



**DESCRIPTIONS OF HEALTH CARE SYSTEMS:
AUSTRALIA, CANADA, DENMARK, FRANCE, GERMANY, THE NETHERLANDS, NEW ZEALAND,
SWEDEN, SWITZERLAND, THE UNITED KINGDOM, AND THE UNITED STATES**

NOVEMBER 2008

MULTINATIONAL COMPARISONS OF HEALTH SYSTEMS DATA
SELECTED INDICATORS FOR ELEVEN COUNTRIES, 2006

	Australia	Canada	Denmark	France	Germany	Netherlands	New Zealand	Sweden	Switzerland	U.K.	U.S.
Total Population (1000s of People), 2006	20703 ^g	32,623	5,435	61,353	82,368	16,346	4,140	9,081	7,484	60,587	299,399
Spending											
Percentage GDP Spent on Health Care, 2006	9.0% ^g	10.0%	9.5%	11.1%	10.6%	9.3%	9.3%	9.2%	11.3%	8.4%	15.3%
Health Care Spending per Capita, 2006 ^c	\$3,196 ^g	\$3,678	\$3,349	\$3,449	\$3,371	\$3,691	\$2,448	\$3,202	\$4,311	\$2,760	\$6,714
Average Annual Growth Rate of Real Health Care Spending per Capita, 1996-2006	3.6% ^g	3.7%	3.3%	3.0%	1.6%	3.3%	4.8%	4.1%	2.5%	4.3%	3.6%
Spending on Health Insurance and Administration per Capita, 2006 ^c	\$80 ^g	\$139	\$32	\$243	\$184	\$190	\$96	\$67	\$195 ^a	n/a	\$486
Out-of-Pocket Health Care Spending per Capita, 2006 ^c	\$543 ^g	\$532	\$484	\$232	\$445	\$203	\$405	n/a	\$1,305	n/a	\$857
Inpatient Hospital Spending per Capita, 2006 ^c	\$1,037 ^a	\$1,045	\$1,011	\$1,272	\$1,180	n/a	\$708	\$801	\$1,880 ^a	n/a	\$1,742
Spending on Pharmaceuticals per Capita, 2006 ^c	\$426 ^a	\$639	\$286	\$564	\$500	\$401 ^g	\$303	\$426	\$427 ^a	n/a	\$843
Spending on Services of Nursing and Residential Care Facilities per Capita, 2006 ^c	\$278 ^g	\$386	\$657	\$210	\$259	\$389	\$238	n/a	\$738 ^a	n/a	\$417
Physicians											
Number of Practicing Physicians per 1,000 Population, 2006	2.8 ^a	2.1	3.6 ^e	3.4	3.5	3.8	2.3	3.5 ^a	3.8	2.5	2.4
Average Annual Number of Physician Visits per Capita, 2006	6.1	5.9 ^a	7.5 ^e	6.4	7 ^e	5.6	4.7 ^g	2.8	n/a	5.1	4 ^a
Hospital Spending, Utilization, and Capacity											
Number of Acute Care Hospital Beds per 1,000 Population, 2006	3.5 ^a	2.8 ^a	3.1 ^a	3.7	6.2	3.0	n/a	2.2	3.5	2.2	2.7
Hospital Spending per Discharge, 2006 ^c	\$6,993 ^a	\$11,093 ^a	\$8,369	\$4,333	\$4,852	\$11,522 ^a	\$4,935 ^e	\$8,631	\$8,888 ^a	n/a	\$17,126 ^a
Hospital Discharge per 1,000 Population, 2006	162 ^a	87 ^a	171	284	202	104 ^a	138 ^e	162	161	125	119 ^a
Average Length of Stay for Acute Care	6 ^a	7.2 ^a	3.5 ^a	5.4	8.5	6.6	4.1 ^g	4.6	8.2	7.5	5.6
Elderly and Long-Term Care											
Number of Long-Term Care Beds per 1,000 Population over Age 65, 2006	40.2	49.9 ^g	22.1	39.2	47.8 ^a	28.2 ^a	n/a	86.3	71.1 ^a	18.2 ^a	43.3
Percentage of Population over Age 65 with Influenza Immunization, 2006	78.0% ^g	66.5% ^a	53.7%	68% ^a	63% ^a	75.0%	63.6%	n/a	61.0%	75.1%	64.3%
IT											
Physicians' Use of EMRs(% of Primary Care Physicians), 2006 ^e	79%	23%	n/a	n/a	42%	98%	92%	n/a	n/a	89%	28%
Avoidable Deaths											
Mortality Amenable to Health Care, 2002-03 ^f (Deaths per 100,000 Population)	71	77	101	65	90	82	96	82	n/a	103	110
Non-Medical Determinants of Health											
Percentage of Adults Who Reported Being Daily Smokers, 2006	18.1% ^g	17.3% ^a	26% ^e	25.0%	23.2% ^a	31.0%	18.1% ^g	15.9% ^a	n/a	22.0%	16.7%
Obesity (BMI>30) Prevalence, 2006	21.0% ^g	18.0% ^a	11.4% ^a	10.5%	13.6% ^a	11.3%	26.5% ^g	10.7% ^a	n/a	24.0%	34.3%

Source: OECD Health Data 2008 (June 2008)

^a2005

^b1996-2005

^cAdjusted for differences in the cost of living

^d2004

^eSource: Commonwealth Fund International Health Policy Survey of Primary Care Physicians, 2006

^fSource: Nolte and McKee, "Measuring the Health of Nations: Updating an Earlier Analysis", 2008

^gProvided by Ministry of Health (May vary from OECD definition, refer to more recent year)

The Australian Health Care System

David Squires
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Who is covered?

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

What is covered?

Services: Medicare provides free or subsidised access to most medical and some optometry services; hospital care for public patients; prescription pharmaceuticals; and some allied health services. The Australian Government, together with state governments in most cases, also funds a wide range of other health services, including population health, mental health, some dental health, rural health, Indigenous health, and health services for war veterans. Private insurance is optional. It complements the public system and offers consumers a broader choice of doctors for hospital admissions, choice of hospitals (including private hospitals), and timing of procedures, as well as services such as physiotherapy, dental, optometry, podiatry, and complementary medicine services.

Cost sharing: Medicare usually reimburses 85-100% of the schedule fee for ambulatory services and 75% of the schedule fee for in-hospital services. Doctors' fees are not regulated. They are free to charge above the schedule fee, or they can treat patients for the cost of the subsidy and bill the federal government directly with no patient charge (referred to as bulk-billing). Due to falling rates of bulk-billing, particularly for general practice, an incentive scheme was introduced in 2004, offering additional payment for bulk billing concession card holders, children under 16 years of age and residents of rural and remote areas. Now (in 2007-08), 74% of all medical services, and 80% of general practitioner attendances, are bulk-billed.

Safety nets: A Medicare safety net for non-inpatient services protects individuals against high out-of-pocket medical costs over a year by covering 80% of subsequent out-of-pocket costs once they reach an annual calendar year out-of-pocket threshold (in 2008, \$529.30 [USD\$327] for individuals with concession cards and low income families, and AUS \$1,058.70 [USD \$654] for other individuals and families),.

A safety net also assists people with high out-of-pocket pharmaceutical costs. General patients pay AUS\$5.00 per script once a calendar year threshold is reached (AUS\$1,141.80 [USD\$706] in 2008) and concession card holders receive the medicine free after a threshold of AUS\$290.00 [USD\$179]

How is the health system financed?

Australia has a mixed public and private health care system. The core feature is public, taxation-funded health insurance under Medicare which provides universal access to subsidised medical services, pharmaceuticals and free hospital treatment as a public patient. Medicare is complemented by a private health system in which private health insurance assists with access to hospital treatment as a private patient and with access to dental services and allied health services.

National Health Insurance: Compulsory national health insurance (Medicare) is administered by the Australian Government. Medicare is funded mostly from general revenue and in part by a 1.5% levy on taxable income, though some individuals are exempt or pay a reduced levy because of low income. Individuals and families on higher incomes who do not have an appropriate level of private hospital insurance cover may also have to pay a Medicare levy surcharge, which is an additional 1% of taxable income. In 2006-07, the revenue raised from the Medicare levy funded 18% of total federal government health expenditure. Other federal, state and territory government health expenditure is funded from general tax revenue, including the Goods and Services Tax (GST), with some revenue raised from patient fees and other non-government sources. In 2006-07, Governments funded 69% of total health expenditures, with 42% funded by the Australian Government and 26% funded by state and territory governments.

Private Insurance: Private hospital insurance covers 44.7% of the population and accounts for around 7% of total health expenditure. Since 1999, 30% of private health insurance premiums are paid by the Australian Government through a rebate. The rebate increases to 35% for people aged

65 to 69 years, and to 40% for those aged 70 and older. Lifetime Health Cover encourages people to take out private hospital coverage early in life and maintain their coverage by offering people who join a health fund before they turn 31 years-old a relatively lower premium throughout their lives, regardless of their health status. People over the age of 30 face a 2% increase in premiums over the base rate for every year they delay joining, although fund members who have retained their private health insurance for more than 10 years are no longer be subject to this penalty. Private health insurance is community-rated. Out-of-pocket expenditure by individuals accounted for 17% of total health expenditure in 2006.

How is the delivery system organised?

Physicians: Most medical and allied health practitioners are in private practice and charge a fee for service.

Hospitals: A mix of public (run by the state and territory governments) and private facilities. Under Medicare the public hospital system provides public patients with free access to hospital care. Public hospitals are jointly funded by the Australian Government and state/territory governments through five-yearly agreements. Public hospitals also receive some revenue from services to private patients. Physicians in public hospitals are either salaried (though allowed to have separate private practices and additional fee-for-service income) or paid on a per-session basis. Many salaried specialist doctors in public hospitals are able to treat some private patients in-hospital, to which they usually contribute a portion of the income earned from the fees. Private hospitals (including free-standing ambulatory day centers) can be either for-profit or non-profit, and their income is chiefly derived from patients with private health insurance. Generally, physicians working in private hospitals are in private practice and do not concurrently hold salaried positions in public hospitals. Private hospitals provide a third of all hospital beds, almost 40% of total hospital separations, and over half of all surgical episodes requiring the use of an operating room. Eighty four percent 84% of emergency surgery is provided in public hospitals, whilst the majority of elective surgery procedures are provided in private hospitals and day surgeries.

Pharmaceuticals: Prescription pharmaceuticals are covered by the federal Pharmaceutical Benefits Scheme (PBS), which offers payment for a comprehensive and evolving list of drugs at a negotiated fixed price.

Patients have a co-payment, set by the federal government. Most prescribed pharmaceuticals are dispensed by private sector pharmacies. The Repatriation Pharmaceutical Benefits Scheme (RPBS) subsidises similar access to pharmaceuticals for war veterans and dependants.

Government: The federal government regulates private health insurance, pharmaceuticals, and medical services and has the primary funding and regulatory responsibility for residential aged care facilities that attract government assistance. States are charged with operating public hospitals and regulating all hospitals and community-based health services.

What is being done to ensure quality of care?

