

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

NOVEMBER 2009

MULTINATIONAL COMPARISONS OF HEALTH SYSTEMS DATA SELECTED INDICATORS FOR THIRTEEN COUNTRIES

		Australia	Canada	Denmark	France	Germany	Italy	Netherlands	New Zealand	Norway	Sweden	Switzerland	U.K.	U.S.
Population, 2007	Total Population (1,000,000s of People)	21.0	33.0	5.5	61.7	82.3	58.9	16.4	4.2	4.7	9.1	7.6	61.0	301.6
	Percenaget of Population Over Age 65	13.1%	13.4%	15.5%	16.4%	20.2%	19.7%	14.6%	12.5%	14.6%	17.4%	16.3%	16.0%	12.6%
Spending, 2007	Percentage of GDP Spent on Health Care	8.7% ^a	10.1%	9.8%	11.0%	10.4%	8.7%	9.8%	9.2%	8.9%	9.1%	10.8%	8.4%	16.0%
	Health Care Spending per Capita ^d	\$3,137 ^a	\$3,895	\$3,512	\$3,601	\$3,588	\$2,686	\$3,837	\$2,510	\$4,763	\$3,323	\$4,417	\$2,992	\$7,290
	Average Annual Growth Rate of Real Health Care Spending per Capita, 1997-2007	3.8% ^c	3.8%	3.5%	2.5%	1.7%	2.4%	4.2%	4.5%	2.4%	4.1%	2.3%	4.9%	3.7%
	Out-of-Pocket Health Care Spending per Capita ^c	\$571 ^a	\$580	\$485	\$246	\$470	\$542	\$213	\$351	\$720	\$528	\$1,350	\$343	\$890
	Hospital Spending per Capita ^d	\$1,184 ^a	\$1,070	\$1,554	\$1,240	\$1,027	n/a	\$1,310	\$985	\$1,615 ^a	\$1,488	\$1,564	n/a	\$2,309
	Spending on Pharmaceuticals per Capita ^d	\$431 ^a	\$691	\$301	\$588	\$542	\$518	\$422	\$241	\$381	\$446	\$454	n/a	\$878
	Spending on Services of Nursing and Residential Care Facilities per Capita ^d	n/a	\$399	\$417	\$236	\$275	n/a	\$430	\$225	\$735 ^a	n/a	\$760	n/a	\$435
Physicians, 2007	Number of Practicing Physicians per 1,000 Population	2.8ª	2.2	3.2ª	3.4	3.5	3.7	3.9	2.3	3.9	3.6 ^a	3.9	2.5	2.4
	Average Annual Number of Physician Visits per Capita	6.3	5.8 ^a	n/a	6.3	7.5	7.0 ^b	5.7	4.7	n/a	2.8 ^a	4.0	5.0	3.8 ^a
Hospital Spending, Utilization, and Capacity, 2007	Number of Acute Care Hospital Beds per 1,000 Population	3.5 ^a	2.7 ^a	2.9	3.6	5.7	3.1	3.0	n/a	2.9	2.1	3.5	2.6	2.7 ^a
	Hospital Spending per Discharge ^d	\$7,295 ^a	\$12,163 ^a	\$9,157	\$4,667	\$4,527	n/a	\$11,988	\$7,312	\$9,131 ^a	\$9,026	\$9,398	n/a	\$17,206 ^a
	Hospital Discharge per 1,000 Population	162 ^a	84 ^a	170	274	227	139 ^a	109	135	172	165	166	126	126 ^a
	Average Length of Stay for Acute Care	5.9 ^a	7.3 ^a	3.5 ^b	5.3	7.8	6.7 ^a	6.6ª	n/a	5.0	4.5	7.8	7.2	5.5
Prevention, 2007	Percentage of Children with Measles Immunization	94.0	n/a	89.0	87.0	95.4	89.6	95.9	82.0	92.0	96.0	87.0	86.2	92.3
	Percentage of Population over Age 65 with Influenza Immunization	77.5% ^a	64.3%	53.7% ^a	69.0%	56.0%	64.9%	77.0%	63.7%	n/a	n/a	56.0%	73.5%	66.7%
Medical Technology, 2007	Magnetic Resonance Imaging (MRI) Machines per Million Population, 2007	5.1	6.7	n/a	5.7	8.2	18.6	6.6 ^b	8.8	n/a	n/a	14.4	8.2	25.9
IT, 2006	Physicians' Use of EMRs(% of Primary Care Physicians) ^e	79%	23%	n/a	n/a	42%	n/a	98%	92%	n/a	n/a	n/a	89%	28%
Avoidable Deaths, 2002-03		71	77	105	65	90	74	82	96	80	82	n/a	103	110
Health Risk Factors, 2007	Percentage of Adults Who Report Being Daily Smokers	16.6%	18.4%	25.0% ^b	25.0% ^a	23.2% ^b	22.4%	29.0%	18.1%	22.0%	14.5% ^a	20.4%	21.0%	15.4%
	Obesity (BMI>30) Prevalence	n/a	15.4%	11.4% ^b	10.5% ^a	13.6% ^b	9.9%	11.2%	26.5%	9% ^b	10.2%	8.1%	24.0%	34.3% ^a

Source: OECD Health Data 2009 (June 09) unless otherwise noted.

^a2006

^b2005

c1996-2006

^dAdjusted for differences in the cost of living

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

Source: E. Nolte and C. M. McKee, Measuring the Health of Nations: Updating an Earlier Analysis, Health Affairs, January/February 2008, 27(1):58-71

The Australian Health Care System, 2009

Edited by David Squires and Jane Hall
The Commonwealth Fund

Who is covered?

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

What is covered?

Services: Medicare provides free or subsidized access to most medical and some optometry services and prescription pharmaceuticals. It also provides free public hospital care, but patients may choose private care in public or private hospitals. Some allied health services are covered if referred by a medical practitioner. The Australian Government, together with state governments in most cases, also funds a wide range of other health services, including population health, mental health, limited dental health, rural and Indigenous health programs, and health services for war veterans. Private insurance is optional (but encouraged with taxes and subsidies). Private treatment complements the public system and offers choice of doctors for hospital admissions, choice of hospitals (including private hospitals), and timing of procedures; 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 for general practice, an incentive scheme was introduced in 2004, offering additional payment for bulk billing concession card holders (low-income, elderly), children under 16 years of age and residents of rural and remote areas; and in 2005 the Medicare payment was increased to 100% of the schedule fee. In mid 2009, 74% of all medical services, and 80% of general practitioner visits, were bulk-billed. Prescription pharmaceuticals covered by the Pharmaceutical Benefits Scheme (PBS) have a standard co-payment: AUS \$32.90 (\$30.26 USD) in

general with a reduced rate of \$5.30 (\$4.88 USD) for individuals with concession cards per item dispensed.

Safety nets: Under the Original Medicare Safety Net, once an annual threshold in gap expenses for out-of-hospital Medicare services has been reached, the Medicare payment is increased to 100% (up from 85%) of the Medicare schedule fee for out-of-hospital services for the remainder of the calendar year. Gap expenses refer to the difference between the Medicare benefit and the schedule fee. In 2009, the threshold was AUS \$383.90 (\$356 USD).

The Extended Medicare Safety Net, introduced in 2004, provides an additional payment for out-of-hospital Medicare services once an annual threshold in out-of-pocket costs is reached. Out-of-pocket cost refers to the difference between the Medicare payment and the fee charged by the practitioner (out-of-pocket costs are higher than gap expenses where the provider charges above the schedule fee). Once the out-of-pocket threshold is reached, the patient will receive 80% of their out-of-pocket costs in addition to the standard Medicare payment for the remainder of the calendar year. (In 2009, the thresholds are AUS \$555.70 [\$511 USD] for individuals with concession cards and low income families, and AUS \$1,111.60 [\$1,022 USD] for general patients). From 2010, there will be a limit on the benefits that will be paid under the Extended Safety Net for selected Medicare services, including obstetric services and assisted reproductive technology services. These changes have been made as a result of an independent review that found the Extended Safety Net's openended nature led to some doctors increasing their fees for some Medicare services.

Families are able to register together for the Medicare Safety Nets to have their gap expenses and out-of-pocket costs combined to reach the applicable threshold amount sooner.

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 subsidized 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. There is a strong reliance on out-of-pocket payments.

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 low-income individuals are exempt or pay a reduced levy. Individuals and families with higher incomes (AUS \$73,000 [\$67,151 USD] and AUS \$146,000 [\$134,299 USD]) per annum respectively who do not have an appropriate level of private hospital insurance coverage have to pay a Medicare levy surcharge, which is an additional 1% of taxable income. In 2007-08, the revenue raised from the Medicare levy (including the surcharge) 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 2007-08, Governments funded 69% of total health expenditures, with 43% funded by the Australian Government and 26% funded by state and territory governments. The Department of Veterans' Affairs covers eligible veterans and their dependants by directly purchasing public and private health care services.

Private Insurance: Private insurance contributes 7.6% 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. In mid-2009, 44.6% of the population had private hospital insurance, and 51.3% had General Treatment coverage (which includes ancillary services). Lifetime Health Coverage encourages people to take out private hospital coverage early in life and maintain their coverage by offering people who join a health fund before age 31 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 subject to this penalty. Private health insurance is community-rated, and provided by both for-profit and non-profit insurers.

Out-of-pocket expenditure: Out-of-pocket spending accounted for 16.8% of total health expenditure in 2007-08. Most of this expenditure is for medications not covered by the PBS, dental services, aids and appliances and co-payments on medical fees.

How is the delivery system organized?

Physicians: Most medical and allied health practitioners are in private practice and charge a fee for service. GPs play a gatekeeping role as Medicare will only reimburse specialists the schedule fee payment for referred consultations.

Hospitals: The hospital sector includes a mix of public (run by the state and territory governments) and private facilities. Under Medicare the public hospital system provides free hospital care for patients electing to be treated as public patients. 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 for treating public patients. 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 slightly less than half of all surgical episodes requiring the use of an operating room. Most emergency surgery is provided in public

hospitals, while the majority of elective surgery procedures are provided in private hospitals and day surgeries.

