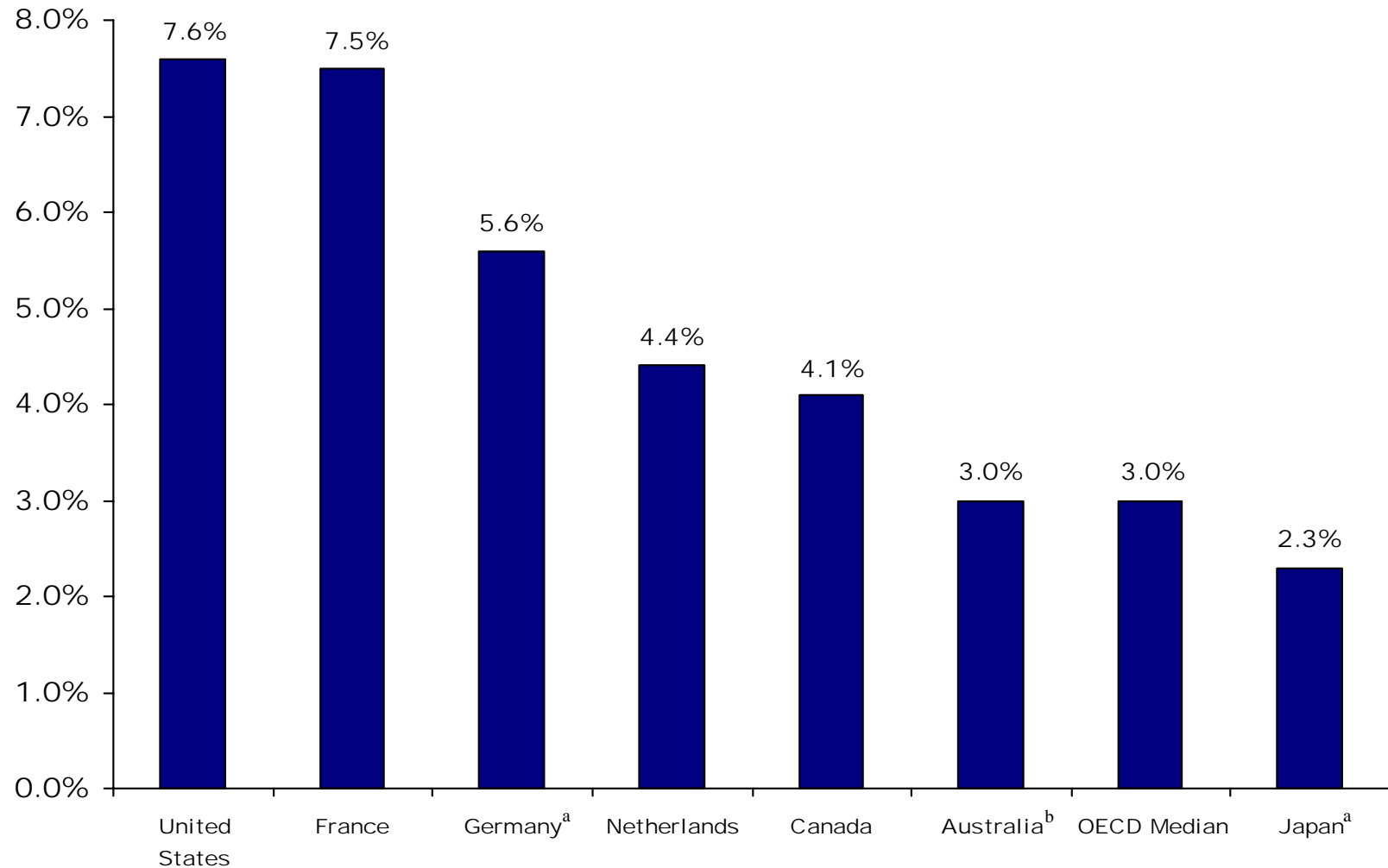
<sup>b</sup>2002 (Out-of-Pocket)



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart II-8

# Percentage of Total Health Care Spending on Health Administration and Insurance in 2004



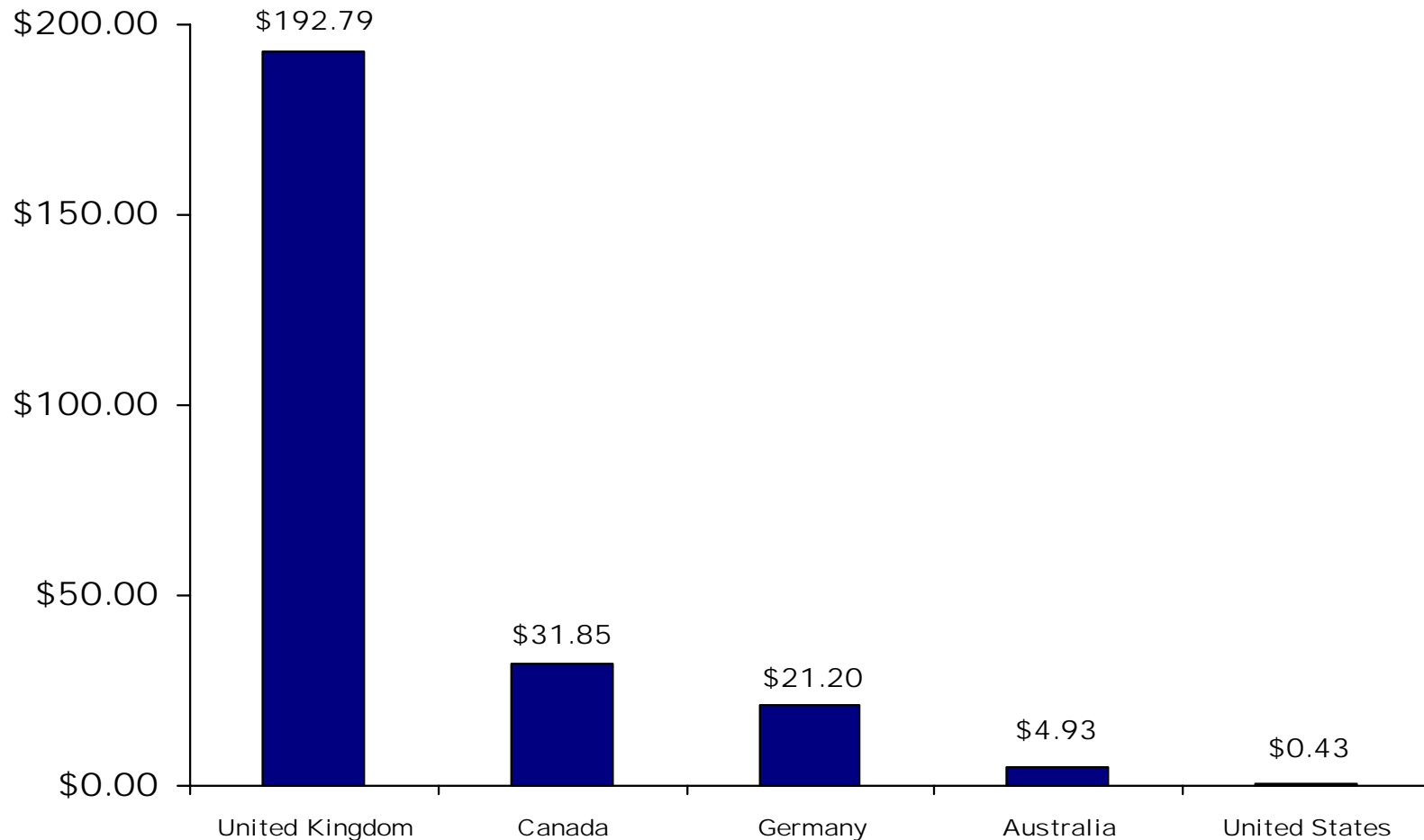
<sup>a</sup>2003  
<sup>b</sup>2002



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart II-9

# Public Investment per Capita in Health Information Technology (HIT) as of 2005



Source: The Commonwealth Fund, calculated from Anderson, G.F., Frogner, B., Johns, R.A., and Reinhardt, U. "Health Care Spending and Use of Information Technology in OECD Countries," *Health Affairs*, 2006.



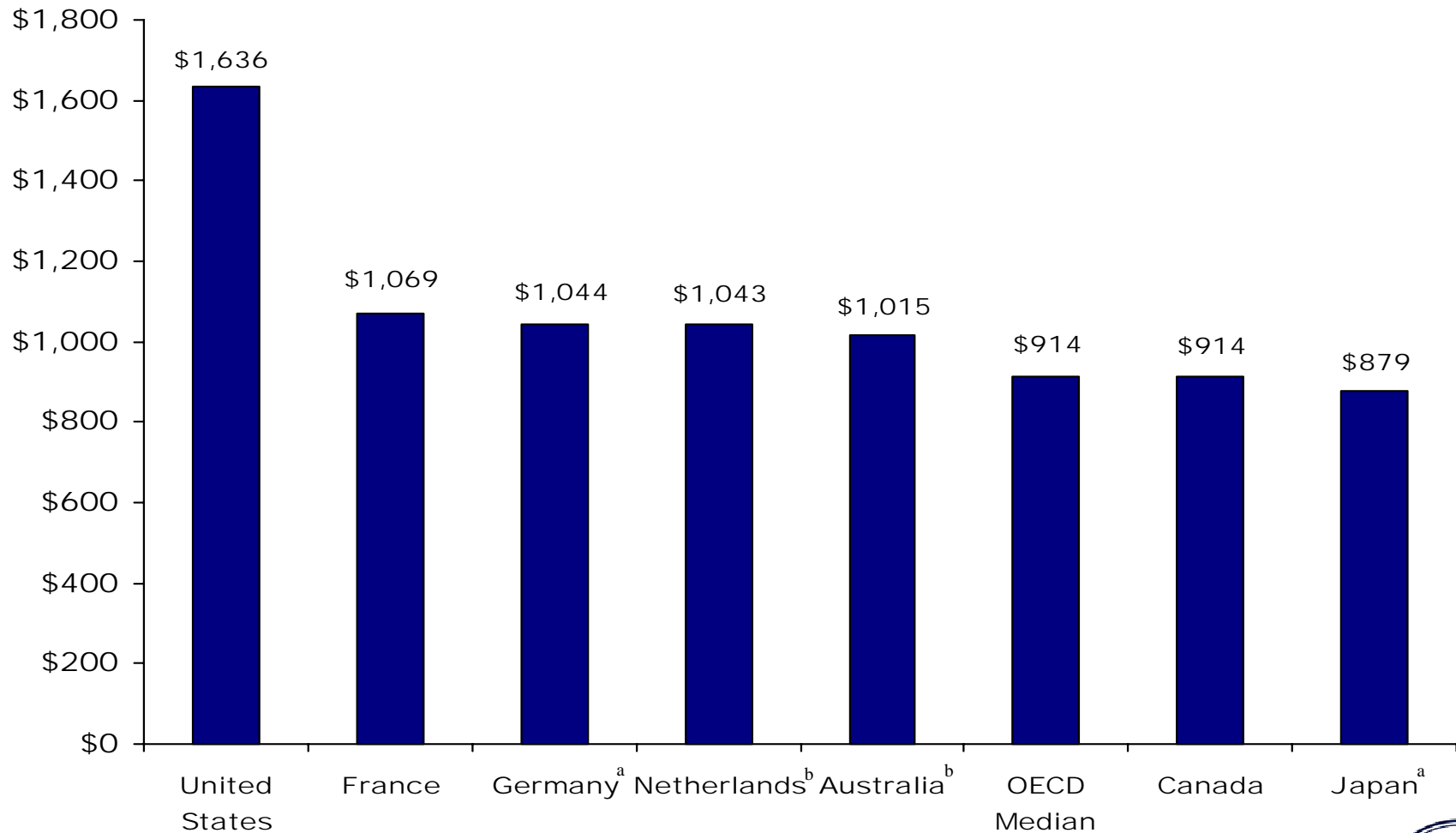
### III. Hospitals



# Chart III-1

## Inpatient Hospital Spending per Capita in 2004

Adjusted for Differences in Cost of Living



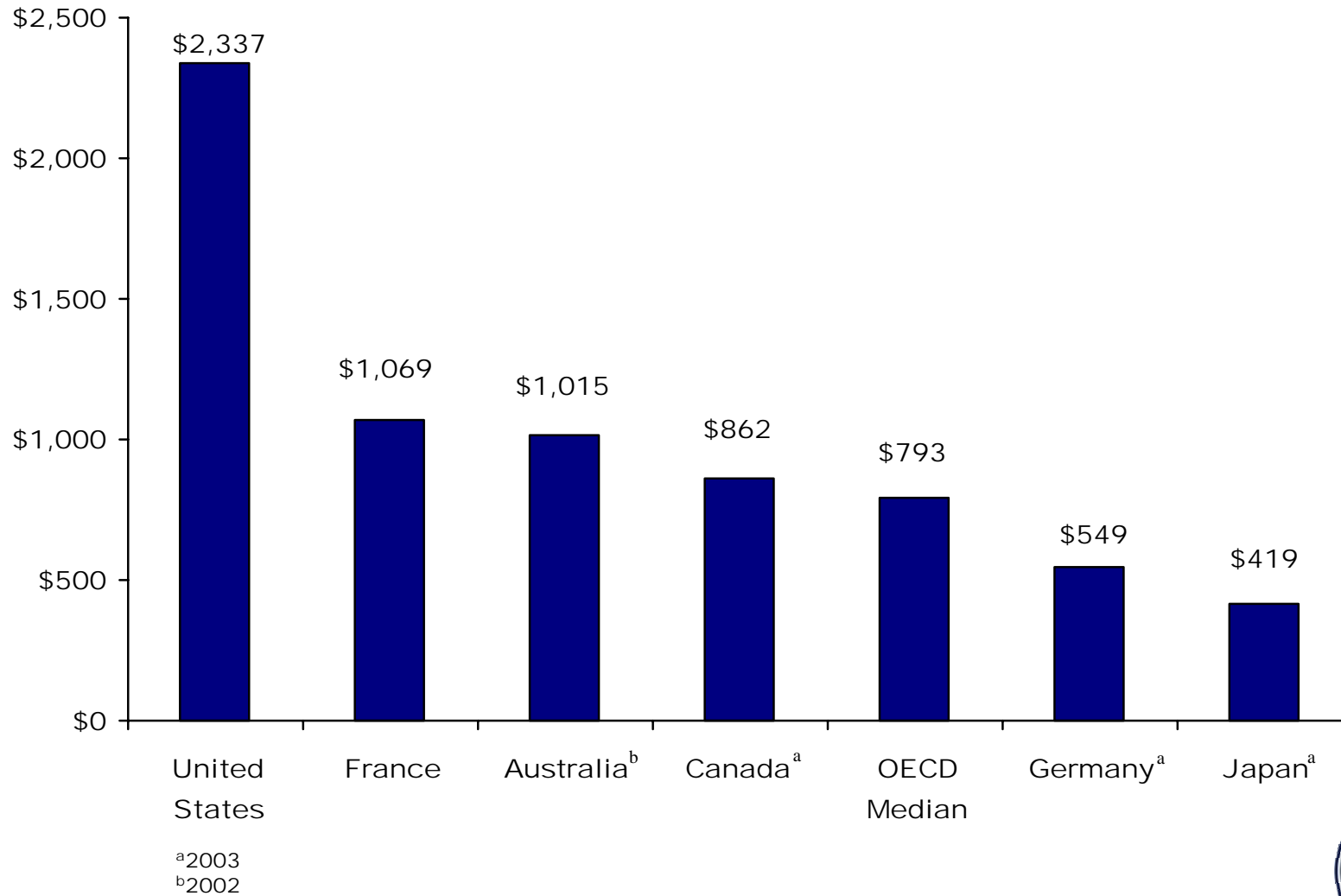
<sup>a</sup>2003  
<sup>b</sup>2002



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.