In 2006, the federal and state/territory governments established the Australian Commission on Safety and Quality in Health Care, whose responsibilities include: identifying issues and policy directions in safety and quality; disseminating knowledge and advocating for safety and quality; reporting publicly on the state of safety and quality including performance against national standards; and, recommending nationally agreed-upon standards for safety and quality improvement. Key areas of focus include clinical handover, health care associated infection, and medication safety. Recent publications include a Measurement for Improvement Toolkit providing a set of practical methods to measure the safety and quality of clinical services. The Commission is currently undertaking the first stages of substantial reform of the fragmented accreditation process, drafting a new model to encompass a set of Australian Health Standards, a quality improvement framework, expanded scope for accreditation to services not currently accredited, national data collection and reporting of performance measures, and national coordination of quality improvement efforts.

The Council of Australian Governments recently signed an agreement to create a single national registration and accreditation system for nine health professions: medical practitioners; nurses and midwives; pharmacists; physiotherapists; psychologists; osteopaths; chiropractors; optometrists; and dentists. Medical practice and competency standards will be subject to the approval of the Health Ministers, in conjunction with the Australian Health Workforce Advisory Council. Provision of government-funded residential aged care is highly regulated with both provider organisations and their staff being subject to stringent approval processes. Aged care facilities are

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subject to compulsory accreditation, with adhoc reviews to ensure ongoing standards are met. Legislation is being introduced to ensure financial protection of assets and bonds paid for aged care services.

Medicare also offers financial incentives to improve quality, including the Practice Incentives Program, which rewards practices deemed to be working towards meeting the Royal Australian College of General Practitioners Standards for General Practices in the areas of information management, after-hours care, rural care, teaching, and quality prescribing.

Specific attention and resources are currently being deployed to address the gap in health outcomes for the indigenous population.

What is being done to improve efficiency?

Current initiatives seek to rationalise funding transfers through consolidating and reducing the number of special purpose payments, and focusing on outcomes in order to reduce the administrative burden. Better public reporting of outcomes and linkage to incentive payments is a new feature expected in the next round of funding agreements between the States and Commonwealth Governments.

The federal government has prioritized improving efficiency in aged care. The recently established Ministerial Conference on Ageing – designed as a collaboration between the different levels of government – is tasked with initiating, developing, and monitoring policy reform towards improving aged care planning. The federal government also plans to work with the state/territory governments to improve planning and accountability of Home and Community Care programs; it hopes to standardize the processes for entry and assessment, planning, financial reporting, quality assurance and information management by 2011.

The cost-sharing arrangement between the federal and state/territory governments creates a possible barrier to efficiency. For example, there is a possible incentive for public hospitals – funded by the state – to discharge patients early with a prescription for medication – funded by the federal government – to be filled at a pharmacy outside the hospital, thereby shifting the medical cost. The Australian Government established the National Health and Hospital Reform Commission in February 2008 to develop a long-term reform plan for the health system, including tackling

the issue of reducing inefficiencies flowing from fragmented funding and delivery arrangements.

How are costs controlled?

Public hospitals are owned and operated by State and Territory governments, although costs are shared with the Australian government. This enables governments to apply budget caps.

Restriction of services covered by Medicare helps control costs for the Government. The Medical Services Advisory Committee assesses new medical therapies for inclusion in the MBS, based on safety, cost-effectiveness and comparative efficacy. The Pharmaceutical Benefits Advisory Committee assesses new prescription drugs on the same basis before they can be included in the PBS. The Australian Government Department of Health and Ageing then uses these assessments to negotiate prices with manufacturers. The government also offers education and incentives to general practices to encourage quality use of medicines.

A National Preventative Health Care Strategy is currently being developed to shift focus and funding to prevention, particularly in relation to chronic disease. Electronic health technologies offer further scope for efficiency improvements by reducing duplicate testing and the risk of inappropriate treatment. Additional cost-controlling methods include: controlling the growth in cost of some large volume diagnostic services through industry agreements with the relevant medical specialty; controlling access to specialist services through ‘gatekeepers’ such as general practitioners; prioritising access to services according to clinical need; and limiting the number of providers that are eligible to access Medicare benefits for some ‘hi-tech’ services.

The Canadian Health Care System

David Squires
The Commonwealth Fund

Who is covered?

Canada's publicly-funded insurance coverage, Medicare, provides universal coverage for Canadian residents. Many Canadians purchase supplemental private insurance for services not covered under the public insurance; private insurance for publicly covered services is generally not allowed.

What is covered?

Services: Through the *Canada Health Act*, the federal government requires that provincial and territorial health insurance plans cover all medically necessary physician and hospital services in order to qualify for federal funding under the Canada Health Transfer. The federal government provides full coverage for members of the Royal Canadian Mounted Police, the military, and inmates in federal penitentiaries. It also provides supplementary coverage for groups such as veterans, First Nations and Inuit. Provincial and territorial governments also provide varying levels of supplementary benefits for groups such as children, senior citizens and social assistance recipients. Supplementary benefits include services such as prescription drug coverage, vision care, dental care, home care, aids to independent living, and ambulance services.

Cost-sharing: There is no cost-sharing by recipients for insured physician and hospital services. However, there are charges for supplementary benefits and for non-insured services.

How is the health system financed?

Publicly-Funded Health Care: Public health insurance plans are administered by the provinces/territories and generally funded by general taxation. Federal transfers to provinces/territories are tied to population and are conditional on meeting the requirements set out in the *Canada Health Act*. Public funding accounts for approximately 70% of total health

expenditures and over 90% of expenditures on physician and hospital services.

Privately-Funded Health Care: Many Canadians have supplemental private insurance coverage through group plans, which cover services such as vision and dental care, prescription drugs, rehabilitation services, private nursing care, and private rooms in hospitals. Private health expenditures represent approximately 30% of total health expenditures. Private spending comes mainly from out-of-pocket payments (48%) and private insurance payments (41%).

How is the delivery system organized?

Physicians: Most physicians are in group or private practices and are remunerated on a fee-for-service basis. However, some Canadian physicians receive payment for clinical care through alternative public payment plans, such as salaries. About 20% of total clinical payments to physicians are made through these types of arrangements. Provincial/territorial medical associations generally negotiate the fee schedule for insured services with provincial/territorial health ministries. Physicians must opt out of the public system of payment to have the right to charge their own rates for medically necessary services.

Nurses: Most nurses are employed either in hospitals or by community health care organizations, including home care and public health services. Nurses are generally paid salaries negotiated between their unions and their employers. With an increasing emphasis on primary care, the majority of provinces are changing their laws to allow nurse practitioners to deliver a greater range of primary care services.

Other health professionals: Dentists, optometrists, therapists, psychologists, pharmacists and other health professionals are, for the most part, in private practice.

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Hospitals: There is a mix of public and private non-profit hospitals that operate under annual, global budgets, negotiated with the provincial/territorial ministries of health or regional health authority, with some fee-for-service payment.

Government: Provincial/territorial governments have the authority to regulate health providers. However, they typically delegate control over physicians and other providers to professional “colleges” whose duty is to license providers and set standards for practice.

What is being done to improve quality of care?

From 2000-2006, the government operated the Primary Health Care Transition Fund (CAD \$800 million; USD \$622 million), which invested in regional, multi-regional, and national initiatives to promote primary care reform. Investment strategies focused on: comprehensive care, chronic disease management, health promotion, 24/7 access, multi-disciplinary teams, and facilitating coordination between types of health services.

The federal government supports the Canadian Patient Safety Institute, a national organization providing leadership and a national focal point to build a culture of patient safety and quality improvement by promoting best practices, and developing strategies, frameworks, standards, tools and guidelines. One such strategy, the national *Safer Healthcare Now!* campaign, encourages health care teams to adopt targeted interventions aimed at reducing the number of injuries and deaths related to adverse events, such as infections and medication incidents.

Accreditation Canada, an independent organization that aims to examine and improve the quality of health services through accreditation, has developed over 30 required organizational practices for patient safety, in the areas of culture, communication, medication use, worklife/workforce, infection control, fall prevention and risk assessment. New patient safety practices will be introduced as evidence and best practices are recognized. Though accreditation is voluntary, the vast majority of Canadian health care facilities participate in Accreditation Canada’s process, including over 90% of acute care hospitals.

All provincial/territorial governments have agreed on a common “architecture” for Electronic Health Records (EHRs), and are using standardized data and technology with the ability to talk to each other. Canada Health Infoway - a federally-funded independent organization (CAD \$1.6 billion; USD \$1.37 billion since 2001) - works with governments and health organizations to accelerate the adoption of EHRs and other electronic health information systems (e.g. telehealth and public health surveillance). All provincial/territorial governments have agreed on a common EHR architecture. Infoway’s goal is to have 50% of Canadians with EHRs by 2010 and 100% by 2016.

The Canadian Institute for Health Information (CIHI) reports data and provides analysis on wait times, surgical volumes, survival rates, patient safety and patient satisfaction, while the Health Council of Canada assesses progress in improving the quality, effectiveness and sustainability of the health care system.

The National Pharmaceuticals Strategy involves a number of initiatives towards improving drug safety and effectiveness, pursuing four independent strategies: supporting collaboration and priority-setting, strengthening existing capabilities, building “front-line” participation and opportunities, and establishing clear standards and transparency of evidence. Supported by the federal government, a Canadian Medication Incident Reporting and Prevention System is currently being pilot tested and will capture, analyze, and manage medication incident data on a national basis once implemented.

Many quality improvement initiatives take place directly at the provincial and territorial level, with jurisdictions having established quality councils and task forces. Provincial and territorial governments are also responsible for activities that contribute to improved quality of care, including: legislation and regulation (including regulating health care professionals), setting standards for the provision of hospital care, and establishing professional education and training activities.

What is being done to improve efficiency?

With respect to pharmaceuticals, all governments (federal and provincial/territorial) have an interest in improving the efficiency and

ensuring the sustainability of their jurisdictional drug plans. The National Pharmaceutical Strategy is pursuing the possibility of establishing a national or multi-regional drug formulary, in place of the current system that is fragmented across provinces/territories. Furthermore, the Canadian Agency for Drugs and Technology in Health provides advice to federal, provincial and territorial governments on the clinical and cost-effectiveness of drugs and other health technologies, which inform decision-making on reimbursement and optimal use.

With the help of targeted investments from the federal government, provinces and territories have invested in initiatives aimed at improving system efficiency and reducing wait times. Governments have established a set of evidence-based wait time benchmarks in the areas of cardiac and cancer care, joint replacement, and sight restoration, and the majority of provinces have established targets for when these benchmarks will be achieved. All provinces publicly report wait times, and wait time reductions have been reported by CIHI and the Health Council. With additional federal funding, provincial and territorial governments are now preparing to implement Patient Wait Times Guarantees, which will provide patients with greater certainty of timely access by automatically offering alternate options to care if the established time frame for treatment is exceeded.

Confronting a problem faced by many Canadian provinces, Saskatchewan operates a fund dedicated to clinician recruitment and retention. Among the fund's goals are to improve working conditions and reduce worker injury in order to promote a consistent workforce.

How are costs controlled?

