THE COMMONWEALTH FUND

International Profiles of Health Care Systems, 2011

Australia, Canada, Denmark, England, France, Germany, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United States

Edited by:
Sarah Thomson, London School of Economics and Political Science
Robin Osborn, The Commonwealth Fund
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Abstract: This publication presents overviews of the health care systems of Australia, Canada, Denmark, England, France, Germany, Japan, Italy, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United States. Each overview covers health insurance, public and private financing, health system organization, quality of care, health disparities, efficiency and integration, use of health information technology, use of evidence-based practice, cost containment, and recent reforms and innovations. In addition, summary tables provide data on a number of key health system characteristics and performance indicators, including overall health care spending, hospital spending and utilization, health care access, patient safety, care coordination, chronic care management, disease prevention, capacity for quality improvement, and public views.

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Table 1. Health Care System Financing and Coverage in Fourteen Countries

	Health System and Public/Private Insurance Role			Benefit Design	
	Government Role	**Public System Financing**	**Private Insurance Role** (Core Benefits; Cost-Sharing; Extra Benefits; Substitute Public Insurance)	**Caps on Out-of-Pocket Spending**	**Exemptions & Low Income Protection**
Australia	Regionally-administered universal public insurance program (Medicare)	General tax revenue; earmarked income tax	50% buy coverage for access to private facilities & extra benefits	80% OOP subsidy if exceeds AUS $1,158 ($1,204)	Low income and elderly: Lower cost-sharing; lower OOP maximum before 80% subsidy
Canada	Regionally-administered universal public insurance program (Medicare)	Provincial/federal tax revenue	~67% buy coverage for extra benefits	No	Some cost-share exemptions; varies by province
Denmark	National health service	Earmarked income tax	~40% buy coverage for cost-sharing, extra benefits, or access to private facilities	Decreasing co-payments with higher drug OOP spending	Drug OOP cap for chronically ill (DKK 3,410 ($636)); financial assistance for low income and terminally ill
England	National health service	General tax revenue	~10% buy for private facilities	No	Drug cost-sharing exemption for low income, elderly, children, pregnant and recent mothers, and some disabled/chronically ill; transport costs for low-income
France	Statutory health insurance system, with all SHI insurers incorporated into single national union	Employer/employee earmarked income and payroll tax; general tax revenue	90% buy coverage for cost-sharing; some extra benefits	No	Exemption for low income, chronically ill and disabled, and children
Germany	Statutory health insurance system, with 180 competing SHI insurers ("sickness funds"); high income can opt out for private coverage	Employer/employee earmarked payroll tax; general tax revenue	Cost-sharing + amenities (~20%); Substitute: 10% opt-out of SHI system for private coverage only	2% income	Income-related insurance contributions; OOP max 1% income for chronic + low income; children exempt
Italy	National health service	Earmarked business and value-added tax; regional tax revenue	~15% buy coverage for access to private facilities and amenities	20% OOP subsidy if exceeds €129 ($179)	Exemptions for low-income elderly/children, pregnant women, and some chronic conditions/ disabilities
Japan	Statutory health insurance system, with 3,500+ non-competing public, quasi-public, and employer-based insurers	General tax revenue; insurance premiums	Majority buy coverage for cash benefits/cost-sharing	Coinsurance reduced to 1% after 80,100 yen ($1,050) monthly cap	Low-income monthly OOP ceiling: 35,400; reduced co-payments for young children and elderly
Netherlands	Statutory health insurance system, with universally-mandated private insurance (national exchange)	Earmarked payroll tax; community-rated insurance premiums; general tax revenue	Private plans provide universal core benefits; 80% buy extra benefits	No	Income-related premium assistance (40% receive); children exempt from cost sharing
New Zealand	National health service	General tax revenue	~33% buy for cost-sharing, access to specialists, and elective surgery in private hospitals	Subsidies after 12 doctor visits/20 prescriptions in past year	Lower cost-sharing for low income, some chronic conditions, Maori and Pacific islanders; young children mostly exempt
Norway	National health service	General tax revenue	<5% buy for private facilities	NOK 1,880 ($339)	Some exemptions for young children, pregnant women, and disabled
Sweden	National health service	General tax revenue	<5% buy for private facilities	SEK 900 ($137) for health services & SEK 1,800 ($274) for drugs	Children mostly exempt from cost-sharing for health services
Switzerland	Statutory health insurance system, with universally-mandated private insurance (regional exchanges)	Community-rated insurance premiums; general tax revenue	Private plans provide universal core benefits; 70% buy extra benefits or amenities	700 CHF ($792) max after deductible	Income-related premium assistance (30% receive); some assistance for low income; some exemptions for children, pregnant women
United States	Medicare: age 65+, some disabled; Medicaid: some low-income (most under age 65 covered by private insurance; 16% of population uninsured)	Medicare: payroll tax, premiums, federal tax revenue; Medicaid: federal, state tax revenue	Primary private insurance covers 56% of population (employer-based and individual); supplementary for Medicare	Not currently	Low income: Medicaid; elderly & some disabled on Medicare

Note: All descriptions are approximate. No health system accords with a single model; all are hybrids.

Table 2. Selected Health System Indicators for Fourteen Countries

		Australia	Canada	Denmark	France	Germany	Italy	Japan	Netherlands	New Zealand	Norway	Sweden	Switzerland	United Kingdom	United States
Population, 2009	Total Population (1,000,000s of People)	21.955	33.368	5.519	62.636	81.902	58.947	127.509	16.418	4.317	4.829	9.301	7.744	60.931	306.656
	Percentage of Population Over Age 65	13.3%	13.9%	16.1%	16.7%	20.5%	20.4%	22.7%	15.2%	12.8%	14.8%	17.9%	17.2%	15.8%	13.0%
Spending, 2009	Percentage of GDP Spent on Health Care	8.7%	11.4%	11.5%	11.8%	11.6%	9.5%	8.5%	12.0%	10.3%	9.6%	10.0%	11.4%	9.8%	17.4%
	Health Care Spending per Capita[d]	$3,445	$4,363	$4,348	$3,978	$4,218	$3,137	$2,878	$4,914	$2,983	$5,352	$3,722	$5,144	$3,487	$7,960
	Average Annual Growth Rate of Real Health Care Spending per Capita, 1999-2009	5.8%	6.1%	6.1%	5.2%	5.0%	5.2%	5.1%	8.5%	7.0%	6.8%	5.7%	5.3%	7.6%	5.8%
	Out-of-Pocket Health Care Spending per Capita[d]	$627	$636	n/a	$291	$552	$617	$454	n/a	$399	$808	$620	$1,568	$364	$976
	Hospital Spending per Capita[d]	$1,356	$1,223	$1,893	$1,366	$1,200	n/a	$1,355	$1,545	$1,070	$1,800	$1,637	$1,831	n/a	$2,475
	Spending on Pharmaceuticals per Capita[d]	$503	$744	$319	$640	$628	$572	$558	$473	$254	$391	$465	$521	$382	$956
Physicians, 2009	Number of Practicing Physicians per 1,000 Population	3.0	n/a	3.4	n/a	3.6	3.4	2.2	n/a	2.6	4.0	3.7	3.8	2.7	2.4
	Average Annual Number of Physician Visits per Capita	6.5	5.5	4.6	6.9	8.2	n/a	13.2	5.7	4.3	n/a	2.9	4.0	5.0	3.9
Hospital Spending, Utilization, and Capacity, 2009	Number of Acute Care Hospital Beds per 1,000 Population	n/a	1.8	2.9	3.5	5.7	3.0	n/a	3.1	n/a	2.4	2.0	3.3	2.7	2.7
	Hospital Spending per Discharge[d]	$8,350	$13,483	$11,112	$5,204	$5,072	n/a	$12,650	$13,244	$7,160	$10,441	$9,870	$10,875	n/a	$18,142
	Hospital Discharge per 1,000 Population	162[a]	84[a]	170	263	237	130	n/a	116.633	142	177	166	168	138	131
	Average Length of Stay for Acute Care (days)	5.9a	7.7	n/a	5.2	7.5	6.7	n/a	5.6	5.9	4.6	4.5	7.5	6.8	5.4
Medical Technology, 2009	Magnetic Resonance Imaging (MRI) Machines per Million Population	5.9	8.0	15.4	6.4	n/a	21.6	43.1	11.0	9.7	n/a	n/a	n/a	5.6	25.9
	MRI Exams per 100,000 Population	23.3	43.0	37.8	55.2	n/a	n/a	n/a	43.9	n/a	n/a	n/a	n/a	n/a	91.2
IT, 2009	Physicians' Use of EMRs (% of Primary Care Physicians)[e]	95%	37%	n/a	68%	72%	94%	n/a	99%	97%	97%	94%	n/a	96%	46%
Health Risk Factors, 2009	Percentage of Adults Who Report Being Daily Smokers	16.6%	16.2%	19.0%	26.2%	21.9%	23.3%	24.9%	28.0%	18.1%	21.0%	14.3%	20.4%	21.5%	16.1%
	Obesity (BMI>30) Prevalence	24.6%	24.2%	n/a	11.2%	14.7%	10.3%	3.9%	11.8%	26.5%	10%	11.2%	8.1%	23.0%	33.8%

Source: OECD Health Data 2011 (June) unless otherwise noted.

[a] 2008

[b] 2007

[c] 1998–2008

[d] Adjusted for differences in the cost of living.

[e] Source: 2009 Commonwealth Fund International Health Policy Survey of Primary Care Physicians.

[f] Self-reported as opposed to measured data.

Table 3. Selected Health System Performance Indicators for Fourteen Countries

		Australia	Canada	France	Germany	Netherlands	New Zealand	Norway	Sweden	Switzerland	United Kingdom	United States
Access, 2010	Able to get Same/Next Day Appointment When Sick	65%	45%	62%	66%	72%	78%	45%	57%	93%	70%	57%
	Very/Somewhat Difficult Getting Care After-Hours	59%	65%	63%	57%	33%	38%	45%	68%	43%	38%	63%
	Waited Two Months or More for Specialist Appointment[a]	28%	41%	28%	7%	16%	22%	34%	31%	5%	19%	9%
	Waited Four Months or More for Elective Surgery[b]	18%	25%	7%	0%	5%	8%	21%	22%	7%	21%	7%
	Experienced Access Barrier Due to Cost in Past Year[c]	22%	15%	13%	25%	6%	14%	11%	10%	10%	5%	33%
Safety, 2010	Experienced Medical, Medication or Lab Test Error in Past 2 Years	14%	17%	14%	10%	11%	12%	21%	13%	13%	8%	18%
Care Coordination and Transitions Among Chronically Ill Adults, 2008	Experienced Coordination Problems with Medical Tests/Records in Past 2 Years[d]	23%	25%	22%	26%	14%	21%	n/a	n/a	n/a	20%	34%
	Experienced Gaps in Hospital Discharge Planning in Past 2 Years[e]	61%	50%	71%	61%	51%	53%	n/a	n/a	n/a	50%	38%
	Specialist Did Not Have Information About Medical History During Appointment[a]	19%	16%	28%	32%	13%	12%	n/a	n/a	n/a	14%	22%
Chronic Care Management, 2008	Regular doctor always tells you about treatment options/involves you in decisions[f]	58%	56%	43%	56%	63%	62%	n/a	n/a	n/a	51%	53%
	Diabetics Received Recommended Preventive Care Services in Past Year	36%	39%	31%	40%	59%	55%	n/a	n/a	n/a	67%	43%
Primary Care Practices' Capacity for Quality Improvement, 2009	Routinely Receives and Reviews Clinical Outcomes Data	24%	17%	12%	41%	65%	68%	25%	71%	n/a	89%	43%
	Routinely Receives and Reviews Patient Satisfaction and Experience Data	52%	15%	2%	24%	23%	65%	5%	78%	n/a	96%	55%
	Routinely Uses Written Treatment Guidelines for Diabetes	87%	82%	62%	77%	98%	93%	86%	94%	n/a	96%	82%
	Can Receive Financial Incentives and Targeted Support	65%	62%	50%	58%	81%	80%	35%	10%	n/a	89%	36%
OECD Health Care Quality Indicators	Diabetes Lower Extremity Amputation Rates per 100,000 population, 2007	n/a	11	13	n/a	11[l]	12	11	12	16[k]	9	36[k]
	Breast Cancer Five-Year Survival Rate, 2002–2007 (or nearest period)	n/a	87	n/a	n/a	85	82	82	86	n/a	79	91
	Mortality After Admission for Acute Myocardial Infarction per 100 Patients, 2007[g]	n/a	4.2	n/a	n/a	6.6[k]	3.3	3.2	2.9	n/a	6.3	5.1[k]
Avoidable Deaths, 2006–07	Mortality Amenable to Health Care[h] (Deaths per 100,000 Population)	57	n/a	55	76	66	79	64	61	n/a	83	96
Prevention, 2009	Percentage of Children with Measles Immunization[i]	94%	n/a	90%	96%[j]	96%	89%	93%	97%	90%	87%	90%
	Percentage of Population over Age 65 with Influenza Immunization[i]	75%	67%	71%	61%	77%	66%	n/a	64%	56%	73%	67%
Public Views of Health System, 2010	Works Well, Minor Changes Needed	24%	38%	42%	38%	51%	37%	40%	44%	46%	62%	29%
	Fundamental Changes Needed	55%	51%	47%	48%	41%	51%	46%	45%	44%	34%	41%
	Needs to be Completely Rebuilt	20%	10%	11%	14%	7%	11%	12%	8%	8%	3%	27%

Sources (unless noted otherwise): 2008, 2009, and 2010 Commonwealth Fund International Health Policy Surveys

[a] Base: Needed to see a specialist in past two years.

[b] Base: Needed elective surgery in past two years.

[c] Did not fill/skipped prescription, did not visit doctor with medical problem, and/or did not get recommended care.

[d] Test results/medical records not available at time of appointment and/or doctors ordered medical test that had already been done.

[e] Did NOT: 1) know who to contact for questions about condition or treatment; 2) receive instructions about symptoms and when to seek further care; 3) receive written plan for care after discharge; or 4) Have arrangements made for follow-up visits with any doctor.

[f] Base: Has a regular doctor or place of care.

[g] In-hospital case-fatality rates within 30 days of admission.

[h] Source: Nolte E, McKee M. Variations in amenable mortality-Trends in 16 high-income nations. Health Policy. 2011 Sep 12.

[i] Source: OECD Health Data 2011 (June).