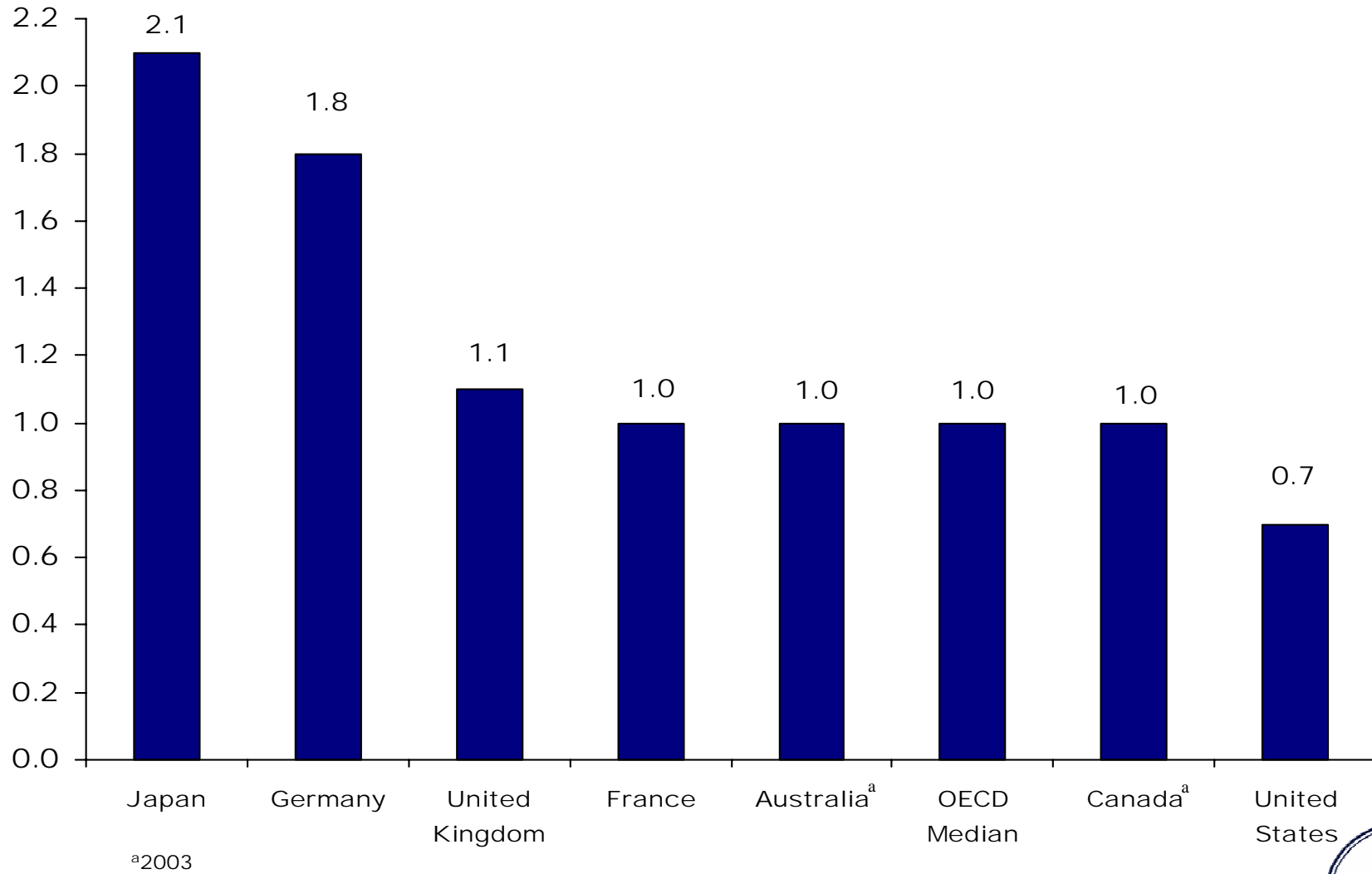
Chart III-2  
**Hospital Spending**  
 per Inpatient Acute Care Day in 2004  
 Adjusted for Differences in Cost of Living



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

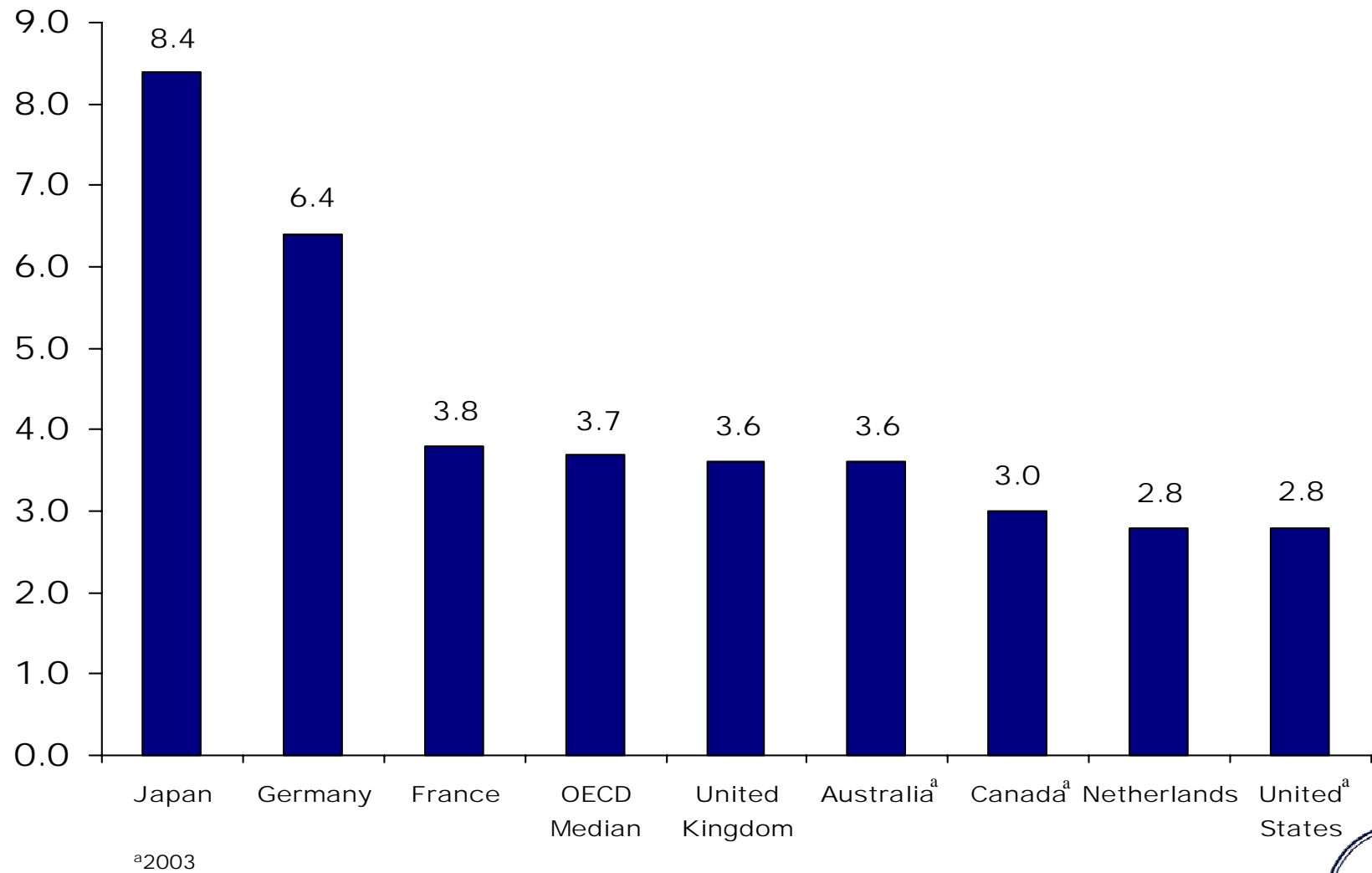


Chart III-3  
Average Annual Hospital Inpatient  
Acute Care Days per Capita in 2004



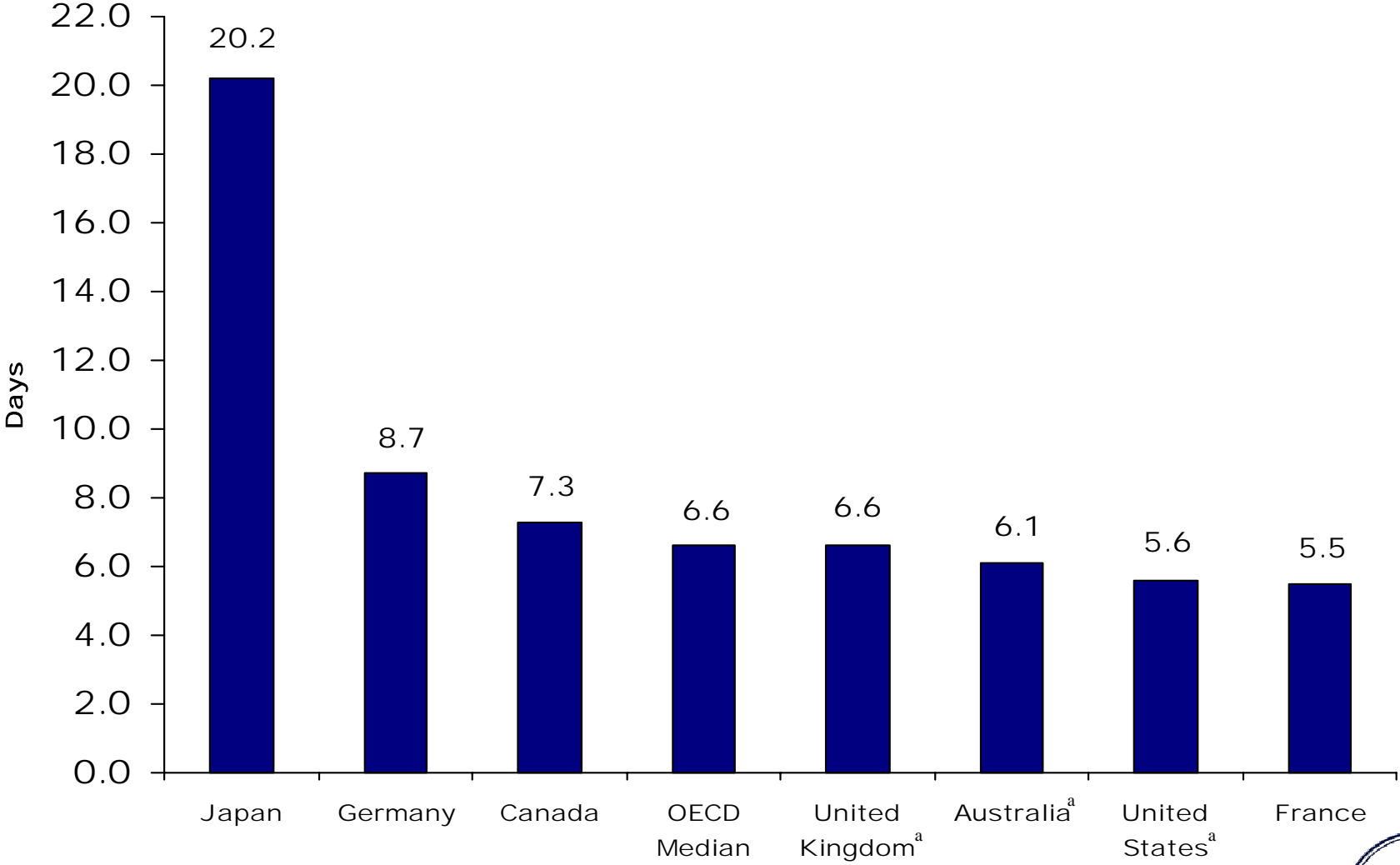
Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart III-4  
 Number of Acute Care Hospital Beds  
 per 1,000 Population in 2004



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

# Chart III-5 Average Length of Stay for Acute Care in 2004



<sup>a</sup>2003



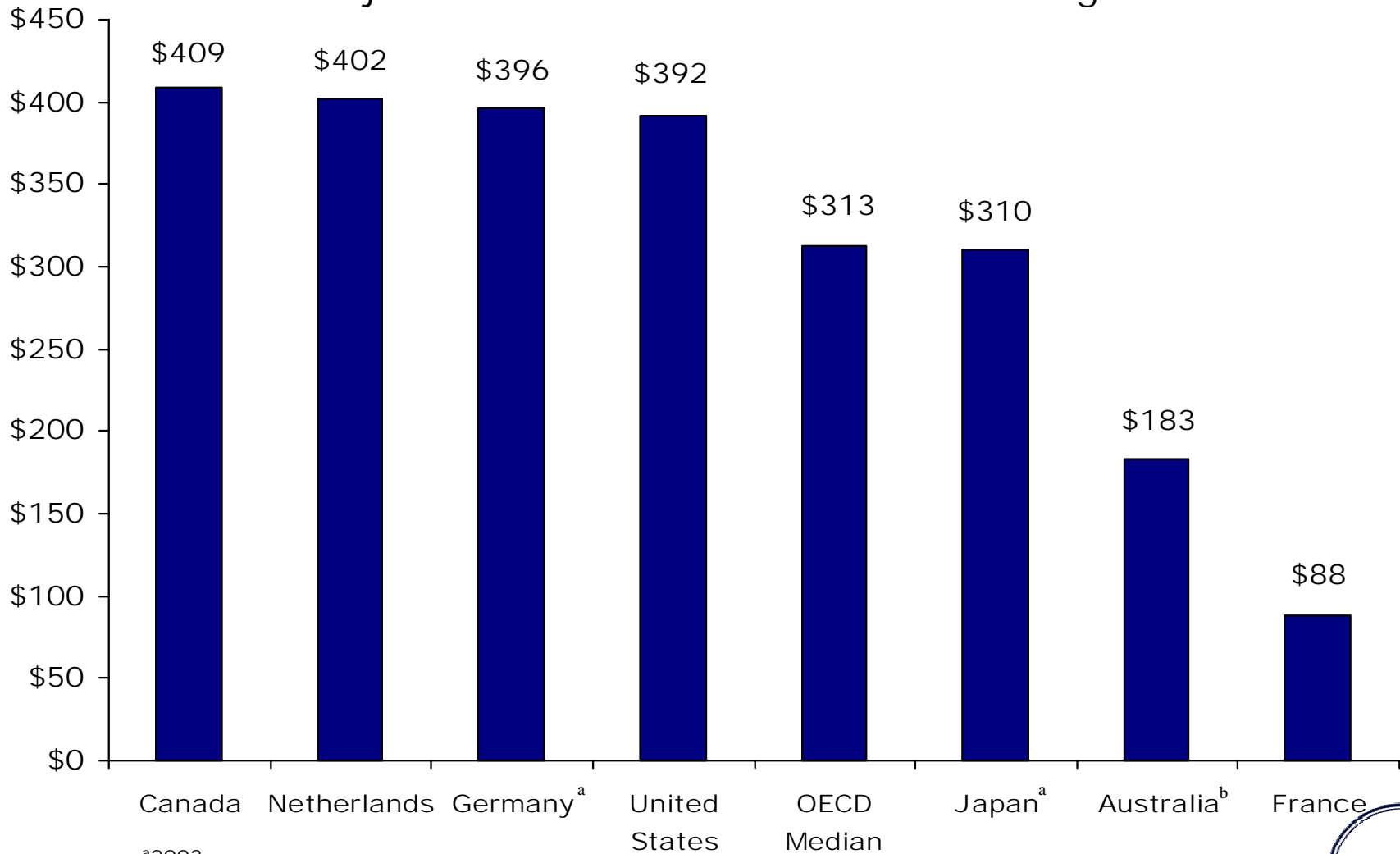
Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