Pharmaceuticals: Prescription pharmaceuticals are covered by the Australian Government 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 subsidizes 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 elderly care facilities that are government subsidized. 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?

The Australian Commission on Safety and Quality in Health Care publicly reports on the state of safety and quality including performance against national standards, disseminates knowledge, and identifies policy directions. A new set of national indicators covering the quality and safety of clinical care has been developed. This has some overlap with another set of performance indicators developed for the 2009 National Healthcare Agreement between the Australian and all state and territory governments. The Commission is currently undertaking the first stages of a new approach to accreditation, including a set of Australian Health Standards, a quality improvement framework, expanded scope for accreditation to services not currently accredited, and national coordination of quality improvement efforts. The Council of Australian Governments in 2008 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. Provision of government-funded residential aged care is highly regulated with both provider organizations and their staff being subject to stringent approval processes.

Medicare also offers financial incentives rewarding 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. Attention and resources are currently being directed to address the gap in health outcomes for the indigenous population.

What is being done to improve efficiency?

The Medical Services Advisory Committee assesses new medical therapies for inclusion in the Medical Benefits Schedule, based on safety, cost-effectiveness and comparative effectiveness. 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.

The Australian 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 Australian 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 National Health and Hospitals Reform Commission has recommended that the responsibility for aged care be transferred to the Australian Government, and that a new approach to funding consumer/patients needs rather than residential places be developed.

How are costs controlled?

Public hospitals are owned and operated by State and Territory governments, although costs are shared with the Australian government. State and Territory governments set annual budgets for public hospitals, with funding on the basis of case-mix (diagnosis related groups) used to drive efficiency in public hospitals. National coverage decisions on

medical services and pharmaceuticals are used to control costs and ensure evidence drives an expanded scope of services. In addition, new pharmaceuticals have to meet cost effectiveness criteria and be subject to nationally negotiated pricing before inclusion in the formulary of publicly subsidized medicines.

Additional cost-controlling methods include: controlling the growth in cost of some large volume diagnostic services (pathology and radiology) through industry agreements with the relevant medical specialty; controlling access to specialist services through 'gatekeepers' such as general practitioners who perform an important role in promoting continuity and a 'medical home'; prioritizing access to certain services according to clinical need; and limiting the number of providers that are eligible to access Medicare benefits for some 'hi-tech' services. Effective prevention and better management of chronic disease have been proposed as strategies to reduce future health care costs.

What recent system innovations and reforms have been introduced?

The new Australian Labor Government established a number of reviews of the health system, most importantly the Health and Hospitals Reform Commission, the National Preventive Health Taskforce, and developed a Primary Health Care Strategy, all of which have recently released reports. The key features of the recommendations of these are a strengthening of primary care, through the development of facilities which provide multidisciplinary care and extended hours, enrolment of people with chronic conditions and young families with 'health care homes', and better integration with aged care and non-acute community services. Proposed funding changes would move all primary care funding responsibilities to the Australian government, and encourage the development of alternatives to fee-for-service. The Health and Hospitals Reform Commission has proposed immediate changes to the Commonwealth-State funding agreements to an activity-based funding model, with clear performance targets. The Commission has also proposed consideration of a change to Medicare to a managed competition model with both private and public insurers. Both the Commission and the National Preventive Health Care Strategy recommend the formation of a National Preventive Health Agency. The Australian Government has not yet released its response to these proposals.

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The Canadian Health Care System, 2009

Edited by Diane Watson The Commonwealth Fund

Who is covered?

Canada's publicly funded insurance coverage, often referred to as Medicare, provides universal coverage for physician and hospital services. Coverage for other health services is generally provided through a mix of public programs and supplementary private insurance.

What is covered?

Services: In order to qualify for federal financial contributions under the Canada Health Transfer, provincial and territorial health insurance plans must provide first-dollar coverage of medically necessary physician and hospital services for all eligible residents. In addition to providing universal coverage for physician and hospital services, provincial and territorial governments 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. The federal government provides certain health care benefits for First Nations and Inuit, members of the Royal Canadian Mounted Police and the Canadian Forces, veterans, refugee claimants and inmates in federal penitentiaries.

Cost-sharing: There is no cost-sharing for publicly insured physician and hospital services. However, there are out-of-pocket payments for supplementary health services not funded by public programs or private insurance. Out-of-pocket payments by private households represent about 15% of total national health expenditures.

How is the health system financed?

Publicly Funded Health Care: Public health insurance plans administered by the provinces/territories are funded by general taxation. Federal transfers to provinces and territories in support of health care are tied to population, and are conditional on provincial and territorial health insurance

plans meeting the requirements set out in the *Canada Health* Act. Public funding has accounted for approximately 70% of total health expenditures over the last decade.

Privately Funded Health Care: Roughly two-thirds of Canadians have supplementary private insurance coverage, many through employment-based group plans, which cover services such as vision and dental care, prescription drugs, rehabilitation services, home care, and private rooms in hospitals. Duplicative private insurance for publicly funded physician and hospital services is not available. Private health expenditures (payments through private insurance and out-of-pocket payments) represent approximately 30% of total health expenditures.

How is the delivery system organized?

Provinces/Territories: Provinces and territories have primary responsibility for the organization and delivery of health services, including the education of health care providers. Provincial and territorial ministries of health negotiate physician fee schedules with provincial and territorial medical associations. Many provinces and territories have established and fund regional health authorities which plan and deliver publicly funded health care services on a local basis. Some jurisdictions have consolidated the number of authorities in recent years.

Physicians: In 2005, physicians comprised 9% of the health care workforce with a near even split between specialists (4%) and general practitioners (5%). Most physicians are in private practices and are remunerated on a fee-for-service basis. An increasing number of Canadian physicians receive alternative forms of public payment such as capitation, salary and blended funding. In 2005-2006, about 21% of total clinical payments to physicians are made through these types of arrangements (ranging from 12% in Alberta to 42% in Nova Scotia to 96% in the Northwest Territories). Physicians are not allowed to charge patients more than what they receive under the fee schedule negotiated with the provincial or territorial health

insurance plan. In some provinces, physicians can opt out of the public plan if they wish to charge their own rates for insured health services.

Nurses and other health professionals: 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. Dentists, optometrists, occupational therapists, physiotherapists, psychologists, pharmacists and other health professionals are employed by hospitals or in private practice.

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

What is being done to improve quality of care?

Over the past decade, the federal government has increasingly earmarked funds to support innovation and stimulate system-wide improvements in quality. Examples include the Patient Wait Times Guarantee Trust (CAD \$612 million [\$575 million USD]), the Canadian Partnership Against Cancer (CAD \$260 million from 2006 to 2011 [\$244 million USD]), the Canadian Patient Safety Institute (up to CAD \$8 million per year since 2003 [\$7.5 million USD]) and the establishment of the Mental Health Commission of Canada (see System Innovation Section).

In terms of improvements in access, in 2005, all governments established a set of evidence-based wait time benchmarks in priority clinical areas (i.e. cardiac, cancer care, joint replacement and sight restoration). Seven provinces have established targets to meet the wait time benchmarks. In 2007, all jurisdictions committed to establish a guarantee in at least one clinical area by 2010.

All provinces and territories now report on wait times. Provinces have made considerable progress in their efforts to manage and reduce wait times, with many provinces now meeting wait time benchmarks for at least 75% of patients. Generally, when available, trend data show waits for care are decreasing in the areas of joint replacement, sight restoration, cardiac surgery and diagnostic imaging scans.

The federally funded Canadian Patient Safety Institute promotes best practices and develops strategies, standards and tools. In terms of quality use of medicines, the Canadian Optimal Medication Prescribing and Utilization Service (COMPUS) identifies and promotes optimal drug therapies. More specifically, it supports the safe and appropriate prescribing and use of medicines through information for health care providers and consumers. COMPUS is one of three programs operated by the Canadian Agency for Drugs and Technologies in Health and is funded by Health Canada.

From 2000 to 2006, the Primary Care Transition Fund invested CAD \$800 million (\$751 million USD) to support provinces and territories with the transitional costs of implementing large-scale primary health care reform initiatives. Most of the funding was allocated to the provinces and territories. The Fund aimed to improve access, health promotion and prevention, integration and coordination, and encourage use of multi-disciplinary teams.

The Canadian Institute for Health Information reports data and analysis on the health care system and the health of Canadians. The Health Council of Canada assesses progress in improving the quality, effectiveness and sustainability of the health care system.

Many quality improvement initiatives take place directly at the provincial and territorial level, with many jurisdictions having established quality councils to drive change, as well as to monitor and publicly report on the progress of renewal.

What is being done to improve efficiency?

Canada Health Infoway, a federally funded independent not-for-profit organization, works with governments and health organizations to accelerate the adoption of electronic health records (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, and projects are under way in every jurisdiction to develop and implement EHR components. As of March 2009, 17% of Canadians have an EHR – Canada Health Infoway's goal is to have 50% of Canadians with EHRs by 2010 and 100% by 2016.

The National Pharmaceutical Strategy, established in 2004, addresses the challenges and opportunities across the drug life cycle using an integrated, collaborative, multi-pronged approach to pharmaceuticals within the health care system. It was intended to develop nationwide solutions to concerns about affordability (and safety) of prescription medications through, e.g., implementation of a catastrophic drug program. A number of achievements have been made so far, including the expansion of the Common Drug Review and the design of a Drug Safety and Effectiveness Network. Progress continues to be made in ways that respect areas of federal and provincial/territorial responsibilities.

The Canadian Agency for Drugs and Technologies in Health provides advice to all governments on the clinical and cost-effectiveness of drugs and other health technologies, which inform decision-making on reimbursement and optimal use. While Health Canada evaluates the benefit-risk profile of a drug to determine whether it can be sold in Canada, the Common Drug Review, housed at the Agency for Drugs and Technologies, assesses the relative value of the therapy within the health care system. The CDR provides consistent evidence-based recommendations to participating drug plans in Canada on the demonstrated effectiveness and value of new therapies for Canadians.

How are costs controlled?