[j] 2008

[k] 2006

[l] 2005

Table 4. Provider Organization and Payment in Fourteen Countries

	Provider Ownership		Provider Payment		Primary Care Role	
	Primary Care	Hospitals	Primary Care Payment	Hospital Payment	Registration with GP Required	Gatekeeping
Australia	Private	Public (~67% of beds), private (~33%)	FFS	Global budgets (+ case-based payment in some states) (includes physician costs)	No	Yes
Canada	Private	Almost all private, non-profit	Mostly FFS, but some alternatives (e.g. capitation)	Global budgets (+ case-based payment in some provinces) (does not include physician costs)	Not generally, but yes for some capitation models	Incentives in some regions/ programs
Denmark	Private	Almost all public	Mix FFS/ capitation	Global budgets + case-based payment (includes physician costs)	Yes (for 98% of population)	Yes (for 98% of population)
England	Mixed	Mostly public, some private	Most mix capitation/ P4P; public receive salary	Global budgets + case-based payment (includes physician costs)	Yes	Yes
France	Private	Mostly public, some private	FFS	Global budgets + case-based payment (includes physician costs)	No	National incentives
Germany	Private	Public (~50% of beds); private non-profit (~33%); private for-profit (~17%)	FFS	Global budgets + case-based payment (includes physician costs)	No	In some sickness fund programs
Italy	Private	Mostly public, some private	Mix capitation/ FFS	Global budgets + case-based payment (includes physician costs)	Yes	Yes
Japan	Private	Private non-profit (~55% of beds) and public	FFS	~50% FFS; ~50% case-based per diem payments (includes physician costs)	No	No
Netherlands	Private	Mostly private, non-profit	Mix capitation/ FFS	Global budgets + case-based payment (include physician costs)	Yes	Yes
New Zealand	Private	Mostly public, some private	Mix capitation/ FFS	Global budgets + case-based payment (includes physician costs)	Yes (for 96% of population)	Yes
Norway	Private	Almost all public	Mix FFS/ capitation	Global budgets + case-based payment (includes physician costs)	Yes	National incentives
Sweden	Mixed	Almost all public	Most salaried; private receive mix capitation/ FFS	Global budgets + case-based payment (includes physician costs)	Yes (except Stockholm)	Some incentives
Switzerland	Private	Mostly public, some private	Most FFS, but some capitation	Varies by canton: Global budgets, per diem, case-based payment (includes physician costs)	No	In some insurance programs
United States	Private	Mix of non-profit (~70% of beds), public (~15%), and for-profit (~15%)	Most FFS, some capitation with private plans	Per diem and case-based payment (usually does not include physician costs)	No	In some insurance programs

Note: All descriptions are approximate. No health system accords with a single model; all are hybrids.

The Australian Health Care System, 2011

CONTRIBUTING AUTHORS:
JUDITH HEALY, AUSTRALIAN NATIONAL UNIVERSITY
JANE HALL, UNIVERSITY OF TECHNOLOGY, SYDNEY,
AND THE COMMONWEALTH FUND

Who is covered?

Australia's national public health insurance scheme, Medicare, provides universal health coverage for citizens and permanent residents, as well as visitors and people on temporary visas from countries that have reciprocal arrangements with Australia. Overseas students are covered by a special arrangement. The Australian government provides some assistance for asylum seekers while their applications for protection are processed, including temporary eligibility for Medicare, and pays for health care for those in detention centers. A significant number of undocumented migrants are not eligible for Medicare, however, and those experiencing financial hardship and asylum seekers can seek assistance from nongovernmental organizations (NGOs), such as migrant resource centers and the Australian Red Cross.

What is covered?

Services: Public hospital care is provided free to the population. People may choose to pay for private care, however, in public or private hospitals. Medicare provides free or subsidized access to most medical services, some allied health services if referred by a medical practitioner, and prescription pharmaceuticals. The Australian government, usually jointly with the eight state and territory governments in Australia's federal system, also funds a wide range of other health services, including population health, mental health, limited dental services, 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 private hospitals, choice of specialists in hospital (people are free anyway to choose their general practitioner and specialist for out of hospital care), and timing of procedures. People may also take out private insurance to cover choice of practitioners for ancillary services such as physiotherapy, dental, optometry, podiatry, and complementary medicine services, as such services are not readily available through the public system or are not covered under Medicare benefits. Since 2007, private insurers have been able to cover out-of-hospital services which substitute for or prevent in-hospital care. However, there has been little development of these services to date.

Preventive services, such as free vaccines and screening for breast, bowel, and cervical cancer, are provided through public programs. General practitioners also provide preventive services, such as immunizations and some health checks, which are subsidized in part or whole by Medicare or through national programs.

Mental health care is free when part of public hospital inpatient care, or is subsidized in part or whole by Medicare for consultations with community-based psychiatric specialists. NGOs also provide information, treatment, and advocacy services.

Long-term care is provided either in the community through means-tested services subsidized by an intergovernmental program, or in residential care homes with means-tested fee, subsidized by an Australian government program.

Who defines what is publicly covered? Inpatient care in public hospitals is free under the National Health Act 1953. The Australian government defines subsidies for outpatient care and outpatient physician services in the Medical

Benefits Schedule, and subsidies for medication are set out in the Pharmaceuticals Benefits Schedule. Eligibility for residential aged care is defined by the Australian government, while eligibility for other services, such as mental health services or alcohol and drug services, mostly is defined by state governments.

Cost-sharing: Medicare usually reimburses 85 percent to 100 percent of the schedule fee for ambulatory services and 75 percent 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). Incentive schemes introduced to reverse falling rates of bulk billing by general practitioners offer 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 the Medicare payment was increased to 100 percent of the schedule fee. In financial year 2009–10, 74.3 percent of all Medicare services were bulk billed. Prescription pharmaceuticals covered by the Pharmaceutical Benefits Scheme (PBS) have a standard copayment of AUS$34 [US$35] for the general public, with a reduced rate of AUS$6 [US$6] per item dispensed for individuals with concession cards).

Safety net: The safety net is in place once annual thresholds for medical services and pharmaceutical goods are exceeded. Under the Original Medicare Safety Net for out-of-hospital medical services, when the annual threshold for "gap expenses" is reached of (AUS$400 [US$415]), the Medicare payment is increased to 100 percent (from 85%) of the Medicare schedule fee for the remainder of the calendar year. Gap expenses refer to the difference between the Medicare benefit and the schedule fee. The Extended Medicare Safety Net introduced in 2004 provides an additional payment. Once the out-of-pocket threshold is reached, the patient receives 80 percent of his or her out-of-pocket costs in addition to the standard Medicare payment for the remainder of the calendar year. 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). The thresholds are AUS$579 (US$601) for individuals with concession cards and low-income families and AUS$1,158 (US$1,202) for general patients. Families can register for the Medicare Safety Nets to have their gap expenses and out-of-pocket costs combined to reach the applicable threshold amount sooner. Since 2009, there have been limits to the amount of benefit provided on certain items.

People who exceed an annual safety-net threshold for pharmaceutical costs (PBS-listed medicines) are eligible for additional subsidies. Patients are grouped into two classes: general and concessional (with subsidies indexed annually to consumer price index increases for each PBS prescription item). The patient copayment per item decreases to the concessional rate once expenditure exceeds AUS$1,370 (US$1,422) by general patients in a calendar year. For concessional patients, the AUS$5 (US$5) copayment is not required once their expenditure on PBS items exceeds AUS$336 (US$349).

How is the health system financed?

The health system is mainly financed through general taxation revenue, including a small statutory insurance levy, and through private payments. The public, taxation-funded national health insurance scheme, Medicare, provides universal access to subsidized medical services, subsidized pharmaceuticals, and free hospital treatment as a public patient. People can also take out private health insurance to complement the public scheme, in order to cover or partially cover the financial costs of hospital treatment as private patients, to enable quicker access to elective surgery as a private patient, and to cover or partially cover dental and other allied health services.

Government health expenditure (the Australian government and the eight states/territories) is funded from general tax revenue, including the Goods and Services Tax (GST), and in addition a large portion of health revenue is raised from patient fees and other nongovernment sources. In 2008–09, governments funded 70.7 percent of total health expenditure (68.0% in the OECD definition) – 43.2% by the Australian government and 26.5% by the states/territories—

while nongovernment sources provided 30.3 percent. Australia spent 9 percent of GDP on health in 2008–09 (8.7% in the OECD definition) after a real growth in total health expenditure of 5.4 percent over the decade 1998–99 to 2008–09 (AIHW 2010a).

National Health Insurance: The Australian government administers the compulsory national health insurance scheme, Medicare, previously a statutory authority and now a government agency. Medicare is funded mostly from general revenue and in part by a 1.5 percent levy on taxable income, although some low-income individuals are exempt or pay a reduced levy. In 2007–08, the revenue raised from the Medicare levy (including the surcharge) amounted to 18 percent of total federal government health expenditure. Individuals and families in 2011–12 with higher incomes (AUS$80,000 and AUS$160,000 per annum, respectively [US$83,034 to $166,067]) who do not take out private hospital insurance must pay a Medicare levy surcharge, which is an additional 1 percent of taxable income.

Medicare defines the reimbursement level for listed items (the Medicare schedule fee) but medical practitioners remain free to set their fees. GPs and specialists charge a fee-for-service. Patients are reimbursed by Medicare, unless the medical practitioner bulk bills Medicare and accepts the schedule fee. The Department of Veterans' Affairs covers eligible veterans and their dependants by directly purchasing public and private health care services.

Private insurance: Private health insurance is community rated and provided by both for-profit and nonprofit insurers. Private health insurance policy is set by the Australian government Department of Health and Ageing and the minister must approve any increases in fees. The private health insurance industry is regulated by the Private Health Insurance Administration Council, an independent statutory authority. Private insurance contributed 7.6 percent of total health expenditure in 2008–09. In June 2011, 44.3 percent of the population had private hospital insurance, and 52.5 percent had general treatment coverage (which includes ancillary services). Private health insurance policy encourages people to take out private hospital coverage early in life. This is the Lifetime Health Coverage, which offers people who join a health fund before age 31 a relatively lower premium throughout their lives, regardless of their health status. People over age 30 face a 2 percent 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.

The Australian government has paid rebates to people on their private health insurance premiums since 1999. The 30 percent rebate increases to 35 percent for people ages 65 to 69 years and to 40 percent for those aged 70 and older. The rebate currently costs AUS$4.5 billion (US$4.7 billion) annually and recent government attempts to pass legislation to means-test the rebate have been defeated in Parliament.

Out-of-pocket expenditure: Out-of-pocket spending accounted for 16.8 percent of total health expenditure in 2008–09 (18.2% in the OECD definition). Most of this expenditure is for medications not covered by the PBS, dental services, aids and appliances, and copayments on medical fees.

How is the delivery system organized?

The Australian government plays a strong role in national policymaking but generally funds rather than provides health services. The main national governance agencies in relation to health are the Council of Australian Governments (COAG), the Australian Health Ministers Conference, and the Australian Department of Health and Ageing. The Australian government funds the national insurance scheme and pharmaceutical benefits, funds (with the states/territories) public hospitals and population health programs, regulates much of the health system including private health insurance, pharmaceuticals, and medical services, and has the main funding and regulatory responsibility for residential elderly care facilities that are government subsidized.

The eight states and territories (through their health departments) essentially are autonomous in administering health services subject to intergovernmental and funding agreements. The states are charged with administering public hospitals and with regulating all hospitals and community-based health services. Local government is involved in environmental health and some public health programs but not clinical services. The private sector includes the majority of doctors (e.g., general practitioners and many specialists), private hospitals, a large diagnostic services industry, and several private health insurance funds.

Physicians: About 37.5 percent of medical practitioners are GPs in private practice, 35 percent are specialists, and 13.8 percent are specialists in training (AIHW 2010b). Most medical practitioners and allied health practitioners are in private practice and charge a fee-for-service. Many private specialists work in both the public and private sectors. Physicians in public hospitals either are salaried (but may also have private practices and additional fee-for-service income) or are paid on a per-session basis for treating public patients.

Primary care: Most general practitioners are self-employed and run their practices as small businesses. Few GPs now work in solo practices although practice sizes mostly remain small. According to the annual Bettering the Evaluation and Care of Health (BEACH) survey of 1,000 randomly selected GPs, 43 percent worked in practices of two to four full-time-equivalent GPs and 29 percent worked in practices of five to nine full-time-equivalent GPs (Britt et al. 2009). Some "corporatization" is underway as 8 percent of GPs now are employed under contract with private agencies, often private health care company chains. GPs charge their patients a fee-for-service and the majority bulk bill Medicare. GPs may also be paid a small amount (in terms of their overall income) to deliver agreed public health services. General practitioners play an important gatekeeping role as Medicare will only reimburse specialists the schedule fee payment for consultations referred by GPs.

Individuals are not required to register with a primary care physician and are free to consult any GP, to seek a second opinion, or to shift to another GP practice. Given the current shortage of doctors, GPs with busy practices, however, may decide not to accept new patients. Patients generally have a "medical home" in that most people/families choose to stay with one general practice clinic, usually in their local area, that maintains their health records.

Multidisciplinary teams are the norm in community health centers but not in private general practices. Large practices with several partners may employ a practice manager, and some employ nurses and the Australian government through the Practice Incentives Program subsidizes the employment of practice nurses. Medicare items allow GPs to claim for specified tasks undertaken by a practice nurse under the direction of the GP, with practice nurses involved in 6.4 percent of GP–patient encounters (Britt et al. 2009). Practice nurses were employed in nearly 60 percent of Australia's general practices in 2006, and are being allocated an increasing number of items in the Medicare Benefits Schedule. The Australian government funds group practices and multidisciplinary teams in its GP Super Clinics program, with an addition of 23 clinics to the existing 36 clinics announced in the 2010–2011 federal budget, plus upgrading around 425 general practices, primary care and community health services, and Aboriginal Medical Services.

The Australian government has funded Divisions of General Practice (comprising local groups of 100 to 300 GPs) since 1992 in order to improve health outcomes for the community. The Divisions support local health planning, collaboration between general practitioners and other health care providers, and enable more efficient use of resources, such as immunization programs and better management of chronic disease. The primary care field recently has embarked on a major restructure with the advent of primary health care organizations called Medicare Locals, with 19 funded in 2011 (based on Divisions of General Practice in consortia with other groups) out of a proposed eventual 62 groups. These Medicare Locals will include a broader range of health professionals and have service delivery responsibility for their local region including chronic disease prevention and management programs, mental health initiatives, and improved access to after-hours care.

After-hours care: General practice clinics vary considerably in the extent to which they provide after-hours care, as clinic hours are a decision for individual practice owners and managers. Practice accreditation standards set by the Royal Australian College of General Practitioners call for practices to ensure "reasonable arrangements for medical care for patients outside normal opening hours." The scarcity of after-hours care, and consequent increase in people attending hospital emergency departments for nonemergency conditions, prompted the Australian government to offer grants to GPs to provide after-hours services, which are mainly provided through locum service home visits.

According to the BEACH survey, 43 percent of GPs work in a practice that provides their own or cooperative after-hours care, and 58 percent in a practice that uses a deputizing service for after-hours patient care (Britt et al. 2009). After-hours care often is provided by a private company through arrangements with GP practices. A Commonwealth Fund survey of primary care physicians in 11 countries in 2009 found that 50 percent in Australia said their practice had after-hours care arrangements, a higher proportion than in the United States but lower than in several European countries (Schoen et al. 2009).