## IV. Long-Term Care and Home Health Care



# Chart IV-1 Long-Term Institutional Care Spending per Capita in 2004

Adjusted for Differences in Cost of Living

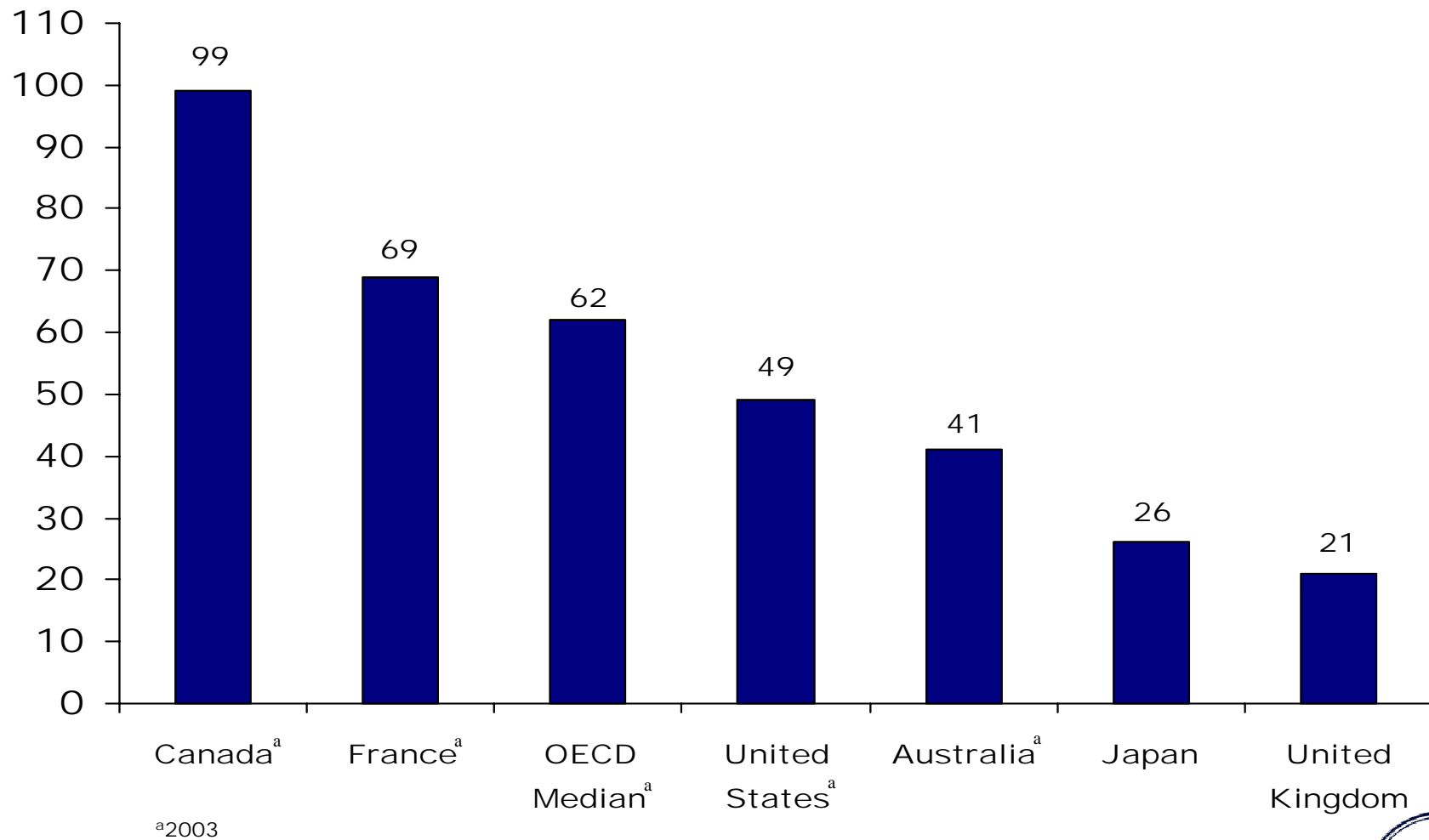


<sup>a</sup>2003  
<sup>b</sup>2002



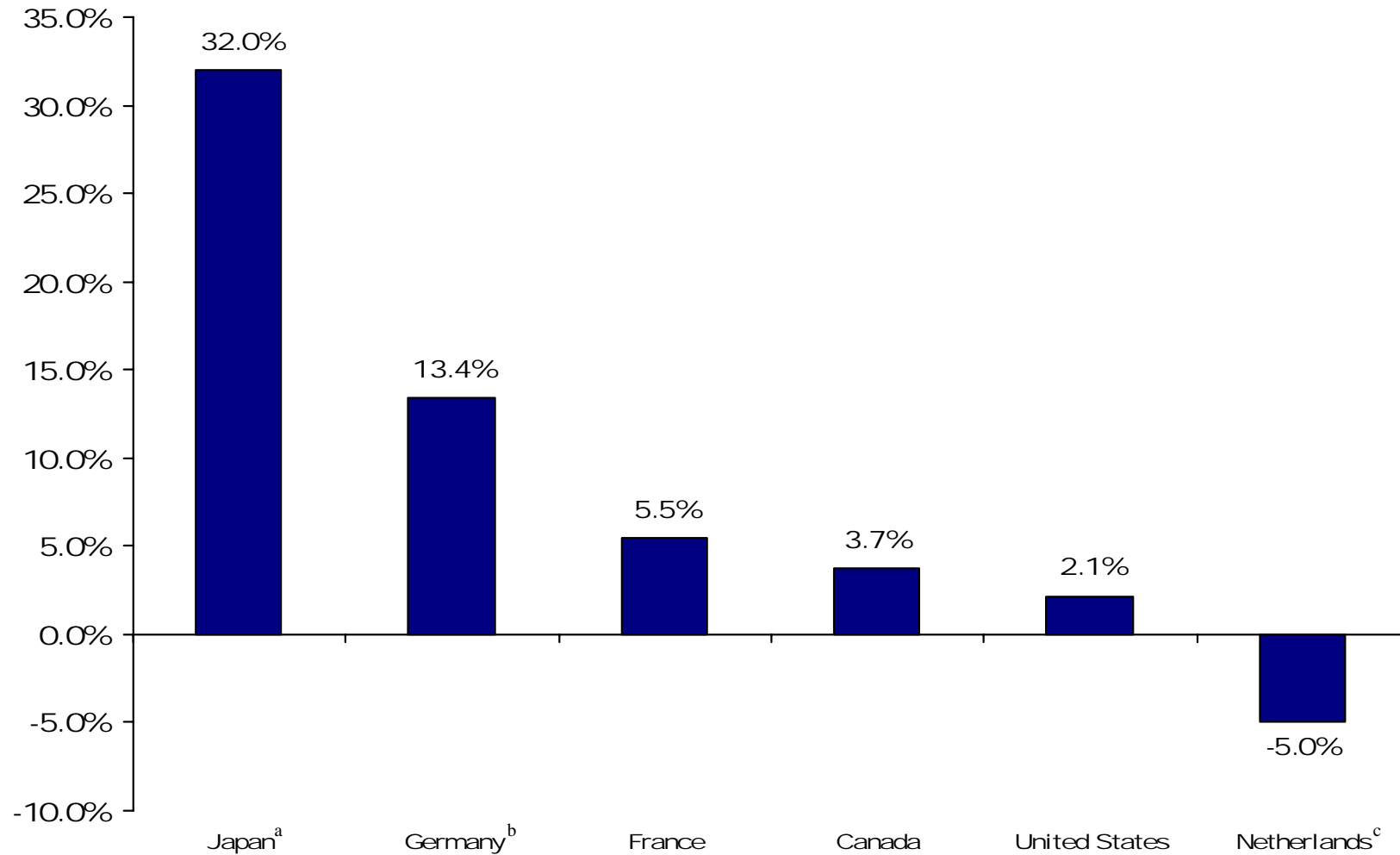
Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart IV-2  
Number of Long-Term Care Beds  
per 1,000 Population over Age 65 in 2004



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

# Chart IV-3 Average Annual Growth Rate of Home Health Care Spending per Capita, 1994-2004



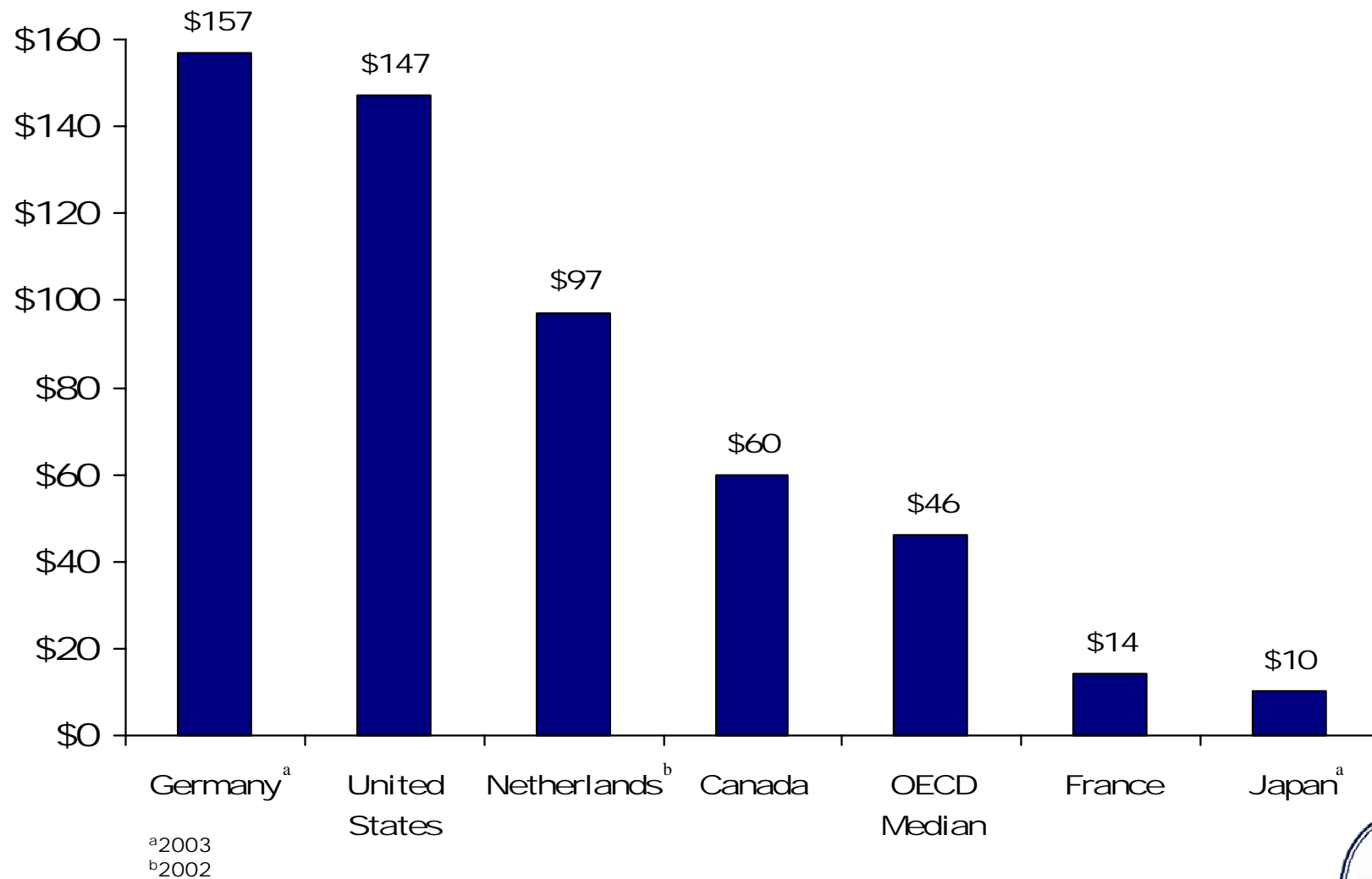
<sup>a</sup>1995-2003 <sup>b</sup>1994-2003 <sup>c</sup>1994-2002

Source: The Commonwealth Fund, calculated from OECD Health Data 2006.





Chart IV-4  
Home Health Care Spending per Capita in 2004  
Adjusted for Differences in Cost of Living



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

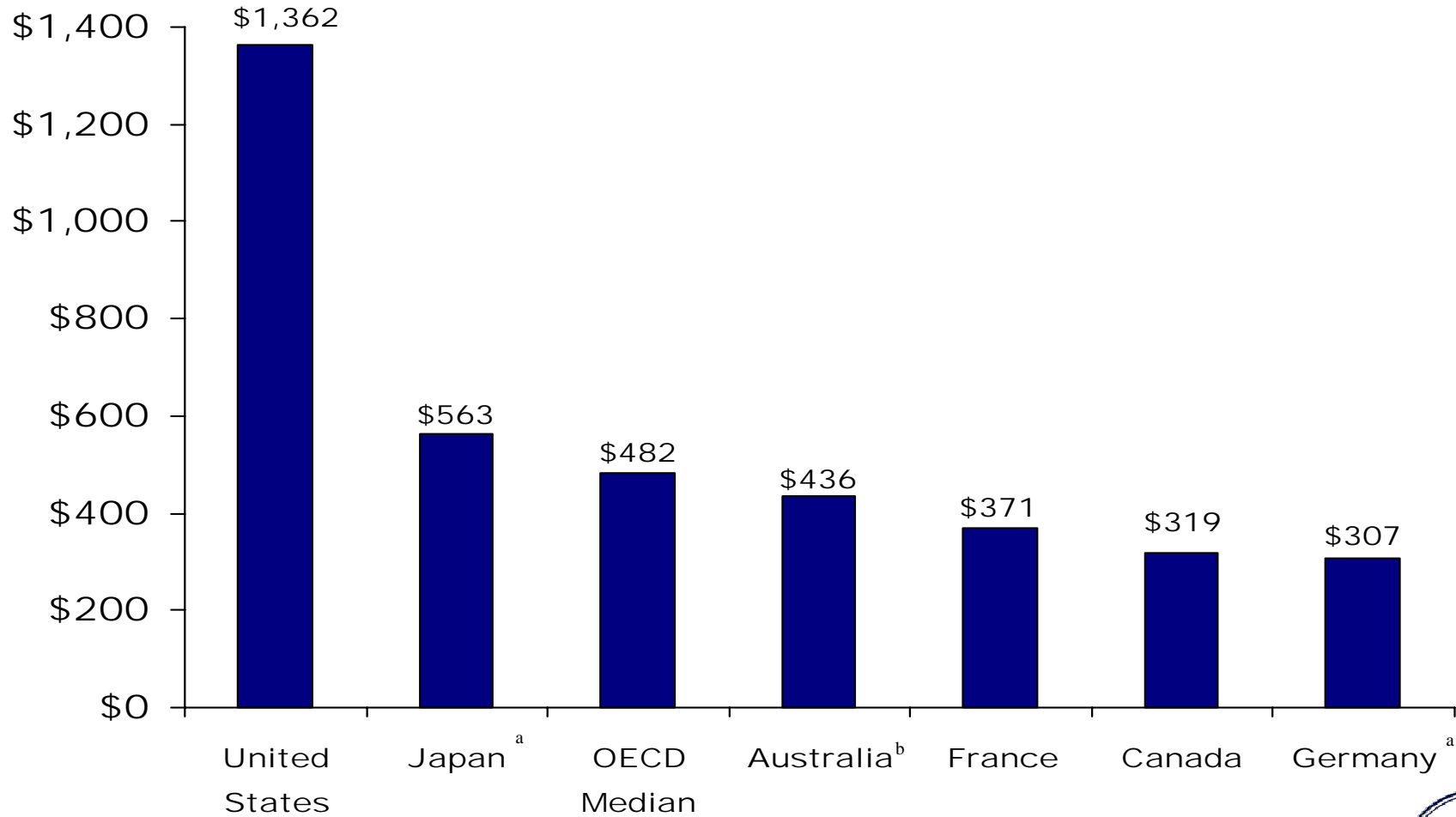
## V. Physicians



Chart V-1

# Spending on Physician Services per Capita in 2004

Adjusted for Differences in Cost of Living



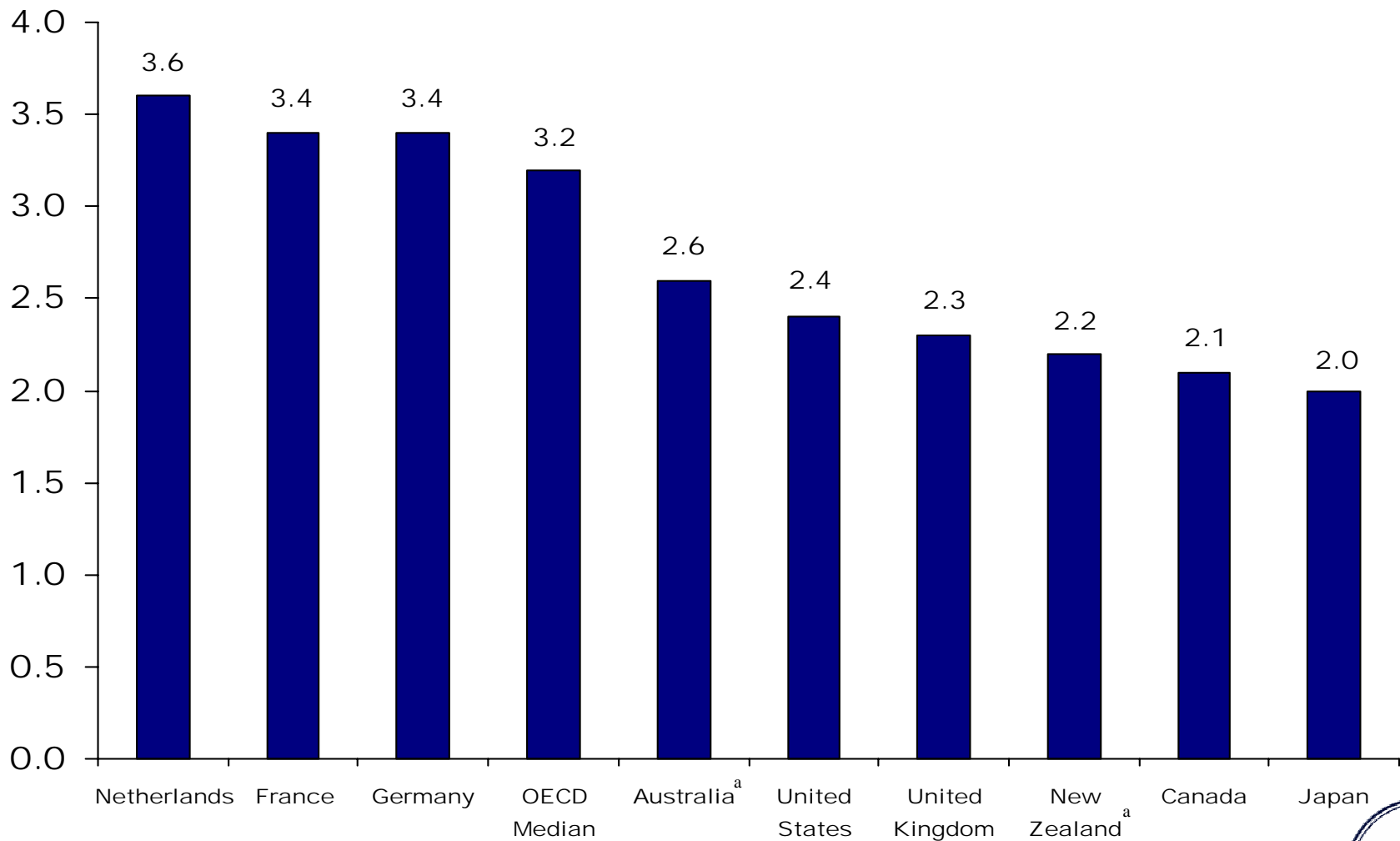
<sup>a</sup>2003

<sup>b</sup>2002



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart V-2  
Number of Practicing Physicians  
per 1,000 Population in 2004