Cost control measures include mandatory annual global budgets for hospitals/health regions, negotiated fee schedules for health care providers, and limits on the diffusion of technology. Many provincial governments are developing pricing and purchasing strategies to obtain the best prices for prescription drugs and vaccines. Among these strategies are formulary management, use of generics, reference-based pricing, price freezes, and limits on markups.

The Danish Health Care System

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Who is covered?

Coverage is universal and compulsory. All those registered as residents in Denmark are entitled to health care that is largely free at the point of use.

What is covered?

Services: The publicly-financed health system covers all primary and specialist (hospital) services based on medical assessment of need.

Cost-sharing: There are relatively few cost-sharing arrangements for publicly-covered services. Cost-sharing applies to dental care for those aged 18 and over (co-insurance of 35% to 60% of the cost of treatment), outpatient drugs and corrective lenses. An individual's annual outpatient drug expenditure is reimbursed at the following levels: below DKK 465 (\$90) – no reimbursement (50% reimbursement for children); DKK 465-1125 (\$90-217) – 50% reimbursement; DKK 1125-2645 (\$217-511) – 75% reimbursement; above DKK 2645 (\$511) – 85% reimbursement (MISSOC 2007). In 2005, out-of-pocket payments, including cost-sharing, accounted for about 14% of total health expenditure (World Health Organization 2007).

Safety nets: Chronically ill patients with a permanently high use of drugs can apply for full reimbursement of drug expenditure above an annual ceiling of DKK 3410 (\$658). People with very low income and those who are dying can also apply for financial assistance, and the reimbursement rate may be increased for some very expensive drugs. Complementary private health insurance provided by a not-for-profit organization reimburses cost-sharing for pharmaceuticals, dental care, physiotherapy and corrective lenses. In 1999 it covered about 30% of the population. Coverage is relatively evenly distributed across social classes.

How is the health system financed?

Publicly-financed health care: A major administrative reform in 2007 gave the central government responsibility for financing health care. Health care is now mainly financed through a centrally-collected tax set at 8% of taxable income and earmarked for health. The new proportionate earmarked tax replaces a mixture of progressive central income taxes and proportionate regional income and property taxes. The central government allocates this revenue to five regions (80%) and 98 municipalities (20%) using a risk-adjusted capitation formula and some activity-based payment. Public expenditure accounted for around 82% of total health expenditure in 2005 (World Health Organization 2007).

Private health insurance: Around 30% of the population purchase complementary private health insurance covering statutory cost sharing from the not-for-profit organization 'Danmark.' Supplemental private health insurance provided by for-profit companies offers access to care in private hospitals in Denmark and abroad. It covers around 5% of the population and is mainly purchased by employers as a fringe benefit for employees. In 2005, private health insurance accounted for 1.6% of total health expenditure (World Health Organization 2007).

How is the delivery system organized?

Government: The five regions are responsible for providing hospital care and own and run hospitals and prenatal care centers. The regions also finance general practitioners, specialists, physiotherapists, dentists and pharmaceuticals. The 98 municipalities are responsible for nursing homes, home nurses, health visitors, municipal dentists (children's dentists and home dental services for physically and/or mentally disabled people), school health services, home help and the treatment of alcoholics and drug addicts. Professionals involved in delivering these services are paid a salary.

Physicians: Self-employed general practitioners act as gatekeepers to secondary care and are paid via a combination of capitation (30%) and fee-for-service. Hospital physicians are employed by the regions and paid a salary. Non-hospital based specialists are paid on a fee-for-service basis.

Hospitals: Almost all hospitals are publicly owned (99% of hospital beds are public). They are paid partly via fixed budgets determined through soft contracts with the regions and partly on a fee for service basis.

What is being done to ensure quality of care?

A comprehensive standards-based program for assessing quality is currently being implemented. The program is systemic in scope, aiming to incorporate all health care delivery organizations and including both organizational and clinical standards. Organizations are assessed on their ability to improve standards in processes and outcomes. The core of the assessment program is a system of regular accreditation based on annual self-assessment and external evaluation (every third year) by a professional accreditation body. The self-assessment involves reporting of performance against national input, process and outcome standards, which allows comparison over time and between organizations. The external evaluation begins with the self assessment and goes on to assess status for quality development. Some quality data is already being published on the Internet (www.sundhedskvalitet.dk) to facilitate patient choice of hospital and encourage hospitals to raise standards.

What is being done to improve efficiency?

In the last few years, many national and regional initiatives have aimed to improve efficiency, with a particular focus on hospitals. For example, Denmark has been at the forefront of efforts to reduce average lengths of stay and to shift care from inpatient to outpatient settings. The administrative reforms of 2007 aimed to enhance the coordination of service delivery and to benefit from economies of scale by centralizing some functions and enabling the closure of small hospitals. The reforms lowered the number of regions from 14 to five, and the number of municipalities from 275 to 98. The introduction of a Danish DRG (diagnosis-related groups) system in the late 1990s has facilitated various partially-activity-based payment schemes (for example, for patients

crossing county borders) and benchmarking exercises. The national Ministry of Health also publishes regular hospital productivity rankings.

How are costs controlled?

Annual negotiations between the central government and the regions and municipalities result in agreement on the economic framework for the health sector, including levels of taxation and expenditure. The negotiations contribute to control of public spending on health by instituting a national budget cap for the health sector. They also form the basis for resource allocation from the central government. At the regional and municipal level, various management tools are used to control expenditure, in particular contracts and agreements between hospitals and the regions, and ongoing monitoring of expenditure development. Policies to control pharmaceutical expenditure include generic substitution by doctors and/or pharmacists, prescribing guidelines and systematic assessment of prescribing behavior. Health technology assessment (HTA) is now an integral part of the health system, with assessments carried out at central, regional and local levels.

The French Health Care System

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Who is covered?

Coverage is universal. All residents are entitled to publicly-financed health care. Following the introduction of *Couverture Maladie Universelle* (CMU) in 2000, the state finances coverage for residents not eligible for coverage by the public health insurance scheme (0.4% of the population). The state also finances health services for illegal residents (*L'Aide Médicale d'Etat*; AME).

What is covered?

Services: The public health insurance scheme covers hospital care, ambulatory care and prescription drugs. It provides minimal coverage of outpatient eye and dental care.

Cost-sharing: Cost-sharing is widely applied to publicly-financed health services and drugs and takes three forms: co-insurance, co-payments, and extra billing.

Co-insurance rates are applied to all health services and drugs listed in the publicly-financed benefits package. Co-insurance rates vary depending on:

- the type of care: hospital care (20% plus a daily co-payment of €16/\$20), doctor visits (30%), dental care (30%)
- the type of patient: patients suffering from chronic conditions and poorer patients are exempt from cost sharing
- the effectiveness of the prescription drug: 0% for highly effective drugs, 35%, 65% and 100% for drugs of limited therapeutic value
- whether or not patients comply with the recently-implemented gatekeeping system (*médecin traitant*): visits to the gatekeeping general practitioner (GP) are subject to a 30% co-insurance rate, while visits to other GPs are subject to a 50% co-insurance rate; the difference between the two rates cannot be reimbursed by complementary private health insurance (see below).

In addition to cost-sharing through co-insurance, which can be fully reimbursed by complementary private health insurance, the following non-reimbursable co-payments will apply from 2008, up to an annual ceiling of €50 (\$64): €1 per doctor visit (\$1.27), €0.50 (\$0.63) per prescription drug, €2 (\$2.54) per ambulance journey and €8 (\$23) for expensive treatment.

Reimbursement by the publicly-financed health insurance scheme is based on a reference price. Doctors and dentists may charge above this reference price (extra billing) based on their level of professional experience. The difference between the reference price and the extra billed amount must be paid by the patient and may or may not be covered by complementary private health insurance.

Safety nets: Exemptions from co-insurance apply to people receiving invalidity and work injury benefits, people with specific chronic illnesses and people with low income. Hospital co-insurance only applies for the first 31 days in hospital and some surgical interventions are exempt. Children and people with low income are exempt from paying non-reimbursable co-payments. Complementary private health insurance covers statutory cost-sharing (the share of health care costs not reimbursed by the health insurance scheme). It only applies to health services and prescription drugs listed in the publicly-financed benefits package. Most people obtain complementary private coverage through their employer. Since 2000, people with low income are entitled to free or subsidized complementary private cover (CMU-C) and free eye and dental care; in addition, they cannot be extra billed by doctors. Complementary private health insurance covers over 92% of the population. In 2005 out-of-pocket payments and private health insurance accounted for 7.4% and 12.8% of total health expenditure respectively (World Health Organization 2007).

How is the health system financed?

Publicly-financed health care: The public health insurance scheme is financed by employer and employee payroll taxes (43%); a national income tax (*contribution sociale généralisée*; 33%) created in 1990 to broaden the revenue base for social security; revenue from taxes levied on tobacco and alcohol (8%); state subsidies (2%); and transfers from other branches of social security (8%). CMU is mainly financed by the state through an earmarked tax on tobacco and through a 2.5% tax on the revenue of complementary private health insurers. There is no ceiling on employer (12.8%) and employee (0.75%) contributions, which are collected by a national social security agency. Public expenditure accounted for 79.1% of total expenditure on health in 2005 (World Health Organization 2007).

Government: The public health insurance funds are managed by a board of representatives, with equal representation from employers and employees (trades unions). Every year parliament sets a (soft) ceiling for the rate of expenditure growth in the public health insurance scheme for the following year (ONDAM¹). In 2004 a new law created two new associations, the National Union of Health Insurance Funds (UNCAM²) and the National Union of voluntary health insurers (UNOCAM³), incorporating all public health insurance funds and private health insurers respectively. The law also gave the public health insurance funds responsibility for defining the benefits package and setting price and cost-sharing levels.

Private health insurance: Complementary private health insurance reimburses statutory cost-sharing. It is mainly provided by not-for-profit employment-based mutual associations (*mutuelles*), which cover 87% to 90% of the population. It only covers those services that are already covered by the public health insurance scheme. There is some evidence to show that the quality of coverage purchased (in other words, the extent of reimbursement) varies by income group. Since 2000, people with low income (unemployed people, people with low income and people receiving single parent subsidies) and their dependants have been entitled to obtain complementary private cover at little to no cost (CMU-C). CMU-C covers

about two million people via a voucher which can be used to obtain cover from a variety of insurers, although most choose to obtain cover from the public health insurance scheme. More recently, for-profit commercial insurers have begun offering coverage for services not included in the public benefits package. For example, the company AXA offered a plan giving faster access to renowned specialists, but this was outlawed by the physicians' association and parliament.

How is the delivery system organized?

Health insurance funds: Public health insurance funds are statutory entities and membership is based on occupation, so there is no competition between them. There is limited competition among mutual benefit societies providing complementary private health insurance, but as they are employment-based, most employees usually only have a choice of one or two *mutuelles*. There is no system of risk adjustment among *mutuelles*, even though there is inadvertent risk selection based on occupation.

Physicians (non-hospital based physicians): The 2004 health financing reform law introduced a voluntary gatekeeping system for adults (aged 16 years and over) known as *médecin traitant*. There are strong financial incentives to encourage gatekeeping. Physicians are self-employed and paid on a fee-for-service basis. The cost per visit is slightly higher for specialists (€23; \$29) than for GPs (€22; \$28) and is based on negotiation between the government, the public insurance scheme and the medical unions. Depending on the total duration of their medical studies, physicians may charge above this level. There is no limit to what physicians may charge, but medical associations recommend tact in determining fee levels.