Outpatient specialist care: Specialists are located in both the private and the public sector and many work in both sectors. Private specialists generally maintain offices in the community and also have "visiting rights" in public and private hospitals where they run outpatient sessions and treat inpatients. Surgeons, in particular, may maintain operating schedules in public hospitals (and operate on both public and private patients) as well as private hospitals.

Hospitals: The hospital sector includes a mix of public facilities (run by state/territory governments) and private facilities. Public hospitals provide 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-year agreements. Public hospitals also receive some revenue from treating private patients. Many salaried specialist doctors in public hospitals also treat some private patients in hospital, to which they usually contribute a portion of the income earned from the fees. Private hospitals (including freestanding ambulatory day centers) can be either for-profit or nonprofit, and their income is chiefly derived from patients with private health insurance. Most emergency surgery is provided in public hospitals, while the majority of elective surgery procedures are provided in private facilities: in-patient hospitals, day hospitals, and clinics. Specialists and hospital services refer patients back to their GPs for follow-up care.

There were 762 public acute care hospitals and 552 private hospitals (including 272 day hospitals) in 2007–08 (AIHW 2010b). Beds in public acute and public psychiatric hospitals accounted for 67 percent of the total bed stock. Australia provides 4.0 beds (public and private) per 1,000 population. Both public and private hospitals have become busier in terms of patient throughput, and same-day discharges accounted for 52.2 percent of all discharges in 2007–08.

Private health insurance funds list their preferred provider for private hospital cover, dental cover, other allied health services, and also list doctors who will accept a Medical Gap Scheme schedule of benefits as full payment for in-hospital services.

Long-term care: The majority of care for the elderly with long-term health conditions and dependencies is provided by relatives and friends; there is an allowance available to caregivers in some cases. The Australian government subsidizes assistance for people assessed as having a high level of dependency either through community care services or residential aged care homes. The national planning benchmark for 2011 is 88 residential care places per 1,000 people aged 70 years and over and 25 community-based packages per 1,000 for high-dependency people. The Australian government and state/territory governments jointly fund the Aged Care Assessment Program (ACAP) that conducts client assessments in relation to five dimensions of need: physical, psychological, medical, cultural, and social. The core objective is to comprehensively assess the care needs of frail older people and to assist them to gain access to the most appropriate types of care, including approval for government-subsidized residential and community care services.

The Australian government subsidy for aged residential care is means tested and the amount of subsidy is based on extent of a person's dependency (low, medium, high) and their total assessable income. Under the current funding formula, the maximum income tested fee for standard care for a resident (as of September 20, 2011) was AUS$866 [US$899] per fortnight for a single person. (In comparison, the full age pension for a single person is $689 [US$715] per fortnight). A resident's income tested fee is calculated at 5/12th of total assessable income over an income tested fee threshold.

There were 175,472 residential aged care places for individuals in 2008, operated by 2,830 service providers. The majority (61%) of providers were in the not-for-profit sector, such as religious and community organizations, 28 percent of providers were private for-profit establishments, while the remaining 11 percent were state and local government facilities. About 80 percent of aged care residents are aged 80 years and over (AIHW 2010c).

The Home and Community Care (HACC) program**,** an intergovernmental program, subsidizes a range of community services that aim to support people in their own homes. Assistance available through HACC includes assistance with domestic tasks, personal care, transport, home maintenance, nursing, and allied health care. The Australian government provides around 60 percent of HACC funding and state/territory governments provide around 40 percent. HACC services were received by 225 per 1,000 persons aged 65 and over in 2007–08.

Palliative care services are provided by government and nongovernment providers to people in their own homes, in community-based settings such as nursing homes, in palliative care units, and in hospitals. The National Palliative Care program funds initiatives to ensure quality care and to improve access to service for people who are dying and their families. Some 340 government-funded agencies (in 2006) provided palliative care of which 63 percent were specialist palliative care agencies.

Mental health care: The aim of the National Mental Health Strategy is to "deinstitutionalize" and "mainstream" mental health services by moving treatment beyond psychiatric hospitals and into general hospitals while expanding the provision of community health services. A variety of public and private health care providers operate mental health services. Nonspecialized services are offered through GPs, and specialized services are provided through psychiatrists, psychologists, community-based mental health services, psychiatric hospitals, psychiatric units within general acute hospitals, and residential care facilities. About 20 public psychiatric hospitals treat and care for admitted patients with psychiatric, mental, or behavior disorders. Community services included hospital outpatient clinics and nonhospital community mental health care services, such as crisis and mobile assessment and treatment services, day programs, outreach services, and consultation and liaison services. Consultations by patients with GPs and specialists for mental-health-related problems can be claimed from Medicare. Inpatient admissions to public hospitals for mental health problems are free to the patient and funded through intergovernmental hospital funding agreements. Private health insurance funds subsidize insured admissions of insured patients to private hospitals.

Pharmaceuticals: Prescription pharmaceuticals are covered by the PBS, which offers payment for a comprehensive and evolving list of drugs at a negotiated fixed price. The standard copayment made by patients (in 2011) was AUS$33 (US$34). Most prescribed pharmaceuticals are dispensed by private sector pharmacies. The Repatriation Pharmaceutical Benefits Scheme subsidizes similar access to pharmaceuticals for war veterans and dependants.

What is being done to ensure quality of care?

The last decade has seen much more attention by a range of regulatory actors and strategies to ensuring quality of care (Healy 2011). The peak body in this area, the Australian Commission on Safety and Quality in Health Care (which became a statutory body in 2011), publicly reports on the safety and quality of health care performance against national standards, disseminates knowledge, identifies policy directions, and develops and promotes programs. For example, the Commission is implementing a new approach to accreditation, including a set of Australian Health Standards to be met by health services such as hospitals and day surgeries by January 2013.

Most health care organizations seek accreditation by independent accreditation agencies, with most hospitals and about 85 percent of general practices now accredited. Quality in general practice has been enhanced in that general practice is a professional specialty and the majority of general practices in Australia (over 85%) now seek accreditation from agencies that accredit against quality standards set by the Royal Australian College of General Practitioners. Medicare also offers financial incentives, rewarding practices deemed to be working toward meeting the college's standards in the areas of information management, after-hours care, rural care, teaching, and quality prescribing. A key incentive is that only accredited practices are eligible to participate in the Practice Incentives Program—a blended payment administered by Medicare Australia on behalf of the Department of Health and Ageing. Residential aged care must be accredited to be eligible for government subsidies and provider organizations and their staff are subject to licensing and stringent approval processes.

Health care organizations as employers run a variety of quality improvement programs. Most professional boards now require their members to participate in professional development programs in order to maintain their professional registration.

What is being done to reduce disparities?

Some Australian population groups are less healthy than others, namely indigenous people (an estimated 2.5% of the population), people living in rural and remote areas, and poorer people (AIHW 2010b). Reducing health disparities is a key goal for the Australian health care system and progress toward this goal is being monitored. The Australian government and the states/territories have pledged to work in partnership with indigenous communities and seek to close the longstanding health gap through a range of programs and increased health expenditure. Extra subsidies for services, training programs, and outreach services are being directed to people in rural areas. A safety net is in place to improve financial access to goods and services for low-income people.

What is being done to improve efficiency and health system integration?

Several entities review the efficiency and effectiveness of drugs, devices, and services. The main ones are as follows.

The Pharmaceutical Benefits Advisory Committee (PBAC) is an independent statutory body that advises the national minister for health. PBAC considers the effectiveness and cost of a drug proposed for PBAC listing (the government subsidy list) compared to other therapies or to no therapy. It assesses new prescription drugs on the same basis before they can be included in the PBS. The Department of Health and Ageing then uses these assessments to negotiate prices with manufacturers.

The PBAC requires applicants to prepare detailed submissions providing evidence of effectiveness and cost-effectiveness, and these are then subject to rigorous assessment by health technology assessment (HTA) organizations contracted to PBAC and provided as confidential reports. PBAC evaluation is mandatory for listing. The minister has some leeway on whether to accept its recommendation. A positive recommendation by PBAC does not ensure listing, but a recommendation not to list a product requires legislative (not just ministerial) intervention to be overturned. When proposing to delete a product from the PBS list, the minister must seek advice from PBAC, and that advice must be tabled in both houses of Parliament, but the minister is not obliged to accept that advice. The health minister and Parliament may reject an affirmative PBAC recommendation to list a new drug or to amend its coverage, but they may not add a new drug to the PBS that has not been endorsed by PBAC.

Medical services are considered by the Medical Services Advisory Committee (MSAC), an advisory committee that makes recommendations to the minister for health. It assesses new medical therapies for inclusion in the Medical Benefits Schedule, based on safety, cost-effectiveness, and comparative effectiveness. The advisory committee requires less rigorous submissions than does PBAC, as it undertakes its own assessment, also using contracted HTA organizations, to prepare reports that form the basis of any recommendation to the minister. These reports are published once the minister has made a determination about listing. Both positive and negative recommendations are solely advisory, with all decisions resting with the minister, and in some cases, the cabinet.

The Therapeutic Goods Administration (TGA) within the Department of Health and Ageing is responsible for the safety and efficacy of new therapeutic goods but is not required to assess their cost effectiveness. The TGA is required under legislation to assess drugs, medical devices, blood, tissues, and cellular therapies. It regulates the overall supply through premarket evaluation, licensing of manufacturers, and post-market surveillance. High-risk products are evaluated for quality, safety, and efficacy, and if approved, are placed on the Australian Register of Therapeutic Goods as "registered" products; those assessed at lower risk are evaluated only for quality and safety and if approved are included on the register as "listed" products. TGA has legislative power to assess therapeutic products and can withdraw a manufacturer's license.

Hospitals in Australia for the last two decades have mainly been funded on a case-mix basis, the diagnostic related groups (DRG) payment system, which pays hospitals a benchmark price for the mix of patients they treat. A variation on this formula, an "efficient national price" is about to be introduced (see later). Fee-for-service remains the main method for paying private physicians despite long-standing criticisms of inherent over-servicing incentives. The national health insurance scheme, Medicare, runs surveillance systems to detect "medifraud" and over-servicing.

The Australian government has prioritized improving efficiency in aged care. The Ministerial Conference on Ageing, a collaboration between the levels of government, is tasked with initiating, developing, and monitoring policy reform toward improving aged care planning.

How is health information technology being used?

The national strategy on health information is managed by the Australian Health Ministers' Advisory Committee (an intergovernmental committee of senior health administrators). Agreements are in place between governments and other key agencies on developing, collecting, and exchanging data in order to improve the health of the population and the delivery of health services. The Australian Institute of Health and Welfare publishes an extensive amount of health information (for example, see *Australia's Health 2010)*. Health system performance indicators also are being adopted and monitored (see below).

An intergovernmental strategy on health information technology, the National E-Health Strategy, has been agreed, and the National E-Health Transition Authority (NEHTA) set up in order to improve the quality and efficiency of health care. The Council of Australian Governments signed a National Partnership Agreement in 2009 on e-health that set out cooperative jurisdictional arrangements. NEHTA priorities are to develop interoperable systems between health care providers, health care identifiers, secure messaging and authentication, and a clinical terminology and information service. For example, a unique health identifier is being implemented under the Healthcare Identifiers Act 2010. A health care identifier is a unique 16-digit number that is being assigned to each health care consumer, and to health care providers and organizations. Patient identifiers are intended to improve communications in discharge, tests, referrals, and prescriptions. The great majority of general practitioners already use computers in clinical care, including electronic decision support systems.

How is evidence-based practice encouraged?

Health authorities and professional groups promote evidence-based practice. The National Institute of Clinical Studies (NICS), under the National Health and Medical Research Council, seeks to close the gaps between best available evidence (what we know) and current clinical practice (what we do). NICS supports the development of clinical practice guidelines and evidence-based products, issues advisory (not mandatory) guidelines, runs guideline dissemination projects and evaluation studies, and runs a clinical practice guidelines portal that gathers together under one entry point the guidelines issued by a variety of bodies. Australians are able to consult the evidence-based medicine literature through free access to the Cochrane Collaboration library.

How are costs controlled?

Public hospitals are owned and operated by state/territory governments, although costs are shared with the Australian government. State/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 to decide on any expanded scope of services. New pharmaceuticals have to meet cost-effectiveness criteria and are 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; prioritizing access to certain services according to clinical need; limiting the number of providers that are eligible to access Medicare benefits for some "hi-tech" services; and proxy rationing measures such as waiting lists. 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 Australian (Labor) government elected in 2007 set up a number of reviews of the health system in relation to professional registration and workforce planning, primary health care, preventive health, and hospital reform. Many recommendations from these reports are in the process of being implemented.

The regulation of health care professionals has been overhauled. The Australian Health Practitioners Regulation Agency was established in 2010 under legislation as an oversight body for 10 new national boards (previously the regulation of the professions was the responsibility of state-level boards) for each of 10 health professions: medical practitioners; nurses and midwives; pharmacists; physiotherapists; psychologists; osteopaths; chiropractors; optometrists; podiatrists; and dentists.

Health Workforce Australia was set up in 2006 by the Council of Australian Governments as an Australian government statutory authority in order to develop policy and deliver programs across four main areas: workforce planning, policy, and research; clinical education; innovation and reform of the health workforce; and the recruitment and retention of international health professionals.

Primary health care, as noted earlier, is in the process of being reorganized with general practices and other health professionals grouping together as Medicare Locals.

The Australian National Preventive Health Agency was established in January 2011 to develop strategic partnerships across all sectors, to provide technical advice and assistance, and to promote health and reduce health risk and inequalities, for example, by targeting risk factors of chronic disease, such as reducing obesity, alcohol and drug abuse, and smoking. In a related tobacco control initiative, the Australian government intends to introduce plain packing for cigarettes.

The Council of Australian Governments agreed a hospital reform strategy in August 2011 after several years of debate. Up to 200 local hospital networks will be formed nationwide, each consisting of between one and four hospitals and run by health and finance experts with local clinician input. State health departments will continue to be the overall managers of their public hospitals. The Australian government, through the National Hospital Funding Authority, will directly pay each local hospital network for each service it provides to public patients, according to 45% (50% after 2016-17) of the efficient growth in costs, as calculated by an independent hospital pricing authority. The remainder will continue to be paid by State governments.

A national health performance authority is being established to monitor the performance of public hospitals; and limited hospital data has been publicly available since December 2010. The Council of Australian Governments in 2008 agreed that the Australian government and the states/territories would collect and report regularly on indicators of population health status and health system performance identified under the National Health Performance Framework. For example, about 20 indicators seek to measure health system performance (AIHW 2010b).

References

Department of Health and Ageing, *Residential Care,* accessed Sept. 23, 2011, http://www.health.gov.au/internet/main/publishing.nsf/Content/Residential+Care-2.

Australian Institute of Health and Welfare (2010a), *Health Expenditure Australia 2008–09* (Canberra: AIHW).