In 2008, public- and private-sector spending on health care in Canada was an estimated CAD \$172 billion (\$162 billion USD) or CAD \$5,170 per person (\$4,855 USD). As a share of GDP, it continued to grow from an estimated 10.6% in 2007 to 10.7% in 2008 (source: Canadian Institute for Health Information data).

Cost control is principally attained through single-payer purchasing power and increases in real spending principally reflect government investment decisions and/or budgetary overruns. Cost control measures include mandatory annual global budgets for hospitals/health regions, negotiated fee schedules for health care providers, drug formularies and reviews of the diffusion of technology. Many governments are developing pricing and purchasing strategies to obtain better drug prices.

What system innovations have been introduced?

In January 2009, a new federally funded Drug Safety and Effectiveness Network (DSEN) was announced to generate and exchange new, post-market ("real world") evidence regarding the safety and effectiveness of pharmaceuticals. The DSEN will respond to decision-makers' needs for information and increase capacity to undertake high-quality research in this area. New evidence generated will inform decision-making about the regulation, public reimbursement, and safe and optimal prescribing and use of drugs.

Elements of a new *Food and Drugs Act* and *Canadian Consumer Product Safety Act* relevant to prescription medicines are pending. In the area of pharmaceuticals, there are also a number of purchasing and pricing initiatives to contain inflationary spending (e.g. Ontario's *Transparent Drug System for Patients Act*).

Canada has ramped up investments in data to monitor and publicly reporting on health system performance. For example, results of the new *National Survey of the Work and Health of Nurses* offer insights about practice conditions, physical/mental well-being, workplace challenges and views on quality of care. Results of the new *Canadian Survey of Experiences with Primary Health Care* offer insights regarding interprovincial differences in access, experiences and views on quality, as well as the ways in which use of primary care impacts use of specialists, emergency departments and hospitals.

The Mental Health Commission of Canada has undertaken a number of initiates such as an anti-stigma campaign, a mental health strategy and a knowledge exchange centre to focus attention on mental health issues and to work to improve the health and social outcomes of people living with mental illness.

The Danish Health Care System, 2009

Karsten Vrangbaek
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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 is no cost-sharing for hospital and primary care services. There are some cost-sharing arrangements for other 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 USD) – no reimbursement (50% reimbursement for children); DKK 465-1125 (\$90-217 USD) – 50% reimbursement; DKK 1,125-2,645 (\$217-511 USD) – 75% reimbursement; above DKK 2,645 (\$511 USD) – 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 out-of-pocket ceiling of DKK 3410 (\$658 USD). 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:

Complementary private health insurance has been common in the Danish health system since the 1970s. Complementary insurance has traditionally been used to cover for co-payments in the statutory system (mostly for pharmaceuticals and dental care), and for services not fully covered by the state (some physiotherapy etc.). The not-for-profit organization "Danmark" has been the sole provider of such complementary insurance in the past. It covered around 2 million Danes in 2007 (36% of the population).

The past decade has seen a rapid growth in number of people buying *supplementary VHI*. In 2002 there were around 130,000 policies taken out, while the figure had grown to almost 1 million in 2008. These plans provide access to private treatment facilities. In addition comes 2.2 million policies providing a lump sum in case of critical illness. This type of insurance is typically related to pension plans. A tax deduction for employers has fuelled this market. The liberal/conservative government introduced this policy in 2002 as a way to encourage more private involvement in Danish health care.

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 feefor-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. Free choice of public hospital, and the extension of choice to private facilities at the expense of the home region if waiting times exceed one month are seen as ways to encourage public hospitals to deliver better service-quality.

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. The introduction of a one month general waiting time guarantee (for all services), and pre-defined treatment "packages" with specified short waiting times between different parts of the treatment path for cancers and other life threatening diseases has challenged the regional control over expenditures. The one month guarantee implies that patients can seek access to private treatment facilities at the expense of the home region, if they face expected waiting times exceeding one month for any type of treatment.

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.

What recent system innovations and reforms have been introduced?

The structural reform of 2007 sought to centralize the administration of hospital care, and merged the previous 15 county units into five regions. The five regions have since developed plans for reorganizing their hospital systems, including plans for major infrastructure investments supported by a DKK 25 billion (\$5.0 billion USD) investment grant from the national state. The total level of new investments will be up to DKK 40 billion (\$8.0 billion USD).

In 2007, the Danish government, regions and municipalities committed to developing and implementing national care pathways for all types of cancer based upon national clinical guidelines, with the aim is to ensure all cancer patients receive fast-tracked care through all the stages of care. At the end of 2008, pathways for 34 cancer types had been finalized and implemented, covering almost all cancer patients. A national agency monitors the pathways and the speed at which patients are diagnosed and treated.

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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 (£7.20 per prescription in England [\$11.50 USD]), but about 89% of prescriptions are exempt from charges (Information Centre 2008). NHS Dentistry services are subject to patient charges of up to a maximum of £198 per course of treatment (\$316 USD), 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, including both cost-sharing and expenditure paid directly by private households, accounted for 11% of total national health expenditures in 2007.

Safety nets: Most costs are met from the public purse. There are measures in place to alleviate charges for NHS services 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 funded by general taxation (76%), by national insurance contributions (18%), user charges (3%) and other sources of income (3%) (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 from 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, faster access to elective surgery and higher standards of comfort and privacy than the NHS. In 2006 it covered 12% of the population and accounted for 1% of total health expenditure.

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. PCTs contract with individual dentists or dental practices for an agreed level of dental services per annum. Some dentists are employed directly by 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. Since 2004 approximately one-half of NHS trusts have become foundation trusts established as semi-autonomous, self-governing public trusts. Both types 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 the level has grown in recent years; since 2003 some routine elective surgery and diagnostics 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. The NHS is administered through ten 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 (the 152 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.

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: In April 2009 the Care Quality Commission (CQC) took over responsibility for the regulation of all health and adult social care in England, whether provided by the NHS, local authorities, the private sector or the voluntary sector. All health and social care providers must be registered by the CQC, which also assesses provider and commissioner performance using nationally agreed upon indicators of quality with the Department of Health, investigates individual providers where an issue has been raised, and considers key provision areas in order to recommend best practice.

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 CQC; others are monitored on a regular basis either by the Department of Health or the regional strategic health authorities. In addition local providers select measures for quality improvement against which they can benchmark their services.

National Service Frameworks: Since 1998 the Department of Health has developed a set of National Service Frameworks 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 Accounts: From April 2010 all providers will produce annual 'Quality Accounts' reporting on the quality of services they provide in terms of safety, effectiveness and patient experience.

Quality contracts: The Commissioning for Quality and Innovation (CQUIN) payment framework was introduced in April 2009. This requires contracts between commissioners and acute, mental health, ambulance and community service providers to include clauses making a proportion of income conditional on quality and innovation.

Quality and Outcomes Framework: This is a 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, patient experience, 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 achieved efficiency gains of £7.9 billion (\$12.6 billion USD) between 2004 and 2008 through a range of policies known as the Gershon Efficiency Programme. These included 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. Further efficiency gains of £10.5 billion (\$16.8 billion USD) are expected between 2008 and 2011 through central and local actions. Local NHS organizations are monitored on efficiency savings targets (Department of Health 2009).

Payment by Results: A DRG-like activity-based funding system known as Payment by Results (PbR) has been introduced for acute hospitals with an aim to extend across the whole system of health care providers. PbR relates payment to the quantity and case mix of activity undertaken, and has resulted in an increased focus on and understanding of the structure of costs.

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).

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).

What system innovations have been introduced?

Individual budgets: Initially on a pilot basis, financial resources have been made available directly to individuals with social care needs, e.g. older people, people with mental health issues, who are then able to choose how that money should be spent. The program is being expanded and will include individual health budgets for some groups of patients.

Patient-reported outcome measures: The NHS is introducing standard contracts that require providers to report on patient-reported outcome measures (PROMs) measuring a patient's health status or health-related quality of life before and after intervention.

Payments for quality: The Commissioning for Quality and Innovation (CQUIN) payment framework requires contracts between commissioners and providers to include clauses making a proportion of income conditional on quality and innovation

Patient choice: NHS patients who require elective care interventions can choose between a wide range of public and private sector providers.

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The French Health Care System, 2009

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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 general 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. Preventive services (immunizations) are covered to a certain extent, usually for defined target populations.

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 [\$24/29 USD), doctor visits (30%), dental care (30%)
- the type of patient: patients suffering from chronic conditions and poorer patients are exempt from cost sharing, though only if they are treated with services and supplies listed in the benefit package which is published and updated by the National Health Authority (HAS)
- 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 co-insurance rate up to 50%; 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 apply, up to an annual ceiling of €50 (\$74 USD): €1 per doctor visit (\$1.49 USD), €0.50 (\$0.74 USD) per prescription drug, €2 (\$2.98 USD) per ambulance journey and €18 (\$27 USD) for expensive hospital 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 depending on the contract. Out-of-pocket payments, including both cost-sharing and expenditure paid directly by private households, accounted for 7% of total national health expenditures in 2007.

Safety nets: Exemptions from co-insurance apply to people with 30 chronic illnesses, people with low income, and people receiving invalidity and work injury benefits. 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 2007 out-of-pocket payments and private health insurance accounted for 8.5% and 13.6% of total health expenditure respectively (comptes nationaux de la santé en 2007).

How is the health system financed?

Publicly-financed health care: Public expenditure accounted for 78% of total expenditure on health in 2008, of which the public health insurance scheme contributed 76.6%. The public health insurance scheme is financed by employer and employee payroll taxes (43%); a national income tax (contribution sociale generalisée; 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%). There is no ceiling on employer (12.8%) and employee (0.75%) contributions, which are collected by a national social security agency. Coverage for those not eligible for the public scheme or complementary private coverage is mainly financed by the state through an earmarked tax on tobacco and alcohol and a 5.9% tax on the revenue of complementary private health insurers.

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 five 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 such as psychotherapy or acupuncture.