Hospitals: Two-thirds of hospital beds are in government-owned or not-for-profit hospitals. The remainder are in private for-profit clinics. All university hospitals are public. Hospital physicians in public or not-for-profit facilities are salaried. Since 1968, hospital physicians have been permitted to see private patients in public hospitals, an anachronism originally intended to attract the most prestigious doctors to public hospitals, and one that has survived countless attempts to abolish it. From 2008, all hospitals and clinics will be reimbursed via the DRG-like prospective payment system (the original DRG scheme was only to be fully implemented by 2012). Public and not-for-profit hospitals benefit from

¹ Objectif National de Dépenses d'Assurance Maladie.

² Union Nationale des Caisses d'Assurance Maladie.

³ Union Nationale des Organismes Complémentaires d'Assurance Maladie.

additional non activity-based grants to compensate them for research and teaching (up to an additional 13% of the budget) and for providing emergency services and organ harvesting and transplantation (on average an additional 10-11% of a hospital's budget).

What is being done to ensure quality of care?

An accreditation system is used to monitor the quality of care in hospitals and clinics. The quality of ambulatory care rests on a system of professional practice appraisal. Both systems are mandatory, under the responsibility of the national health authority (HAS) created in 2004. Hospitals must be accredited every four years by a team of experts. The accreditation criteria and reports are publicly available via the HAS website (www.has-sante.fr). Every fifth year, physicians are required by law to undergo an external assessment of their practice in the form of an audit. For hospital physicians, the practice audit can be performed as part of the accreditation process. For physicians in ambulatory practice, the audit is organized by an independent body approved by HAS (usually a medical society representing a particular specialty). Dentists and midwives will soon have to undergo a similar process.

What is being done to improve efficiency?

Improving efficiency is the major challenge facing the public health insurance funds, which are currently working on structural and procedural changes. Structural changes involve the creation of a national computerized system of medical records to limit duplication of tests, over-prescribing and adverse drug side effects, and to facilitate the implementation of prospective payment for all hospitals and clinics from 2008. Procedural changes on the supply side mainly focus on two issues: the reorganization of inputs (for example, by transferring some physician tasks to nurses or other professionals) and improved coordination of care (particularly for patients with chronic illnesses). On the demand side, the main health insurance scheme is experimenting with patient education and hotlines. From 2008 it will also transfer some drugs to over-the-counter status.

How are costs controlled?

Cost control is a key issue in the French health system, as the health insurance scheme has faced large deficits for the last 20 years. More recently the deficit has fallen, from €10-12 billion per year in 2003 (\$12.7-15.2 billion) to an expected €4 billion in 2008 (\$5.1 billion). This may be attributed to the following changes, which have taken place in the last two years:

- a reduction in the number of acute hospital beds
- limits on the number of drugs reimbursed; around 600 drugs have been removed from public reimbursement in the last few years
- an increase in generic prescribing and the use of over the counter drugs
- the introduction of a voluntary gatekeeping system in primary care
- protocols for the management of chronic conditions
- from 2008, new co-payments for prescription drugs, doctor visits and ambulance transport will not be reimbursable by complementary private health insurance

At the same time, there has been an increase in the number of medical students admitted to university due to an expected shortage of doctors in the coming decade. Public funding has also had to increase to accommodate a rise in the fee schedule, since GPs are now considered as specialists and their cost per visit has risen from €20 (\$37) to €22 (\$28).

The German Health Care System

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Who is covered?

Public (“social”) health insurance (SHI) is compulsory for people earning up to around €48,000 (\$61,174) per year, including dependents who are included in the insurance. This applies to around 75% of the population. Individuals with earnings above €48,000 per year (around 20% of the population) are currently not required to be covered. If they wish, they can remain in the publicly-financed scheme on a voluntary basis (and 75% of them do), they can purchase private health insurance, or they can theoretically be uninsured. The publicly-financed scheme covers about 88% of the population. In total, 10% of the population are covered by private health insurance, with civil servants and self-employed being the largest groups (both of which are excluded from SHI). Less than 1% of the population has no insurance coverage. From 2009, health insurance will be mandatory, depending on previous insurance and/or job status either in the social or in the private health insurance scheme.

What is covered?

Services: The SHI benefits package covers preventive services; inpatient and outpatient hospital care; physician services; mental health care; dental care; prescription drugs; medical aids; rehabilitation; and sick leave compensation. Since 1995, long-term care is covered by a separate insurance scheme, which is mandatory for the whole population.

Cost-sharing: Traditionally, the SHI scheme has imposed few cost-sharing provisions (mainly for pharmaceuticals and dental care). However, in 2004 co-payments were introduced for visits by adults aged 18 years and older to physicians and dentists (€10; \$12.74 each for the first visit per quarter or subsequent visits without referral); other co-payments were made more

uniform: € (\$6.37) to €10 per pack of outpatient medications (except if the price is at least 30% below the so-called reference price, i.e. the maximum reimbursable amount for drugs of equivalent effectiveness, which is the case for more than 12,000 drugs), €10 per inpatient day (up to 28 days per year), and € to €10 for prescribed medical aids. For dental prostheses, patients receive a lump sum which on average covers 50% of costs. In total, out-of-pocket payments accounted for 13.8% of total health expenditure in 2005.

Safety Nets: Cost-sharing is generally limited to 2% of household income. For additional family members, part of the household income is excluded from this calculation. For the chronically ill, the cost-sharing limit is 1%. A directive sets out the conditions for qualifying as chronically ill; since 2008 it is also necessary to demonstrate that the person has received counselling on screening measures prior to the illness.

How is the health system financed?

Publicly-Financed Scheme (SHI): The SHI scheme is operated by over 200 competing health insurance funds (sickness funds; SFs): autonomous, not-for-profit, non-governmental bodies regulated by law. The scheme is funded by compulsory contributions based on wages up to a limit of around €43,000 (\$54,776) per year. For 2008, the average insured employee (or pensioner) contributes almost 8% of the gross wage, while the employer (or the pension fund) adds another 7% on top of the gross wage, so the combined maximum contribution is around €540 (\$688) per month. This includes dependents (non-earning spouses and children) who are covered through the primary SF member. Unemployed people contribute in proportion to their unemployment entitlements, but for long-term

unemployed people with a fixed low entitlement (so-called “Hartz IV”), the government employment agency pays a fixed per capita premium. Currently, SFs are free to set their own contribution rates for all other insured. Beginning in 2009, a uniform contribution rate will be set by the government and, although SFs will continue to collect contributions, all contributions will be centrally pooled by a new national health fund, which will allocate resources to each SF based on an improved risk-adjusted capitation formula. This formula will, in addition to age and sex, take morbidity from 80 chronic and/or serious illnesses into account, i.e. SFs will receive considerably more for patients with cancer, AIDS or cystic fibrosis than for “ordinary” insured. In 2009, SFs may charge an additional nominal premium if the received resources are insufficient. In 2005, public sources of finance accounted for 77.2% of total health expenditure.

Private health insurance (PHI): Private health insurance plays a substitutive role in covering the two groups excluded from SHI (civil servants, who are refunded parts of their health care costs by their employer, and the self-employed), as well as high earners who choose to opt out of the publicly-financed scheme. All pay a risk-related premium, with separate premiums paid for dependents; the risk is assessed upon entry only, though as contracts are based on life-time underwriting. Substitutive private health insurance is regulated by the government to ensure that the insured do not face massively increasing premiums by age and that they are not overburdened by premiums if their income decreases. Starting in 2009, private insurers offering substitutive cover will be required to take part in a risk adjustment scheme (separate from SHI) to be able to offer insurance for persons with ill health who could otherwise not afford a risk-related premium. PHI also plays a mixed complementary and supplementary role, adding certain minor benefits to the SHI basket, providing access to better amenities, such as single/double rooms, and covering some co-payments, especially for dental care. In 2005, PHI accounted for 9.1% of total health expenditure.

How is the delivery system organised?

Physicians: General practitioners have no formal gatekeeper function. However, in 2004 SFs were required to offer their members the option to enroll in a “family physician care model” which provides a bonus for complying with gatekeeping rules. Ambulatory care in all specialities is

mainly delivered by physicians working in solo practices, although polyclinic-type ambulatory care centres with employed physicians have been allowed since 2004. Physicians in the outpatient sector are paid by a mixture of fees per time period and per medical procedure. SFs annually negotiate with the regional associations of physicians to determine aggregate payments, which ensures cost control.

Hospitals: Hospitals are mainly non-profit, both public (about half of all beds) and private (around one-third of all beds). The private, for-profit segment has been growing over the last years (around one-sixth of all beds), mainly through takeovers of public hospitals. Independent of ownership, hospitals are principally staffed by salaried doctors. Senior doctors may also treat privately-insured patients on a fee-for-service basis. Doctors in hospitals are typically not allowed to treat outpatients. Exceptions have been made if necessary care cannot be provided on an outpatient basis by specialists in private practice. Since 2004, hospitals may also provide certain highly specialized services on an outpatient basis. Inpatient care is paid through a system of diagnosis-related groups (DRG) per admission, currently based on around 1,100 DRG categories. The system was introduced in 2004 and is revised annually to take new technologies, changes in treatment patterns, and associated costs into account.

Individuals have free choice of ambulatory care physicians and, if referred to inpatient care, of hospitals.

Disease Management Programs (DMPs): Legislation in 2002 created DMPs for chronic illnesses in order to give the SFs an incentive to care for chronically ill patients. DMPs currently exist for diabetes types 1 and 2, breast cancer, coronary heart disease, asthma and chronic obstructive lung disease. DMP participants are accounted separately in the risk-adjusted reallocation mechanism between SFs, i.e. they generally receive higher per-capita allocations than for non-DMP participants. Through that mechanism, SFs with higher shares of DMP patients receive higher compensation. There are currently 14,000 regional DMPs with 3.8 million enrolled patients (as of late 2007).

Government: The German government delegates regulation to the self-governing corporatist bodies of both the SFs and the medical providers’ associations. The most important body is the Federal Joint Committee,

created in 2004 to increase efficacy and compliance; it replaced several sectoral committees. However, more purchasing powers are also given directly to the individual SFs, e.g. to contract providers directly, to negotiate rebates with pharmaceutical companies or to procure medical aids.

What is being done to ensure quality of care?

Quality of care is addressed through a range of measures: *Structural quality* is addressed by the requirement to have a quality management system for all providers, the obligation for continuous medical education for all physicians, and health technology assessment for drugs and procedures (for which the Institute for Quality and Efficiency, IQWiG, was founded in 2004), while hospital accreditation is voluntary. Minimum volume requirements were introduced for a number of complex procedures (e.g. transplantations), thereby requiring hospitals to provide this number in order to be reimbursed. *Process and partly outcome quality* is addressed through the mandatory quality reporting system for all 1800+ acute care hospitals. Under this system, more than 150 indicators are measured for 30 indications covering about one-sixth of all inpatients in Germany. Hospitals receive an individual feedback. Since 2007, around 30 indicators are made public in annual, mandatory hospital quality reports.