Australian Institute of Health and Welfare (2010b), *Australia's Health 2010* (Canberra: AIHW).

Australian Institute of Health and Welfare (2010c), *Australia's Welfare 2009* (Canberra: AIHW).

H. Britt et al. (2009), *General Practice Activity in Australia 2008–09: BEACH Bettering the Evaluation and Care of Health* (Canberra: AIHW).

J. Healy, E. Sharman, and B. Lokuge (2006), "Australia: Health System Review," *Health Systems in Transition* 8(5):1–158. Available at http://www.euro.who.int/__data/assets/pdf_file/0007/96433/E89731.pdf.

J. Healy (2011), *Improving Health Care Safety and Quality: Reluctant Regulators*, (England, U.S.: Ashgate).

Private Health Insurance Administration Council (2011), *June Statistics 2011* (Canberra: PHIAC).

C. Schoen et al. (2009), "A Survey of Primary Care Physicians in 11 Countries, 2009: Perspectives on Care, Costs, and Experiences," *Health Affairs,* Web Exclusive Nov. 5, w1171–w1183.

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CONTRIBUTING AUTHORS:

SARA ALLIN, UNIVERSITY OF TORONTO
DIANE WATSON, NEW SOUTH WALES BUREAU OF HEALTH INFORMATION
AND 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. Residency in a Canadian province or territory is the main eligibility criterion for access to public insurance plans; however, each province and territory is responsible for establishing its own specific residency requirements. Undocumented immigrants, including denied refugee claimants, those who stay in Canada beyond the duration of a legal permit, and those who enter the country "illegally," are not covered in any federal or provincial health insurance program, although the provinces do provide some limited services (e.g., in Ontario, through the community health services). Coverage for other health services is generally provided through a mix of public programs and supplementary private insurance, or out-of-pocket payments.

What is covered?

Services: 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, and 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.

Prescription drugs: All prescription drugs provided within the hospital setting are covered through public health insurance. However, outside of the hospital setting each province and territory may offer additional coverage for prescription drugs, but these policies vary. All provinces and territories provide some coverage for seniors over age 65 who are partially (or not) covered by private insurance. In addition, all provinces have drug coverage plans for those with low incomes who are recipients of social assistance. In 2009, public spending on prescription drugs accounted for 46 percent (CAD11.5 billion [US$11.3 billion]) of all drug spending (Canadian Institute for Health Information 2011).

Preventive services: The federal government directly provides and funds a wide range of preventive services through the Public Health Agency of Canada. Provincial and territorial governments include public health promotion and prevention (including immunizations) in their public plans. They also run provincial screening programs with variations in approach, delivery, and comprehensiveness.

Mental health care: Mental health care services delivered by physicians (e.g., family physicians, psychiatrists) in ambulatory and hospital settings are covered under Canada's universal public insurance program (see below for more detail). The legislation underpinning Canada's health system, the Canada Health Act (CHA), does not mandate public coverage of nonphysician mental health services (such as services of psychologists or social workers) outside of hospitals.

Long-term care: Long-term care services that are provided in facilities and in the community are considered "extended health services" by the CHA and therefore fall outside the universal health system. Provinces may choose to fund services, and all do, but coverage varies substantially across and within provinces.

Dental care and optometry: Dental care and optometry services are generally not publicly covered in Canada; in 2008, public spending accounted for 5 percent of all spending on dental care, and 8 percent of all spending on vision care. These services are mostly paid for via private insurance or out-of-pocket payments.

Coverage decisions: The majority of public coverage decisions are made at the provincial/territorial level. While the CHA requires provincial/territorial health care insurance plans to provide coverage for all "medically necessary" hospital and physician services, it does not define which services are medically necessary. This responsibility is left to the provinces and territories in conjunction with the medical profession. However, these decisions must always be consistent with the requirements of the comprehensiveness criterion of the CHA.

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 accounted for 71 percent of total health expenditures in 2009. The federal government contributes cash funding to the provinces through the Canada Health Transfer, which makes up about 22 percent of total provincial and territorial health expenditures (although this varies across provinces/territories).

Privately-funded health care: Private health expenditures (payments through private insurance and out-of-pocket payments) represent approximately 30 percent of total health expenditures. 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. About 80 percent of insurers that sell private health care insurance are for-profit health and life insurance companies, and about 20 percent not-for-profit insurance organizations that specialize in health coverage. Federal and provincial governments regulate life and health insurance to ensure that contractual commitments to policyholders are met. Insurance companies and their representatives are subject to guidelines on consumer disclosure and insurance practices. Health insurance was provided by 95 life insurance companies to 23 million Canadians, which accounts for approximately 12 percent of total health spending in Canada. The plans typically pay for extra charges for semi-private or private hospital rooms, prescription drugs, special duty nursing and other paramedical services, ambulance services, crutches, psychological services, artificial limbs, prostheses and medical appliances, wheelchair rental, and vision care. Contributions to employer-sponsored voluntary health insurance are deductible from income for federal tax purposes, and are also deductible from income for provincial tax purposes in all provinces but Quebec. Premiums paid to any private health insurance plan are considered eligible expenses for the federal Medical Expense Tax Credit.

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. In 2009, out-of-pocket payments by private households represented 15 percent of total national health expenditures. The federal government supports tax credits for medical expenses through the Medical Expense Tax Credit, which applies to individuals who have significant medical expenses (above 3 percent of income) for themselves or their dependents. A disability tax credit and an attendant care expense deduction also provide relief to individuals or their dependents that have prolonged mental or physical impairments and individuals who incur expenses for care that is needed to allow them to work.

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, accreditation, and licensure 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 that plan and deliver publicly funded health care services on a local basis. Some jurisdictions have consolidated the number of authorities in recent years. Unlike the financing of Canadian Medicare, which is predominately the responsibility of the public sector, the delivery of health care services is almost entirely the domain of private actors. A vast majority of physician practices are owned and operated by physicians, and hospitals are a mix of public and private not-for-profit organizations that are often managed locally by regional health authorities or hospital boards representing the community.

Physicians: Most physicians are in private practices and are remunerated on a fee-for-service basis, though an increasing number receive alternative forms of public payment such as capitation, salary, pay-for-performance, and blended funding. In 2007–08, about 24 percent of total clinical payments to physicians were made through these types of arrangements, which increased from 21 percent in 2003–04 (the range is from 13% in Alberta and 24% in Ontario to 47% in Nova Scotia and 94% in the Northwest Territories). According to a physician survey from 2007, about half of family physicians received at least 90 percent of their income from fee-for-service, and about 30 percent received at least 90 percent through blended payment. Provinces are increasingly introducing pay-for-performance for physician care (see section on disease management programs, below). For example, physicians in Ontario are paid cumulative preventive care bonuses for achieving specified thresholds of preventive care for immunizations and screening.

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. Hospital-based physicians generally are not hospital employees and are paid fee-for-service. Physicians in community clinics are salaried.

Registration with a primary care doctor is not required to access health care, although most Canadians' initial contact with the health care system is with a family physician. Some of the new primary care teams that have a capitation portion of their remuneration require patients to register in order to receive the payments.

Provincial governments have implemented a number of primary care reform initiatives, such as Family Health Teams in Ontario, an inter-professional primary health care model bringing together family physicians, nurse practitioners, dieticians, mental health and social workers, and other types of health professionals. In 2011, more 2,100 physicians were signed up in over 130 Family Health Teams. Other examples primary care initiatives include Primary Care Networks in Alberta, Physician Integrated Networks (PINs) in Manitoba, Divisions of Family Practice and Integrated Health Networks in British Columbia, and Family Health Centers in Prince Edward Island. Many of these approaches offer features similar to a medical home, such as multidisciplinary teams. In the 2007 National Physician Survey, about 30 percent of family doctors reported that they had a formal arrangement to collaborate with nurses, and from 10 percent to 15 percent reported working with other allied professionals.

Uptake of health information technology, particularly of ambulatory electronic medical records, has been limited and varies widely across Canada. Only about one-third of physicians use electronic health records in Canada.

After-hours care: After-hours care is generally provided by walk-in clinics and hospital emergency rooms. (After-hours, walk-in, and urgent care clinics are mostly privately owned.) In most provinces and regions, such as Ontario and New Brunswick, a free telephone service is available 24 hours per day ("Telehealth") for health advice from a registered nurse. Primary care physicians are generally not required to provide after-hours care, although some government-enabled group practice arrangements, such as Ontario's Family Health Organizations, are required to provide extended office hours and/or a telephone advice service after hours for patients registered with the practice.

The Commonwealth Fund International Health Policy Survey (2009) of physicians found that only 43 percent of physicians' practices had arrangements for patients to see a doctor or nurse after-hours (Schoen et al. 2009). The Fund's 2010 survey of the population found 45 percent of Canadians report having same-day or next-day access to physicians when they are sick. The same survey found 65 percent of Canadians reported difficulty accessing after-hours care. Availability of after-hours care varies across the provinces from 34 percent in Quebec to 88 percent in Alberta and Saskatchewan (from a 2001 national survey of family physicians).

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. Generally, dentists, optometrists, occupational therapists, physiotherapists, psychologists, pharmacists, and other health professionals are employed by hospitals or in private practice. However, there are community practices, like the Family Health Teams and Community Health Centres in Ontario and the Integrated Health Networks in British Columbia, that employ a variety of multidisciplinary providers.

Hospitals: Ownership of acute hospitals that provide medically necessary services varies across jurisdictions in Canada. In general, these facilities are almost all not-for-profit and are owned by religious orders, municipalities, public corporations, regional health authorities, universities, and governments. They generally operate under annual, global budgets, negotiated with the provincial/territorial ministry of health or regional health authority. However, several provinces are beginning to incorporate activity-based funding for hospitals. Activity-based funding has also been used to pay for additional services that were targeted by national efforts to address wait times for specific services such as cancer treatment and cataract surgery.

Long-term care: While the legislation underpinning Canada's health system, the CHA, guarantees universal access to medically necessary hospital and doctor care, it does not guarantee coverage for care that is provided outside hospitals or by providers other than physicians. Long-term care services and end-of-life care provided in facilities other than hospitals and in the community are considered "extended health services" by the CHA. Provinces and territories may choose to fund services, and all do, but coverage varies substantially across and within provinces/territories.

The majority of public finances (general taxes) for long-term care are directed toward residential facilities. While some specialized long-term care programs and services (e.g., cancer care) may be under direct provincial control, the funding and allocation of much community-based care is devolved to the regional and municipal agencies. A mix of private for-profit, private not-for-profit, and public facilities provide long-term care in Canada. In 2008–09, approximately 40 percent of the residential care facilities in Canada were private-for-profit while the remaining facilities were owned by non-profit and public organizations.

Where long-term care facility-based health services are usually funded by the provincial or territorial government (through general taxation), accommodation and meal cost are still generally the responsibility of the individual, unless means testing demonstrates that the individual cannot afford such expenses. In 2009, nursing homes and residential care facilities accounted for approximately 10 percent of total health expenditures in Canada (Canadian Institute for

Health Information, 2011). In addition, estimates suggest that over 70 percent of nursing home and residential facilities are financed through public provincial sources (both health and social services departments) (Canadian Institute for Health Information, 2011). Eligibility for publicly financed long-term facility-based care varies across provinces, and some have established minimum periods of residency in the province (ranging from three months to 24 months) prior to being eligible for admission to a facility.

About half of the provinces and territories provide some home care services without cost to clients (e.g., there is no means testing). However, in contrast to medically necessary hospital and doctor care, there is no entitlement to these services and access may depend both on assessed priority and on availability within capped home care budgets. For home care, most provinces charge user fees for nonprofessional home care services (e.g., homemaking, transportation, meal delivery, respite care), while user charges to publicly funded home care professional (e.g., nursing) services are seen in some provinces. On average, provinces and territories spend approximately 4 percent of their health budgets on home care, on average. Most provincial governments assign responsibility for funding and delivery of care to their regional health authorities, but the models of service delivery (public, mixed, or private) vary across the provinces.

The proportion of residents across the country who received publicly funded home care depends on the programs available in their region and other factors. About 65 percent of home care recipients in Manitoba in 2003 reported that public funding covered some or all of their care, compared to 42 percent in British Columbia. Provincially financed, regionally administered home care services are provided based on assessments of need (though most provinces impose a limit on the maximum care provided). While assessment tools vary across provinces and territories, there is an increasing tendency to implement the "InterRAI-Home Care" tool. Supply shortages significantly limit the availability of publicly funded services, which has the effect of increasing the demand for private home care services. In addition, an estimated 80 percent of care for older persons is provided by informal (family and friend) caregivers.

Historically, palliative care has focused on specialist care for people with end-stage cancer, primarily delivered in hospitals. However, palliative and end-of-life care may occur in any setting, such as in hospitals, long-term care facilities (e.g., nursing homes), private residences, or free-standing hospices. There is currently increasing demand for palliative care to be expanded so that all care providers can be prepared (trained, available, and accessible) to deliver or facilitate access to palliative care services in a variety of settings, throughout the course of all life-threatening diseases or conditions. Governments, communities, and the private sector may support the provision of palliative and end-of-life care services. The provinces and territories are responsible for delivering palliative and end-of-life care in hospitals, and many provide some coverage for professional services outside these settings (e.g., doctors, nurses, and drug coverage). A significant number of deaths still occur in hospitals and in institutional long-term care (approximately 60%) as opposed to noninstitutional settings, such as the home (approximately 30%).

Finally, people who have the financial means are also free to purchase any long-term care services they wish from private providers since services are not judged medically necessary (under the CHA). For example, instead of entering a publicly funded nursing home, individuals and families can purchase accommodation and services at private retirement residences, which, depending on the jurisdiction, may be only partially regulated. Similarly, individuals may purchase any home and community care services to avoid wait lists for publicly funded services. Private long-term care insurance appears to be growing in Canada but the market remains small.[1]

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[1] In 2007, about 276,000 individuals (roughly 1% of the total population) subscribed to long-term care insurance (75% as part of a group insurance plan). A total of about $65 million was paid in premiums, while about $9 million in benefits were paid.

Mental health care: The Canadian system includes universal health care coverage for MD-provided mental health care, alongside a fragmented system of allied mental health services. Physician FFS payments in 2005–06 for psychotherapy or counseling services amounted to roughly 8 percent of total physician FFS payments. Hospital mental health care is provided in specialty psychiatric hospitals and in general hospitals with adult mental health beds. The majority of social workers are salaried employees of municipal, provincial, or federal government funded facilities or organizations (e.g., schools, hospitals, and correctional facilities); many work for agencies funded by voluntary donations and a growing number are private practitioners. Psychologists may work privately, and are paid through private insurance or out-of-pocket payments, or in publicly funded organizations under salary. Registered psychiatric nurses in Canada also provide mental health services in hospitals, community based organizations, and nursing homes; they are paid by salary.

What are the key nongovernmental entities for system governance?

