

# International Healthcare Systems Primer



**Prepared By:**

**Jessica A. Hohman**  
**Miami University (Ohio)**  
**Class of 2006**

**Edited By:**

**Kao-Ping Chua**  
**Jack Rutledge Fellow 2005-2006**  
**Washington University School of Medicine**  
**Class of 2007**  
**[jrf@www.amsa.org](mailto:jrf@www.amsa.org)**



**The American Medical Student Association**  
**1902 Association Drive**  
**Reston, VA 20191**

## **Introduction**

“All progress is precarious, and the solution of one problem brings us face to face with another problem.” Although Martin Luther King, Jr., was describing the 1960s American civil rights struggle, his words also aptly depict the state of healthcare reform today across the globe. In their quest to find a panacea for healthcare ills, industrialized countries have been forced to re-evaluate their healthcare priorities to balance competing needs. The last two decades have provided exceptionally ripe conditions for reform, as healthcare demands have risen against a backdrop of increasingly limited resources so that health expenditures now regularly outstrip growth in gross domestic product (GDP) across most countries in the OECD (Organization for Economic Cooperation and Development) (Appleby 1993). As the baby-boomer population has aged and worker tax bases have dwindled, governments have struggled to efficiently utilize available resources in order to fund an equitable level of care for their citizenry (Appleby 1993; Blank and Burau 2004).

Understanding the nature of these struggles and the current environment for healthcare reform across the world requires a basic understanding of the structure of international healthcare systems as well as the values underlying each system.

### **Structure of international healthcare systems**

All healthcare systems occupy a distinct place on the “public versus private” continuum in terms of the financing and delivery of healthcare (Sanders 2002). Although distinctions blur, most systems tend to predominantly embrace a “national health service model,” “entrepreneurial model,” or “mandated insurance model.”

- Under a national health service (e.g. the United Kingdom and Spain), universal coverage is publicly financed through taxation. Healthcare delivery occurs via mostly public mechanisms; hospitals are publicly owned, and medical services are primarily delivered by government-salaried physicians (Sanders 2002).
- In an entrepreneurial model of healthcare (e.g. the United States), people voluntarily purchase employment-based or individual insurance, and the healthcare delivery mechanisms (providers and healthcare facilities) exist largely in the private sector. Financing can come from both private and public sources (Sanders 2002).
- Between these two extremes lies the mandated insurance model, in which compulsory universal coverage is publicly financed and health care is delivered by both public and private entities (Sanders 2002). Within this category, systems can be further classified as following a national health insurance/single-payer model (e.g. Canada and Sweden) or a multi-payer health insurance model that relies on sickness funds to provide universal health coverage (e.g. Germany and France) (OECD 2003).

### **Values underlying international healthcare systems**

The study of international healthcare systems inevitably reveals stark and intriguing contrasts, which have at their root an individual country's unique set of economic and social values. The European countries, in particular, are testaments to both the economic and social significance healthcare systems carry, and any healthcare reform effort must consequently address this central duality (Saltman and von Otter 1995). Since there is a strong ethic of social responsibility within European cultures, protecting and promoting the “public interest” is a fundamental goal. Thus, it is not surprising that despite system-wide variation, these countries share a fundamental

healthcare vision of solidarity, mandatory participation, strict public regulation, community-based fairness, and health valued as a social good (Saltman 2002). In turn, this has produced a European focus on micro-economic efficiency based on the principle of “social entrepreneurialism”: the idea that competitive reforms tempered with the ideals of solidarity can still increase efficiency (Saltman 2002).

The following discussion focuses mainly on the structure of international healthcare systems, specifically the systems of Sweden, Canada, Japan, the Netherlands, France, Germany, the United Kingdom, and the United States. Structure and organization, financing, quality/choice/access, and problems and reforms will be addressed. Although the values underlying these systems is indirectly manifest through the choices that each country has made for its system (e.g. degree of privatization, equitability, comprehensiveness), a full discussion of these values is beyond the scope of this discussion. The aim of this primer is to increase awareness of the diversity of ways by which countries other than the US have achieved universal healthcare, as well as to paint a picture of some of the challenges that countries across the world face in their attempts to balance increasing healthcare demand with limited resources.

## Sweden

### ***Background***

Sweden's citizenry is served by a national health insurance (single-payer) system, in which the government is the primary reimbursing (payer) of healthcare. Conceptually, Sweden's healthcare system is relatively decentralized, with the main duties of healthcare administration and financing falling under the jurisdiction of individual county councils; the role of the central government is to use federal taxes to fund the councils. Ranked 23<sup>rd</sup> of 191 countries for overall performance, 10<sup>th</sup> for level of responsiveness, and 4<sup>th</sup> for level of health attainment by the World Health Organization (WHO) in 2000, Sweden is often cited as an exemplary model by health experts in terms of equity and quality of services/facilities; population satisfaction for this system currently hovers around 58% (Blendon, et al. 2001; WHO 2000).

### ***Organizational Structure and Management***

#### *Basic Structure, Delivery, and Administration*

Publicly funded with both private and public delivery mechanisms, the Swedish healthcare system offers Swedes a comprehensive benefits package for healthcare. Supplementary voluntary health insurance is occasionally offered by employers to allow workers to reduce their waiting times for certain services, but very few Swedes opt for this route (León and Rico 2002).

Administration of the Swedish healthcare system is decentralized. Twenty-one individual county councils are primarily responsible for managing, funding, and governing healthcare. The county councils either serve as the main purchasers of care from providers, or they devolve this responsibility to other entities. As of 1992, the responsibility for long-term care was transferred to municipal governments. The central government's National Tax Board (RSV) and its regional/local offices collect social insurance contributions and central taxes, which help fund the operations of the county councils.

Providers are mainly public, although a significant number of physicians operate in the private sector. These public and private providers, in combination with hospital outpatient departments, account for the vast majority of ambulatory care. Hospitals are mostly public, although they retain independent status. Since 1989, there have been general trends aimed at promoting private-sector style arrangements within the public healthcare system and increased contracting to private providers continue at varying rates in the counties. Similarly, the degree of privatization in hospitals also varies among counties (León and Rico 2002).

### ***Healthcare Financing Mechanisms and Health Expenditures***

#### *Taxation, Premiums, and Other Contributions*

Funding for the Swedish healthcare system comes from local income taxes, grants from the central government, user fees, and a payroll tax.

Most of the funding for the healthcare system comes from county, municipal, and parish taxes. These local income taxes, which are set by the municipal and county governments, tend to be proportional to income, with an average rate of 31.65% in 1998. All in all, county taxes funded 66% of Swedish healthcare spending in 1999, and 85% of all county expenses came from healthcare expenditures (León and Rico 2002).

Grants from the central government to the counties/municipalities, financed through a progressive national income tax and regressive indirect taxes, account for 7-11% of health expenditures. The remainder of healthcare spending is financed by patient fees (2%) and mandatory contributions by employers and employees (21-25%); such contributions took the form of an 8.5% payroll tax in 2000. The overall financing scheme of Sweden's health system skews regressive due to the proportional local taxes and high co-payments (León and Rico 2002).

### *User Fees*

Most direct patient fees consist of flat-rate payments made according to a fee schedule determined by each county council; for instance, the average cost for a consultation with a public primary care physician in 2000 ranged from EUR 11-15, while the average cost for a consultation with a public specialist ranged from EUR 16-27. Visits to private physicians require patients to pay higher fees. Specific groups of people are exempt from direct patient fees in certain circumstances. For example, school-age children are eligible for free vaccinations and health examinations at primary care clinics. Similarly, pregnant women receive free check-ups at maternity primary care centers. There is a national ceiling for patient fees in a year (excluding inpatient care), which has recently been set in the range of EUR 99 (León and Rico 2002; Hjortsberg and Ghatnekar 2001).

Other forms of user fees include co-payments for prescription drugs and technical devices. There is a sliding-scale rate for these co-payments. In 2002, for example, patients were responsible for 100% of prescription drug expenses up to EUR 99 and 0% past EUR 472, with a decreasing rate of responsibility for payment for values between EUR 99 and EUR 472. Although pharmaceutical prices are kept low by financing from the social insurance system, patients are starting to shoulder greater co-payment burdens due to 1998 cost-containment reforms (León and Rico 2002).

### *Reimbursement*

Privately contracted general practitioners (GPs) and specialists within the Swedish system are reimbursed by county councils on a fee-for-service basis at rates determined by the National Social Insurance Board; the patient fees they charge are determined in conjunction with the county council. Physicians in the public sector are often salaried and paid by county councils (Hjortsberg and Ghatnekar 2001).

For short-term care, hospitals are paid predominantly by diagnosis-related group (DRG) mechanisms [In a DRG, the government pays the hospital a lump sum for each diagnosis; the hospital receives this sum regardless of the actual cost of taking care of the patient]. In contrast, for hospital psychiatry, geriatrics, and emergency services, expenses are reimbursed via a global budget set for the hospital (León and Rico 2002).

### *Quality of Benefits, Choice, and Access*

The Swedish government has not mandated a specific benefits package for its population, but it has guaranteed three basic principles for care in order of priority: human rights, need/solidarity, and cost-effectiveness. A wide range of health services are provided; dental services, however,

are fully covered just through the age of 18, and only certain pharmaceuticals are subsidized by the national insurance funds (León and Rico 2002).

The level of choice for first-contact care in Sweden is good, as patients can choose whether to go to primary care centers or hospital outpatient departments (about 50% go to each). Patients also have the choice whether to see private physicians or public ones. Financial incentives, however, favor using primary care centers and public providers over hospital outpatient departments and private providers, respectively (León and Rico 2002).

The overall waiting times for primary care in Sweden are somewhat higher than in other EU countries, although patients can usually be seen same-day by a nurse at a health center or obtain an appointment with their GP within 8 days. Access to private specialists can be problematic because patients have to pay additional costs out-of-pocket to see such specialists. Waiting lists for elective hospital procedures have also been a problem for the system (León and Rico 2002).

