

# Multinational Comparisons of Health Systems Data, 2005

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### I. Overview



International data allow policymakers to compare the performance of their own health care system with those of other countries. In this chartbook, we use data collected by the Organization for Economic Cooperation and Development (OECD) to compare 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 median value of all 30 members of the OECD.

The chart book is organized into eleven sections:

- Total Spending
- Public and Private Health Care Financing
- Health Spending by Type of Service
- Hospitals
- Long-Term Care
- Physicians
- Nursing
- Pharmaceuticals
- Medical Procedures Involving Sophisticated Technology
- Non-Medical Determinants of Health
- Mortality



#### **Methods**

The source for most of the data is the OECD. Data were sent to each country for review, and 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 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, with the substitution noted on the chart. All health spending was adjusted to U.S. dollars using purchasing power parities, a common method of adjusting for cost-of-living differences. Because of definitional and data concerns, 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**

In 2003, per capita spending for all health care services ranged from a high of \$5,635 in the United States to a low of \$1,886 in New Zealand. The median for all 30 OECD countries was \$2,280. The United States spent 15 percent of GDP on health care services, compared with 8.4 percent in the median OECD country. Most of the countries had an increase in health spending as a percentage of GDP between 1993 and 2003. Over the last 20 years, the United States had the fastest average annual growth rate of real health spending per capita and Germany had the slowest rate.

#### **Public and Private Health Care Financing**

Universal publicly financed health insurance coverage exists in Australia, Canada, France, Japan, New Zealand, and the United Kingdom. In Germany and the Netherlands, every citizen has access to public coverage, but individuals with higher incomes may opt for private coverage instead. Among all OECD countries, the United States had the highest level of health financing from public sources in 2003. This is surprising because only one-quarter of all Americans have publicly financed health insurance. The United States spent nearly 25 times more than the median OECD country on private health care spending (excluding out-of-pocket spending). In the United States, private health insurance coverage is the most common source of health insurance, but other countries primarily use private insurance as a supplement to public insurance coverage. Out-of-pocket spending per capita in the United States was almost twice as high as in the median OECD country.



#### **Health Spending by Type of Service**

In 2003, the median OECD country spent 40 percent on hospitals, 15 percent on physicians, 16 percent on pharmaceuticals, and 10 percent on long-term institutional health care and home health care. The remainder was spent on multiple health care services, including dentists and durable medical equipment, as well as biomedical research and development.

#### **Hospitals**

In 2003, the United States spent the most per capita on hospital services. Canada and Japan spent the least per capita on hospital services. An alternative measure is inpatient acute care spending per day; the United States spent two times the median OECD country and five times more than Japan.

The United States falls below the median OECD country, and often at the bottom of the nine countries, in certain service utilization measures: hospital discharges, average length of stay for acute care, average length of stay for normal delivery, and average annual number of acute care days, and the number of acute care beds. Germany and Japan were consistently above the median OECD country on these utilization measures. The United States had the highest number of health employees per 1,000 acute care days, and more than twice that of Germany, the country with the least number of health employees per acute care day.



#### **Long-Term Care**

Canada had the most long-term care beds per 1,000 people over the age of 65 in 2003, while the United Kingdom had the fewest. Canada and the United States spent the most on long-term institutional care per capita, and the United States spent the most on home health care per capita in 2003. France spent the least on long-term institutional care per capita, and France and Japan spent the least on home health care per capita. Germany experienced fastest growth rate in long-term institutional health care spending per capita, and had the fastest growth rate in home health care spending per capita.

#### **Physicians**

The United States spent almost three times the median OECD country on physician services per capita in 2003. In the last decade, the United States and Australia experienced the most rapid increase in average annual growth rate in real spending on physician services, while Japan had a decrease in the spending growth rate. The number of physician visits per capita is relatively similar in all nine of the countries except for Japan, which had many more physician visits. The nine countries also had similar numbers of physicians. The United Kingdom and the United States experienced the fastest increase in practicing physicians per 1,000 people between 1993 and 2003 while Canada saw a decrease.



#### **Nursing**

In 2003, the Netherlands had the most nurses per 1,000 people, while France had the least. The United States had below the OECD median number of nurses per 1,000 people. The United Kingdom had almost four times the number of nurses per acute care bed as France.

#### **Pharmaceuticals**

The United States spent more than two times the OECD median per capita on pharmaceuticals in 2003. The Netherlands spent the least on pharmaceuticals per capita among the nine countries. Spending for pharmaceuticals increased the fastest between 1993 and 2003, at a rate of approximately 9 percent in both Australia and the United States. Japan only had a 1.1 percent average annual growth rate in real pharmaceutical spending.



#### **Medical Procedures Involving Sophisticated Technology**

The diffusion of medical technology occurs at different rates across the nine countries. For example, the number of magnetic resonance imagers (MRIs) and computer tomography (CT) units per capita varied considerably. Japan had the most MRIs and CTs, with almost 13 times the number of MRIs per capita as France and nearly 16 times the number of CT units per capita as the United Kingdom in 2003. Japan, Germany, and the United States consistently have the most technology available, while France, New Zealand, and the United Kingdom tend to have the least.

A comparison of utilization rates for specific procedures is confounded by differences in the incidence of disease and disease classification, among other factors. However, there are striking differences in utilization rates for certain procedures. For example, Germany had 794 cardiac catheterizations procedures per 100,000 people while the United Kingdom had only 14. The United States performed the most percutaneous transluminal coronary angioplasty procedures, coronary bypass procedures, and knee replacement procedures per 100,000 people in 2003. Japan and the United States had the highest number of patients undergoing dialysis. France, New Zealand, the Netherlands, and the United Kingdom had consistently lower rates of these procedures.



#### **Non-Medical Determinants of Health**

About one-third of the population in the Netherlands and Japan were daily tobacco smokers in 2003. Canada and the United States had the lowest rates of daily tobacco smoking. Australia, Canada, and the United States have experienced the largest drop in smoking rates over the last 20 years. Alcohol consumption is highest in France and lowest in Canada. A large proportion of the United States population is obese. Japan had the lowest obesity prevalence. Japan also had the smallest change in obesity rates between 1993 and 2003, while the United Kingdom had experienced the largest increase in obesity rates.



#### **Mortality**

Measuring health outcomes is extremely difficult as all the widely available indicators are crude proxies and not very sensitive to changes in health care financing and delivery.

In 2003, men lived an average of 5.6 fewer years than women. Japan maintained the longest life expectancy at birth for men and women. The United States had the shortest life expectancy at birth for men and women. Over the last twenty years, Japanese women and Australian men had the largest gain in life expectancy among the nine OECD countries. The Netherlands had the smallest increase in life expectancy for both men and women.

At the age of 65, Japanese men and women had the longest life expectancy. Japanese women had the largest increase in life expectancy at the age of 65 over the past 20 years, and the United States had the smallest increase. Australian men had the largest increase in life expectancy at age of 65 while men in the Netherlands had the smallest increase.

Mortality rates are influenced by many factors in addition to health care. One indicator that is potentially sensitive to health care intervention is the five-year survival rate for certain diseases. Breast cancer survival rates in the United States are slightly higher than those in Australia, France, and England (United Kingdom data not available). Breast cancer screening rates are similar in Canada, Australia, the United States, and England, but lower in New Zealand. Kidney transplant five-year survival rate was highest in Canada, and lowest in the United States.



#### **Summary**

In 2003, 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 total spending 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 double the amount of the next highest country. Resources and utilization rates in the United States are low especially for acute care days and other utilization measures.

The United States is also a clear outlier in insurance coverage. While the other eight countries have achieved nearly universal health insurance coverage, approximately 40 million people in the United States are estimated to be uninsured in 2005. The United States spent the most on publicly financed and privately financed health insurance and also paid the most out-of-pocket. On one important outcome measure, longevity, the United States was consistently at or near the bottom among the nine countries.



## **II. Total Health Care Spending**



Chart II-1

Health Care Spending per Capita in 2003

Adjusted for Differences in Cost of Living

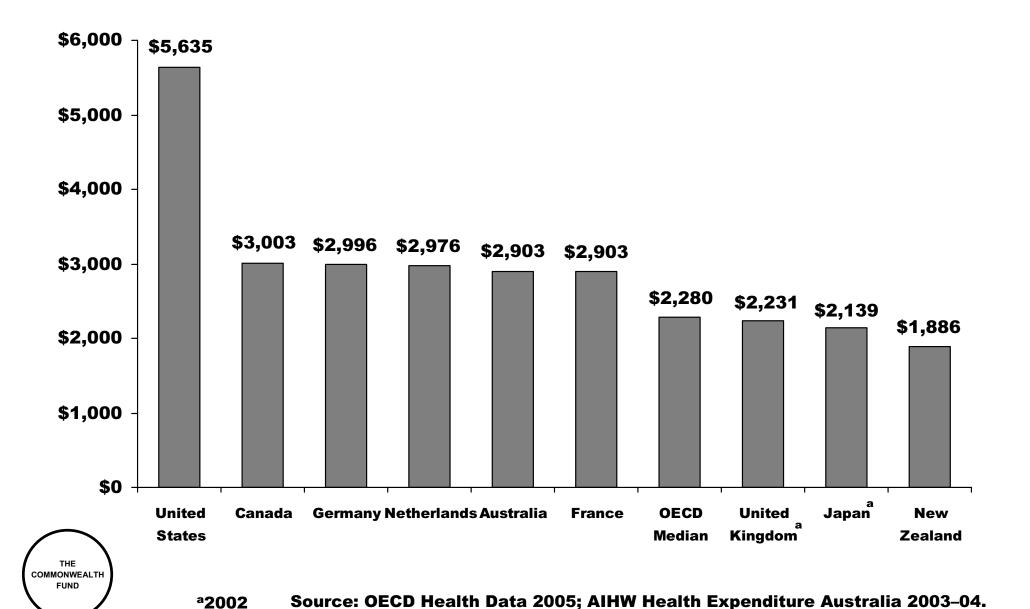
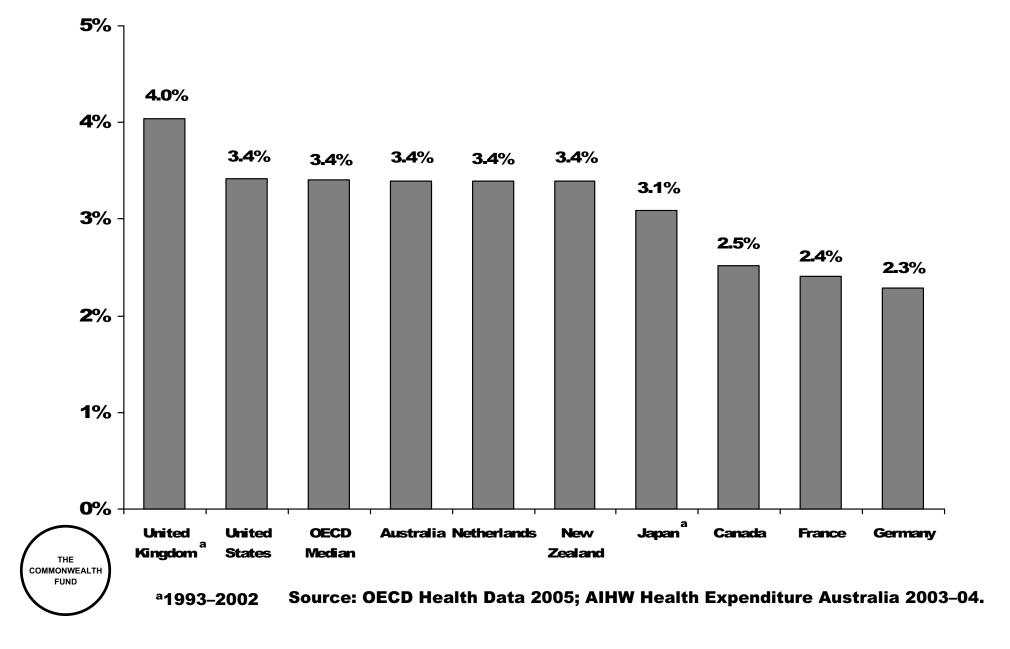


Chart II-2

Average Annual Growth Rate of Real Health Care

Spending per Capita, 1993–2003



**Chart II-3** 

# Average Annual Growth Rate of Real Health Care Spending per Capita, 1983–2003, 1993–2003

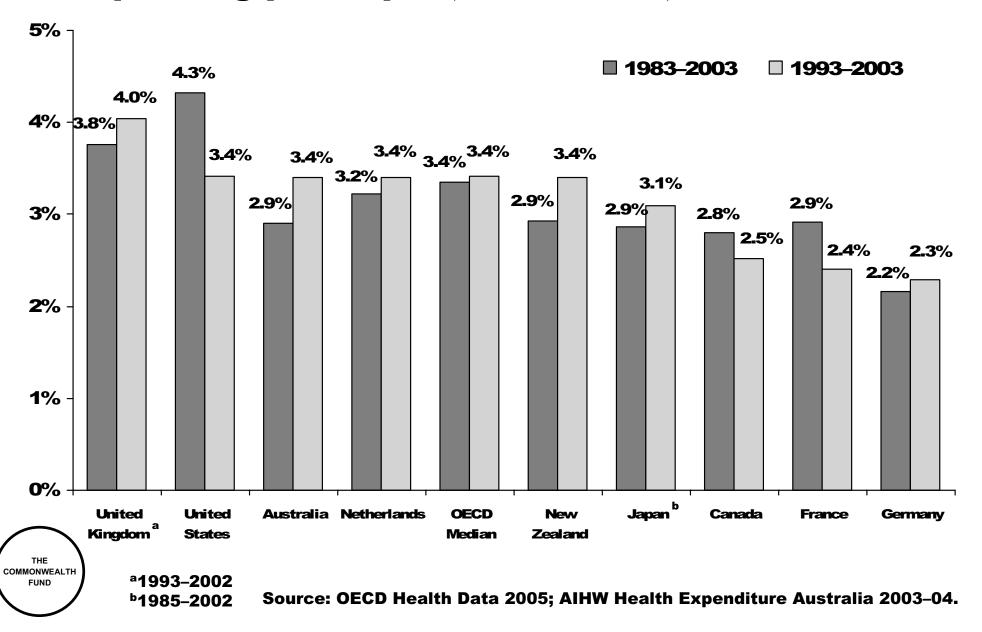


Chart II-4
Percentage of Gross Domestic Product Spent
on Health Care in 2003

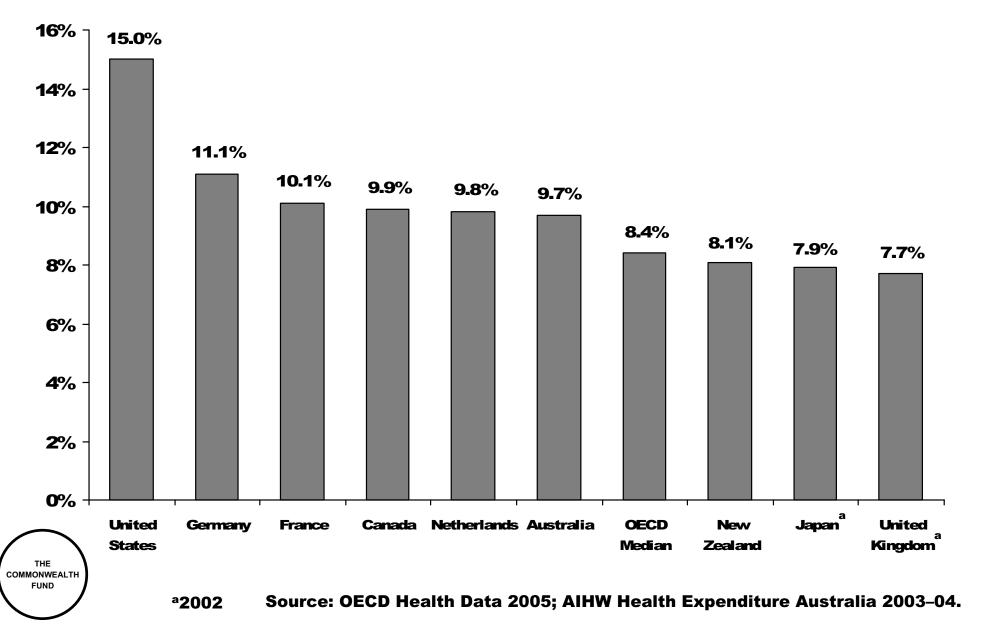
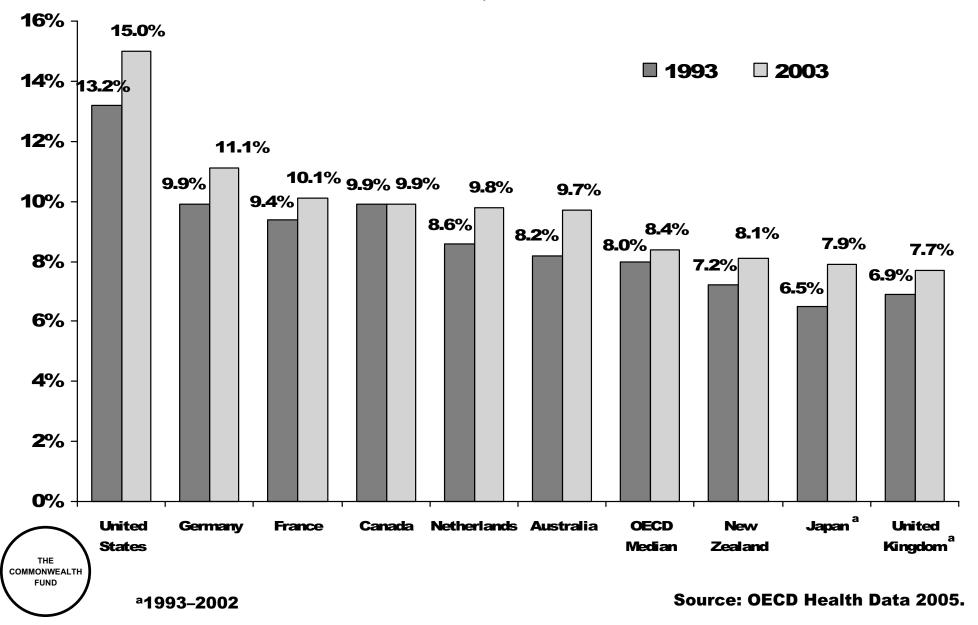


Chart II-5

# Percentage of Gross Domestic Product Spent on Health Care, 1993 and 2003



## III. Public and Private Health Care Financing



**Chart III-1** 

# Percentage of Total Population with Health Insurance Coverage Through Public Programs in 2003

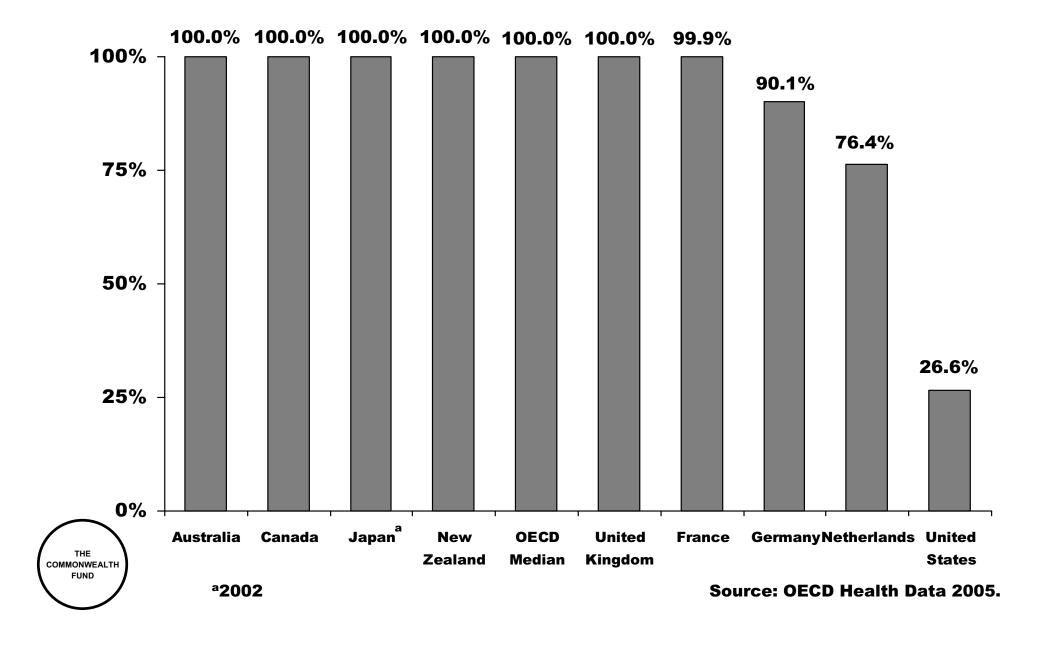
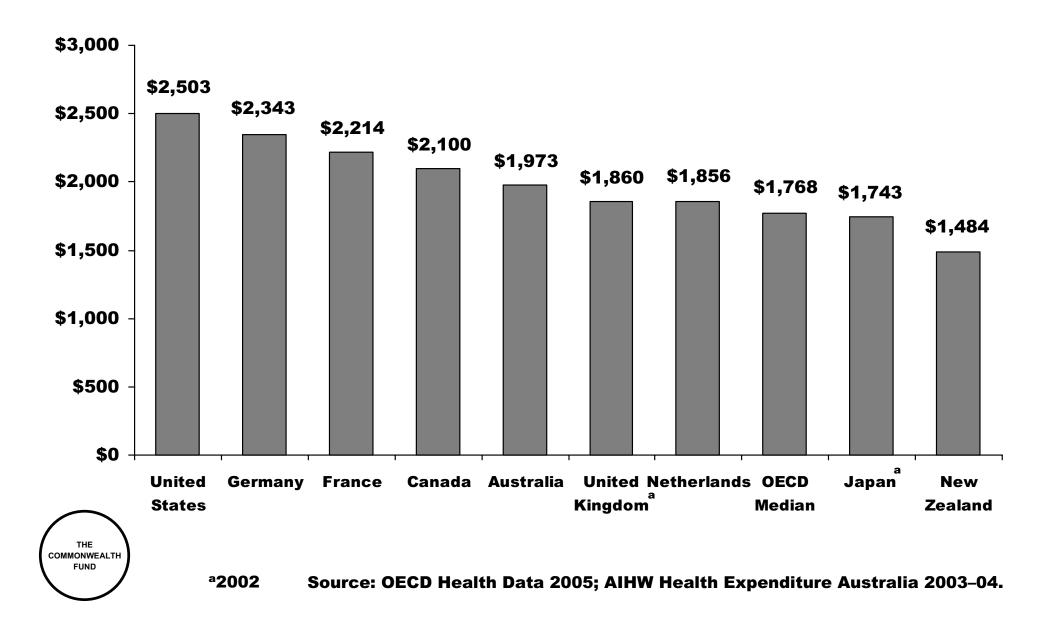