Quality/safety/comparative effectiveness: Because of the highly decentralized nature of health care in Canada, the provinces have primary jurisdiction over administration and governance of their health systems. Most provinces have established statutory relationships with the devolved purchasing organizations (regional health authorities, Local Health Integration Networks (Ontario)); some of these arrangements include performance management within the broader context of accountability agreements.

At a national level, several intergovernmental, nonprofit organizations have been established in the past decade to improve overall system governance (some of these are discussed in the section, Quality of Care). The Health Council of Canada was set up by the federal and provincial governments (except Québec and Alberta) as an intergovernmental, nonprofit organization to monitor and report on progress with the federal/provincial/territorial health strategies to improve the quality, effectiveness and sustainability of the health care system. The Canadian Patient Safety Institute aims to provide national leadership in improving patient safety and to disseminate best practice in patient safety initiatives. The Canadian Institute for Health Information was established in 1994 as a government funded, not-for-profit corporation that provides information on Canada's health system and the health of the population by maintaining a range of health databases and establishing metrics and measurement standards. The Canadian Institutes of Health Research was created in 2000 and is the federal agency responsible for funding health research in Canada.

Several nongovernmental organizations play important roles in system governance, including the professional organizations (e.g., the Canadian Medical Association), the provincial regulatory colleges responsible for governing the professions through their licensing role and by developing and enforcing standards of practice, and Accreditation Canada, which manages the voluntary accreditation of health care organizations including regional health authorities, hospitals, long-term care facilities, and community organizations.

What is being done to ensure quality of care?

Over the past decade, the federal government has increasingly earmarked funds to support innovation and stimulate systemwide improvements in quality. Examples include the Patient Wait Times Guarantee Trust (CAD$612 million [US$614 million]), the Canadian Partnership Against Cancer (CAD$250 million [US$245 million] from 2006 to 2011), the Canadian Patient Safety Institute (up to CAD$8 million per year [US$8 million] since 2003) and the establishment of the Mental Health Commission of Canada (see section below on system innovation).

In terms of improvements in access, in 2005, all governments established a set of evidence-based wait time benchmarks in priority clinical areas—cardiac, cancer care, joint replacement, and sight restoration. In 2007, all jurisdictions committed to establish a guarantee in at least one clinical area by 2010; all but one province (Alberta) have implemented a wait-time guarantee.

All provinces have taken steps to inform their residents annually or more frequently on current wait times and have established Web sites for this purpose. Provinces have made considerable progress in their efforts to manage and reduce wait times, with eight of 10 patients across Canada receiving priority procedures within benchmarks. In addition, the Canadian Institute for Health Information (CIHI) has been mandated to collect wait-time information and monitor provincial progress in meeting benchmarks. On average, at the national level (as of 2010) 78 percent of patients are treated within the wait-time benchmark for hip fracture repair (benchmark of 48 hours), 84 percent for hip replacements (benchmark of 26 weeks), 79 percent for knee replacements (benchmark of 26 weeks), 98 percent for radiation therapy to treat cancer (benchmark of four weeks), 83 percent for surgery to remove cataracts (benchmark of 16 weeks for patients at high risk), and 99 percent for cardiac bypass surgery (benchmark of two to 26 weeks, depending on urgency). 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.

Since 2005, the Wait Time Alliance, made up of 14 national medical professional organizations, has been issuing reports on wait times across Canada. It notes that most current wait-time reporting focuses only on these original five priority areas, and mainly measures the wait between a specialist's decision to treat and the patient's receipt of treatment (therefore, it does not consider the wait to see a specialist, which can be lengthy). However, some provincial reporting has begun to expand to cover additional areas, including timely access to specialists.

The federally funded Canadian Patient Safety Institute promotes best practices and develops strategies, standards, and tools. In terms of quality use of medicines, the Optimal Use Projects program (formerly Canadian Optimal Medication Prescribing and Utilization Service) identifies and communicates optimal drug therapy information to health care providers and consumers. Optimal Use Projects, funded by the federal government, is one of three programs operated by the Canadian Agency for Drugs and Technologies in Health.

From 2000 to 2006, the Primary Care Transition Fund invested CAD$800 million (US$802 million) 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 multidisciplinary teams. Major achievements in reforming primary care include widespread introduction of multidisciplinary teams in Ontario, Quebec, and Alberta; patient enrollment in Ontario and Quebec; the spread of alternative payment methods to fee-for-service; and expanded primary care education for physicians and nurses.

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. For example, in Ontario, Health Quality Ontario was set up in 2005 with a mandate to publicly report to Ontarians on the performance of the health system, including acute and long-term care. In 2010, the Ontario government introduced new legislation ("An Act respecting the care provided by health care organizations," aka the "Excellent Care for All Act") to improve quality of care, primarily in hospitals, with the introduction of quality committees, annual quality improvement plans, patient/client/caregiver surveys, and staff surveys, and by linking the compensation of hospital executives to the achievement of quality improvement targets stipulated in the annual plans.

Disease management programs: In the context of primary care reform, and increased investment in primary care, there have been some reforms that aimed to improve the systematic management of disease. These are organized at the provincial level and many include incentive payments for physicians. British Columbia introduced its Full Service Family Incentive Program to support management of congestive heart failure, diabetes, and hypertension; physicians receive annual payments for each patient with one of these conditions whose clinical management is consistent with recommendations in provincial clinical practice guidelines. Also, Nova Scotia introduced the Family Physician Chronic Disease Management Incentive Program. Ontario's Diabetes Education Program, recently expanded under a provincial diabetes strategy, helps people with diagnosed diabetes better manage their condition.

Cancer Care Ontario, with a budget of close to CAD$700 million (US$694 million), implements provincial cancer prevention and screening programs, works with cancer care professionals and organizations to develop and implement quality improvements and standards, uses HIT to support health professionals and patient self-care, plans cancer services to meet current and future patient needs, and disseminates new research and innovations in clinical practice and cancer service delivery.

Disease registries: Few formal disease registries exist, though many provincial cancer systems maintain some type of patient registry. Provincial cancer registries feed data to the Canadian Cancer Registry, an administrative survey that collects information on cancer incidence in Canada. Some provinces, such as Ontario, maintain a renal disease registry to capture information about patients receiving care at participating chronic kidney disease clinics and dialysis centers within Ontario. British Columbia maintains a congestive heart failure registry and a diabetes registry, and Ontario is currently developing an electronic version for diabetes.

Public reporting on provider performance: There is no information available on doctors' performance, but the Canadian Institute for Health Information, an independent, not-for-profit organization funded by the federal and provincial governments, produces regular reports on health system performance, including hospital standardized mortality rates and waiting times. The reporting on health system performance varies widely across the provinces/territories; several have established quality councils that report on quality of care and system performance. There is so far little connection between financial rewards and public reporting of performance (with the exception of pay-for-performance initiatives that are increasingly used in physician payment models), although the new law in Ontario includes, for the first time, a link between hospital executive compensation and hospital performance.

Accreditation/revalidation: There is no system of professional revalidation for physicians in Canada, and each province has its own process of ensuring physicians engage in lifelong learning. For example, three provinces mandate that physicians participate in an education program to keep their professional license; others rely on peer review and self-assessments.

What is being done to address health disparities?

Health disparities are a significant issue in health policy in Canada, where specific groups suffer from a higher burden of illness than other residents. For instance, 18 percent of Canadians live in "deep poverty" and approximately 14,000 people in Canada are homeless. The poor and the homeless suffer from a greater burden of illness than the general population. Canada also has more than 1 million aboriginal peoples who, on average, cope with poorer housing conditions, fewer educational and employment opportunities, and a significantly higher burden of illness than the general population.

While Canada does not have a single or central body responsible for addressing health disparities, numerous isolated efforts have been made across the country to address these. Several governments have recently established departments and agencies devoted to addressing population health issues and health inequities. In 2004, the federal government established the Public Health Agency of Canada, which has a mandate to address population health issues, including "reducing health disparities between the most advantaged and disadvantaged Canadians." In Ontario, the provincial government recently established Public Health Ontario, an arm's-length agency that focuses on protecting and promoting health and reducing health inequities.

In 2005, the federal government launched the Aboriginal Health Transition Fund—a CAD$200 million (US$201 million) initiative to address gaps in health status between aboriginal and non-aboriginal Canadians by improving access to health services. In 2004, federal, provincial, and territorial governments agreed to implement a CAD$100 million (US$100 million), five-year initiative to increase the number of aboriginal people working in health care, adapt health care education to support culturally appropriate health care, and improve the retention of health care workers in aboriginal communities.

Several provinces have also introduced new programs to address health disparities. In 2006, the government of Newfoundland and Labrador established a 10-year strategy to shift the province from one with the highest rates of poverty to one with the lowest. Many provinces and territories across Canada have implemented similar poverty reduction or elimination strategies.

Research and data collection are other areas where efforts have been made to better understand Canadian health disparities. The Canadian Institute for Health Information supports the Canadian Population Health Initiative, which was established to examine population health patterns, and help develop policies to reduce inequities and improve health. The Initiative's most recent areas of focus have been on mental health, reducing gaps in health, promoting healthy weight, and the relationship between location (home, work, etc.) and health.

What is being done to improve efficiency and health system integration?

The 2004 National Pharmaceuticals Strategy (NPS) aimed to improve Canadians' access to safe, effective, and appropriately used drugs as well as the efficiency and affordability of drug plans. Intergovernmental work (undertaken by all jurisdictions except Quebec) under this law resulted in analyses that have helped to inform drug coverage improvements and generic pricing reforms in several provinces. The NPS work also supported the expansion of the Common Drug Review (CDR) to include more drug classes, and the establishment of the federally funded Drug Safety and Effectiveness Network at the Canadian Institutes of Health Research.

The CDR, created in 2002, reviews the clinical and cost-effectiveness of drugs and provides common formulary recommendations to the publicly funded drug plans in Canada (except Quebec). These recommendations, which are non-binding, support greater consistency of public drug plan access and evidence-based resource allocation. More than 90 percent of the CDR's recommendations are followed. Before its creation, Canada's public drug plans each had separate processes for conducting reviews and making formulary recommendations. Although initially created to review new chemical entities only, the CDR was expanded starting in 2007–08 to include new indications for old drugs as well as class reviews. In Quebec, the Conseil du médicament conducts cost-effectiveness analyses of medications and provides recommendations to the provincial government for its public plan formulary.

In Canada, medical devices and equipment are licensed by the federal government, but purchasing decisions are made at the provincial or territorial level. There is increasing use of health technology assessment (HTA) in Canada to support and inform decision-makers regarding health policy/purchasing, service management, and clinical practice. Canada's HTA organizations include the Canadian Agency for Drugs and Technologies in Health (CADTH), a national body; specialized provincial agencies in Alberta, Ontario, and Quebec; and a growing number of provincial and regional entities. CADTH's HTA program produces high-quality information about the clinical effectiveness, cost-effectiveness, and broader impact of drugs, medical technologies, and health systems.

How is health information technology being used?

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). Canada Health Infoway funds projects within provinces and territories on a cost-sharing basis, paying up to 75 percent of provincial projects and up to 100 percent of territorial projects. All provincial and 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 2011, 50 percent of Canadians have an EHR available to authorized health care professionals, an increase from 22 percent in March 2010. Canada Health Infoway's goal is to achieve 100 percent coverage by 2016.

In Canada, an EHR is a secure lifetime record of a person's health history and care, and it contains information from a variety of sources—hospitals, doctors, pharmacies, and laboratories. An electronic medical record (EMR) is a patient record, specific to a setting of care, which documents the clinician's encounters with the patient.

Uptake of health information technologies, particularly of EMRs, has been limited and varies widely across Canada. The 2009 Commonwealth Fund International Health Policy Survey of Primary Care Physicians found that 37 percent of doctors reported using EHRs, up from 23 percent in 2006. However, based on federal funding allocated in 2010, Canada Health Infoway is working with provinces/territories and other partners to accelerate the deployment and clinical adoption of EMRs and other priorities.

How is evidence-based practice encouraged?

The optimal use of medication, to improve health outcomes, is central to the mandate of the aforementioned Optimal Use Projects program. This program, also run by the Canadian Agency for Drugs and Technologies in Health (CADTH), identifies and communicates evidence-based, clinical and cost-effectiveness information on optimal drug therapy. Although the program does not issue formal clinical guidelines, strategies, tools, and services are provided to encourage the use of this information in decision-making by health care providers and consumers.

Similar organizations are also supported at the province level. In Ontario, the Ministry of Health and Long-Term Care supports Health Quality Ontario—an independent agency, created in 2005, that measures and reports to the public on the quality of care in Ontario. The Council's subsidiary, the Ontario Health Technology Advisory Committee, is responsible for making evidence-based recommendations to health system stakeholders and government about the efficacy of new health technologies and treatments. The CADTH provides advisory recommendations.

How are costs controlled?

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. They also include human resources restrictions, both for physicians and for nurses. Many governments are developing pricing and purchasing strategies to obtain better drug prices.

The federal Patented Medicine Prices Review Board (PMPRB), an independent quasi-judicial body, regulates the introductory price of new patented medications in Canada. The PMPRB's mandate is to ensure that patented drug prices are not "excessive" on the basis of their "degree of innovation" and through a comparison with the prices of existing medicines in Canada and with the prices in seven comparator countries including the United States and the United

Kingdom. The PMPRB regulates the "factory gate" prices and does not have jurisdiction over prices charged by wholesalers or pharmacies, or over pharmacists′ professional fees. The provinces have jurisdiction over prices of generic drugs, and have control over pricing and purchasing for public drug plans (and, in some cases, pricing under private plans), leading to some interprovincial variation in drug prices.

The pricing of generics varies according to province, and a series of recent and emerging generic drug price reforms in six Canadian provinces are expected to lead to significant cost savings. For example, in Ontario, public plan prices of generics were reduced from 50 percent of the brand-name drug price to 25 percent in 2010 (with the same reduction applying to private plans in spring 2012). And in 2010, British Columbia commenced a three-year phased in reduction of generic prices from 65 percent of brand-name price to 35 percent.

What system innovations have been introduced?

In January 2009, the federally funded Drug Safety and Effectiveness Network (DSEN) was established at the Canadian Institutes for Health Research to generate and disseminate new, post-market ("real world") evidence regarding the safety and effectiveness of pharmaceuticals. The DSEN is funding studies that will inform pharmaceutical decision-making across the health care system including the areas of regulation, reimbursement, and safe and optimal prescribing and use of drugs.

Canada has ramped up investments in data to monitor and publicly report 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 and mental well-being, workplace challenges, and views on quality of care. Results of the most recent Canadian Survey of Experiences with Primary Health Care offer insights regarding inter-provincial 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 initiatives, such as an anti-stigma campaign, a mental health strategy, and a knowledge exchange center to focus attention on mental health issues and to work to improve the health and social outcomes of people living with mental illness.

References

Marchildon, G. P. (forthcoming), "Canada: Health System Review," *Health Systems in Transition*.

Marchildon, G.P. *Health Systems in Transition: Canada*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2005.