### ***Problems and Reforms***

There has been intense debate in Sweden about increasing privatization in the Swedish healthcare system. One of the most publicized recent reforms of the Swedish healthcare system was the 1999 sale of a Stockholm hospital to the private company Capio BA. This move was vehemently opposed by the national government, which then passed subsequent legislation to ban future shifts of hospitals from the public to private sector. The Stockholm County Council has also been at the forefront of reforms aimed at embracing more private types of arrangements for public health centers (León and Rico 2002).

The problem of waiting times in Sweden is exacerbated, or perhaps caused by, a relatively shortage of healthcare professionals in the country. In addition, many feel that the capacity of the counties and municipalities to deliver care is being strained by a rapidly aging population, especially since the 1992 Ädel reforms transferred the responsibility of long-term care to the municipalities (León and Rico 2002).

Perhaps the most pressing problem currently facing the Swedish healthcare system is protecting the patient choice and care guarantees of 1997. These guarantees mandated that patients receive care from a nurse practitioner on the same day of their visit to a health center, receive a GP appointment within eight days, are referred to a specialist within three months as needed, and are informed of their diagnosis within one month. Other patient protections outlined in the *Health Care Act* (1999 additions) guaranteed patients the right to information, second opinions, and treatment alternatives. Sweden has struggled to meet these pledges, however, due in part to a severe specialist nurse shortage, very low ratio of primary care physicians to population, and waiting times (León and Rico 2002).

## Canada

### ***Background***

Possessing a single-payer national health insurance system, Canada combines publicly funded, mandated universal healthcare with largely private delivery mechanisms. Canada's care health system reflects the decentralized nature of its government; its ten provinces and three territories are constitutionally accountable for funding, managing, and delivering health services while the national government serves a regulatory role by way of its ability to withhold federal funding to provinces when provinces/territories fail to comply with certain federally-defined criteria (Goldsmith 2002). Canada's healthcare system was ranked 30<sup>th</sup> by the World Health Organization in 2000 for overall system performance, 7<sup>th</sup>-8<sup>th</sup> for level of responsiveness, and 12<sup>th</sup> in level of health attainment (WHO 2000). Although public satisfaction with this system has fallen to 46% (Blendon, et al. 2001), Canada's health system still remains the country's most popular social program (Goldsmith 2002).

### ***Organizational Structure and Management***

#### ***Basic Structure, Delivery, and Administration***

The Canadian model of healthcare ensures that its population will receive all "medically necessary hospital and physician services" (Goldsmith 2002). The 1984 Canada Health Act articulates the five fundamental principles of the Canadian healthcare system: public administration, universality, portability, comprehensiveness, and accessibility. Private health insurance in Canada typically exists only for those services not publicly covered, and employers often offer supplemental health insurance as part of the benefits package. Such insurance covers prescription drugs, dental/vision care, hospital room upgrades, and nonphysician-provider services (chiropractors and physical therapists). These extended insurance plans often allow for family coverage and typically involve some form of cost-sharing in the form of co-payments or deductibles. In 1999, approximately 73% of Canadians (22.2 million) had private extended health insurance of some sort (Goldsmith 2002).

Funding and administration responsibilities are decentralized within the Canadian health system, as each province/territory administers its own insurance plan on a not-for-profit basis for residents who have lived in the area for over three months (Goldsmith 2002). The role of the federal government is to provide oversight and regulation of the provincial/territorial governments. The power of the federal government stems from its ability to withhold federal funding for healthcare ("transfer payments" known as the Canada Health and Social Transfer block grants) to provinces/territories that do not meet the five criteria delineated in the Canada Health Act (Goldsmith 2002).

Healthcare delivery occurs mainly through private providers who work either independently in solo practice or as part of a group practice. Hospitals have traditionally been not-for-profit entities, with most being in the public sector. Nursing homes are usually privately run entities that are either for-profit or non-profit (Goldsmith 2002).

### ***Healthcare Financing Mechanisms and Health Expenditures***

#### ***Taxation, Premiums, and Other Contributions***

The Canadian healthcare system is financed mainly through taxes at the provincial, territorial, and municipal levels of government. Federal taxes are the source of the national government's transfer payments to the provincial governments for healthcare. Finally, private contributions also help to finance this system, representing 30.1% of all healthcare expenditures in 2002. Private funding represents both individual out-of-pocket expenses (55% of private health expenditures in 1996) and the cost of purchasing private health insurance (35% of private health expenditures in 1996) (Goldsmith 2002).

In a few provinces (e.g. Alberta and British Columbia), citizens also pay insurance premiums and out-of-pocket fees. According to the Canada Health Act of 1984, care cannot be denied to Canadians who are unable to pay these health insurance premiums; in practice, however, this has been violated, and anecdotal evidence suggests that some patients have been refused care for this reason (Goldsmith 2002).

#### *User Fees*

Canada has no user fees for medically necessary physician and hospital services covered under the public system, but there is cost-sharing for non-covered benefits, particularly prescription drugs. In 1998, drug expenditures (14.8%) overtook physician services (13.9%) in share of health costs, second only to hospital services (32.9%). In recent years, provincial/territorial governments that provide some level of outpatient prescription drug coverage for residents have utilized different mechanisms to control drug expenditures, including cost-sharing for drug insurance coverage via co-payments and deductibles (Goldsmith 2002).

#### *Reimbursement*

Physicians in private practice are reimbursed primarily by fee-for-service mechanisms from the public insurance funds at rates negotiated with the government. Fee-for-service or per-diem (per-day) payments are also still the methods used to reimburse private for-profit hospitals, while nonprofit hospitals tend to use global or regional budgets (Goldsmith 2002).

#### ***Quality of Benefits, Choice, and Access***

Comprehensive coverage of "all insured health services provided by hospitals and medical practitioners or dentists" by insurance plans is guaranteed in the Canada Health Act (Deber 2003). Additional services, such as dental care, home care, ambulance services, and outpatient drugs (provided for the elderly and social assistance recipients often with cost-sharing mechanisms) are also funded by the provinces/territories to varying levels. Only two provinces fail to offer residents drug insurance coverage (Goldsmith 2002). Canadians can also purchase supplemental private insurance to cover the above services.

Overall, Canadians have free choice and few financial barriers to high quality healthcare in their country (Deber 2003). With no user fees or deductibles for medically necessary health services provided by physicians and hospitals, they only need to display their insurance card to receive coverage. Moreover, Canadians can generally choose their physician, and typically, their hospital as well (Goldsmith 2002).

Waiting lists for elective, non-emergency procedures have become a highly symbolic and controversial issue, although the actual magnitude of the problem is unclear because the data on

waiting lists is non-standardized and incomplete. Furthermore, the Canadian experience with waiting times is uneven, with great variations by province and procedure (McDonald 1998). Nonetheless, for a significant portion of the Canadian population, waiting times for elective procedures remains a highly concerning issue.

Despite the generally good healthcare access overall for most Canadians, there do exist inequities in access for low-income Canadians and those living in rural areas, where there are fewer providers and healthcare facilities (Goldsmith 2002).

### ***Problems and Reforms***

With steadily declining levels of satisfaction with the Canadian healthcare system, the government has been compelled to address public concerns over waiting times, specialist availability, and nurse shortages. Many feel the problems of the healthcare system stem from underfunding. For instance, reductions in federal government transfer payments during the 1980s resulted in tighter hospital budgets, decreased physician reimbursement, reduced nursing staffs, an emphasis on same-day surgery, and fewer hospital beds in the 1990s (Deber 2003). There has been recent momentum towards increased privatization of the healthcare system, as some believe that private sector dollars could compensate for the underfunding of the public system. Privatization, however, is controversial, as many Canadians fear it would compromise the equitability of the Canadian healthcare system (Deber 2003).

Canadian patients are guaranteed coverage for a wide variety of benefits, but there do remain significant gaps in public coverage, especially outpatient pharmaceutical drugs and long-term care. Provinces are free to provide additional coverage for such non-covered benefits, but those that do often charge significant user fees for such coverage (Deber 2003).

There is an ongoing tension between the federal and provincial governments as they attempt to agree upon healthcare organization and how comprehensive publicly financed care should be. Such tensions have sometimes erupted into pitched battles that have been usually resolved by increased federal funding for the provinces (Deber 2003).

Finally, Canada's relatively high expenditures on healthcare have prompted many efforts at cost-containment in the past few years. In 1998, Canada was the fifth highest healthcare spender among OECD countries, with 9.5% of the GDP spent on healthcare (Goldsmith 2002). The concern over high expenditures was exacerbated by Canada's simultaneous low ranking (30<sup>th</sup>) by the WHO in 2000, although some have argued that this ranking is artificially low due to the WHO's controversial methodology of adjusting healthcare systems by educational attainment (Deber 2003).

## Japan

### ***Background***

Since formally guaranteeing universal healthcare for its population in the 1958 National Health Insurance Law, Japan's healthcare program has become the standard for multi-payer national health insurance systems due to its consistently low costs, easy access to healthcare, and comprehensive benefits package. Ranked 10<sup>th</sup> for overall health system performance, 1<sup>st</sup> in level of health attainment, and 6<sup>th</sup> in level of responsiveness by the World Health Organization in 2000, Japan possesses among the longest life expectancies at birth at 82 years (2003) and highest per capita number of physician visits (WHO 2005). Moreover, Japan only devotes 7.9% of its Gross Domestic Product to health expenditures while simultaneously maintaining one of the highest computed tomography (CT) and magnetic resonance imaging (MRI) technology distribution rates per capita (WHO 2005; Yoshikawa and Bhattacharya 2002).

### ***Organizational Structure and Management***

#### *Basic Structure, Delivery, and Administration*

There are three primary sources of coverage in Japan: employee health insurance, the Roken system for the elderly, and the Kokuho program for the self-employed, retired, and others who do not qualify for the other two programs. The employee health insurance pool is additionally subdivided into the Seikan, Kyosai, and Kenpo health insurance societies. The government-managed Seikan system covers small and midsized companies, while the government-managed Kyosai program covers public employees and private-school teacher enrollees. Approximately 1800 private Kenpo associations cover workers at larger companies.

Hospitals remain the center of medical care in Japan due to their ability to provide high-technology inpatient and outpatient care, as well as nursing-home functions/services. Hospitals exist overwhelmingly in the private sector. These hospitals, which are mostly owned by physicians, are run similarly to American for-profit hospitals (Yoshikawa and Bhattacharya 2002).