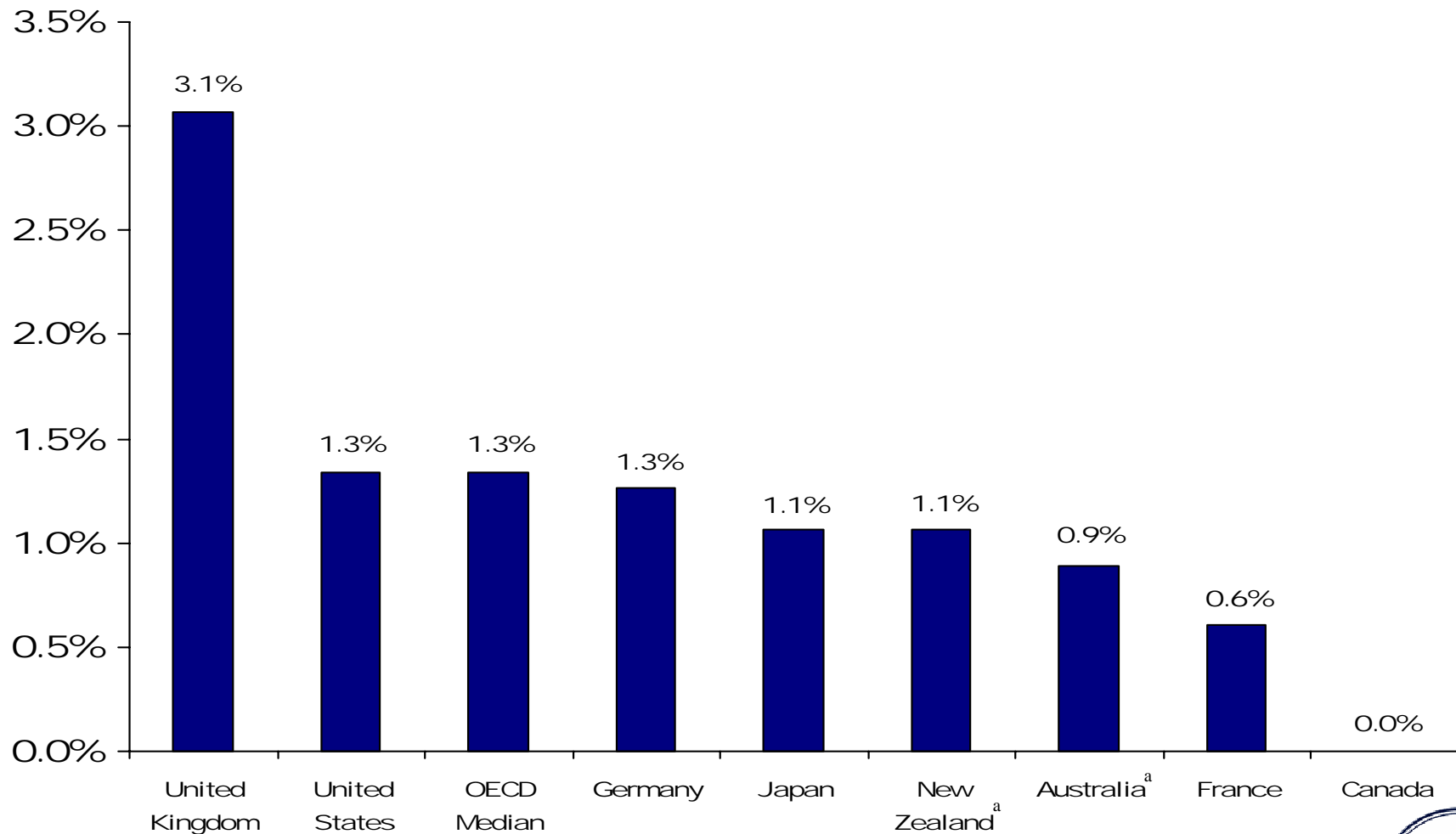
<sup>a</sup>2003



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart V-3

# Average Annual Growth Rate of Practicing Physicians per 1,000 Population, 1994–2004

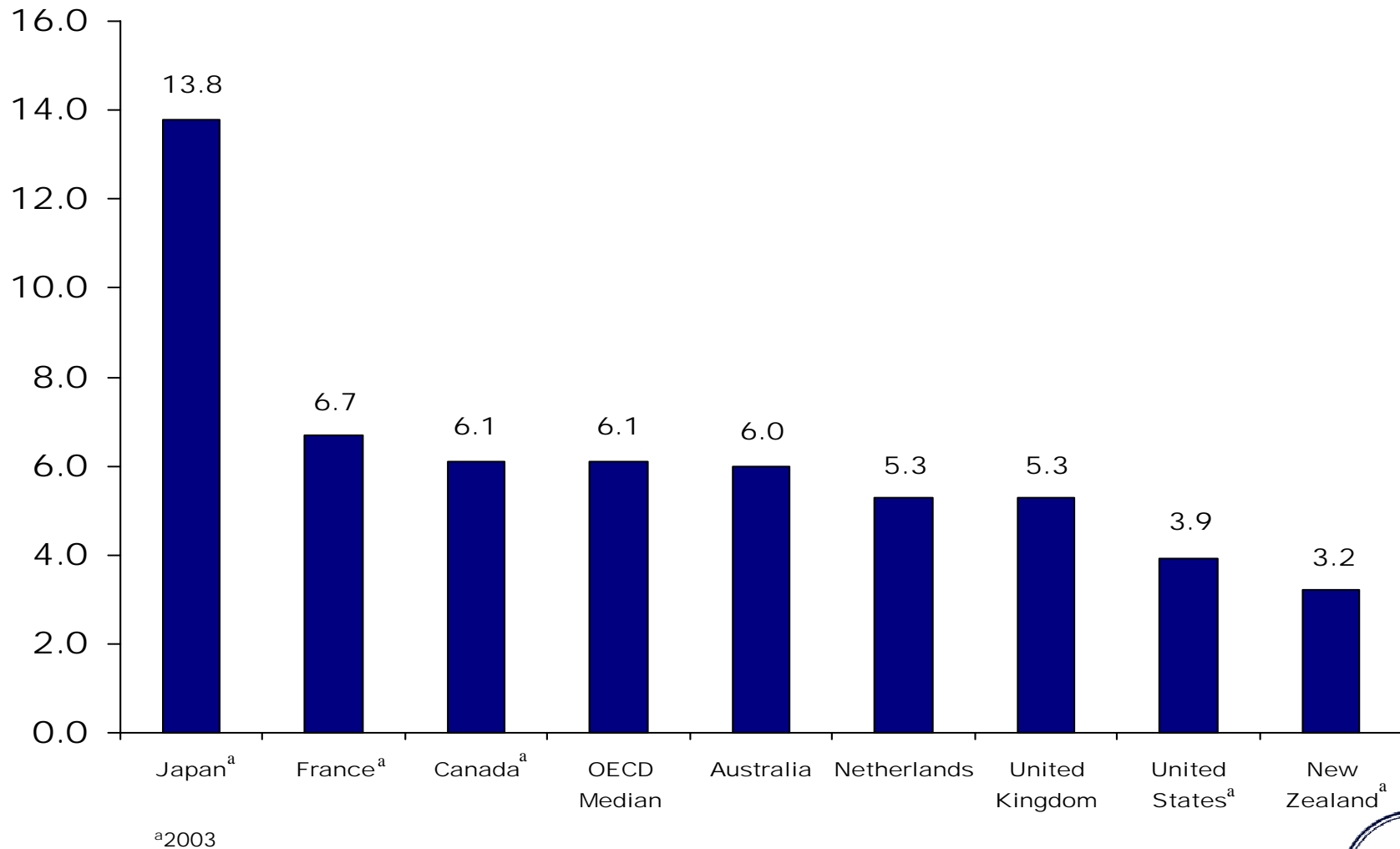


<sup>a</sup>1994–2003



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart V-4  
Average Annual Number of Physician Visits  
per Capita in 2004



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

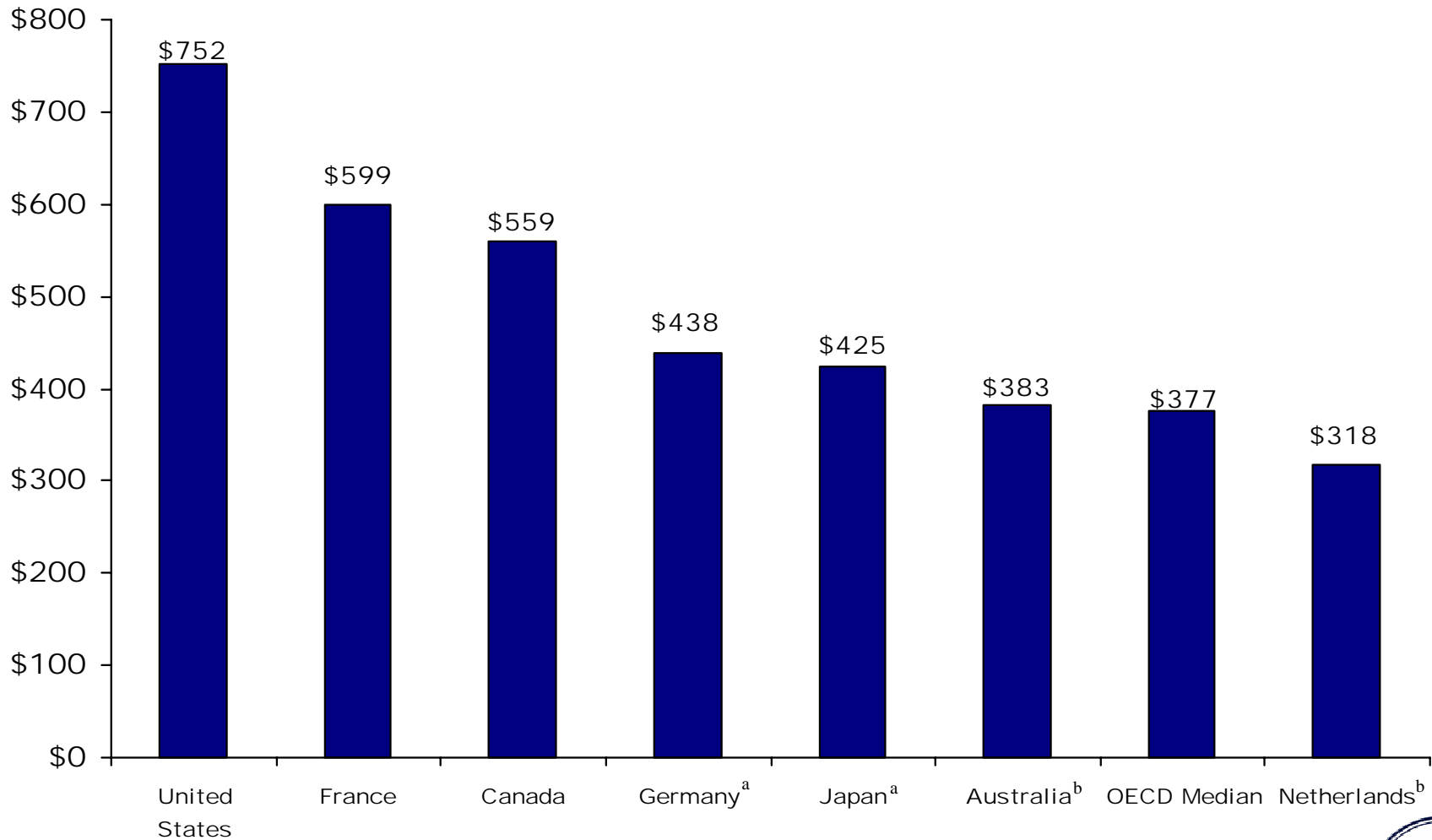
## VI. Pharmaceuticals and Immunizations



# Chart VI-1

## Pharmaceutical Spending per Capita in 2004

Adjusted for Differences in Cost of Living



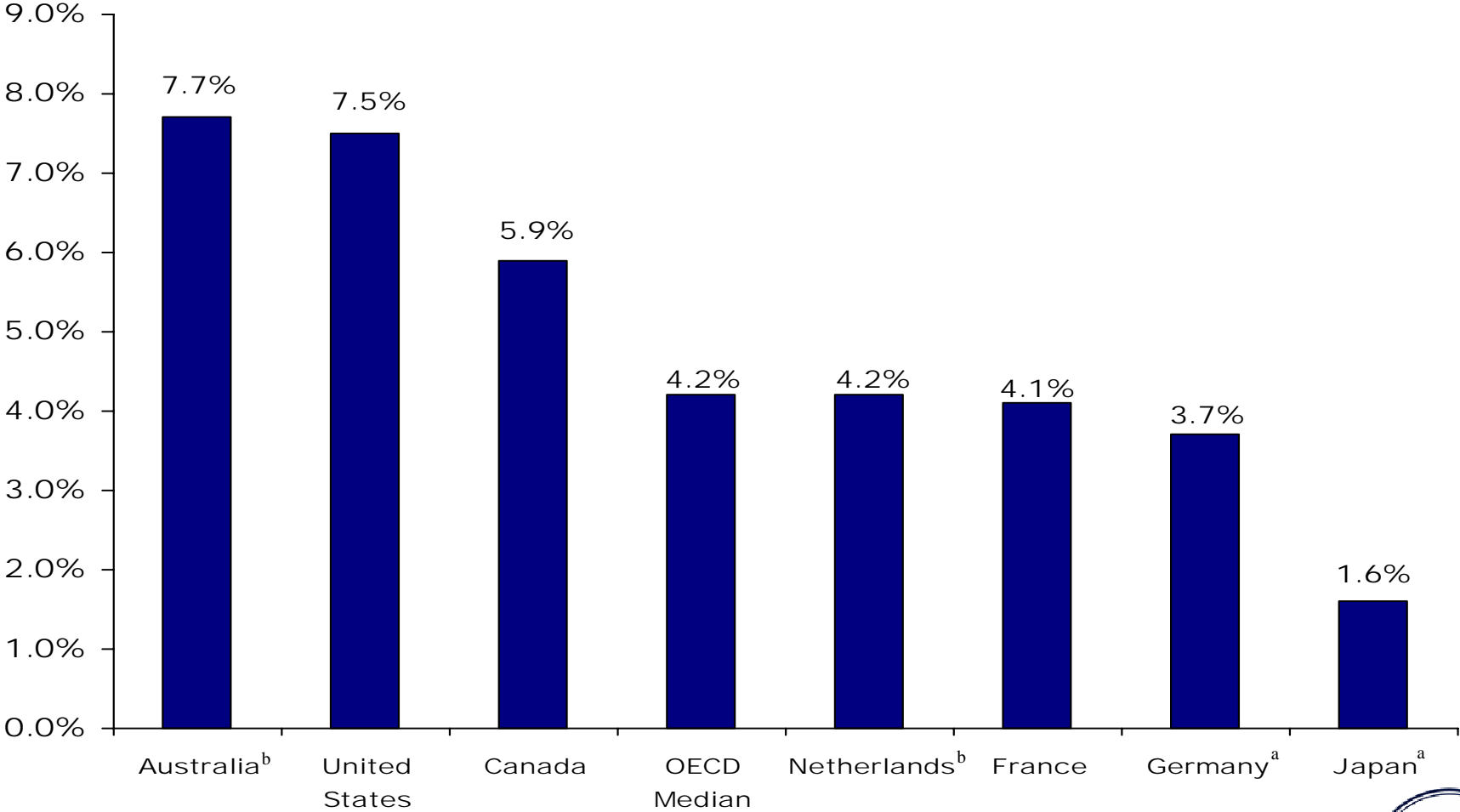
<sup>a</sup>2003  
<sup>b</sup>2002



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.



# Chart VI-2 Average Annual Growth Rate of Real Spending per Capita on Pharmaceuticals, 1994–2004

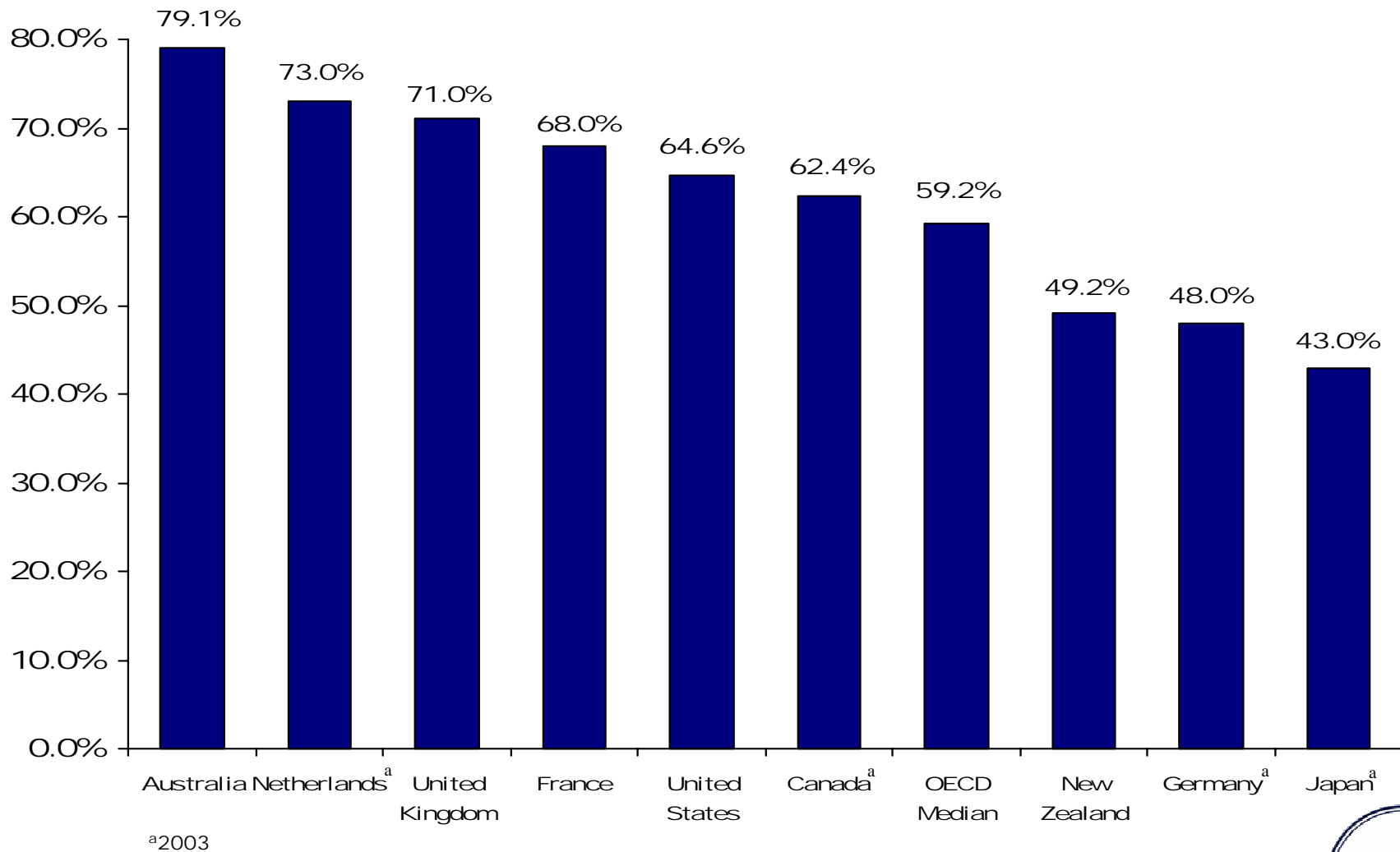


<sup>a</sup>1994–2003  
<sup>b</sup>1994–2002



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart VI-3  
 Percentage of Population over Age 65  
 with Influenza Immunization in 2004