What is being done to improve efficiency?

Besides the measures to increase quality listed above, a set of other measures addresses efficiency more directly. All drugs, both patented and generic, have been subject to reference prices since 2004, unless they can demonstrate a clear added medical benefit. From 2008, IQWiG will explicitly evaluate the cost-effectiveness of drugs, thereby adding pressure on pharmaceutical prices. As mentioned, all hospitals are reimbursed through DRGs, so hospitals are paid the same for the same type of patient. As DRGs weights are calculated based on average costs, this puts enormous pressure on less efficient hospitals.

How are costs controlled?

In line with placing more emphasis on quality and efficiency, the previously imposed, relatively crude, but successful cost-containment measures (especially sector-wide budgets for ambulatory physicians, hospital budgets, collective prescription caps for physicians on a regional basis) are carefully revised. The prescription cap, which complemented the reference prices for pharmaceuticals, was lifted in 2001, initially leading to an unprecedented increase in spending on pharmaceuticals by the SFs. Then, prescription caps with individual liabilities were introduced. More recently negotiated rebates between SFs and pharmaceutical manufacturers and incentives to lower prices below the reference prices are the major instruments. Hospital budgets are being phased out between 2005 and 2008, while per-case DRGs become the main instrument to reimburse inpatient care. From 2009, the fixed budgets for ambulatory care will be replaced by more flexible budgets that take population morbidity into account.

The Dutch Health Care System

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Who is covered?

Since January 1, 2006, all residents or those paying income tax in the Netherlands are required to purchase health insurance coverage⁴. Coverage is statutory under the Health Insurance Act (*Zorgverzekeringswet*; ZVW) but provided by private health insurers and regulated under private law. The uninsured proportion of the population is estimated to be 1.5%, a figure that is likely to rise further (Maarse 2007). Asylum seekers are covered by the government and several mechanisms are in place to reimburse the health care costs of illegal immigrants unable to pay for care. New legislation regarding the health care costs of illegal immigrants is being debated in parliament.

Prior to 2006, people with earnings above approximately €30,000 (\$38,206) per year and their dependants (around 35% of the population) were excluded from statutory coverage provided by public sickness funds and could purchase coverage from private health insurers. This form of substitutive private health insurance⁵ was regulated by the government to ensure older people and people in poor health had adequate access to health care and to compensate the publicly-financed health insurance scheme for covering a disproportionate amount of high risk individuals. Over time, growing dissatisfaction with the dual system of public and private coverage led to the reforms of 2006.

What is covered?

Services: Insurers are legally required to provide a standard benefits package covering the following: medical care, including care by general practitioners (GPs), hospitals and midwives; hospitalization; dental care (up

to the age of 18; coverage from age 18 is confined to specialist dental care and dentures); medical aids; medicines; maternity care; ambulance and patient transport services; paramedical care (limited physiotherapy/remedial therapy, speech therapy, occupational therapy and dietary advice). Insurers may decide by whom and how this care is delivered, which gives the insured a choice of policies based on quality and costs. In addition to the standard benefits package, all citizens are covered by the statutory Exceptional Medical Expenses Act (AWBZ) scheme for a wide range of chronic and mental health care services such as home care and care in nursing homes. Most people also purchase complementary private health insurance for services not covered by the standard benefits package, although insurers are not required to accept applications for private health insurance.

Cost-sharing: The insured pay a flat-rate premium (set by insurers) to their private health insurer. Everyone with the same policy pays the same premium. In 2006 an insured person was eligible for a refund of €255 (\$324) if they incurred no health care costs. If they incurred costs of less than €255, they would receive the difference at the end of the year. This ‘no claims bonus’ system was abolished in 2007, following a change of government, and has been replaced by a system of deductibles. Every insured person aged 18 and over must now pay the first €150 (\$191) of any health care costs in a given year (with some services excluded from this general rule). Out-of-pocket payments as a proportion of total health expenditure are around 8% (Statistics Netherlands 2007; World Health Organization 2007).

Safety nets: Children are exempt from cost-sharing. The government provides ‘health care allowances’ for low income citizens if the average flat-rate premium exceeds 5% of their household income.

⁴ The exceptions are those with conscientious objections and members of the armed forces on active service.

⁵ Substitutive private health insurance covers people excluded from the publicly-financed health insurance scheme.

How is the health system financed?

Statutory health insurance: The statutory health insurance system (ZVW) is financed by a mixture of income-related contributions and premiums paid by the insured. The income-related contribution is set at 6.5% of the first €30,000 of annual taxable income. Employers must reimburse their employees for this contribution and employees must pay tax on this reimbursement. For those who do not have an employer and do not receive unemployment benefits, the income-related contribution is 4.4%. The contribution of self-employed people is individually assessed by the Tax Department. Contributions are collected centrally and distributed among insurers based on a risk-adjusted capitation formula. In 2006 the average annual premium was €1,050 (\$1,336). The government pays for the premiums of children up to the age of 18. In 2005 public sources of finance accounted for 65.7% of total health expenditure (World Health Organization 2007). In 2006 this proportion had risen to around 78% (Statistics Netherlands 2007).

Private health insurance: Substitutive private health insurance was abolished in 2006. Most of the population purchase a mixture of complementary and supplementary private health insurance from the same health insurers who provide statutory coverage. This has given rise to concerns about the potential for risk selection, as the premiums and products of voluntary coverage are not regulated. In 2005, private health insurance accounted for 20.1% of total health expenditure (World Health Organization 2007). In 2006 this proportion had fallen to about 7% (Statistics Netherlands 2007).

How is the delivery system organized?

Health insurance funds: Insurers are private and governed by private law. They are permitted to have for-profit status. They must be registered with the Supervisory Board for Health Insurance (CTZ) to enable supervision of the services they provide under the Health Insurance Act and to qualify for payments from the risk equalization fund. The insured have free choice of insurer and insurers must accept every resident in their coverage area (although most already operate nationally). A system of risk equalization/adjustment is used to prevent direct or indirect risk selection by insurers.

Physicians: Physicians practice directly or indirectly under contracts negotiated with private health insurers. GPs receive a capitation payment for each patient on their practice list and a fee per consultation. Additional budgets can be negotiated for extra services, practice nurses, complex location etc. Experiments with pay-for-performance for quality in primary and hospital care are underway. Most specialists are hospital based. Two-thirds of hospital-based specialists are self-employed, organized in partnerships and paid on a capped fee-for-service basis. The remainder are salaried. Future payments will increasingly be related to activity through the Dutch version of DRGs known as Diagnosis Treatment Combinations (DTCs).

Hospitals: Most hospitals are private non-profit organizations. Hospital budgets are developed using a formula that pays a fixed amount per bed, patient volume and number of licensed specialists, in addition to other factors. Additional funds are provided for capital investment, although hospitals are increasingly encouraged to obtain capital via the private market. From 2000, for several years payments to hospitals were rated according to performance on a number of accessibility indicators. Hospitals that produced fewer inpatient days than agreed with health insurers were paid less, a measure designed to reduce waiting lists. A new system of payment for specific products (DTCs) is currently being implemented. Ten percent all hospital services are now reimbursed on the basis of DTCs (up to 100% of all services in some hospitals). In the future, it is expected that most care will be reimbursed using DTCs, although there is still considerable debate about the desired speed of further liberalization of the hospital market (for example, through giving hospitals greater freedom in negotiating the price and quality of DTCs).

What is being done to ensure quality of care?

At the health system level, quality of care is ensured through legislation regarding professional performance, quality in health care institutions, patient rights and health technologies. A national inspectorate for health is responsible for monitoring and other activities. Most quality assurance is carried out by health care providers in close cooperation with patient and consumer organizations and insurers. Mechanisms to ensure quality in the care provided by individual professionals involve re-registration/re-validation for specialists based on compulsory continuous medical

education; regular on-site peer assessments organized by professional bodies; profession-owned clinical guidelines, indicators and peer review. The main methods used to ensure quality in institutions include accreditation and certification; compulsory and voluntary performance assessment based on indicators; and national quality improvement programs based on the breakthrough method (Sneller Beter). Patient experiences are systematically assessed and, since 2007, a national center has been working with validated measurement instruments comparable to the CAHPS approach in the United States. The center also generates publicly-available information for consumer choice.

What is being done to improve efficiency?

The main approach to improving efficiency in the Dutch health system rests on regulated competition between insurers combined with central steering on performance and transparency about outcomes via the use of performance indicators. This is complemented by provider payment reforms involving a general shift from a budget-oriented reimbursement system to a performance-related approach (for example, the introduction of DTCs mentioned above). In addition, various local and national programs aim to improve health care logistics and/or initiate ‘business process re-engineering’. At a national level, health technology assessment (HTA) is used to enhance value for money by informing decision making about reimbursement and encouraging appropriate use of health technologies. At the local level, several mechanisms are used to ensure appropriate prescribing.

How are costs controlled?

The new Health Insurance Act aims to increase competition between private health insurers and providers to control costs and increase quality, but it is still too early to say whether these aims have been met. Increasingly, costs are expected to be controlled by the new DTC system in which hospitals must compete on price for specific services.

The New Zealand Health and Disability System

David Squires
The Commonwealth Fund

Who is covered?

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

What is covered?

Services: The publicly-funded system covers: public health preventive and promotional services; inpatient and outpatient hospital care; primary health care services; inpatient and outpatient prescription drugs; mental health care; dental care for school children; and disability support services. Residents have free choice of their GP.

Cost-sharing: Co-payments are required for GP and general practice nurse primary health care services, prescription drugs (NZ \$3.00; USD \$1.67 USD per item), private hospital or specialist care, and adult dental care. Subsidies for long-term aged care are asset tested. In addition, complementary and alternative medicines and therapies are paid for out-of-pocket.

Safety Net: Health care is substantially free for children under age 6 and is subsidized to a significant degree for all people enrolled with Primary Health Organisations (PHOs), which includes 95% of the public.

How is the health system financed?

Government: Public funding is derived from general taxation (86%), levies on employers (13%), and local government (1%). Overall, public funding accounts for about 78% of health care expenditures (2006). The government sets a global budget annually for most publicly-funded health services. This is distributed to District Health Boards (DHBs). DHBs provide services at government-owned facilities (about one-half, by value, of all health services) and purchase other services from privately owned providers, such as GPs (most of whom are grouped as PHOs), disability support services, and community care. Accident and injury care is financed by a separate quasi-government agency, the Accident Compensation Corporation (ACC).

Private Insurance: Not-for-profit insurers generally cover private medical care. Private insurance is most commonly used to cover cost-sharing requirements, elective surgery in private hospitals, and specialist outpatient consultations. About one-third of New Zealanders have private health insurance, which accounts for approximately 4.7% of total health care expenditures (2006).

Out-of-Pocket: Patients pay co-payments for GP services, pharmaceuticals, private hospital or specialist care, and adult dental care. Subsidies for long-term aged care are asset tested. Out-of-pocket payments account for 17% of health care expenditures (2006).

How is the delivery system organized?