### ***Healthcare Financing Mechanisms and Health Expenditures***

#### *Taxation, Premiums, and Other Contributions*

Individual Kenpo associations are funded through a combination of fixed employer and employee payroll contributions (typically 8% of wages, shared by employers and employees).

The premise underlying the Roken system for the elderly is to shift costs so that all of Japan's population shares the burden for providing healthcare to those over 70 years of age. Specifically, contributions from the other health insurance societies account for 70% of the expenses for Roken, and government financing constitutes the remaining 30% (Yoshikawa and Bhattacharya 2002).

The Japanese healthcare system relies heavily on cross-subsidizations (transfers of money from one program to another). Specifically, the Kokuho and Seikan programs have traditionally run at deficits and required payment transfers from Kenpo associations, which tend to have premium surpluses from their younger and healthier pools of workers.

### *User Fees*

All of Japan's insurance societies rely on cost-sharing mechanisms at the point-of-service, usually requiring co-insurance payments between 10% and 30% to dissuade overuse of medical services. However, the High-Cost Medical Care Benefits Law sets a cap on co-payment amounts for one month at \$531 in 1997 (Yoshikawa and Bhattacharya 2002).

### *Reimbursement*

Although hospital physicians are salaried employees, non-hospital physicians are generally reimbursed for medical costs on a fee-for-service basis at rates determined by the national fee schedule. The government often employs fee manipulation as a mechanism to regulate utilization rates and contain health expenditures. The Japanese government also sets a pharmaceutical price schedule on a biannual basis, and the price is set in such a way as to allow retention of a profit margin by providers for prescribing drugs (Yoshikawa and Bhattacharya 2002).

In order to receive reimbursement for expenses, hospitals must file highly detailed claims ("receptos") that are submitted to clearinghouses each month; there they receive a cursory review by insurance companies before a refund check is then sent back to hospitals, usually within a two-month interval (Yoshikawa and Bhattacharya 2002).

### *Quality of Benefits, Choice, and Access*

Japanese residents have unusually easy access to low-cost, comprehensive care and are able to choose their ambulatory care doctors. Unlike many other industrialized countries, studies have shown little correlation between healthcare use and income within Japan, indicating the existence of few financial barriers to health service utilization. Japan's system is characterized by a high number of hospital beds, readily available technology, and perhaps excessive numbers of specialists. Nurse shortages throughout the country have been somewhat alleviated, although they are still a problem (Yoshikawa and Bhattacharya 2002).

With a national uniform fee schedule, hospitals cannot compete with each other on the basis of price, so they try to attract patients by promising higher quality care and greater access to technology. Such quality competitions may yield better care for consumers, yet they also tend to produce excessive waits at the facilities with the best reputations and a corollary black market for faster access to services at such hospitals (Yoshikawa and Bhattacharya 2002).

### *Problems and Reforms*

With 75% of Kenpo associations presently in debt, the current practice of cross-subsidization has destabilized the Japanese healthcare system. Currently, Kenpo associations pay for 40% of elderly care (Roken) from their premiums, but they are now resisting this obligatory contribution as they struggle to balance their own books. With a rapidly aging population, there is much concern about the long-term sustainability about current financing mechanisms for elderly care.

The guaranteed profit margin in the national pharmaceutical price schedule has had the unintended consequence of encouraging physician over-prescription. Drugs accounted for 23% of health expenditures in 2002. Inequities in the Japanese healthcare system, while relatively

small overall, do exist, particularly because of a low concentration of healthcare professionals in rural areas 2000 (Yoshikawa and Bhattacharya 2002).

In 2000, the government created a nursing care insurance scheme to cover some of the elderly previously provided for under the Roken program. There are also proposals under consideration that would increase co-payment/co-insurance caps and shift reimbursement from fee-for-service to a DRG payment system. Finally, some reformers have pushed to give Kenpo societies more autonomy and thus greater incentives for efficiency and monitoring via utilization reviews (Yoshikawa and Bhattacharya 2002).

## The Netherlands

### ***Background***

With private ownership themes strongly interwoven into the economic and cultural fabric of the Netherlands, it is perhaps not surprising that the Dutch possess a hybrid private-public healthcare system. The Netherlands covers roughly two-third of its population through its public healthcare system, and the remaining one-third (primarily civil servants and upper-income citizens who do not qualify for government-financed benefits) obtain coverage from private insurers (National Union 2002). In 2000, the Netherlands was ranked 17<sup>th</sup> for overall health system performance, 9<sup>th</sup> in level of responsiveness, and 13<sup>th</sup> for level of health attainment by the World Health Organization (WHO 2000). Furthermore, 73.2% of the Dutch population expressed satisfaction with the Dutch healthcare system in 1999 (Exter, et al. 2004).

### ***Organizational Structure and Management***

#### *Basic Structure, Delivery, and Administration*

Conceptually, the Dutch health system has three distinct components: “Public universal insurance for so-called ‘exceptional medical expenses,’ compulsory social health insurance for the low income and voluntary private insurance for the high income, and voluntary supplementary insurance open to all” (Busse 2002). This system is dependent on employer-based insurance, and "sickness funds" (insurance plans) play an integral role in the provision of the compulsory social health insurance component of the Dutch healthcare program (National Union 2002).

The three distinct coverage schemes comprising the Dutch healthcare system are as follows:

1) *AWBZ*. The Exceptional Medical Expenses Act (AWBZ) ensures that the government will cover long-term care, as well as catastrophic care for costly treatments often associated with serious illness/disability. Everyone pays into this system, and everyone receives benefits from this system.

2) *ZFW*. Non-catastrophic, but medically necessary, care is provided through the Sickness Funds Act (ZFW), civil servant health insurance programs, substitutive voluntary health insurance (VHI), or WTZ mandate.

- People earning under EUR 30700 (considered a middle-class income) qualify for mandatory ZFW coverage via sickness funds (Exter, et al. 2004). In addition, those who social security benefit recipients and who have opted into this program because they are over 65 and make less than EUR 19550 are also eligible for ZFW coverage. ZFW alone covered close to 66% of the population in 2001 (Busse 2002).
- Insurance schemes for groups such as civil servants accounted for 5% of the Dutch population.
- For those who do not qualify for ZFW sickness funds because of high income and who also are not covered under civil servant insurance programs, there is the option to voluntarily purchase substitutive VHI from a private insurer. This is the route chosen by about 29% of the Dutch.
- For those who do not qualify for ZFW and who are denied substitutive VHI coverage by private insurers, the Health Insurance Access Act (WTZ) guarantees access to government coverage. The WTZ “standard policy” annual premium was set at EUR 1135 in 1999 for individuals under 65 and EUR 1275 for those over 65. In contrast to

ZFW sickness funds, in which dependents are also insured, dependent coverage must be purchased separately under WTZ. There is also a WTZ surcharge to compensate for the disparity between WTZ costs and premiums (Busse 2002).

3) *Voluntary health insurance*. The last component of the Dutch healthcare system involves the purchase of VHI from certain sickness funds (sickness funds often offer publicly financed coverage and private options for those above the income ceiling) and private insurance companies to cover medical services that are “less necessary.” These benefits typically extend to accommodation upgrades or services such as dental care, but they do not allow for quicker access to care by bypassing waiting lines (Busse 2002).

The vast majority (90%) of hospitals in the Netherlands are private, non-profit entities (Exter, et al. 2004). Physicians are independent practitioners that exist both in the private and public sector, with a predominance of private providers (Busse 2002).

### ***Healthcare Financing Mechanisms and Health Expenditures***

#### *Taxation, Premiums, and Other Contributions*

The Dutch pay national, provincial, and municipal taxes to help fund healthcare. Although general taxes only formally account for 5.3% of health expenditures, taxes also indirectly subsidize annual federal grants to the AWBZ and ZFW (Busse 2002).

The National Insurance Financing Act requires all insured individuals to make contributions to AWBZ based on their taxable earnings. In 2001, 10.25% of the first EUR 27009 of an employee’s income was uniformly withheld from their paycheck (Busse 2002).

The ZFW is financed by two main sources. First, it is funded by a combination of employer contributions (6.25% payroll tax) and employee contributions (1.7% of income up until a ceiling of EUR 28188 in 2002, with self-employed workers and those living on social security benefits having a lower ceiling). Second, the ZFW is funded by an annual flat-rate contribution between EUR 114 and EUR 238.80 for ZFW insurees as set by the Ministry of Health (Busse 2002).

Those individuals who purchase substitutive VHI pay premiums assessed according to risk-ratings that take into account family medical history and age; the average annual premium was EUR 698 in 1999 (Keen, et al. 2001; Busse 2002). Private insurance is both renewable and portable once it is obtained (Keen, et al. 2001). In addition, there is a “MOOZ” surcharge that those with substitutive VHI pay to subsidize sickness funds that cover a high percentage of the elderly (Busse 2002).

#### *User Fees*

Out-of-pocket fees fund 9% of health expenditures in the Netherlands (4% for AWBZ co-pays, 2% for co-pays/deductibles in ZFW, and 3% for private complementary or supplementary VHI). Cost-sharing occurs in all three parts of the Dutch system. AWBZ co-payments apply mainly to nursing home care and take into account individuals’ circumstances; the maximum co-payment was EUR 1631 per month in 2001 (Busse 2002). ZFW insurees pay for medical costs at a 20% co-insurance rate; however, this contribution is capped, and there is no co-payment or deductible for GP visits, general dental services, or inpatient pregnancy fees (Busse 2002).

### *Reimbursement*

The ZFW is responsible for reimbursing GPs on a capitation basis, and specialists are reimbursed on a fee-for-service basis. Hospitals tend to operate under size-dependent global budgets. VHI funds reimburse GPs on a fee-for-service basis (Busse 2002).