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 for patients to encourage gatekeeping, with higher co-payments for visits and prescriptions without a referral from the gatekeeper. Physicians are self-employed and paid on a fee-for-service basis. The cost per visit is slightly higher for specialists (€23 [\$34 USD]) than for GPs (€22 [\$33 USD]) 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.

The 2009 "Hospital, Patients, Health, Territories" Reform Act attempted to improve access to care in deprived areas by creating negative incentives for physicians who set up practice in areas with current oversupply. Opposition from the physicians unions has led to the withdrawal of the measure; however; nurses' unions have agreed to a similar arrangement with the MoH.

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.

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 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. In addition, HAS undertakes comparative effectiveness review of all new drugs, devices, and medical procedures before their inclusion in the public benefit package. It also publishes guidelines on care and defines best-care standards.

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. The "Hospital, Patients, Health, Territories" Reform Act voted on in July 2009 reformed the governance of public and not-for-profit hospitals by increasing the role of the hospital director in defining the strategies and deciding on the hospital's operations. At the regional level, one single authority (regional health agency) combines the roles of purchaser of hospital and ambulatory care, planner and regulator. Notably for a Bismarckian health system, the 2009 reform merged State and Sickness Fund administration.

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 (\$15-18 billion USD) to €5 billion (\$7.4 billion USD) in 2009. This may be partly attributable to the following changes, which have taken place in the last three 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
- a requirement to deliver a generic drug unless otherwise specified on the prescription
- the introduction of a voluntary gatekeeping system in primary care
- a basic benefit packages for the management of chronic conditions
- since 2008, new co-payments for prescription drugs, doctor visits and ambulance transport are not 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 (\$30 USD) to €23 (\$34 USD).

The economic downturn constitutes a threat for the state budget in general (the forecasted public deficit for 2009 is 3.9% of GDP) and the health insurance scheme as the revenue base shrinks.

What recent system innovations and reforms have been introduced?

The major innovations concern the governance of public and not-for profit hospitals and the creation of regional health agencies that merge sickness funds and State administrations at the regional level. More than simply creating administrative economies of scale, this merger creates one department responsible for health care and public health policies, managed care, and social services (previously overseen by seven departments). This is intended to be a major step towards a more consistent system.

In April 2009, the SHI launched a series of individual contracts with office-based physicians (Contrats d'Amélioration des Pratiques Individuelles CAPI). These contracts link monetary rewards up to €5,000 (\$7,357 USD) per year to the achievement of targets in the process of care for asthma, diabetes, hypertension, immunization, and breast cancer screening. The contracts also stipulate the prescription of generic drugs, particularly for cardiovascular conditions. The physicians' unions, the national physicians' regulation authority and the union of pharmaceutical industry opposed these contracts in court, on the grounds that 1) individual contracts (opposed to contracts negotiated between the SHI and the unions) undermine the basis of a Bismarckian health system: 2) the physician-patients relationship should not be polluted by the suspicion that physicians may not prescribe in the best interest of the patients; 3) by setting targets for generic prescribing, the contracts might limit patients access to innovative medicines. Three months after implementation, however, the contracts had been accepted by over 5,000 GPs (or 10% of the total GP population) - far more than the initial forecasts. Some incentives to coordinate care are available; GPs who manage patients with chronic conditions receive an additional €40 (\$59 USD) per patient. Social

health insurance also finances a number of providers' networks that coordinate hospital and out-of-hospital care for diabetes, cancer, chronic renal failure and multiple sclerosis.

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Who is covered?

Since 2009, health insurance is mandatory in Germany for all citizens, either in the social or in the private health insurance scheme, depending on previous insurance and/or job status. All employed citizens earning less than €4,050 (\$5,959 USD) per month or €48,600 (\$71,514 USD) per year [in 2009] are covered by a mandatory public health insurance scheme – the Statutory Health Insurance (SHI). Their dependents (non-earning spouses and children) are covered free of charge. Exception rules apply to the selfemployed and civil servants. Individuals whose gross wages exceed €48,600 per year for three consecutive years (around 20% of the population) may either choose to remain in the publicly-financed scheme on a voluntary basis (and 75% of them do) or may choose to purchase private health insurance. The SHI scheme covers about 85% of the population. Around 10% of the population are covered by private health insurance, with civil servants and the self-employed being the largest groups. The remaining persons, e.g. soldiers, policemen and others, fall under special regimes.

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 office visits in ambulatory care (GPs, specialists and dentists) for adults aged 18 years and older (€10; \$15 USD for the first visit per quarter or subsequent visits without referral). Other co-payments were made more uniform: €5 to €10 (\$7-15 USD) per outpatient prescription (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 for hospital and rehabilitation stays (up to 28 days per year), and \le to ≤ 10 for prescribed medical aids. In total, out-of-pocket payments accounted for 13% of total health expenditure in 2007.

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 chronically ill patients, there is a cost-sharing threshold of 1% of annual gross income. A directive lists conditions which are regarded as chronic disease; patients who suffer from breast cancer, cervical cancer and colon cancer have to demonstrate that they attended recommended counselling on screening measures prior to the illness in order to qualify for the 1% threshold.

How is the health system financed?

Statutory Health Insurance Scheme (SHI): The SHI scheme is operated by about 180 competing health insurance funds (called "sickness funds"): autonomous, not-for-profit, non-governmental bodies regulated by law. The scheme is funded by compulsory contributions levied as a percentage of gross wages up to a certain threshold. Earnings exceeding €3,675 (\$5,408 USD) per month or €44,100 (\$64,897 USD) per year [in 2009] are exempt from contribution payments. As of July 2009, the insured employee (or pensioner) contributes 7.9% of the gross wage, while the employer (or the pension fund) adds another 7.0% on top of the gross wage, so the combined maximum contribution is around €348 (\$806 USD) per month. This includes dependents (non-earning spouses and children), who are covered through the primary sickness fund 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 pays a fixed per capita premium.

Since 2009, a uniform contribution rate is set by the government and, although sickness funds continue to collect contributions, all contributions are centrally pooled by a new central health fund, which allocates resources to each sickness fund based on an improved risk-adjusted capitation formula. This formula takes age, sex, and morbidity from 80 chronic and/or serious illnesses into account. This means that sickness funds will receive considerably more for patients with cancer, AIDS or cystic fibrosis than for "ordinary" insured. Since 2009, sickness funds may charge the insured person an additional nominal premium if the received resources are insufficient (or pay back money if they have left over funds). So far, just one small sickness fund has raised an extra premium. Since 2004, there is a growing amount of tax-financed federal subsidy for "insurance-extraneous" benefits provided by the SHI (especially coverage of children). These expenses are considered to be of common interest and therefore are (partly) covered from general taxes. The subsidies will rise from €7.2 billion (\$10.6 billion USD) up to €14 billion (\$21 billion USD) in 2012. In 2007, the SHI scheme accounted for 61% of total health expenditure.

Private health insurance (PHI): Private health insurance plays a substitutive role in covering the two groups who are mostly exempt from the 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 SHI scheme. All pay a risk-related premium, with separate premiums paid for dependents; the risk is assessed upon entry only, though contracts are based on life-time underwriting. 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. Since January 2009, private insurers offering substitutive coverage are required to take part in a risk adjustment scheme (separate from SHI) to be able to offer basic insurance for persons with ill health who are assigned to PHI due to previous insurance or profession and who could otherwise not afford a risk-related premium. In addition recent legislation aimed to intensify competition between insurers. Private health insurers are forced by law to set aside savings (i.e., "aging reserves") for old age from the insurance premiums when the insured are young in order to slow the increase of premiums as they age. Previously, these aging reserves remained with the insurer when a person cancelled his/her policy or changed to another insurer. Since January 2009, individual aging reserves are transferable if privately insured persons cancel their

policy and change to another insurer. 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 hospital rooms, and covering some co-payments, especially for dental care. In 2007, PHI accounted for 9.3% of total health expenditure.

How is the delivery system organised?

Physicians: General practitioners have no formal gatekeeper function. However, since 2004 sickness funds are required to offer their members the option to enroll in a "family physician care model" which has been shown to not only provide better services, but often also a bonus for complying with gatekeeping rules. Ambulatory care in all specialties is mainly delivered by physicians working in solo practices, although polyclinic-type ambulatory care centers with employed physicians have been allowed since 2004. Physicians in ambulatory care are generally reimbursed via fee-forservice, which however are increasingly bundled. Sickness funds annually negotiate aggregate payments with the regional associations of physicians, which ensures service provision and 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 in recent 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 are 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 1,192 DRG categories. The system was made obligatory 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 implemented DMPs for chronic illnesses in the SHI to incentivize the sickness funds to better care for chronically ill patients. Sickness Funds are paid a lump sum for each enrollee and can waive co-payments for insured in the programs. DMPs currently exist for diabetes types 1 and 2, breast cancer, coronary heart disease, asthma and chronic obstructive lung disease. They are based on evidence-based treatment recommendations with mandatory documentation and quality assurance. Sickness funds receive a per capita administration compensation of €262 per year (\$386 USD) for each insured enrolled in a DMP. In October 2009 there were 13,087 regional DMPs registered with more than 5 million patients enrolled (more than 7% of all SHI-insured).

Government: The German government delegates regulation to the self-governing corporatist bodies of both the sickness funds and the medical providers' associations. The most important body is the Federal Joint Committee (G-BA), which was created in 2004 to replace several sectoral committees. Within the legal framework, the G-BA has wide-ranging regulatory power to formulate and implement in detail what services will be provided by the sickness funds. One of its most important responsibilities is to assess new methods of medical diagnosis and treatment, which must gain a positive evaluation in terms of benefits and efficiency before they can be reimbursed by the sickness funds. Some purchasing powers have also been given directly to the individual sickness funds, e.g. to contract providers directly, to negotiate rebates with pharmaceutical companies or negotiate contracts with manufacturers.

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). 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 of about 2,250 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. From 2010, a new institute gas been charged with developing quality assurance across ambulatory and inpatient care.

What is being done to improve efficiency?