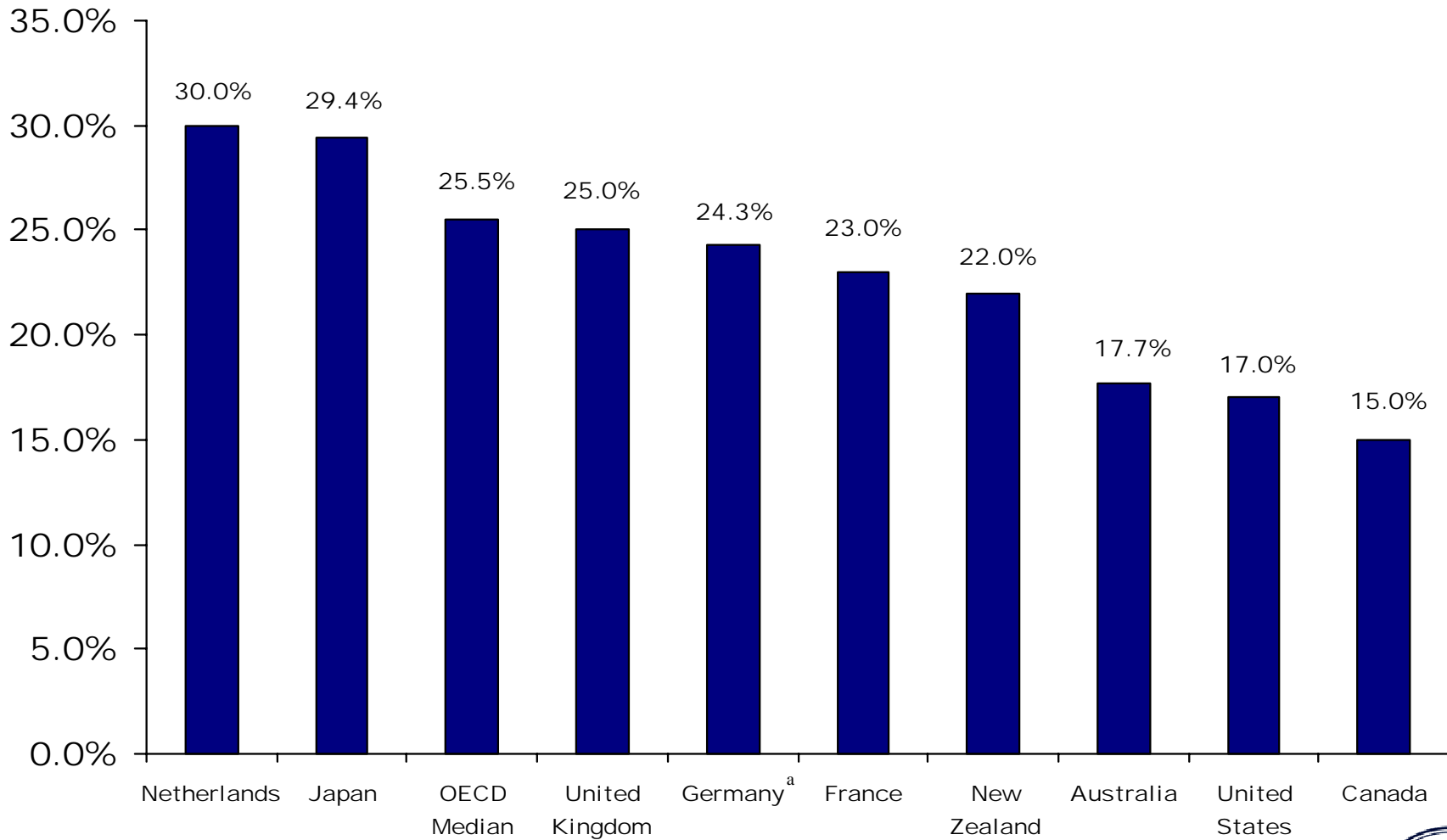


Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

## VII. Non-Medical Determinants of Health



# Chart VII-1 Percentage of Adults Who Reported Being Daily Smokers in 2004

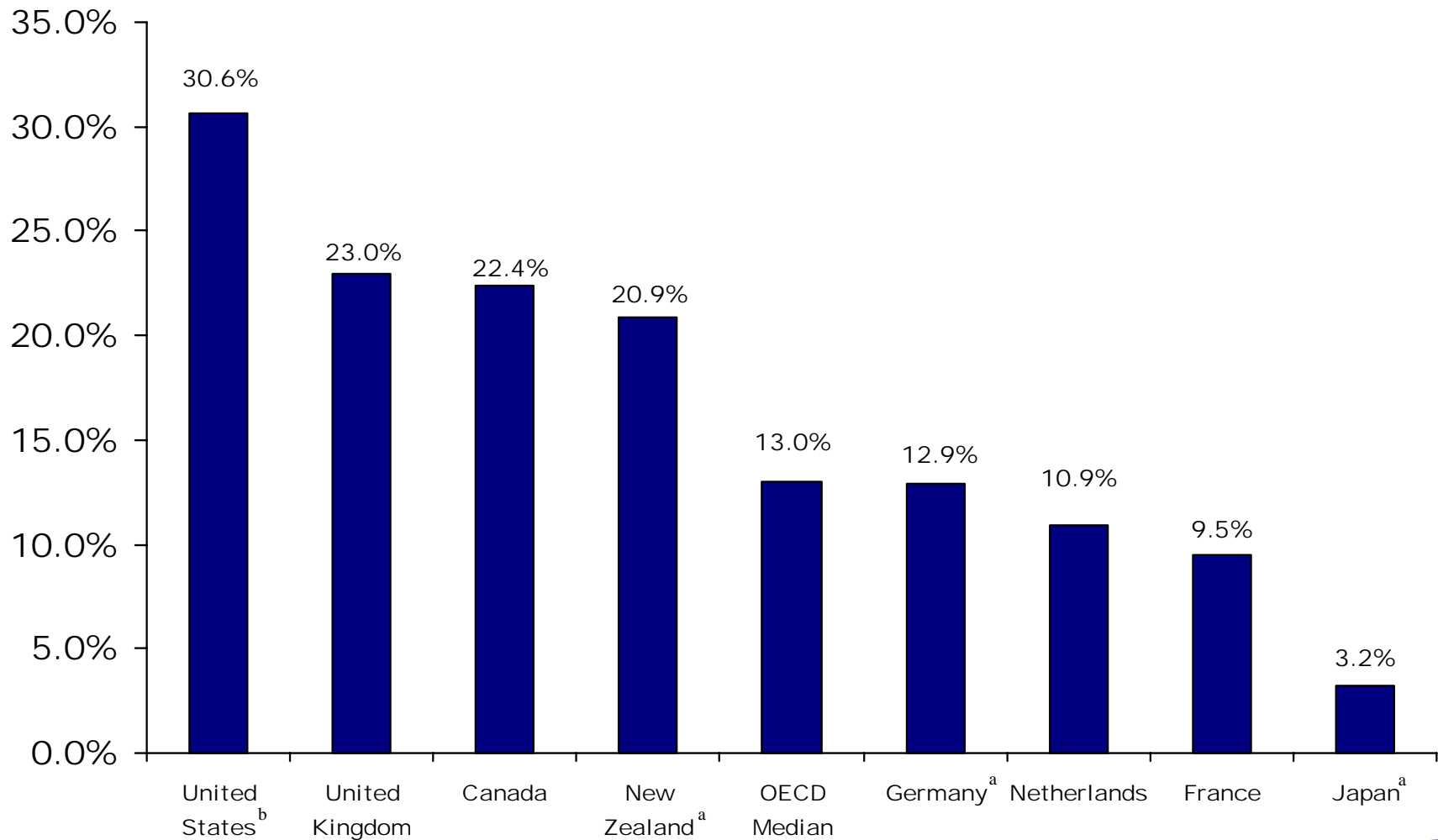


<sup>a</sup>2003



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart VII-2  
Obesity (BMI > 30) Prevalence in 2004