### *Quality of Benefits, Choice, and Access*

AWBZ coverage includes psychiatric and mental healthcare, hospital coverage after the first year of an admission, nursing home care for those who are disabled, assistance for the mentally/physically disabled, inpatient and outpatient rehabilitation, and child immunizations, among other services. The ZFW covers acute medical/surgical services, obstetric care, hospital stays for up to a year, selective dental care, prescription drugs, home dialysis, medical aids and transport, maternity care, rehabilitation, and various other services. Substitutive VHI policies offer variable benefit packages, while the complementary and supplementary VHI provided by private insurers and by most sickness funds (i.e. the third component of the Dutch system) often covers additional health expenses such as dental and eye care (Busse 2002).

With 22 sickness funds, the Dutch not only have the option of selecting which fund to belong to, but they also have the ability to change funds annually (Exter, et al. 2004). Moreover, they can pick their GP, who then acts as a gatekeeper for specialist care. Dutch residents can also choose their specialist, although referrals are needed. In contrast to many other countries, GPs treat almost all ailments, and they refer patients to specialists during only 6% of all contacts (Busse 2002).

Although access to primary care physicians is unimpeded, waiting times for elective procedures and specialty care have become highly important issues to the public in recent years. On average, the waiting time for a specialist appointment is 6 weeks, and the waiting time between seeing a specialist and receiving treatment is 11 weeks (2 in internal medicine, 9 in surgery) (Busse 2002). In order to address the issue of waiting times, sickness funds have contracted with hospitals in other countries (e.g. Belgium) to provide care for their enrollees. Also, health insurers now pay hospitals according to their performance level and ability to meet goals aimed at reducing waiting times (Busse 2002).

### *Problems and Reforms*

In part due to the income-based method of determining healthcare coverage and the fact that people ineligible for ZFW are not mandated to purchase substitutive VHI, 1.6% of the Dutch population lacks healthcare coverage. Most of the uninsured are homeless individuals or people who choose not to insure themselves (Busse 2002).

There has been much debate over the inequitable nature of the Dutch healthcare system's second compartment, in which there is a compulsory health insurance program for the low-income (ZFW) and a more expensive parallel private system for those above the income cutoff. A July 2001 government plan includes reforms to unify the second compartment into one scheme, and then to merge this with the AWBZ to provide for one single national insurance system administered by sickness funds and private health insurers (Busse 2002).

## France

### ***Background***

Ranked first for overall health system performance, 16<sup>th</sup>-17<sup>th</sup> for responsiveness, and third for level of health attainment by the World Health Organization in 2000, France's healthcare system arguably serves as the benchmark for all other world systems. Of particular note is the system's ability to provide universal care for all legal residents, choice of providers, free health programs for the poor/disabled, model child/adolescent care, and significant cost reimbursement (WHO 2000; Costich 2002). With a strong ethos of solidarity pervading its cultural history, France has attempted to balance the societal value of collectivity with the traditional French respect for the sanctity of freedom and individual choice. Combining elements of both the public and private sectors, France possesses a multi-payer insurance system with which over 65% of the population expresses satisfaction (Blendon, et al. 2003). Moreover, France offers a considerable health safety net for its population through charitable *Médecins sans Frontières* organizations that supply care to illegal immigrants and through 2000 clinics that provide free consultations for health education, screening, prevention, and checkups (Costich 2002).

### ***Organizational Structure and Management***

#### *Basic Structure, Delivery, and Administration*

France's multi-payer health insurance system is an amalgamation of Sickness Insurance Funds (SIFs) and supplementary insurers.

1) *SIFs*. Profession and geographical location determine which SIF an individual is automatically enrolled in, and people do not have the ability to "opt out" of France's social insurance scheme in favor of private coverage (Sandier, et al. 2002). There are three main SIFs. The National Fund for the Insurance of Employed Workers (CNMATS) covers industrial, commercial, and government workers (83% of the population). There is also a major SIF for farmers (9% of the population) and a major SIF for professionals, craftspersons, and small business workers (6% of the population). A small number of more specific occupation-linked SIFs also exist, with variation among the plans in terms of benefits and contributions. To address imbalances among SIFs, significant cross-subsidization takes place (Costich 2002).

2) *Supplemental insurance*. In addition to SIF coverage, 86% of the French obtain supplementary voluntary health insurance (VHI) through their employers, who reimburse employees for co-payments and other out-of-pocket expenses to various degrees. Moreover, in 2000 the Universal Coverage Act (CMU) provided VHI for over six million disabled, unemployed, and low-income French residents (Costich 2002). This brought the percentage of the French population with complementary VHI to 90% (Sandier, et al. 2002).

Most French physicians are in private practice, although some work for public hospitals. The majority of ambulatory care is provided by private-practice physicians. Hospitals exist in both the public and private sectors (Costich 2002).

### ***Healthcare Financing Mechanisms and Health Expenditures***

#### *Taxation, Premiums, and Other Contributions*

The French healthcare system is primarily financed through general taxation and a payroll tax. Supplementary insurance and out-of-pocket payments also account for a small portion of health

expenditures. Individuals pay a user fee at the point-of-service, which their insurance scheme and/or supplementary VHI will typically reimburse within 12 days (Costich 2002; Sandier, et al. 2002).

There are three main categories of earmarked national taxes for France's healthcare system. First, there are general social contribution (CSG) funds drawn from a tax of 5.25% on total income (3.95% for the unemployed and social security beneficiaries). Second, there is a tax levied on pharmaceutical companies. Finally, there is a tax on tobacco and alcohol.

The social health insurance contributions from employers and employees (payroll tax) are set to be proportional for salaried employees and regressive for farmers and the self-employed. For salaried employees, employers contribute 12.80% of employee salary, and employees contribute 0.75% of their salary for such payroll taxes. In contrast, the contribution rate ranges from 5.90% to 6.50% for the self-employed and 8.13% for farmers. These contribution rates apply only for the first EUR 164000 of income; income above this level is not taxed (Sandier, et al. 2002).

#### *User Fees*

Out-of-pocket expenses play a small role in France's healthcare financing. User fees via co-payments vary depending on the health service. Generally, French individuals are responsible for 30% of the cost of GP and specialist visits (EUR 18.50 and 22.87, respectively), an average of 35% of drug costs (0% coinsurance rate for "effective drugs" and 65% rate for drugs with questionable effectiveness), 40% for lab tests, and 20% for non-maternity hospital care during the first month (up to EUR 200). It is important to note, though, that French residents can apply for co-payment exemptions for catastrophic health incidents resulting in treatment costing over EUR 200 (in 2000). Patients also pay extra fees to see private practitioners. Many of the above costs, however, can be reimbursed through complementary VHI, which is purchased through one's employer or on an individual basis (Sandier, et al. 2002).

#### *Reimbursement*

The majority of physicians and specialists are paid on a fee-for-service basis (with the exception of salaried public hospital doctors), but reimbursement rates vary according to whether a doctor participates in "Sector I" or "Sector II." Sector I physicians are paid according to the national fee schedule, and in exchange, they themselves are guaranteed government benefits including free health coverage. Physicians who opt for Sector II can charge prices above the national fee schedule, but they forsake the government benefits their Sector I counterparts enjoy. In 1997, only 27% of physicians practiced in the closely regulated Sector II (Costich 2002).

Public hospitals and private not-for-profit hospitals operate via a global budget set by the regional hospital agency. Private for-profit hospitals have an itemized billing system including a per diem charge for accommodations/care, a per diem charge for drugs, and payment for the use of operating rooms, prosthetics, and other equipment (Sandier, et al. 2002).

#### *Quality of Benefits, Choice, and Access*

France's healthcare system offers a wide range of benefits. Generally, medical services in the fee-for-service sector will be covered by insurance if they are prescribed by a healthcare

professional and are on the lists of approved procedures or drugs/medical devices (list inclusion is determined by level of effectiveness) (Costich 2002).

French residents are free to visit their GP, specialist, and hospital of choice without referrals, and they usually are able to make a same-day appointment to see their GP. Access to healthcare is particularly good for school-aged children, as nurses and physicians regularly visit France's public schools. The general population's experience with equitable access, however, has been more uneven. 27% of French physicians charge above the national fee schedule (Sector II), creating a barrier to access for low-income populations (Costich 2002).

### ***Problems and Reforms***

Despite the French healthcare system's high overall level of performance, problems exist in terms of rising expenditures, poor quality assurance and uniformity, health disparities by region and socioeconomic status, and overconsumption of health services. High out-of-pocket costs at the point-of-service (although reimbursed later) also can serve as an initial impediment to care for some. Additionally, there is currently a nursing shortage, which is compounded by mandatory 35-hour work week caps for nurses. There will also likely be a future physician shortage due to recently enacted medical school quotas (Costich 2002; Sandier, et al. 2002). Problems have plagued the relationship between physicians and health insurance providers because reforms in 1996 capped physician fees; this has made reaching future contractual agreements unusually difficult (Costich 2002).

Soaring health costs in France are largely attributable to drug expenditures, which account for 19% of overall health costs (dwarfing physician fees, which stand at 13%). 90% of physician consultations in France result in prescriptions. This excessive consumption is encouraged by the French government's restriction of pharmaceutical prices to low levels (Costich 2002).

As the percentage of GDP spent on healthcare has risen, reforms have been undertaken to encourage more efficient health service usage and to curb waste, such as raising rates of coinsurance and lowering physician reimbursement levels. Such reforms have had only mixed results, however, because physicians compensate for their losses by ordering more services within France's fee-for-service payment structure while supplementary insurance often covers the higher co-payment rates (Costich 2002).

There have also been other recent attempts at widespread reform. The Juppé Plan was a 1996 initiative aimed at reforming French healthcare funding and administration by adopting yearly spending objectives, determining global budgets for hospitals, and setting treatment guidelines; the ultimate objective of this plan was to improve the quality of care while containing costs. The CNMATS plan that later followed built on these initiatives while concurrently advocating greater patient involvement, available and uniform outcome comparison data, portable medical records (smart cards), and DRG payments, among other reforms (Costich 2002).