Besides the measures to improve 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. Since 2008, IQWiG is legally charged with explicitly evaluating 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, previously imposed, relatively crude, but successful cost-containment measures (especially overall budgets for ambulatory physicians, hospital budgets, collective prescription caps for physicians on a regional basis) have been 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 sickness funds. Then, prescription caps with physicians liable for exceeding regular volume for their patient mix were introduced. More recently negotiated rebates between sickness funds and pharmaceutical manufacturers and incentives to lower prices below the reference prices are the major instruments. Hospital budgets have been phased out between 2005 and 2009, while per-case DRGs have become the main instrument to reimburse inpatient care. Since 2009, the fixed budgets for ambulatory care have been replaced by more flexible budgets that take population morbidity into account.

What recent system innovations and reforms have been introduced?

Rating quality of care in nursing homes and ambulatory long-term care providers: Since 2009 nursing homes and ambulatory long-term care providers are evaluated in 5 areas with respect to over 50 quality indicators by an independent institution. They are rated on grades equivalent to school marks and the results are posted on the internet. This simple procedure is designed to improve transparency in several important areas of long-term care.

Incentives for minimizing health service utilization and taking part in prevention programs: Sickness funds may offer reduced contributions or lower copayments to patients who agree to take part in schemes thought to reduce the burden of morbidity and health care costs—for example, minimizing use of health care services or taking part in specific disease management programs. Some schemes are binding for a minimum of three years.

Sustainability of health care financing: The central health fund ("Gesundheitsfonds"), introduced in 2009, has provided social health insurers with stable and reliable revenues, which is of particular importance for coping with the financial and economic crisis. Despite the major challenges of the previous year the sickness funds have reported surpluses for the first half of 2009; so far, nominal premiums above the uniform contribution rate are a very rare exception, but may become introduced by more sickness funds in 2010.

Enhancing competition: A central element of the latest health care reform (2007) is enhancing competition in health care services. The introduction of various elective insurance schemes or plans by the sickness funds – including new forms of health care provision such as DMPs or family physician care models – offers more choices for the insured and gives leeway for insurers to compete. Elective insurance plans include, for example, sick pay for the self-employed, or patients can opt for alternative deductible or cost-sharing schemes. The sickness fund may charge an extra premium covering additional costs or – e.g. in the case of deductibles – pay a premium to members signing up. The sickness funds are obliged by law to

report regularly on the results of elective insurance plans, notably on efficiency and savings.

The Italian Health Care System, 2009

David Squires
The Commonwealth Fund

Who is covered?

The public health system (*Servizio Sanitario Nazionale* or SSN) covers all citizens and legal foreign residents. Since, 1998, illegal immigrants have been granted access to basic services. The SSN was modeled after the British NHS to provide uniform comprehensive care and replaced a Bismarckian system of health insurance funds in 1978.

What is covered?

Services: The central Government defines the minimum national benefits package that must be offered to all residents – the 'essential levels of care' or livelli essenziali di assistenza (LEAs). Since 2001, the has SSN defined a positive list and negative list of LEA services, based on the criteria of effectiveness, appropriateness and efficiency in delivery. The positive list spans ambulatory care, inpatient care, and some prescription drugs. The negative list of services includes three categories of exclusion: 1) services that are ineffective or not within the province of the SSN, such as cosmetic surgery or certain types of physical therapy; 2) services that are only covered on a case-by-case basis, such as orthodonture and laser eye surgery; 3) potentially inappropriate hospital admissions, such as for cataract surgery or hypertension. Prescription drugs are divided into three tiers according to clinical effectiveness and, in part, cost effectiveness; the SSN covers the first tier in all cases, covers the second tier only in hospitals, and does not cover the third tier. Eye care and dental care are generally not covered and paid for out-of-pocket. In particular, public provision of dental care (volume of services actually provided) is very low even where it is covered by the NHS. Regions can choose to offer non-LEA services, but must finance these themselves. Supplemental health insurance (various forms of "health funds") has been recently introduced to cover services excluded by the NHS, some social-health provisions for the elderly, and dental care. New regulation is pending for this to be become effective.

Cost-sharing: Primary and inpatient care is free at the point of use, but copayments have been applied for ambulatory specialist services at the

national level and outpatient drugs at the regional level. Furthermore, since 2007, a €25 (\$37 USD) co-payment has been introduced for "unwarranted" use of emergency services, deemed to be non-critical and non-urgent. Private insurance is sometimes purchased to cover cost-sharing payments, but does not play a significant role in the health system.

Safety nets: All individuals with out-of-pocket payments over €129 (\$193 USD) in a given year are eligible for a tax credit equal to roughly one-fifth their spending. Furthermore, cost-sharing exemptions are applied to people over the age of 65 with a household income below a certain threshold, people with chronic or rare diseases, people with disabilities, people who are HIV positive, prisoners, and pregnant women. Certain screening services are also provided free of charge.

How is the health system financed?

Publicly-financed health care: Public financing accounted for 77.2% of total health spending or €1,752 (\$2,616 USD) per capita in 2006. The public system is primarily financed through two taxes. The first is a business tax that is collected into a national pool and redistributed back to the regions - generally, the source region. There are large interregional gaps in the business tax base, leading to financing inequalities. The second is a value-added tax collected by the central government and distributed to the regions as grants, with the aim of ensuring all regions have adequate resources to provide the LEAs. Since 2001, the government has tried to develop a National Solidarity Fund, fed through the value-added tax, to be distributed among the regions through a formula designed to reduce inequalities, but so far negotiations have been unsuccessful. In addition to these central taxes, regions are allowed to generate their own revenue, leading to further interregional financing differences.

Private health insurance: Private health insurance plays a very small role in the health system, accounting for roughly 1% of overall health spending in 2006. Approximately 15% of the population has some form of private insurance, generally to cover cost sharing requirements, services excluded under the SSN, and wider choice of public and private providers. In

addition, various forms of non-profit "health insurance" exist which cover large and increasing segments of population, workers and mostly managerial segments employed by the private sectors. These forms will be made equivalent to the new supplemental health insurance sector mentioned above.

A 2008 financial law established that Regions will be financed through standard costs. Standard costs (although not yet operationally defined) should be the sectoral and overall costs of services provided in the Regions that are considered efficient and effective.

Out-of-pocket spending: In 2006, 20% of overall health spending was paid out-of-pocket. Much of this spending was for prescription drugs not covered by the public health system. Also, dental and eye care are generally not covered by public or private insurance, and paid for mostly out of pocket.

How is the delivery system organized?

Regions: While the central government determines the required minimum benefit package and mostly controls the distribution of tax revenue, the 20 regions have the responsibility for the organization and delivery of health services. Regions are allowed a large degree of autonomy in how they perform this role, and most choose to allocate capitated resources and varying degrees of responsibility to local health authorities. These local authorities are led by a CEO, vertically integrated, and responsible for a range of hospital and community services within a geographic area.

Physicians: General practitioners payments flow through a combination of capitation and fee-for-service – sometimes related to performance – and is regulated under a national contract and regional agreements. Capitation is based only on the number of patients and not adjusted for population characteristics. The majority of GPs generally operate in solo practices, though the central government and regions has offered incentives to encourage group practice. In the last few years, therefore, general practice has witnessed a transformation where the "solo practice" model is being progressively abandoned for new organizational forms (networks, groups, etc.), particularly in the northern part of the country. Government and GP associations have agreed to implement a model where GPs, specialists, and

nurses can work together in order to ensure 24 hour access and avoid the unnecessary use of hospital emergency departments. Incentives encourage GPs to play a gatekeeping role. Once referred, the Italian system allows freedom of choice for patients among all accredited specialists, including in other regions. Hospital-based physicians are generally salaried employees.

Hospitals: Hospitals dominate the health system, accounting in 2006 for 45.2% of overall health spending – the third largest proportion reported among OECD countries. Depending on the region, public funds are allocated by the region or the local ASLs to semi-competitive public and accredited private hospitals. Public hospitals are either managed directly by the local authorities or operate as semi-independent public enterprises similar to the British trust hospitals. Doctors are generally salaried employees of the hospital. A DRG-based prospective payment system (PPS) operates across the country, though it is generally not applied for locally-run hospitals. There is, however, considerable interregional variability in the PPS system, such as in how tariffs are set, what services are excluded, and the tools employed to influence patterns of care; regions even use different coding and classification systems. All regions have mechanisms to cut tariffs once a spending threshold for the hospital sector is reached, as a way to contain costs and offset incentives to increase admissions.

What is being done to ensure quality of care?

The health ministry is responsible for quality assurance, for which it ensures that LEA services are provided and monitors wait times. Since 1999, all doctors under contract with the SSN must be certified, and all SSN staff take part in a compulsory continuing education program. Furthermore, private hospitals must be accredited in order to contract with the SSN. Both the central and regional governments take part in creating and distributing guidelines. Interregional equity is a longstanding concern, particularly between the more affluent northern and less affluent southern regions. The less affluent southern regions trail the northern regions in the number of beds and advanced medical equipment and see a greater presence of private facilities. Southern regions have argued that the central government should attempt to compensate for these inequities in its allocation of the health budget.

What is being done to improve efficiency?

There is a strong emphasis on treating patients at the lowest possible level of the health-care delivery system that is appropriate for their condition. The LEAs – the minimum benefit package required under the SSN – are developed taking into consideration effectiveness, appropriateness, and efficiency in delivery. Furthermore, the National Pharmaceutical Formulary bases coverage decisions in part on clinical and cost effectiveness. Prices for reimbursable drugs are set in negotiations between the government and the manufacturer that consider the following criteria: cost effectiveness for pharmaceuticals where no effective therapies exist; comparison with alternative pharmaceuticals for the same condition; costs per day compared to products of the same effectiveness; the economic impact on the health system; the estimated market share of the new drug; and average prices/consumption data from all European countries. Prices for non-reimbursable drugs are set freely by the market.

Regarding the organization and delivery of care, the 1992 reform aimed to lead down the path towards a quasi-market for health care services, with local ASLs able to contract with competing private, fully public, and semi-independent public providers. This quasi-market has not fully materialized for several reasons: not enough public providers have branched off to be run as semi-independent enterprises; regions have exercised strict control over managing the system and capping spending; and the accreditation process for hospitals has created a barrier to entry.