Physicians: GPs act as gatekeepers and are independent, self-employed providers, paid through fee-for-service with partial government subsidy and capitation through PHOs. Consultants (specialists) working for DHBs are salaried but may supplement their salaries through treatment of patients in private (non-crown) hospitals.

Primary Health Organisations (PHOs): The Government has injected substantial additional funding into subsidizing primary health care to improve access to services. Since July 2002, 80 PHOs have formed to reduce health disparities and take a population approach to primary health care. Ninety-five percent of New Zealanders are now enrolled with a PHO. PHOs are networks of self-employed providers, which practice clinical and non-clinical health and are funded by capitation and fee-for-service. Since July 2007, all New Zealanders receive low-cost access to primary health services provided by PHOs.

District Health Boards (DHBs): DHBs (21 in the country) are partly elected by the people of a geographic area and partly appointed by the Minister of Health. DHBs determine the health and disability support service needs of the population in their districts, as well as the planning, providing, and purchasing of those services. A DHB's organization has a funding arm and a service

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provision arm, operating government-owned hospitals, health centers, and community services.

Government: New Zealand's government has responsibility for legislation, regulation, and general policy matters. It funds the majority of health care expenditures and owns DHB assets.

What is being done to ensure quality of care?

In the 2007/2008 financial year, the Minister of Health launched a set of ten Health Targets organized around the Minister's priorities. The target areas include increasing childhood immunization coverage, expanding oral health services, improving diabetes care, reducing cancer treatment waiting times, reducing tobacco consumption, improving diets, reducing avoidable hospital admission rates, increasing uptake of mental health relapse prevention plans, improving the responsiveness of elective services and reducing Ministry of Health expenditures on overhead. The Ministry of Health, District Health Boards, and non-government organizations work collaboratively to achieve Health targets at DHB and national levels.

The Quality Improvement Committee (QIC) is currently pursuing several National Quality Improvement Programmes (NQIP) in public hospitals. These focus on: safer medication management, optimizing the patient journey, reducing healthcare acquired infection rates, standardizing national incident management, establishing a per-operative mortality review committee, and building a consumer forum. DHBs have 0.25% of their funding at risk if they fail to participate in these programs. The QIC is also currently working up a "Saving 1,000 Lives" campaign based on the Institute for Healthcare Improvement's "Saving 100,000 Lives" campaign. If successful, this would give structure and branding to the existing NQIPs, and focus on the additional areas of safer surgery, transforming care at the bedside, and safer cardiac care.

The government quarterly releases a Hospital Benchmark Information Report, used by the DHBs to improve performance. This report includes quality and outcome data on Emergency Triage Rates, Acute Readmissions, Patient Satisfaction, and Hospital Acquired *S. aureus* Bloodstream Infections. A quarterly report on DHB performance is also publicly released, which provides a rating for each DHB on a series of performance indicators

in such areas as waiting times, access to primary care services, and mental illness outcomes. Furthermore, all 21 DHBs are partners in the Health Round Table, which produces benchmarking data. This data compares NZ hospital performance with Australian hospitals.

Certification is mandatory for hospitals, rest homes and residential disability, subject to defined health and disability standards. Certification audits are often performed in conjunction with accreditation by third parties.

An independent Health Ombudsman (the Health and Disability Commissioner) investigates patient complaints and highlights area for improvement. The Commissioner has advocated for a coordinated national effort to improve the quality of care for patients.

What is being done to improve efficiency?

New Zealand has given considerable attention to prioritisation, particularly in the development of access criteria. For several types of surgeries, patients are assigned a Clinical Priority Assessment Criteria score intended to give priority to patients with the greatest need and potential to benefit, thereby rationalizing the waiting system. This method of prioritization has been controversial and regional disparities remain in access to surgery. Also, the NZ Health Information Services operates a National Booking Reporting System, which keeps track of how many patients are waiting for treatment and how long those who received treatment waited. These statistics are used to plan wait-time reduction policies. The Hospital Benchmarking Information Report uses DHB-level measures related to efficiency (average length of stay, daycase procedures, day of surgery admission, and did not attend) to inform system improvements.

The Ministry of Health regularly releases a newsletter, "Scanning the Horizon: Recent Developments in Health Innovations and Technologies", to update DHBs and providers on the opportunities offered by new health technologies. The National Service and Technology Review Advisory Committee operates under an assessment framework to evaluate new health interventions and service reconfigurations.

How are costs controlled?

The government sets an annual publicly-funded health budget. New Zealand is shifting from open-ended, fee-for-service arrangements to contracting and funding mechanisms such as capitation. “Booking systems” in lieu of waiting lists ensure that elective surgery services are targeted to those people best able to benefit. Early intervention, health promotion, disease prevention, and chronic care management are being emphasized in primary care and by DHBs. Drug purchasing for the country occurs through a government agency (Pharmac) for publicly subsidized drugs dispensed through community pharmacies and hospital. The competitive tendering process has kept pharmaceutical costs low and increased their availability, though it has compromised the available range.

The Swedish Health Care System

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Who is covered?

Coverage is universal. All residents are entitled to publicly-financed health care.

What is covered?

Services: The publicly-financed health system covers: public health and preventive services; inpatient and outpatient hospital care; primary health care; inpatient and outpatient prescription drugs; mental health care; dental care for children and young people; rehabilitation services; disability support services; patient transport support services; home care; and nursing home care. Possibilities for residents to choose primary care provider and hospital vary by county council.

Cost-sharing: Cost-sharing arrangements exist for most publicly-financed services. Patients pay SEK 100-150 (about \$15-23) per visit to a primary care doctor, SEK 200-300 (\$30-46) for a visit to a specialist or to access emergency care and up to SEK 80 (\$12) per day in hospital (MISSOC 2007). For outpatient pharmaceuticals, patients pay the entire cost up to SEK 900 per year (\$137), while costs above this are subsidized at different rates (50%, 75%, 90% and 100%) depending on the level of out of pocket expenditure. Out-of-pocket payments accounted for 13.9% of total health expenditure in 2005 (World Health Organization 2007).

Safety nets: The maximum amount to be paid out-of-pocket for publicly-financed care in a 12-month period is SEK 900 (\$137) for health services and SEK 1,800 (\$274) for outpatient pharmaceuticals. Children are exempt from cost-sharing for health services. An annual maximum of SEK 1,800 (\$274) for pharmaceuticals applies to children belonging to the same family. Limited subsidies are available for adult dental care.

How is the health system financed?

The publicly-financed system: Public funding for health care mainly comes from central and local taxation. County councils and municipalities have the right to levy proportional income taxes on their residents. The central government provides funding for prescription drug subsidies. It also provides financial support to county councils and municipalities through grants allocated using a risk-adjusted capitation formula. One-off central government grants focus on specific problem areas such as geographical inequalities in access to health care. County councils provide funding for mental health care, primary care and specialist services in hospitals. Municipalities provide funding for home care, home services and nursing home care. Local income taxes account for 70% of county council and municipality budgets; the remainder comes from central government grants and user charges. Overall, public funding accounted for 85% of total health expenditure in 2005 (World Health Organization 2007).

Private health insurance: About 2.5% of the population is covered by supplemental private health insurance, which provides faster access to care and access to care in the private sector. In 2005 private health insurance accounted for less than 1% of total expenditure on health (World Health Organization 2007).

How is the delivery system organized?

Government: The three levels of government (central government, county councils and municipalities) are all involved in health care. The central government determines the health system's overall objectives and regulation, while local governments determine how services are to be delivered based on local conditions and priorities. As a result, the organization of the delivery system varies at the local level.

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Primary care: Organization of primary care varies across county councils. Most health centers are owned and operated by county councils, and general practitioners and other staff are salaried employees. Traditionally, health centers have been responsible for providing primary care to residents within a geographical area. This model is being replaced, with increased possibilities for residents to choose their provider and physician. Primary care has no formal gatekeeping function. Residents may choose to go directly to hospitals or to private specialists contracted by county councils. Increasingly, residents are encouraged to visit their primary care provider first. Higher co-payments for specialist visits are used to support such behavior. Payment of public primary care providers is largely based on capitation, topped up with fee-for-service and/or target payments. The number of private primary care providers and ambulatory specialists working under a public contract is increasing; in some county councils about half of primary care physicians are private. Fee-for-service arrangements with cost and volume contracts is more common for payment of private providers, in particular for ambulatory specialists.

Hospitals: Almost all hospitals are owned and operated by the county councils. There are no private wings in public hospitals. Hospitals have traditionally had large outpatient departments, reflecting low levels of investment in primary care. For tertiary care the county councils collaborate in the six regions with at least one university hospital. Private hospitals mainly specialize in elective surgery and work under contract with county councils. Physicians and other hospital staff are salaried employees. Payment of hospitals is usually based on DRGs (diagnosis-related groups) combined with global budgets.

What is being done to ensure quality of care?

At the national level, the Swedish Council on Technology Assessment in Health Care (SBU) and the National Board of Health and Social Welfare support local governments by preparing systematic reviews of evidence and guidance for priority setting respectively.

At the local and clinical level, medical quality registers managed by specialist organizations play an increasingly important role in assessing new treatment options and providing a basis for comparison across providers. Transparency has increased and some registers are now at least

partly available to the public. Since 2006, performance indicators applied to county councils and, to some extent, providers are systematically applied by the county councils in collaboration with the National Board of Health and Welfare. Further improvements in the transparency of national quality assessment include setting up a register of drug use.

Concern for patient safety has been growing. The five most important areas with potential for improvement are: unsafe drug use, particularly among older people; hospital hygiene; falls; routines to control for fully avoidable patient risks; and communication between health care staff and between staff and patients.

What is being done to improve efficiency?

Several initiatives are being implemented to improve general access to health services and to treatment. According to an agreement between the county councils and the central government, all non-acute patients should be able to see a primary care physician within seven days, visit a specialist within 90 days of referral by a GP and obtain treatment within 90 days of the prescription of treatment by a specialist. Most county councils struggle with longer waiting times for at least some patients and services (particularly for elective surgery). If patients are required to wait more than 90 days, they can choose an alternative provider with assistance from their county council.

In primary care, residents in several counties are encouraged to choose a provider based on their own assessment of access and quality, with money following the patient. A parallel policy is to increase the number of private primary care providers and encourage general competition for registration by residents. At the same time, however, there is a call for closer collaboration between primary care providers, hospitals and nursing home care, particularly where care of older people is concerned. There are similar calls for increased integration of health and social services for mental health patients.

How are costs controlled?

County councils and municipalities are required by law to set annual budgets for their activities and to balance these budgets. In the past, the

central government has introduced temporary financial penalties (by lowering its grant) for local governments that raised their local income tax rate above a specified level. For prescription drugs, the county councils and the central government agree on subsidies to the county councils for a period of five years. The national Pharmaceutical Benefits Board (Läkemedelsförmånsnämnden; LFN) engages in value-based pricing of prescription drugs, determining reimbursement based on an assessment of health needs and cost-effectiveness.