## Germany

### ***Background***

Since its inception over a century ago under the leadership of German Chancellor Otto von Bismarck, Germany's healthcare system has occupied an esteemed place in history and continues to serve as the premier model for countries attempting to implement similar health programs. Germans rely on occupation-based sickness funds for compulsory health coverage; the sickness funds are financed primarily via payroll contributions shared equally between employers and employees. Although Germany's healthcare system heavily depends on public funding through these taxes, Germans covered by the public program have a wide range of choices in terms of public and private providers; moreover, high earners can opt out and purchase private insurance instead. The German system was ranked 25<sup>th</sup> in overall health system performance, 5<sup>th</sup> in level of responsiveness, and 22<sup>nd</sup> in level of health attainment by the WHO in 2000. Roughly 58% of the current population expresses satisfaction with the system (WHO 2000; Blendon, et al. 2001).

Although the German system has long served as a healthcare model for other states, it now finds itself in the midst of a critical period of reform. Health expenditures have risen to close to 11% of Germany's GDP; furthermore, generous benefits, a lack of cost-containment measures, and Germany's high level of unemployment have destabilized the system (Brenner and Rublee 2002).

### ***Organizational Structure and Management***

#### *Basic Structure, Delivery, and Administration*

The German social health insurance (SHI) network's statutory sickness funds (designated by occupation or region) cover approximately 88% of the population. 9% of the population opted out of SHI for private health insurance, and 2% qualified for free government care in 2002 (Appleby 1993; Busse 2002; Busse and Riesberg 2004). Employees who opt for private insurance pay risk-based premiums (an especially attractive and cheaper option for the young and healthy who earn high salaries), and their employers continue to make contributions at the same level they would if the individual was publicly insured (Brenner and Rublee 2002). In addition, all Germans have the option of obtaining complementary and supplementary VHI policies to cover services such as dentures (Busse 2002).

While the statutory sickness funds are "private in formal ownership," they are publicly responsible and accountable (Busse and Riesberg 2004). In addition, retirees are covered under a social insurance plan if they made contributions into a sickness fund during the majority of their working life (or if their spouse did), and the government helps to fund deficits related to higher costs of care for the elderly.

While the national government passes the legislation mandating health insurance and hospital financing levels, administration/implementation tends to be more decentralized with sickness funds, the hospital association, health professionals, and state governments all playing a role. Hospital care is administered by individual hospitals, sickness funds, and Länder (state) governments; ambulatory care, on the other hand, is administered by physician associations and sickness funds (Brenner and Rublee 2002).

Ambulatory and hospital functions are distinct, and in contrast to other industrialized countries, few outpatient contacts occur in the hospital setting (Busse 2002). Ambulatory care doctors can only treat social insurance patients if they are part of the Länder medical association, which negotiates contracts with sickness funds (Brenner and Rublee 2002). Private physicians dominate the ambulatory care market within Germany, while both public and private providers are available for hospital care (Busse 2002).

### ***Healthcare Financing Mechanisms and Health Expenditures***

#### *Taxation, Premiums, and Other Contributions*

The German SHI system is financed mainly through a monthly payroll tax shared equally between employers and employees. This tax is compulsory for those making under EUR 3525 a month and is proportional to income (Busse and Riesberg 2004). Those who make above this amount can opt out of SHI so that they can purchase private insurance. Contributions vary among sickness funds, with the average rate being 14.2% in 2004; the employee and employer each pay half (7.1%) (Busse and Riesberg 2004). Those making under EUR 400 per month are exempt from paying this premium, but their employers must pay a 10% contribution rate on their behalf.

All in all, general taxation only accounts for 8.4% of healthcare expenditures (Busse 2002). General taxation is used to invest in public hospitals as well as private hospitals, both non-profit and for-profit (Brenner and Rublee 2002). The German health insurance system is further distinguished from many of its social insurance counterparts by not requiring additional contributions to cover spouses/dependents (Brenner and Rublee 2002).

Voluntary health insurance premiums diverge widely in accordance to risk and require extra fees for dependent coverage; the average substitutive premium is in the range of EUR 1790 per year (Busse 2002).

#### *User Fees*

Out-of-pocket fees account for 12.2% of German health expenditures, although co-insurance rates for pharmaceuticals, nonphysician care, the first two weeks of hospital stays, and transportation are limited to 2% of gross income for an individual (certain groups such as low-income earners, pensioners, and minors have exemptions). The average drug co-payment is between EUR 4 and 5, while ambulance transportation typically cost EUR 13 per ride in 2002 (Busse 2002).

#### *Reimbursement*

Hospitals receive two sources of funding: investment costs through the Länder and sickness funds, which are responsible for setting each hospital's operating budget at the regional level. Hospitals were formerly paid according to a hybrid system of prospective case-fees, procedure-fees, and per diems. The Reform Act of SHI (2000) mandated that by 2004, all hospital remuneration will be conducted according to a DRG-based scheme (Busse 2002).

German hospital physicians are salaried and generally do not bill patients. Reimbursement for ambulatory care physicians from sickness funds occurs in two steps. First, sickness funds allocate a global budget for the physician's associations based on capitation (i.e. a certain amount is allocated per insured person). Second, the physician's associations reimburse physicians on a

fee-for-service basis according to the Uniform Evaluation Standard fee schedule. This fee schedule also makes budgetary allowances for overhead costs associated with equipping and staffing a practice (Brenner and Rublee 2002; Busse 2002).

All private practice physicians can see privately insured clients and bill them higher amounts on a fee-for-service basis. In contrast, in order to treat sickness fund insurees, ambulatory care physicians must be authorized and must agree to certain stipulations (i.e. fees, regulation, regional medical association and chamber membership) (Busse 2002).

### ***Quality of Benefits, Choice, and Access***

The Social Code Book V (SGB V) defines benefits that are guaranteed by Germany's healthcare system in general terms, focusing on prevention/screening, treatment, and transportation. In practice, the German health system provides an extensive array of benefits to its population, ranging from ambulatory, hospital, and preventive care to physiotherapeutic, maternity/family planning, and rehabilitation services. Prescription drugs are also covered, as are dental and eye care. Different levels of cost-sharing, however, exist for these services (Brenner and Rublee 2002).

Germans reap a high level of benefits to compensate for missed employment time due to illness; employer's must continue to pay employees 100% of their income for the first six weeks of illness, but sickness funds take over this function after that period and pay cash benefits at 80% of income until the 78<sup>th</sup> week of illness during each period (Busse 2002).

In general, Germans find easy access to medical, dental, and hospital services, and they carry a health insurance card with a memory chip so that their chosen healthcare provider can effortlessly retrieve pertinent administrative information (Brenner and Rublee 2002). With the passage of the 1996 Health Care Structure Act, Germans can select their sickness fund and conditionally switch between funds (Busse 2002). Germany is oversaturated with physicians, possessing a high ratio of 3.4 physicians per 1000 people; thus, Germans can freely choose their GPs and their specialists for ambulatory care from many available options, but hospital visits typically require physician referrals and use of the closest available hospital for non-emergency care (Brenner and Rublee 2002). Waiting times for appointments/hospital treatment are usually not a problem in Germany (Busse 2002).

In an attempt to empower German patients by improving their access to information, health insurance agencies offer advice through their telephone lines, which is complimented by increased use of the Internet for medical-related purposes (Coulter and Magee 2003). Germany is unique in offering such a strong self-help group presence, with over 70000 groups and 250 self-help contact points. Through German patient organization funding, these contact points help tie the self-help groups to physicians and improve access to care. Such patient groups, in turn, have the opportunity to contribute to policy making at regional health conferences (Coulter and Magee 2003). Despite these attempts to cater to consumer interests, an eight-country 2002 survey found that only 29% Germans thought doctors listened, explained, and allowed time for questions. This dissatisfaction with patient-physician relationships is particularly interesting when considering that Germany spends a higher percentage of its GDP on healthcare than most of its European brethren (Coulter and Magee 2003).

### ***Problems and Reforms***

Despite the long history of the German healthcare program, German health expenditures per person are relatively high in comparison to other European countries, although this can be partly attributed to money set aside as cash benefits used to defray income losses during times of sickness (Appleby 1993). Current healthcare expenditures account for close to 11% of GDP, but this statistic is deceiving; when all actual health-related expenses (sickness benefits, capital costs, out-of-pocket payments) are taken into account, this figure soars to near 15% (Brenner and Rublee 2002). Moreover, the German healthcare system is fraught with excessive hospital usage, disproportionate numbers of physicians, and nurse shortages.

Before 1993, the German health system tended towards overprovision of medical care, as competition was virtually non-existent among SHI funds and patients lacked both the information to demand quality improvements and the financial incentive to curtail their demand for services (Sauerland 2001). The jump in healthcare expenditures from 6.3% of the GDP in 1970 to present levels against the backdrop of a sputtering German economy and rising unemployment precipitated the passage of the Health Care Reform Act (1993); this law called for separate budgets for ambulatory care, inpatient treatment, and prescription drugs in the Social Code Book V. At the same time, a shift from a fee-for-service to a capitation reimbursement system helped to reign in physician tendencies toward provision of unnecessary services (Sauerland 2001). The trend towards cost-containment measures such as capitation and global budgets ultimately subjugated the healthcare system to the SHI cost-control agenda, and overprovision of care was replaced with underprovision (Sauerland 2001).

German healthcare overconsumption can be partly attributed to the strong position held by physicians trying to maximize their income and by hospitals looking to capitalize on per diem reimbursement rates by increasing hospital admissions and stay lengths; this has been partially combated by increased numbers of physicians (and a resultant limiting of their salary potential), improved monitoring, and restrictions on referrals for hospital care (Appleby 1993; OECD 2003). Certain areas have also been closed to additional ambulatory care physicians if the location already is at 10% physician excess; at present, around 60% of Germany's geographical areas are closed (Brenner and Rublee 2002).

## The United Kingdom

### ***Background***

Despite its reputation as a staunch advocate of free-market capitalism in its economic policies, the United Kingdom funds a strong social welfare safety net for its population that includes the National Health Service (NHS), a health system characterized by market-minimization and government ownership/control (Fried and Gaydos 2002). The UK NHS represents true socialized medicine in the sense that physicians work for the government and the majority of healthcare facilities are publicly owned; that is, both the financing and delivery of healthcare is predominantly public.