Waiting times are a concern. National legislation has set maximum wait time guarantees for ambulatory care and three elective procedures, though there is no system to comprehensively track this information. Some regions have experimented with programs that prioritize the delivery of certain services based on clinical need, and these have achieved some significant wait time reductions.

How are costs controlled?

Containing health costs is a core concern for the central government, as public debt in Italy is one of the highest among industrialized nations. The financing and delivery of care in Italy is divided, with the central

government generally determining the regional budgets and the regions deciding how to organize and deliver care. Regions have some ability to raise their own revenue but this is limited. This division between financing and delivery creates a tension, as the regions claim the government underbudgets and the government claims the regions need greater cost control.

What system innovations have been introduced?

Due to the regionalization of the health system, most innovations in the delivery of care take place on the regional rather than the national level, with some regions viewed as leaders in innovation. Under a pilot program funded by the national government, many regions are experimenting with a primary care model, the "casa della salute," which has a parallel in the U.S. medical home movement. In this model, a variety of health and social services are offered within the same space with the aim of improving care for the chronically ill and enabling self-management. On the national level, a significant reform is planned that would distribute health funding to the regions according to standard costs based on the characteristics of the population; this reform, broadly believed to be necessary, still faces hurdles to be operationalized. Though electronic medical records are already widely adopted, the central government has made investments to develop HIT to improve communication, organization, management, and exchange across sites of care.

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The Dutch Health Care System, 2009

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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 coverage, excepting those with conscientious objections and active members of the armed forces. Coverage is statutory under the Health Insurance Act (Zorgverzekeringswet; ZVW) but provided by private health insurers and regulated under private law. In 2007, roughly 231,000 persons (1.5% of the Dutch population) were uninsured, and there were 240,000 defaulters. In 2009-10 additional policy measures will enforce the mandate and payment of the insurance premiums. 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 creating a government fund to cover some of the health care costs of illegal immigrants was implemented in 2008.

Prior to 2006, people with earnings above approximately €30,000 (\$44,200 USD) 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 insurance 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; and 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, such as adult dental care, although insurers are not required to accept all 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, regardless of age or health status. Every insured person aged 18 and over must pay the first €155 (\$228 USD) of any health care costs in a given year (with some services, like GP-care, excluded from this general rule). Out-of-pocket payments, including both cost-sharing and expenditure paid directly by private households, accounted for 6% of total national health expenditures in 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.

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 6.9% of the first €32,369 (\$47,644 USD) 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 4.8%. The contribution of self-employed people is individually assessed by the Tax Department. Contributions are collected centrally and distributed

among insurers based on a sophisticated risk-adjusted capitation formula, which considers age, gender, labor force status, region, and health risk (based on past drug and hospital utilization). In 2009 the average annual premium was €1,065 (\$1,568 USD). The government pays for the premiums of children up to the age of 18. In 2008 the total spending on health care was €79 billion (\$116 billion USD).

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 13% and in 2006 for 3.1% of the total costs.

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 (CVZ) 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 all applicants. 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 ongoing.

Hospitals: Most specialists are hospital-based. Two-thirds of hospital-based specialists are self-employed, organized in partnerships; the remainder are salaried. Most hospitals are private non-profit organizations. Hospital budgets were previously developed using a formula that paid a fixed amount per bed, patient volume, number of licensed specialists, and other factors. Additional funds were provided for capital investment. Since 2006,

hospitals are increasingly encouraged to obtain capital via the private market. Currently, payment of 34% of the hospital care takes place through the Dutch version of DRGs known as Diagnosis Treatment Combinations (DTCs). These DTCs cover both the hospital costs and the specialists costs, thereby strengthening the integration of the specialist in the hospital organization. Although a substantial part of the hospital/specialist reimbursements through DTCs are still budgetary framed and based on fixed prices, an increasing part is subject to market forces through negotiation on price with the insurers.

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. The Dutch Health Care Inspectorate 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/revalidation 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 reengineering'. 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. Dutch authorities are working to establish a central HIT network to enable information exchange across sites of care.

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. Insurers are required to charge the same premiums for the same benefits but may selectively contract with providers, leading insurers to compete on quality rather than risk-selection, and publicly reported quality information provides transparency. However, there is an awareness of rising costs. Increasingly, costs are expected to be controlled by the new DTC system in which hospitals must compete on price for specific services.

What system innovations have been introduced?

The major change of the insurance system took place in 2006 with the introduction of a universal insurance scheme executed by private insurers. This created a level playing field. There is an ongoing review about the coverage of both the standard insurance scheme and the Exceptional Medical Expenses Act. Progress has been made on producing indicator information, although improving transparency remains a focus. In the budget for 2010, reductions are foreseen for specialists costs (which rose more in the past year than planned) and for care allowances via tax reductions. The economic crisis has so far not significantly affected health care costs, but major cost reductions are foreseen once the economy recovers. Renewed emphasis has been given to prevention (i.e. support to quit smoking will be included in the standard benefit package) and disease management on specific chronic disease groups will be strengthened through the introduction of new financing schemes for integrated care.

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The New Zealand Health and Disability System, 2009

The Commonwealth Fund Updated by the Ministry of Health, New Zealand

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 (NZD \$3.00 per item [\$2.22 USD]), private hospital or specialist care, and adult dental care. Subsidies for long-term aged care are asset tested. Complementary and alternative medicines and therapies are paid for out-of-pocket.

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

How is the health system financed?

Government: Public funding is derived from general taxation (85%), levies on employers (7%), and local government (8%). Overall, public funding accounts for about 78% of health care expenditure. 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 primary health organizations or PHOs), private surgical hospitals, 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 some form of private health insurance, which accounts for less than 6% of total health care expenditures.

Out-of-pocket: Patients pay co-payments for pharmaceuticals, private hospital or specialist care, and adult dental care; co-payments for GPs have reduced markedly in recent years. Subsidies for long-term aged care are asset tested. Out-of-pocket payments, including both cost-sharing and expenditure paid directly by private households, accounted for 14% of total national health expenditures in 2007.

How is the delivery system organized?

Physicians: GPs act as gatekeepers and are usually independent, self-employed providers, paid through fee-for-service and co-payments with partial government subsidy and, increasingly, 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 Organizations (PHOs): Over recent years there has been substantial additional funding to subsidize primary health care and improve access to services. Since July 2002, 81 PHOs have formed and ninety-five percent of New Zealanders are now enrolled with a PHO. PHOs are networks of self-employed providers funded by capitation and fee-for-service. Since July 2007, all New Zealanders receive low-cost access to primary health care 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 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?

The Ministry of Health distributes a Hospital Benchmark Information Report quarterly to 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. Public reports on DHB performance are also released that rate each DHB on a series of performance indicators in such areas as waiting times, access to primary care services, and mental illness outcomes. All 21 DHBs are partners in producing benchmark data, which is compared 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.

A number of policy elements have been introduced partly or fully motivated by the desire to reduce health disparities. These include lowering co-payments for primary care, additional services for high risk patients or patients with complex needs, specific PHO services targeted towards Maori and other vulnerable populations, and community and Maori involvement in PHO governance.

The government's Quality Improvement Committee is currently pursuing several programs in public hospitals. These focus on optimizing the patient journey, safer medication management, 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. In addition, the Ministry of Health, District Health Boards, and non-government organizations work collaboratively to achieve health targets identified by the Government at the DHB and national levels.

What is being done to improve efficiency?

New Zealand has given considerable attention to prioritization in elective surgery, 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. To improve access to surgery, the government has recently announced its intention to make smarter use of the private sector.

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. DHB-level measures related to efficiency (average length of stay, daycase procedures, day of surgery admission, and did not attend) are publicly reported.

The inclusion of drugs on the national formulary is determined by PHARMAC (the Pharmaceutical Management Agency of New Zealand). Relative cost effectiveness is one of nine decision criteria used in making funding decisions.

Improving performance and lean thinking in hospitals is an area of recent focus. To support this, work is underway to realign targets, improve productivity metrics, incentivize performance improvement, improve ward efficiency, reduce emergency department waiting times, improve medical workforce productivity, increase day surgery and improve theater utilization, jointly procure consumables and reduce the cost of back office or overhead functions.

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. While New Zealanders have access to the full range of pharmaceutical products, the Pharmac subsidy for patients is set at the price of the lowest priced generic medicine in each category. If people wish to access a medicine more expensive than the subsidy and there are no clinical indications, they pay the extra cost for this.

What recent system innovations and reforms have been introduced?

Health organizations in New Zealand are focusing on opportunities to improve system productivity and hospital efficiency through better management of acute demand. Collective procurement and administration and hospital productivity and quality improvement initiatives driven by clinicians at the ward and department levels, aim to improve health system capacity and efficiencies as well as patient experiences. However, recent initiatives that have been implemented to improve Emergency Department (ED) waiting times, and to increase elective surgery volumes while reducing waiting times, have demonstrated the need to take a system approach to improving system efficiency and patient flows. The most effective use of hospital resources lies with programs that better manage acute demand across the system; in particular, improving primary and community care reduces ED admissions. Work has commenced on innovative primary care delivery programs that will be provider-driven and focus on secondary/primary linkages.

A voluntary bonding scheme was introduced in February 2009 to reward medical, midwifery and nursing graduates who agree to work in hard-to-staff communities and specialties. Hard-to-staff communities and specialties struggle with higher vacancy rates, higher locum use, higher use of overseas trained professionals and longer waiting periods than their counterparts. Research shows that the longer new graduates stay in a community or specialty during their training years, the more likely they are to stay on once their training is complete. The bonding scheme is a practical initiative designed to move graduates into the communities and specialties that need them most. Graduates who are part of the scheme are eligible for incentive payments intended to help repay their student loans for up to five years. More than

double the expected number of registrations for the scheme have been received and confirmed. A Clinical Training Agency has been set up that centralizes work around workforce issues and provides a system-wide response to areas such as workforce shortages and fragmentation.

The Norwegian Health Care System, 2009

David Squires
The Commonwealth Fund

Who is covered?