Canadian Healthcare Association (2009) *New Directions for Facility-Based Long Term Care*. Ottawa.

Canadian Institute for Health Information (2010), *Drug Expenditure in Canada 1985 to 2009* (Ottawa, Ont.: CIHI, 2009).

Canadian Institute for Health Information (2011). *National Health Expenditure Trends, 1975 to 2011*. Ottawa.

Schoen, C., Osborn, R. et al. (2009), A Survey of Primary Care Physicians in 11 Countries, 2009: Perspectives on Care, Costs, and Experiences, *Health Affairs,* 28:6, w1171–w1183.

The Danish Health Care System, 2011

KARSTEN VRANGBAEK, DANISH INSTITUTE OF GOVERNMENTAL RESEARCH

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. Preventive services, mental health services, and long-term care are also covered. Decisions about service level and introduction of new treatments are made by the regional authorities (health care), municipal authorities (social care, care for older people, prevention, and some rehabilitation) and the state based on regulation and national guidelines. There is no fixed definition of benefits.

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 primarily applies to dental care for those age 18 and older (coinsurance 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 865 ($162 USD)—no reimbursement (60% reimbursement for minors); DKK 865–1,410 ($162–$263 USD)—50 percent reimbursement (60% reimbursement for minors); DKK 1,410–3,045 ($263–$569 USD)—75 percent reimbursement; above DKK 3,045 ($569 USD)—85 percent reimbursement (MISSOC 2011). The total share of private expenditures for health care was 14.9 percent in 2008.

Safety net: 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 3,410 ($637 USD). People with very low income and those who are terminally ill can also apply for financial assistance, and the reimbursement rate may be increased for some very expensive drugs. Complementary voluntary health insurance (VHI) provided by a not-for-profit organization reimburses cost-sharing for pharmaceuticals, dental care, physiotherapy, and corrective lenses. In 2007 it covered about 36 percent of the population. VHI 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, earmarked tax set at 8 percent of taxable income. The proportionate health 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 (approximately 80%) and 98 municipalities using a risk-adjusted capitation formula and some activity-based payment. The municipalities pay a copayment to the regions for hospital treatment of their citizens (this covers approximately 20% of regional hospital expenditures). The idea is to create incentives for municipalities to increase prevention activities. Public expenditure accounted for around 85.1 percent of total health expenditure in 2008

Private health insurance: Complementary VHI has been common in the Danish health system since the 1970s. It has traditionally been used to cover the costs of copayments 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 VHI 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 administered, reaching almost 1 million in 2008. These plans provide access to private treatment facilities. In addition, 2.2 million policies have been administered that provide a lump sum in case of critical illness. Supplementary VHI is typically provided as a fringe benefit as an alternative to income. It has been a conscious goal of the liberal/conservative government (2002–2011) to facilitate a stronger role for private actors in health care, e.g., by exempting supplementary VHI provided by employers from taxation since 2002. Provider fees are negotiated with each voluntary health insurer.

How is the delivery system organized?

Government: The five regions are responsible for providing hospital care and own and run hospitals. 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.

Primary care: Self-employed general practitioners act as gatekeepers to secondary care and are paid via a combination of capitation (30%) and fee-for-service. The structure is gradually shifting from solo to group practices. More and more practices employ specialized nurses to perform diagnostic tests, etc. General practitioners participate in various formal and informal network structures. They are formally included in the health service agreements made between the regions and the municipalities to facilitate cooperation and improve patient pathways. Registration with a primary care doctor is required for all Danes that choose the Group 1 public service option (98% of all Danes). The alternative is Group 2 coverage, which provides direct access to practicing specialists and free choice of GP but requires a copayment. GPs are intended to function as coordinators of care for patients, and to develop a comprehensive view of their individual patients' needs, in terms of both prevention and care. All general practitioners are linked to electronic information systems that provide discharge letters and can be used for electronic referrals and prescriptions to pharmacies.

Practicing specialists: Self-employed practicing specialists provide outpatient specialist care. They are paid fee for service according to general agreements with the regions for referred patients, and negotiated individual rates for VHI and out-of-pocket services.

After-hours care: After-hours care is organized by regions and delivered by general practitioners. Individual primary practitioners participate on a voluntary basis. Fees for participating are higher than during regular hours. After-hours services are mostly provided at clinics that are often co-located with hospital emergency departments. Home visits are carried out for acute cases and patients that are not mobile.

Hospitals: Almost all hospitals are publicly owned (approximately 97% of hospital beds are public). They are paid partly via fixed budgets determined through soft contracts with the regions and partly on a diagnosis-related group (DRG) basis. Hospital physicians are employed by the regions and paid a salary. The regional hospital systems are organized to provide all types of services. Patients have a free choice of public hospitals upon referral. Choice patients in other regions are funded by 100 percent of the DRG rates. For all procedures, a waiting time guarantee provides extended free choice to private facilities in case of expected waiting times exceeding one month from referral to treatment. Public hospitals are financed through general income taxation at the state level. The state redistributes funding to the regions as block grants based on mixed sociodemographic criteria combined with some activity-based funding for selected areas. The regions decide on budgeting mechanisms for hospitals, but are encouraged to use activity-based funding (DRGs) for up to 50 percent. All regions have caps on the activity-based funding, which essentially means that hospitals are operating on a target level, which is increased annually according to expected productivity gains. Public hospitals are not allowed to see private patients.

Long-term care (LTC): LTC includes hospital services that are funded as other types of hospital care. LTC outside of hospitals is organized and funded by the municipalities based on needs assessment, and unrelated to means. The municipalities are obliged to organize markets with open access for both public and private providers to accommodate free choice of home care services. A few municipalities have also outsourced institutions for care of older people, but more than 90 percent remain public. Hospices are organized by the regions, and may be public or private.

Mental health care: Specialized psychiatric care is organized regionally as part of the hospital system and funded by DRG rates. Social psychiatry and care is a responsibility of the municipalities, which can choose a combination of private and public service providers, but most are public.

What are the key nongovernmental entities for system governance?

Governance is organized into either state or regional/municipal functions. In some cases, semiindependent joint organizations are established to carry out system governance, as in the case of the Danish Healthcare Quality Programme. This agency consists primarily of medical professionals and works to develop extensive accreditation standards that shape health care quality across all health care sectors. Standards within this program must be approved by the International Society for Quality in Healthcare (ISQua). IKAS, the Danish Institute for Quality and Accreditation in Healthcare, develops, plans, and manages the Danish Healthcare Quality Programme. IKAS is a board that comprises representatives from the National Board of Health, the Danish regions, and the Ministry of Health and Prevention. In its capacity as an accreditation organization, IKAS must be approved by ISQua as well. In this sense there are nongovernmental entities performing “metagovernance” of the Danish system. Another example is the use of medical societies for professional advice to the National Board of Health when developing new guidelines.

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 satisfy 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 self-assessment and goes on to assess status for quality development. Quality data for a number of treatment areas are captured in clinical databases and published on the Web.[2] The data are used for a variety of purposes, including patient choice of hospitals and management of hospital quality. 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 also seen as ways of encouraging public hospitals to deliver better service quality.

Standards within the program enforce the use of national clinical guidelines, where available. A national unit within the National Board of Health is gradually developing such guidelines for all major disease types. Standard treatment packages (patient pathway descriptions) have been elaborated, e.g., for cancer treatment. Hospital departments are monitored on their ability to live up to process standards. Health technology assessments (HTA) are made locally, regionally, and nationally. They are facilitated and financially supported by a national unit for HTA within the National Board of Health and provide important input to decision-making in health policy at all levels.

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[2] www.sundhedskvalitet.dk, www.nip.dk.

There are no explicit standard sanctions or economic rewards tied to performance monitoring. The regions take action in case of poor results and may fire hospital managers or introduce other measures to support quality improvement. The National Board of Health may step in if entire regions fail to live up to standards. Patient safety is organized as an integrated part of the National Board of Health and supported by the regions as the owners of hospitals. Health care staff at all levels (including GPs and municipal health services) are obliged to report accidents and near-accidents to the regional authorities. The regional authorities evaluate incidents and send anonymized reports to the National Board of Health, which collects and publishes the information in an annual database. The system is geared toward learning rather than sanctioning.

What is being done to address health disparities?

Universal access to health services is considered the basis for avoiding health disparities. Universal coverage is supplemented by subsidy schemes and caps on out-of-pocket payments for pharmaceuticals, dental care, etc. There are also general recommendations to target chronic diseases (where prevalence often has a social bias) with prevention and follow-up interventions. A government-initiated report from 2011[3] on the determinants of health inequity led to the formulation of a general action plan to address the determinants of health disparities. Some of the specific initiatives include: higher taxes on tobacco and unhealthy food, targeted interventions to promote smoking cessation, prohibition of sale of strong alcohol to young people, establishing antialcohol policies in all educational institutions, further encouragement of municipal prevention activities (e.g., through increased municipal cofinancing of hospital care for residents), an action plan for improved psychiatric care, and finally a mapping of health profiles in all municipalities to be used as a tool to target municipal prevention and health promotion activities.

What is being done to improve efficiency and system integration?

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 achieve both quality and efficiency gains by centralizing treatment in larger units. The reforms reduced the number of regions from 14 to five, and the number of municipalities from 275 to 98. The regions are currently restructuring their hospital infrastructure, closing down or amalgamating small hospitals while building new hospitals for specialized care. The introduction of a Danish DRG system in the late 1990s has facilitated benchmarking, productivity analysis, and various partially activity-based payment schemes (for example, for patients crossing county borders). Productivity comparisons are published on a regular basis, allowing regions and hospital managers to benchmark performance of individual hospital departments.

How is health information technology being used?

Information technology (IT) is used at all levels of the health system, and a national strategy for use of IT in health care exists.[4] Sundhed.dk is a national IT portal with differentiated access for health personnel and citizens. The portal provides general information on health and treatment options for citizens. It also provides access to the citizen's own medical records and history. For professionals, the site serves as an entry to medical handbooks, scientific articles, treatment guidelines, waiting times and treatments offered in hospitals, etc. Professionals may also use the system to view records and laboratory test results for their own patients. The portal also provides access to the available quality data for primary care clinics. Each region has developed its own electronic patient record system for hospitals, although with adherence to national standards for compatibility. All primary care clinics use IT for electronic records and communication with regions, hospitals, and pharmacies. An April 2008 report from the European Commission ranked Danish general

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[3] http://www.im.dk/Aktuelt/Nyheder/Sundhedspolitik/2011/Maj/~/media/Filer - dokumenter/Uligehed-sundhed/Ulighed_i_sundhed_pdf2011.ashx.

[4] http://www.regioner.dk/Sundhed/Sundheds-IT/~/media/8C320C7470DD473A9ACF7083CD87798F.ashx.

practitioners as number one in the use of IT in Europe.[5] A shared, e-based "medical card" with all information on prescriptions and use of drugs is currently being implemented. Danish general practitioners also have access to an online medical handbook with updated information. Another initiative is the gradual implementation of clinical databases to monitor quality in the primary care sector (DataFangst).

How is evidence-based practice encouraged?

HTA based on available international evidence provides input for decision-making at local, regional, and national levels. The Danish Healthcare Quality Programme has now been implemented for all hospital organizations, and is in the process of being integrated into primary care and pharmacies. This program includes clinical standards that relate to the use of evidence-based practice. The National Board of Health develops these clinical guidelines based on available international evidence. The regions develop more specific practice guidelines for their hospitals and other health organizations based on the general national recommendations.

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 overall levels of taxation and targets for expenditure. The negotiations contribute to control of public spending on health by instituting a national budget cap for the health sector. 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. However, the introduction of a one-month general waiting time guarantee (for all services), and predefined treatment "packages" with specified short waiting times between different parts of the treatment path for cancers and other life-threatening diseases has made it more difficult for regions to control 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 pharmacists, prescribing guidelines, and systematic assessment of prescribing behavior. Pharmaceutical companies report prices to the national authorities on a monthly basis. The price list is provided to pharmacies, and they are obliged to choose the cheapest alternative with the same active ingredient, unless the prescribing doctor has explicitly stated that he/she prefers a specific drug. Patients may choose more expensive drugs, but have to pay the difference in price out-of-pocket. Pharmaceutical expenditures at the hospital level are reduced through coordinated purchasing strategies and recommendations. 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 are currently reorganizing their hospital systems, closing or amalgamating small hospitals and building new hospital infrastructure, at a total cost of DKK 40 billion ($7.5 billion USD). Reorganization of acute care with stronger prehospital services and larger specialized emergency departments is an important part of the new structure. The National Board of Health has also issued new guidelines for placement of specialized functions. The structural reform introduced a municipal copayment to the regions for hospital treatment. The idea was to encourage municipalities to pay more attention to prevention and health promotion. Mandatory agreements between municipalities and regions on patient pathways, chronic care, and care for older people are another policy instrument to promote collaboration. Such agreements must be formalized at least once in each four-year election term for municipal and regional councils, and must be approved by the National Board of Health.

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[5] http://www.ehealthnews.eu/content/view/1113/62/.

Also in 2007, the Danish government, regions, and municipalities committed to developing and implementing national care pathways for all types of cancer based on national clinical guidelines, with the aim of ensuring all cancer patients receive fast-tracked care through all stages of care. At the end of 2008, pathways for 34 cancers 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.

References

M. Olejaz, A. Juul Nielsen, A. Rudkjøbing et al., "Denmark: Health System Review," *Health Systems in Transition,* 2011 (forthcoming).

M. Strandberg-Larsen, M. B. Nielsen, S. Vallgårda et al., "Denmark: Health System Review," *Health Systems in Transition,* 2007 9(6):1–164.

National Board of Health. "Dansk sundhedsvæsen international perspektiv (The Danish Health System in an International Perspective)," Copenhagen, 2010. http://www.sst.dk/publ/Publ2010/DOKU/OECD/DKsundhedsv_internationaltpersp.pdf (accessed October 28, 2011).

J. Magnussen, K. Vrangbæk R. Saltman, "Nordic healthcare systems: Recent reforms and current policy challenges." Maidenhead, USA, McGraw-Hill 2009.

The English Health Care System, 2011

CONTRIBUTING AUTHORS:
ANTHONY HARRISON, THE KING'S FUND, LONDON,
SARAH GREGORY, THE KING'S FUND, LONDON,
CLAIRE MUNDLE, THE KING'S FUND, LONDON,
AND SEÁN BOYLE, LSE HEALTH AND SOCIAL CARE,
LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Who is covered?

Coverage is universal. All those "ordinarily resident" in England are entitled to health care that is largely free at the point of use. Only treatment in an accident and emergency department and for certain infectious diseases is free to people not "ordinarily resident" such as visitors or illegal immigrants (Department of Health 2010a).

What is covered?