The NHS was ranked 18<sup>th</sup> for overall health system performance, 26<sup>th</sup>-27<sup>th</sup> for level of responsiveness, and 14<sup>th</sup> in level of health attainment by the World Health Organization in 2000 (Gaydos and Fried 2002; WHO 2000). NHS costs represent a significantly smaller percentage of the UK's GDP at 7.7% than the health systems of many of its European counterparts (WHO 2005; Dixon and Robinson 2002). Despite this, the NHS continues to be plagued by chronic underfunding, as it is perpetually caught in an "efficiency trap" – its vaunted cost-effectiveness allows more patients to be treated, but the increased number of patients simultaneously creates higher costs and a need for greater funding (Appleby 1993). Moreover, the NHS has experienced problems with long waiting times, restricted choice, poor access to specialists, and outdated facilities (Appleby 1993; Ranade 1998). Yet in the face of this growing list of complaints, NHS enjoys an unprecedented level of public support (57%) and has been relatively successful at keeping escalations in health spending in line with GDP growth (Anderson and Poullier 1999; Blendon, et al. 2001).

### ***Organizational Structure and Management***

#### *Basic Structure, Delivery, and Administration*

Established in 1948 in the aftermath of World War II, the NHS has been guided by the principles of equity, comprehensiveness, and free access at the point-of-service since its inception (Gaydos and Fried 2002). While a small private insurance sector does exist in the British healthcare system, the NHS provides the majority of care for the UK's inhabitants via government-salaried physicians and public hospitals. The private insurance sector, which has grown significantly in recent years, is generally sought to improve access to elective procedures and ease waiting times, but even these private insurees are still entitled to NHS care (Gaydos and Fried 2002).

Much of the actual administration of care is in the hands of county health authorities funded by the government. These authorities identify the local population's health needs and purchase services from providers including GPs and NHS hospital trusts (Gaydos and Fried 2002). Recently, administrative duties have increasingly fallen in the hands of so-called "primary care groups" or "primary care trusts", which are groups of GPs other healthcare professionals that are given funding to plan health services for their local communities – a responsibility that traditionally had been in the domain of the county health authorities (Gaydos and Fried 2002; Dixon and Robinson 2002).

For primary care, delivery occurs through public GPs who either work alone or in a group. The average GP is responsible for a patient list of 1900 enrollees, and every UK citizen has the right

to register with a GP. GPs provide free primary care consultations to NHS-registered UK citizens and serve as gatekeepers to specialist care (Gaydos and Fried 2002). GPs are prevented from treating patients on their NHS-registered list on a private basis and only approximately 200 private GPs exist in all of the U.K., most of them in London (Dixon and Robinson 2002). NHS walk-in centers provide similar services to GPs (Gaydos and Fried 2002).

Hospitals in the UK typically exist as part of independent, self-governing entities (“NHS trusts”) that provide a wide range of medical services, from emergency to long-term care (Gaydos and Fried 2002). NHS trusts employ the majority of the NHS workforce.

### ***Healthcare Financing Mechanisms and Health Expenditures***

#### *Taxation, Premiums, and Other Contributions*

General taxation funds approximately 80% of NHS costs, with additional contributions coming from national insurance contributions (12% of NHS costs), patient fees (4% of NHS costs), and miscellaneous (4% of NHS costs) (Dixon and Robinson 2002). General taxation includes a 17.5% value added tax, as well as a direct general tax of 10% on the first Great British Pound (GBP) 1880 of taxable income, 22% of remaining income up to GBP 29400, and 40% on any income left above that amount (Dixon and Robinson 2002). The UK National Insurance contributions additionally require employees to pay 10% of their weekly taxable income between GBP 87-575 and employers to pay an 11.9% payroll tax for earnings over GBP 87 (Dixon and Robinson 2002).

Premiums for private medical insurance are risk-rated and vary between group policies (e.g. employer-bought private insurance) and individual policies, the latter of which tend to be more expensive in general. Approximately two-third of private medical insurance is bought by employers as part of an employee’s benefits package (Dixon and Robinson 2002).

#### *User Fees*

Although most medical needs are met freely at the point-of-service with no charges for GP consultations or inpatient hospital stays, the population often must pay out-of-pocket for long-term and private care, pharmaceuticals, dental care, and eye services (Gaydos and Fried 2002). For example, the prescription drug co-payment was GBP 6.20 in 2002. However, 85% of all prescriptions end up being exempt from this co-payment because they fit into one of the exception categories (e.g. pensioners, students, low-income populations, STD clinic visitors, etc.). Segments of the population who frequently require prescription drugs are able to pay for four-month or annual prescription certificates at GBP 31.90 and 87.60, respectively; these certificates cover their drug costs for that time interval. Eye exams cost between GBP 10-20, while consumers pay 80% of the costs of dental services, up to a cap of GBP 354 (Dixon and Robinson 2002).

#### *Reimbursement*

Hospitals generally operated via global budgets. While hospital physicians are salaried government employees, GPs are reimbursed by capitation in accordance to the number of patients enrolled in a practice and also the number of services rendered. Privately insured patients are typically billed on a fee-for-service basis (Dixon and Robinson 2002).

### ***Quality of Benefits, Choice, and Access***

There is no enumerated list of guaranteed benefits within the NHS, but the Secretary of State is accountable for providing necessary benefits based on the recommendations of the National Institute of Clinical Excellence (NICE). The so-called "British National Formulary" allows UK residents to look up which drugs are not covered by the NHS due to excessive costs or questionable benefits. In general, UK citizens are free to choose their GP (Dixon and Robinson 2002).

Although the NHS consistently receives high marks for public funding of healthcare, population coverage, and cost control, it typically is ranked low in terms of rapid access to medical technology and patient responsiveness (Blank and Burau 2004). The UK has a low ratio of both hospital beds and physicians per 1000 population relative to the UK's European counterparts (Fried and Gaydos 2002). With GPs spending under 10 minutes with each patient on average, poor communication and strained, impersonal relationships are a growing consumer complaint (Coulter and Magee 2003).

Moreover, in an era where patients are seizing personal control of their health, the NHS is plagued by long waiting times after GP referrals for specialist appointments (average 2.5 months) and elective hospital procedures/treatment (average 3 months). It is worth noting, however, that first-contact access to primary care is good, as appointments can usually be made for the same day in extreme circumstances and within a week for normal requests. Nonetheless, in order to compensate for some of these access issues, recent attempts have been made to reduce waiting times for elective procedures by contracting with private, for-profit hospitals in France; similarly, UK residents also recently have had the opportunity to receive necessary treatments abroad in a more timely manner under three pilot programs (Dixon and Robinson 2002).

### ***Problems and Reforms***

The NHS has been in a continual state of flux during the past two decades, with reforms yielding mixed results. On the positive side, recent NHS reforms have prompted a shift away from acute hospital-based medicine towards primary care and community health initiatives; with this new emphasis on prevention and education, GPs have found their roles enhanced at the expense of hospital-based specialists (Ham 1997). The transformation of British healthcare has also had negative effects, such as increased administrative costs due to the fragmentation of the purchaser role between GP fundholders (now replaced by primary care trusts) and health authorities (Saltman and von Otter 1995). Additionally, the introduction of primary care trusts created a high number of small purchasers of healthcare, which in turn reduced the bargaining power used to obtain lower prices and wage costs (Appleby 1993). In recent years, the Labour government has enacted reforms that have reversed the trends towards greater competition in favor of increased cooperation between purchasers and providers. These reforms aim to create an environment conducive to the formation of innovative partnerships between primary and secondary care providers (Ham 1997).

The NHS continues to struggle with underfunding in the face of rising healthcare expenditures. Recently, the government committed to increasing levels of funding for healthcare with its 19 billion GBP "NHS plan" of 2000. This plan represents a 10-year effort to modernize and improve the NHS system, including increasing the number of doctors/nurses/hospitals,

decreasing waiting times, upgrading healthcare facilities, and improving care for the elderly. The plan will be implemented by ten Department of Health task forces and a new Modernization Agency, which will work with NHS trusts and others to insure maximal community responsiveness (Gaydos and Fried 2002).

Finally, health disparities continue to plague the UK's healthcare system. While the magnitude of gradients might vary depending on the measure and method used (i.e. occupational class, education, income, or ecological index to examine mortality, birth weight, morbidity, height, etc.), studies have consistently shown that individuals in lower social classes tend to die younger and suffer from a higher rate of disability during their lifetimes (MacIntyre 1997). Significant variations also exist according to geographical location and gender. Eliminating these inequities has become a more pressing concern, as the health disparities between higher and lower social classes are increasing today despite advances in medicine and science. The social class gradient in mortality and morbidity is getting steeper largely because the professional, non-manual labor classes are experiencing a faster rate of decrease in mortality rates than the lower, manual labor classes (MacIntyre 1997). Although life expectancies were improving for all five social classes during the period from 1931 to 1991, males from professional families were found to live almost 10 years longer than their counterparts born to parents who were unskilled laborers according to a 1992-96 study. Even more disturbing, during the 1980s individuals from the poorest regions experienced a 27% increase in "likelihood of death," which then ballooned to 34% as compared to the rest of the population in the 1990s (Mackenbach and Bakker 2002).

## The United States

### ***Background***

The US fuses a heavy reliance on private, voluntary insurance obtained primarily through employers with a public system that provides services through Medicare and Medicaid (Sanders 2004). The US is a leader in groundbreaking biomedical technology and innovative life-extending procedures, and those Americans who are well-insured enjoy arguably some of the best healthcare in the world. Despite this, the US entered the new millennium with a healthcare system characterized by skyrocketing costs, administrative inefficiency, and significant health disparities by race and income. Perhaps most visibly from an international standpoint, the US remains the only industrialized country in the world without guaranteed healthcare for its citizens. Indeed, the number of uninsured Americans rose to 45 million (15.6%) in 2003, an increase of one million people from the previous year (Kaiser Commission 2004). Recent economic recessions have aroused middle-class fears over the tenuous nature of their health insurance, particularly as escalating costs prompt increasing numbers of employers to drop coverage (Ham 1997; Marmor 1998).