At the local level, costs are controlled by the fact that most health care providers are owned and operated by the county councils and municipalities. Most private providers work under contract with county councils. Financing of health services through global budgets and contracts and paying staff a salary also contributes to cost control. Although several hospitals are paid on a DRG basis, payments usually fall once a specified volume of activity has been reached, which limits hospitals' incentives to increase activity. Primary care services are mainly paid for via capitation or global budgets, with minimal use of fee-for-service arrangements. In several county councils, primary care providers are financially responsible for prescribing costs, which creates incentives to control pharmaceutical expenditure.

The Swiss Health Care System

David Squires

The Commonwealth Fund

Who is covered?

Coverage is universal, with residents mandated under the 1996 Health Insurance Law to purchase basic health insurance from among competing health funds. There are virtually no uninsured residents. Insurance is individual, and does not extend to dependents nor is it sponsored by employers. Many residents also purchase supplementary insurance to cover additional services that are not covered under the basic package or for free choice of doctor when hospitalized.

What is covered?

Services: The basic insurance package covers most GP and specialist services, as well as a list of pharmaceuticals, complementary medicine, and some preventative measures. It covers some out-of-canton services, though many residents purchase supplemental insurance for wider coverage and more options.

Cost-sharing: Health funds are required to offer a minimum annual deductible of 300 CHF (\$257), though enrollees may opt for a higher deductible and a lower premium. Enrollees pay 10% coinsurance for all services, except a 20% charge for brand name drugs with a generic alternative unless specifically prescribed, and a 10 CHF (\$8.65) copayment per inpatient day. Several populations are exempt from deductibles - among them, large families, women during maternity, social-assistance beneficiaries, enrollees of some managed care plans, and recipients of supplementary old-age and disability benefits.

Safety nets: Coinsurance charges are waived after an enrollee reaches 700 CHF (\$600) in a given year. Cantons provide income-based assistance to individuals to help cover their premiums, though the process varies by canton. Roughly 1.6% of residents do not pay their premiums, which each canton is in charge of regulating.

How is the health system financed?

Statutory Health Insurance: Mandatory basic insurance, regulated by the Federal Office of Public Health, is purchased on an individual basis from a number of competing non-profit insurers. Most premiums range between CHF 3,732 and CHF 4,764 (\$3,204 to \$4,090). Revenue is redistributed among insurers from a central fund according to a risk equalization scheme based on age and gender. As of 2012, this scheme will also take into account hospital or nursing home stays of more than three days in the previous year. Transfer amounts are established retroactively, possibly resulting in a penalty for lowering costs. Insurers offer premiums for defined regions, and they may vary only according to age category and level of deductible. In the same region the premium variation between insurers can be significant – as much as 89% in Zurich. This variation may be due in large part to risk selection rather than efficiency differences. Non-managed care insurance plans pay uniform prices for services; these prices are negotiated by insurer and supplier organizations. Mandatory basic insurance finances 43% of total health expenditures.

Private health insurance: Regulated by the Federal Office of Private Insurance, private health insurers can vary benefit packages and premiums, and refuse enrolment to applicants based on health information. Unlike insurers offering basic coverage, private insurers can be for-profit. Often an insurer will have a non-profit branch offering mandatory basic insurance and a for-profit branch offering private insurance. It is illegal for private insurers to base private insurance enrolment decisions on health information obtained via basic health coverage, but this is hard to enforce. Private insurance finances 8.5% of total health expenditure.

Other: Out-of-Pocket expenditures are relatively high, contributing 30.3% of total health expenditure. Along with deductibles and coinsurance, Switzerland has high rates of out-of-pocket spending on dentistry and long-term care. Basic insurance only covers “medically necessary” services for long-term care and as a result funding for many services are left to the individual or are absorbed by the community. One possible proposal to

alleviate the individual financial stress of long-term care is to create long-term care savings account for citizens between 58 and 80.

How is the delivery system organized?

Health Insurance Funds: Insurers are private though strictly regulated. All insurers offering basic coverage must be non-profit, while insurers offering supplemental coverage may be for-profit. Often insurers offer both and are split into non-profit and for-profit branches. Residents have free choice among insurers, who are required to accept all applicants for the basic package and may not vary premiums other than regionally and by age group. A risk equalization scheme redistributes revenue among insurers to discourage risk selection. Managed care organizations are allowed, and twelve percent of residents enroll for basic coverage with a managed care insurer, either HMOs, IPAs, or free-for-service with gatekeeping provisions. In two-thirds of these, GPs act as gatekeepers through whom specialist care is referred, though patients can also register with specialists as their gatekeepers. Patients have broad choice of physicians.

Government: The system is highly decentralized. The 26 cantons each play several roles and are responsible for regulating insurers, hospital planning, and financing a number of institutions. Inpatient care, in particular, is heavily financed by the cantons. Government spending makes up 17.2% of total health expenditure (2006).

Physicians: Basic insurance covers most GP and specialist care, and residents generally have free choice of GPs and access without a referral to specialists (unless enrolled with a gatekeeping managed care plan). Switzerland spends CHF 2,031 (\$1,740) per capita on outpatient care, a relatively high amount (2006). Outpatient care tends to be physician-centered with nurses playing a relatively small role. Some managed care plans operate capitation models, where physician groups are paid on a capitation basis. Otherwise, physicians are paid on a fee-for-service schedule negotiated between insurers and provider organizations at the canton level.

Hospitals: Cantons provide a substantial share of hospital funding, and have responsibility for hospital planning. About 75% of acute inpatient procedures are provided by public or publicly-subsidized hospitals. This

system of planning and funding hospitals on the canton level rather than centrally is a primary reason that the Swiss system is fragmented along cantonal lines. Additionally, hospitals receive a portion of their funding from insurers in the form of per diem rates.

What is being done to ensure quality of care?

Professional self-regulation has been the traditional approach in quality improvement. Providers must be licensed in order to practice medicine, which requires meeting educational and regulatory standards. Accreditation for medical schools is optional, though accreditation for post-graduate curricula is mandatory. Cantons often have their own requirements for certification.

Many medical organizations have developed clinical pathways and consensus guidelines, though these are not standardized or used systematically nationwide. Many local quality initiatives have been undertaken, often at the provider level. In recent years, the government has examined implementing a framework for systematic quality measurement, public reporting, and minimum national standards.

What is being done to improve efficiency?

TARMED, a partially standardized fee schedule for outpatient care across Switzerland, gives greater weight to non-technical services than technical services, incentivizing less resource-intensive forms of care. Also, per diem payment rates to hospitals, which encourage longer stays, are being phased out in favor of diagnosis-based remuneration schedules.

The risk equalization scheme is designed to force insurers to compete on cost and quality only, employing the power of market forces to improve efficiency. While under the current scheme (which considers only age and gender) observers generally acknowledge that risk selection is still broadly used, as of 2012 it will be refined to include hospital and nursing home stays of more than three days in the previous year. This reform should bolster the market incentive to improve efficiency. Furthermore, the risk equalization scheme currently looks retroactively at insurers' actual costs when determining how much to transfer – this may further discourage cost-control and efficiency improvements, and so may be reformed.

A national HIT strategy has been developed seeking to implement a national portal for HIT, an electronic patient file system, and an electronic insurance card system. These initiatives are coordinated and receive funding through the central and cantonal governments.

Reducing cantonal barriers has been a controversial topic in recent years, such as in proposals to allow free patient movement between hospitals.

How are costs controlled?

Switzerland has some of the highest health costs in the world, spending CHF 7,347 (\$6,305) per capita in 2006 (only the U.S. and Norway spend more). Some insurance plans employ gatekeeping and capitation payments for physicians. Among managed care plans, HMOs are estimated to achieve savings of between 20% and 37%. Out-of-pocket expenditures are high, which may reduce overall expenditure, though they are typically due to dental and long-term care. Premium differences within cantons are generally considered to be due to risk selection rather than cost control.

All new pharmaceuticals are evaluated before a coverage decision is made, during which both effectiveness and price are considered. Efforts are also being made to more frequently reassess the price of older drugs. Generic drugs must be sold for at least 30% lower than the original brand; however, they make up only 3% of the drugs allowed entry into the Swiss market, due in part to import restrictions. Patients pay an elevated coinsurance for brand name drugs that have a generic equivalent (20% rather than 10%). Pharmacists and clinicians are paid a flat amount for dispensing drugs, rather than an amount based on the price, reducing their incentive to prescribe the most expensive drug.

The United Kingdom Health Care System

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Who is covered?

Coverage is universal. All those ‘ordinarily resident’ in the United Kingdom are entitled to health care that is largely free at the point of use.

What is covered?

Services: Publicly-funded coverage: the National Health Service (NHS) covers preventative services; inpatient and outpatient (ambulatory) hospital (specialist) care; physician (general practitioner) services; inpatient and outpatient drugs; dental care; mental health care; learning disabilities; and rehabilitation.

Cost-sharing: There are relatively few cost-sharing arrangements for publicly-covered services. Drugs prescribed under the NHS by general practitioners, dentists and other independent prescribers are subject to a fixed rate charge (£7.10 per prescription in England; \$11.36), but about 89% of prescriptions are exempt from charges (Department of Health 2008). NHS Dentistry services are subject to patient charges of up to a maximum of £198 per course of treatment (\$320), although for historic reasons there is difficulty in accessing NHS dental services in some areas. Increasing access to NHS dentistry is currently a national priority for the NHS. Out-of-pocket payments accounted for 11.9% of total expenditure on health in 2005 (World Health Organization 2007).

Safety nets: Most costs are met from the public purse. There are measures in place to alleviate costs where these may have an undue impact on certain patient groups. The following are exempt from prescription drug fixed rate charges: children under the age of 16 years and those in full-time education aged 16, 17 or 18; people aged 60 years or over; people with low income; pregnant women and those having had a baby in the last 12 months; and people with certain medical conditions and disabilities. There are discounts through pre-payment certificates for people who use a large amount of

prescription drugs. Transport costs to and from provider sites are also covered for people with low income.

How is the health system financed?

National Health Service (NHS): The NHS accounts for 87% of total health expenditure. It is mainly funded by general taxation (76%), but also by national insurance contributions (19%) and user charges (5%) (Department of Health 2006). Apart from the income the NHS receives for the provision of prescription drugs and dentistry services to the general population, there is some income from other fees and charges, particularly to private patients who use NHS services.

Private health insurance: A mix of for-profit and not-for-profit insurers provide supplementary private health insurance. Private insurance offers choice of specialists, avoidance of queues for elective surgery and higher standards of comfort and privacy than the NHS. It covers 12% of the population and accounted for 1% of total health expenditure in 2004.

Other: People also pay directly out-of-pocket for some services – for example, care in the private sector. Direct out-of-pocket payments account for over 90% of total private expenditure on health.

How is the delivery system organized?

Physicians: General practitioners (GPs) are usually the first point of contact for patients and act as gatekeepers for access to secondary care services. Most GPs are paid directly by primary care trusts (PCTs) through a combination of methods: salary, capitation and fee-for-service. The 2004 GP contract introduced a range of different local contracting possibilities as well as providing substantial financial incentives tied to achievement of clinical and other performance targets. Private providers of GP services set their own fee-for-service rates but are not generally reimbursed by the public system.