Services: The precise scope of the National Health Service (NHS) is not defined in statute or regulation. However, in practice it provides or pays for: preventive services, including screening and immunization and vaccination programs; inpatient and outpatient (ambulatory) hospital (specialist) care; physician (general practitioner) services; inpatient and outpatient drugs; dental care; some eye care; mental health care, including care for those with learning disabilities; palliative care; some long-term care; and rehabilitation.

Cost-sharing: There are only a few cost-sharing arrangements for publicly covered services. Drugs prescribed under the NHS by general practitioners, dentists, and others are subject to a fixed-rate charge (£7.40 per prescription in England [$11.9 USD]). NHS dentistry services are subject to patient charges of up to a maximum of £204 per course of treatment ($327 USD). Primary care, specialist care, and hospital services are all free at the point of use.

Safety net: 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 copayments: children under the age of 16 years and those in full-time education ages 16, 17, or 18; people age 60 or older; people with low income; pregnant women and those having had a baby in the last 12 months; and people with certain long-term conditions and disabilities. About 89 percent of prescriptions are exempt from charges (NHS Information Centre 2011a). There are also discounts through prepayment certificates for people who use a large number of prescription drugs. Young people and students and those with low incomes also receive financial support for eyeglasses and dental charges. Transport costs to and from provider sites are also covered for people with low income.

How is the health system financed?

In 2009, England about 10 percent of its GDP on health services. Public expenditure, mainly on the NHS, accounts for about 84 percent of this (OECD 2011). Around 75 percent of NHS funding comes from general taxation and 20 percent from national insurance (effectively a payroll tax imposed on all employees), with user charges and other sources of income accounting for about another 3 percent. In addition to the income the NHS receives from charges for prescription drugs and dentistry services, it also receives income from other fees and charges, particularly from privately funded patients who use NHS services.

Private expenditure, mainly on over-the-counter drugs, dentistry, and hospital care, accounts for the remainder. Out-of-pocket spending made up 10 percent of total health expenditures in 2009 (OECD 2011). Most private hospital care—

largely for elective conditions—is financed through voluntary private health insurance. About 12 percent of the population has private health insurance (Office of Health Economics 2010).

How is the delivery system organized?

Government: Responsibility for health legislation and general policy matters rests with Parliament and the Department of Health. The NHS is currently administered through 10 regional strategic health authorities that are accountable to the Department of Health. At the local level, commissioners of health care services (currently 152 Primary Care Trusts, or PCTs) contract with providers (hospital trusts, general practitioners [GPs], independent providers) for services they judge to be appropriate for their local population. Some specialized services for small client groups are commissioned at the national or regional level. PCTs control around 80 percent of the NHS budget (allocated to them using a risk-adjusted capitation formula). The coalition government (elected in May 2010) has announced a restructuring of the health system. Strategic health authorities and PCTs are to be abolished and responsibility for commissioning will largely fall to “clinical commissioning groups” (CCGs) led by GPs beginning in April 2013, subject to consultation and passing of the necessary legislation (Department of Health 2010b).

Primary care: Primary care is delivered through general practitioners, who have registered lists of patients. In 2010, there were 8,324 general practices and an average of 6,610 patients per practice. The average number of patients per GP was 1,567 in 2010 (NHS Information Centre 2011a). GPs are normally the first point of contact for patients who usually have little choice of which GP to register with. In some parts of the country walk-in centers offer primary care services, and for these registration is not required. Most GPs are private contractors, operating under a national contract and paid by PCTs through a combination of salary, capitation, and fee-for-service. The 2004 GP contract introduced a range of different local contracting possibilities and provided, under the Quality and Outcomes Framework, substantial financial incentives tied to achievement of clinical and other performance targets. GPs increasingly work in multipartner practices employing nurses and other clinical staff with consulting rooms for visiting specialists. Although still a minority (around a fifth), the number of GPs employed in practices as locums or on a salaried basis is increasing. Some private providers of GP services set their own fee-for-service rates.

After-hours care: After-hours care is currently the responsibility of PCTs. These commission a range of providers, including GP cooperatives and private companies, to provide urgent primary care outside service office hours and minor injury units usually staffed by nurses. Serious emergencies are handled by hospital accident and emergency departments. Telephone advice is available from NHS Direct on a 24-hour basis.

Outpatient specialist care: GPs act as gatekeepers to hospital specialists but patients are able to choose which hospital department to visit. The coalition government has recently introduced the right to choose a particular specialist, but that is not fully implemented. The majority of outpatient specialist care is carried out in hospitals, although care has increasingly been delivered by hospital specialists in primary care settings and by GPs with specialist training in particular conditions.

Hospitals: Hospitals are organized either as NHS trusts directly responsible to the Department of Health or Foundation Trusts, which enjoy greater freedom from central control than NHS trusts. In particular, Foundation Trusts have easier access to capital funding and are able to accumulate surpluses or run (temporary) deficits. Since 2004, a majority of NHS trusts have become Foundation Trusts. Both types of hospital contract with PCTs for the provision of services to local populations and are reimbursed for these services at the same nationally determined rates. Public funds have always been used to purchase some hospital care from the private sector but the level has grown in recent years. Beginning in 2003, some routine elective surgery and diagnostic services have been procured for NHS patients from freestanding treatment centers owned and staffed by private sector providers. However, the private sector contribution remains low, at around 2 percent of all elective operations. Specialist doctors are employed by NHS hospitals on a salaried basis, but may supplement their salary by treating private patients.

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 year within the framework of a nationally determined contract. Some dentists are employed directly by PCTs on a salaried basis. Most dentists provide private as well as NHS care.

Long-term care: The NHS pays for some long-term care (i.e., for those with continuing medical or skilled nursing needs), but most long-term care is referred to as adult social care. Public coverage of adult social care is means-tested. Separate government funding is available to people with disabilities according to national eligibility criteria and is not means-tested. State-funded residential care is means-tested and is available free only to those with less than £23,000 ($37,000 USD) in assets. The level of charges for state-funded social care provided at home depends on a local council's interpretation of the national framework for eligibility and hence varies from area to area. In 2009, the private sector provided 70 percent of residential care places in the U.K. (not England), with the local authority providing 12 percent and the voluntary sector 18 percent (Laing and Buisson 2010).

Mental health care: Mental health care in England is commissioned by PCTs and local authorities, with provision split between the NHS (63%), social services (7%), the private and voluntary sector (29%), and general medical services (1%) (Department of Health 2010c).

What are the key nongovernmental entities for system governance?

The Care Quality Commission ensures basic standards of safety and quality through a registration system and subsequent monitoring (see below). Monitor is responsible for authorizing NHS trusts to become Foundation Trusts (e.g., by checking their financial viability and governance structures) and subsequently monitoring their financial performance, intervening if that significantly deteriorates. The Cooperation and Competition Panel investigates potential breaches in competition and advises the Department of Health on the action to be taken. The roles of Monitor and the Cooperation and Competition Panel are due to change in the near future subject to the passing of the Health and Social Care Bill currently before Parliament. Monitor will become the economic regulator of all providers of health care to NHS patients. The Cooperation and Competition Panel will become part of Monitor and its advisory role to the Department will cease. All these bodies are independent of the Department of Health.

What is being done to ensure quality of care?

Regulatory bodies: In April 2009, the Care Quality Commission 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 Care Quality Commission, which also assesses provider and commissioner performance using nationally set quality standards. It also investigates individual providers where concerns have been raised (e.g., by patients of the quality of care they provide) and may close down poorly performing services. Although not formally regulatory bodies, the National Patient Agency and the NHS Institute for Improvement and Innovation support NHS providers' efforts to improve patient safety and service quality. The coalition government has announced that these bodies will be abolished and their main functions transferred to the NHS Commissioning Board (described below). All doctors practicing in the U.K. have been required by law to have a license to practice from the General Medical Council. In addition, a process of revalidation every five years is currently being introduced.

National Quality Standards: Starting in 1998, the Department of Health has developed a set of National Service Frameworks intended to improve particular areas of care (e.g., coronary, cancer, mental health, diabetes) and improvement strategies have been developed for a range of other services including stroke, end-of-life care, and trauma care. These set national standards and identified key interventions for specific services or care groups. This policy has been overtaken by the work of the National Institute for Health and Clinical Excellence (NICE) that is now developing 150 quality standards for the main pathways of care by 2015. These quality standards will be central to the NHS Outcomes Framework, the Quality and Outcomes Framework (QOF) and the Commissioning for Quality and Innovation (CQUIN) Payment Framework.

NHS Outcomes Framework: The coalition government is planning to abolish most of the performance targets introduced by the previous government and replace them with new outcome measures which will be used to hold the NHS Commissioning Board to account (Department of Health 2010d). There will also be separate outcomes frameworks for public health and social care.

Quality and Outcomes Framework: This was introduced as part of the new GP contract in 2004 and provides financial incentives for improving quality. GP practices are awarded points (the total of which determines part of their remuneration) for how well the practice is organized, how good patient experience of care is within the practice, whether extra services are offered, such as child health and maternity, and how well common chronic diseases such as asthma and diabetes are managed. GPs are also awarded points for keeping a disease register of patients with certain diseases or conditions. Further points are awarded for both managing and treating patients with those conditions and for improving the health of affected patients by, for example, helping them to control their blood pressure or cholesterol levels.

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

Quality Accounts and Transparency: Since 2010, acute care and mental health care providers have had to produce annual “Quality Accounts” reporting on the quality of services they provide in terms of safety, effectiveness, and patient experience. The primary aim of the reporting is to provide patients with information about provider performance. In the future, Quality Accounts will be extended to other care settings such as general practice.

What is being done to reduce disparities?

In 2001, the then Labour government set high-profile targets to achieve a 10 percent reduction by 2010 in the difference in infant mortality rates between socioeconomic groups and in life expectancy between those living in deprived areas and the general population. Additional resources were made available to areas of poor health to support this policy. The new coalition government formed after the election in May 2010 proposes a new “health premium” designed to “promote action to improve population-wide health and reduce health inequalities” as part of a ring-fenced public health budget (Department of Health 2010e).

What is being done to improve efficiency and health system integration?

The NHS has been set a target of £20 billion ($32 billion USD) in savings to be achieved in this and the next two financial years. A number of initiatives are in place to help the NHS meet this target.

Payment by Results: A DRG-like activity-based funding system known as Payment by Results (PbR) has been introduced for acute hospital services. The aim is to extend it across the whole system of health care provision. The tariff is based on the average cost of providing each procedure or treatment across the NHS as a whole, but also embodies an efficiency element specifying an assumed annual improvement in efficiency. Beginning in 2010–11 and for the following three years, there will be 0 percent uplift in national tariff prices—i.e., a real terms reduction.

Benchmarking and public reporting on provider performance: 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). Public reporting of performance in relation to quality is being extended through publication of quality accounts.

QIPP: The Department of Health's Quality, Innovation, Productivity, and Prevention program (QIPP) supports NHS organizations in improving quality of care while making efficiency savings. The NHS Institute for Innovation and Improvement, which promotes changes to raise the quality and reduce the cost of providing NHS services, contributes to this program. The Institute is due to be abolished, however, and its main functions transferred to other bodies. QIPP comprises a wide range of other initiatives: some examples are given below.

Reducing management costs: The coalition government has proposed cuts to management costs by 45 percent through abolition of Strategic Health Authorities and PCTs and some semi-independent bodies.

Reducing the costs of back office services: The Department of Health's NHS Shared Business Services provides shared functions such as finance, payroll, and e-procurement for an estimated 100 NHS organizations.

More effective procurement: Initiatives have been taken to cut the costs of purchasing medical and others supplies, including national and regional contracts designed to achieve savings through bulk purchases.

How is health information technology being used?

Every patient registered with the NHS receives an NHS number which acts as a unique patient identifier. While most GP patient records are computerized, hospital and general practice clinical systems are generally not integrated into a single system. The government is currently introducing a Summary Care Record which will store key patient data from all health care providers for all patients except those who choose not to have one. Programs to allow electronic transfer of prescriptions from GP practices to pharmacies and for the storage and distribution of digital images of scans, X-rays, etc., are being developed. The Choose and Book system, which allows patients to choose where they want to be treated and to book appointments online, is now operational across the whole country.

Interest and investment in telecare (continuous, automatic, and remote monitoring of real-time emergencies and lifestyle changes over time in order to manage the risks associated with independent living) and telehealth (remote exchange of data between a patient at home and medical staff at a hospital to assist in diagnosis and monitoring, e.g., blood pressure monitoring, blood glucose monitoring, and medication reminder systems) has grown steadily over the past five years but is not yet mainstream. The technology is now being tested in a large randomized control trial.

How is evidence-based practice encouraged?

NICE sets guidelines for the NHS on clinically effective treatments and appraises new health technologies for their efficacy and cost effectiveness. All drugs which NICE assesses as clinically and cost effective are available in the NHS. The NICE quality standards referred to above are intended to support benchmarking of current performance against evidence-based measures of best practice to identify priorities for improvement. A Web site, NHS Evidence, has been established to provide access for professionals and patients to up-to-date clinical guidelines for a wide range of conditions.

How are costs controlled?

Budgets for the NHS are set at the national level, usually on a three-year cycle. To control utilization and costs, the government sets a capped overall budget for PCTs. These are expected to achieve financial balance each year by ensuring that the volume of services they commission is affordable within their budget allocation. Currently their financial performance is closely monitored by the Department of Health. Successive government negotiations with the pharmaceutical industry as part of the Pharmaceutical Price Regulation Scheme have reduced the cost of prescription drugs, but the total number of prescribed items has continued to rise. However, prescribers have been encouraged to prescribe generic equivalents where available. Over 80 percent of prescriptions are now fulfilled with generic drugs (NHS Information Centre 2011b). The Department of Health is currently developing a new value-based approach to the pricing of branded medicines to replace the Pharmaceutical Price Regulation Scheme in 2013, wherein the intention is for drugs to be available to the NHS at a price reflecting the value they bring.

What system innovations and reforms have been introduced?

The coalition government has set out a large-scale program for reform to be implemented by the end of 2014 (Department of Health 2010b), subject to consultation and legislation. The key points of this programme are:

Organization: Strategic Health Authorities and PCTs are to be abolished. A new NHS Commissioning Board, independent of the Department of Health, will be established in shadow form in 2011 and as a statutory body in 2012. The Secretary of State for Health will set a formal mandate for the board over a three-year period, to be updated annually. This mandate will include ensuring progress against a new NHS Outcomes Framework with outcome goals chosen (after consultation) by the Secretary of State for Health.

Commissioning: Starting in April 2013, responsibility for most commissioning will devolve to local clinical commissioning groups (CCGs), consisting largely of GPs. The NHS Commissioning Board will allocate resources to these CCGs and will hold them to account for their use of resources. The Board will also take over responsibility for the commissioning of specialized services, i.e., those currently commissioned at the national or regional level.

Local authorities and the NHS: The role of local authorities in the health system will be extended by creating health and well-being boards in local authorities and giving them responsibility for NHS public health functions. They will also have responsibility for promoting closer links between health and social care services.