<sup>a</sup>2003  
<sup>b</sup>2002

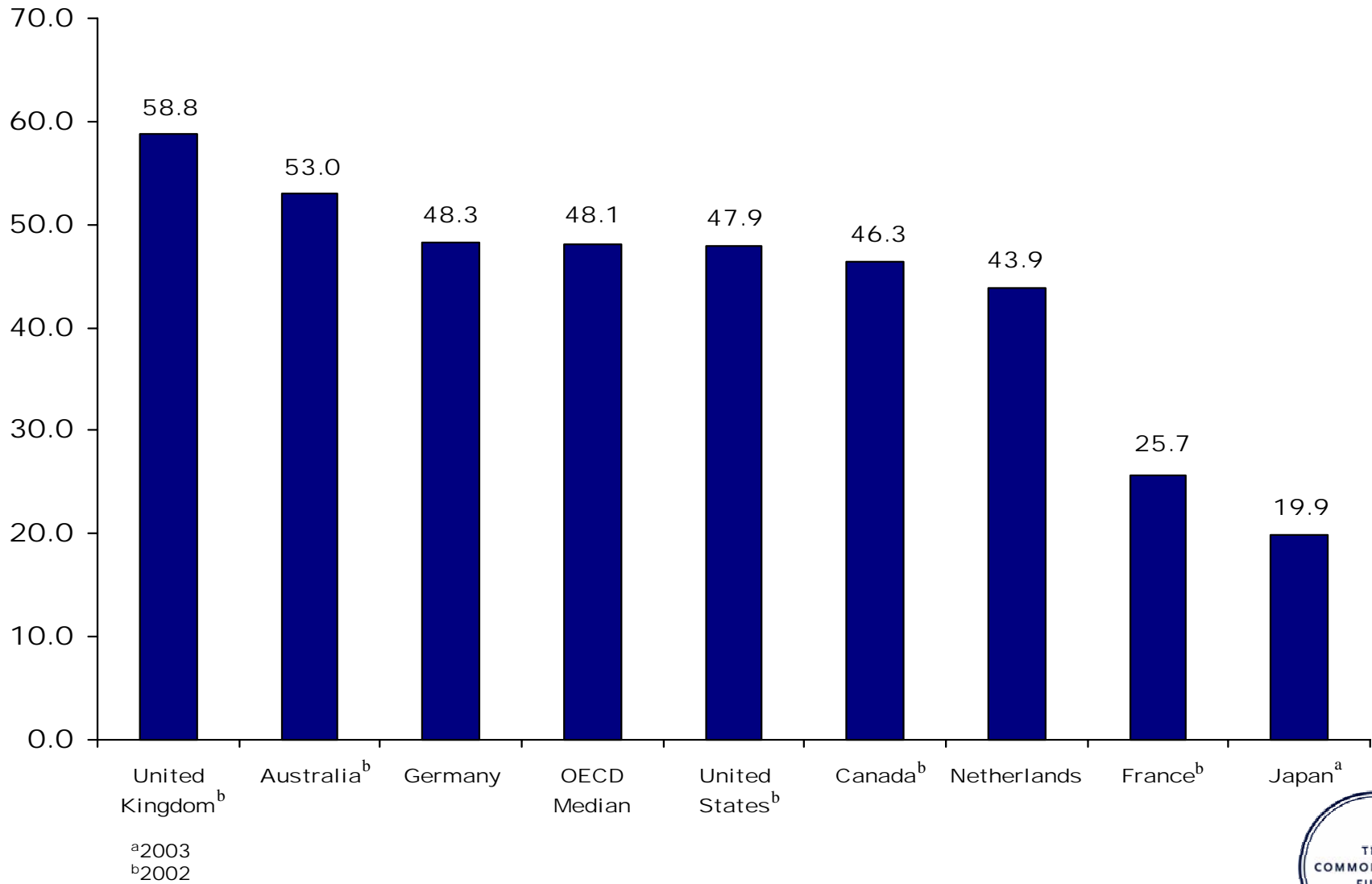


Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

## VIII. Disease-Specific Mortality

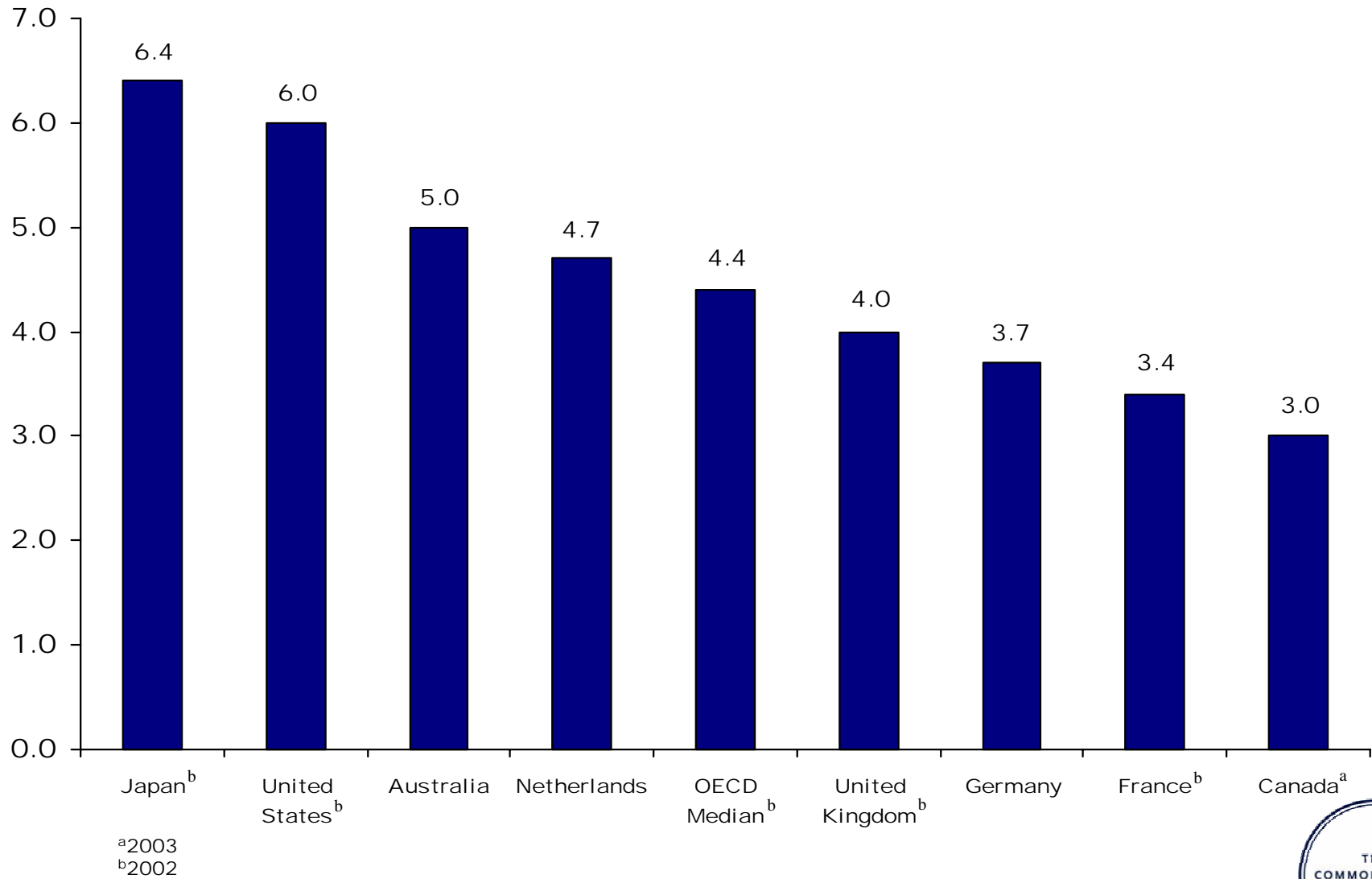


# Chart VIII-1 Acute Myocardial Infarction Deaths per 100,000 Population



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

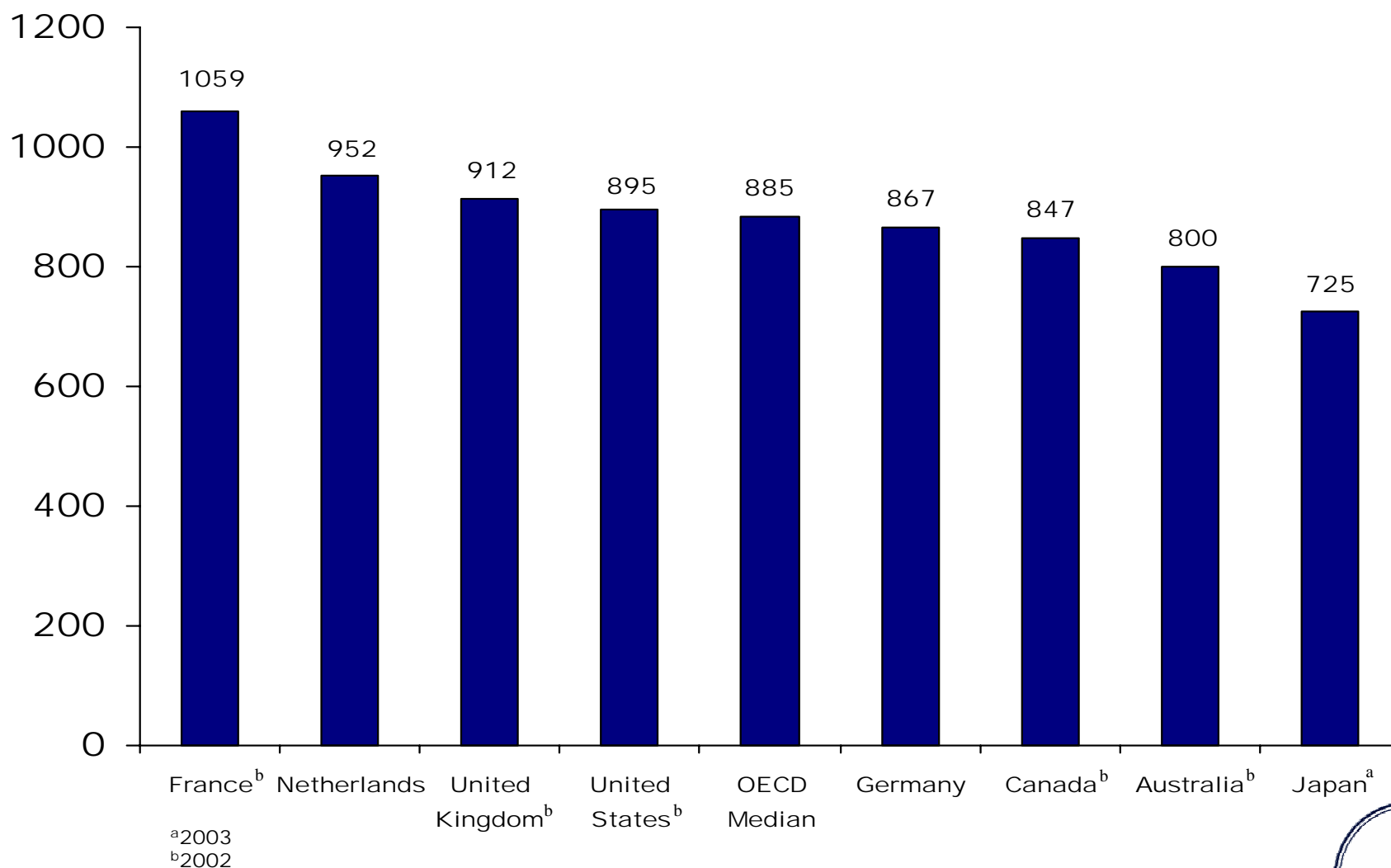
# Chart VIII-2 Bronchitis, Asthma, and Emphysema Deaths per 100,000 Population



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.



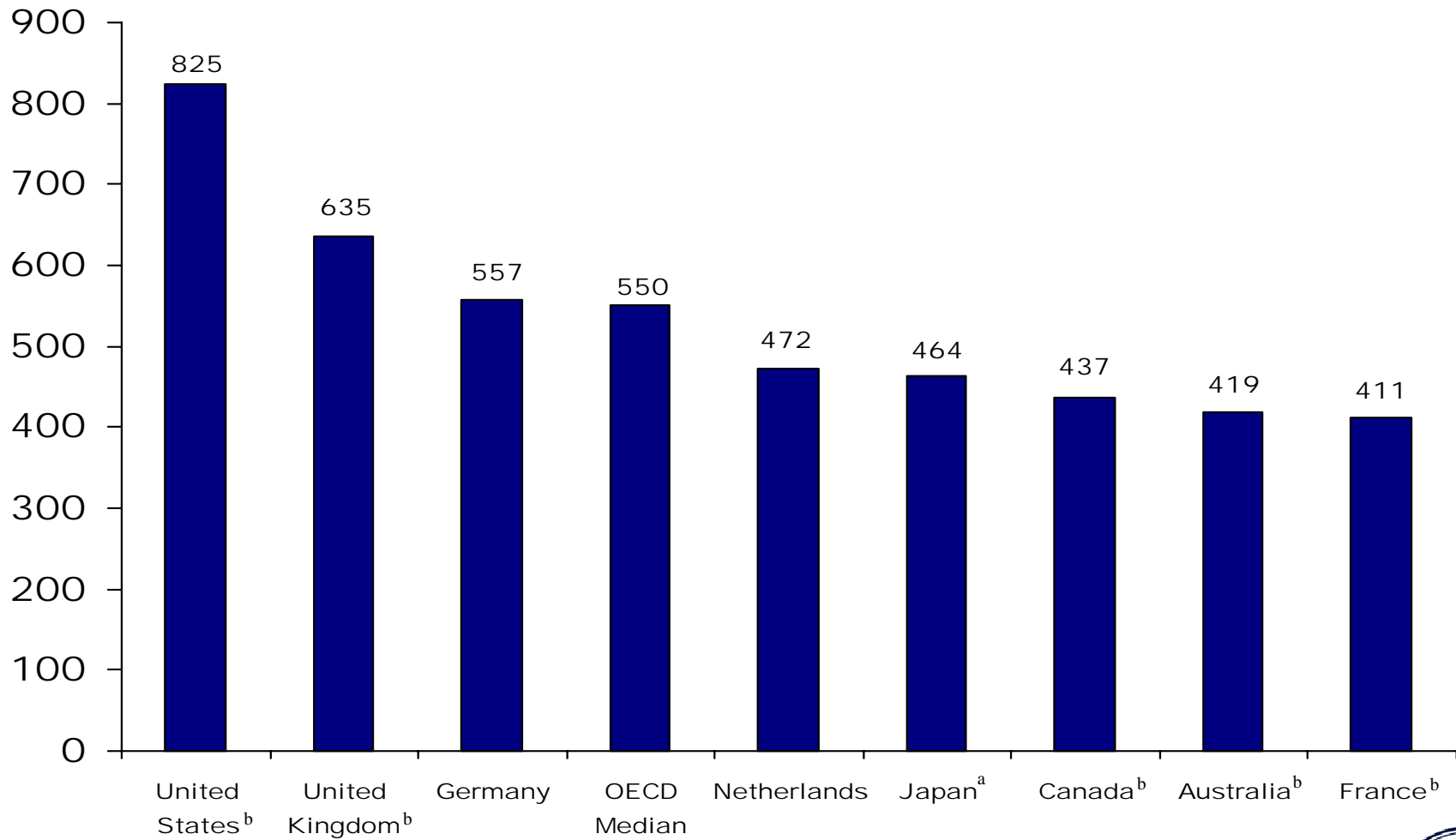
# Chart VIII-3 Potential Years of Life Lost Due to Malignant Neoplasms per 100,000 Population in 2004



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

Chart VIII-4

# Potential Years of Life Lost Due to Diseases of the Circulatory System per 100,000 Population in 2004

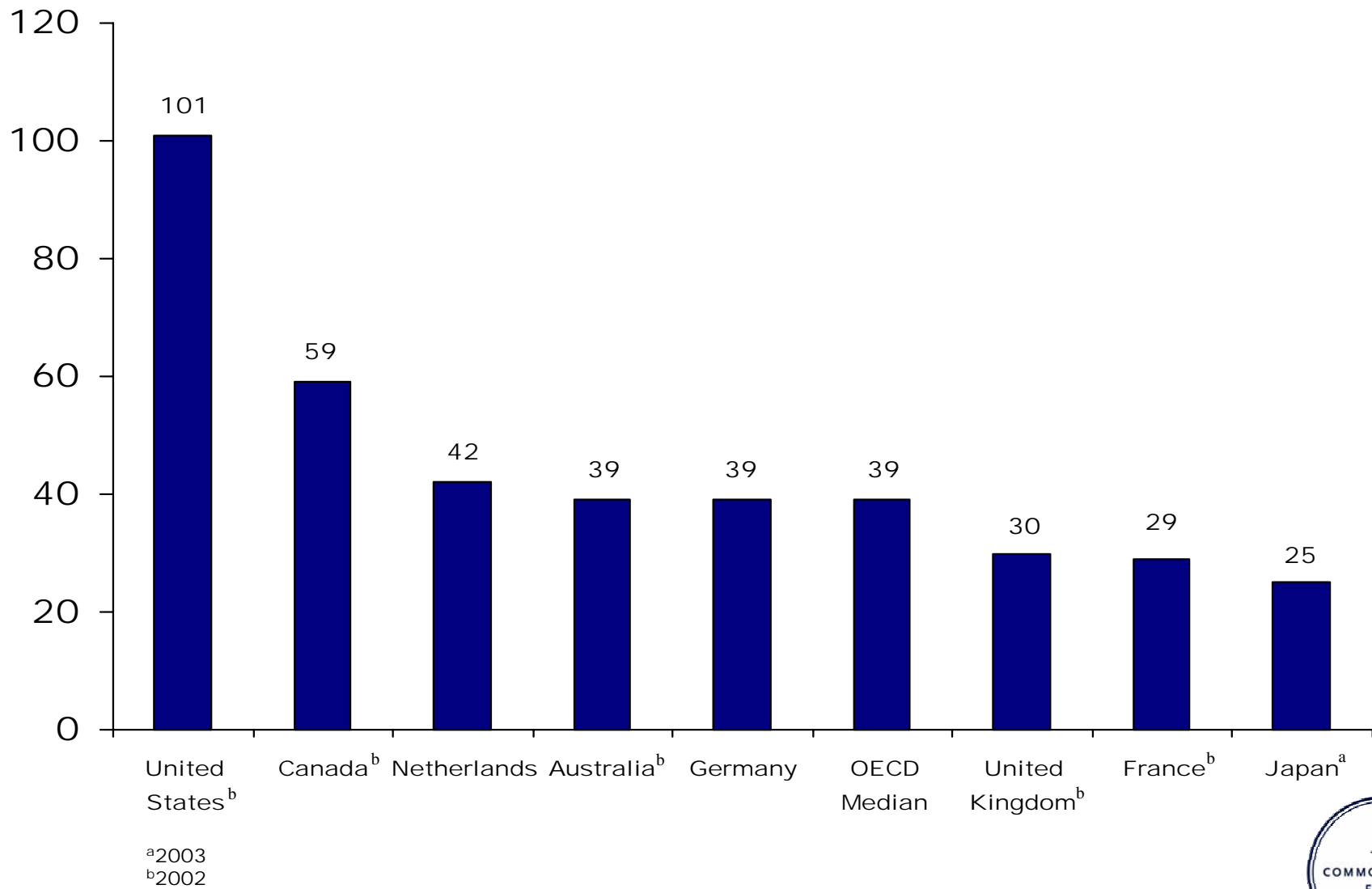


<sup>a</sup>2003  
<sup>b</sup>2002



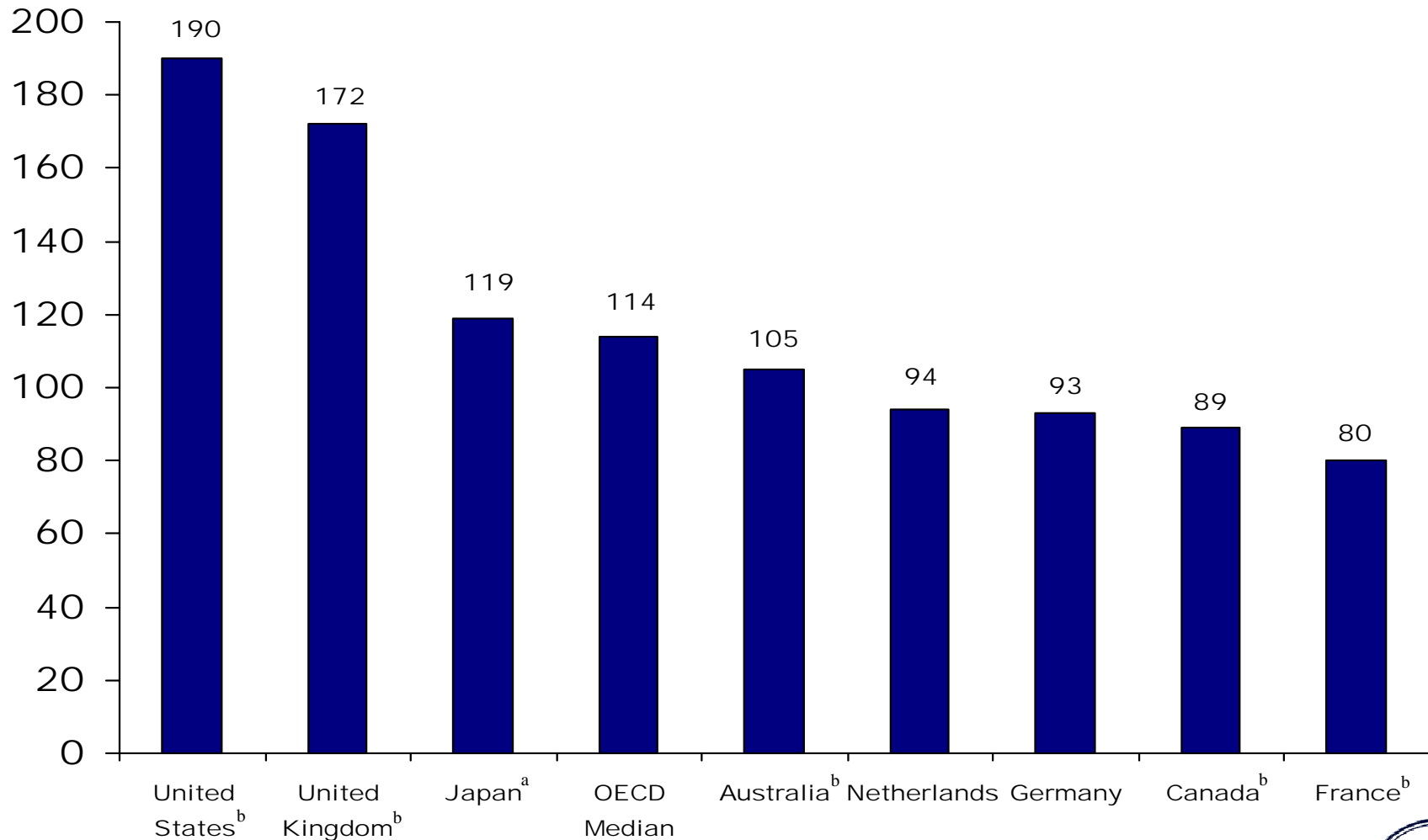
Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

# Chart VIII-5 Potential Years of Life Lost Due to Diabetes per 100,000 Population in 2004



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

# Chart VIII-6 Potential Years of Life Lost Due to Diseases of the Respiratory System in 2004

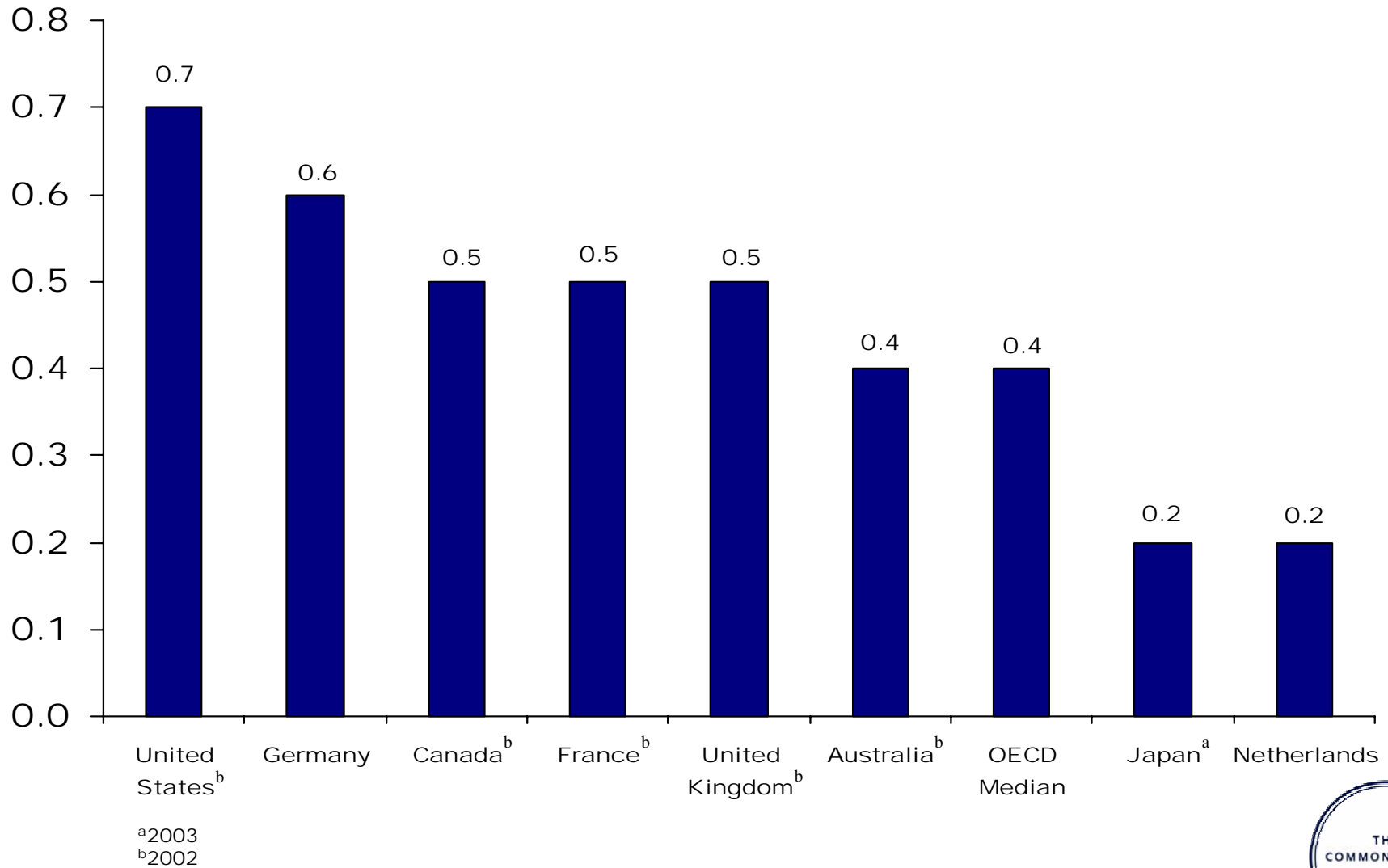


<sup>a</sup>2003  
<sup>b</sup>2002



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.