Chart III-2

# Public Spending on Health Care per Capita in 2003

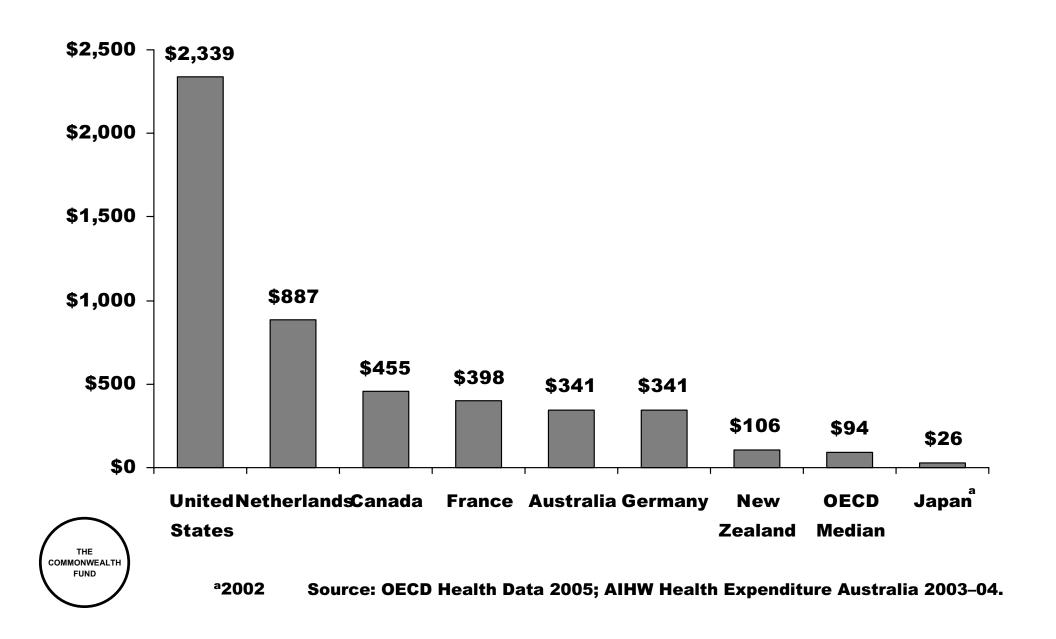
**Adjusted for Differences in Cost of Living** 



#### **Chart III-3**

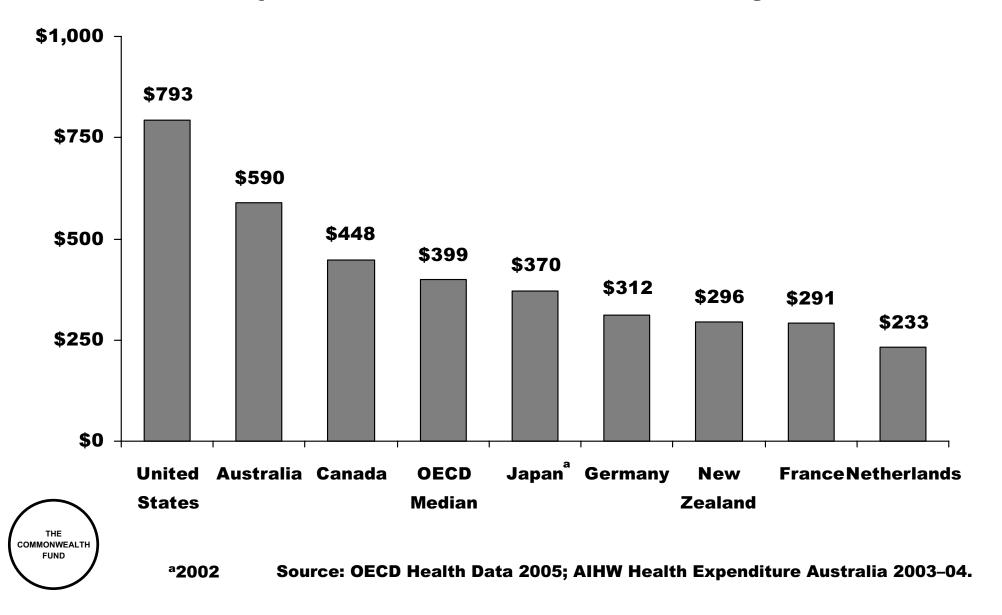
## Private Spending on Health Care per Capita in 2003

**Excluding Out-of-Pocket Spending, Adjusted for Differences in the Cost of Living** 



# Out-of-Pocket Health Care Spending per Capita in 2003

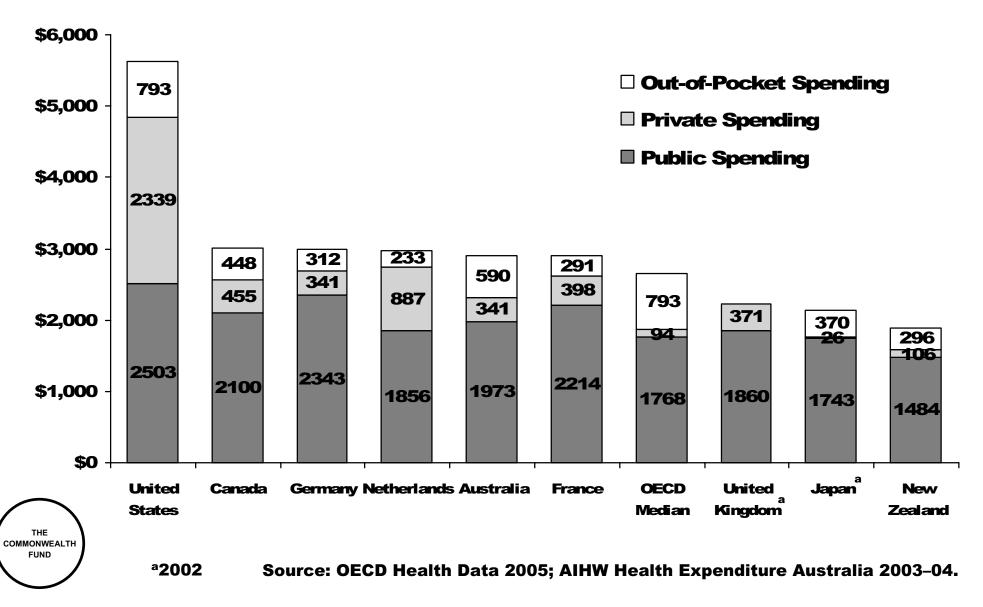
**Adjusted for Differences in the Cost of Living** 



**Chart III-5** 

# Health Care Expenditure per Capita by Source of Funding in 2003

**Adjusted for Differences in Cost of Living** 



## IV. Health Spending by Type of Service



Chart IV-1

Distribution of Health Spending by Type of Service

	Australia	Canada	France	Germany	Japan <sup>a</sup>	United States
Pharmaceuticals	14.0%	16.9%	20.9%	14.6%	18.4%	12.9%
Physician Services	16.5%	9.6%	12.5%	10.1%	25.9%	22.6%
Hospitals <sup>1</sup>	33.4%	28.1%	41.2%	35.8%	40.0%	27.1%
Home Health Care	0.1%	1.8%	0.4%	4.3%	0.5%	2.4%
Other <sup>2</sup>	36.0%	43.6%	25.0%	35.2%	15.2%	35.0%

1. Hospital spending includes some long-term institutional care and cannot be separated.

2. Other includes some long-term institutional care, dental, clinical laboratory, diagnostic imaging, patient transport and emergency rescue, administration, and R&D.



<sup>a</sup>2002 Source: OECD Health Data 2005; AIHW Health Expenditure Australia 2003–04.

Chart IV-2
Percentage of Total Health Care Spending on Hospital Care in 2003

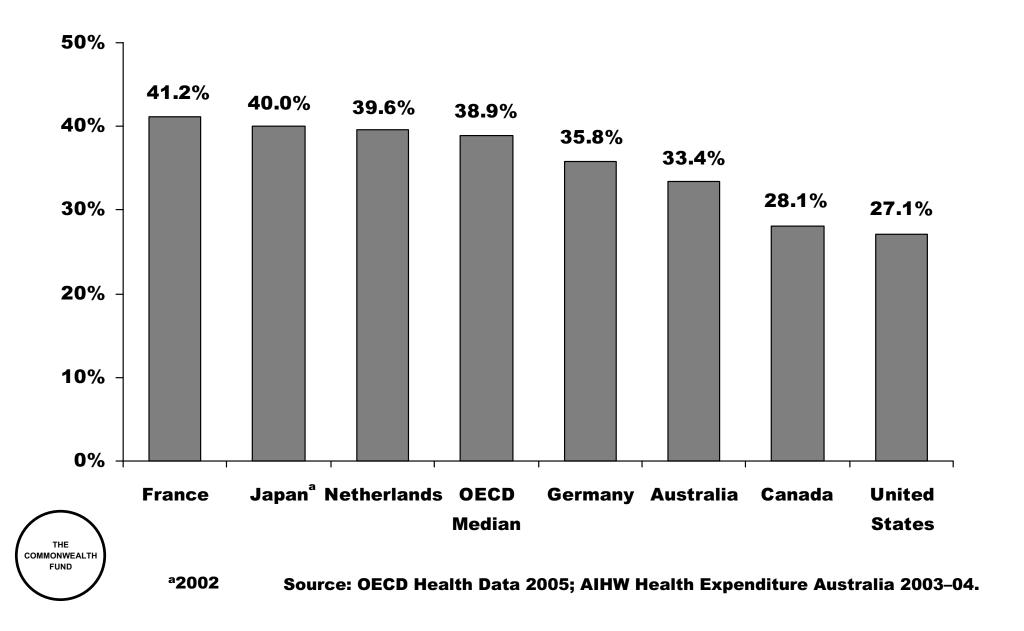


Chart IV-3

# Percentage of Total Health Care Spending on Hospital Care, 1993 and 2003

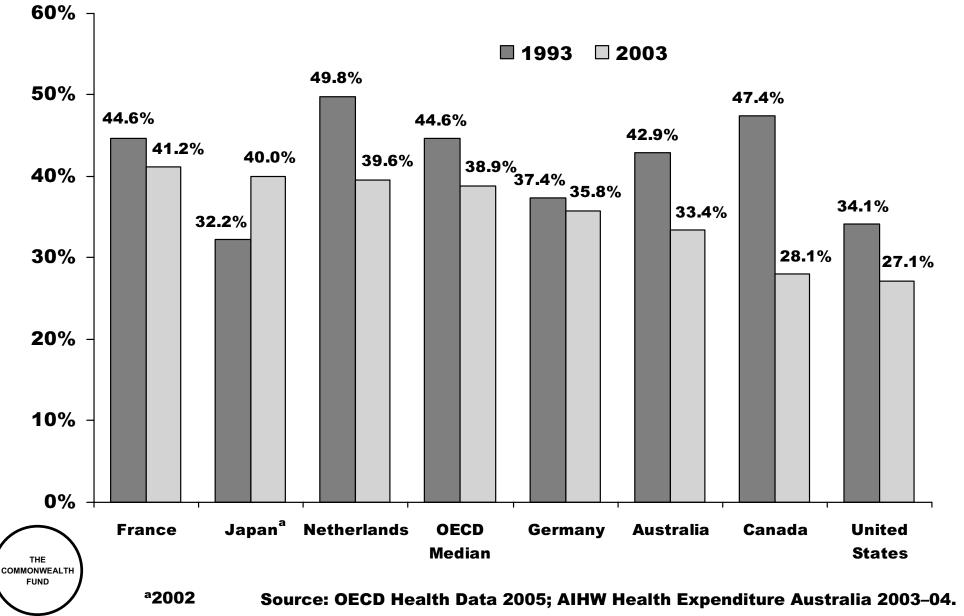
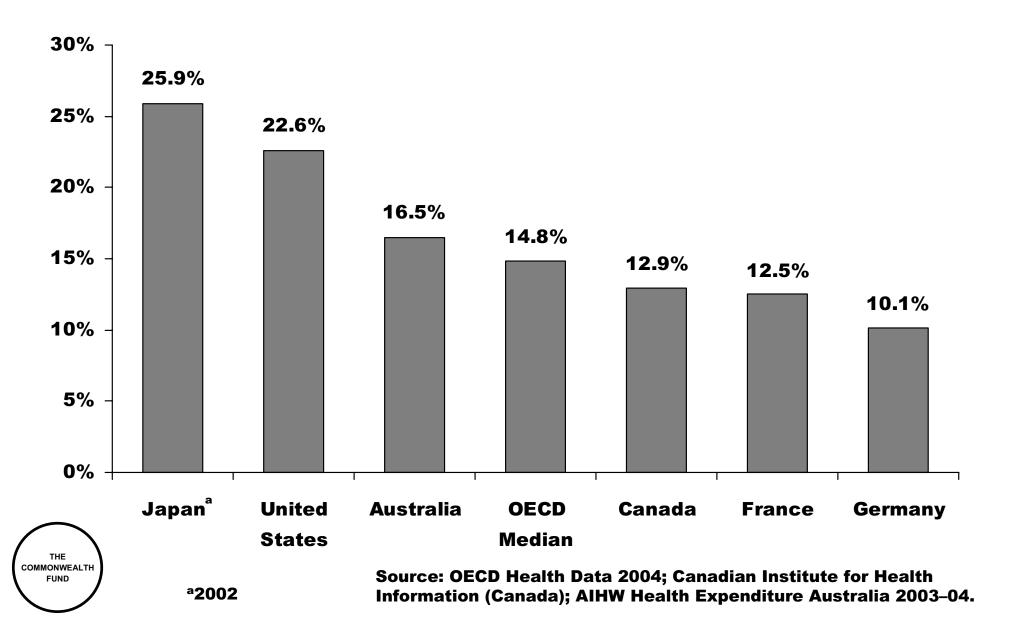
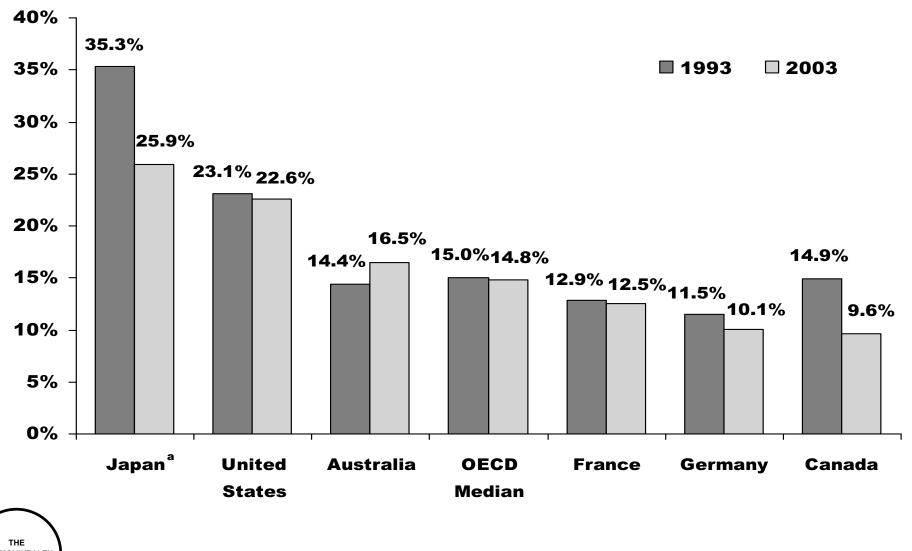


Chart IV-4
Percentage of Total Health Care Spending on Physician Services in 2003



**Chart IV-5** 

## **Percentage of Total Health Care Spending** on Physician Care, 1993 and 2003





a2002

Source: OECD Health Data 2005; AIHW Health Expenditure Australia 2003-04.

Percentage of Total Health Care Spending on Pharmaceuticals in 2003

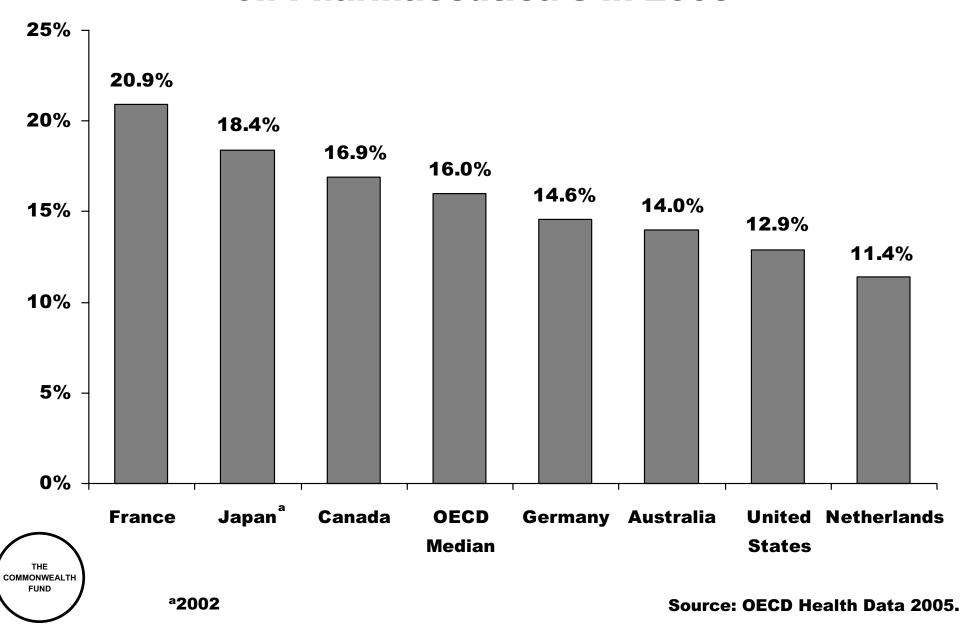
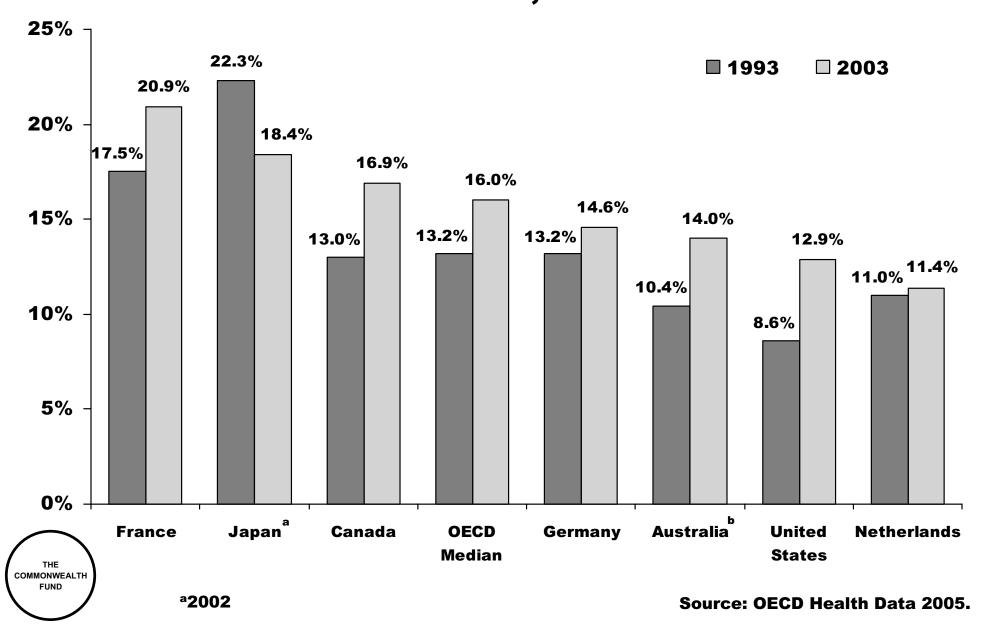
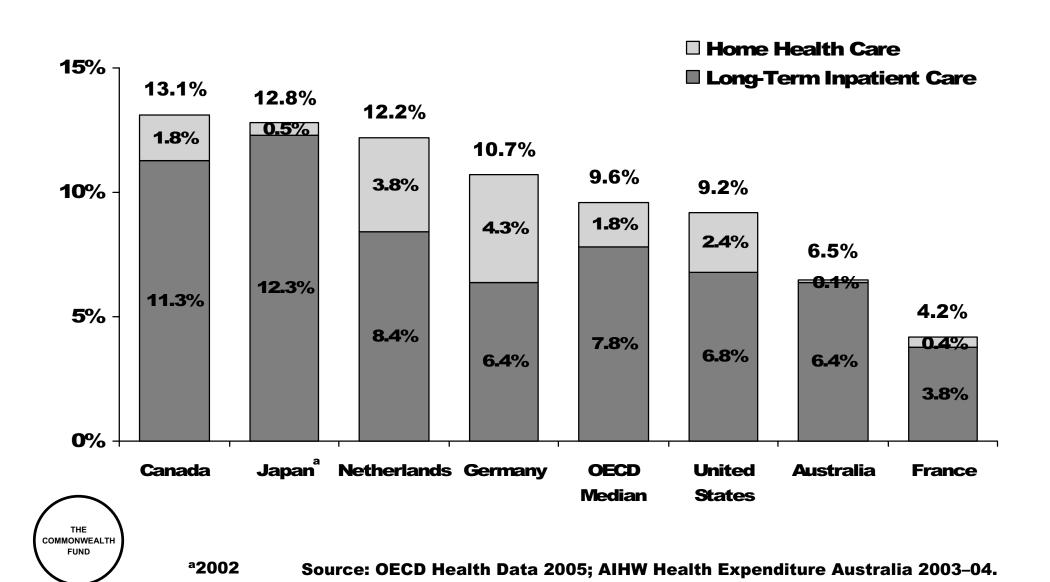