The US system was ranked 37<sup>th</sup> for overall health system performance, 1<sup>st</sup> in level of responsiveness, 24<sup>th</sup> in level of health attainment, and 55<sup>th</sup> for fairness in financial contribution by the World Health Organization in 2000. The US healthcare system performs unevenly on various health indicators, which is significant given that the US spends far more per capita on healthcare than any other country in the world (WHO 2005). Among OECD countries, the US ranked 7<sup>th</sup> worst in infant mortality rate and 9<sup>th</sup> worst in life expectancy (Department of Commerce 2004; OECD 2003). In contrast, the US excels on other indicators, such as its high level of consumer responsiveness and easy access to technology; indeed, with the exception of Japan, the US possesses the most magnetic resonance imaging (MRI) units per capita, as well as the most computed tomography (CT) scanners per million population (Anderson and Poullier 1999).

The unevenness of the US system's performance on these health indicators and the decline in satisfaction with the US system to levels hovering around 40% have created a political environment geared towards reform of the healthcare system. It remains to be seen whether the problems of the US healthcare system can be successfully addressed by incremental reforms that keep the current structure in place, or whether the problems can only be solved through fundamental reform of the system.

### ***Organizational Structure and Management***

#### *Basic Structure, Delivery, and Administration*

The US healthcare system relies on a combination of private and public insurance. The majority of Americans purchase private health insurance (63% in 1999) through their employer (58%) or on an individual basis (5%) (Upshaw and Deal 2002). An employer may purchase insurance coverage for an employee, cover them through the employer's own insurance company (self-funded plans), or help pay for health insurance coverage for the employee.

The public insurance system includes entities such as Medicare and Medicaid. Medicare provides health insurance for 65 and over Americans and is funded through payroll tax

contributions. Medicaid is an income-based health insurance program jointly administered by the states and federal government that covers low-income populations, the disabled, and the elderly. Other publicly funded programs such as the Veterans Health Administration and workers' compensation fund health services for veterans and those who are unable to work due to occupation-related disability, respectively (Upshaw and Deal 2002).

Both for-profit and not-for-profit private insurance companies operate within the US. In general, health services are delivered in both public and private settings, with a predominance of physicians and hospitals in the private sector.

### ***Healthcare Financing Mechanisms and Health Expenditures***

#### *Taxation, Premiums, and Other Contributions*

Contributions to healthcare funding in the US are made by individuals, employers, federal and state governments, and charitable organizations (Upshaw and Deal 2002). In 2002, government expenditures accounted for 44.9% of healthcare costs, and private expenditures represented the remaining 55.1% in the form of prepaid plans (65.7%) and out-of-pocket expenses (25.4%) (Sanders 2004; WHO 2005).

The government finances Medicare, Medicaid, the Veterans Health Administration, and workers' compensation largely out of general federal/state/local taxes (Upshaw and Deal 2002). Medicare Part A is additionally financed through a Social Security payroll tax, and Medicare Part B is additionally financed through monthly premiums. Both state and federal governments finance Medicaid, with the federal government providing states with matching funds for Medicaid expenditures according to a set formula (Upshaw and Deal 2002).

#### *User Fees*

48% of Americans covered by private employer-based insurance obtain coverage through preferred-provider organizations (PPO's), which typically offer incentives to enrollees to choose certain contracted providers in the form of lower coinsurance rates. 23% of those covered by employer-based health insurance are enrolled in health maintenance organizations (HMO's), which subject enrollees to monthly premiums and co-payments (average \$10) when they visit their physician. 22% are covered by point-of-service/indemnity plans that allow free choice of providers, although choosing contracted providers is usually rewarded in the form of more extensive benefit coverage. Finally, 7% have traditional fee-for-service plans that require enrollees to pay a monthly premium (often with employer contributions). Their insurance company then pays providers for services rendered each month. These plans, however, often have deductibles ranging from \$250-500 as well as co-insurance requirements (Upshaw and Deal 2002).

By federal law, states are not allowed to charge premiums to most Medicaid beneficiaries, but recently, states have been obtaining waivers that allow them to charge higher premiums to an expanded number of Medicaid beneficiaries. Cost-sharing in the form of deductibles, co-payments, or co-insurance has also increased recently. Certain groups of individuals are not allowed to be targeted for cost-sharing (e.g. children and pregnant women). Nonetheless, a total of 29 states imposed new or higher co-payments in Medicaid in fiscal years 2004 and 2005 for other groups (Artiga and O'Malley 2005).

### *Reimbursement*

Reimbursement within the US healthcare system occurs via several different mechanisms: fee-for-service, capitation, and prospective payment. Indemnity plans tend to favor fee-for-service remuneration, while managed care plans often rely on capitation. Prospective payment mechanisms are also favored by health maintenance organizations (Upshaw and Deal 2002).

### *Quality of Benefits, Choice, and Access*

Medicare Part A provides for limited hospitalization and home health costs for all Medicare enrollees who have made payroll contributions throughout their lifetime; Medicare Part B, on the other hand, offers a more generous benefits package extending to certain outpatient services and medical equipment (Upshaw and Deal 2002). Medicaid enrollee benefits vary by state, but the federal government mandates that certain medical services be covered, with other services (such as dental services) left to the state's discretion (Upshaw and Deal 2002).

In the US, there are large disparities in healthcare according to gender, race, age, region, education, and socioeconomic status (Schuster, et al. 1998). For example, despite possessing a large number of physicians (particularly specialists), 46 million Americans resided in areas experiencing primary healthcare professional shortages in 2000 (Upshaw and Deal 2002). As another example, uninsured individuals are more likely than insured individuals to experience difficulty accessing care and also tend to have worse health outcomes; indeed, the Institute of Medicine estimated that there are 18,000 preventable deaths a year related to a lack of health insurance coverage (IOM 2004).

Even with these barriers to access, US patients are generally informed, savvy consumers of healthcare in comparison to many of their European counterparts. Particularly in today's Information Age, patients are finding a wealth of information at their fingertips. Conversely, the increasingly specialized medical profession is struggling to stay up-to-date with recent developments; thus, physicians rarely possess more than a topical knowledge of areas outside of their specialty, which serves to level the playing field between doctors and the information-armed patients and to promote mutual participation in the decision-making process (Freidson 2004).

### *Problems and Reforms*

The US is plagued by high administrative costs, and studies have estimated as much as 31% of all healthcare costs in the US go to administration (Woolhandler, et al. 2004). Health insurance premiums continued to grow at unsustainable rates; from 2003 to 2004, premiums increased 11.2%, a much faster rate than inflation (2.3%) and wage increases (2.2%). Overall, the US devoted 14.6% of GDP to healthcare in 2002, which is significantly higher than the OECD average of 8.1% (Reinhart, et. al 2004).

The increasing number of uninsured individuals and skyrocketing health insurance premiums continue to be the most visible problems within the US healthcare system. With such a strong reliance on employer-based health insurance in the US, it is noteworthy that only 63% of jobs offered workers health insurance (Kaiser Family Foundation 2004). As health costs continue to soar, employers feel increasing pressure to drop healthcare coverage for workers, shifting many people onto public health insurance programs such as Medicaid (Kaiser Commission 2004).

The US has embraced an element of planning/regulation during the past two decades, transforming itself from a fee-for-service system to one in which over 50% of the population is now part of a managed care plan (Appleby 1993). Although HMOs have achieved a degree of success in reducing unnecessary treatments and increasing consumer/provider accountability through deductibles and incentives, these accomplishments have often been at the expense of low-income populations, the elderly, and people with pre-existing health conditions; thus, coverage has improved little in the US during this era of managed care because HMOs cannot afford to take on such high-risk populations (Appleby 1993; Saltman and Otter 1995).

Problems also exist regarding the quality of healthcare in the US. Various studies have shown that not only are a mere two-thirds of acute/chronic patients receiving proper care in the US, but American patients receive many unnecessarily “intensive treatments” that fail to produce appreciable gains in health outcomes on a consistent basis (OECD 2003; McLoughlin and Leatherman 2003). These problems are further compounded by the continued use of treatments proven ineffective by research studies, such as the prescription of antibiotics for viral infections, as well as the extensive underuse of necessary treatments, such as the under-prescribing of  $\beta$  blockers to decrease the likelihood of future attacks in heart attack patients (McLoughlin and Leatherman 2003; Schuster, et al. 1998).

Nevertheless, it is important to note that outstanding medical treatment is provided for well-insured individuals, who have quick access to cutting-edge technology and a plethora of innovative treatment options (Sanders 2004). The central challenge facing the US healthcare system is extending this excellent healthcare to all of its citizens, not just those who can afford it.

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## Health indicators table

	US	UK	Germany	France	Netherlands	Japan	Canada	Sweden	OECD Median**
WHO Health Level Attainment Ranking by Disability-Adjusted Life Expectancy (2000)	24	14	22	3	13	1	12	4	N/A
WHO Level of Responsiveness Attainment Ranking (2000)	1	26--27	5	16--17	9	6	7--8	10	N/A
WHO Fairness in Financial Contribution Ranking (2000)	54--55	8--11	6--7	26--29	20--22	8--11	17--19	12--15	N/A
WHO Overall System Performance Ranking (2000)	37	18	25	1	17	10	30	23	N/A
Life Expectancy at Birth (years, 2003)	77.2	78.5	78.4	79.4	78.6	81.8	79.7	80.2	77.8
Healthy Life Expectancy at Birth (years, 2002)	69.3	70.6	71.8	72	71.2	75	72	73.3	
Infant Mortality Rate (deaths per 1000 live births, 2003)	7.0	5.3	4.2	3.9	4.8	3	5.4	3.1	6.1
Health Expenditure as % of GDP (2003)	15	7.7	11.1	10.1	9.8	7.9	9.9	9.2	8.6
Per Capita Health Expenditure (PPP, 2003)	5635	2231	2996	2903	2976	2139	3003	2594	2307
Public expenditure on health, % of total expenditure of health (2003)	44.4	83.4	78.2	76.3	62.4	81.5	69.9	85.3	72
Average Growth Rate of Total Health Expenditure, 1998-2002/3	4.6	5.7	1.8	3.5	4.6	3	4.2	5.4	4.5
Expenditure on Pharmaceuticals as % of Total Health Expenditure (2003)	12.9	15.8 (2000)	14.6	20.9	11.4	18.4	16.9	13.1	17.7
Per Capita Spending on Hospitals (1996)	1646	521	796	902	954	463	918	665	692
Per Capita Spending on Physician Services (1996)	761	184	375	237	154	542	298	187	295
CT Scanners Per Million Population (2002 or most recent available)*	13.1	5.8	14.2	8.4	9	92.6	10.3	14.2	11.6
MRI Units Per Million Population (2003 or most recent available)*	8.6	5.2	6	2.8	3.9	35.3	4.5	7.9	2.8
Practicing Physicians per 1000 Population (2003)	2.3	2.2	3.4	3.4	3.1	2	2.1	3.3	2.9
Acute Care Beds Per 1000 Population (2003)	2.8	3.7	6.6	3.8	3.2	8.5	3.2	2.4	4.1

\*This US figures are below the real number of CT scanners and MRI units because the estimates do not account for devices in non-hospital locations or multiple scanners in a hospital.