# Chart VIII-7 Deaths Due to Surgical or Medical Mishaps per 100,000 Population in 2004



Source: The Commonwealth Fund, calculated from OECD Health Data 2006.



# Country Profiles

# The Australian Health Care System

## Who is covered?

- Australia's public health insurance scheme, Medicare, provides universal coverage for citizens, permanent residents, and visitors from countries that have reciprocal arrangements with Australia.

## What is covered?

- Services: Free or subsidised access to most medical services; inpatient and outpatient hospital care; physician services; some allied health services for the chronically ill; inpatient and outpatient drugs; specified optometric and dental surgery services; mental health care; and rehabilitation. Free choice of general practitioner.
- Cost-sharing: Medicare reimburses 75% of the scheduled fee for private inpatient services and 85%–100% of ambulatory services. Doctors are free to charge above the scheduled fee, or they can treat patients for the cost of the subsidy and bill the Government directly with no patient charge (referred to as bulk billing). There is a bulk-billing incentive scheme and almost 75% of medical services are bulk-billed. Prescription pharmaceuticals have a patient copayment. Out-of-pocket payments account for 20.2% of total health expenditure.
- Safety nets: A Medicare safety net for non-inpatient services, and a separate pharmaceutical safety net, protect against high out-of-pocket costs.

## How are revenues generated?

- National Health Insurance (Medicare): Compulsory national health insurance administered by the Australian (federal) Government. National health insurance is funded by a mixture of general tax revenue, a 1.5% levy on taxable income (which accounts for 17.3% of federal outlays on health) and fees paid by patients. Additionally, a Medicare Levy Surcharge applies to high-income individuals without private health insurance for hospital coverage. Government funds almost 70% of total health expenditures (46% federal and 22% state/local).

- Private Insurance: The Australian Government actively encourages private insurance to cover some or all of the costs of services provided in the private health care sector. Mainly not-for-profit mutual insurers cover the gap between Medicare benefits and schedule fees for inpatient services. Doctors may bill above the scheduled fee. Private insurers also cover private hospital accommodation. Having private health insurance allows people to choose their preferred physician for hospital treatment.
- Private insurance covers 49.6% of the population (43% have hospital cover with nearly all of these also having ancillary cover). Expenditure by private health insurance funds accounts for 7.1% of total health expenditure. Through a rebate, 30% of private health insurance premiums are paid by the Australian Government. The rebate increases to 35% for people aged 65 to 69 years, and to 40% for those aged 70 years and over. The Government has introduced the Lifetime Health Cover initiative, designed to encourage people to take out private hospital coverage early in life and maintain their coverage. People who join a health fund before they turn 31 years old and who stay in private health insurance will pay a lower premium throughout their lives relative to people who delay joining, regardless of their health status. People over the age of 30 will face a 2% increase in premiums over the base rate for every year they delay joining. Private health insurance is community-rated.
- The Government recently announced a package of changes to private health insurance. Under the reforms, hospital cover will expand to cover outpatient and out-of-hospital services as well as chronic care management for conditions such as diabetes and asthma. Insurers will also be able to cover disease prevention measures. In the future, Australians will be able to insure not only for hospital admissions but also for services to prevent future hospitalizations that can safely be delivered out of the hospital. These policies will be covered by the Government's private health insurance rebate. In addition, fund members who have retained their private health insurance continuously for more than ten years will no longer be subject to Lifetime Health Cover penalties.

### **How is the delivery system organized?**

- **Physicians:** Primary care physicians act as gatekeepers. Mix of public and private sector providers. Majority of physicians are self-employed, and a small proportion are salaried government employees. Physicians are generally reimbursed by a fee-for-service system. The Government establishes fee schedules, but doctors can charge whatever fee they wish. Services delivered without a patient copayment are said to be bulk-billed.
- **Hospitals:** A mix of public, run by the States, and private facilities. The States pay for public hospitals with Australian Government assistance negotiated via 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. Private hospitals (including free standing ambulatory surgeries) can be either for-profit or not-for-profit. Their income is chiefly derived from patients with private health

insurance. The majority of physicians working in private hospitals are in private practice and do not concurrently hold salaried positions in public hospitals.

- **Government:** The Australian Government regulates private health insurance, 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. Also, the Government restricts the number of medical students and Medicare-licensed providers.



## The Canadian Health Care System

### Who is covered?

Coverage is universal for eligible residents of Canada.

### What is covered?

- Services: Through the *Canada Health Act*, the federal government requires that provincial and territorial health insurance plans cover all medically necessary physician and hospital services to qualify for full federal transfers. The federal government is also directly responsible for health care services for specific groups, including the Royal Canadian Mounted Police, serving members of the armed forces, eligible veterans, First Nations people living on reserves, the Inuit, inmates in federal penitentiaries, and refugee protection claimants.
- Provincial and territorial governments also provide varying levels of supplementary benefits for certain groups such as children, senior citizens, and social assistance recipients. Benefits include services such as prescription drug coverage, vision care, dental care, home care, aids to independent living, and ambulance services.
- Cost-sharing: No cost-sharing for insured physician and hospital services. However, there are charges for supplementary benefits and for non-insured services.

### How are revenues generated?

- Publicly Funded Health Care: Public health insurance plans are administered by the provinces/territories and generally funded by general taxation. Three provinces charge additional health care premiums. Federal transfers to provinces/territories are tied to population and other factors and are conditional on meeting the principles of the *Canada Health Act*. Public funding accounts for approximately 70% of total health expenditures.
- Privately Funded Health Care: Many Canadians have supplemental private insurance coverage through group plans, which cover services such as vision and dental care, prescription drugs, rehabilitation services, private care nursing, and private rooms in hospitals. Private health expenditures represent approximately 30% of total health expenditures.
- Private insurance to cover publicly funded core services is prohibited. However, a Supreme Court of Canada ruling in July 2005 (*Chaoulli v.*

*AG Quebec*) struck down the laws in Quebec that prohibited the purchase of private health insurance.

### How is the delivery system organized?

- Physicians: Most physicians are in group or private practice and are remunerated on a fee-for-service basis. However, some Canadian physicians receive payment for clinical care through alternative public payment plans, such as salaries. In 2003–04, about 19.5% of total clinical payments to physicians were made 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.
- Nurses: Most nurses are primarily employed either in hospitals or by community health care organizations, including home care and public health services. Nurses are generally paid salaries negotiated between their unions and their employers. With an increasing emphasis on primary care, the majority of provinces are changing their laws to allow nurse practitioners to deliver a greater range of primary care services.
- Other health professionals such as dentists, optometrists, therapists, psychologists, pharmacists, and public health inspectors may be employed or self-employed.
- Hospitals: Mainly private non-profit hospitals that operate under annual, global budgets, negotiated with the provincial/territorial ministries of health or regional health authority, with some fee-for-service payment.
- 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.

# The German Health Care System

## Who is covered?

- Up to the determined income level, every employee has to enroll with any of the Sickness Funds (SFs) 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: The 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, and since 1995, long-term care insurance is mandatory. There is free choice of ambulatory care physicians and hospitals, as well as any medical service that is covered by statutory insurance.
- Cost-sharing: Traditionally few cost-sharing provisions. However copayments especially for dental care but also for physician services and inpatient care were increased over the last years. In addition, there are now copayments for GP visits and medications. Out-of-pocket payments (glasses, OTC drugs, others) accounted for 10.4% of health care expenditures.

## How are revenues generated?

- Sickness Funds (SFs): There are approximately 249 SFs, autonomous, not-for-profit, nongovernmental bodies (although regulated by the government). They are funded by compulsory payroll contributions averaging 14.2% of wages, equally shared by employers and employees. SFs cover approximately 88% of the population. Dependents are covered through the primary SF enrollee. While the unemployed continue to contribute to the SF proportionate to their unemployment entitlements, health care costs incurred by welfare recipients, asylum seekers, and the homeless, are financed through general revenues. In 2000, SIFs accounted for 56.9% of health care expenditures.
- Private Insurance: Private insurance, which provides health insurance based on voluntary, individual premiums, covers 8.1% of the population (the affluent, the self-employed, and civil servants). Private insurance accounted for 8.2% of health care expenditures in 2000.

## How is the delivery system organized?

- Physicians: General practitioners have no formal gatekeeper function. However, in 2004 SFs were required to offer insureds the option to enroll in a “family physician care model” that provides a bonus for complying with gatekeeping rules. Ambulatory care is mainly delivered by private for-profit providers working in single practice, and all physicians in the outpatient sector are paid per medical procedure. There is a strong sector of ambulatory specialized care in Germany. Therefore, Germany has two branches of specialized care: one in the hospital and the other in the ambulatory sector. Representatives of the Sickness Funds annually negotiate with the regional associations of physicians to determine aggregate payments.
- Hospitals: Hospitals are mainly non-profit, both private and public. They are staffed with salaried doctors. Senior doctors may also treat privately insured patients on a fee-for-service basis. Doctors in hospitals are typically not allowed to treat outpatients. Exceptions are made when necessary care cannot be provided on an outpatient basis by specialists in private practices. A new payment system based on diagnosis-related group (DRG) per-admission payments was introduced in 2004.
- Disease Management Programs (DMPs): Legislation in 2002 created DMPs for chronic illnesses in order to give the SFs an incentive to care for chronically ill patients. SFs’ compensation is adjusted for income, age, sex, and incapacity to work; the introduction of DMPs added high-risk pools to this list, so that SFs with higher shares of DMP patients receive higher compensation. There are currently 5,000 regional DMPs with 1.6 million enrolled patients.
- 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 sector-wide budgets for physician and hospital services. In early 2001 the drug budget ceilings for collective liability of physicians on a regional basis was lifted, leading to an unprecedented increase of expenditures for pharmaceuticals increasing financial strain on the SFs. This lift was recently replaced by a drug budget ceiling with individual liability. Health care reforms in the 1990s included increased competition among Sickness Funds; the introduction of a per-admission DRG hospital payment system; the control of physician supply; and moderate cost-sharing provisions.

## The Dutch Health Care System

### Who is covered?

- As of January 1, 2006, everyone who resides or pays income tax in The Netherlands (except those with conscientious objections or members of the armed forces on active service) is required to purchase private health insurance coverage.

### What is covered?

- Beginning January 1, 2006, under the Health Insurance Act (Zorgverzekeringswet) all citizens are covered by private health insurance. Private health insurance companies must accept every resident in their coverage area. A system of risk equalization prevents direct or indirect risk selection.
- The new health insurance system legally mandates that insurers provide a standard package of essential health care. The package includes: medical care, including care by GPs, hospitals, and midwives; hospitalization; dental care (up to age 18; coverage from age 18 on will be confined to specialized dental care and dentures); medical aids; medicines; maternity care; ambulance and patient transport services; paramedical care (limited physiotherapy/remedial therapy, speech therapy, occupational therapy, and dietary advice). Insurers may decide by whom and how this essential care is delivered and in that way several health insurance policies are possible—citizens have a choice of policies based on quality and premiums.
- Citizens may also purchase supplemental insurance for services not covered by the basic package. However, insurers are not legally bound to accept applications for supplemental insurance.
- Cost-sharing: Insured pay a nominal premium to the health insurer. Everyone with the same policy pays the same insurance premium. Low-income citizens can qualify for a “Healthcare Allowance” (Zorgtoeslag) to go toward the cost of their premiums.
- An insured person is eligible for a refund of €255 if that person incurs no health care costs. If an insured person incurs less than €255 in health care costs, then that person receives the difference at the end of the insurance year. Visits to GPs, natal care, and maternity care do not

count towards the no-claim scheme. The refund scheme does not apply to children under 18.

### How are revenues generated?

- The new health insurance system is 50% funded by premiums paid by the insured. The average premium is estimated to be about €1,050 in 2006. The government provides the funds to pay for the premiums of children up to age 18.
- The Health Insurance Act also requires an income-related contribution. Everyone with an income must pay a contribution equal to 6.5% of their income (with a maximum contribution of 6.5% of income of €30,000). Employers must reimburse their employees for this contribution, and employees must pay taxes on this reimbursement. For those who do not have an employer and do not receive unemployment benefits, the income-related contribution is 4.4%. The contribution by self-employed people is individually assessed by the Tax Department. The income-related contributions are divided among the insurers by the risk equalization fund.
- The government provides Healthcare Allowances for low-income citizens who qualify. A citizen qualifies if the average nominal premium exceeds 5% of his/her household income.

### How is the delivery system organized?

- Health insurance companies must be registered with the Supervisory Board for Health Insurance (CTZ) to allow supervision of the services they provide under the Health Insurance Act and to qualify for payments from the equalization fund.
- Physicians: Physicians practice under contracts negotiated with private health insurers. GPs receive a capitation payment for each patient on the practice list and a fee per consultation. Additional budgets can be negotiated for extra services, practice nurses, complex location, etc. Experiments with pay-for-performance for quality are under way. Specialists working in hospitals are self-employed and are paid capitated amounts based on negotiations with insurers. Some specialists

are paid a fixed income/salary and have a contract with the hospital. Future payment will be related to Diagnose-Treatment-Combination (see below).

- Hospitals: The majority of hospitals are private non-profit. Hospital budgets are developed based on a formula that pays a fixed amount per bed, patient volume, and number of licensed specialists, in addition to other considerations. Additional funds are provided for capital purchases. As of 2000, payments to hospitals are rated according to performance on a number of accessibility indicators. Hospitals that produce fewer inpatient days than agreed with health insurers are paid less, a measure designed to reduce waiting lists. A new system of payment (Diagnose-Treatment Combinations—DBC) is currently being introduced: 10% of all medical interventions are now reimbursed

on the basis of these DBCs. In some experimental hospitals 100% of all interventions are based on DBCs. It is expected that most of the care will be defined in these new entities in the future, although there is a lot of debate about the feasibility of this new system.

#### **How are costs controlled?**

- The goal of the new Health Insurance Act is to increase competition between private health insurers and providers to control costs and increase quality. Costs are expected to be increasingly controlled by the new DBC system in which hospitals have to compete on price for specific medical interventions.

## The New Zealand Health Care System

### Who is covered?

- All New Zealand residents have access to a broad range of health services with substantive government funding.

### What is covered?

- Services: Public health preventive and promotional services; inpatient and outpatient hospital care; primary health care services; inpatient and outpatient prescription drugs; mental health care; dental care for school children; and disability support services. Free choice of general practitioner.
- Cost-sharing: Copayments are required for General Practitioner (GP and general practice nurse primary health care services), and non-hospital prescription drugs. Health care is substantially free for children under age 6 and is partially subsidized for most other people depending on age and income. Patient copayments (out-of-pocket payments) account for 17% of health care expenditures (2004).

### How are revenues generated?

- General taxation: Public funding is derived from taxation. It accounts for about 78% of health care expenditures (2005).
- 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 (most of whom are grouped as Primary Health Organizations, or PHOs), disability support services, and community care.
- Patient Copayments (out-of-pocket expenditures): People pay fee-for-service copayments to GPs and for pharmaceuticals, some private hospital or specialist care and adult dental 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 5.7% 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 with partial government subsidy, mostly capitation funded through PHOs. 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): The Government has injected substantial additional funding into subsidising primary health care to improve access to services. From July 2002 to date, 81 PHOs have been formed under government policy to reduce health disparities and take a population approach to primary health care. 95% of the New Zealand population is now enrolled with and receiving care from a PHO. PHOs have a range of different clinical and non-clinical health practitioners on staff and are funded partly by capitation and partly by fee-for-service. By July 2007, all New Zealanders will be able to receive low cost access to primary health services provided by PHOs.
- District Health Boards: The Boards (21 in the country) are partly elected by the people of a geographic area 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 78% 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, health promotion, disease prevention, and chronic care management are being emphasized in primary care and by DHBs.

# The British Health Care System

## Who is covered?

Coverage is universal.

## What is covered?

- Services: Publicly funded coverage—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% of health expenditures.

## How are revenues generated?

- National Health Service (NHS): The NHS is administered by the NHS Executive, DH, and by Health Authorities. In 1997 the new government shifted from the internal market to integrated care, partnership, 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 mixture of general taxation and national insurance contributions, accounts for 88% of health expenditures.
- Private Insurance: Mix 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% of the population and accounts for 4% of health expenditures.