Chart IV-7
Percentage of Total Health Care Spending on Pharmaceuticals, 1993 and 2003



**Chart IV-8** 

### Percentage of Total Health Care Spending on Long-Term Institutional Care and Home Health Care in 2003



#### V. Hospitals



Chart V-1
Hospital Spending per Capita in 2003

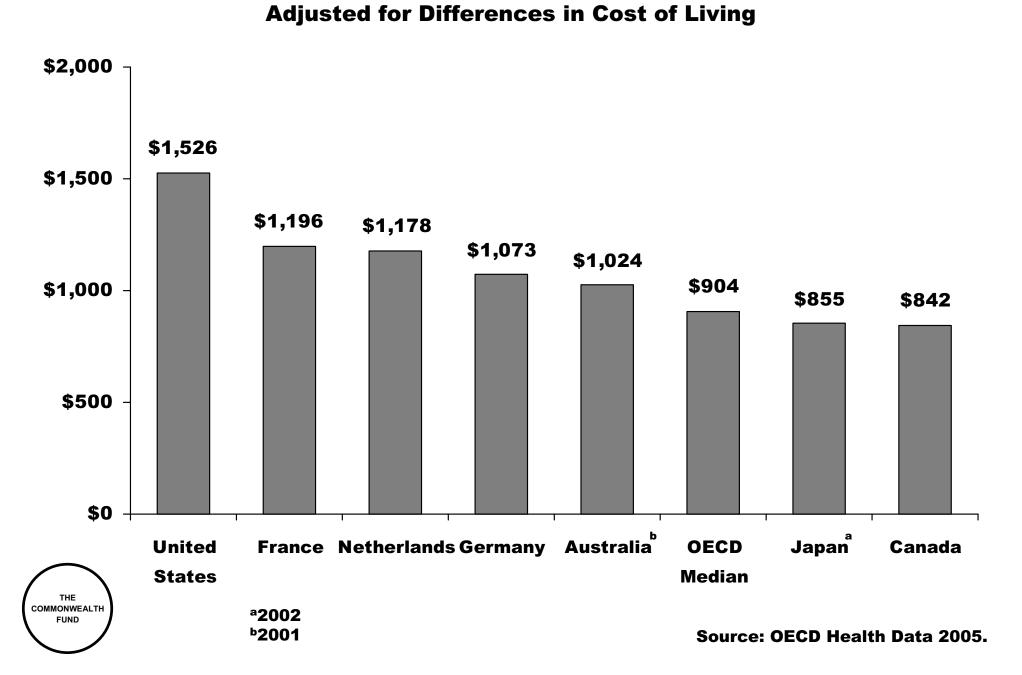


Chart V-2

Average Annual Growth Rate of Real Spending per

Capita on Hospital Services, 1993-2003

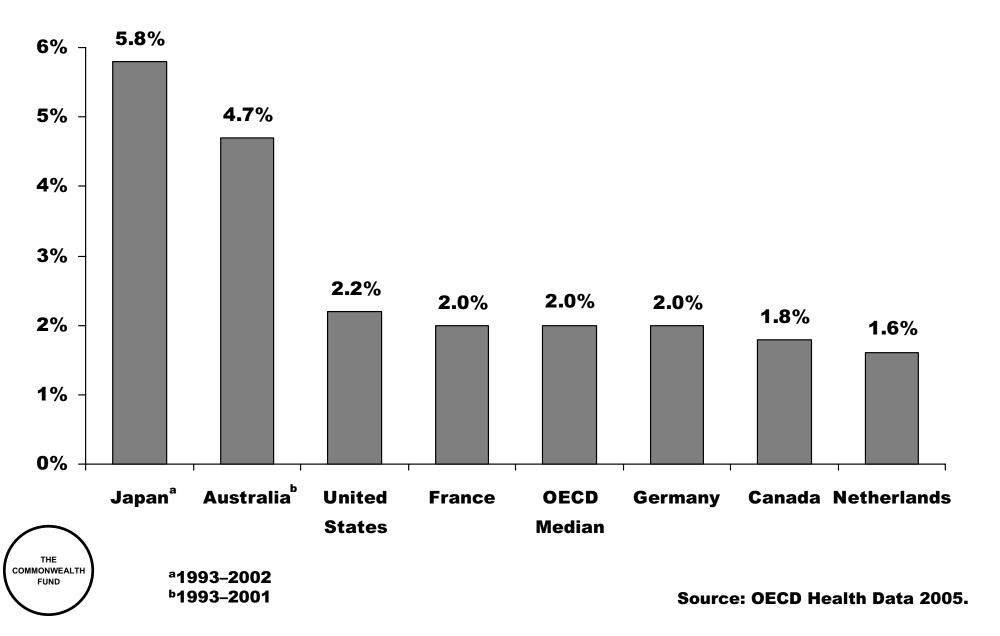


Chart V-3
Hospital Spending per Inpatient
Acute Care Day in 2003

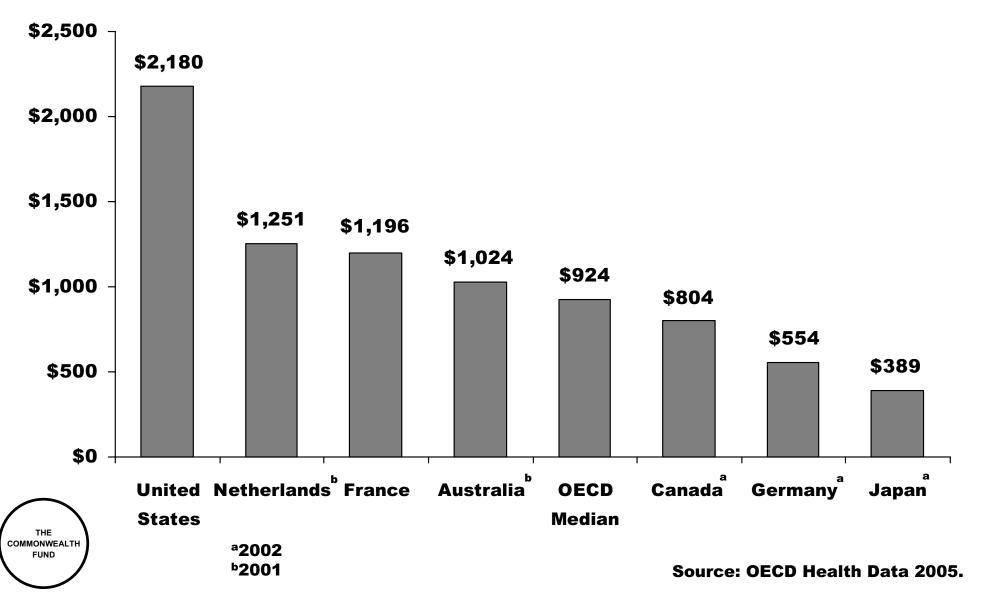


Chart V-4
Hospital Spending per Discharge in 2003

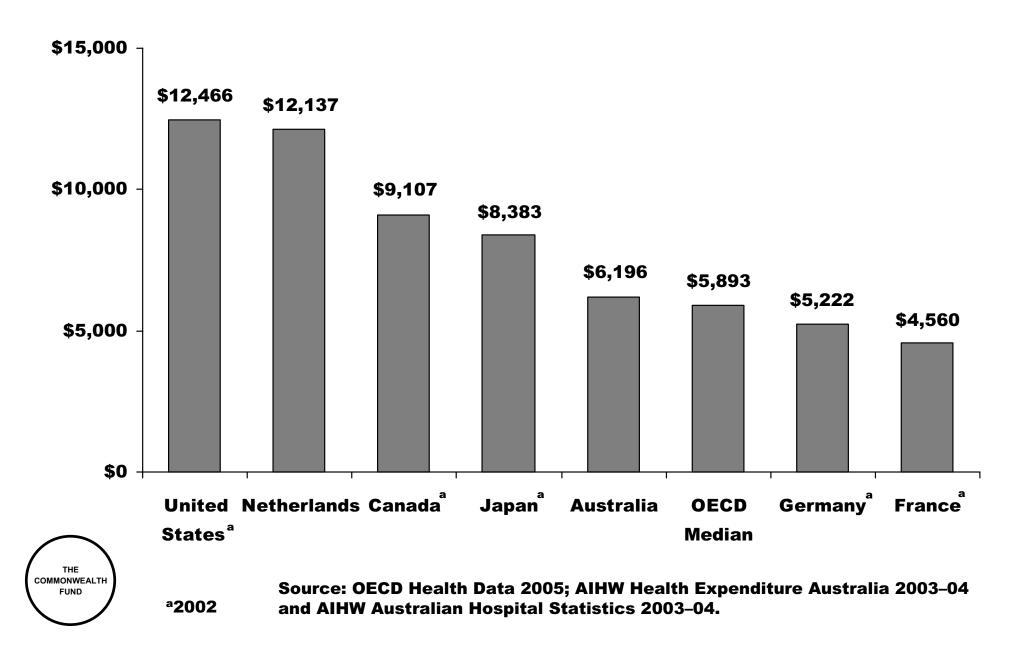


Chart V-5
Hospital Discharges per 1,000 Population in 2003

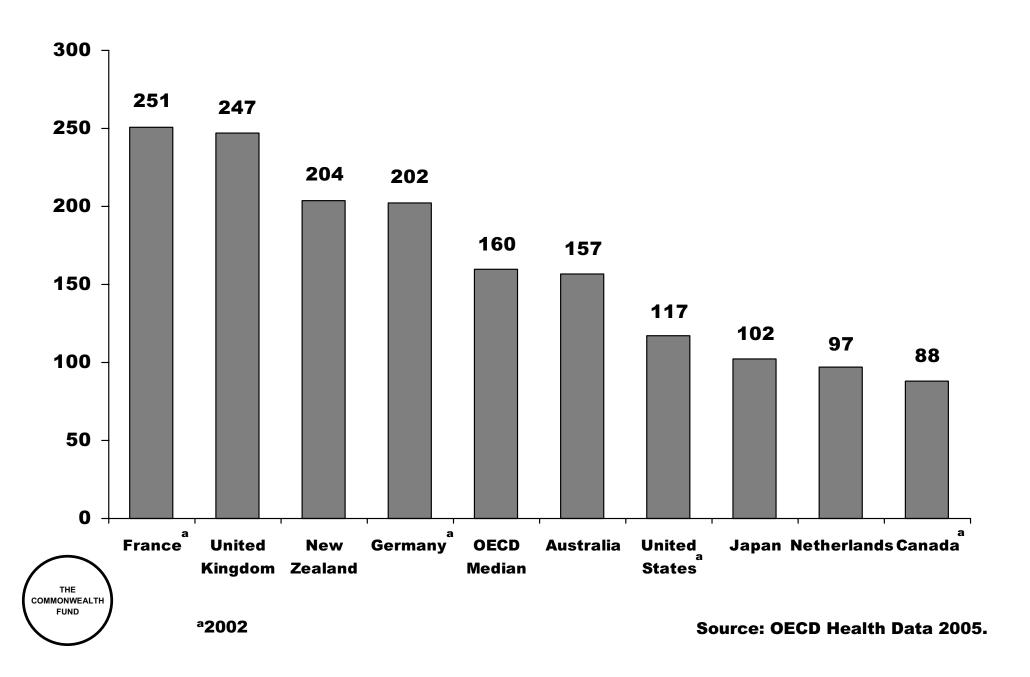


Chart V-6

Average Length of Stay for Acute Care in 2003

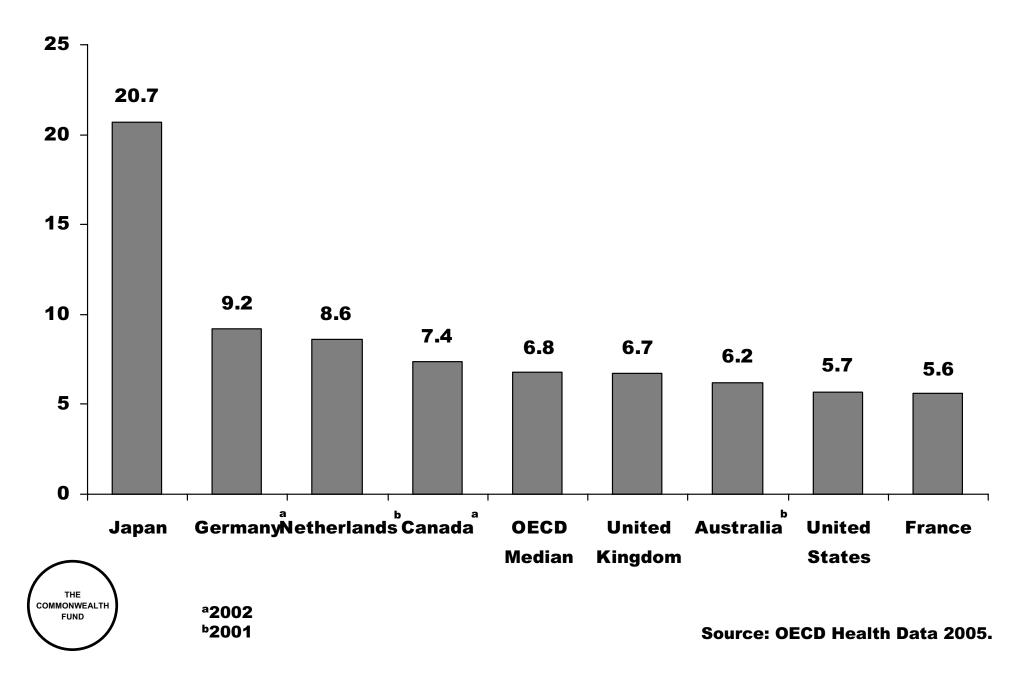


Chart V-7
Average Length of Hospital Stay
for Acute Myocardial Infarction in 2003

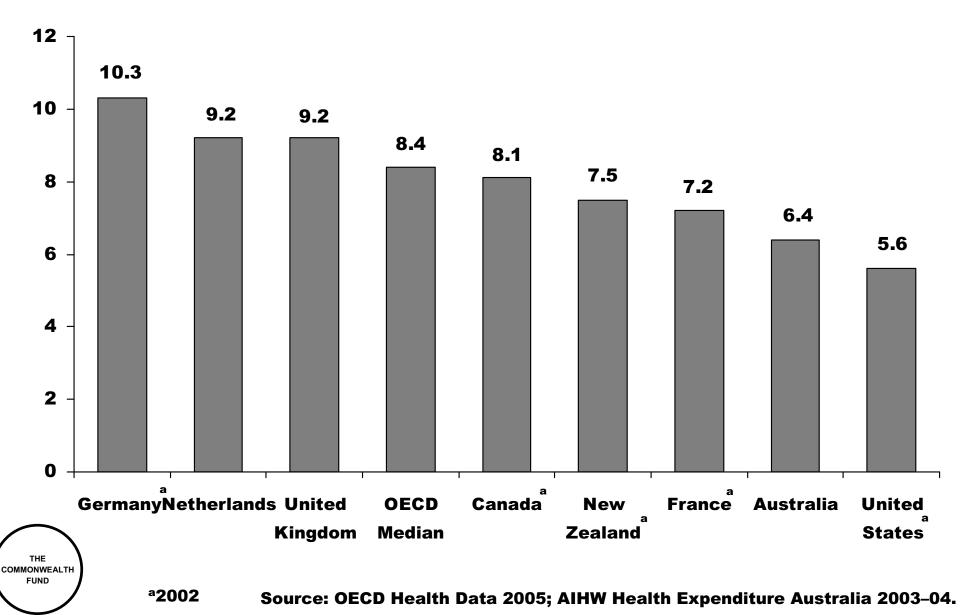


Chart V-8

Average Length of Stay for Normal Delivery in 2003

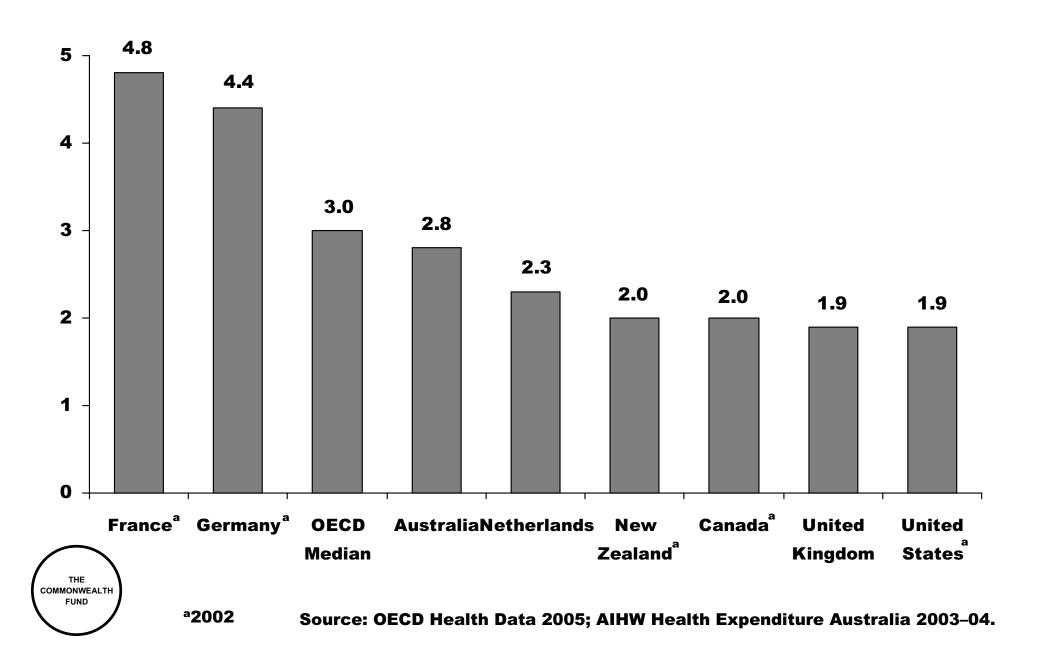
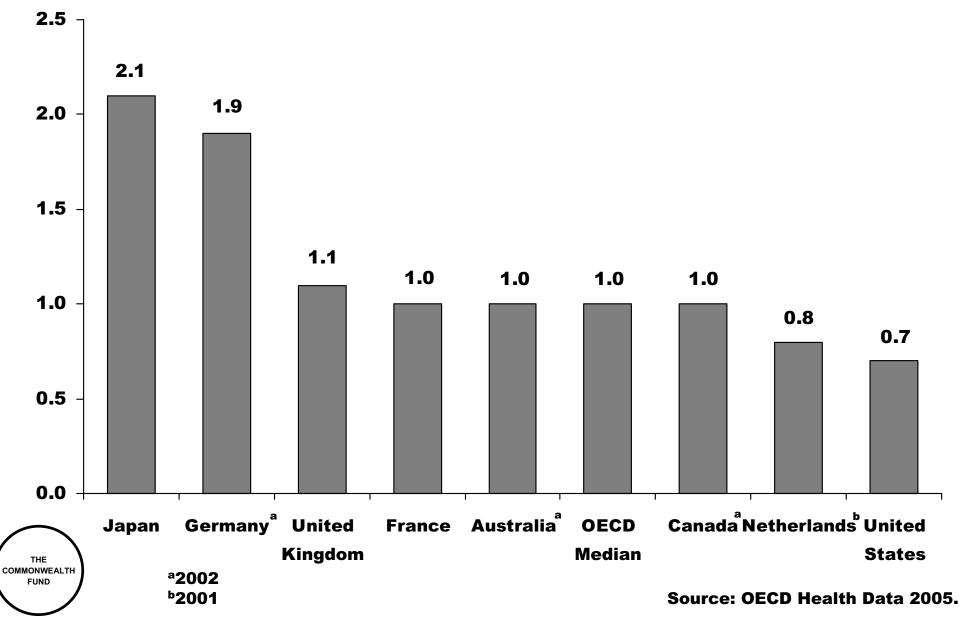


Chart V-9 **Average Annual Hospital Inpatient Acute Care Days per Capita in 2003** 



Number of Acute Care Hospital Beds per 1,000 Population in 2003

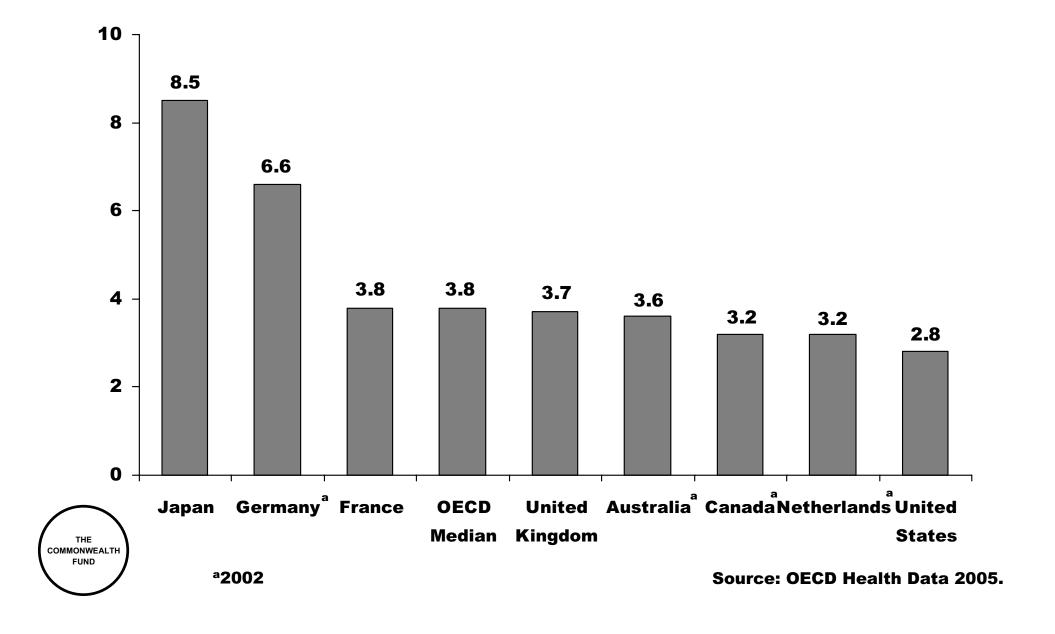
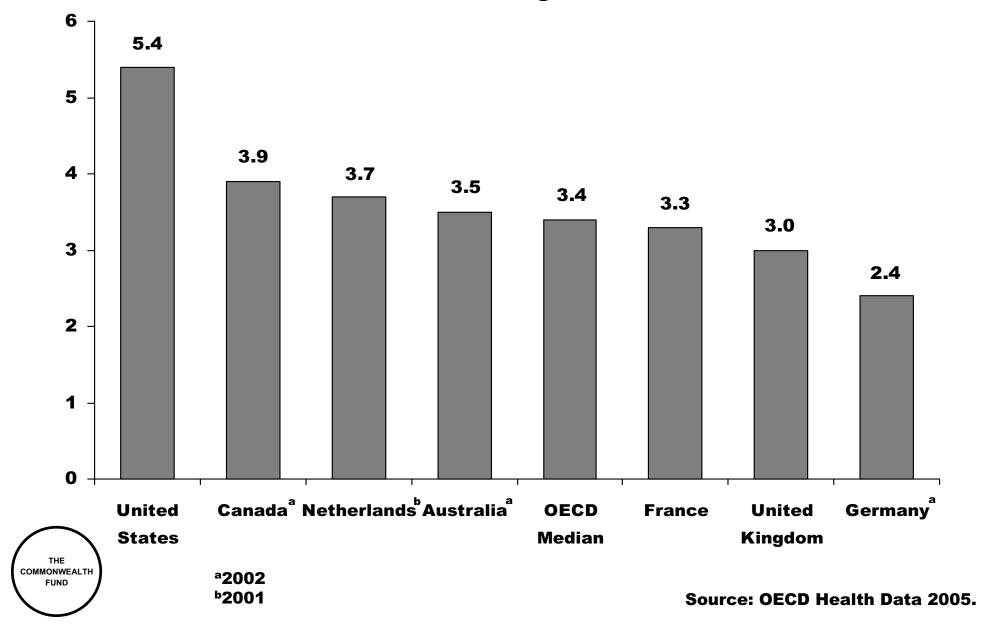


Chart V-11
Hospital Employment per 1,000 Inpatient
Acute Care Days in 2003



#### **VI. Long-Term Care**



Chart VI-1

## Long-Term Institutional Care Spending per Capita in 2003

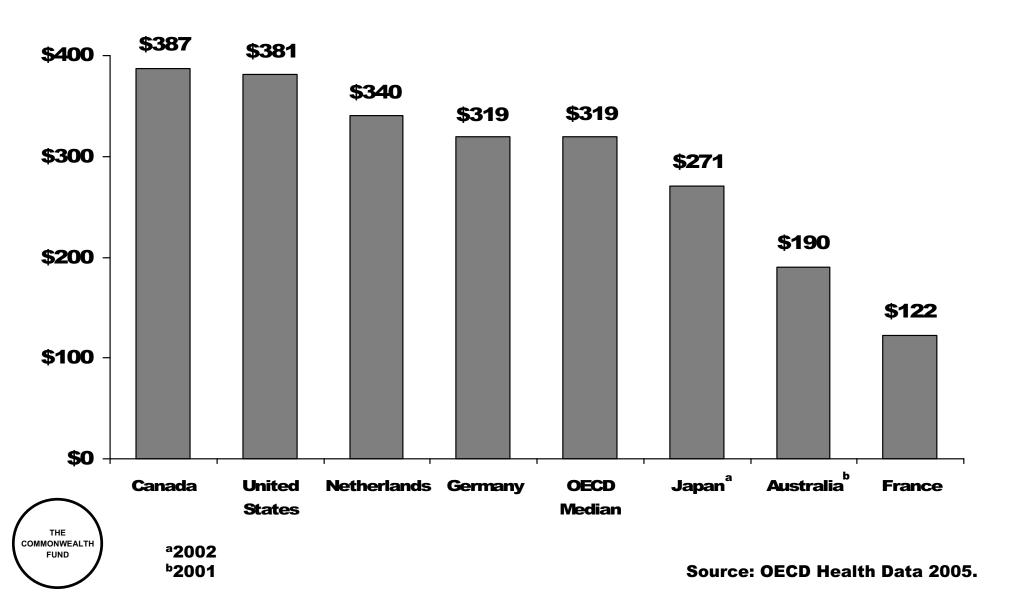


Chart VI-2

## Average Annual Growth Rate of Real Spending per Capita on Long-Term Institutional Care, 1993–2003

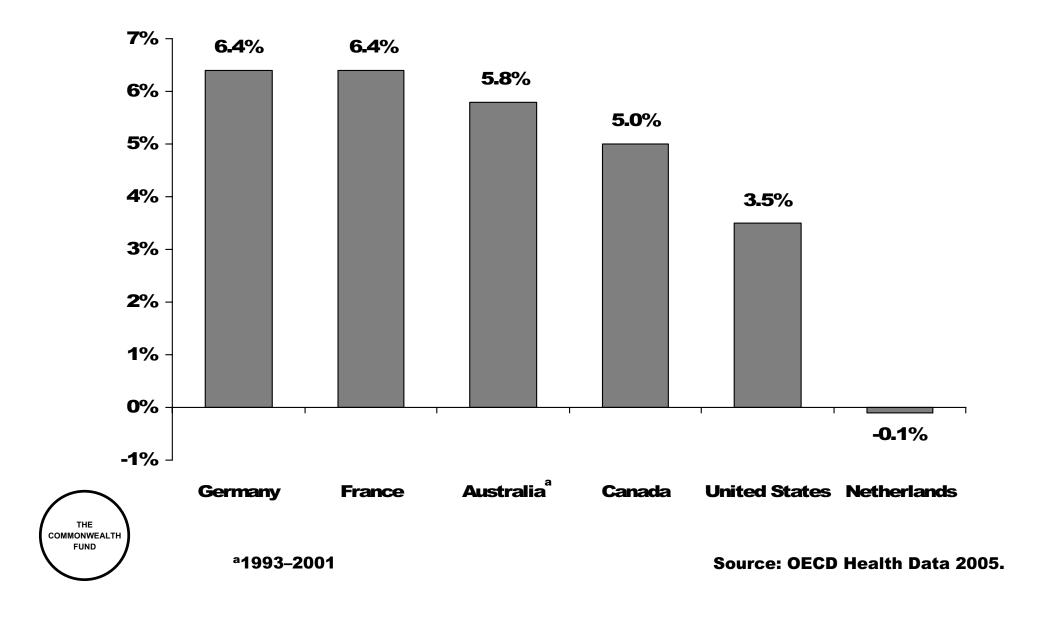


Chart VI-3

Home Health Care Spending per Capita in 2003

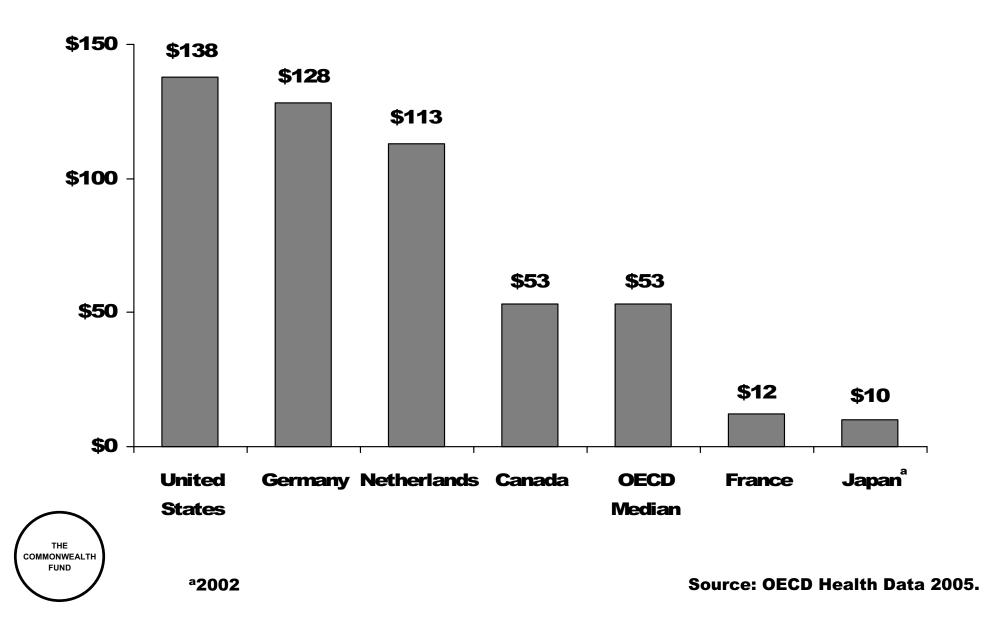
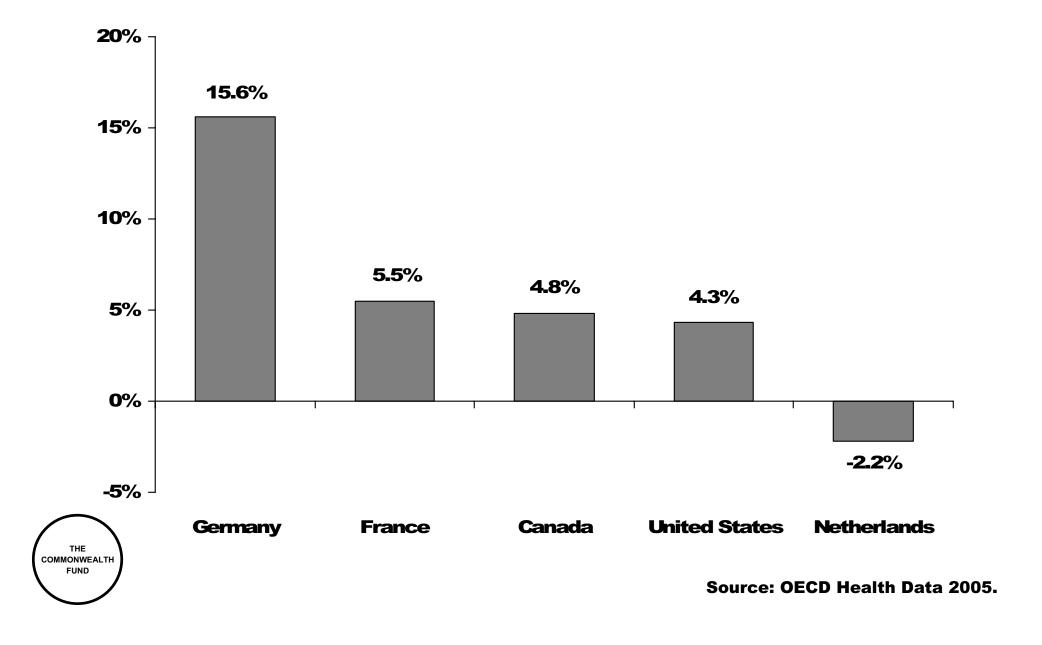


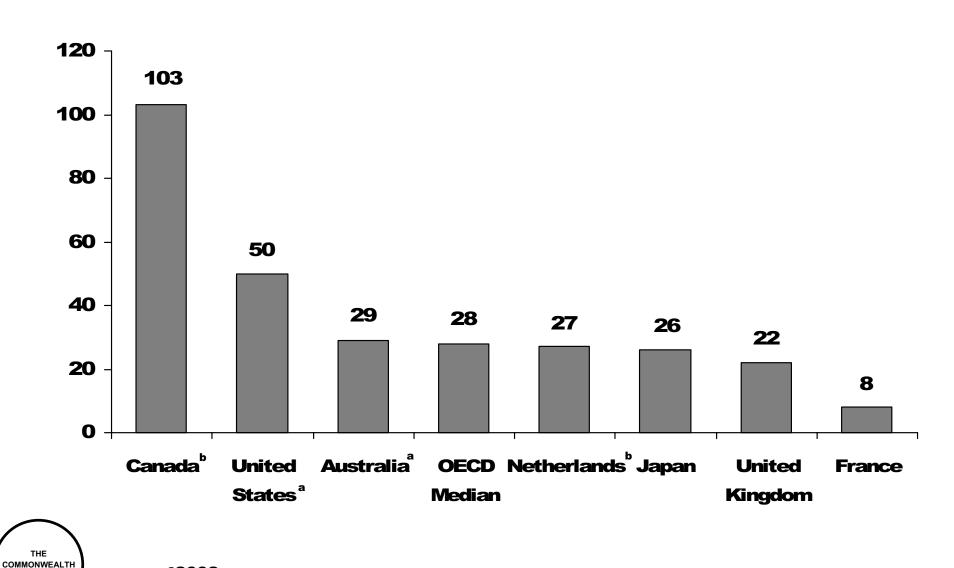
Chart VI-4

Average Annual Growth Rate of Real Spending per Capita on Home Health Care, 1993–2003



Source: OECD Health Data 2005.

Number of Long-Term Care Beds per 1,000 Population over Age 65 in 2003



a2002

<sup>b</sup>2001

FUND

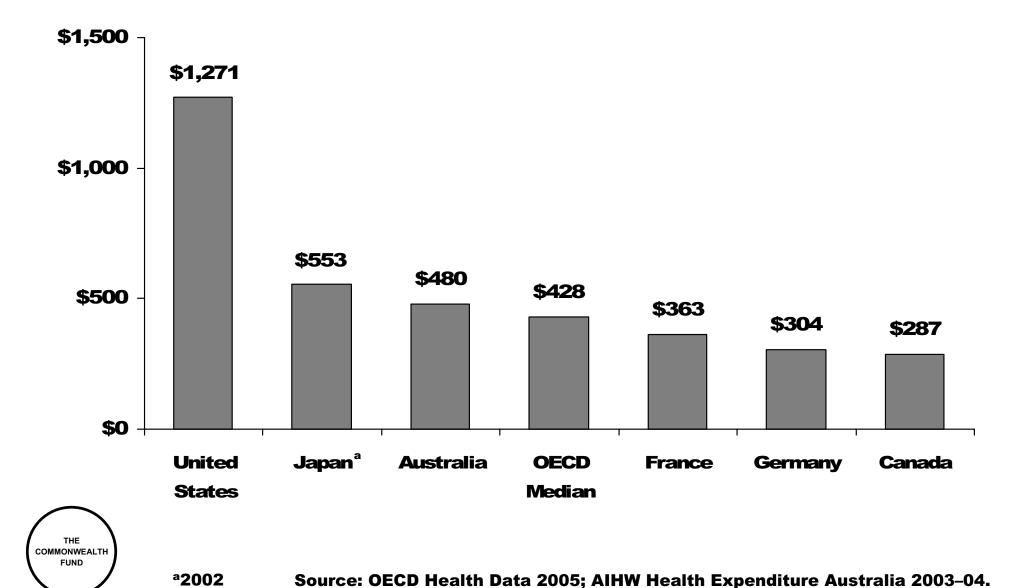
#### **VII. Physicians**



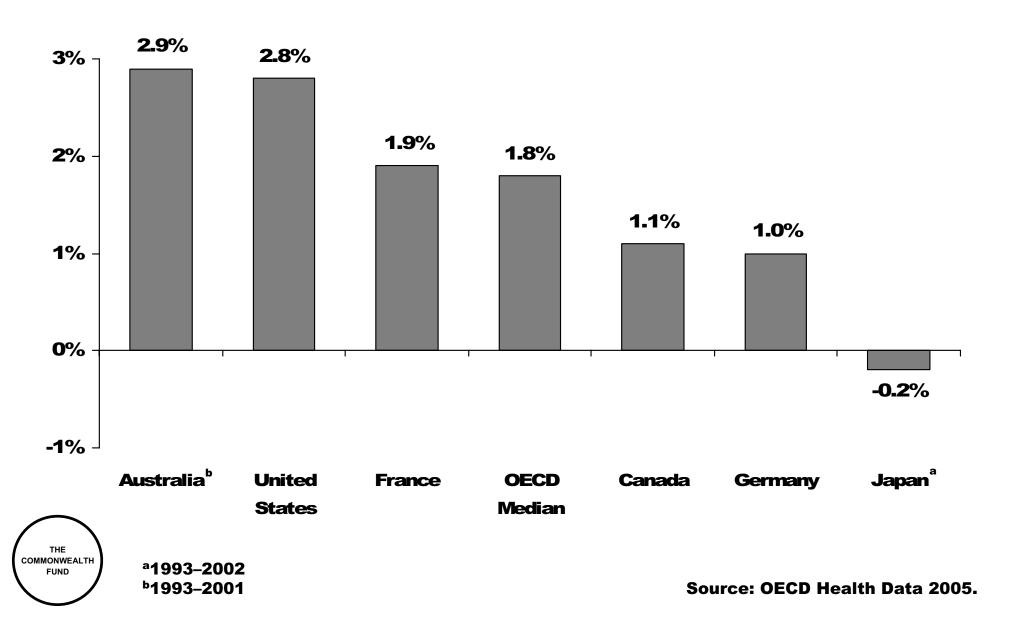
Chart VII-1

Spending on Physician Services per Capita in 2003

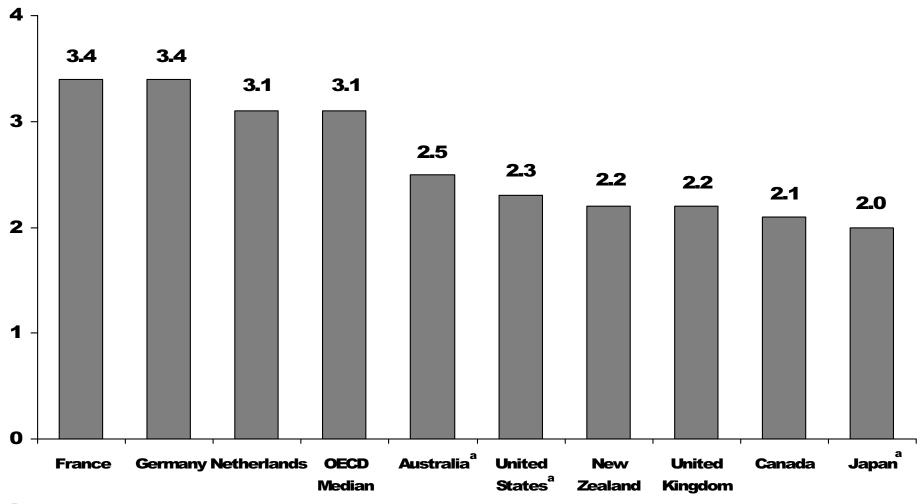
Adjusted for Differences in Cost of Living



Average Annual Growth Rate of Real Spending per Capita on Physician Services, 1993–2003



Number of Practicing Physicians per 1,000 Population in 2003

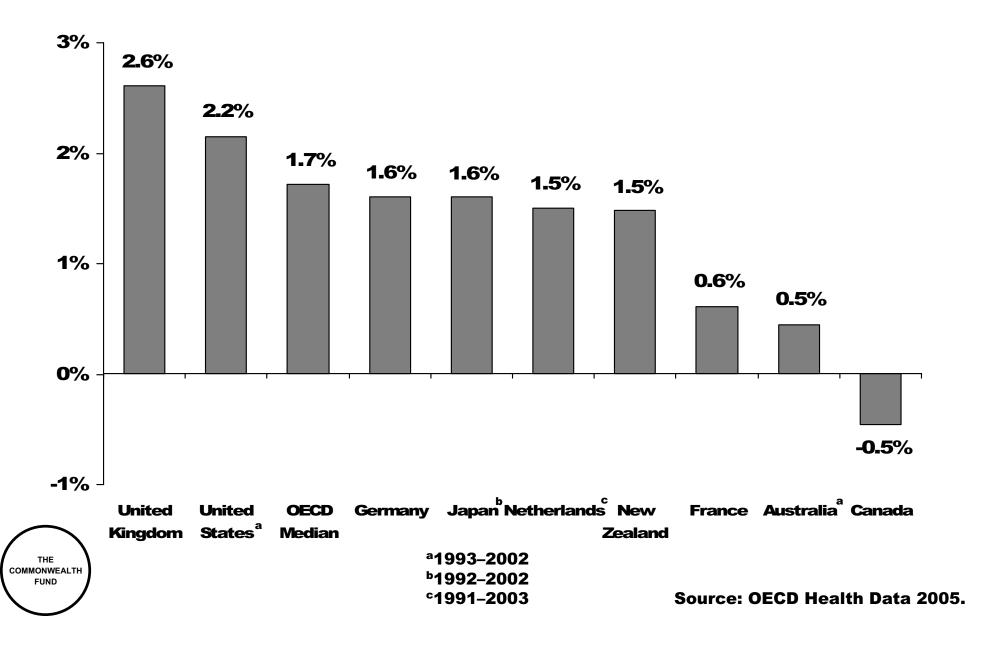




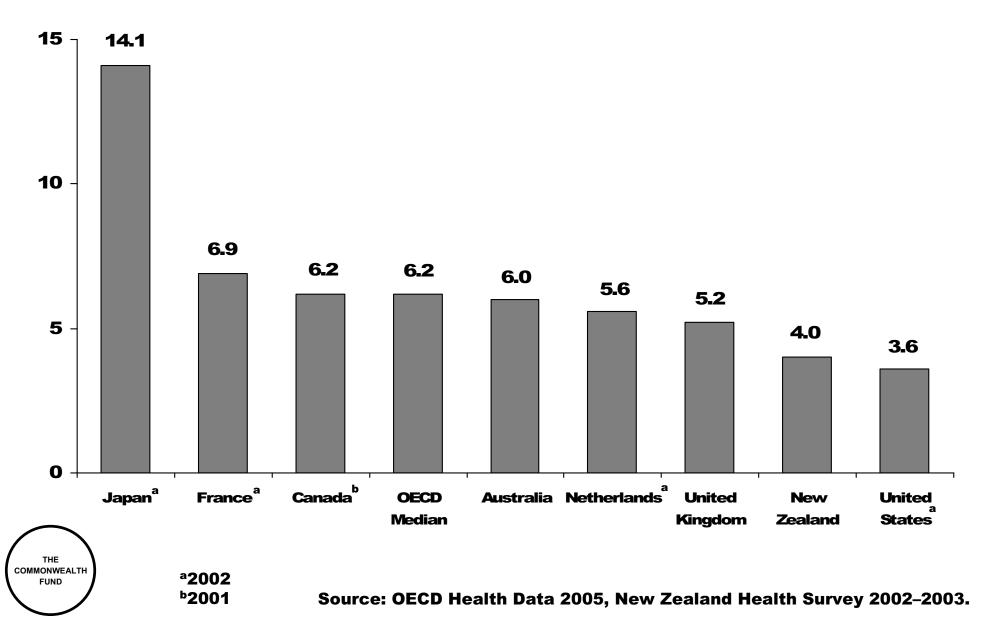
**Source: OECD Health Data 2005.** 

Chart VII-4

## Average Annual Growth Rate of Practicing Physicians per 1,000 Population, 1993–2003



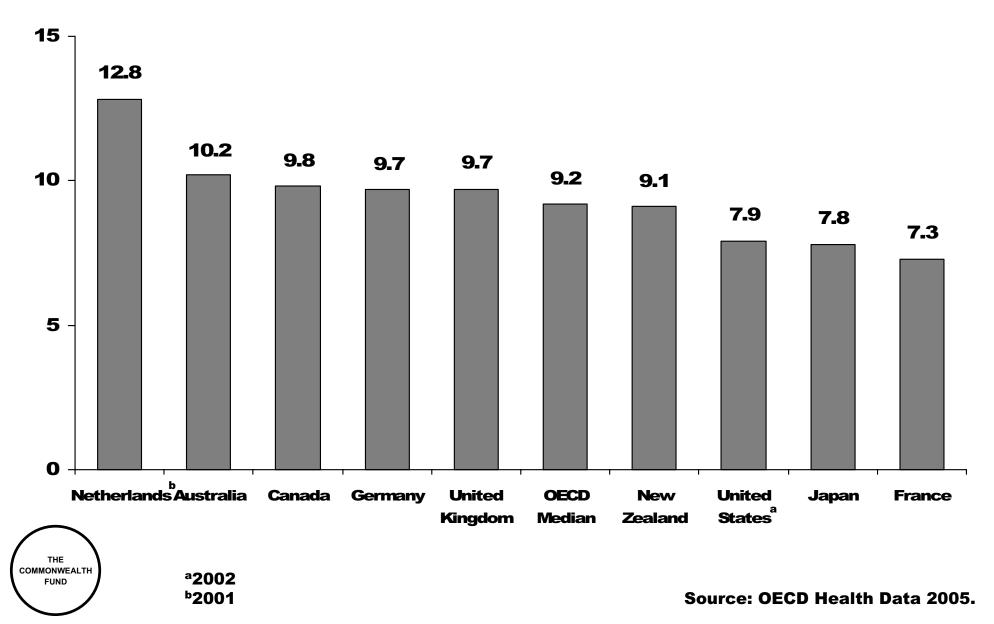
Average Annual Number of Physician Visits per Capita in 2003



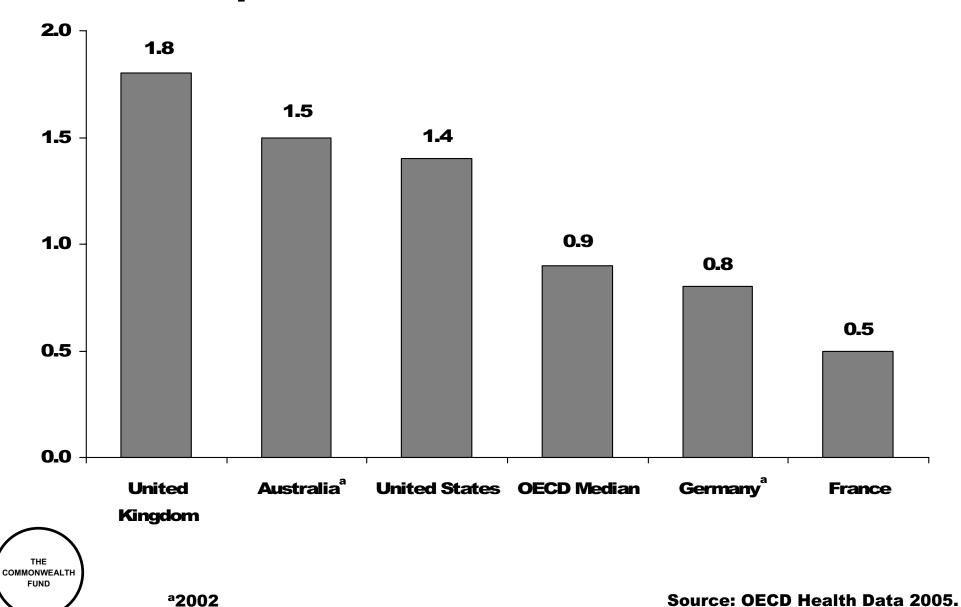
#### **VIII.** Nursing



# Number of Practicing Nurses per 1,000 Population in 2003



# Number of Practicing Nurses per Acute Care Bed in 2003



#### IX. Pharmaceuticals



Chart IX-1

Pharmaceutical Spending per Capita in 2003

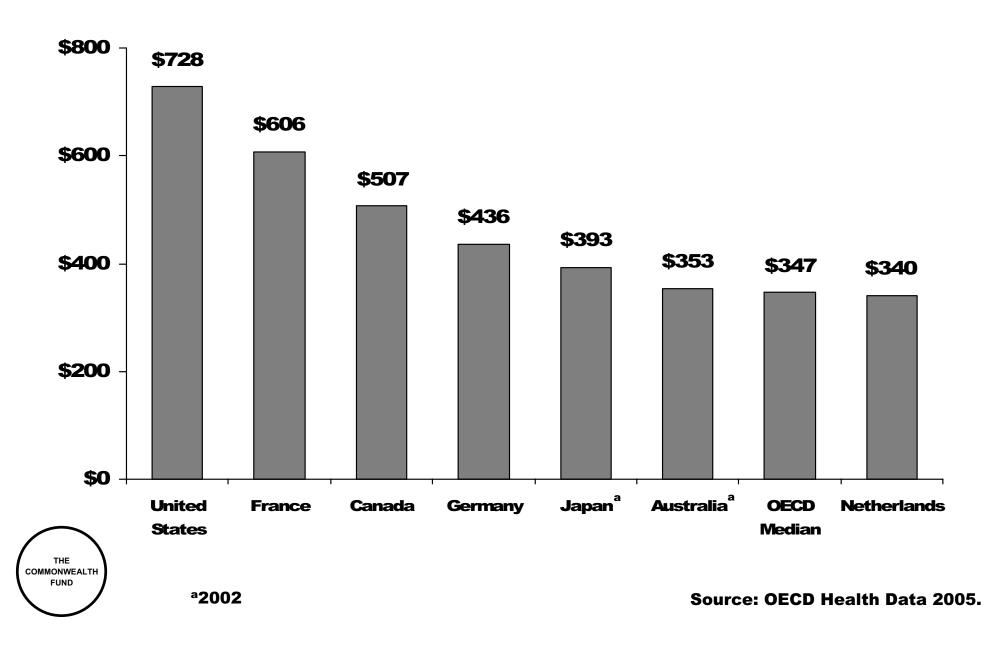
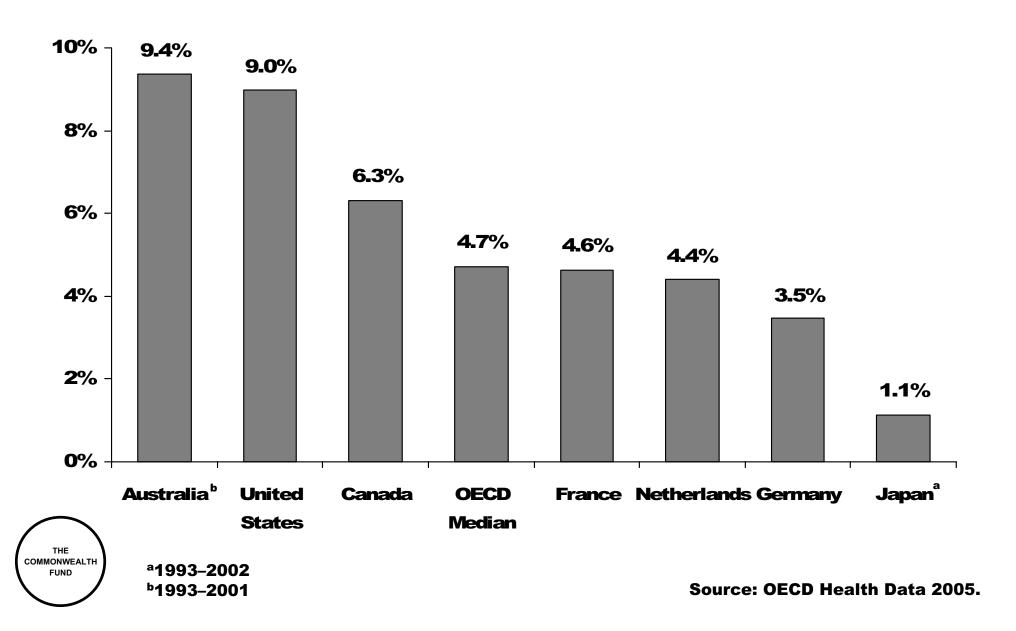


Chart IX-2

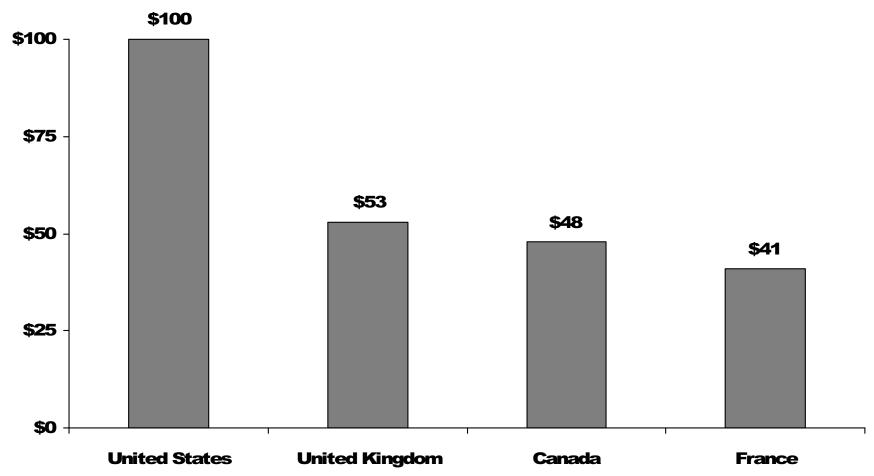
Average Annual Growth Rate of Real Spending per Capita on Pharmaceuticals, 1993–2003



**Chart IX-3** 

### Relative Prices of Thirty Pharmaceuticals in Four Countries in 2003

**Assuming No Discount for U.S. Purchasers** 





Source: G. F. Anderson et al., "Doughnut Holes and Price Controls," *Health Affairs* Web Exclusive (July 21, 2004): W4-396–W4-404.

**Chart IX-4** 

## Percentage of Total Population with Pharmaceutical Goods Coverage Through Public Programs in 2003

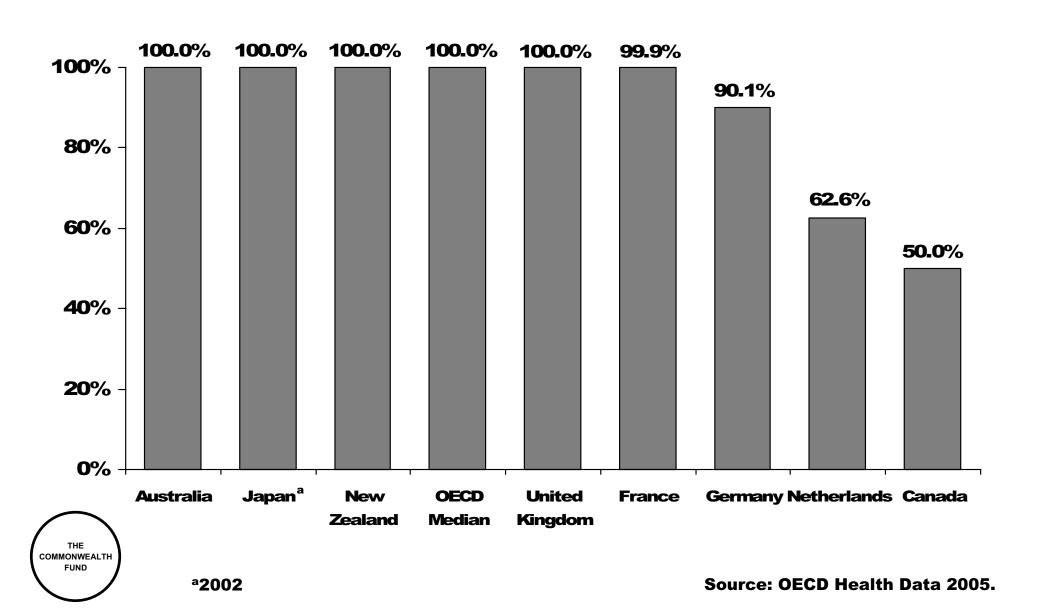
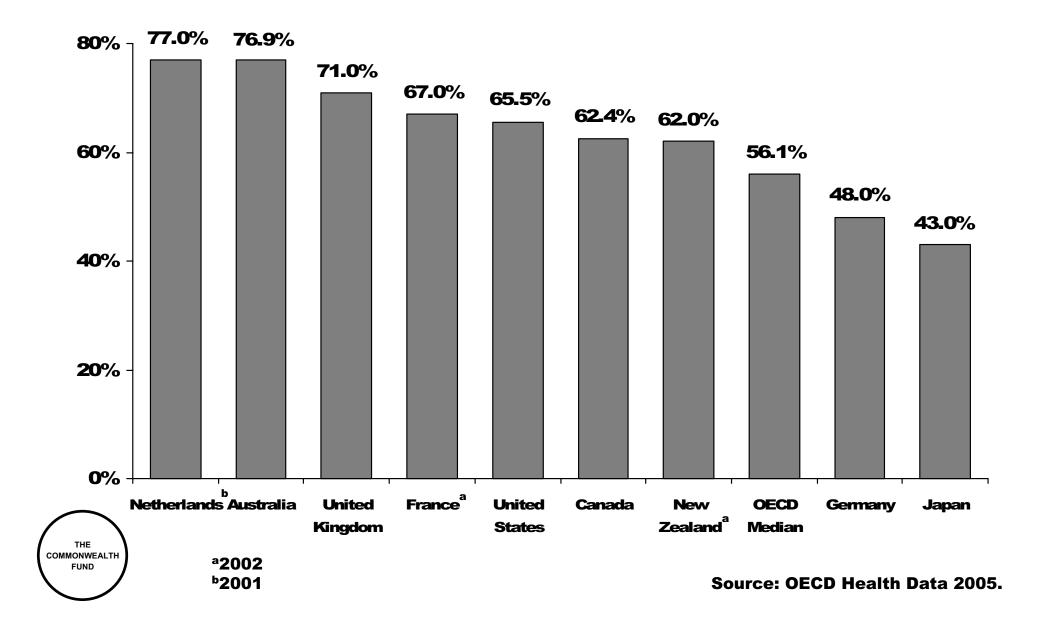


Chart IX-5
Percentage of Population over Age 65
with Influenza Immunization in 2003



## X. Medical Procedures Involving Sophisticated Technology



Chart X-1
Magnetic Resonance Imaging (MRI) Units
per Million Population in 2003

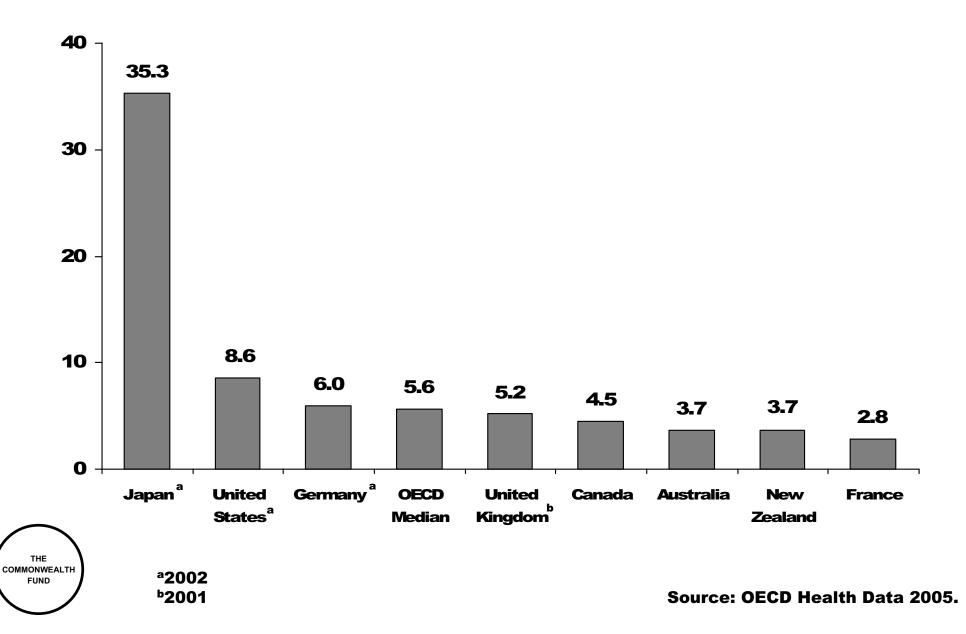


Chart X-2
Computer Tomography (CT) Scanners
per Million Population in 2003

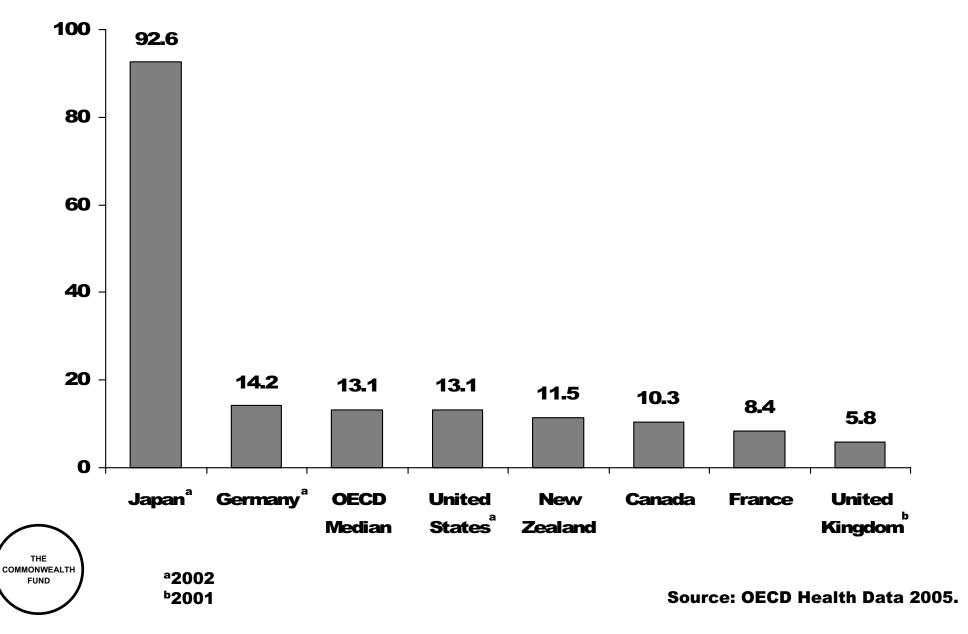
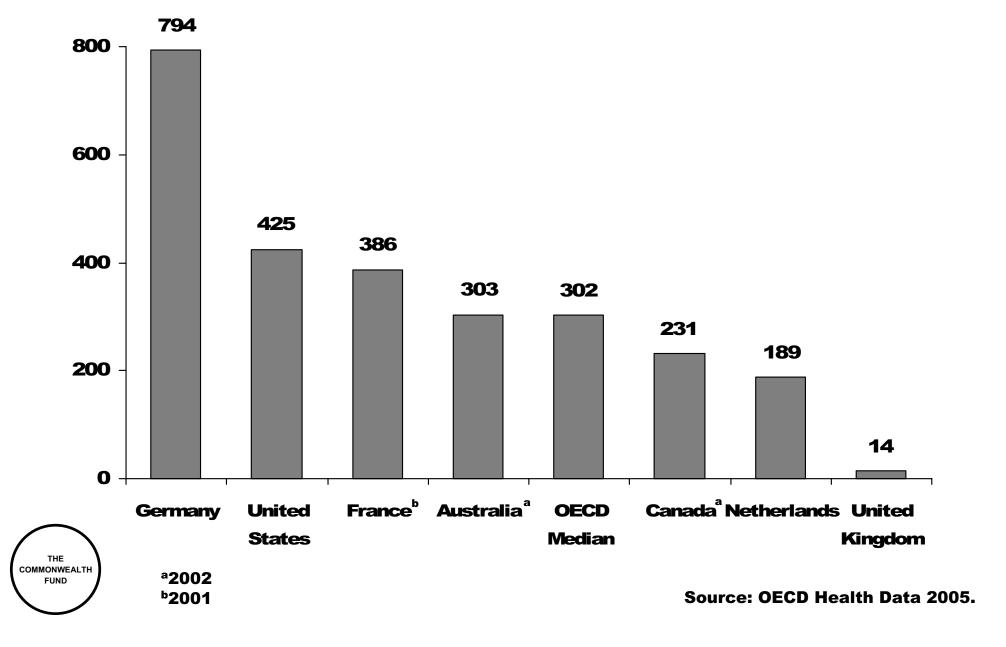


Chart X-3
Cardiac Catheterization Procedures
per 100,000 Population in 2003



**Chart X-4** 

# Percutaneous Transluminal Coronary Angioplasty (PTCA) Interventions per 100,000 Population in 2003

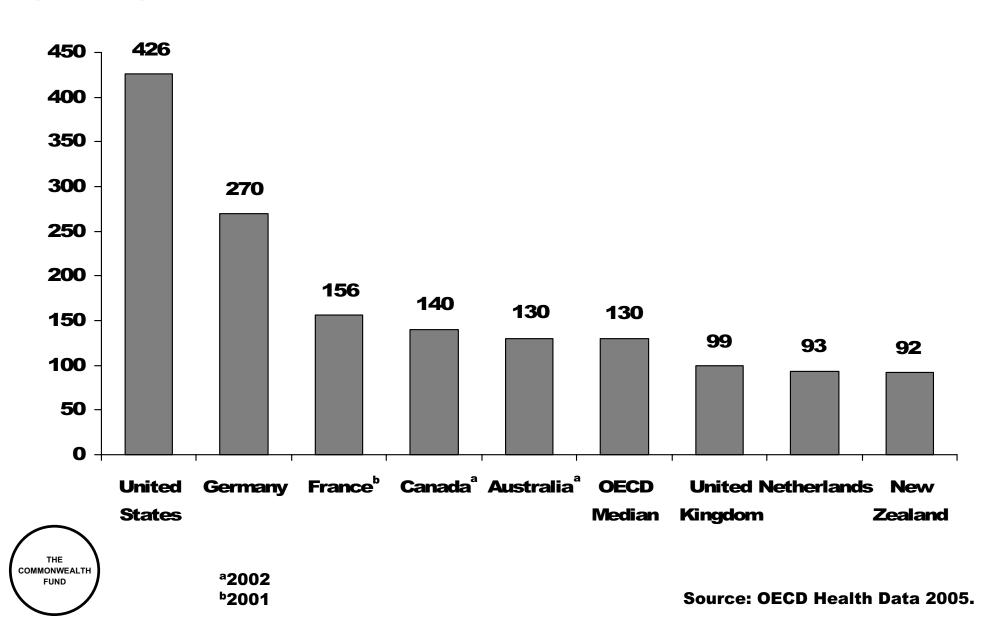
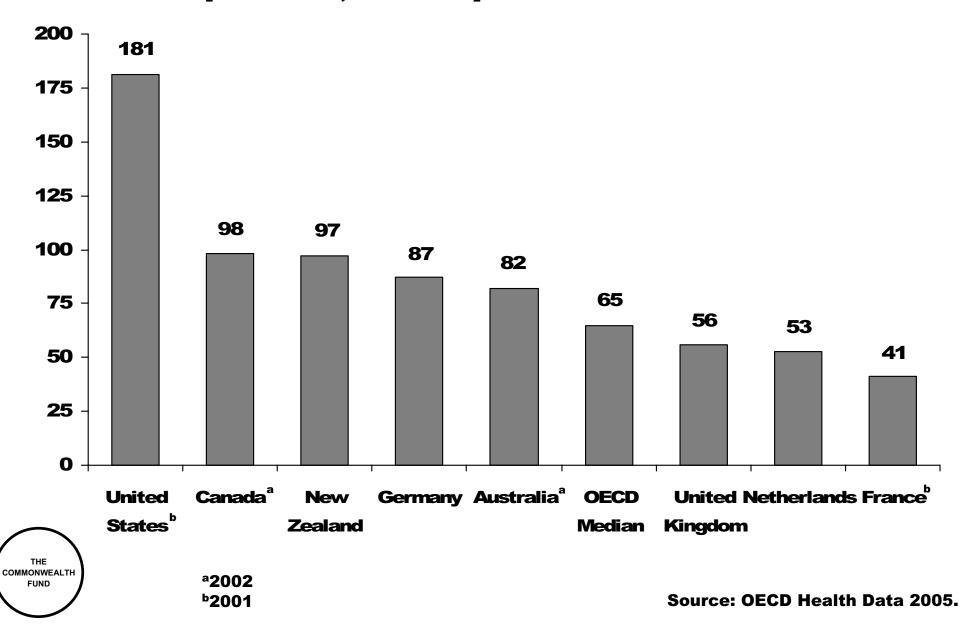
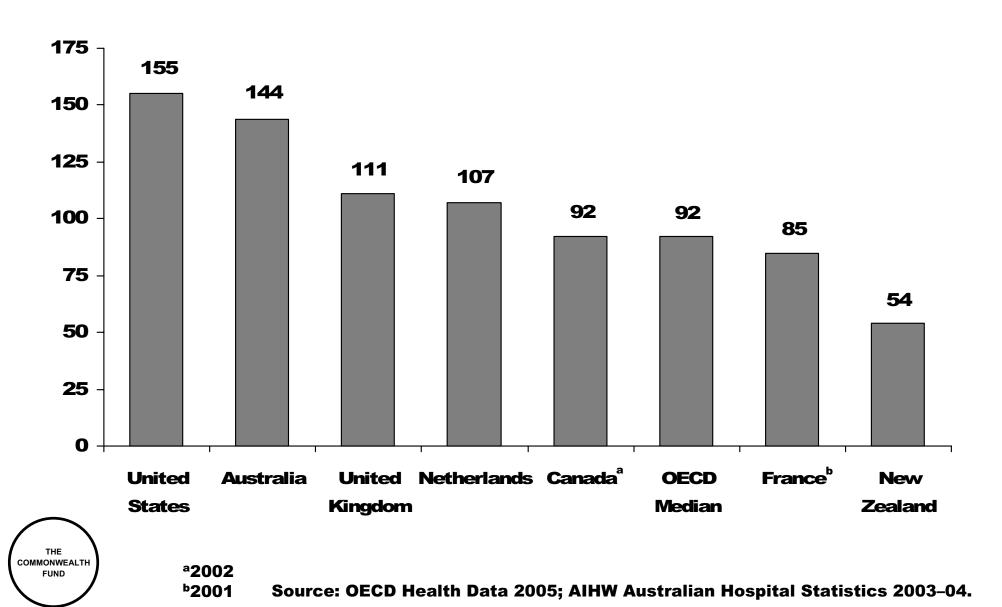


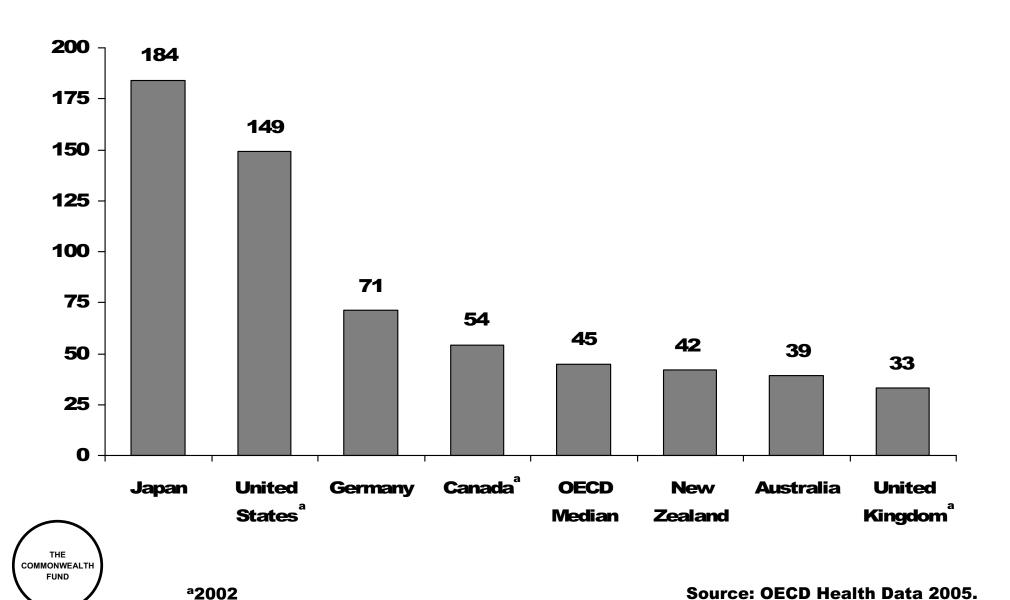
Chart X-5
Coronary Bypass Procedures
per 100,000 Population in 2003



Number of Knee Replacements per 100,000 Population in 2003



Number of Patients Undergoing Dialysis Treatment per 100,000 Population in 2003



# XI. Non-Medical Determinants of Health



Chart XI-1
Percentage of Adults Who Reported Being
Daily Smokers in 2003

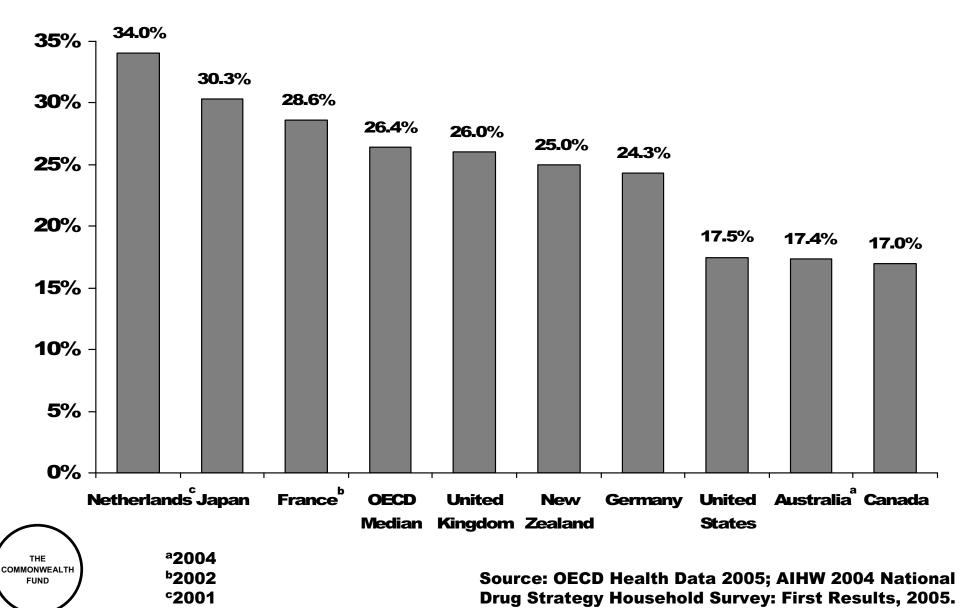


Chart XI-2

Decreases in Smoking Rates Between 1983–2003

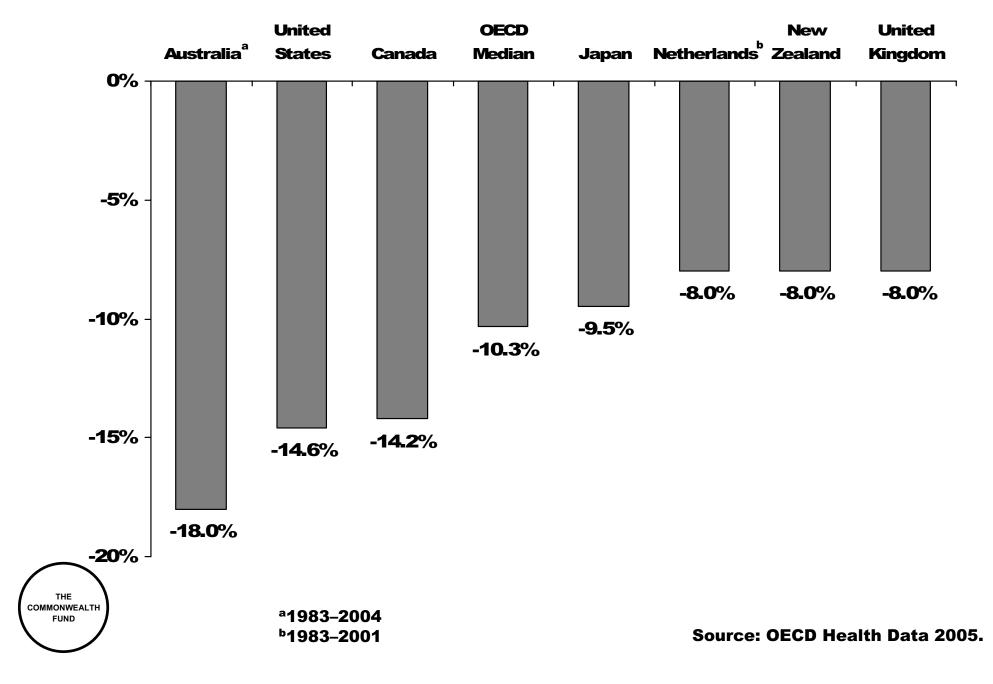
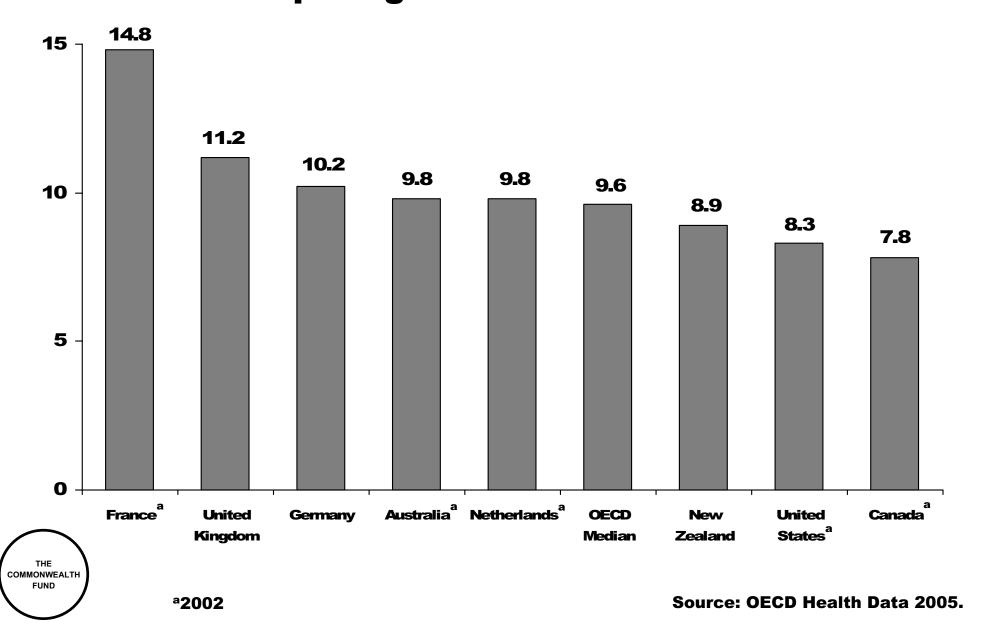


Chart XI-3

Annual Alcohol Consumption in Liters per Capita

for People Age 15 and Older in 2003



# Chart XI-4 Obesity (BMI>30) Prevalence in 2003

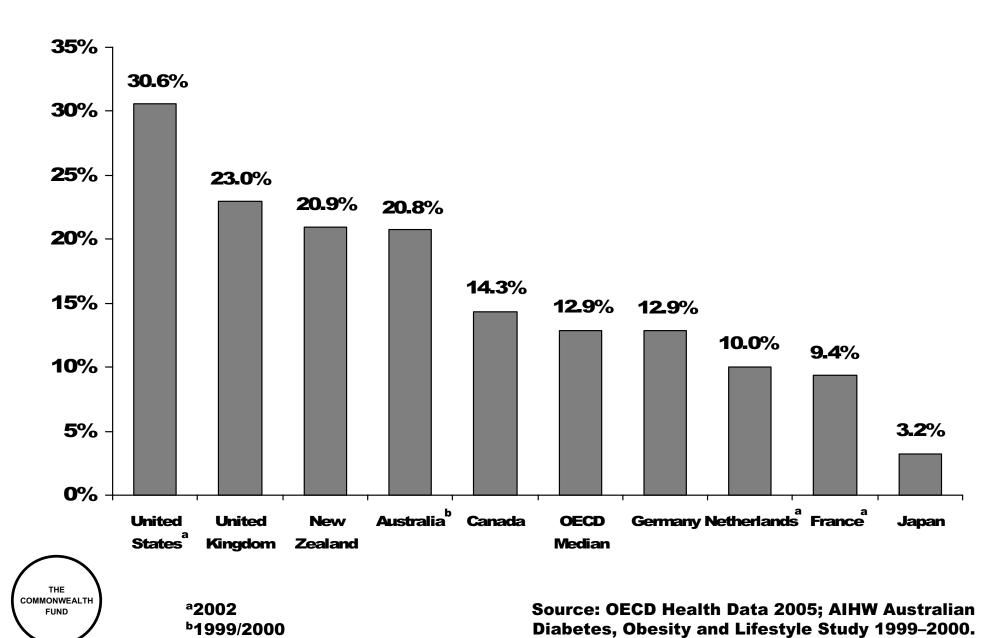
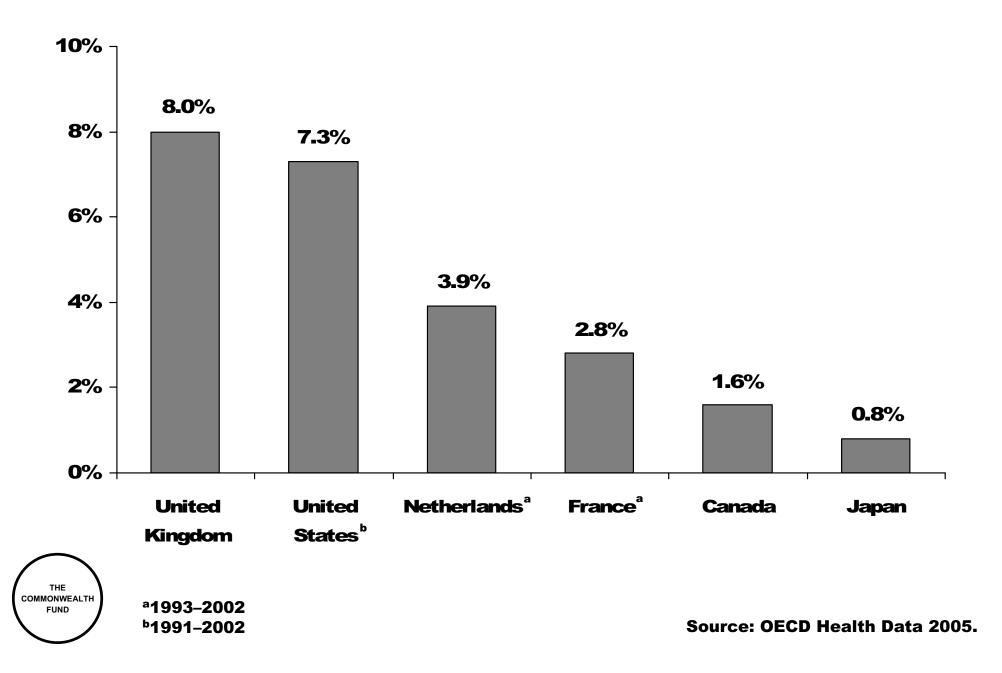


Chart XI-5 **Changes in Obesity Rates, 1993–2003** 



# XII. Mortality



# Chart XII-1 **Life Expectancy at Birth in 2003**

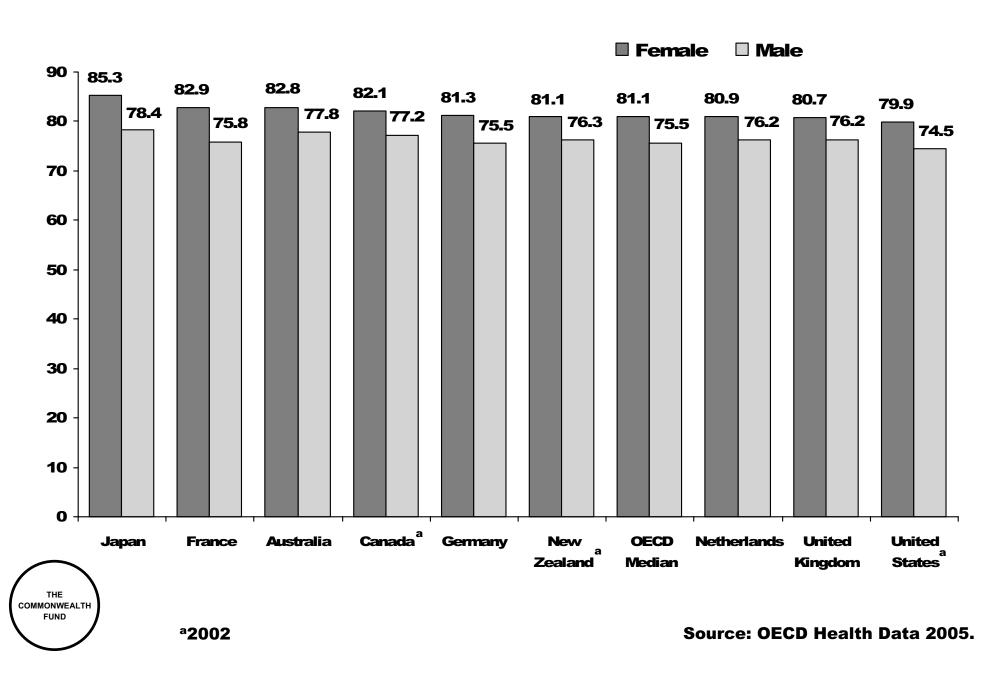


Chart XII-2

Life Expectancy at Age 65 in 2003

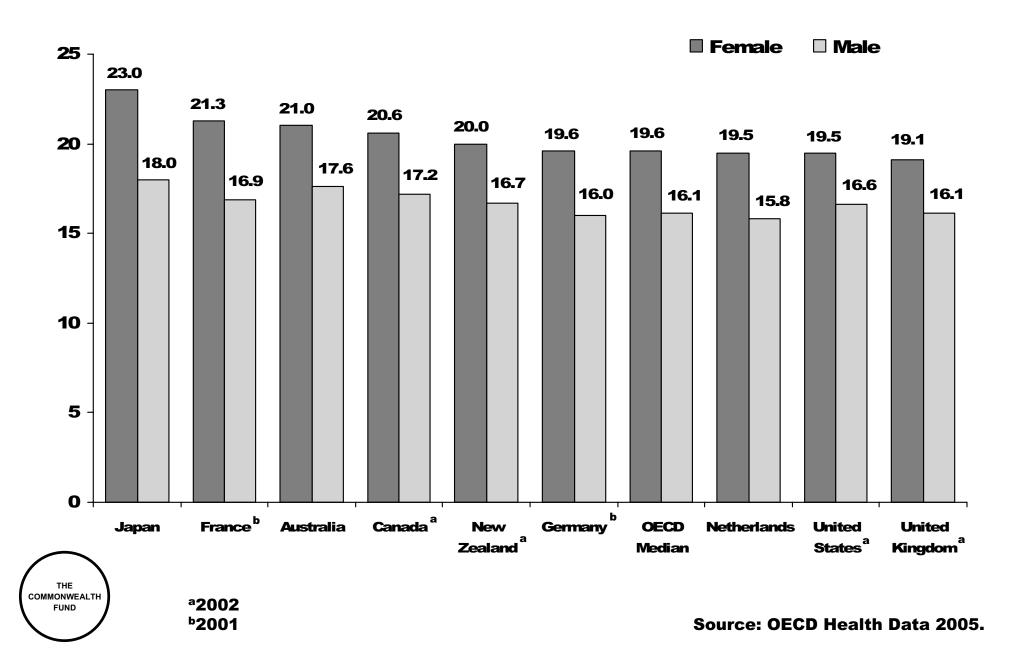


Chart XII-3
Increases in Life Expectancy at Birth, 1983–2003

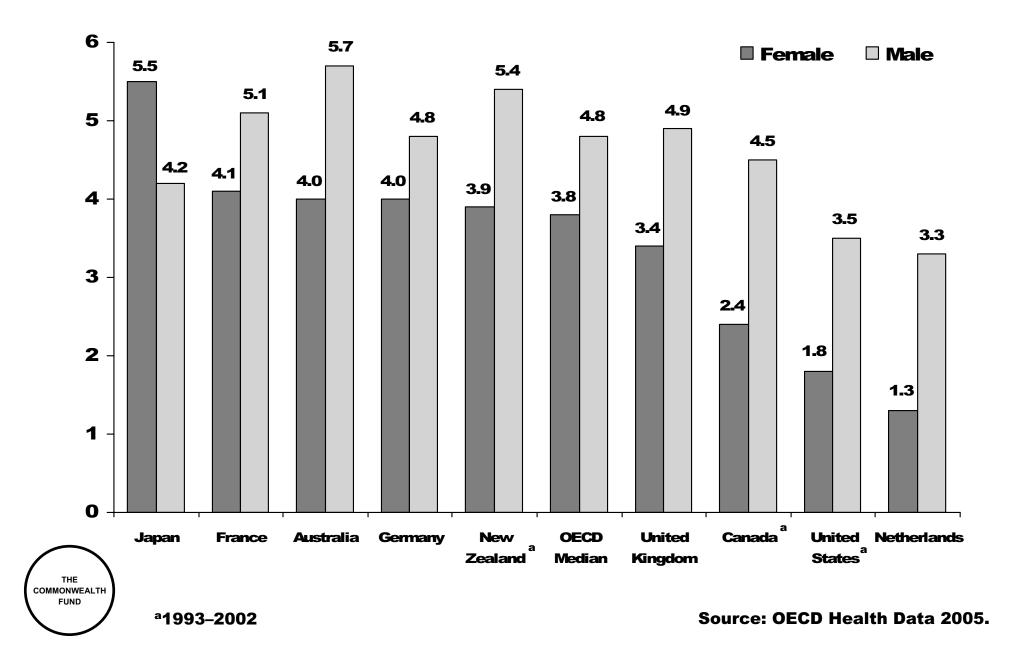


Chart XII-4
Increases in Life Expectancy at Age 65, 1983–2003

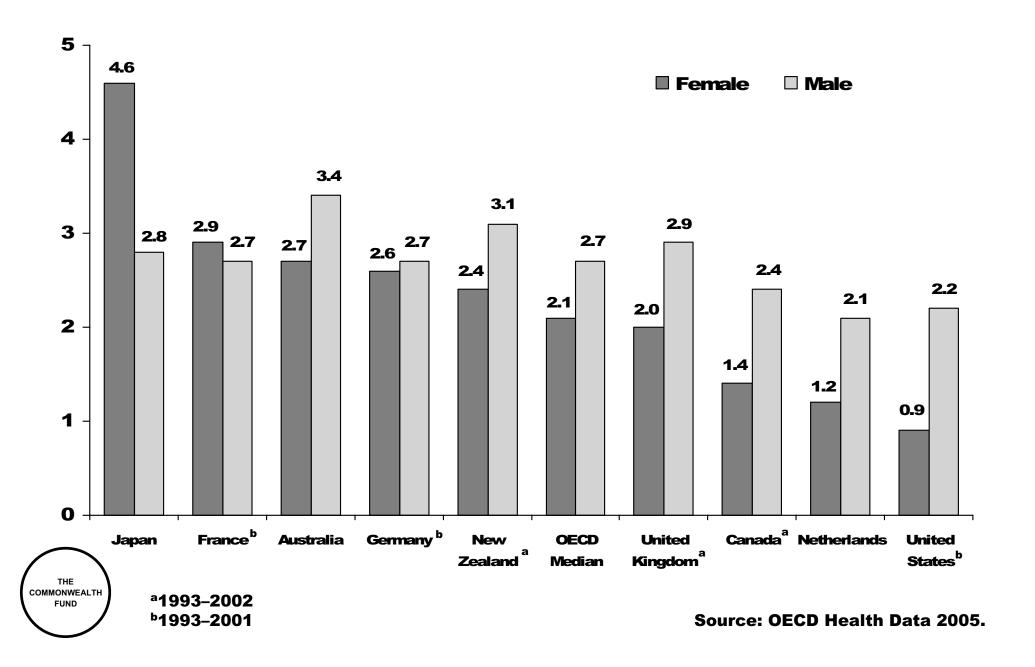
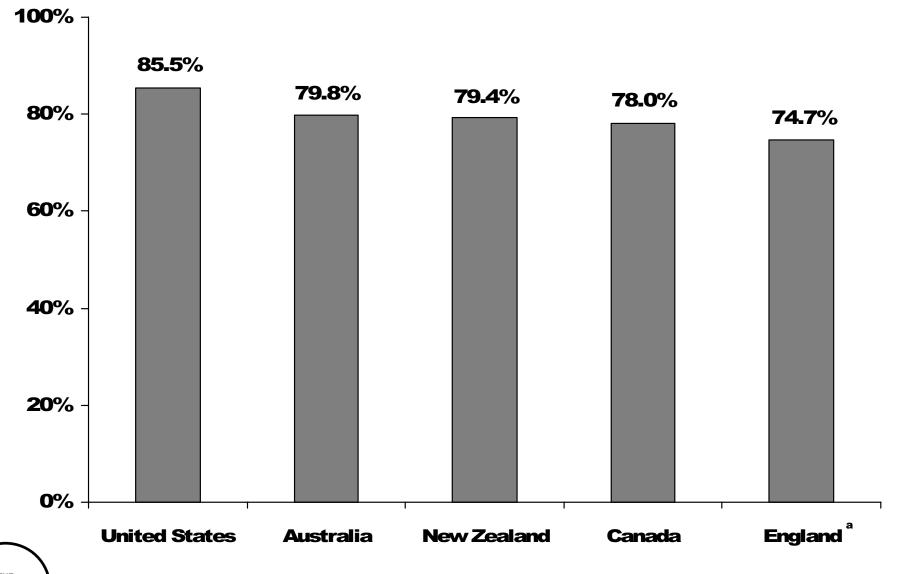


Chart XII-5

Breast Cancer Five-Year Relative Survival in 1997



commonwealth Fund

Source: Commonwealth Fund International Working Group on Quality Indicators.

Chart XII-6
Breast Cancer Screening in 2001

**Percentage of Women Receiving a Mammogram** 

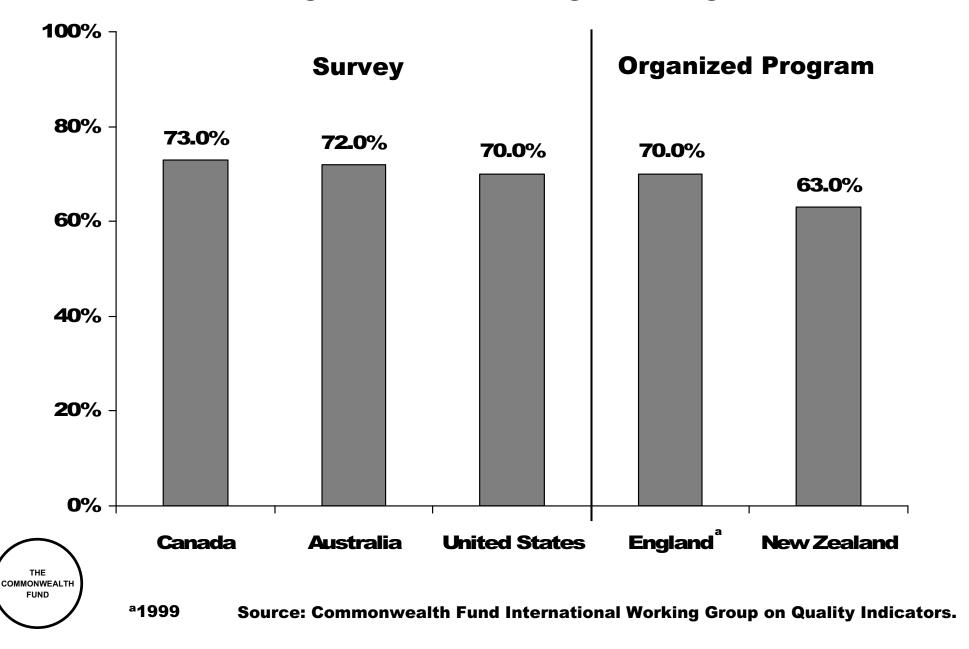
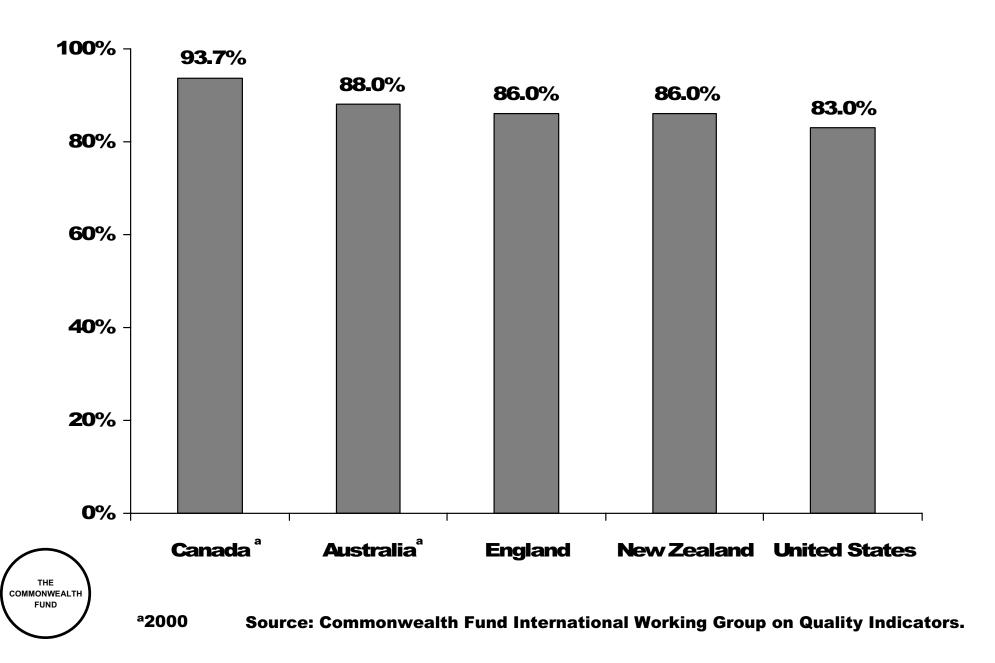


Chart XII-7

Kidney Transplant Five-Year Survival in 2001



# **XIII. Country Summaries**



# **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 percent of the scheduled fee for private inpatient services and 85 percent to 100 percent 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 percent of medical services are bulk billed. Prescription pharmaceuticals have a patient copayment. Out-of-pocket payments account for 19.7 percent of total health expenditures.
- 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 percent levy on taxable income (accounting for 17.3 percent 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 percent of total health expenditures (46 percent federal and 22 percent state/local).

- Private Insurance: 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 accommodations, choice of specialists, and avoidance of queues for elective surgery.
- Private insurance covers 49 percent of the population (43 percent have hospital cover with nearly all of these also having ancillary cover, whilst 6 percent of the population are covered for ancillary services only).
   Expenditure by private health insurance funds accounts for 7.1 percent of total health expenditure. Through a rebate, 30 percent of private health insurance premiums are paid by the Australian government. The rebate increases to 35 percent for people aged 65 to 69 years, and to 40 percent for those aged 70 years and over.

#### How is the delivery system organized?

- Physicians: Primary care physicians act as gatekeepers. Physicians are generally reimbursed by a fee-for-service system. The government sets the fee schedules, but these are not maximum prices.
- Hospitals: Mostly public, run by the states. The states pay for public
  hospitals with Australian government assistance negotiated via five
  yearly 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 Australian 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.



# **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 individuals living on reserves, the Inuit, and inmates in federal penitentiaries.
- Supplementary benefits: Provincial and territorial governments also
  provide supplementary benefits for certain groups such as senior
  citizens and social assistance recipients. Benefits include services such
  as prescription drugs, dental care, home care, aids to independent
  living, and ambulance services.
- Cost-sharing: No cost-sharing for insured physician and hospital services. However, there may be charges for other, 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 percent of total health expenditures.
- Privately funded health care: Many Canadians have supplemental private insurance coverage through group plans, which extend the range of insured services to include vision and dental care, prescription

drugs, rehabilitation services, private care nursing, and private rooms in hospitals. Private health expenditures represent approximately 30 percent of total health expenditures.

#### How is the delivery system organized?

- Physicians: Most physicians are in group or private practices and remunerated on a fee-for-service basis. However, many Canadian physicians receive some payment for clinical care through alternative public payment plans. In 2002–03, about 17.5 percent 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.
- Other health professionals: Dentists, optometrists, therapists, psychologists, pharmacists, and public health inspectors may be employed or self-employed, and are generally paid salaries negotiated between their unions and their employers.
- Hospitals: Mainly public and private non-profit hospitals that operate under annual, global budgets. Budgets are 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," which 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 must 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 and 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 all services and products. Out-of-pocket payments (glasses, OTC drugs, others) accounted for 11 percent of health care expenditures.

#### How are revenues generated?

- Sickness Insurance Funds: There are approximately 249 SIFs—autonomous, not-for-profit, nongovernmental, although regulated by the government, bodies. They are funded by compulsory payroll contributions averaging 14.2 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 welfare recipients, 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 8.1 percent of the population, including 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 (GPs) have no formal gatekeeping function. However, in 1994, special GP contracts required all SIFs to offer at least one model of GP gatekeeping to their enrollees. All physicians in the outpatient sector are paid on a fee-for-service basis. Representatives of the SIFs 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. Representatives of the SIFs
  negotiate payment rates with hospitals at the regional level. A new
  payment system based on diagnosis-related group per-admission
  payments was introduced in 2004.
- Government: The German government delegates regulation to the self-governing corporatist bodies of both the SIFs 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 SIFs.

#### How are costs controlled?

 The government imposes sector-wide 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 and increasing financial strain on the SIFs. Health care reforms in the 90s 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.



# **The Dutch Health Care System**

#### Who is covered?

• Public and private coverage is nearly universal.

#### What is covered?

- · Normal, necessary medical care.
  - The Sickness Funds Act (ZFW) compulsorily insures people whose annual salary falls below a statutory ceiling and all recipients of social security benefits, up to age 65. This covers about 65 percent of the population.
  - Other health insurance schemes cover various categories of civil servants, accounting for around 5 percent of the population.
  - Those not covered by the ZFW or schemes for civil servants can obtain private health insurance coverage on a voluntary basis.
     Approximately 30 percent of the population is privately insured.
  - Beginning January 1, 2006, all citizens will have compulsory basic insurance, the distinction between private and public insurance will no longer apply. Insurers will be obliged to accept patients for this basic insurance, and will need to compete on price and quality.
- Long-term care and high-cost treatments are covered for all by the Exceptional Medical Expenses Act (AWBZ).
- Public universal insurance for "exceptional medical expenses," including long-term care, mental health, etc. Compulsory social health insurance for the low income, voluntary private health insurance for the high income, and voluntary supplemental insurance for all. Ambulatory care is provided by independent GPs, who mostly work in private practices. Almost all Dutch citizens have regular GPs, who handle 95 percent of health problems within primary care practices. Patients with more complex problems are referred to other care providers.

THE COMMONWEALTH FUND

 Cost-sharing: Each insurance arrangement, including public sickness funds and private plans, require some form of cost-sharing, including copayments and deductibles. All those insured by the ZFW incur a 20 percent co-insurance rate.

#### How are revenues generated?

- The AWBZ is funded by premiums paid by people covered under the scheme, local taxes, and government subsidies.
- Contributions through the tax system to the national government provide funding for all national health insurance schemes. A portion of employed individuals' income is deducted by employers and paid to the national health insurance funds. The percentage withheld corresponds to level of income. Those insured by the ZWF pay an additional non-incomerelated premium.
- Local taxation: Local taxes are a supplementary source of funding for most health insurance arrangements.
- Central government grants and payments: A series of grants are
  available for the purchase of services not covered by entitlement
  programs. These include services earmarked for future inclusion in the
  entitlement package, as well as innovative forms of care. The central
  government also uses a portion of general revenues to supplement
  funding of entitlement programs.
- Out-of-pocket expenditures account for approximately 9 percent of total health care costs. Four percent is covered by copayments under the AWBZ, 2 percent by copayments and deductibles under the ZFW, and 3 percent by direct payments for private complementary or supplementary insurance plans. Those covered by private insurance pay a nominal premium, averaging \$1,277 (USD) in 2003. Beginning in 200, all patients will have compulsory basic insurance with a nominal premium of about \$1,300–\$1,400 (USD) and an income-related premium add-on.
- Private insurance: Private insurance coverage is funded out of premiums and cost sharing. Those who opt for private coverage are required to pay "solidarity" contributions to the national health insurance scheme. A portion of each individual's premium accounts for this contribution. Private insurance packages are available as stand-alone and supplementary coverage.

# The Dutch Health Care System (continued)

#### How is the delivery system organized?

- Physicians: Physicians practice under national contracts negotiated by health insurers and providers' representative organizations. GPs are paid on a capitation basis for patients insured under the ZFW and on a fee-for-service basis for privately insured patients. Beginning in 2006, GPs will 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 locations, etc. Experiments with pay-for-performance quality are underway. Specialists working in hospitals are self-employed, and are paid a capitated amount based on negotiations between insurers and specialists' organizations. Some specialists are paid on a fixed income/salaried basis and have contracts with the hospitals. Future payment will be related to a new payment system, Diagnose Treatment Combination (DBC).
- Hospitals: The majority of hospitals are private and non-profit. Hospital budgets are 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 payment system, DBC, is currently being introduced, and 10 percent of all medical interventions are now reimbursed on the basis of these DBCs. In some experimental hospitals, 100 percent of all interventions are based on DBCs. It is expected that most future care will be defined under this new system, although there is debate regarding its feasibility.

 Government: Much of the responsibility for managing the health insurance schemes is handled at the regional level. Thirty-one regional health care offices carry out duties such as contracting with providers, collecting patient contributions, and organizing regional alliances. The national government approves all contracts negotiated between regional councils, insurers, and providers.

#### How are costs controlled?

 Providers negotiate contracts that dictate the volume of services to be delivered, as well as charges to be assessed to users. These contracts are subject to the approval of the national government, which sets limits on the amounts that doctors, hospitals, and nursing homes can charge. 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 account for 16 percent of health care expenditures (2002–03).

#### How are revenues generated?

- General taxation: Public funding is derived from taxation. It accounts for about 78.3 percent of health care expenditures (2003–04).
- 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 GPs, most of whom are grouped as Primary Health Organizations (PHOs), disability support services, and community care.
- Patient copayments: People pay fee-for-service co-payments to GPs and for pharmaceuticals, and for 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, accounting 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 with partial government subsidy, mostly capitation funded through PHOs. Consultants (specialists) working for DHBs are salaried but may supplement their salaries through treatment of private patients in private (noncrown) hospitals.
- Primary Health Organisation: The government has injected substantial additional funding into subsidising primary health care to improve access to services. From July 2002 to date, 79 PHOs have been formed under government policy to reduce health disparities and take a population approach to primary health care. Ninety-two percent of the New Zealand population is now enrolled with and receiving care from PHOs. PHOs will have a range of different clinical and non-clinical health practitioners on staff and be 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 DHBs (21 in the country) are partly elected by
  the people of a geographic area and partly appointed by the Minister of
  Health. They 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. It funds 78.3 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, health promotion, and disease prevention 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. For example, 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 expenditures.

#### How are revenues generated?

- National Health Service (NHS): The NHS is administered by the NHS
   Executive, Department of Health, and by the 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 percent 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 percent of the population and
  accounts for 4 percent of health expenditures.

#### How is the delivery system organized?

- Physicians: General practitioners (GPs) act as gatekeepers and are brought together in Primary Care Trusts (PCTs), 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. Some, however, are employed locally and a new GP contract will introduce greater use of local contracting and introduce quality incentives. Private providers set their own fee-for-service rates but are not generally reimbursed by the public system.
- Hospitals: Mainly semi-autonomous, self-governing public trusts that
  contract with PCTs. Recently, some routine elective surgery has been
  procured for NHS patients from purpose-built Treatment Centers, which
  may be owned and staffed by private sector health care providers.
  Consultants (i.e., 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 contributing to improved value include arrangements for the systematic appraisal of new technologies (i.e., the National Institute for Clinical Excellence) and for monitoring the quality of care delivered (i.e, the Healthcare Commission).



# **The United States Health Care System**

#### Who is covered?

• Public and private health insurance covers 84 percent of the population. In 2004, 45.8 million were uninsured.

#### 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 14 percent 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 14 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 expenditures. Beginning January 2006, Medicare will be 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 percent of the population and accounts for 16 percent of total health expenditures.
- Private Insurance: Provided by more than 1,200 not-for-profit and forprofit 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 68 percent of the population, including individuals covered by both public and private insurance. It accounts for 36 percent of total health 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, non-profit, and public 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?

- 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 (i.e., \$1,000 or more) 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.



# XIV. Appendix: Notes and Definitions

#### **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 (±3 years) for calculation of the median.

# **II. Total Health Care Spending**

#### II-1. Health Care Spending per Capita in 2003

- 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 2005.
- 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. Average Annual Growth Rate of Real Health Care Spending per Capita, 1993–2003

- 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-3. Average Annual Growth Rate of Real Health Care Spending per Capita, 1983–2003, 1993–2003

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.



 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 2003

- 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 2005.
- 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, 1993–2003

- 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 2005.
- 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.

### III. Public and Private Health Care Financing

#### III-1. Percentage of Total Population with Health Insurance Coverage through Public Programs in 2003

• Definition: The share of the population that is eligible to receive health care goods and services that are included in total public health spending. The percent covered is therefore independent of the scope of the coverage.

#### III-2. Public Spending on Health Care per Capita in 2003

- Definition: Public spending on health includes all health expenditure 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.
- 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-3. Private Spending on Health Care per Capita in 2003

- 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.
- 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. For Australia, figures are for "other private spending."

#### III-4. Out-of-Pocket Health Care Spending per Capita in 2003

- 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.

#### III-5. Health Care Expenditure per Capita by Source of Funding in 2003

- Definition: Public spending on health includes all health expenditure 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.

## IV. Health Spending by Type of Service

#### IV-1. Distribution of Health Spending by Type of Service

• 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: 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.
- Definition: Spending on physician services includes expenditures on professional health services provided by general practitioners and specialists. The data also includes expenditures on services of osteopaths.
- Definition: Spending for home health care includes all medical and paramedical services delivered to patients at home.

#### IV-2. Percentage of Total Health Care Spending on Hospital Care in 2003

- 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: 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 2005.

#### IV-3. Percentage of Total Health Care Spending on Hospital Care, 1993 and 2003

- 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: 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 2005.



#### IV-4. Percentage of Total Health Care Spending on Physician Services in 2003

- Definition: Spending on physician services includes expenditures on professional health services provided by general practitioners and specialists. The data also includes expenditures on services of osteopaths.
- 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 2005.

#### IV-5. Percentage of Total Health Care Spending on Physician Services, 1993 and 2003

- Definition: Spending on physician services includes expenditures on professional health services provided by general practitioners and specialists. The data also includes expenditures on services of osteopaths.
- 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 2005.

#### IV-6. Percentage of Total Health Care Spending on Pharmaceuticals in 2003

- 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.
- 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 2005.

#### IV-7. Percentage of Total Health Care Spending on Pharmaceuticals, 1993 and 2003

- 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.
- 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 2005.



#### IV-8. Percentage of Total Health Care Spending on Long-Term Institutional Care and Home Health Care in 2003

- 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. Spending for home care includes all medical and paramedical services delivered to patients at home.
- 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 2005.

## V. Hospitals

#### V-1. Hospital Spending per Capita in 2003

- 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.
- 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. Average Annual Growth Rate of Real Spending per Capita on Hospital Services, 1993–2003

• 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.



 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.

#### V-3. Hospital Spending per Inpatient Acute Care Day in 2003

- 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.

#### V-4. Hospital Spending per Discharge in 2003

- 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: Discharge is the formal release of an inpatient from an acute care institution after a period of "hospitalization". It includes deaths in hospitals, but excludes same-day separations and transfers to other care units within the same institution.
- Method: Hospital spending per discharge is calculated by dividing total hospital spending by the total number of discharges in each country.

#### V-5. Hospital Discharges per 1,000 Population in 2003

- Definition: Discharge is the formal release of an inpatient from an acute care institution after a period of "hospitalization". It includes deaths in hospitals, but excludes same-day separations and transfers to other care units within the same institution.
- Method: For Canada, data is for acute care hospitals only. For France, data includes same-day separations. For the United Kingdom, data include
  NHS admissions only (the private sector is excluded). Discharge rates are calculated by the OECD Secretariat. The number is expressed as
  discharges per 100,000 population in the OECD Health Data 2005. The authors re-calculated this ratio to express the number per 1,000 population.



#### V-6. Average Length of Stay for Acute Care in 2003

- 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).

#### V-7. Average Length of Hospital Stay for Acute Myocardial Infarction in 2003

- 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 myocardial infarction is defined as ICD-10 I21-I22 or ICD-9 410.
- Method: Data on ALOS for New Zealand is based on public hospitals only. For the United Kingdom, data include NHS admissions only (the private sector is excluded).

#### V-8. Average Length of Stay for Normal Delivery in 2003

- 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: Normal delivery is defined as ICD-10 O80 or ICD-9 650.
- Method: Data on ALOS for New Zealand is based on public hospitals only. For the United Kingdom, data include NHS admissions only (the private sector is excluded).

#### V-9. Average Annual Hospital Inpatient Acute Care Days per Capita in 2003

• 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.

#### V-10. Number of Acute Care Hospital Beds per 1,000 Population in 2003

• Definition: Acute care includes all types of medical care, excluding long-term care. It includes rehabilitative care, palliative care and acute psychiatric care.

#### V-11. Hospital Employment per 1,000 Inpatient Acute Care Days in 2003

- Definition: Hospital employment includes the number of persons employed (head counts) and the number of full-time equivalent (FTE) persons employed in general and specialty hospitals. Self-employed are included.
  - 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 employment per inpatient acute care days is calculated by the authors as the number of hospital employees divided by inpatient acute care days. The ratio is multiplied by 1,000 to achieve the number of hospital employees per 1,000 inpatient acute care day.



## VI. Long-Term Care

#### VI-1. Long-Term Institutional Care Spending per Capita in 2003

- 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.

#### VI-2. Average Annual Growth Rate of Real Spending per Capita on Long-Term Institutional Care, 1993–2003

- 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: 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. Home Health Care Spending per Capita in 2003

- 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.

#### VI-4. Average Annual Growth Rate of Real Spending per Capita on Home Health Care, 1993-2003

- 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.

#### VI-5. Number of Long-Term Care Beds per 1,000 Population over Age 65 in 2003

- 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).



## VII. Physicians

#### VII-1. Spending on Physician Services per Capita in 2003

- Definition: Spending on physician services includes expenditures on professional health services provided by general practitioners and specialists. The data also includes 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.

#### VII-2. Average Annual Growth Rate of Real Spending per Capita on Physician Services, 1993-2003

- Definition: Spending on physician services includes expenditures on professional health services provided by general practitioners and specialists. The data also includes expenditures on services of osteopaths.
- 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.

#### VII-3. Number of Practicing Physicians per 1,000 Population in 2003

- 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, 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.

#### VII-4. Average Annual Growth Rate of Practicing Physicians per 1,000 Population, 1993–2003

- 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, 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.



#### VII-5. Average Annual Number of Physician Visits per Capita in 2003

- 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.

## VIII. Nursing

#### VIII-1. Number of Practicing Nurses per 1,000 Population in 2003

- 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. This definition differs slightly in each country.
- Method: Fully-qualified nurse (with post-secondary education in nursing) and associate/practical/vocational nurses (with a lower level of nursing skills but also usually registered) are included. The following are excluded: nursing aid/assistants and care workers who do not have any recognized qualification/certification in nursing; midwives (however registered nurses working part-time as midwives should be included), nurses working abroad, working in administrative, research and industry positions. France includes midwives. In France, the FTE method is used for nurses in public and private hospitals. The U.S. data includes nurse educators and nurses in hospitals, and nurse midwives.

#### VIII-2. Number of Practicing Nurses per Acute Care Bed in 2003

• 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.

#### IX. Pharmaceuticals

#### XI-1. Pharmaceutical Spending per Capita in 2003



- 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.

#### IX-2. Average Annual Growth Rate of Real Spending per Capita on Pharmaceuticals, 1993–2003

- 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.

#### IX-3. Relative Prices of Thirty Pharmaceuticals in Four Countries in 2003

Method: The price index is constructed by comparing the prices of the basket of 30 drugs (including generics) with highest sales in the United States.
 The price data are purchased from IMS Health, a private consulting firm.

#### IX-4. Percentage of Total Population with Pharmaceutical Goods Coverage through Public Programs in 2003

• Definition: The share of the population that is eligible to receive a defined set of health care goods and services that are included in total public health spending. The percent covered is therefore independent of the scope of the coverage.

#### IX-5. Percentage of Population over Age 65 with Influenza Immunization in 2003

- 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. For Germany, the age is 60 and older.

# X. Medical Procedures Involving Sophisticated Technology

#### X-1. Magnetic Resonance Imaging (MRI) Units per Million Population in 2003

- Definition: Magnetic Resonance Imaging (MRI) refers to a diagnostic modality in which the magnetic nuclei (especially protons) of a patient are
  aligned in a strong, uniform magnetic field, absorb energy from tuned radio frequency pulses, and emit radio frequency signals as their excitation
  decays. These signals, which vary in intensity according to nuclear abundance and molecular chemical environment, are converted into sets of
  tomographic images by using field gradients in the magnetic field, which permit 3-D localization of the point sources of the signals.
- Method: Australia data represents the number of units approved for billing to Medicare only. The U.S. data on MRIs show the number of hospitals with
  this equipment, not the actual number of MRIs. Some hospitals may have more than one unit, and some units may not be located in hospitals. For the
  U.K., the raw numbers of CT scanners for England and Wales have been increased pro-rata by the OECD Secretariat to provide appropriate numbers
  for the U.K., enabling the correct computation of rates using the U.K. population data stored within the database.



#### X-2. Computer Tomography (CT) Scanners per Million Population in 2003

- Definition: Computer Tomography (CT) scanners image anatomical information from a cross sectional plane of the body. Each image is generated by a computer synthesis of x-ray transmission data obtained in many different directions in a given plane.
- Method: Australia data represents the number of units approved for billing to Medicare only. Germany data includes the number of positron emission tomography units. The U.S. data on CT scanners show the number of hospitals with this equipment, not the actual number of CT scanners. Some hospitals may have more than one unit, and some units may not be located in hospitals. For the U.K., the raw numbers of CT scanners for England and Wales have been increased pro-rata by the OECD Secretariat to provide appropriate numbers for the U.K., enabling the correct computation of rates using the U.K. population data stored within the database.

#### X-3. Cardiac Catheterization Procedures per 100,000 Population in 2003

- Definition: Cardiac catheterization is defined as ICD-9-CM 37.21-23 or equivalent.
- Method: The utilization rate is not risk-adjusted and so does not reflect differences in the patient populations between countries. The rates also do not control for differences in the incidence of underlying disease.

#### X-4. Percutaneous Transluminal Coronary Angioplasty (PTCA) Interventions per 100,000 Population in 2003

- Definition: PTCA is defined as ICD-9-CM 36.0 or equivalent.
- Method: The utilization rate is not risk-adjusted and so does not reflect differences in the patient populations between countries. The rates also do not control for differences in the incidence of underlying disease.

#### X-5. Coronary Bypass Procedures per 100,000 Population in 2003

- Definition: Coronary bypass is defined as ICD-9-CM 36.1 or equivalent.
- Method: The utilization rate is not risk-adjusted and so does not reflect differences in the patient populations between countries. The rates also do not control for differences in the incidence of underlying disease.

#### X-6. Number of Knee Replacements per 100,000 Population in 2003

- Definition: Knee replacement is defined as ICD-9-CM 81.54-55 or equivalent.
- Method: The utilization rate is not risk-adjusted and so does not reflect differences in the patient populations between countries. The rates also do not
  control for differences in the incidence of underlying disease. For Australia, knee replacement is defined as ICD-10-AM 1518, 1519, 1523, and 49527-00.

#### X-7. Number of Patients Undergoing Dialysis Treatment per 100,000 Population in 2003

- 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.
- THE COMMONWEALTH FUND
- Method: The utilization rate is not risk-adjusted and so does not reflect differences in the patient populations between countries. The rates also do not control for differences in the incidence of underlying disease.

#### XI. Non-Medical Determinants of Health

#### XI-1. Percentage of Adults Who Reported Being Daily Smokers in 2003

- 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. 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.

#### XI-2. Decreases in Smoking Rates between 1983–2003

- 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 14 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, until 1989 in the Netherlands and Germany, and until 1988 in Canada. 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.

#### XI-3. Annual Alcohol Consumption in Liters per Capita for People Age 15 and Older in 2003

- Definition: Alcohol consumption is defined as liters of pure alcohol per person aged 15 years and over.
- Method: Alcohol consumption figures are based on alcohol sales data. Methodology to convert alcoholic drinks to pure alcohol may differ across countries. Typically beer is weighted as 4%–5%, wine as 11%–16% and spirits as 40% of pure alcohol equivalent.

#### XI-4. Obesity (BMI > 30) Prevalence in 2003

- 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.



#### XI-5. Changes in Obesity Rates, 1993-2003

- 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 and older. 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.

### XII. Mortality

#### XII-1. Life Expectancy at Birth in 2003

• Definition: Life expectancy at birth is the average number of years that a person at that age can be expected to live, assuming that age-specific mortality levels remain constant.

#### XII-2. Life Expectancy at Age 65 in 2003

• Definition: Life expectancy at age 65 is the average number of years that a person at that age can be expected to live, assuming that age-specific mortality levels remain constant.

#### XII-3. Increases in Life Expectancy at Birth, 1983–2003

Definition: Life expectancy at birth is the average number of years that a person at that age can be expected to live, assuming that age-specific
mortality levels remain constant.

#### XII-4. Increases in Life Expectancy at Age 65, 1983–2003

Definition: Life expectancy at age 65 is the average number of years that a person at that age can be expected to live, assuming that age-specific
mortality levels remain constant.

#### XII-5. Breast Cancer Five-Year Relative Survival in 1997

- Definition: The breast cancer relative survival rate is the percentage of survivors among all women diagnosed with breast cancer, adjusted for expected deaths from other causes.
- Method: Some differences may be due to differences in age-standardization methods.



#### XII-6. Breast Cancer Screening in 2001

- Definition: The breast cancer screening rate is the percentage of women reporting receiving a mammogram.
- Method: England and New Zealand measure the number of women screened within the past three years. Australia, Canada, and the United States measure the number of women screened within the past two years.
- Method: England and New Zealand measure women age 50–64, Australia and Canada measure women age 50–69, and the United States measures women age 40 and older.
- Method: Surveys in the five countries may differ on dimensions including questions used, survey design and administration, sampling methodology, sample size, response rate, cultural orientation of respondents, etc. Data from organized programs, on the other hand, are based on administrative records. Organized programs are aimed at specific target populations which may differ between countries.

#### XII-7. Kidney Transplant Five-Year Survival in 2001

- Definition: The kidney transplant survival rate is the percentage of survivors after five years among those receiving a kidney transplant.
- Method: Rates for Australia and New Zealand do not include live donors; the other three rates do. The Australian and U.S. rates are not agestandardized. In New Zealand, relatively few transplants are performed leading to wider uncertainty around the estimate.