Coverage is universal. The system is built on the principle that all inhabitants have equal access regardless of social status, income, and geography. European Union residents have the same access to health services in Norway as residents.

What is covered?

Services: There is no standard national benefit package, but in practice the statutory health system covers hospital care, ambulatory care, and approved prescription drugs, partly covers dental care (children and some other groups), and does not cover non-medical eye care. A physician must consider certain treatments, such as plastic surgery, to be essential or beneficial for them to be publicly covered. Primary, preventive and nursing care is organized on the local level by the 430 municipalities. The health budget for these services is decided on a local level but a number of services are obligatory, particularly related to pediatric care. Specialty care is organized on a regional level, with the 4 regional health authorities obligated to provide equal access within their boundaries. The National Insurance Scheme provides financial security to individuals and families in the case of sickness or disability.

Cost-sharing: In 2007, out-of-pocket payments made up 15% of total health expenditure, reflecting moderate cost-sharing requirements. However, for primary care services (GPs) the copayment accounts for 42% of total costs. All care and treatments received in a public hospital, including pharmaceuticals, is free for patients. Some co-payments are required for GP and specialist consultations (approximately \$35 and \$50 USD, respectively) prescription drugs (maximum of \$85 USD), ambulatory care, and radiology and laboratory tests (\$45 and \$10 USD, respectively). Prescription drugs require co-payments according to a reference price set by a cross-national price comparison. Home and long-term institutional care for the elderly and disabled have high cost-sharing requirements. Dental

care requires some co-payments, but these are waived for children under the age of 18. Cost-sharing charges are set by the central government.

Safety nets: There is an annual ceiling for many cost-sharing requirements, after which the out-of-pocket costs are waived – in 2006, this ceiling was 1,615 NOK (\$282 USD). Long-term care and some prescription drugs do not qualify towards this ceiling. Furthermore, certain populations are exempt from some types of cost-sharing requirements – children under the age of 7 receive free physician treatment and essential drugs, pregnant woman receive free medical examinations during and after pregnancy, and residents who receive minimum requirement or disability pensions receive free essential drugs and nursing requisites.

How is the health system financed?

Norway is one of the wealthiest countries in the world per capita and has among the highest per capita spending. In 2006, Norway spent 40,170 NOK (\$7,015 USD) per capita on health care, the second highest among OECD countries. Yet, given their high income this equaled only 8.7% of GDP, less than the OECD median.

Government: Public spending made up 83.6% of total health expenditure in 2006 and is financed through general taxation. Tax revenue is collected by the national government (87.2% in 2003), the counties (1.5% in 2003) and the municipalities (11.0% in 2003) through personal income and wealth taxes, value-added taxes (VAT) and excise duties, corporate taxes, and taxes on petroleum activities. Taxpayers with high expenses due to a permanent illness receive a tax deduction. The government sets an annual health budget in December but parliament has on some occasions voted for additional funds later in the year, particularly for hospitals. After the budget is passed, funds for hospital care are allocated to the regional health authorities through a combination of block grants and activity-based funding (in 2009, 60% and 40%, respectively). The General Purpose Grant Scheme redistributes funds between the municipalities based upon population characteristics, size, and density.

Private health insurance: Private insurance does not play a significant role in Norway's health system and few residents are enrolled. Private insurance typically seeks to offer shorter waiting times for publicly covered services. Private enrollees typically receive coverage through their employers.

How is the delivery system organized?

Physicians: Norway's 430 municipalities have responsibility for funding and delivering primary care services, including health promotion, preventive medicine, general medical diagnosis, treatment and rehabilitation, emergency care, and long-term nursing care. Since 2001, patients are encouraged to sign on with the general practitioner of their choice as their regular GP and gatekeeper, with the freedom to seek a second opinion and change regular GP twice a year. Virtually all residents are now registered with a regular GP, with those not registered paying higher out-of-pocket fees for consultations. The 2001 reform also established the current model wherein municipalities contract with private general practitioners who receive a combination of capitation, fee-forservice and out-of-pocket payments. The model for financing GPs is set nationally with little variation among municipalities. Most GPs are selfemployed with the remainder being salaried employees of the municipalities. General practices are most commonly comprised of 2 to 6 physicians.

Hospitals: Since the 2002 Norwegian Hospital Reform, four regional health authorities have responsibility for inpatient and specialist care in Norway. Hospitals are state-owned, though each is a discrete legal entity with a board and management, granting them a degree of self-governance. Regional health authorities oversee all hospitals in their region, and are led by an executive board, appointed by the Ministry, and a chief executive officer. Regional health authorities are funded through a combination of capitation and activity based payments – which generally flow directly to the hospitals – and out-of-pocket payments (for out-patient care). All hospitals offer ambulatory care services, and virtually all ambulatory care consultations occur in hospitals or through private specialists with agreements with the regional health authorities. Hospital and specialist consultations, in order to be reimbursed by the NIS, must be referred by a

GP. Hospital-based specialists are generally paid on salary and ambulatory specialists are generally self-employed and paid through a combination of subsidies (annual lump sums) and fee-for-service.

What is being done to ensure quality of care?

The Norwegian Directorate for Health is tasked with quality improvement in the health system, with a focus on safety and efficiency, patient-centered care, coordination and continuity. Eliminating socioeconomic disparities, health promotion and disease prevention are also targeted as priority areas. Towards these efforts, the Norwegian Knowledge Centre for Health Services, a state funded independent research organization, gathers and disseminates information on the effects and quality of health services through knowledge synthesis (systematic reviews and health technology assessments), a national electronic health library, performance measurements, and promoting and supporting quality improvement, patient safety and evidence-based practice. The Norwegian Registration Authority for Health Personnel provides licensing and authorization for all health care personnel, which can grant full and permanent approval based upon meeting educational and professional criteria. Inspections of all levels of the health system are carried out by the Norwegian Board of Health, including health care workforce.

What is being done to improve efficiency?

Improving the effectiveness and efficiency of care is a primary policy goal. The Norwegian Knowledge Centre for the Health Services disseminates health technology assessments, research syntheses, cost benefit analyses, and guidelines for treatment, in order to improve the quality and value of health services. For pharmaceuticals, the Norwegian Medicines Agency, which determines whether a new drug should be included on the "Blue List" reimbursement scheme, takes cost-effectiveness into account in comparison with existing treatments. The use of generic drugs is encouraged, with the price set as a percentage of the proprietary drug. In addition to the Blue List, a "Green prescription scheme" encourages providers to 'prescribe' lifestyle and nutrition programs as a first alternative to more expensive preventive medicine.

Currently, virtually all GPs use electronic patient records, but uptake has been slower among hospitals and nursing homes due to more complex and integrated information system requirements. A centralized National Health Network owned by the regions seeks to establish a single information exchange platform, providing a single point for communication for GPs, hospitals, nursing homes, pharmacists, and others.

In the hospital sector, payment reform in 1997 looked to create activity-based payment for services based on the DRG system. This was followed by reforms in 2002 that centralized responsibility for inpatient and specialist care on four regional health authorities. Both reforms have been credited with improving efficiency.

How are costs controlled?

New drugs expected to considerably increase costs must receive ministerial and parliamentary approval before being added to the reimbursement scheme. Drug prices are set at the average of the three lowest market prices for that drug in a group comparison among Scandinavian and western European countries. The drug pricing scheme also attempts to encourage the use of generic drugs, setting the generic price at a percentage of the branded price that decreases over time.

The Government sets an overall health budget in the December prior to each year, though parliament typically approves additional funds throughout the year. Like most countries, Norway faces the financial challenges of an aging population. However, a national petroleum savings fund of over 2.2 trillion NOK (\$384 billion USD) provides Norway flexibility in addressing rising health costs.

What system innovations have been introduced?

With quite recent reforms at both the primary care (regular GP reform, 2001), hospital (2002) and national authority level (2002) there have been a series of major changes in Norwegian health care. However, the current health minister has recently proposed the Coordination Reform (2009) focused on prevention, integrating care and strengthening health care in the municipalities. There has been a large growth in health expenditure the last 10 years, with most going to hospitals, and the reform wants to curb this

growth and direct more investments towards primary care. The proportion of physicians working as GPs has gone down dramatically over the last 10 years indicating unbalanced growth of specialist services and secondary care. The reform will also strengthen information systems and a new national state owned company, the new Norwegian Health Network, has been established for developing and operating ICT infrastructure for the health care sector.

There has also been increased focus on quality and priority setting. The current government has established the Norwegian Council for Quality Improvement and Priority Setting in Health Care, and a set of priority setting guidelines have been created to guide referrals to secondary care.

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The Swedish Health Care System, 2009

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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 (\$14-21 USD) per visit to a primary care doctor, SEK 200-300 (\$28-42 USD) for a visit to a specialist or to access emergency care and up to SEK 80 (\$11 USD) per day in hospital (MISSOC 2007). For outpatient pharmaceuticals, patients pay the entire cost up to SEK 900 per year (\$127 USD), 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 Out-of-pocket payments, including both cost-sharing and 2007). expenditure paid directly by private households, accounted for 16% of total national health expenditures in 2007. This figure mainly includes private household out-of-pocket expenditure for services of curative and rehabilitative care and medical goods dispensed to out-patients, but also services of long-term health (nursing) care and prevention and public health services.

Safety nets: The maximum amount to be paid out-of-pocket for publicly-financed care in a 12-month period is SEK 900 (\$127 USD) for health

services and SEK 1,800 (\$254 USD) for outpatient pharmaceuticals. Children are exempt from cost-sharing for health services. An annual maximum of SEK 1,800 for pharmaceuticals also 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 waiting times and geographical inequalities in access to health care. The 21 county councils provide funding for mental health care, primary care and specialist services in hospitals. The 289 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 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 fully determine how services are to be delivered based on local conditions and priorities. As a result of this decentralization, the organization of the delivery system varies at the local level.