## How is the delivery system organized?

- Physicians: General practitioners (GPs) act as gatekeepers and are brought together in Primary Care Trusts—with 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. The 2004 GP contract introduced greater use of local contracting and provided substantial financial incentives tied to achievement of clinical and other performance targets. Private providers set their own fee-for-service rates but are not generally reimbursed by the public system.
- Hospitals: Mainly semiautonomous, self-governing public trusts that contract with Primary Care Trusts (PCTs). Latterly, some routine elective surgery has been procured for NHS patients from purpose-built Treatment Centres, which may be owned and staffed by private sector health care providers. 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 3 year cycle. To control utilization and costs, the U.K. 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 Health and Clinical Excellence) and for monitoring the quality of care delivered (the Healthcare Commission).

## The United States Health Care System

### Who is covered?

- Public and private health insurance covers 84% of the population. 46.6 million were uninsured in 2005.

### 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 12.6% of health 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 12% of the population. The program is financed through a combination of payroll taxes, general federal revenues, and premiums. It accounts for 16.5% of total health expenditures. Beginning January 2006, Medicare was expanded to cover outpatient prescription drugs.
- Medicaid: Joint federal-state health insurance program covering certain groups of the poor. Medicaid also covers nursing home and home health care and is a critical source of coverage for frail elderly and the disabled. Medicaid is administered by the states, which operate within broad federal guidelines. It covers 13% of the population and accounts for 15.6% of total health 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 58% of the population, including individuals covered by both public and private insurance. It accounts for 35.1% of total health expenditures.

- Other: Out-of-pocket payments, other private, and other public funds account for 32.9% of total national health 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, non-profit, 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?

- Total national health expenditures have been increasing at rates well above increases in national income, with total expenditures reaching 16% of GDP as of 2004. Annual rates of increases since 2000 have averaged 8% to 9% per year.
- 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.
- Recently, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 included new provisions for tax credits for Health Savings Accounts (HSAs) when coupled with high deductible (\$1,000+) health insurance plans. HSAs allow individuals to save money tax-free to use on out-of-pocket medical expenses. Tax incentives plus double digit increases in premiums have led to a shift in benefit design toward higher patient payments.
- Medicare demonstrations and various private purchasers, including employer groups, are also experimenting with new payment incentives that reward performance. Private purchasing strategies include “value based” strategies that profile care systems or providers that appear to provide higher quality care with more efficient use of resources.



# Notes

## Overall

- **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.
- **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 are substituted with data from the closest years ( $\pm 3$  years) for calculation of the median.

## II. Total Health Care Spending

### II-1. Health Care Spending per Capita in 2004

- **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 OECD Health Data 2006.
- **Method:** Purchasing power parities are 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.

### II-2. Health Care Spending per Capita from 1980 to 2004

- **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 OECD Health Data 2006.
- **Method:** Purchasing power parities are 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.

### II-3. Average Annual Growth Rate of Real Health Care Spending per Capita, 1994–2004

- **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 OECD Health Data 2004.
- **Method:** The average annual growth rates are calculated in units of each country's national currency adjusting for general inflation using each country's GDP price deflator.

#### II-4. Percentage of Gross Domestic Product Spent on Health Care in 2004

- **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 OECD Health Data 2006.
- **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.

#### II-5. Percentage of Gross Domestic Product Spent on Health Care from 1980 to 2004

- **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 OECD Health Data 2006.
- **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.

#### II-6. Americans Spend More Out-of-Pocket on Health Care Expenses

- **Definition:** Out-of-pocket spending includes cost-sharing, self-medication, and other expenditures paid directly by private households, irrespective of whether the contact with the health care system is established on referral or on the patient's own initiative.
- **Method:** Purchasing power parities are 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.

#### II-7. Health Care Expenditure per Capita by Source of Funding in 2004

- **Definition:** Public spending on health includes all health expenditures incurred by state, regional, and local government bodies and social security schemes. It does not reflect differences among countries in the sources of the public revenues. For example, there are differences among countries in the coverage provided by publicly financed health insurance.
- **Definition:** Private spending on health care includes private insurance programs, charities, and occupational health care. It does not reflect differences among countries in the sources of the private revenues. For example, the role of private insurance differs widely among OECD countries.
- **Definition:** Out-of-pocket spending includes cost-sharing, self-medication, and other expenditures paid directly by private households, irrespective of whether the contact with the health care system is established on referral or on the patient's own initiative.
- **Method:** Purchasing power parities are 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.

#### II-8. Percentage of Total Health Care Spending on Administration and Insurance in 2004

- **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 OECD Health Data 2004.
- **Definition:** Health administration and insurance are activities of private insurers and central and local authorities and social security including planning, management, regulation, and collection of funds and handling of claims of the delivery system.

#### II-9. Public Investment per Capita in Health Information Technology (HIT) as of 2005

- **Definition:** Public investment in HIT is the estimated federal level spending for the major HIT initiative as defined by each country as of 2005. For more information, refer to Exhibit 3 in Anderson G.F., Frogner B., Johns R., and Reinhardt U., “Health Care Spending and Use of Information Technology in OECD Countries,” *Health Affairs*, May/June 2006.
- **Method:** Purchasing power parities are 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.

### III. Hospitals

#### III-1. Inpatient Hospital Spending per Capita in 2004

- **Definition:** Hospital spending refers to expenditures on inpatient care. Inpatient expenditures include curative, rehabilitative, and long-term nursing care for inpatients. Inpatient is a patient who is formally admitted (or “hospitalized”) to an institution for treatment and/or care and stays for a minimum of one night in the hospital or other institution providing inpatient care. Inpatient care is mainly delivered in hospitals, but partially also in nursing and residential care facilities or in establishments that are classified according to their focus of care under the ambulatory-care industry, but perform inpatient care as a secondary activity. Inpatient care includes accommodation provided in combination with medical treatment when the latter is the predominant activity provided during the stay as an inpatient. Although spending for hospital outpatient services is not included in this definition, there are differences in definitions among countries.
- **Method:** Purchasing power parities are 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.

#### III-2. Hospital Spending per Inpatient Acute Care Day in 2004

- **Definition:** Hospital spending refers to expenditures on inpatient care. Inpatient expenditures include curative, rehabilitative, and long-term nursing care for inpatients. Inpatient is a patient who is formally admitted (or “hospitalized”) to an institution for treatment and/or care and stays for a minimum of one night in the hospital or other institution providing inpatient care. Inpatient care is mainly delivered in hospitals, but partially also in nursing and residential care facilities or in establishments that are classified according to their focus of care under the ambulatory-care industry, but perform inpatient care as a secondary activity. Inpatient care includes accommodation provided in combination with medical treatment when the latter is the predominant activity provided during the stay as an inpatient. Although spending for hospital outpatient services is not included in this definition, there are differences in definitions between countries.

- **Definition:** An inpatient acute care day is one during which a person is confined to a bed and in which the patient stays overnight in a hospital. Day cases (patients admitted for a medical procedure or surgery in the morning and released before the evening) are excluded.
- **Method:** Hospital spending per day is calculated by the authors by dividing total hospital spending by the total number of acute care hospital days in each country. Purchasing power parities are 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.

### III-3. Average Annual Hospital Inpatient Acute Care Days per Capita in 2004

- **Definition:** An inpatient acute care day is one during which a person is confined to a bed and in which the patient stays overnight in a hospital. Day cases (patients admitted for a medical procedure or surgery in the morning and released before the evening) are excluded.

### III-4. Number of Acute Care Hospital Beds per 1,000 Population in 2004

- **Definition:** Acute care beds are beds accommodating patients for curative care such as managing labor, curing illness, treating injuries, performing surgery, relieving symptoms and reducing severity of illness or injury symptoms (excluding palliative care), protecting against exacerbation and/or complication of an illness or injury.

### III-5. Average Length of Stay for Acute Care in 2004

- **Definition:** Average length of stay (ALOS) is 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.
- **Definition:** Acute care includes all types of medical care, excluding long-term care. It includes rehabilitative care, palliative care, and acute psychiatric care.
- **Method:** For the United Kingdom, data include NHS admissions only (the private sector is excluded).

## IV. Long-Term Care and Home Health Care

### IV-1. Long-Term Institutional Care Spending per Capita in 2004

- **Definition:** Spending for long-term institutional care includes all nursing care delivered to inpatients that need assistance on a continuing basis due to chronic impairments and a reduced degree of independence and activities of daily living. Inpatient long-term nursing care is provided in institutions or community facilities. Only health services are included, not social services.
- **Method:** Purchasing power parities are 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.

### IV-2. Number of Long-Term Care Beds per 1,000 Population over Age 65 in 2004

- **Definition:** Long-term care beds include those for inpatients who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence in activities of daily living. These beds can be provided in different institutional settings, including hospitals, nursing homes and the like.

- **Method:** Some countries report only beds in nursing homes while others include beds in non-acute care hospitals (or hospital wards). The U.S. figures do not include day care beds. The figures refer to beds maintained (i.e., open and ready to receive patients).

#### IV-3. Average Annual Growth Rate of Real Spending per Capita on Home Health Care, 1994–2004

- **Definition:** Spending for home care includes all medical and paramedical services delivered to patients at home.
- **Method:** The average annual growth rates are calculated in units of each country's national currency adjusting for general inflation using each country's GDP price deflator.

#### IV-4. Home Health Care Spending per Capita in 2004

- **Definition:** Spending for home care includes all medical and paramedical services delivered to patients at home.
- **Method:** Purchasing power parities are 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.

## V. Physicians

#### V-1. Spending on Physician Services Per Capita in 2004

- **Definition:** Spending on physician services includes expenditures on professional health services provided by general practitioners and specialists. The data also include expenditures on services of osteopaths.
- **Method:** Purchasing power parities are 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.

#### V-2. Number of Practicing Physicians per 1,000 Population in 2004

- **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.
- **Method:** The number of practicing physicians includes foreign physicians licensed to practice and actively practicing medicine in the country. The data exclude dentists, stomatologists, qualified physicians who are working abroad, or working in administration, research, and industry positions. Differences exist across the countries in the types of services provided by physicians and in which practitioners are counted as physicians. The U.K. figures do not include the private sector or non-practicing physicians.

#### V-3. Average Annual Growth Rate of Practicing Physicians per 1,000 Population, 1994–2004

- **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.
- **Method:** The number of practicing physicians includes foreign physicians licensed to practice and actively practicing medicine in the country. The data excludes dentists, stomatologists, qualified physicians who are working abroad, or working in administration, research, and industry positions. Differences exist across the countries in the types of services provided by physicians and in which practitioners are counted as physicians. The U.K. figures do not include the private sector or non-practicing physicians.

#### V-4. Average Annual Number of Physician Visits per Capita in 2004

- **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.
- **Method:** The number of contacts includes: visits/consultations of patients at the physician's office; physician's visits made to a person in institutional settings such as liaison visits or discharge planning visits, made in a hospital or nursing home with the intent of planning for the future delivery of service at home; telephone contacts when these are in lieu of a first home or hospital visit for the purpose of preliminary assessment at home; and visits made to the patient's home. 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, quality of care provided, level of skill/training of the physician, and provision of outpatient surgery in physician offices.

## VI. Pharmaceuticals

#### VI-1. Pharmaceutical Spending per Capita in 2004

- **Definition:** Pharmaceutical spending includes all spending on pharmaceuticals and other medical non-durables including medicinal preparations, branded and generic medicines, drugs, patent medicines, serums and vaccines, vitamins and minerals, and oral contraceptives.
- **Method:** Purchasing power parities are 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.

#### VI-2. Average Annual Growth Rate of Real Spending per Capita on Pharmaceuticals, 1994–2004

- **Definition:** Pharmaceutical spending includes all spending on pharmaceuticals and other medical non-durables including medicinal preparations, branded and generic medicines, drugs, patent medicines, serums and vaccines, vitamins and minerals, and oral contraceptives.
- **Method:** The average annual growth rates are calculated in units of each country's national currency adjusting for general inflation using each country's GDP price deflator.

#### VI-3. Percentage of Population over Age 65 with Influenza Immunization in 2004

- **Definition:** The proportion of people aged 65 and older who have been immunized against influenza during the last 12 months.
- **Method:** Influenza vaccination rates are based on national surveys. Survey design and responses may differ across countries.

## VII. Non-Medical Determinants of Health

#### VII-1. Percentage of Adults Who Reported Being Daily Smokers in 2004

- **Definition:** Daily smokers are 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. Estimates of the total population of daily smokers have been calculated for the OECD Secretariat as the unweighted average of the male and female rates for all years in Japan. The Netherlands includes both regular and occasional smokers. For New Zealand, the age is 18 and older. For the United Kingdom, the age is 16 and older for Great Britain only. For the United States, the age is 18 and older.

#### VII-2. Obesity (BMI > 30) Prevalence in 2004

- **Definition:** Obesity is defined as a body mass index (BMI) of 30kg/m<sup>2</sup> or more.
- **Method:** Figures are based on national health interview survey data from populations age 15 and older. For Australia, the age is 25 to 64. For Japan, the age is 20 and older. For the Netherlands, the age is 20 and older. For the United States, the age is 20 to 74. For the United Kingdom, the age is 16 and older. The total percentage of the population (persons) is 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. Definitions of obesity vary due to method of collection, either self-report or measured.

### VIII. Disease-Specific Mortality

#### VIII-1. Acute Myocardial Infarction Deaths per 100,000 Population

- **Definition:** Acute myocardial infarction is defined as ICD-10 I21-I22 or ICD-9 410.
- **Method:** The number of deaths according to sex and cause are extracted from the World Health Organization Mortality Database. Age-standardized death rates per 100,000 population are calculated by the OECD Secretariat using the total OECD population for 1980 as the reference population.

#### VIII-2. Bronchitis, Asthma, and Emphysema Deaths per 100,000 Population

- **Definition:** Bronchitis, asthma, and emphysema are defined as ICD-10 J40-J42, J45, J46 or ICD-9 490-493.
- **Method:** The number of deaths according to sex and cause are extracted from the World Health Organization Mortality Database. Age-standardized death rates per 100,000 population are calculated by the OECD Secretariat using the total OECD population for 1980 as the reference population.

#### VIII-3. Potential Years of Life Lost Due to Malignant Neoplasms per 100,000 Population in 2004

- **Definition:** Malignant Neoplasms is defined as ICD-10 C00-C97 or ICD-9 140-208.
- **Definition:** Potential Year of Life Lost (PYLL) is a summary measure of premature mortality that provides an explicit way of weighting deaths occurring at younger ages, which are, a priori, preventable.
- **Method:** Potential Years of Life Lost (PYLL) involves summing up deaths occurring at each age and multiplying this with the number of remaining years to live up to a selected age limit. The limit of 70 years has been chosen for the calculations in the OECD Health Data. PYLL are calculated by the OECD Secretariat based on age-specific death statistics provided by the World Health Organization using the 1980 total OECD population as the reference population for age standardization.

#### VIII-4. Potential Years of Life Lost Due to Diseases of the Circulatory System per 100,000 Population in 2004

- **Definition:** Disease of the Circulatory System is defined as ICD-10 I00-I99 or ICD-9 390-459.

- **Definition:** Potential Year of Life Lost (PYLL) is a summary measure of premature mortality that provides an explicit way of weighting deaths occurring at younger ages, which are, a priori, preventable.
- **Method:** Potential Years of Life Lost (PYLL) involves summing up deaths occurring at each age and multiplying this with the number of remaining years to live up to a selected age limit. The limit of 70 years has been chosen for the calculations in the OECD Health Data. PYLL are calculated by the OECD Secretariat based on age-specific death statistics provided by the World Health Organization using the 1980 total OECD population as the reference population for age standardization.

#### VIII-5. Potential Years of Life Lost Due to Diabetes per 100,000 Population in 2004

- **Definition:** Diabetes is defined as ICD-10 E10-E14 or ICD-9 250.
- **Definition:** Potential Year of Life Lost (PYLL) is a summary measure of premature mortality which provides an explicit way of weighting deaths occurring at younger ages, which are, a priori, preventable.
- **Method:** Potential Years of Life Lost (PYLL) involves summing up deaths occurring at each age and multiplying this with the number of remaining years to live up to a selected age limit. The limit of 70 years has been chosen for the calculations in the OECD Health Data. PYLL are calculated by the OECD Secretariat based on age-specific death statistics provided by the World Health Organization using the 1980 total OECD population as the reference population for age standardization.

#### VIII-6. Potential Years of Life Lost Due to Disease of the Respiratory System per 100,000 Population in 2004

- **Definition:** Disease of the Respiratory System is defined as ICD-10 J00-J98 or ICD-9 460-519.
- **Definition:** Potential Year of Life Lost (PYLL) is a summary measure of premature mortality that provides an explicit way of weighting deaths occurring at younger ages, which are, a priori, preventable.
- **Method:** Potential Years of Life Lost (PYLL) involves summing up deaths occurring at each age and multiplying this with the number of remaining years to live up to a selected age limit. The limit of 70 years has been chosen for the calculations in the OECD Health Data. PYLL are calculated by the OECD Secretariat based on age-specific death statistics provided by the World Health Organization using the 1980 total OECD population as the reference population for age standardization.

#### VIII-7. Deaths Due to Surgical or Medical Mishaps per 100,000 Population in 2004

- **Definition:** Medical mishaps are defined as ICD-10 Y60-Y84 or ICD-9 E870-E879.
- **Method:** The number of deaths according to sex and cause are extracted from the World Health Organization Mortality Database. Age-standardized death rates per 100,000 population are calculated by the OECD Secretariat using the total OECD population for 1980 as the reference population.