Patient choice: As noted above, in addition to being able to choose from a range of public and private sector providers, NHS patients who require elective care interventions will also be able to choose a named consultant for elective care where clinically appropriate. Choice is being extended via an “any qualified provider” policy beyond elective surgery to other types of care (including mental health and community services as of April 2012). A “choice mandate” will now be included in the Secretary of State for Health’s mandate to the NHS Commissioning Board, and the duties on commissioners have been amended to better reflect the principle of “no decision about me without me.”

Providers: All existing NHS trusts are expected to become foundation trusts in the next few years. Monitor, the current regulator of Foundation Trusts, will become responsible for the economic regulation of all providers of NHS care. It will also share responsibility, with the new NHS Commissioning Board, for setting the national tariff for NHS services. The Cooperation and Competition Panel will transfer to Monitor.

Competition and market reform: The coalition government is committed to promoting a market in health care services. However, the Secretary of State for Health recently assured the Health Select Committee that “it is absolutely clear that integration around the needs of the patient will trump other issues, including the application of competition.”

Public health: Responsibility for public health programs will be transferred to local authorities but remain funded as part of the NHS. Public Health England, the new national public health service, will be established as an executive agency of the Department of Health. There will be duties on the Secretary of State for Health, NHS Commissioning Board, and clinical commissioning groups to have regard for the need to reduce health inequalities.

Information: Patient choice is to be supported by publication of a wide range of information on the safety, effectiveness, and experience of individual providers (Department of Health 2010e).

References

Seán Boyle: United Kingdom (England): Health system review. *Health Systems in Transition*, 2011; 13(1):1–486. Available at http://www.euro.who.int/__data/assets/pdf_file/0004/135148/e94836.pdf.

Department of Health (2010a). *Review of access to the NHS by foreign nationals*. London, Department of Health.

Department of Health (2010b). *Equity and excellence, liberating the NHS*. London, Department of Health.

Department of Health (2010c). *The 2008/09 national survey of investment in adult mental health services*. London:Department of Health.

Department of Health (2010d). *NHS Outcomes Framework*. London: Department of Health.

Department of Health (2010e). *Healthy Lives, Healthy People*. London: Department of Health.

Department of Health (2010e). *Liberating the NHS: an information revolution*. London: Department of Health

NHS Information Centre (2011a). *General and Personal Medical Services: England 2000-2010*. Leeds: Information Centre.

NHS Information Centre (2011b). Prescriptions *Dispensed in the Community - Statistics for 2000 to 2010: England*. Leeds: Information Centre.

Laing's Healthcare Market Review (2011). London: Laing and Buisson.

OECD Health Data 2011 (June). Available at www.oecd.org.

Office of Health Economics (2009). *Compendium of Health Statistics*. London: Office of Health Economics.

The French Health Care System, 2011

CONTRIBUTING AUTHORS:

ISABELLE DURAND-ZALESKI, PROFESSOR OF MEDICINE, UNIVERSITÉ PARIS-EST AND
KARINE CHEVREUL, DEPUTY DIRECTOR, PARIS HEALTH ECONOMICS AND HEALTH SERVICES
RESEARCH UNIT (URC ECO)

Who is covered?

Health care coverage in France is universal. All residents are entitled to publicly financed health care through Statutory Health Insurance (SHI). Following the introduction of universal medical coverage (*Couverture maladie universelle*, or CMU) in 2000, residents not eligible for SHI receive coverage through the state (0.4% of the population). The state also finances health services (*l'Aide médicale d'état*, or AME) for illegal residents who have applied for residency. While SHI covers the entire population, it does not cover 100 percent of expenditures; 92 percent of the population have access to voluntary health insurance (VHI) either through their employers or via means-tested vouchers (*CMU complémentaire*, or CMU-C).

What is covered?

Services: The public health insurance scheme covers hospital care, ambulatory care, and prescription drugs. It provides minimal coverage of outpatient vision and dental care. The coverage of health care costs accounts for 85 percent of SHI expenditure. The remaining 15 percent goes toward cash benefits in the form of daily allowances for maternity, sickness, or occupational accident leave and disability pensions.

Medical goods and services: Medical goods and services qualifying for coverage by the health insurance system include:

- hospital care and treatment in public or private institutions providing health care, rehabilitation, or physiotherapy;
- outpatient care provided by general practitioners, specialists, dentists, and midwives;
- diagnostic services and care prescribed by doctors and carried out by laboratories and paramedical professionals (nurses, physiotherapists, speech therapists, etc.);
- pharmaceutical products, medical appliances, and prostheses prescribed and included in the positive lists of products eligible for reimbursement;
- prescribed health care–related transport.

In order to be eligible for coverage, a person must have received medical goods or services prescribed by a doctor, a dentist, or a midwife and distributed by health care professionals or institutions registered by the statutory health insurance system. The benefit package covered by SHI is defined differently for outpatient and inpatient care. Covered outpatient services are explicitly stated in three official positive lists of reimbursable health care procedures, drugs, and devices. The same services are reimbursed throughout the SHI, and are available on the SHI Web site: www.ameli.fr. VHI will "top up" the SHI reimbursement. The positive lists are defined at the national level and apply throughout France in all regional authorities. Drugs and medical devices are added to the list by the ministry of health, while procedures are added by SHI, following guidance from the national health authority (HAS). For each item on the positive list, SHI specifies both the reimbursement rate and the official tariff. One of the main roles of HAS is to produce scientific expertise on health goods and procedures. A separate, specific list for pharmaceutical coverage exists for inpatient care, and the positive lists mentioned above apply only to procedures paid outside of the diagnosis-related group (DRG) system. For hospital care, expensive and innovative drugs and devices that are paid for in addition to DRG tariffs are identified on special lists. Otherwise, given the DRG reimbursement scheme, there is an implicit understanding of the range of services that can be delivered to patients.

Preventive services (immunizations and screenings): While preventive services in general receive limited coverage, there is full reimbursement for certain services for defined target populations. For example, immunization is covered for elderly individuals over 65 years of age, persons suffering from chronic diseases, pregnant women, and newborns; HPV immunization is covered for adolescent girls; mammography and colorectal cancer screenings are free for individuals over the age of 50. HAS assesses the efficiency criteria for free provision of preventive services. Other preventive services, including immunizations, are paid for directly by patients and not reimbursed unless VHI has a special provision. Opportunistic screening prescribed by a physician will be reimbursed.

Mental health services: Mental health care is provided as part of the basic benefit package. The package covers hospitalization, clinic visits, medication, and community care. It does not cover outpatient psychologist visits, psychoanalysis, or psychoeducation. Care provided for mental illness by general practitioners and psychiatrists in private practice is covered by the SHI at the usual rate. Individuals presenting a long-term psychiatric condition are fully covered. Care provided in public and private psychiatric hospitals for adults and children is financed by the SHI. Patient copayment is 20 percent of a daily tariff that varies across hospitals and can be fully covered by VHI. People with mental disabilities also receive care and services from the health and social care sector for the disabled.

Long-term care: Coverage for long-term care, health and social care for the elderly (comprising mostly those over 65 with varying degree of disability, or those over 60 if they have a work disability) was reformed in 2000. There are currently four sources of funding for long-term health and social care for frail older people in France.

- National level: The National Solidarity Fund for Autonomy (*Caisse nationale de solidarité pour l'autonomie*, or CNSA), which receives resources from both SHI and Solidarity Day (named for an unpaid working day introduced in 2004), financing long-term care in nursing homes and community services for older people, as well as a share of the long-term care allowances for frail older people that are used to finance domiciliary staff or home care devices.
- Local level: Local authorities finance a large share of long-term care allowances for frail older people. Many other local actors undertake social actions to support frail older people.
- Households: Private out-of-pocket payment for care in a nursing home currently averages €1,500 ($2,086 USD) per month per individual. The steady increase in private spending for nursing home services is a major concern for the government, as it threatens equity in access to long-term care.
- VHI: VHI contracts may cover those expenses for medical care not fully covered by SHI, as well as a contractual part of housing expenditures. Nursing homes (without medical care) are excluded from coverage.

Cost-sharing: Cost-sharing is widely applied to publicly financed health services and drugs and takes three forms: coinsurance, copayments, and extra billing. In 2009, out-of-pocket spending made up 7 percent of total health expenditures.

Coinsurance rates are applied to all health services and drugs listed in the publicly financed benefit package. Coinsurance rates vary depending on:

- The type of care: Inpatient care (20% plus a daily copayment of €18 ($25 USD) or €13.50 ($19 USD) in psychiatric wards, doctor visits (30%), dental care (30%).
- The effectiveness of the prescription drug: Patients owe 0 percent coinsurance for highly effective drugs, whereas all other items require 40 percent coinsurance and 70 percent (as of May 2011, previously 35% and 65%, respectively),[6] 85 percent, and 100 percent coinsurance for drugs of limited therapeutic value.
- Compliance with recently implemented gatekeeping system (médecin traitant): Visits to the gatekeeping general practitioner (GP) are subject to a 30 percent coinsurance rate, while visits to other GPs are subject to a coinsurance rate of up to 50 percent. The difference between the two rates cannot be reimbursed by VHI (see below).

In addition to cost-sharing through coinsurance, which can be fully reimbursed by VHI, the following non-reimbursable copayments apply, up to an annual ceiling of €50 ($70 USD): €1 per doctor visit ($1.39 USD), €0.50 ($0.70 USD) per prescription drug, €2 ($2.78 USD) per ambulance, and €18 ($25 USD) for hospital treatment above €120 ($167 USD). These copayments have not changed since their initiation in 2008.

Reimbursement by SHI is based on a reference price set by SHI after negotiation with the providers or, in the case of drugs and devices, by the governmental national pricing committee. The reference price will be used by SHI and VHI as a basis for determining reimbursements to patients. Doctors and dentists may charge above this reference price (extra billing) according to 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.

Safety net: Exemptions from coinsurance apply to: individuals with any of 32 chronic illnesses (8.6 million), with exemption limited to the treatments required by the illness as listed (for each of the 32 illnesses) by HAS (in 2011 hypertension was excluded from the list, meaning that patients newly diagnosed will no longer be exempted from coinsurance while current beneficiaries remain exempt); individuals who benefit from either universal medical coverage (CMU, 2 million) or the means-tested vouchers for VHI (CMU-C, 4 million); and individuals receiving invalidity and work-injury benefits. Hospital coinsurance applies only to the first 31 days in hospital, and some surgical interventions are exempt. Children and people with low incomes are exempt from paying non-reimbursable copayments. VHI covers statutory cost-sharing (the share of health care costs not reimbursed by the health insurance scheme), and applies only to health services and prescription drugs listed in the publicly financed benefit package. Most people obtain VHI through their employer. Since 2000, people with low incomes are entitled to free or subsidized VHI (CMU-C) and free eye and dental care, and cannot be extra-billed by doctors.

How is the health system financed?

Publicly financed health care: Public expenditure accounted for 78 percent of total expenditure on health in 2009. SHI is financed by employer and employee payroll taxes (43%); a national earmarked 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.

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[6] http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=?cidTexte=JORFTEXT000023820525&dateTexte=&oldAction=rechJO&categorieLien=id

Coverage for those not eligible for SHI or VHI is financed mainly by the state through an earmarked tax on tobacco and alcohol and a 5.9 percent tax on the revenue of complementary private health insurers.

Governance: SHI 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 (ONDAM[7]). In 2004, a new law created two new associations: the National Union of Health Insurance Funds (UNCAM[8]) and the National Union of Complementary Health Insurers (UNOCAM[9]), incorporating all SHI funds and private health insurers, respectively. The law also gave SHI responsibility for defining the benefit package in coordination with the ministry of health and setting price and cost-sharing levels.

Private health insurance: VHI reimburses statutory cost-sharing. It is provided mainly by not-for-profit, employment-based mutual associations (*mutuelles*), which cover 87 to 90 percent of the population. It originally covered only those services that already received coverage by SHI; however, a few VHI providers recently extended complementary coverage to well-being services that are not part of the SHI basic benefit package. The role of VHI is to increase the level of coverage as established by SHI for services on the positive list. The level of additional reimbursement depends on the contractual agreement. Providers who extra-bill are free to determine fee levels, but SHI will always reimburse 70 percent of the €23 ($32 USD) tariff for a consultation (minus a €1 [$1.39] deductible) and VHI will reimburse an agreed-upon amount that is generally a multiple of the SHI ceiling.

Contracts differ as to the level of coverage of the cost left to the patient after SHI reimbursement. They usually cover fully the patient's cost-sharing for non-convenience drugs and health professionals' procedures and tests up to the official SHI tariff. However, VHI contracts differ vis-à-vis the level of coverage of the cost that is charged above the official tariffs (extra billing), as well as the level of the cost of convenience drugs, medical devices, private amenities, and services not included in the SHI benefit package in cases where these are covered. An increasing number of VHI firms offer tailor-made contracts allowing people to choose the rate of coverage for each type of care.

There is some evidence to show that the quality of coverage purchased (in other words, the extent of reimbursement) varies by income group. To minimize the risk that VHI contracts would result in inequitable access, a special fund was created in 2000 to provide VHI to low-income individuals (the unemployed, people with low salaries, and people receiving single-parent subsidies) and their dependents (CMU-C). The fund provides VHI to 4.3 million people at little to no cost via vouchers that can be used to obtain coverage from a variety of insurers, although most opt to obtain this additional coverage from SHI. The paradoxical result is that the public provider (the SHI) has become also a provider of VHI, competing with private (not-for-profit) companies.

In spite of these measures, access to care differs between patients covered with commercial VHI contracts and beneficiaries of CMU-C. For instance, 21 percent of CMU-C beneficiaries did not seek eye or dental care, versus 14 percent of patients with commercial VHI and 30 percent of patients without any supplemental insurance. Persons without any VHI and CMU-C beneficiaries report poorer health than persons with commercial insurance (37%–39% report bad or very bad health versus 27% of individuals with commercial insurance[10]). As a measure to reduce inequities in access, the 2011 SHI Finance Act has increased the income threshold for beneficiaries of the state-sponsored CMU-C by 6 percent (currently €634 [$882 USD]), with another increase planned in 2012, implying that more households will be eligible for CMU-C.

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[7] Objectif National de Dépenses d'Assurance Maladie.

[8] Union Nationale des Caisses d'Assurance Maladie.

[9] Union Nationale des Organismes Complémentaires d'Assurance Maladie.

[10] http://www.inegalites.fr/spip.php?article1450

How is the delivery system organized?

Health insurance funds: SHI funds are statutory entities and membership is based on occupation, so there can be no competition between them. Levels of both contribution and benefits vary between funds. The three major funds cover more than 90 percent of the population: salaried employees, rural workers, and self-employed persons. There is limited competition among mutual societies providing VHI, but as they are employment-based, most employees usually have a choice of only one or two *mutuelles* (see "mutual societies" above).

Physicians: The 2004 health financing reform law introduced a voluntary gatekeeping system for adults (aged 16 years and over) known as *médecin traitant*. