

**MULTINATIONAL COMPARISONS  
OF HEALTH SYSTEMS DATA, 2000**

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October 2000

## **ACKNOWLEDGEMENTS**

Thanks to Jeremy Hurst and the OECD for providing data and expert assistance with its interpretation and presentation.

Thanks to Karen Davis, Robin Osborn, and Cathy Schoen at The Commonwealth Fund, and to Edward Aiston, Philip Davies, Robert Eckhardt, Richard Faull, Jane Hall, Manfred Huber, Karen Poutasi, Nora Ritchie, Clive Smee, Kees Van Gool, Raphael Wittenberg, and John Wyn Owen.

## **OVERVIEW**

Policymakers are beginning to use international data to compare the performance of their own health care system with the performance of health care systems in other countries. Two international agencies, the Organization for Economic Cooperation and Development (OECD) and the World Health Organization (WHO), have taken the lead in preparing data for conducting these international comparisons. In this chartbook, we present data from the OECD and the WHO to compare the performance of the health care systems in Australia, Canada, France, Germany, Japan, New Zealand, the United Kingdom, and the United States. Whenever possible, we also present the value for the median OECD country.<sup>1</sup>

Increasingly, policymakers would like to be able to use data on quality of health care in making health system performance comparisons. Indicators which measure the quality of health care are especially important to policymakers because health care represents over 90 percent of total health spending in most industrialized countries.<sup>2</sup> In this chartbook, we present some of the available indicators that measure quality of care and health system performance. Unfortunately, the availability of the data to make these comparisons is somewhat limited, and the available indicators are not very sensitive to the quality of medical care. An additional investment in developing data sets that allow for better international quality of care comparisons could make international comparisons of health system performance more policy-relevant in the future.

We have organized the chartbook into eight sections:

- Prevention
- Responsiveness
- Mortality
- Disease-Specific Incidence and Mortality
- Medical Procedures Involving Sophisticated Technology
- Health Care Resources and Utilization
- Health Expenditures
- Financial Equity

## **Prevention**

All eight countries could improve their immunization rates. Immunization rates for DPT at age 12 months range from 84 percent in the United States to 92 percent in the United Kingdom. Immunization rates for measles at age 12 months range from 75 percent in Germany to 96 percent in Canada. Although a substantial investment is needed to reach the remaining individuals, certain approaches may help countries increase immunization coverage. Australia, for example, is offering cash to parents and doctors and fast-food vouchers to children as incentives. The United Kingdom gives doctors a financial incentive to reach target immunization coverage levels.<sup>3</sup>

Tobacco is used by at least one-fifth of the population in all eight countries. Men are more likely to smoke than women. Alcohol consumption is highest in France and lowest in Canada. The prevalence of obesity is highest in the United States. Almost one of four Americans is obese, compared with one of six Australians, one of eight Canadians, and one of fifteen French.

## **Responsiveness**

Individuals in the United Kingdom wait the longest for nonemergency surgery and individuals in the United States wait the shortest amount of time. These are averages and do not show the variation by type of surgery or proportion who wait a very long time.

The World Health Organization scores each country on the responsiveness of its health care system. This score is based upon surveys of 50 key informants in each country that measure satisfaction in seven areas: autonomy, confidentiality, dignity, prompt attention, quality of basic amenities, access to social support networks during care, and choice of provider. According to the World Health Organization, the United States has the most responsive system; the other seven countries are relatively similar.

## **Mortality**

Disability-adjusted life expectancy is an estimate of the number of years a person will live in full health.<sup>4</sup> Disability-adjusted life expectancy at birth for women varies from 71.2 years in New Zealand to 77.2 years in Japan. For men, the range is from 67.1 years in New Zealand to 71.9 years in Japan. Life expectancy at birth is on average 5 to 7 years longer for both men and women than disability-free life expectancy.

Potential years of life lost measures the years of life lost prior to age 70 due to causes considered preventable given appropriate medical intervention. As a result, deaths during childhood can have a major influence on potentially years of life lost. The infant mortality rate and the mortality rate for children ages 5-14 are highest in the United States and New Zealand and lowest in Japan. Potential years of life lost are highest in the United States and New Zealand and lowest in Japan.

At age 60, the range of disability-adjusted life expectancy for women is from 17.0 years in New Zealand to 21.7 years in France and for men from 14.4 years in New Zealand to 17.5 years in Japan. Life expectancy at age 60 averages 3 to 4 years longer for both men and women than disability-free life expectancy. At age 80, there is less variation in life expectancy across the eight

countries. Japan has the longest life expectancy at age 80 and Germany and the United Kingdom the shortest.

### **Disease-Specific Incidence and Mortality**

Generally, there is greater variation in the incidence of diseases than in the mortality from these same diseases. For example, mortality rates for breast and prostate cancer are roughly similar in all of the countries except Japan, where the mortality rates for these cancers are lower. The incidence rates of breast and prostate cancer show much greater variation. There is no clear relationship between incidence and mortality for these two conditions. It must be recognized that incidence and mortality rates are influenced by differences in how diseases are coded.

Mortality rates are influenced by many factors in addition to health care. One indicator that is potentially more sensitive to health care intervention than disease-specific mortality rates is the five-year breast cancer survival rate. Breast cancer survival rates in the United States, Japan, Australia, and France are relatively similar and lower in England (United Kingdom data are not available).

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

The eight countries vary considerably in the availability and use of medical technology and medical procedures. This is illustrated in several specific areas. The number of magnetic resonance imagers (MRIs) per capita varies considerably across the eight countries. For example, Japan has ten times the number of MRIs per capita as Canada. While the availability of MRIs has increased relatively slowly in most countries since 1987, the availability of MRIs in Japan has continued to increase rapidly. Similar variation is seen in the availability of other expensive technologies although these data are not presented. Japan and the United States typically have the most technology available, while Canada has the least.

Comparisons of utilization rates for specific procedures is confounded by differences in the incidence of disease and many other factors. Nevertheless, there are striking differences in utilization rates for certain procedures which should be recognized. For example, about five times the number of coronary bypass procedures are performed in the United States than in the United Kingdom, Germany, and France. Hysterectomy rates are roughly similar in the United States and Canada; the rates in New Zealand and Australia are also similar. However, the rates in Australia and New Zealand are half those in the United States and Canada. A much greater proportion of the Japanese population is on dialysis. The dialysis rate is lowest in the United Kingdom, New Zealand, and Australia.

### **Health Care Resources and Utilization**

The number of physician visits per capita is very similar in all of the countries except for Japan, which has many more physician visits. Many of these additional visits in Japan involve the dispensing of pharmaceuticals in the doctor's office. There is greater variation in the number of

practicing physicians per 1,000 population; for example, Germany has twice as many practicing physicians as the United Kingdom.

There is considerable variation in the number of inpatient hospital days per capita. The United States and New Zealand have the fewest hospital days per capita, while Japan has the most. The average length of stay is substantially longer in Japan, primarily because hospitals are used as nursing homes for many elderly persons. Hospital admission rates per capita are highest in France and Germany and lowest in Japan and Canada. The number of hospital beds per capita is lowest in the United Kingdom and highest in Japan.

### **Health Expenditures**

Health expenditures per capita are 2–3 times higher in the United States than in the other countries. This is the continuation of a pattern that has continued since at least 1960. If the United States spent the same amount on health per capita as Germany, the country that spends the second most per capita, United States health care expenditures would decline by almost \$500 billion.

During the period from 1960 to 1998, the annual rate of increase in health spending ranged from 2.2 percent in New Zealand to 6.9 percent in Japan. In most countries, the rate of increase in real health care spending was highest during the decade of the 1960s and generally has been declining in each decade.

In all of the countries except for the United States, the percentage of GDP spent on health care began to stabilize in 1980. In the United States, the percentage of GDP spent on health did not stabilize until around 1990. During the 1990s, the percentage of GDP spent on health care remained relatively stable in all eight countries.

The United States spends the most per capita on hospitals, physicians, and pharmaceuticals. In the United States, hospital expenditures per day are substantially higher than in any other country. This difference remains after controlling for length of stay. For example, while the United States and New Zealand have similar average lengths of stay, hospital expenditures per day are almost five times greater in the United States. Physician incomes in the United States are almost double those in Germany and Canada and four times those in the United Kingdom, France, and Australia.

### **Financial Equity**

In the United States, only one-third of the population is covered by government-provided health insurance or government-mandated health insurance. The most affluent Germans have the option of purchasing private health insurance or self-insuring and nearly all of them opt for private health insurance coverage. The other six countries have universal health insurance coverage. In the United States, 44 million Americans do not have health insurance coverage.

The World Health Organization index of fairness of financial contribution, which measures how much variation there is within a country in the percentage of income spent on health care at the family level, scores the United States much lower than the other seven

countries. This is because individuals in the United States without health insurance or inadequate health insurance are more likely to pay a large proportion of their income for health care services when they become ill.

### **Implications for the United States**

Alcohol and tobacco consumption rates and immunization rates are similar in the United States and the seven other countries. The United States has a much higher proportion of its population which is obese.

While the seven other countries have nearly universal health insurance coverage, one of six Americans did not have health insurance coverage in 1998. Compared with the other seven countries, the United States scored lower on the WHO index of fairness of financial contribution.

The availability of hospital and physician services is similar to most other countries. The United States is at or near the bottom in terms of hospital beds per capita, hospital inpatient days per capita, and average length of inpatient hospital stay. The availability of expensive technology is high relative to the other countries with the exception of Japan, which consistently has more machines per capita. The United States provides the most procedures per capita in at least two areas: hysterectomies and coronary bypass operations.

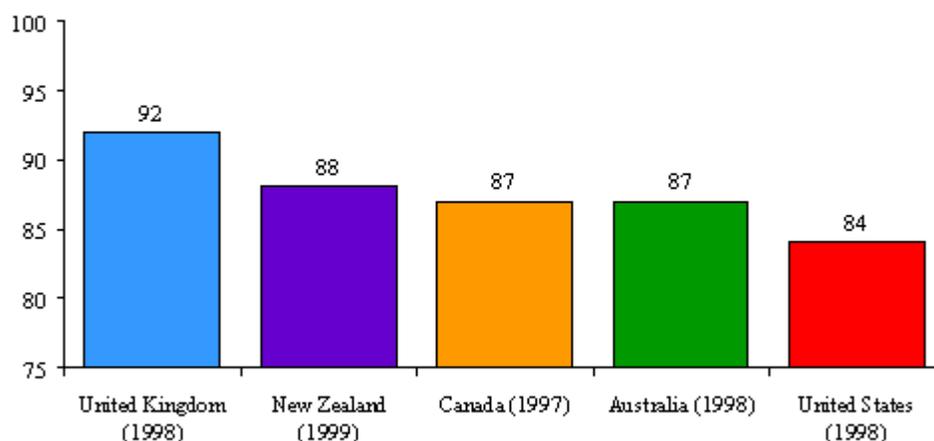
One area where the United States performs relatively well is the responsiveness of the health system. Americans wait the shortest period of time for certain types of surgery and the United States scores the highest on surveys of the responsiveness of its health care system to patients.

Disability-adjusted life expectancy and life expectancy at birth are relatively short in the United States. Much of this may be attributable to high mortality rates in childhood. On measures of adult health status, the United States performs slightly better. On most disease-specific mortality rates, the United States ranks relatively low. One exception is AIDS. The incidence of AIDS in the United States is very high. Five-year survival rates for breast cancer are best in the United States.

In most other OECD countries, the percent of GDP spent on health care began to stabilize around 1980. In the United States, the stability did not begin until around 1990. Hospital expenditures per day and physician incomes are higher in the United States compared with other OECD countries.

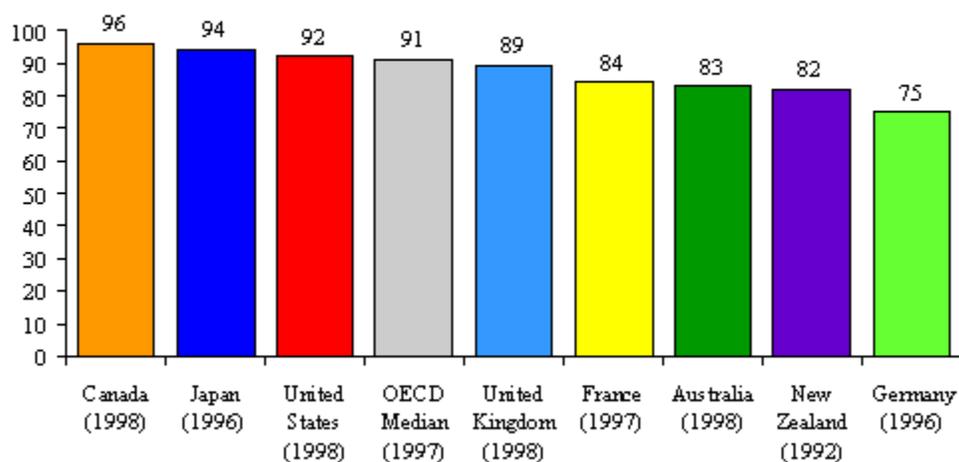
## PREVENTION

**Chart II-1**  
**Immunization for Diphtheria, Pertussis, and Tetanus,**  
**Percent of Children at Age 12 Months**



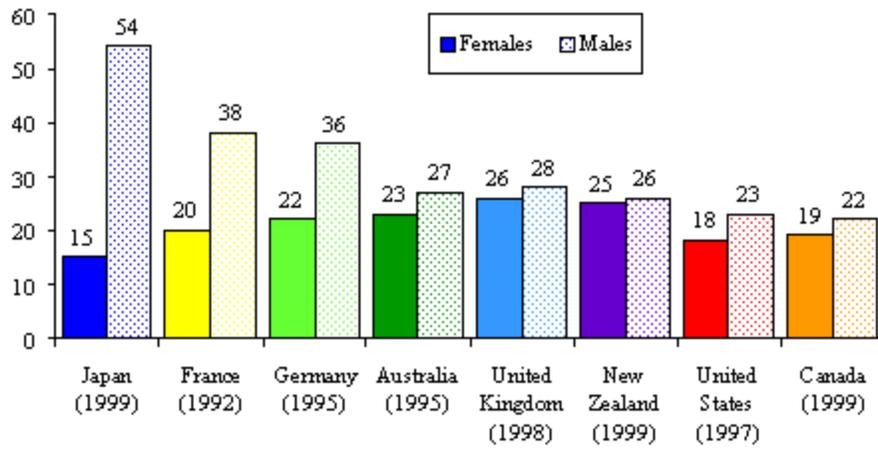
Source: OECD Health Data 2000 and New Zealand Crown Research Institute ESR