Dentists: Primary care dental services are delivered in England through a system of local commissioning introduced in 2006. Primary care trusts contract with dental for an agreed level of dental services per annum. Some dentists are employed directly by the primary care trusts on a salaried basis. Most dentists provide private as well as NHS care. They set their own fees for private services, or contract with a private insurance company. Private dental care is not generally reimbursed by the public system.

Hospitals: These are organized as NHS trusts directly responsible to the Department of Health. More recently, foundation trusts have been established as semi-autonomous, self-governing public trusts. Both contract with PCTs for the provision of services to local populations. Public funds have always been used to purchase some care from the private sector, but since 2003 some routine elective surgery has been procured for NHS patients from purpose-built treatment centers owned and staffed by private sector providers. Consultants (specialists) work mainly in NHS hospitals but may supplement their salary by treating private patients.

Government: Responsibility for health legislation and general policy matters rests with Parliament at Westminster. The NHS is administered through regional strategic health authorities who are accountable to the Department of Health. Services locally are provided through a series of contracts between commissioners of health care services (PCTs) and providers (hospital trusts, GPs, independent providers). PCTs control around 80% of the NHS budget (allocated to them based on a risk-adjusted capitation formula) and are responsible for ensuring the provision of primary and community services for their local populations. Recent policy developments include the introduction of patient choice of hospital and a move to the reimbursement of hospitals using a DRG-like activity-based funding system known as Payment by Results (PbR). PbR relates payment to the quantity and case mix of activity undertaken.

Private insurance funds: Private insurers provide their subscribers with health care at a range of private and NHS hospitals. Patients generally can choose from a number of health care providers.

What is being done to ensure quality of care?

Quality of care is a key focus of the NHS. A Department of Health objective in 2007 was to enhance the quality and safety of health and social care services. Quality issues are addressed in a range of ways including:

Regulatory bodies: A number of bodies monitor and assess the quality of health services provided by public and private providers. This involves regular assessment of all providers, investigation of individual providers where an issue has been drawn to the attention of the regulatory body, and consideration of key areas of provision in order to recommend best practice. A new integrated regulator covering health and adult social care (the Care Quality Commission) was established in October 2008 and will take over from the Healthcare Commission, the Commission for Social Care Inspection and the Mental Health Act Commission on 1 April 2009.

Targets: Targets have been set by the government for a range of variables that reflect the quality of care delivered. Some of these targets are monitored by the regulatory bodies mentioned above; others are monitored on a regular basis either by the Department of Health or the regional strategic health authorities.

National Service Frameworks (NSFs): Since 1998 the Department of Health has developed a set of NSFs intended to improve particular areas of care (for example, coronary, cancer, mental health, diabetes). These set national standards and identify key interventions for defined services or care groups. They are one of a range of measures used to raise quality and decrease variations in service.

Quality and Outcomes Framework: This is a new framework for measuring the quality of care delivered by GPs. It was introduced as part of the new GP contract in 2004, which provided incentives for improving quality, and has been operating since 2005. GP practices are awarded points related to payments for how well the practice is organized, how patients view their experience at the surgery, whether extra services are offered, such as child health and maternity, and how well common chronic diseases such as asthma and diabetes are managed.

What is being done to improve efficiency?

Efficiency has always been a key focus of the NHS. The NHS seeks to improve efficiency in a range of ways including:

High-level efficiency targets: The government is committed to a program to achieve efficiency gains of £6.5 billion (\$10.4 billion) by March 2008 through a range of policies known as the Gershon Efficiency Programme. These include increasing front-line productivity, centralizing procurement to obtain more cost-effective deals, reductions in the costs of both NHS provider and central administration and increasing the efficiency of social care provision. Local NHS organizations are also set targets for efficiency savings.

Benchmarking: NHS organizations are benchmarked against the performance of their peers on a number of activity measures, including day case rates and lengths of stay for common operative procedures, readmission rates and NHS reference costs (costs of standard procedures known as Healthcare Resource Groups). The Healthcare Commission reviews the performance of NHS trusts against these measures in providing an overall assessment of NHS performance through the Annual NHS Health Check.

Institute for Innovation and Improvement: The Department of Health supports the development of better and more efficient ways of providing health care through the use of semi-autonomous bodies such as the Institute for Innovation and Improvement. The Institute helps the NHS to develop new ways of dealing with the introduction of new technology and changes to working practices, and helps to spread these throughout the NHS.

How are costs controlled?

The government sets the budget for the NHS on a three-year cycle. To control utilization and costs, the government sets a capped overall budget for PCTs. NHS trusts and PCTs are expected to achieve financial balance each year. The centralized administrative system tends to result in lower overhead costs. Other mechanisms that contribute to improved value for money include arrangements for the systematic appraisal of new

technologies through the National Institute for Health and Clinical Excellence (NICE).

The United States Health Care System

David Squires
The Commonwealth Fund

Who is covered?

Health care coverage is fragmented and incomplete. In 2007, 68% of residents received coverage from private insurers, 59% receiving it through their employer, and 9% paying directly. Twenty-eight percent were covered under a federal program: 14% under Medicare (aged 65+), 13% under Medicaid (low-income and disabled), and 4% under military health care programs (Some people have coverage from more than one source). Forty-six million residents, slightly more than 15% percent, were uninsured.

What is covered?

Services: Benefit packages vary according to type of insurance, but often include inpatient and outpatient hospital care and physician services. Many also include preventive services and prescription drug coverage, and dental care coverage also is available. Beginning January 2006, Medicare was expanded to cover outpatient prescription drugs. Medicaid, available to the elderly and the disabled, also covers nursing home and home health care.

Cost-sharing: Cost-sharing provisions vary by type of insurance. Out-of-pocket payments account for 12.8% of overall health expenditures.

How is the health system financed?

Medicare: Social insurance program for the elderly, some of the disabled under age 65, and those with end-stage renal disease. Administered by the federal government, the program is financed through a combination of payroll taxes, premiums, and federal general revenues. Medicare accounts for 17% of total health expenditures.

Medicaid: Joint federal-state health insurance program covering certain groups of the poor. Medicaid is administered by the states, which operate within broad federal guidelines. States receive matching funds from the

federal government, varying among states from 50% to 78% of Medicaid expenditures. Medicaid accounts for 16% of total health expenditures.

Private Insurance: Provided by more than 1,200 not-for-profit and for-profit health insurance companies regulated by state insurance commissioners. Private health insurance can be purchased by individuals, or it can be funded by voluntary premium contributions shared by employers and employees on an employer-specific basis, sometimes varying by type of employee. Employer coverage is the predominant form of health insurance coverage. Some individuals are covered by both public and private insurance. It accounts for 35% of total health expenditures.

Other: Out-of-pocket payments, other private funds, and other public funds account for 32% of total national health expenditures.

How is the delivery system organized?

Physicians: General practitioners have no formal gatekeeper function, except within some managed care plans. The majority of physicians are in private practice. They are paid through a combination of methods: charges or discounted fees paid by most private health plans, capitation rate contracts with some private plans, and fees paid by public programs; insured patients are generally directly responsible for some portion of physician payment, and uninsured patients are responsible for all or part of the physicians' charges.

Hospitals: For-profit, non-profit, and public hospitals. Hospitals are paid through a combination of methods: per service or per diem charges, per admission payments, and capitation.

Other providers (nursing facilities, home health agencies, et al.) are paid through a variety of methods that vary by provider type and by payer.

What is being done to improve quality of care?

Medicare is developing a variety of programs that seek to align financial incentives with quality of care, commonly referred to as pay-for-performance (P4P). Nearly 60 percent of private insurance providers also have a P4P program. In these programs, payment is tied to a set of quality measures on process of care, health outcomes, cost efficiency, patient satisfaction, and/or information technology. These programs are typically aimed at primary care physicians and, less often, specialists. Medicare is conducting several P4P demonstration projects aimed at hospitals and physician groups, and is developing approaches for smaller physician practices, as well. Recently, Medicare stopped paying hospitals for the added costs of eight specific preventable events, such as operations to retrieve sponges or tools left inside a patient after surgery.

The Joint Commission - an independent, non-profit organization - accredits over 15,000 health care organizations across the country, primarily hospitals long-term care facilities, and laboratories. It looks at multiple dimensions, such as patient treatment, governance, culture, performance, and quality improvement, and collaborates closely with the Centers for Medicare and Medicaid (CMS) on evaluative criteria. The National Committee for Quality Assurance (NCQA) is the primary accreditor of health plans. Accredited organizations must report annually on performance measures in over 40 areas and meet more than 60 standards. The American Board of Medical Specialties and the American Board of Internal Medicine provide certification to physicians who pass various quality standards. Requirements include using practice data to evaluate one's own performance and obtaining patient feedback.

CMS has moved towards increased public reporting with Hospital Compare - reporting on process of care, outcome of care, and patient experience measures - and Nursing Home Compare - reporting on a number of quality indicators measured through inspections and a review of records. In addition, states (California, Pennsylvania, Wisconsin, and others) have developed their own public reporting systems for ambulatory care, intended to increase quality improvement and provide benchmark data.

The Agency for Healthcare Research and Quality (AHRQ), funded by the federal government, conducts research on evidence-based practices,

outcomes, effectiveness, clinical guidelines, safety, patient experience, HIT, and disparities.

What is being done to improve efficiency?

The government has funded several initiatives towards shifting from a specialist-focused health system to a primary care-focused system. The Medicare Medical Home Demonstration project, beginning in 2009, will restructure reimbursement rates so as to include coordination of care and other costs not currently covered. CMS is funding a number of initiatives aimed at “rebalancing” long-term care, shifting Medicaid resources from institutions towards community-based services. These reforms are aimed at allowing patients who require some health services to stay in their home, rather than being admitted to resource-intensive institutional care.

Innovation is common among private insurers and practices, but the large degree of fragmentation in the national health system proves a barrier towards improving efficiency. Insurance and administration costs are high at 7.2% of total health expenditures. Wide-scale coordination is difficult to achieve, and local or regional systems are often incompatible with each other. Widespread use of electronic medical records, for example, has developed more slowly than in most European countries. The large number of uninsured further complicates efforts to improve efficiency. The care they receive but do not pay for is generally absorbed by hospitals, resulting in higher costs throughout the system. Also, the uninsured's encounters with the health system tend to be more resource-intensive than those with regular care – for example, higher emergency room use and less preventive care.

How are costs controlled?

Annual per capita health expenditure is the highest in the world - \$6,714 in 2006. Total national health expenditures have been increasing at rates well above increases in national income, with total expenditures reaching 15.3% of GDP as of 2006. Annual rates of increase since 2000 have averaged 7% to 8% per year.

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

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Medicare Modernization Act of 2003 included new provisions for tax credits for Health Savings Accounts (HSAs) when coupled with high deductible (\$1,000+) health insurance plans. HSAs allow individuals to save money tax-free to use on out-of-pocket medical expenses. Tax incentives plus double digit increases in premiums have led to a shift in benefit design toward higher patient payments.

Medicare, Medicaid, and various private purchasers, including employer groups, are also experimenting with new payment incentives that reward performance. Strategies being implemented include “value based” purchasing, which is intended to reward care systems or providers that provide higher quality and more efficient care.