\*\* The OECD consists of 30 countries representing a total population of 1.15 billion people: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States.

### Definitions:

- “Responsiveness” refers to how well the system meets people’s expectations of how they should be treated by the system.
- “Fairness of financial contribution” refers to the degree to which every member of society pays the same share of their disposable income to cover their health costs.
- “Disability-adjusted life expectancy” is different from life expectancy in that it incorporates quality of life. It is calculated by assigning relative weights to the following four states of quality of life: no activity limitations, activity limitations in leisure activities or transportation, activity limitations at work, home, and/or school, and institutionalization in a health care facility. These values are summed up to calculate a “quality-adjusted” life-expectancy.

[Source: Statistics Canada. <http://www.statcan.ca/english/freepub/82-221-XIE/2004002/defin1.htm>]

## Glossary of Health Related Terms

Taken From: <http://www.euro.who.int/observatory/glossary/toppage>

**Accessibility of health care** A measure of the proportion of a population that reaches appropriate health services

**Accountability** The obligation to disclose periodically, in adequate detail and consistent form, to all directly and indirectly responsible or properly interested parties, the purposes, principles, procedures, relationships, results, incomes, and expenditures involved in any activity, enterprise, or assignment so that they can be evaluated by the interested parties.

**Acute care (short-stay)** Hospitals with an average length of stay of 30 days or less.

**Adequacy** Application of measures, technologies, and resources which are qualitatively and quantitatively sufficient for achieving the desired goal.

**Ambulatory care** All types of health services provided to patients who are not confined to an institutional bed as inpatients during the time services are rendered.

**Appropriate(ness)** If an expected health benefit exceeds the expected negative consequences by a large enough margin to justify performing the procedure rather than other alternatives.

**Average length of stay** Average length of stay is computed by dividing the (total) number of days in inpatient or acute care institutions by the number of discharges (or admissions).

**Beneficiaries** The individuals covered within a health plan.

**Benefit** In health insurance, either a payment in cash paid in settlement of a claim under the terms of an indemnity policy or the provision of a service in kind following a medical contingency covered by a scheme.

**Benefits package** The set of services and other advantages in money or kind to which a person or persons are entitled by virtue of meeting particular criteria.

**Budget** A statement of the financial resources made available to provide an agreed level of service over a set period of time or to use them for a specific purpose.

**Cap** A limit on the amount that a payer or group of payers will pay.

**Capitation** A fixed payment to a provider for each listed or enrolled person served per period of time.

**Case-based payment** Third-party payers pay physicians/ hospitals according to the cases treated rather than per service or per bed days.

**Centralization** The concentration of managerial functions at one point within the system.

**Clinical audit** A cyclical evaluation and measurement by health professionals of the clinical standards they are achieving.

**Clinical guidelines** Systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances.

**Co-insurance (rate)** Cost-sharing in the form of a set proportion of the cost of a service.

**Co-payment** Cost-sharing in the form of a fixed amount to be paid for a service.

**Complementary insurance** Insurance obtained for services not included or not fully covered by the state including co-payment coverage when cost-sharing is imposed by the statutory health system

**Compulsory health insurance** Health insurance under an obligatory scheme by law, usually with contributions that are income-related.

**Contract** Agreement between payer(s) and provider(s) which define in advance the health services to be purchased, the health services to be purchased, the quantity, quality and price.

**Contract Model** The system of health service provision which involves contracts between three separate parties: a) the beneficiaries; or patients; b) the fund-holders or purchasers acting on behalf of the beneficiaries; and c) the providers of services.

**Contracting-Out** Services requested under contract from one provider (often a hospital) to a specialized one (e.g., for laundry), independent of ownership.

**Contribution** Monies paid by or on behalf of insured persons to a health insurer to purchase the coverage of a defined range of services (the benefit package).

**Cost-sharing** A provision of health insurance or third-party payment that requires the individual who is covered to pay part of the cost of medical care received.

**Coverage** Share of population eligible for healthcare benefits (in-kind) under public programs.

**Deductible** Cost-sharing in the form of a fixed amount which must be paid for a service or of total cost incurred over a defined period by a covered person before the third-party payer then covers all of or a percentage of the rest of the cost

**Devolution** Involves passing responsibility and a degree of independence to regional or local government, with or without financial responsibility (i.e. the ability to raise and spend revenues).

**Earmarked taxes** Taxes which are collected with the specific purpose of using them for health care.

**Fee schedule** A list of approved fees for each service promulgated by an insurance company, government agency, or professional society.

**Fee-for-service** Payments to a provider for each act or service rendered.

**Formulary** A list of approved drugs for reimbursement, with all non-approved drugs paid at a lesser rate or not at all.

**Fundholding** A system of payment for medical care which has the following characteristics: financial resources for health care are allocated on a per capita basis; financial resources are held in a fund; and the general practitioner is usually the decision-maker for allocating the funds.

**Gatekeeper** A primary care physician/general practitioner (or another provider) who is responsible for overseeing and coordinating all the medical needs of a patient. The gatekeeper must authorize any referral of the patient to a specialist or hospital.

**Global budget** An aggregate cash sum, fixed in advance, intended to cover the total cost of a service, usually for one year ahead.

**Health center** A facility that provides (ambulatory) medical and sanitary services to a specific group in a population.

**Health insurance** A mechanism by which money is raised to pay for health services by financial contributions to a fund; the fund then purchases health services from providers for the benefit of those for whom contributions are made or who are otherwise covered by the scheme.

**Health maintenance organization (HMO)** US healthcare sector term, an organization that contracts to provide comprehensive medical services (not patient reimbursement) for a specified fee each month.

**Health outcome** Changes in health status (mortality and morbidity) which result from the provision of health (or other) services.

**Inpatient** 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.

**Integrated model** Compulsory or voluntary health insurance or third-party funding in which both the insurance and provision of health care is supplied by the same organization in a vertically integrated system.

**Managed care** The use of a “manager” to control utilization of medical services and control costs.

**Managed competition** Government regulation of a healthcare market which uses competition as the means to achieve efficiency objectives within a framework of government intervention designed to achieve other policy objectives, such as equity.

**National health service** The system of social security and health services arising out of the Beveridge report in England and Wales, first published in 1943. This report recommended provision of health care for all people through central taxation and other compulsory financial contributions and that a system of universal benefits should give support during unemployment or sickness and after disability and retirement. The National Health Service Act of 1946 established the provision of services, free-of-charge, for the prevention, diagnosis and treatment of disease.

**Opting-out** The process whereby people choose not to participate in the – usually public – health plan they would be assigned to if they don’t make an active decision.

**Out-of-pocket payments (user fees)** These payments include cost-sharing as well as private expenditure for services not covered by the respective health plan.

**Outpatient** Medical and paramedical services delivered to patients who are not formally admitted to the facility (physician’s private office, hospital outpatient center or ambulatory-care center) and do not stay overnight.

**Pay-as-you-go system** A system of insurance financing under which total expenditure in a given period is met by income from contributions and other sources from the same period.

**Per-diem charge** Payment for services per day usually for inpatient treatment.

**Premium** A flat-rate payment for voluntary insurance.

**Primary health care** The first level contact with people taking action to improve health in a community.

**Prospective payment** A payment whose level is fixed in advance of actually providing a service.

**Provider** Professionals and institutions providing healthcare services to patients.

**Purchaser** A healthcare body which assesses the needs of a defined population and buys services to meet those needs from providers.

**Purchasing power parity (PPP)** PPPs are the rates of currency conversion which eliminate the differences in price levels between countries

**Remuneration** Refers to the activity of compensating health professionals for their time and effort in providing care.

**Retrospective payment** A payment scheme whose level is determined only after services have been provided.

**Secondary health care** Specialized ambulatory medical services and commonplace hospital care (outpatient and inpatient services). Access is often via referral from primary healthcare services.

**Sickness fund** Third-party payer in social health insurance system, covering the community as a whole or sections of the population.

**Social health insurance** Social health insurance is an insurance program which meets at least one of the following three conditions: participation in the program is compulsory either by law or by the conditions of employment; the program is operated on behalf of a group and restricted to group members; or an employer makes a contribution to the program on behalf of an employee.

**Substitutive insurance** Insurance which provides cover that would otherwise be available from the state

**Supplementary insurance** Insurance that provides faster access and greater consumer choice

**Tertiary care** Refers to medical and related services of high complexity and usually high cost.

**Universal health insurance** A national plan providing health insurance or services to all citizens, or to all residents.

**User charge/fee** User charges are charges for goods or services that the user, or patient, is required to pay.

**Value-added tax** A tax levied on the difference between a commodity's price before taxes and its cost of production

**Voluntary health insurance** Health insurance which is taken up and paid for at the discretion of individuals (whether directly or via their employers).

**Waiting list** The number of people awaiting admission to hospital as inpatients.

**Waiting period** The period an insured or covered person has to wait before he or she qualifies for benefits.

**Waiting time** The time which elapses between 1) the request by a general practitioner for an appointment and the attendance of the patient at the outpatients' department, or 2) the date a patient's name is put on an inpatients' list and the date he is admitted.

**Workers Compensation** A mandatory insurance program covering the costs of medical treatment and disability due to work-related accidents and illness.