Primary care: Organization of primary care varies across the 21 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. By January 1st 2010, a new law supporting choice by the population and privatization of primary care providers will come into effect. Several county council have already implemented such changes, however. Primary care has no formal gatekeeping function. Residents may choose to go directly to hospitals or, if available, to private specialists contracted by county councils. Increasingly, residents are encouraged to visit their primary care provider first. Higher co-payments for visits to hospitals and specialists without a referral 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 ambulatory specialists and especially primary care providers working under a public contract is increasing – roughly a quarter of all primary care physicians are private, with up to half in some county councils. 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 National Board of Health and Social Welfare (Socialstyrelsen), the Swedish Council on Technology Assessment in Health Care (SBU) and The Dental and Pharmaceutical Benefits Board (Tandsvårds- och läkemedelsförmånsverket, TLV) 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 a national drug register, which contains data on patients' drug use and expenditure, age, and sex as well as the prescriber's profession and practice.

Concern for patient safety has been growing. Five priority areas 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.

The Swedish Government has given high political priority to eHealth in order to create the awareness at all levels throughout the healthcare sector that eHealth should be seen as the main tool for renewal and improvement of the healthcare sector.

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. Several 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. Those county councils that comply with waiting time targets qualify for extra grants from the national level.

In primary care, residents in several counties are encouraged to choose a provider based on access and quality – with local and national initiatives underway to provide such information – and the money follows 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 years – the current agreement covers 2009-10. The national Dental and Pharmaceutical Benefits Board (TLV) engages in value-based pricing of prescription drugs, determining reimbursement based on an assessment of health needs and cost-effectiveness. The same board also determines subsidies for dental care.

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.

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.

What recent system innovations and reforms have been introduced?

The public funding of Swedish health care, including the role and level of user-charges, has been stable over time; however, a number of innovations have been introduced for the purpose of improving the quality and costeffectiveness of services. Recent innovations include the introduction of choice for the population among primary care providers, while maintaining the traditions of a multidisciplinary staff, broad financial responsibility and fixed risk-adjusted payment topped up with pay-for-performance. Primary care is also increasingly provided by private practices that are paid according to the same principles as public providers. The role of the Dental and Pharmaceutical Benefits Board was expanded in 2009, to include decisions regarding subsidies for dental services based on cost-effectiveness and needs assessment, similar to criteria used for drug reimbursement decisions. Increasingly, the distribution of national grants is based on county council performance, e.g. related to waiting times. In general, transparent comparison of performance across county councils and providers is not only accepted but also more and more used to support decision-making at both the national, local authority and clinical levels.

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The Swiss Health Care System, 2009

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, and some preventative measures. It also covers out-of-canton services in case of medical need, even 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 (\$292 USD), 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 (\$9.74 USD) copayment per inpatient day. Medical services provided to women during maternity and a few preventive services are exempt from deductibles. Insurers can lower or waive coinsurance for people insured in a managed care plan. Municipalities or cantons cover health insurance expenses of social-assistance beneficiaries and recipients of supplementary old-age and disability benefits.

Safety nets: Coinsurance charges are waived after an enrollee reaches 700 CHF (\$682 USD) in a given year. Confederations and cantons provide income-based subsidies to individuals to help cover their premiums, though the process varies by canton. Roughly 1.6% of residents do not pay their premiums, responsibility for whom falls to the canton.

How is the health system financed?

Statutory Health Insurance: Mandatory basic insurance, regulated by law and supervised by the Federal Office of Public Health, is purchased on an individual basis from a number of competing non-profit insurers. Cantonal average premiums range between CHF 2,760 (Nidwalden) and CHF 5,040 (Geneva) (\$2,689 to \$4,911 USD). Costs are 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 only vary by two age categories (children, young adults) and level of deductible. Within the same region, the premium variation between insurers can be significant – as much as 90% 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 suppliers or their organizations. Social insurance finances 42.8% of total health expenditures. This includes the 35.2% financed by mandatory health insurance (2007).

Private health insurance: Regulated by the Federal Office of Private Insurance, private health insurers can vary benefit packages and premiums, and refuse enrollment 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 enrollment decisions on health information obtained via basic health coverage, but this is hard to enforce. Private insurance finances 9.2% of total health expenditure (2007).

Other: Out-of-pocket expenditures are relatively high, contributing 30.6% of total health expenditure, including 5.8% in co-payments. 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. As of July 2010, mandatory insurance will pay a contribution to the costs of medical care, the patient will have to pay 20 per cent of the amount paid by health insurance, the remaining costs of medical care being financed by the canton.

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 as they are responsible for the admission of providers, hospital planning, and subsidizing a number of institutions and organizations. Inpatient care, in particular, is heavily financed by the cantons. Government spending makes up 16.5% of total health expenditure (2007).

Physicians: Basic insurance covers 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). Basic health insurance spends CHF 1,947 (\$1,897 USD) per capita on outpatient care, a relatively high amount (2007). 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 providers or their 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 services are provided by public or publicly-subsidized privately-owned 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. Hospitals receive their funding from insurers, either in the form of per diem rates or reimbursement by diagnosis-related payments. The deficits of public and subsidized hospitals are covered by the canton.

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. Federal authorities publish medical quality indicators.

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 replaced by diagnosis or service-related 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. As of 2012, patients will have free choice among hospitals, in accordance with hospital planning changes.

How are costs controlled?

Switzerland has some of the highest health costs in the world, spending CHF 7,263 (\$7,076 USD) per capita in 2007 (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 10% and 25%. 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 40% (as of October 1st, 50%) lower than the original brand; however, they make up only 8.9% of the drugs sold in the Swiss markets. Patients pay an elevated coinsurance for brand name drugs that have a generic equivalent (20% instead of 10%). Pharmacists are paid a flat amount for dispensing drugs, rather than an amount based on the price, reducing their incentive to deliver the most expensive drug.

What recent system innovations and reforms have been introduced?

In December 2007, the Federal Parliament passed a hospital financing reform. The legal change will come into force on January 1, 2012. Instead of covering the costs of public and publicly subsidized hospitals, compulsory health insurance will finance only the services of private and public hospitals that the hospitals adhere to cantonal hospital planning – services in hospitals or department not included on a cantonal hospital list will not be reimbursed, with the goal to restrict hospital supply. Payments will be flat rate and service-related and will remunerate the hospitals for both operating costs and capital costs. This financing scheme will facilitate the cantons' ability to plan hospital capacities according to projected demand. In addition to the change in hospital financing, the Federal Parliament is refining the risk-adjustment compensation formula among insurers: from 2012 on, an indicator of the health status will be included in the formula in addition to "age" and "gender".

In June 2008, the Federal Parliament decided to reform long-term care financing. Instead of covering the costs of basic care (activities of daily living) and nursing care for patients in nursing homes and patients needing home care, compulsory health insurance will pay a flat contribution that is fixed by the Federal Council. The patient will additionally contribute no more than 20 percent of the highest amount paid by compulsory health insurance, and the cantons will regulate the financing of the remaining costs. The corresponding law changes will come into force on July 1st, 2010.

In July 2009, a re-examination of the prices of drugs reimbursed under the social insurance scheme led to the decision to move to a reference pricing scheme, based upon drug prices in six European countries (Germany, Netherlands, United Kingdom, Denmark, France and Austria).

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Who is covered?

Health care coverage is fragmented between multiple payers with wide gaps in the population uninsured. In 2008, 60% of residents received coverage from private insurers, 55% receiving it through their employer, and 5% paying directly. Twenty-four percent were covered under a federal program: 13% under Medicare (aged 65+), 10% under Medicaid (low-income and disabled), and 1% under military health care programs. Forty-six million residents (15% of the population) were uninsured. The government program CHIPRA, which offers coverage to certain populations of low-income children, was reauthorized and expanded in January 2009 and covers 7 million children.

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.

How is the health system financed?

Medicare: Medicare is a 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.

Medicaid: Medicaid is a 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 76% of Medicaid expenditures.

Private Insurance: More than 1,200 not-for-profit and for-profit health insurance companies provide private insurance. These are 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

Out-of-pocket: Out-of-pocket payments, including both cost-sharing insurance arrangements and expenditure paid directly by private households, accounted for 12% of total national health expenditures in 2007.

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: Hospitals can be for-profit, non-profit, and public. 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). The majority 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, based on domains including patient treatment, governance, culture, performance, and quality improvement. 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.

The Centers for Medicaid and Medicare Services (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.

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 administration costs are high at 7.1% of total health expenditures in 2007. 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 - \$7,290 in 2007. Total national health expenditures have been increasing at rates well above increases in national income, with total expenditures reaching 16% of GDP in 2007, and is expected to reach 21% by 2020 if current trends continue.

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 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.

What recent system innovations and reforms have been introduced?

The American Recovery and Reinvestment Act of 2009 made a number of significant investments in the health system, including a short-term boost in federal Medicaid funding and subsidies for recently unemployed to remain insured. Nineteen billon dollars was directed towards developing health information technology, and will be distributed under the newly-formed Office of the National Coordinator for Health Information Technology. One major initiative will be the creation of regional HIT extension centers to provide technical assistance, guidance, and information on best practices to support health care providers' use of Electronic Health Records. Additionally, an investment of \$1.1 billion was made in research comparing the effectiveness of medications and medical devices. A list of priorities for comparative effectiveness research has been submitted by the U.S. Department of Health and Human Services to the President and Congress.

The concept of a "medical home" – where a patient can receive targeted, accessible, continuous and coordinated, and family–centered care by a personal physician – has gained interested among U.S. experts and policymakers as a model to strengthen primary care. Beginning in 2009, the Medicare Medical Home Demonstration project will offer participating physician practices a care coordination fee in addition to the current fee-forservice payments, as well as additional bonus payments based on quality and efficiency performance funded through Medicare savings attributed to the project.

In 2006, the state of Massachusetts enacted an ambitious health reform, the first stage of which was to expand insurance coverage. The state implemented an individual mandate wherein all residents are required to have "minimal creditable coverage" and all medium and large employers must contribute towards their employees' premiums – failure for either to do so results in a financial penalty. Massachusetts now has one of the lowest uninsured rates in the country – 4.1% in 2008. The second step of reform will attempt to overhaul the provider payment system – in July 2009, the Special Commission on the Health Care Payment System unanimously endorsed a move away from traditional fee-for-service towards the establishment of global payments with incentives for quality.

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