**Chart II-2**  
**Immunization for Measles,**  
**Percent of Children at Age 12 Months<sup>5,6</sup>**



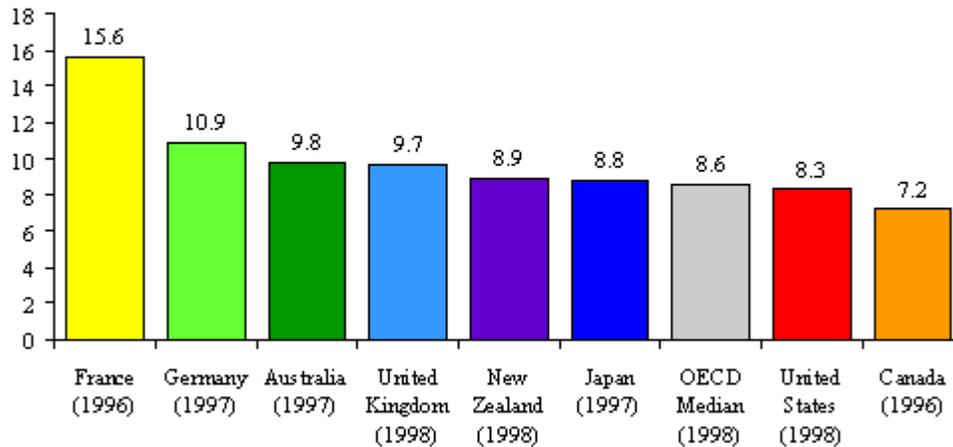
Source: OECD Health Data 2000

**Chart II-3**  
**Tobacco Consumption, Percent of Population**  
**Age 15 and Older Smoking Daily<sup>7</sup>**



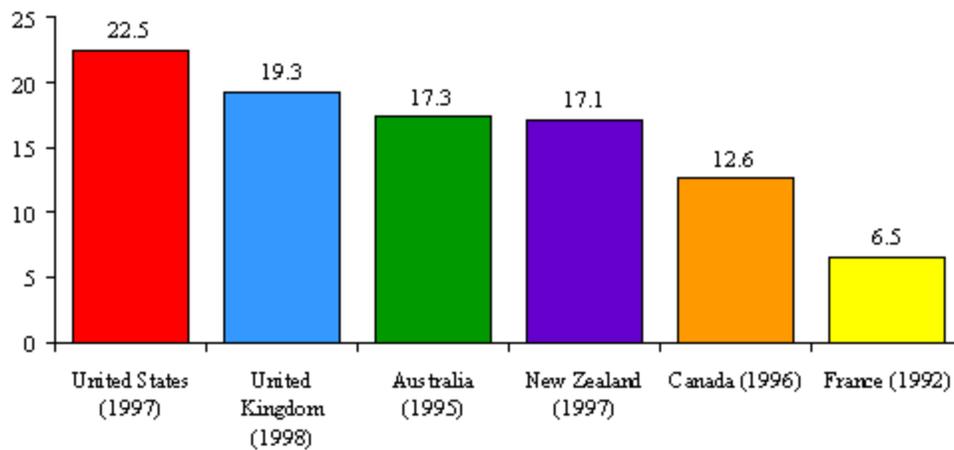
Source: OECD Health Data 2000

**Chart II-4**  
**Annual Alcohol Consumption in Liters per Capita**  
**for People Age 15 and Older<sup>8</sup>**



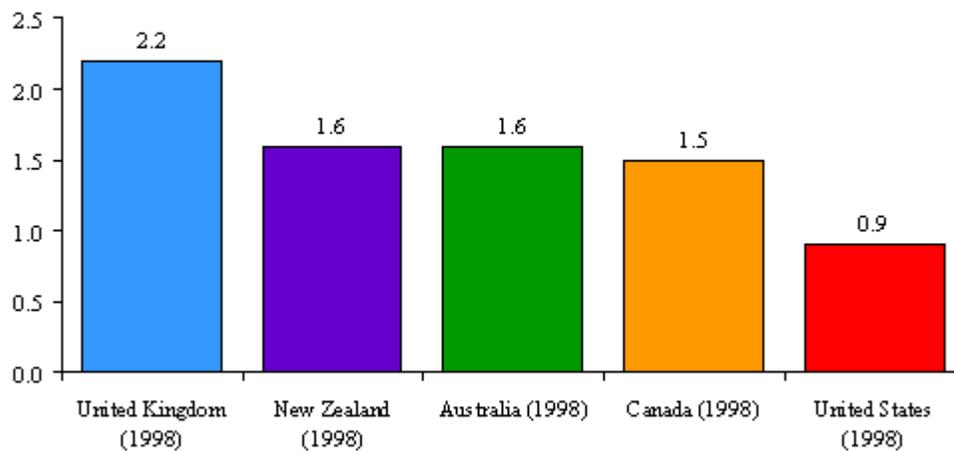
Source: OECD Health Data 2000 and Statistics New Zealand

**Chart II-5**  
**Percent of the Population Age 15 and Older That Is Obese**  
**Body Mass Index > 30 kg/m<sup>2</sup> <sup>9,10</sup>**



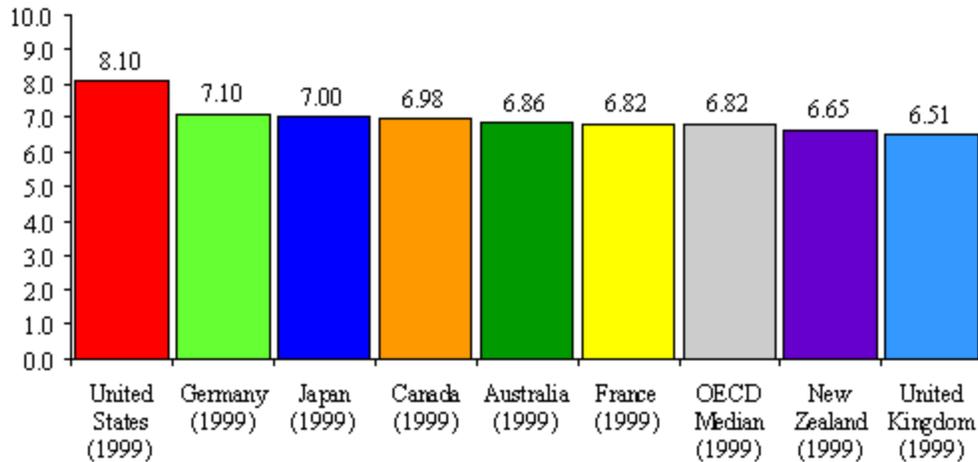
Source: OECD Health Data 2000, New Zealand National Nutrition Survey 1997, and Health Survey for England 1998

**Chart III-1**  
**Average Waiting Time for Nonemergency Surgery (Months)<sup>11,12</sup>**



Source: OECD

**Chart III-2**  
**WHO Index of Responsiveness of Health Systems<sup>13</sup>**



Source: World Health Report 2000

### **Immunization Rates**

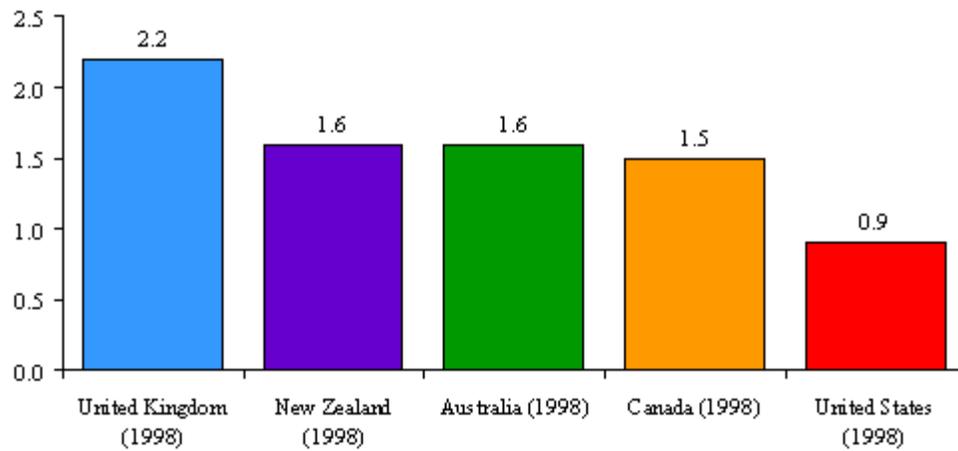
- All eight countries need to increase their immunization rates.
- At age 12 months, immunization rates for DPT range from 84 percent in the United States to 92 percent in the United Kingdom.
- At age 12 months, immunization rates for measles range from 75 percent in Germany to 96 percent in Canada.

### **Unhealthy Lifestyle**

- In all countries, at least one-fifth of the population smokes tobacco regularly.
- Smoking rates are higher for men than for women.
- Average alcohol consumption is highest in France and lowest in Canada.
- The United States has the highest percentage of people who are obese and France the lowest.

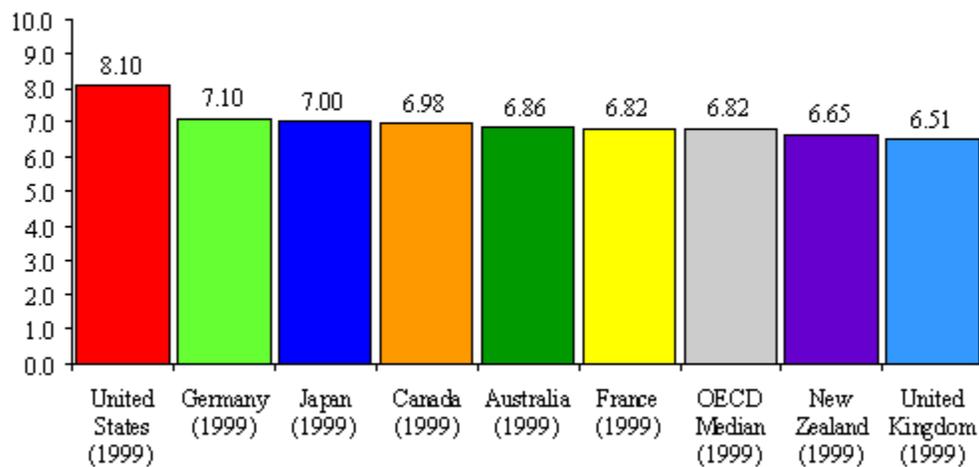
## RESPONSIVENESS

Chart III-1  
Average Waiting Time for Nonemergency Surgery (Months)<sup>11,12</sup>



Source: OECD

Chart III-2  
WHO Index of Responsiveness of Health Systems<sup>13</sup>



Source: World Health Report 2000

## Waiting Times

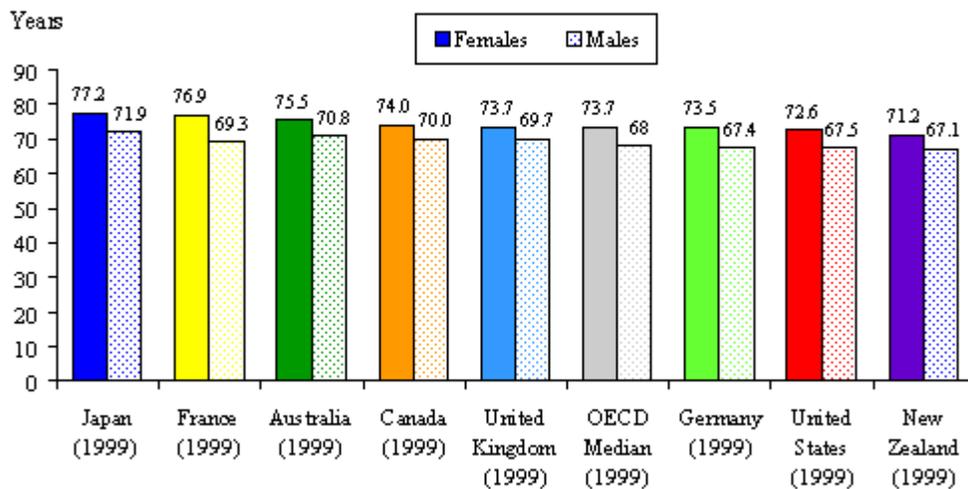
- Individuals in the United Kingdom wait the longest for nonemergency surgery and individuals in the United States wait the shortest time.

## WHO Responsiveness Index

- The World Health Organization has scored the responsiveness of health care systems on seven dimensions: autonomy, confidentiality, dignity, prompt attention, quality of basic amenities, access to social support networks during care, and choice of providers. The responses were scored from 1 to 10.
- The United States scores highest on the WHO responsiveness index; the other countries' scores are similar.

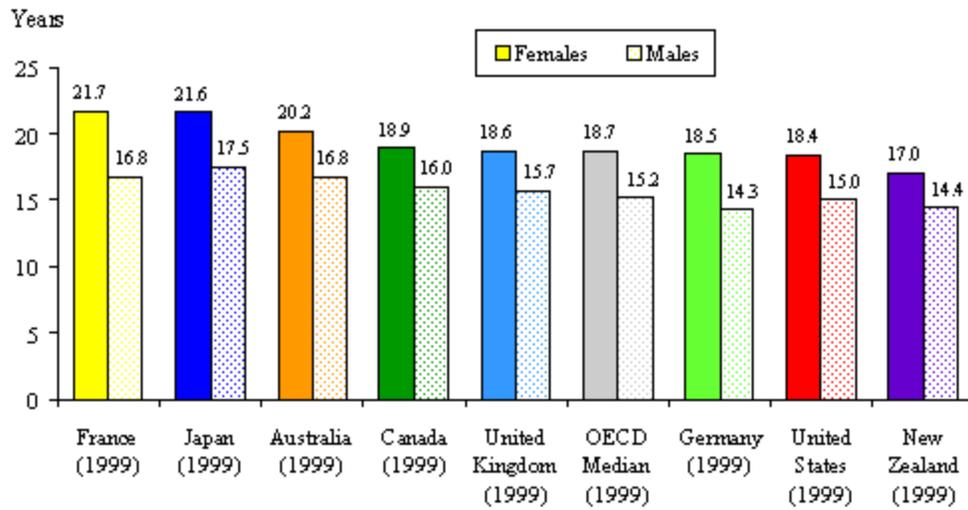
## MORTALITY

Chart IV-1  
Disability-Adjusted Life Expectancy at Birth<sup>14</sup>



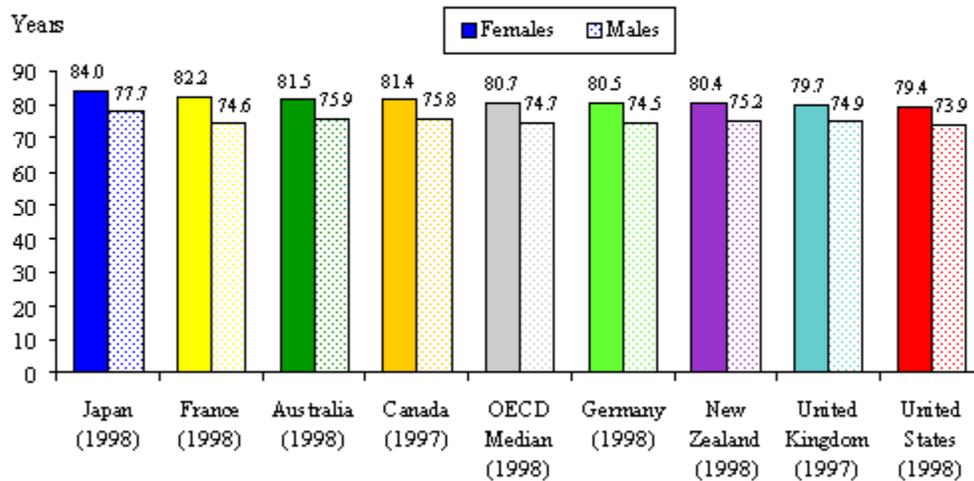
Source: World Health Report 2000

**ChartIV-2**  
**Disability-Adjusted Life Expectancy at Age 60**



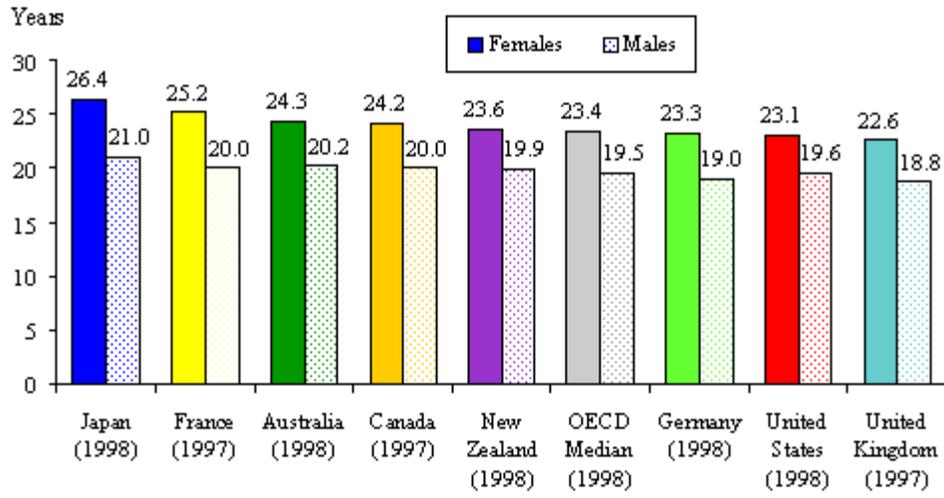
Source: World Health Report 2000

**ChartIV-3**  
**Life Expectancy at Birth**



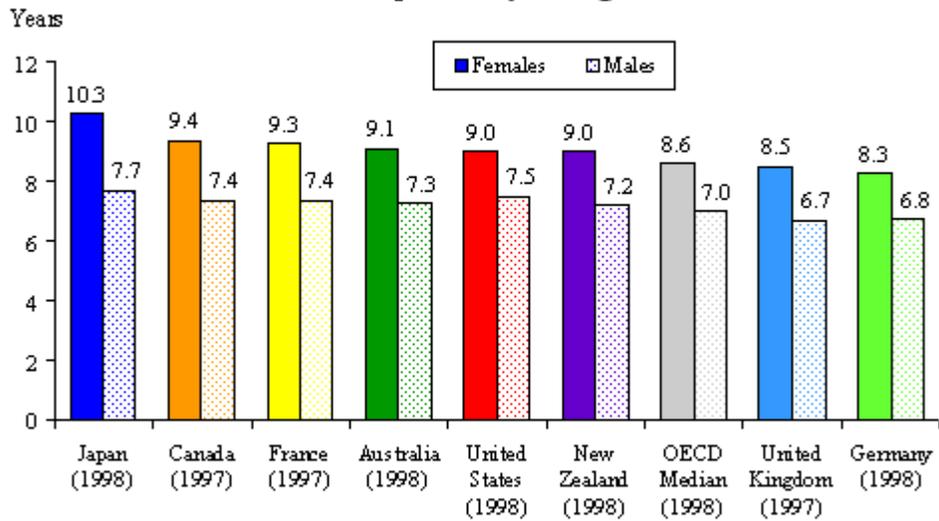
Source: OECD Health Data 2000

**Chart IV-4**  
**Life Expectancy at Age 60**



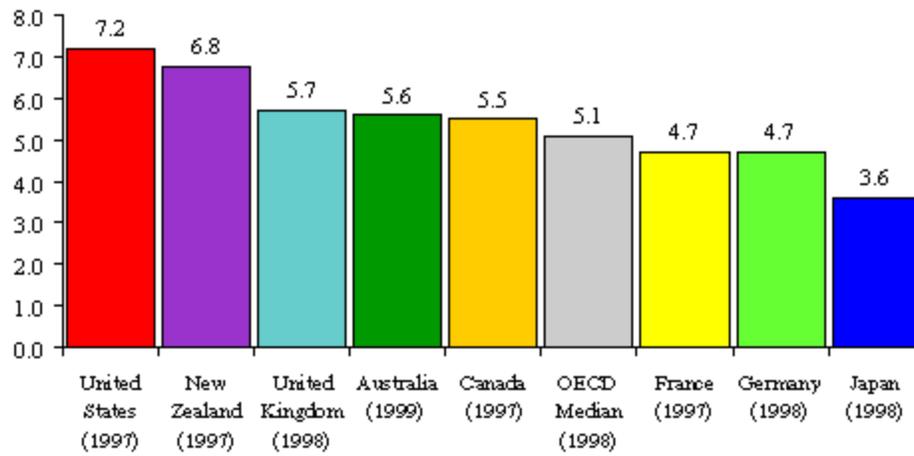
Source: OECD Health Data 2000

**Chart IV-5**  
**Life Expectancy at Age 80**



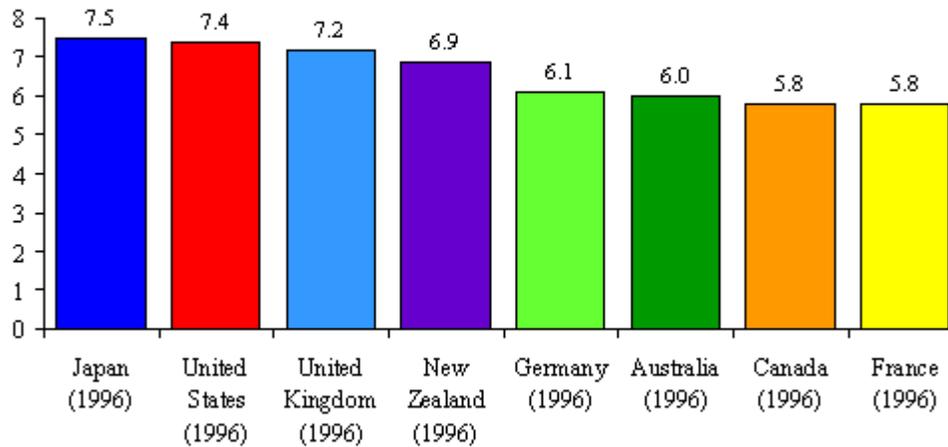
Source: OECD Health Data 2000

**ChartIV-6**  
**Infant Mortality Rate per 1,000 Live Births**



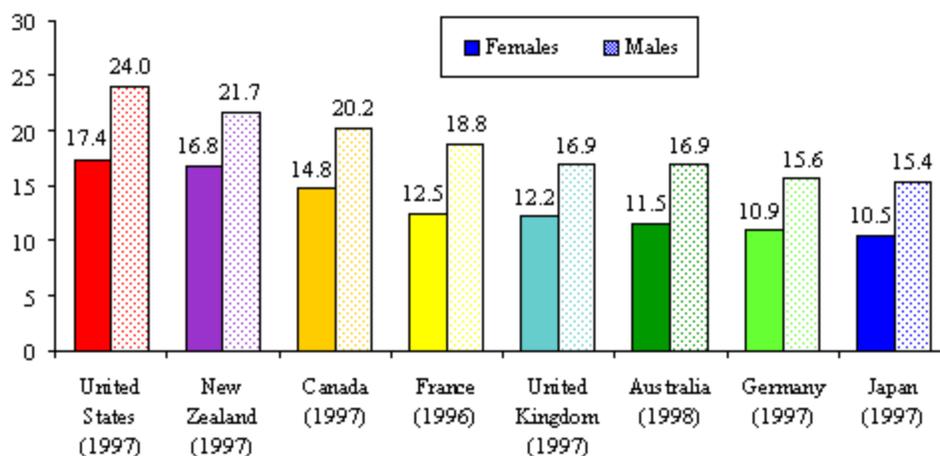
Source: OECD Health Data 2000 and Australian Bureau of Statistics

**ChartIV-7**  
**Low Birthweight Babies, Percent of Live Births**



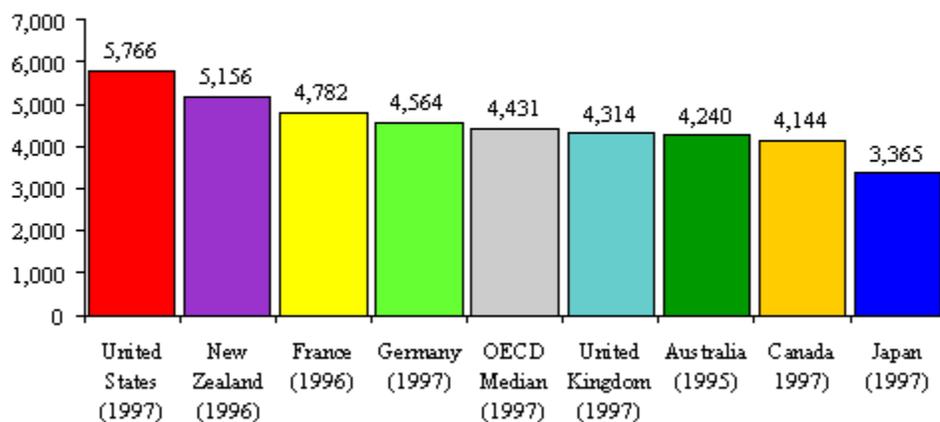
Source: OECD Health Data 2000

**Chart IV-8**  
**Deaths per 100,000 Population, Ages 5–14<sup>15</sup>**



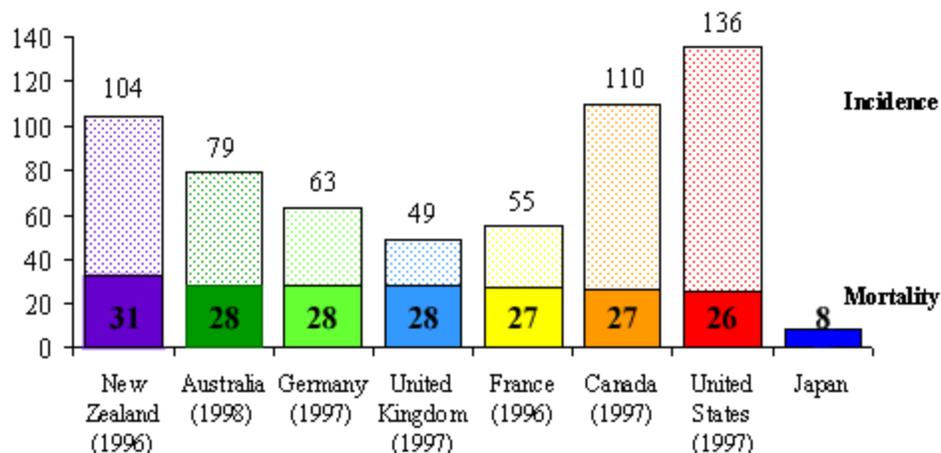
Source: WHO Statistical Information System, New Zealand Health Information System, and Australian Bureau of Statistics

**Chart IV-9**  
**Potential Years of Life Lost per 100,000 Population for All Causes**



Source: OECD Health Data 2000

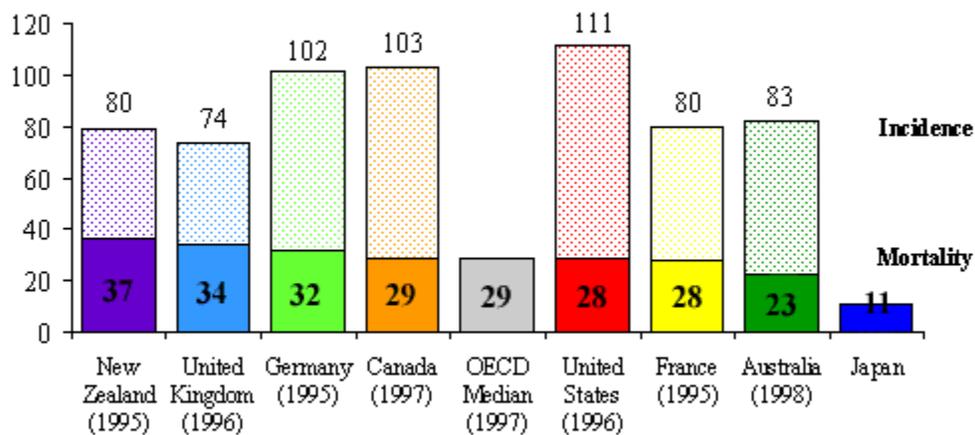
**Chart V-1**  
**Prostate Cancer Incidence and Mortality**  
**per 100,000 Males per Year**



Note: Incidence figure for Japan was not available.

Source: OECD Health Data 2000 and Australian Bureau of Statistics

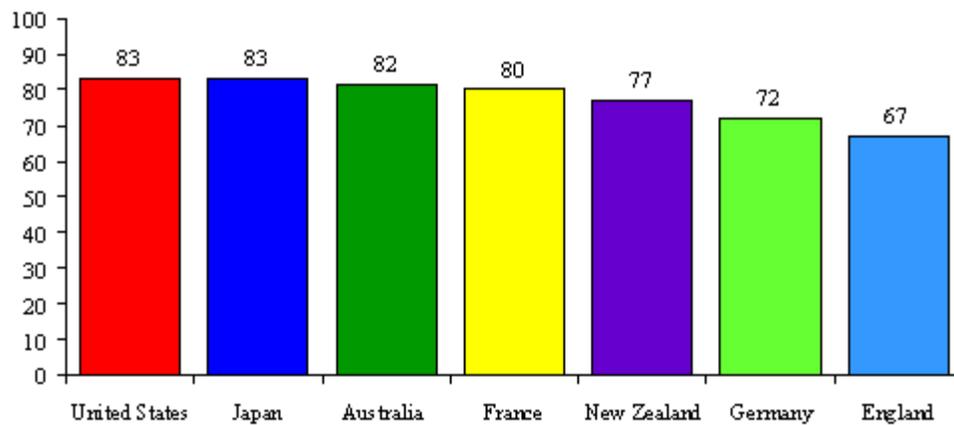
**Chart V-2**  
**Breast Cancer Incidence and Mortality**  
**per 100,000 Females per Year**



Note: Incidence figure for Japan was not available.

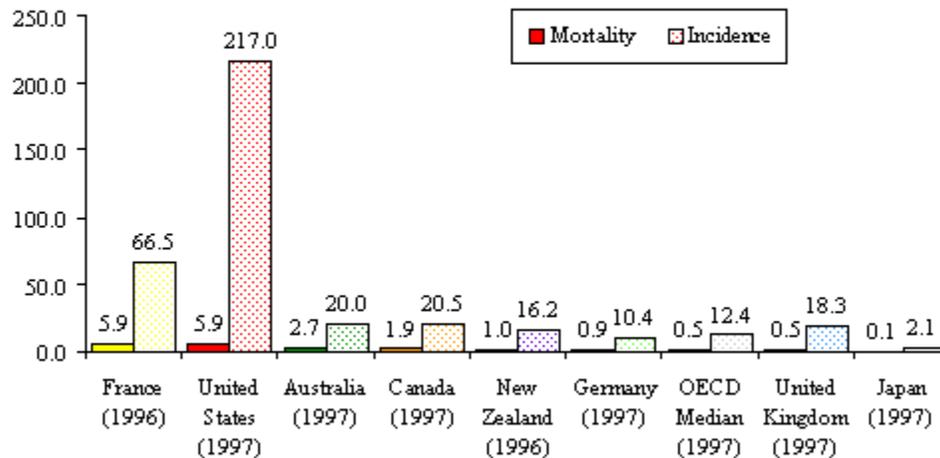
Source: OECD Health Data 2000 and Australian Bureau of Statistics

**Chart V-3**  
**Five-Year Survival Rates for Breast Cancer, 1985–1995**



Source: OECD and New Zealand Health Information System >

**Chart V-4**  
**Incidence and Mortality Due to AIDS**  
**per 100,000 Population per Year**



Source: OECD Health Data 2000

### Life Expectancy at Birth

- Disability-adjusted life expectancy is an estimate of the number of years a person will live in full health.

- For women, disability-adjusted life expectancy ranges from 71.2 years in New Zealand to 77.2 years in Japan.
- For men, disability-adjusted life expectancy ranges from 67.1 years in New Zealand to 71.9 years in Japan.
- The difference in disability-adjusted life expectancy between men and women ranges from 4.0 years in Canada and the United Kingdom to 7.6 years in France.
- Life expectancy at birth for both men and women is on average 5–7 years longer than disability-adjusted life expectancy.

### **Mortality in Children**

- The infant mortality rate is highest in the United States and lowest in Japan.
- The mortality rate at age 5 is highest in the United States and lowest in Japan.
- Death rates for children ages 5–14 are highest in New Zealand and the United States and lowest in Japan and Germany.

### **Life Expectancy at Age 60**

- For women, disability-adjusted life expectancy at age 60 ranges from 17.0 years in New Zealand to 21.7 years in France.
- For men, disability-adjusted life expectancy at age 60 ranges from 14.4 years in New Zealand to 17.5 years in Japan.
- The difference in disability-adjusted life expectancy between men and women ranges from 2.6 years in New Zealand to 4.1 years in France.
- Life expectancy at age 60 for both men and women is on average 3–4 years longer than disability-adjusted life expectancy.

### **Life Expectancy at Age 80**

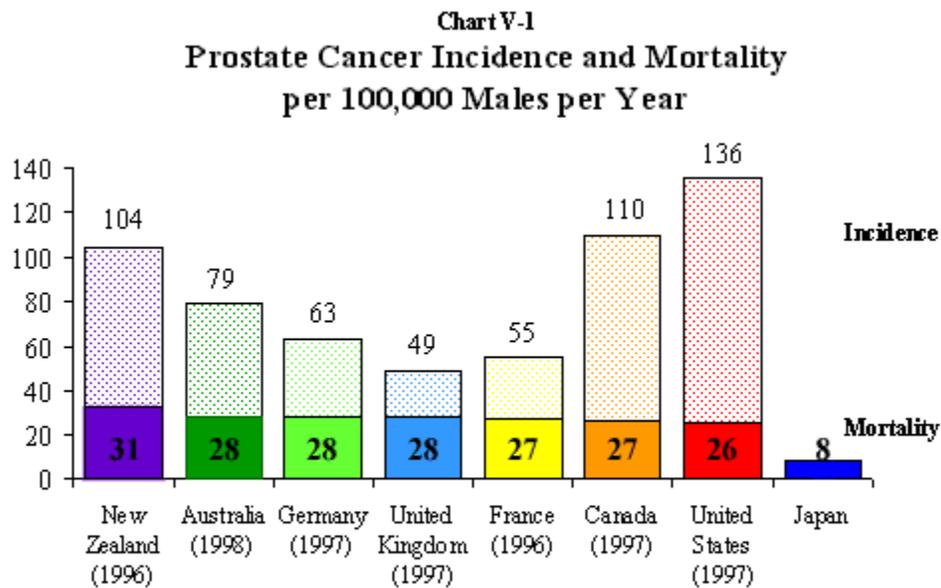
- For women, life expectancy at age 80 ranges from 8.3 years in Germany to 10.3 years in Japan.
- For men, life expectancy at age 80 ranges from 6.6 years in Germany to 7.7 years in Japan.

### **Potential Years of Life Lost**

- Potential years of life lost measures the years of life lost prior to age 70 due to causes that are considered preventable given the appropriate intervention or preventive measure.
- The United States and New Zealand have the greatest number of potential years of life lost while Canada and Australia have the fewest.

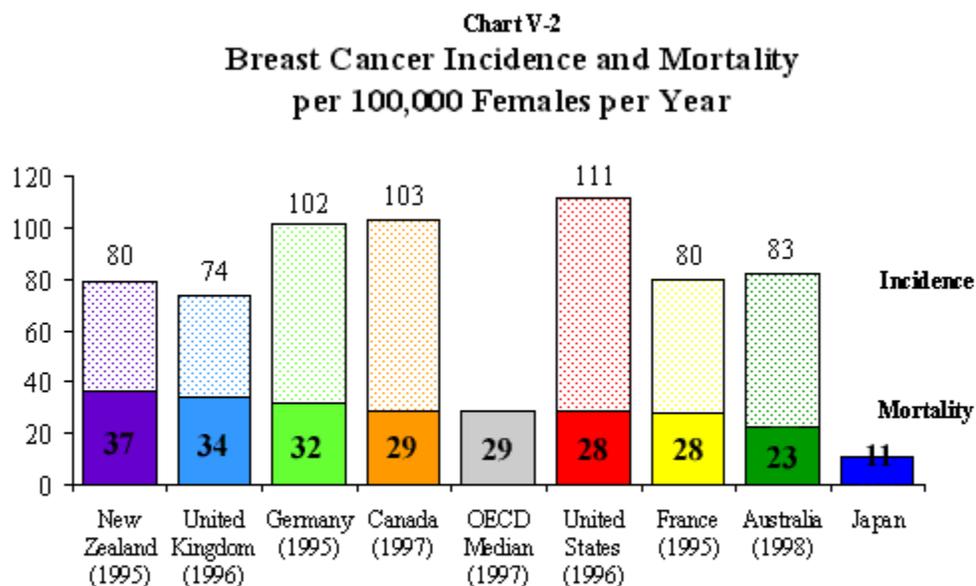
- This reflects the relatively high childhood mortality rates in the United States and New Zealand.

## DISEASE-SPECIFIC INCIDENCE AND MORTALITY



Note: Incidence figure for Japan was not available.

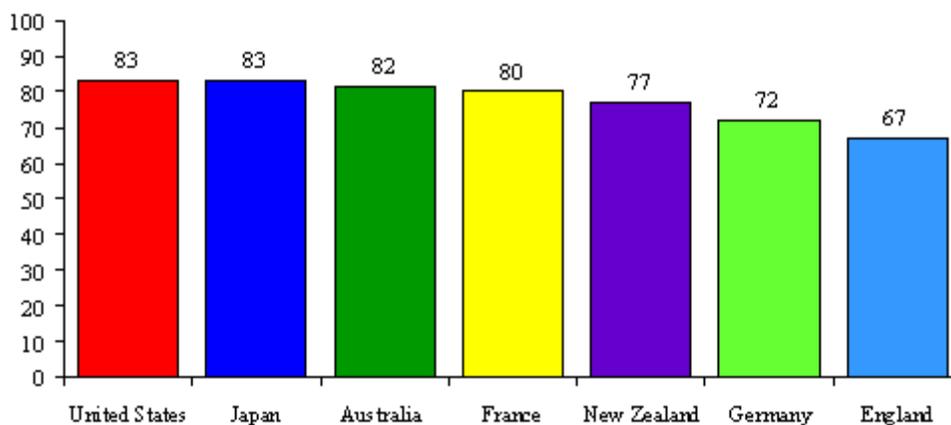
Source: OECD Health Data 2000 and Australian Bureau of Statistics



Note: Incidence figure for Japan was not available.

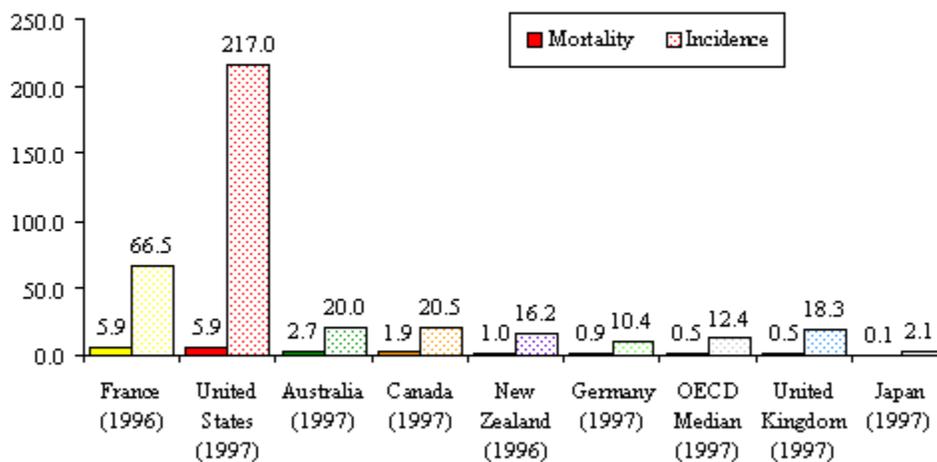
Source: OECD Health Data 2000 and Australian Bureau of Statistics

**Chart V.3**  
**Five-Year Survival Rates for Breast Cancer, 1985–1995**



Source: OECD and New Zealand Health Information System

**Chart V.4**  
**Incidence and Mortality Due to AIDS**  
**per 100,000 Population per Year**



Source: OECD Health Data 2000

### Patterns

- Generally, there is greater variation in the incidence of diseases than in the mortality from these same diseases.

### Specific Diseases

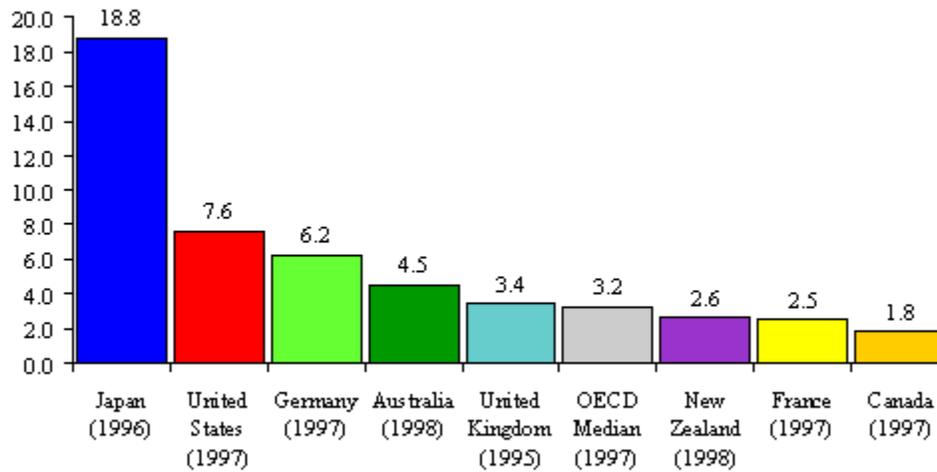
- Prostate cancer mortality is highest in New Zealand and lowest in Japan.
- Breast cancer mortality is highest in New Zealand and lowest in Japan.
- AIDS mortality is highest in France and the United States and lowest in Japan.

### Breast Cancer Survival

- Five-year survival rates for breast cancer are longest in the United States and Japan and shortest in England.

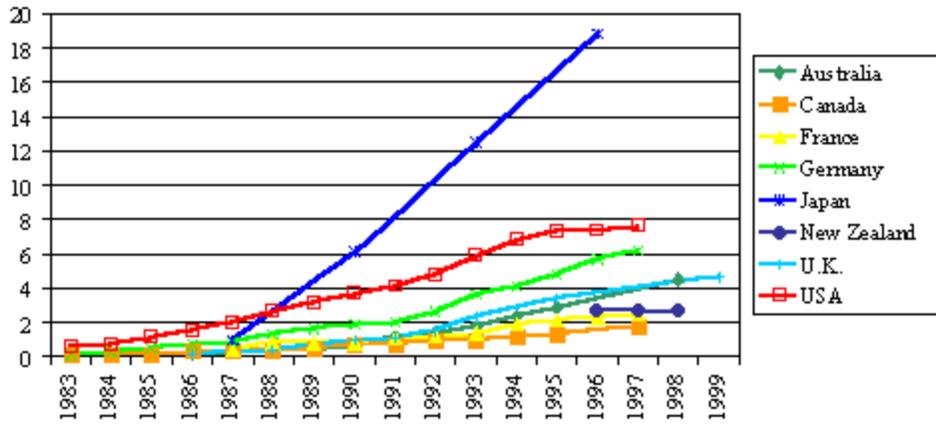
## MEDICAL PROCEDURES INVOLVING SOPHISTICATED TECHNOLOGY

Chart VI-1  
Magnetic Resonance Imagers per Million Population<sup>16</sup>



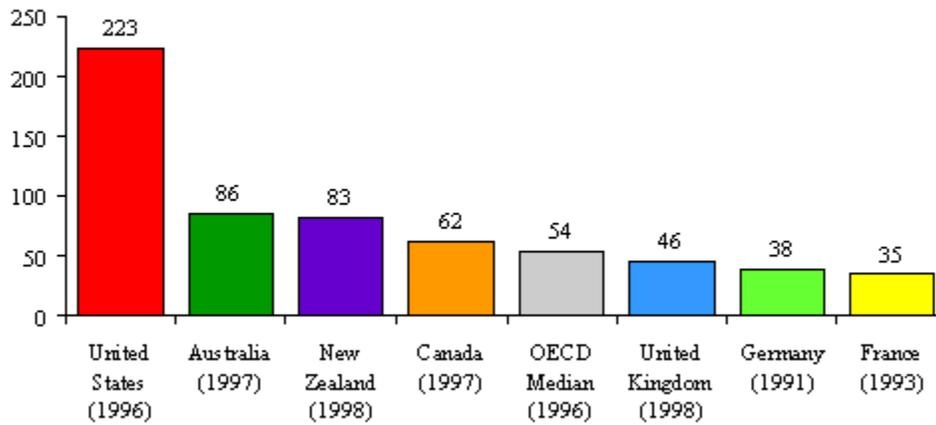
Source: OECD Health Data 2000

**Chart VI-2**  
**Magnetic Resonance Imagers per Million Population,**  
**1983 to 1999**



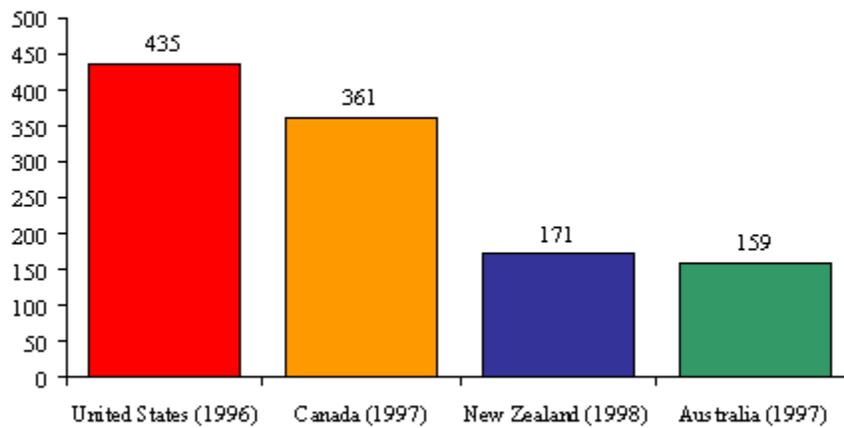
Source: OECD Health Data 2000

**Chart VI-3**  
**Coronary Bypass Procedures per 100,000 Population**



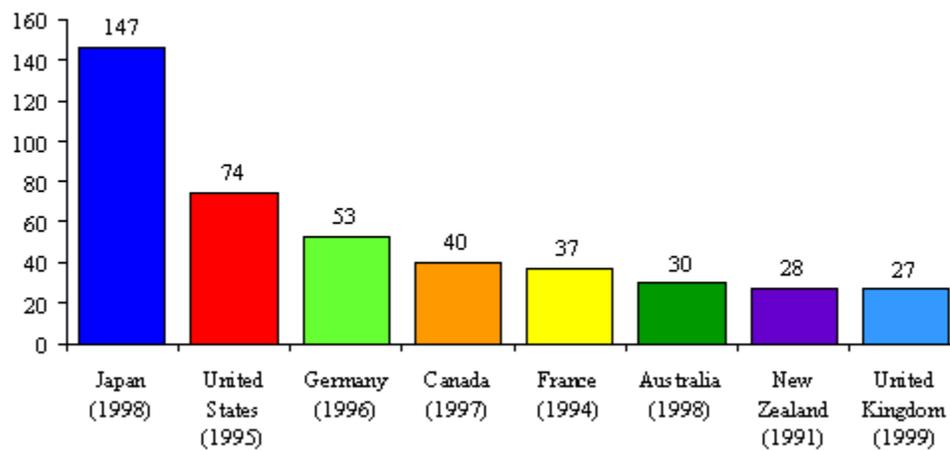
Source: OECD Health Data 2000

**Chart VI-4**  
**Hysterectomies per 100,000 Females**



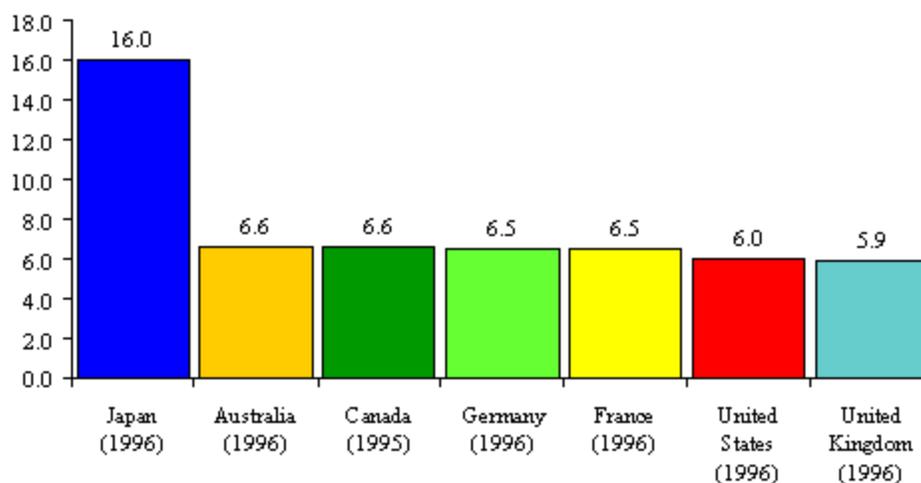
Source: OECD Health Data 2000

**Chart VI-5**  
**Patients Undergoing Dialysis per 100,000 Population**



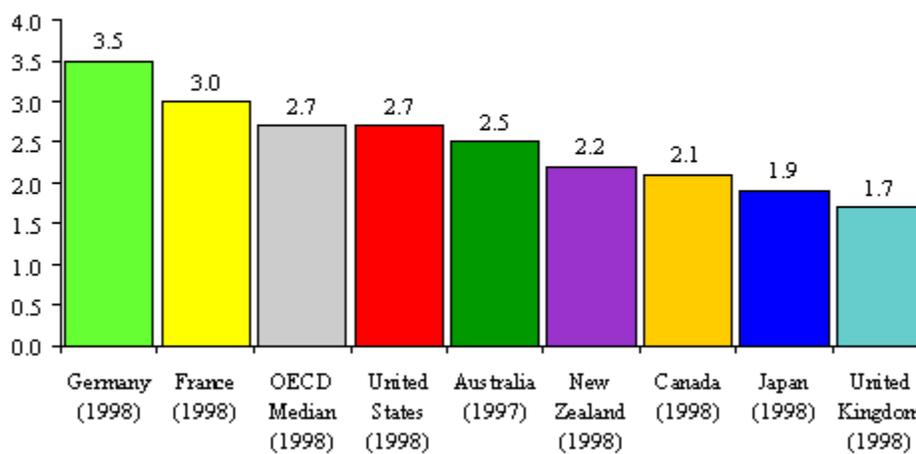
Source: OECD Health Data 2000

**Chart VII-1**  
**Annual Physician Visits per Capita<sup>18</sup>**



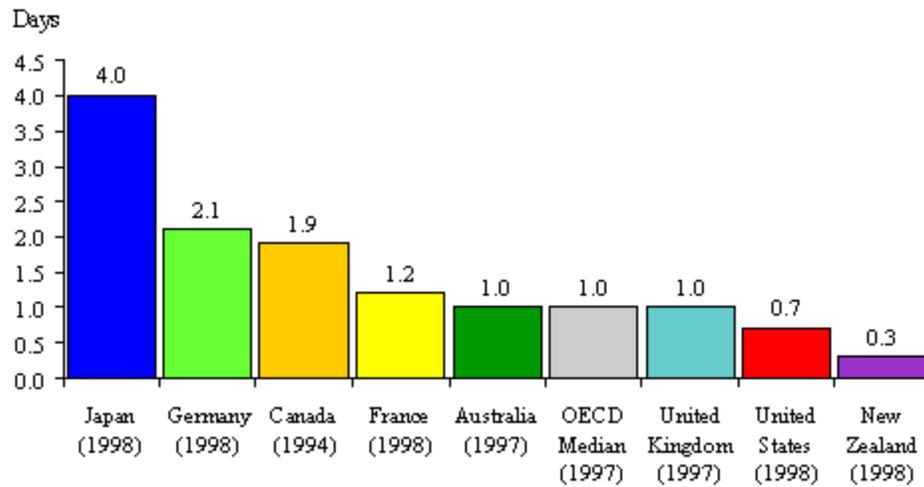
Source: OECD Health Data 2000

**Chart VII-2**  
**Number of Practicing Physicians per 1,000 Population<sup>19</sup>**



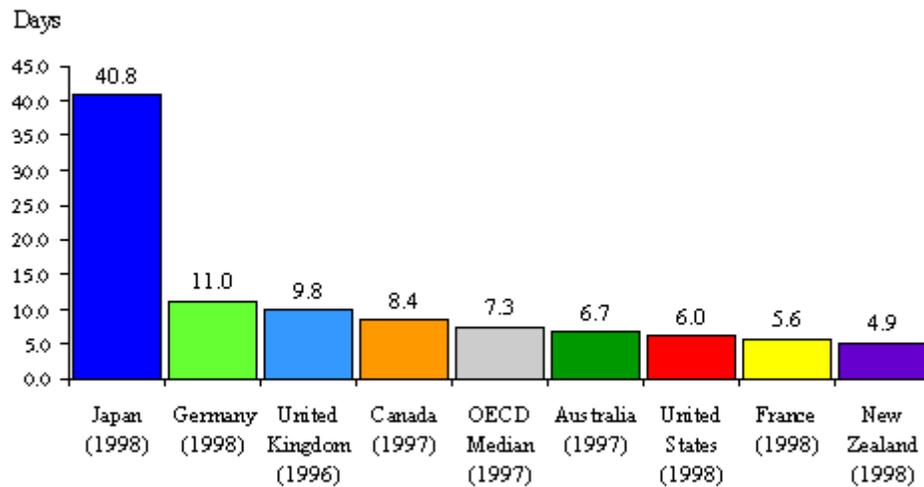
Source: OECD Health Data 2000

**Chart VII-3**  
**Annual Hospital Inpatient Acute Care Days per Capita<sup>20</sup>**



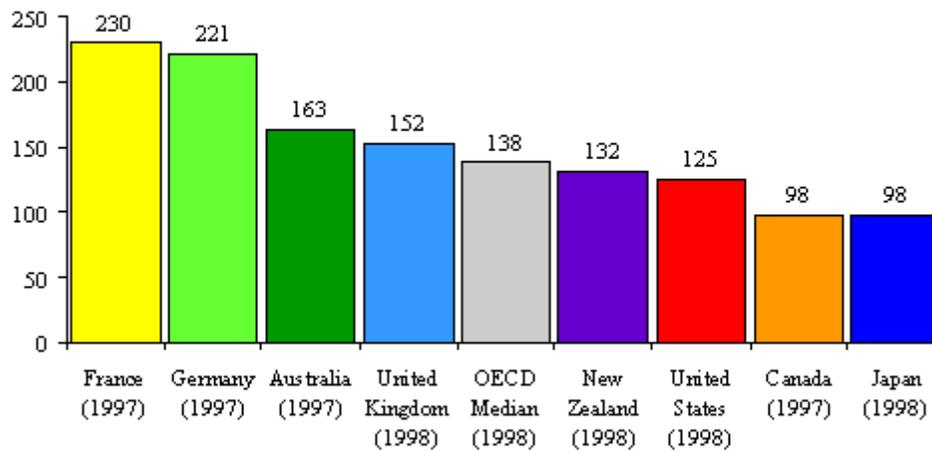
Source: OECD Health Data 2000

**Chart VII-4**  
**Average Length of Inpatient Acute Care Hospital Stay<sup>20</sup>**



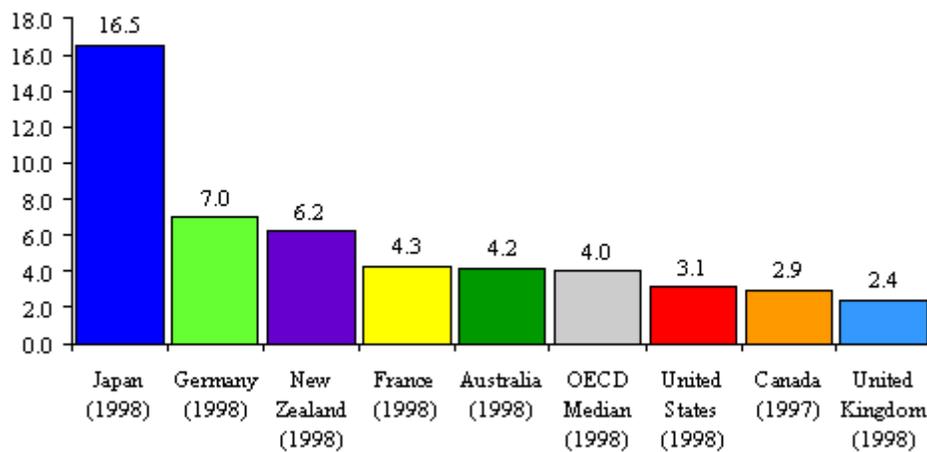
Source: OECD Health Data 2000

**Chart VII-5  
Inpatient Admissions per 1,000 Population<sup>21</sup>**



Source: OECD Health Data 2000

**Chart VII-6  
Number of Acute Care Hospital Beds per 1,000 Population**



Source: OECD Health Data 2000

### Access to Technology

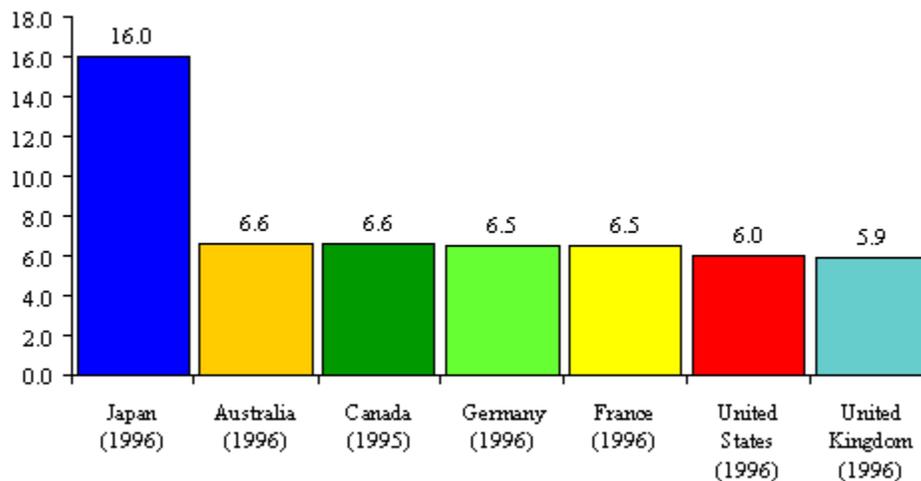
- Japan has more than twice the number of MRIs per capita as the United States and ten times the number per capita as Canada.
- The number of MRIs per capita has increased dramatically in Japan since 1987. In the other countries, the number of MRIs per capita has increased much more slowly.

### Utilization

- The United States has over twice the coronary bypass procedure rate of Australia, over three times the rate in Canada, and almost five times the rate in the United Kingdom.
- The United States and Canada have over twice the hysterectomy rates of New Zealand and Australia.
- Japan has twice the dialysis rate of the United States and five times the rate of the United Kingdom.

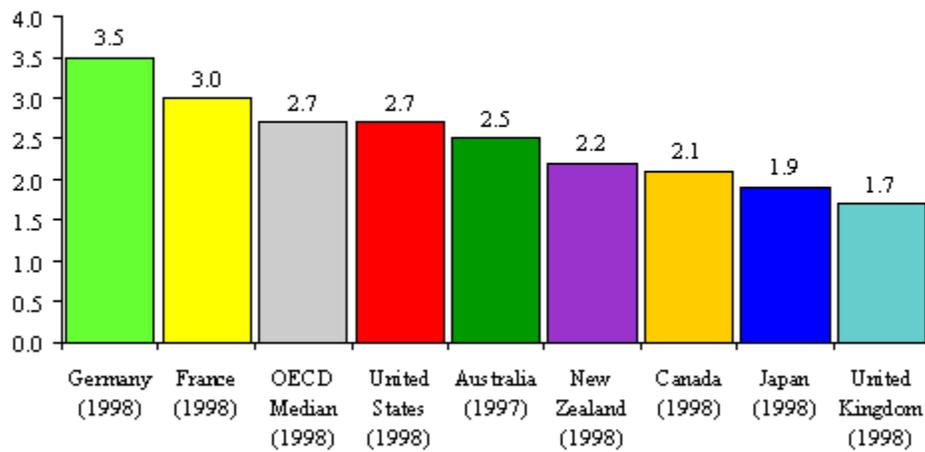
## HEALTH CARE RESOURCES AND UTILIZATION

Chart VII-1  
Annual Physician Visits per Capita<sup>18</sup>



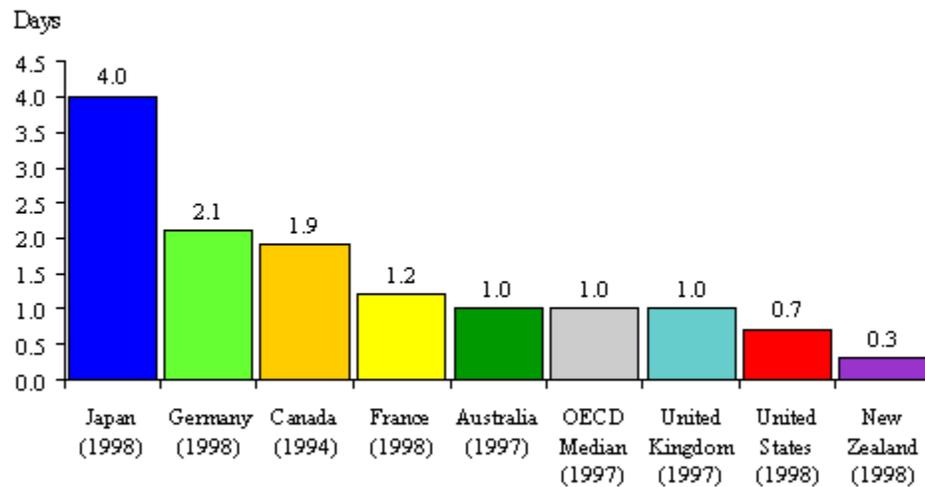
Source: OECD Health Data 2000

**Chart VII-2**  
**Number of Practicing Physicians per 1,000 Population<sup>19</sup>**



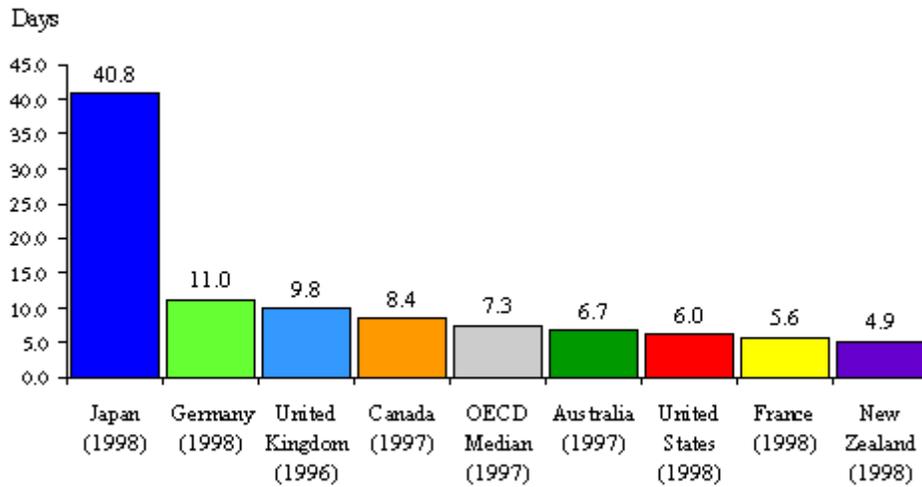
Source: OECD Health Data 2000

**Chart VII-3**  
**Annual Hospital Inpatient Acute Care Days per Capita<sup>20</sup>**



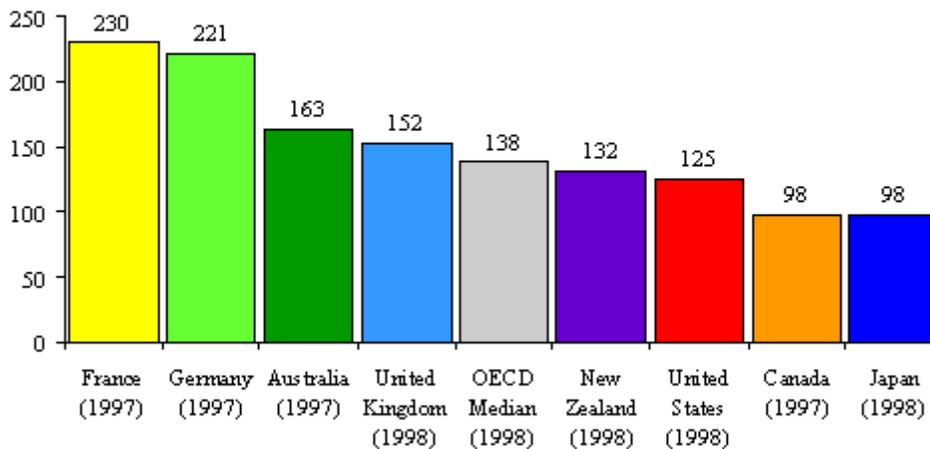
Source: OECD Health Data 2000

**Chart VII-4**  
**Average Length of Inpatient Acute Care Hospital Stay<sup>20</sup>**



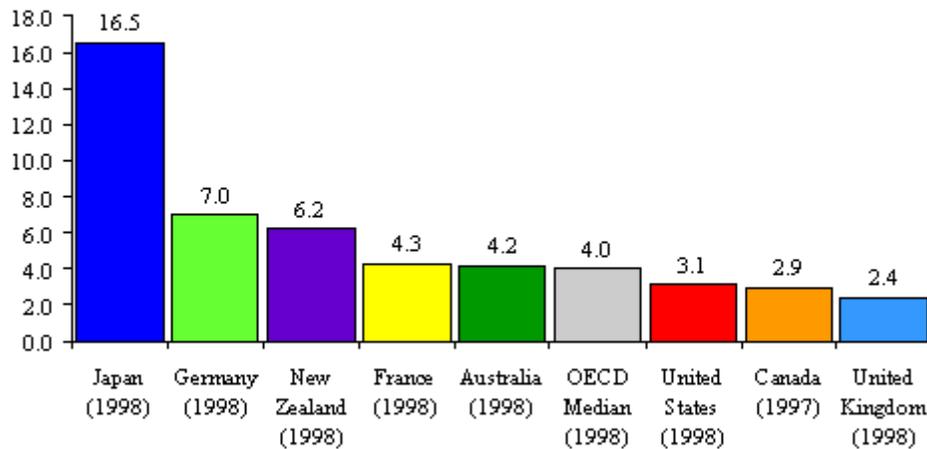
Source: OECD Health Data 2000

**Chart VII-5**  
**Inpatient Admissions per 1,000 Population<sup>21</sup>**



Source: OECD Health Data 2000

**Chart VII-6**  
**Number of Acute Care Hospital Beds per 1,000 Population**



Source: OECD Health Data 2000

### Physicians

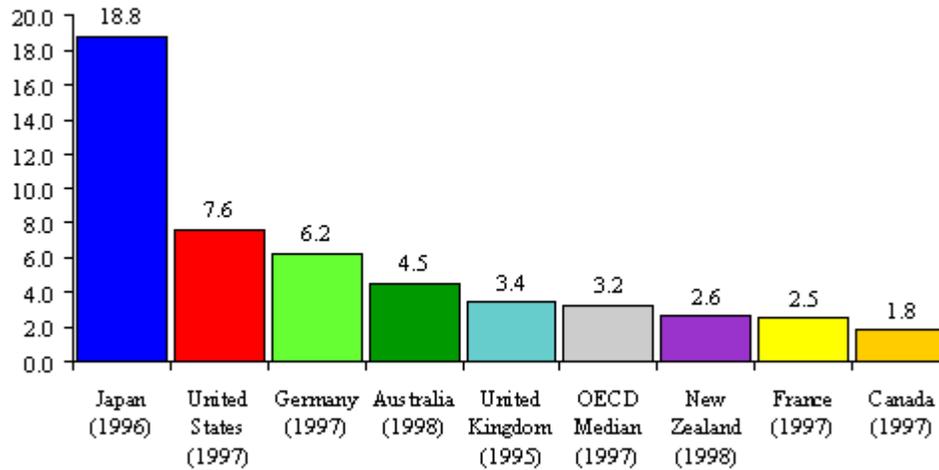
- All countries have approximately the same number of physician visits except for Japan, which has almost three times more.
- Germany has twice the number of practicing physicians per capita as the United Kingdom.

### Hospitals

- New Zealand has the fewest acute care inpatient days per capita; Japan has the most.
- New Zealand has the shortest average length of acute care inpatient stay, while Japan has the longest.
- Japan has many elderly patients who remain in the hospital a very long time because Japan does not have a well-established nursing home system.<sup>17</sup>
- The hospital admission rate is over twice as high in France and Germany as in Canada and Japan.
- The United Kingdom has the fewest hospital beds per capita.
- Japan has substantially more hospital beds per capita than the other countries.

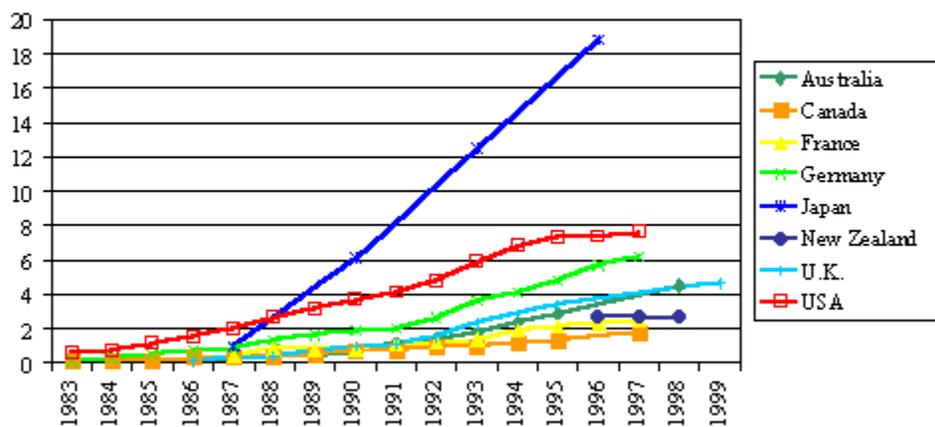
## HEALTH EXPENDITURES

**Chart VI-1**  
**Magnetic Resonance Imagers per Million Population<sup>16</sup>**



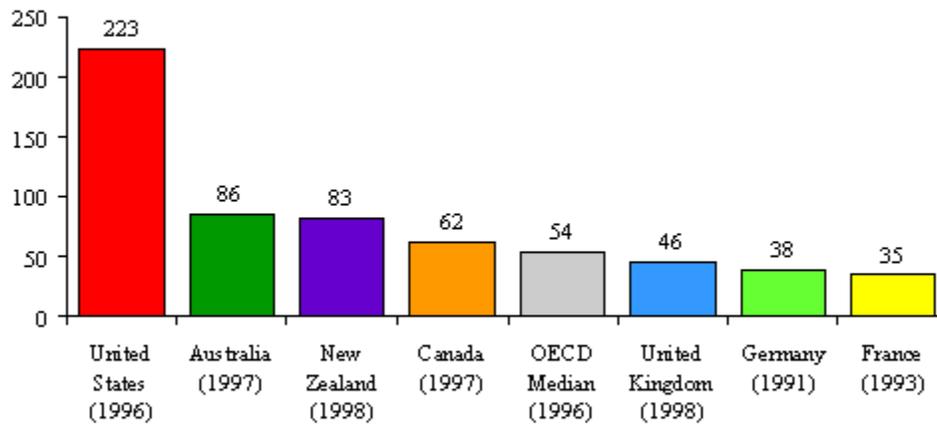
Source: OECD Health Data 2000

**Chart VI-2**  
**Magnetic Resonance Imagers per Million Population, 1983 to 1999**



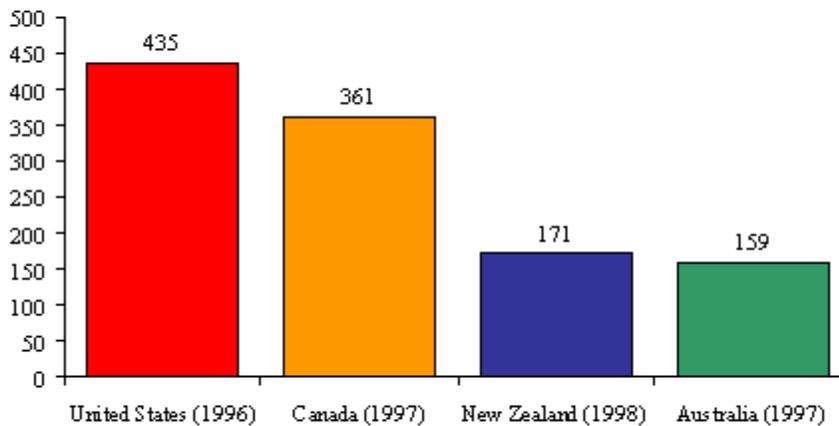
Source: OECD Health Data 2000

**Chart VI-3**  
**Coronary Bypass Procedures per 100,000 Population**



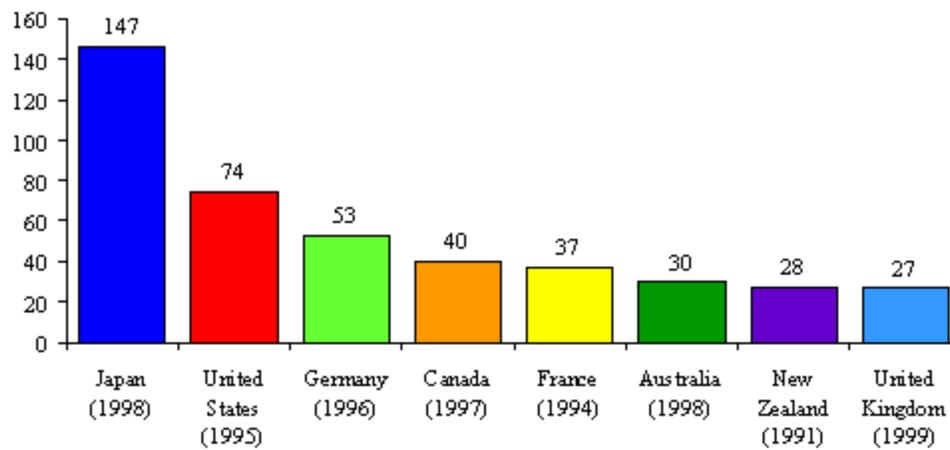
Source: OECD Health Data 2000

**Chart VI-4**  
**Hysterectomies per 100,000 Females**



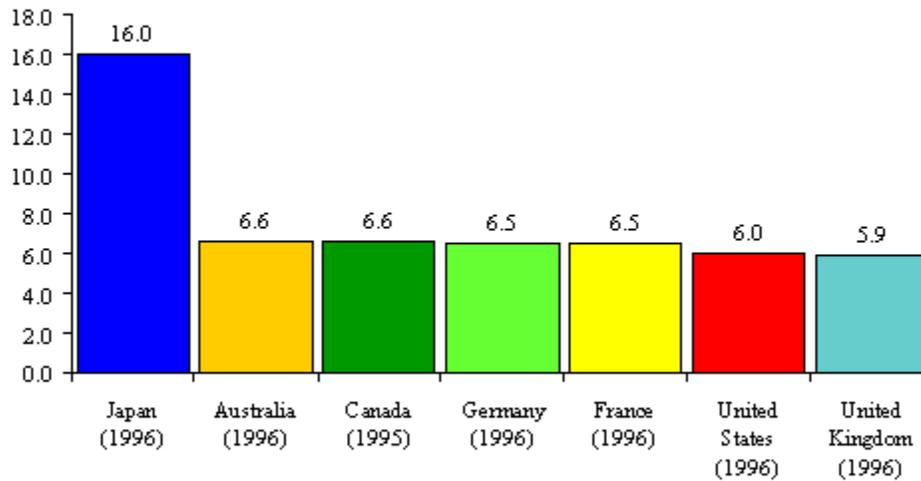
Source: OECD Health Data 2000

**Chart VI-5**  
**Patients Undergoing Dialysis per 100,000 Population**



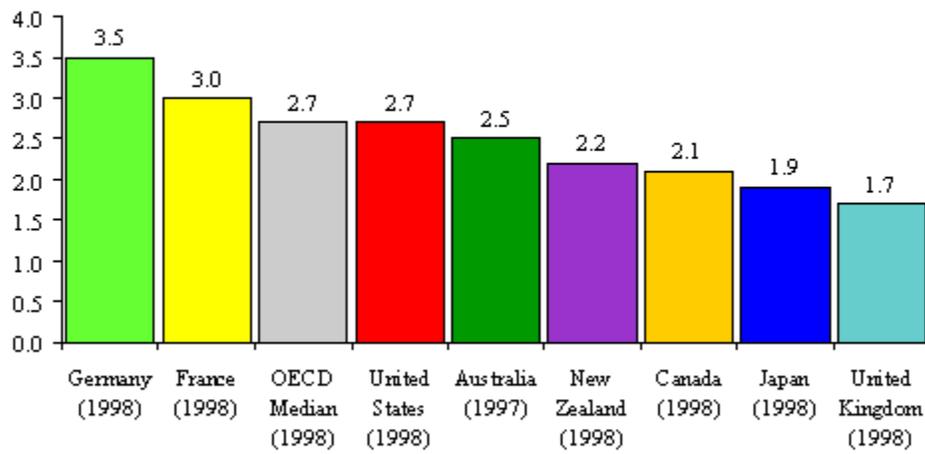
Source: OECD Health Data 2000

**Chart VII-1**  
**Annual Physician Visits per Capita<sup>18</sup>**



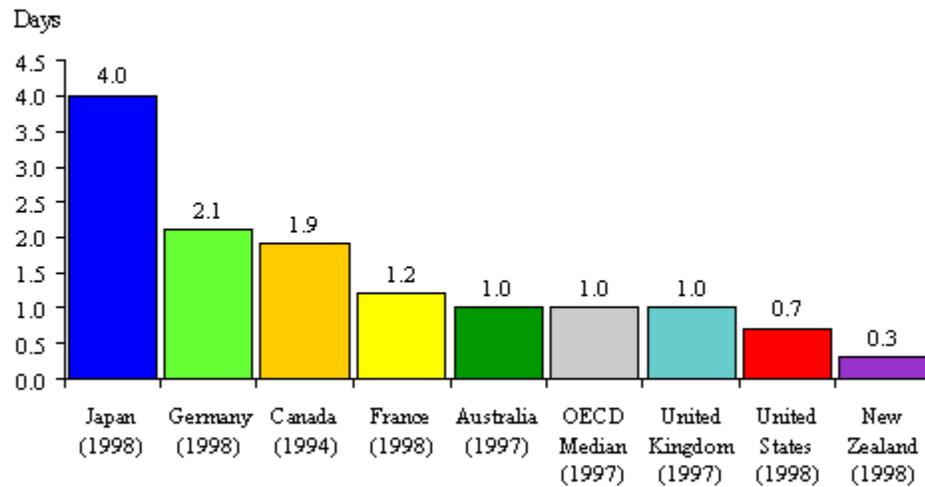
Source: OECD Health Data 2000

**Chart VII-2**  
**Number of Practicing Physicians per 1,000 Population<sup>19</sup>**



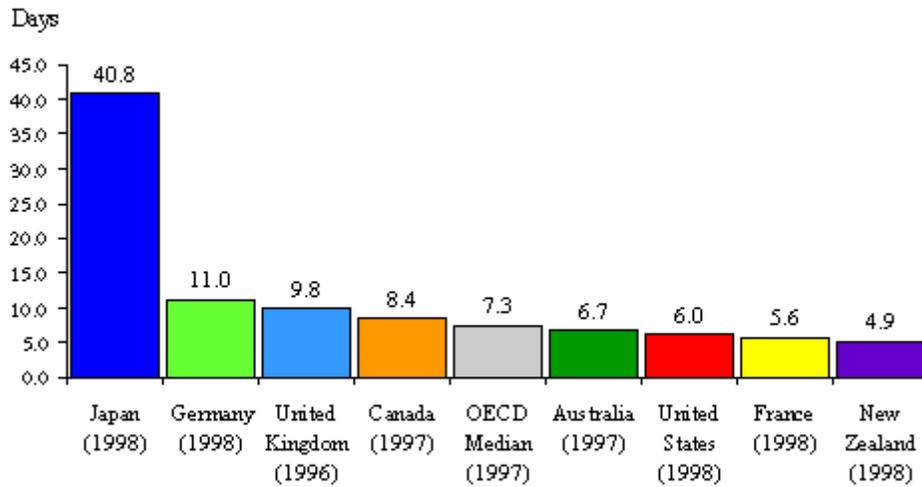
Source: OECD Health Data 2000

**Chart VII-3**  
**Annual Hospital Inpatient Acute Care Days per Capita<sup>20</sup>**



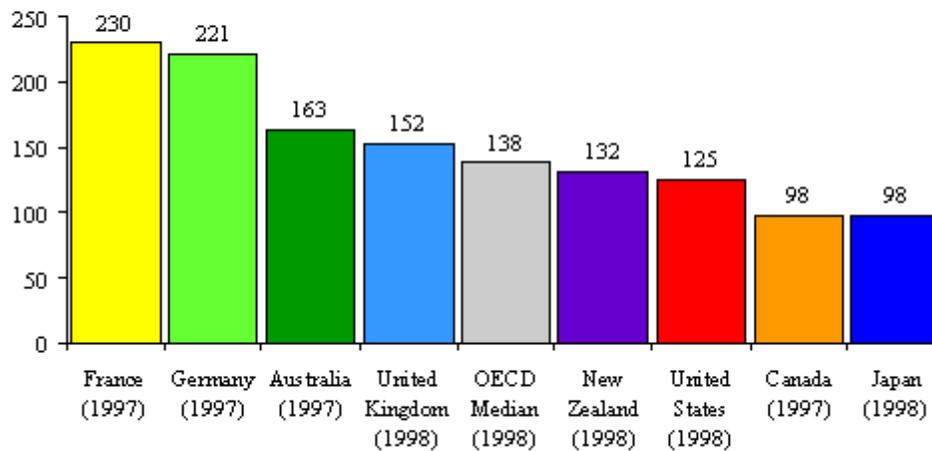
Source: OECD Health Data 2000

**Chart VII-4**  
**Average Length of Inpatient Acute Care Hospital Stay<sup>20</sup>**



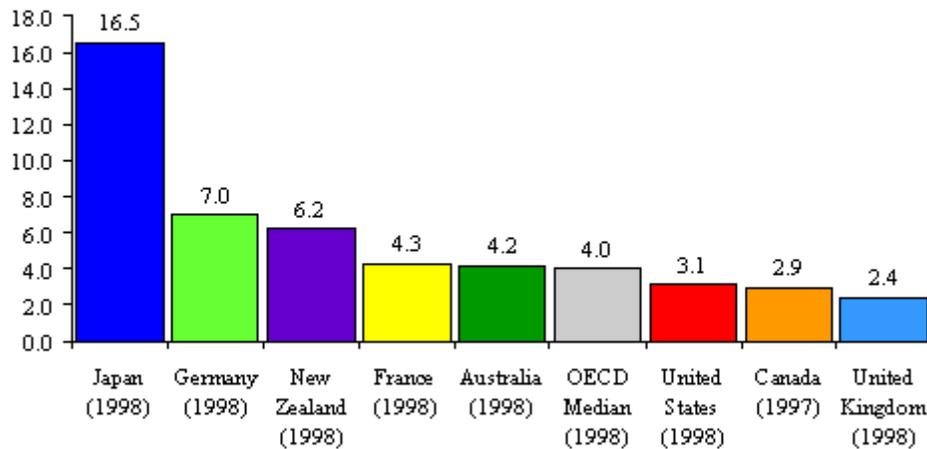
Source: OECD Health Data 2000

**Chart VII-5**  
**Inpatient Admissions per 1,000 Population<sup>21</sup>**



Source: OECD Health Data 2000

**Chart VII-6**  
**Number of Acute Care Hospital Beds per 1,000 Population**



Source: OECD Health Data 2000

### **Per Capita Health Spending in 1998**

- Adjusted for differences in the standard of living, the United States spends considerably more on health care than any other country.
- If the United States spent the same amount on health care per capita as Germany (the second most expensive country shown here), health care spending in the United States would decrease by almost \$500 billion.

### **Per Capita Health Spending Growth, 1960-1998**

- The annual rate of increase was most rapid in Japan (6.9%) and slowest in New Zealand (2.2%).<sup>22</sup>

### **Per Capita Health Spending Growth by Decade**

- In most countries, the real rate of increase in per capita health spending slowed in each decade from 1960 to 1990.
- During the 1990s, Japan had the highest rate of growth in real health spending and France the lowest.

### **Percentage of GDP Spent on Health**

- The United States spends a much greater percentage of GDP on health care (13.6%) than the other countries (OECD Median = 8.3%).
- In most countries, the percentage of GDP spent on health stabilized around 1980.

- In the United States, the stability did not occur until around 1990.
- In all eight countries, the percentage of GDP spent on health care was relatively stable in the 1990s.
- The United States has spent the highest percentage of GDP on health care in every year since 1960.
- Much of the difference in the percentage of GDP spent on health between the United States and the other countries is attributable to continued growth in the United States during the 1980s.

### **Distribution of Spending**

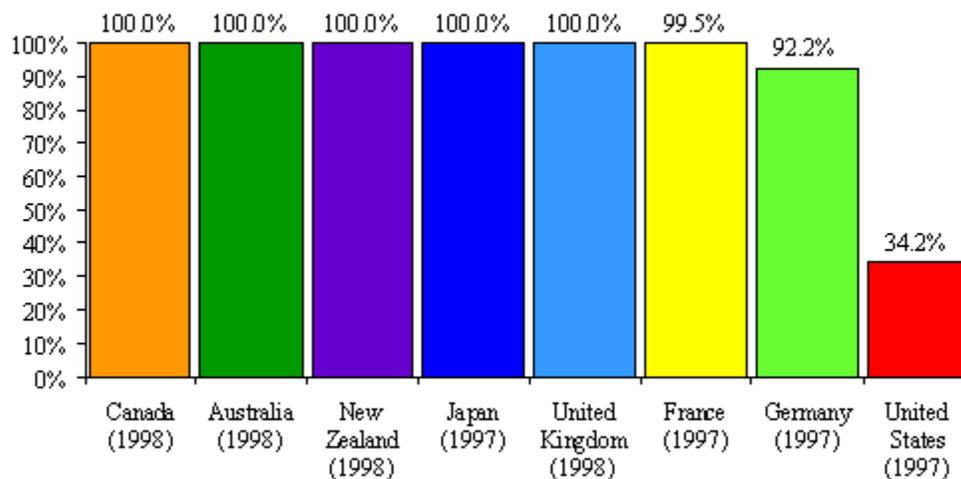
- The United States spends the most per capita on hospitals, physicians, and pharmaceuticals.
- The United Kingdom spends the least per capita on hospitals.
- New Zealand spends the least per capita on physicians and pharmaceuticals.

### **Hospitals and Physicians**

- The United States spends almost five times more per hospital day than the OECD median.
- Hospital expenditures per day are much higher in the United States after adjusting for differences in length of stay and hospital days per capita.
- Physician incomes are almost twice as high in the United States as in Germany and Canada and almost four times higher than Australia, the United Kingdom, and France.

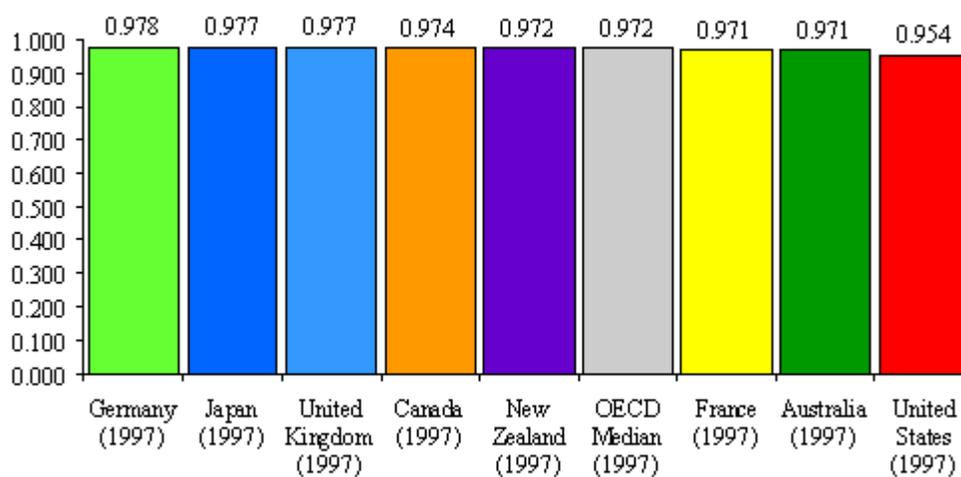
## FINANCIAL EQUITY

**Chart IX-1**  
**Percentage of Total Population with**  
**Government-Assured Insurance<sup>35</sup>**



Source: OECD Health Data 2000

**Chart IX-2**  
**WHO Index of Fairness of Financial**  
**Contribution for Health<sup>36</sup>**



Source: World Health Report 2000

## **Health Insurance**

- Universal health insurance coverage exists in most OECD countries.
- In the United States, approximately one-third of the population receives health insurance from the government. Approximately one of six Americans does not have health insurance coverage from any source.
- In Germany, the most affluent are permitted to self-insure or buy private health insurance coverage.

## **WHO Financial Fairness Index**

- The World Health Organization has constructed an index which measures how much variation there is within a country in the percentage of income spent on health care at the family level.
- The United States scores substantially lower on the WHO index of fairness of financial contribution than the other seven countries.

## **COUNTRY SUMMARIES**

### **The Australian Health Care System**

#### **Who is covered?**

Coverage is universal.

#### **What is covered?**

- Services: Some preventive services; inpatient and outpatient hospital care; physician services; inpatient and outpatient drugs; mental health care; and rehabilitation. Free choice of general practitioner.
- Cost-sharing: Medicare reimburses 75 percent of the scheduled fee for private inpatient services and 85 percent of ambulatory services. Doctors are free to charge above the scheduled fee or they may direct bill the government when there is no patient charge. Seventy percent of medical services are direct billed. Prescription pharmaceuticals have a patient copayment. Out-of-pocket payments account for 17 percent of health expenditures.

### **How are revenues generated?**

- National Health Insurance (Medicare): Compulsory national health insurance administered by the federal government. National health insurance is funded by a mixture of general tax revenue, a 1.5 percent levy on taxable income (which accounts for 17.3% of federal outlays on health), state revenue, and fees paid by patients. Additionally, a Medicare Levy Surcharge applies to high-income individuals without private health insurance. Government funds 70 percent of health expenditures (47% federal and 23% state).
- 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 offer private hospital treatment, choice of specialists, and avoidance of queues for elective surgery.
- Private insurance covers 41 percent of the population and accounts for 10 percent of health expenditures. Through a rebate, 30 percent of private insurance premiums are paid by government.

### **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 federal government assistance negotiated via five yearly agreements. Physicians in public outpatient hospitals are either salaried (but may have private practices and fee-for-service income) or paid on a per-session basis.
- Government: The federal government has control over hospital benefits, pharmaceuticals, and medical services. States are charged with operating public hospitals and regulating all hospitals, nursing homes, and community-based general services.

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

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

### **Relative Ranking Over Time**

The following table shows the performance of Australia compared with the other 28 OECD member countries over time for selected indicators. Since the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of Australia compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator, except for infant mortality, potential years of life lost, and alcohol consumption, where a percentile rank of 100 is given to the country with the

lowest value. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	1998
Life Expectancy at Birth, Females	73	69	78
Life Expectancy at Birth, Males	65	67	83
Life Expectancy at Age 60, Females	81	69	82
Life Expectancy at Age 60, Males	42	62	82
Infant Mortality	82	64	60
Potential Years of Life Lost	71	58	85*
Average Annual Alcohol Intake per Capita	33	40	47§
Practicing Physicians per 1,000 Population	58	48*	43§
Acute Hospital Beds per 1,000 Population	78	75	57§
Hospital Acute Care Days per Capita	–	26	53§
Average Length of Acute Inpatient Stay	–	14	37§
Health Spending per Capita	89	64	59
Health Spending, % of GDP	89	65	70

± 1981 data  
 \* 1995 data  
 § 1997 data

## THE BRITISH HEALTH CARE SYSTEM

### Who is covered?

Coverage is universal.

### What is covered?

- Services: Publicly funded coverage 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: Few cost-sharing arrangements for covered services (e.g., outpatient drugs, dentistry). 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, its regional office, and by Health Authorities. In 1997 the new government shifted from the internal market to integrated care, partnership, and long-term service agreements between providers and purchasers. 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 act as gatekeepers and are brought together in Primary Care Groups-with budgets for all care of enrolled populations-and Primary Care Trusts-with both budgets for their enrolled population and with added responsibility for the provision of community services. Physicians are paid directly by the government through a combination of methods: salary, capitation, and fee-for-service. Private providers set their own fee-for-service rates but are not generally reimbursed by the public system.
- Hospitals: Mainly semiautonomous, self-governing public trusts that contract with groups of purchasers (e.g., Primary Care Groups and Trusts, health authorities) on a long-term basis. Consultants (specialist physicians) 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. The governments in the home countries are both purchasers and providers of health care.

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

- The government decides on an annual budget for the NHS. To control utilization and costs, the United Kingdom has controlled physician training, capital expenditure, pay, and purchaser budgets. There are also waiting lists. In addition a centralized administrative system results in lower overhead costs. Other cost-control mechanisms include a drive for clinically cost-effective care, formal efficiency targets, and benchmarking.

### **Relative Ranking Over Time**

The following table shows the performance of the United Kingdom compared with the other 28 OECD member countries over time for selected indicators. Since the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of the United Kingdom compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator, except for infant mortality, potential years of life lost, and alcohol consumption, where a percentile rank of 100 is given to the country with the lowest value. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	1998
Life Expectancy at Birth, Females	85	50	37 <sup>§</sup>
Life Expectancy at Birth, Males	69	63	48 <sup>§</sup>
Life Expectancy at Age 60, Females	69	38	33 <sup>§</sup>
Life Expectancy at Age 60, Males	19	31	37 <sup>§</sup>
Infant Mortality	68	50	40
Potential Years of Life Lost	75	50	69
Average Annual Alcohol Intake per Capita	–	72	42 <sup>§</sup>
Practicing Physicians per 1,000 Population	17	15	21
Acute Hospital Beds per 1,000 Population	–	43	10 <sup>§</sup>
Hospital Acute Care Days per Capita	–	5	42 <sup>§</sup>
Average Length of Acute Inpatient Stay	–	29	8 <sup>¶</sup>
Health Spending per Capita	67	24	37
Health Spending, % of GDP	56	19	19

¶ 1996 data

§ 1997 data

## THE CANADIAN HEALTH CARE SYSTEM

### Who is covered?

Coverage is universal.

### What is covered?

- Services: The federal government requires that provincial health insurance plans cover all medically necessary physician and hospital services.
- Provinces provide additional benefits to different groups (i.e., seniors, social assistance recipients, etc.). Benefits include prescription drugs, dental care, home care, aids to independent living.
- Cost-sharing: No cost-sharing for insured physician and hospital services.

### How are revenues generated?

- National Health Insurance (Medicare): Public health insurance plans are administered by the provinces and funded by general taxation and dedicated taxes. Federal contribution to provinces are tied to population and conditional to compliance with the Canada Health Act. Public funding accounts for just under 70 percent of total health expenditures.

- Private Insurance: The majority of Canadians have supplemental private insurance coverage through group plans, which extends the range of insured services to include dental care, prescription drugs, rehabilitation services, private care nursing, and private rooms in hospitals. Private health sector represents approximately 30 percent of total health expenditures.

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

- Physicians: Most physicians are in private practice and are remunerated on fee-for-service basis. Provincial medical associations negotiate the fee schedule for insured services with provincial health ministries. Physicians must opt out of the public system of payment to have the right to charge their own rates.
- Hospitals: Mainly public and private non-profit hospitals that operate under global budgets or regional budgets with some fee-for-service payment. Less than 5 percent of Canadian hospitals are privately owned—mostly long-term care facilities.
- Government: Provincial governments have the authority to regulate health providers. However, they delegate control over physicians and other providers to professional "colleges" whose duty is to license providers and set standards for practice.

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

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

#### **Relative Ranking Over Time**

The following table shows the performance of Canada compared with the other 28 OECD member countries over time for selected indicators. Since the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of Canada compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator, except for infant mortality, potential years of life lost, and alcohol consumption, where a percentile rank of 100 is given to the country with the lowest value. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	1998
Life Expectancy at Birth, Females	74 <sup>i</sup>	89 <sup>±</sup>	74 <sup>§</sup>
Life Expectancy at Birth, Males	84 <sup>i</sup>	78 <sup>±</sup>	85 <sup>§</sup>
Life Expectancy at Age 60, Females	95 <sup>i</sup>	100 <sup>±</sup>	81 <sup>§</sup>
Life Expectancy at Age 60, Males	79 <sup>i</sup>	93 <sup>±</sup>	81 <sup>§</sup>
Infant Mortality	57	68	46 <sup>§</sup>
Potential Years of Life Lost	54	46	85
Average Annual Alcohol Intake per Capita	67	60	80 <sup>*</sup>
Practicing Physicians per 1,000 Population	79 <sup>i</sup>	44	37
Acute Hospital Beds per 1,000 Population	28	36	24 <sup>§</sup>
Hospital Acute Care Days per Capita	–	79	88 <sup>x</sup>
Average Length of Acute Inpatient Stay	–	71	63 <sup>§</sup>
Health Spending per Capita	94	80	85
Health Spending, % of GDP	100	69	85

<sup>i</sup> 1961 data  
<sup>±</sup> 1981 data  
<sup>x</sup> 1994 data  
<sup>¶</sup> 1996 data  
<sup>§</sup> 1997 data

## THE FRENCH HEALTH CARE SYSTEM

### Who is covered?

Coverage is universal.

### What is covered?

- Services: Compulsory benefit package includes preventive services; inpatient and outpatient hospital care; physician services; mental health care; long-term care; dental care; prescription drugs; and rehabilitation. Free choice of ambulatory care physicians.
- Cost-sharing (ticket modérateur): 25 percent for conventional treatment, up to 60 percent for comfort drugs. Out-of-pocket payments account for 17 percent of health expenditures.

### How are revenues generated?

- Sickness Insurance Funds (SIFs): Autonomous, not-for-profit, nongovernmental bodies (although regulated by the government), with national headquarters and regional networks. SIFs are financed with compulsory payroll contributions (13% of wage) from employers (representing about 70% of contributions) and employees (about 30% of contributions). There is no upper earnings limit. SIFs cover 99 percent of the population and account for 75 percent of health expenditures.

- Mutual Insurance Funds (MIFs): In addition to compulsory payroll contributions to the sickness funds, the mutuelles provide supplemental, voluntary insurance to cover cost-sharing arrangements (ticket modérateur) and extra billings. MIFs cover about 80 percent of the population and account for 6 percent of health expenditures.
- Private Insurance: Voluntary for those individuals who never contributed to the national health insurance system (e.g., the affluent self-employed). Private insurance, which covers a small percentage of the population, accounts for 2 percent of health expenditures.

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

- Physicians: General practitioners have no formal gatekeeper function. Physicians are self-employed and are paid on a fee-for-service basis. Patients pay physicians' bills and are reimbursed by the sickness funds (public reimbursement model).
- Hospitals: Private hospitals are both for-profit and not-for-profit, usually with fee-for-service doctors. Public hospitals employ salaried doctors. The sickness funds contract with private and public hospitals (public contract model).
- Government: The French government regulates contribution rates paid to sickness funds, sets global budgets and salaries for public hospitals, and supervises national fee schedule negotiations.

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

- Emphasis is placed on global budgeting, setting moderate fee schedules, and cost-sharing arrangements.

### **Relative Ranking Over Time**

The following table shows the performance of France compared with the other 28 OECD member countries over time for selected indicators. Since the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of France compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator, except for infant mortality, potential years of life lost, and alcohol consumption, where a percentile rank of 100 is given to the country with the lowest value. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	1998
Life Expectancy at Birth, Females	65	73	91
Life Expectancy at Birth, Males	46	56	48
Life Expectancy at Age 60, Females	92	96	–
Life Expectancy at Age 60, Males	35	69	–
Infant Mortality	54	71	77 <sup>§</sup>
Potential Years of Life Lost	63	42	50*
Average Annual Alcohol Intake per Capita	6	4	4*
Practicing Physicians per 1,000 Population	46	63	63
Acute Hospital Beds per 1,000 Population	–	61	67 <sup>§</sup>
Hospital Acute Care Days per Capita	–	53	58 <sup>§</sup>
Average Length of Acute Inpatient Stay	–	43	26 <sup>§</sup>
Health Spending per Capita	61	72	67
Health Spending % of GDP	67	73	89

∞ 1996 data

§ 1997 data

## THE GERMAN HEALTH CARE SYSTEM

### Who is covered?

Everyone is eligible to participate in the public system. Individuals above a determined income level have the right to obtain private coverage.

### What is covered?

- Services: Compulsory benefit package includes preventive services; inpatient and outpatient hospital care; physician services; mental health care; long-term care; dental care; prescription drugs; rehabilitation; and sick leave compensation. Free choice of ambulatory care physicians.
- Cost-sharing: Traditionally few cost-sharing provisions. Out-of-pocket payments account for 11 percent of health expenditures.

### How are revenues generated?

- Sickness Insurance Funds (SIFs): About 600 autonomous, not-for-profit, nongovernmental bodies (although regulated by the government). They are funded by compulsory payroll contributions (averaging 14% of wage), equally shared by employers and employees. SIFs cover 92 percent of the population. The unemployed, the homeless, and immigrants are covered through a special sickness fund financed through general revenues. Sickness funds account for 81 percent of health expenditures.

- Private Insurance: Private insurance, which provides health insurance based on voluntary, individual contributions, covers 8 percent of the population (the affluent, self-employed, and civil servants). Private insurance accounts for 8 percent of health expenditures.

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

Physicians: General practitioners have no formal gatekeeper function. Private physicians are paid on a fee-for-service basis. Representatives of the sickness funds negotiate with the regional associations of physicians to determine aggregate payments.

Hospitals: Hospitals are for-profit and not-for-profit, both private and public. They are staffed with salaried junior and fee-for-service senior doctors. Representatives of the sickness funds negotiate with individual hospitals over payment rates.

Government: The German government regulates the sickness funds. However, it is increasingly willing to reduce its interventions in favor of a self-regulating system.

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

- The government imposes mandatory sector-wide budgets for physician and hospital services and pharmaceuticals. Health care reforms in the 1990s included increased competition among sickness funds; innovative contract models for sickness funds and providers; the integration of ambulatory and hospital care; the introduction of a per-admission hospital payment system; the control of physician supply; and moderate cost-sharing provisions.

### **Relative Ranking Over Time**

The following table shows the performance of Germany compared with the other 28 OECD member countries over time for selected indicators. Since the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of Germany compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator, except for infant mortality, potential years of life lost, and alcohol consumption, where a percentile rank of 100 is given to the country with the lowest value. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	1998
Life Expectancy at Birth, Females	50	42	48
Life Expectancy at Birth, Males	42	41	43
Life Expectancy at Age 60, Females	35	46	50
Life Expectancy at Age 60, Males	27	42	41
Infant Mortality	36	43	75
Potential Years of Life Lost	38	54	46
Average Annual Alcohol Intake per Capita	61	44	32 <sup>s</sup>
Practicing Physicians per 1,000 Population	92	85	89
Acute Hospital Beds per 1,000 Population	61	71	100 <sup>s</sup>
Hospital Acute Care Days per Capita	–	84	95 <sup>s</sup>
Average Length of Acute Inpatient Stay	–	90	84 <sup>s</sup>
Health Spending per Capita	–	92	89
Health Spending % of GDP	–	88	96

§ 1997 data

## THE JAPANESE HEALTH CARE SYSTEM

### Who is covered?

Coverage is universal.

### What is covered?

- Services: Preventive services; inpatient and outpatient services; physician services; mental health care; long-term and home care; dental care; prescription drugs; and rehabilitation. Free choice of general practitioner.
- Cost-sharing: Cost-sharing provisions range from 20 percent to 30 percent of charges. Out-of-pocket payments account for 12 percent of health expenditures.

### How are revenues generated?

- Employees' Health Insurance System (EHI): About 1,900 not-for-profit, nongovernmental, and governmental bodies. Premiums are funded by compulsory payroll contributions (8% of wage), equally shared by employers and employees.
- Company-Managed Health Insurance (CMHI): Covers employees of large corporations.
- Government-Managed Health Insurance (GMHI): Covers employees of medium-size and small companies.

- National Health Insurance (NHI): Covers the self-employed, pensioners and their dependents, and trade associations. Local governments act as insurers. Premiums are calculated on the basis of income, the number of individuals in the insured household, and assets.
- Overall, premiums account for 57 percent of health expenditures. The federal government pays 24 percent of medical care expenditures, while local governments pay 7 percent.

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

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

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

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

#### **Relative Ranking Over Time**

The following table shows the performance of Japan compared with the other 28 OECD member countries over time for selected indicators. Since the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of Japan compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator, except for infant mortality, potential years of life lost, and alcohol consumption, where a percentile rank of 100 is given to the country with the lowest value. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	1998
Life Expectancy at Birth, Females	22	88	100
Life Expectancy at Birth, Males	23	96	100
Life Expectancy at Age 60, Females	15	65	100
Life Expectancy at Age 60, Males	12	92	95
Infant Mortality	46	96	95
Potential Years of Life Lost	17	100	100
Average Annual Alcohol Intake per Capita	–	76	58 <sup>s</sup>
Practicing Physicians per 1,000 Population	42	19	32
Acute Hospital Beds per 1,000 Population	39	86	–
Hospital Acute Care Days per Capita	–	100	100 <sup>s</sup>
Average Length of Acute Inpatient Stay	–	100	100 <sup>s</sup>
Health Spending per Capita	17	40	52
Health Spending % of GDP	17	46	37

§ 1997 data

## THE NEW ZEALAND HEALTH CARE SYSTEM\*

### Who is covered?

Coverage is universal.

### What is covered?

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

How are revenues generated?

- General taxation: Public funding is derived from taxation and administered by a national funding agent, the Health Funding Authority (HFA). Care is provided by 23 hospital provider organizations, known as Hospital and Health Services (HHS), general practitioners (many of whom are grouped as Independent Practitioner Associations), and other noncrown providers of child care, disability support services, etc. These parties compete for the provision of health services. Public funding accounts for 76 percent health expenditures.

- Private Insurance: Mainly not-for-profit insurers cover private medical care, which plays a complementary role to the NHI. Private insurance is most commonly used to cover cost-sharing requirements, elective surgery in private hospitals, and specialist outpatient consultations. Private insurance covers about one-third of the population and accounts for 7 percent of health expenditures.

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

- Physicians: General practitioners act as gatekeepers and are independent providers. They are self-employed and are paid through a combination of payment methods: fee-for-service, partial government subsidy, and negotiated contracts with HFA through IPAs. The payment system is currently moving from fee-for-service to capitation. Private insurance and out-of-pocket contributions pay the remainder.
- Hospitals: Mainly semiautonomous, government-owned companies that contract with the HFA. Consultants (specialists) are salaried but may supplement their salaries through treatment of private patients in private (noncrown) hospitals.
- Government: New Zealand's government is a purchaser and provider of health care and has responsibility for legislation and general policy matters.

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

- The government sets the annual budget for the HFA. In addition, New Zealand has shifted from open-ended fee-for-service arrangements to innovative contracting and funding mechanisms, such as capitation. "Booking systems" are being introduced to replace waiting lists as the means for ensuring that elective surgery services are targeted to those people best able to benefit.

\* This describes the current New Zealand system. Subject to the passage of legislation, significant changes to the institutional arrangements for government funding and service delivery are expected to be made by the end of 2000.

Relative Ranking Over Time The following table shows the performance of New Zealand compared with the other 28 OECD member countries over time for selected indicators. Since the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of New Zealand compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator, except for infant mortality, potential years of life lost, and alcohol consumption, where a percentile rank of 100 is given to the country with the lowest value. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

Indicator	Percentile Rank		
	1960	1980	1998
Life Expectancy at Birth, Females	69	35	39
Life Expectancy at Birth, Males	81	48	65
Life Expectancy at Age 60, Females	88	42	64
Life Expectancy at Age 60, Males	65	46	64
Infant Mortality	64	36	23 <sup>§</sup>
Potential Years of Life Lost	67	27	40*
Average Annual Alcohol Intake per Capita	50	12	26 <sup>§</sup>
Practicing Physicians per 1,000 Population	50	26	42
Acute Hospital Beds per 1,000 Population	89	57	82
Hospital Acute Care Days per Capita	–	–	5 <sup>§</sup>
Average Length of Acute Inpatient Stay	–	–	21 <sup>§</sup>
Health Spending per Capita	83	32	30
Health Spending % of GDP	72	27	44

\* 1996 data

§ 1997 data

## THE UNITED STATES HEALTH CARE SYSTEM

### Who is covered?

Public and private health insurance covers 83 percent of the population.

### What is covered?

- Services: Benefit packages vary according to type of insurance, but often include inpatient and outpatient hospital care and physician services. Many also include preventive services, dental care, and prescription drug coverage.
- Cost-sharing: Cost-sharing provisions vary by type of insurance. Out-of-pocket payments account for 17 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 13 percent of the population. The program is financed through a combination of payroll taxes, general federal revenues, and premiums. It accounts for 20 percent of total health expenditures.
- Medicaid: Joint federal-state health insurance program covering certain groups of the poor. Medicaid is administered by the states, which operate within broad federal guidelines. It covers 12 percent of the population and accounts for 14 percent of total health expenditures.

- Private Insurance: Provided by more than 1,200 not-for-profit and for-profit health insurance companies regulated by state insurance commissioners. Private health insurance can be purchased by individuals, or it can be funded by voluntary premium contributions shared by employers and employees on a negotiable basis. Private insurance covers 58 percent of the population. It accounts for 33 percent of total health expenditures.
- Others: Private and public funds account for 16 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. Hospitals are paid through a combination of methods: charges, per admission, and capitation.
- Government: The federal government is the single largest health care insurer and purchaser.

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

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

### **Relative Ranking Over Time**

The following table shows the performance of the United States compared with the other 28 OECD member countries over time for selected indicators. Since the number of countries reporting data varies by indicator and year, the relative ranking is expressed as the percentile rank of the United States compared with the other OECD countries reporting data. A percentile rank of 100 is given to the country with the highest value for each indicator, except for infant mortality, potential years of life lost, and alcohol consumption, where a percentile rank of 100 is given to the country with the lowest value. A minimum of 15 countries with available data was required for the construction of the percentile ranking.

## ENDNOTES

- <sup>1</sup> There must be data from at least 15 of the 29 countries in order to present the OECD median. The 29 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, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.
- <sup>2</sup> Health care includes all health services except for research, education, and construction.
- <sup>3</sup> World Health Organization Expanded Programme on Immunization, “Imaginative Ways of Raising Immunization Coverage.” Geneva: WHO, 1997.
- <sup>4</sup> Differences in how disability is defined influence the calculation of disability-adjusted life expectancy.
- <sup>5</sup> The OECD median value is shown when there are a minimum of 15 countries reporting data in a particular year.
- <sup>6</sup> Japan source: World Bank, World Development Indicators 2000 (Washington, DC: World Bank, 2000).
- <sup>7</sup> For the United States, the age is 18 or older. For the United Kingdom, the age is 16 or older.
- <sup>8</sup> Average alcohol consumption per capita is not necessarily a good indicator of unhealthy lifestyle; however, it is the only available standardized alcohol-related indicator for these countries.
- <sup>9</sup> United Kingdom source is Health Survey for England, 1998, age 16 and older. A weighted average of the individual values for men and women was created using the male and female population estimates for the entire population, 1995–2000, from the United Nations Population Projections, 1998 revision.
- <sup>10</sup> For Australia the age is 18+.
- <sup>11</sup> The average ignores variations within countries and across procedures.
- <sup>12</sup> Waiting times do not take into consideration the health risks of those on the waiting lists. Waiting times for elective services do not necessarily lead to poor health outcomes.
- <sup>13</sup> This index is based on surveys on seven elements of responsiveness: autonomy, confidentiality, dignity, prompt attention, quality of basic amenities, access to social support networks during care, and choice of providers. The responses were scored from 1 to 10. Fifty key informants were interviewed in each country.
- <sup>14</sup> These WHO estimates of disability-adjusted life expectancy (DALE) are based on life tables, population-representative surveys assessing physical and mental disability and health status, and detailed information on the epidemiology of major disabling conditions in each country. Some of the variation may be due to differences in how disability is measured in country-specific surveys.

- <sup>15</sup> Age-specific death rates in New Zealand vary significantly year to year due to the small size of the population.
- <sup>16</sup> The value for the U.S. has been substantially revised from past figures by the OECD.
- <sup>17</sup> Japan's Gold Plan, legislation originally enacted in 1989 and strengthened in 1994, is intended to increase the use of nursing homes and home-based services for long-term care. Also, beginning in 2000, all Japanese elderly receive public long-term care insurance.
- <sup>18</sup> A simple comparison of physician visits per capita ignores differences in the duration of the visit, scope of services offered, use of telephone consultations, quality of care provided, level of skill/training of the physician, and provision of outpatient surgery in physician offices.
- <sup>19</sup> Differences exist across the countries in the types of services provided by physicians and who are counted as physicians.
- <sup>20</sup> Due to a lack of acute care data in the OECD database for Canada and Japan, inpatient care data were used instead. In Canada, the definition of inpatient care hospital beds is similar to that for acute care beds in most other countries: "All hospital beds, excluding nursing home beds." In Japan, the hospital figures will include many long-term care beds; most formal long-term care in Japan is provided in the hospital setting.
- <sup>21</sup> Admissions and length-of-stay data may differ depending on whether same-day admissions are counted.
- <sup>22</sup> The annual rate of health spending growth, 1960–1998 for New Zealand cannot be calculated due to a lack of health spending data for the early 1960s. The rate of growth shown is for the period from 1968 to 1998. The average annual growth of health expenditures in the other seven countries was higher than in New Zealand from 1968 to 1998.
- <sup>23</sup> Total health expenditures include 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).
- <sup>24</sup> International comparisons of the level of health spending must recognize that countries include slightly different services in the health sector and that the numbers are continually revised as new information becomes available.
- <sup>25</sup> Purchasing power parities are used to adjust for differences in cost of living across countries by comparing prices for a fixed basket of goods. The basket of goods used here is broad-based, not health-based.
- <sup>26</sup> The increases are measured in a converted unit—purchasing power parities—that embodies gains and losses in purchasing power with respect to the dollar. Price movements dominate the increases, but the underlying estimates also affect macro-economic policies.
- <sup>27</sup> Inflation is adjusted for by using the United States Consumer Price Index.
- <sup>28</sup> Gross domestic product measures the total output produced and utilized inside a country in a given year. It excludes imports and exports.

- <sup>29</sup> In the United States, inpatient expenditures and hospital costs per day include some long-term care facilities, including nursing homes, that are affiliated with hospitals.
- <sup>30</sup> Physician expenditures typically (but not for the United States) refer to outpatient and ambulatory contacts; the fees or salaries of physicians' interventions in hospitals are typically aggregated into inpatient care.
- <sup>31</sup> The level of spending on pharmaceuticals is dependent on many factors, including patient expectations, formulary use, and prices.
- <sup>32</sup> Physician incomes are obtained from survey data.
- <sup>33</sup> The OECD definition of physician income is “average professional earnings net of deductible practice expenditure, before taxes and including social security contributions (salaried and/or self-employed).”
- <sup>34</sup> Countries differ substantially on how much they subsidize undergraduate and medical school education, which could explain some of the differences in physician income.
- <sup>35</sup> The value for the United States is based on the authors' calculation. The value represents total enrollment in Medicare, Medicaid, the Indian Health Service, the Federal Employees' Health Benefits Plan, and military health care divided by the total population. The total enrollment in military health care was estimated by multiplying the enrollment in the armed services by 2.5 to adjust for dependents. Sources: HCFA, IHS, OPM, DOD. Total population is from OECD Health Data 2000.
- <sup>36</sup> This index measures the distribution of household financial contributions for health. The way health care is financed is considered perfectly fair if the ratio of total health contribution to total non-food spending is identical for all households, independent of their income, health status, or health services utilization. A value of 1 represents totally equal distribution. The index is designed to weight highly households that have spent a very large share of their income beyond subsistence on health.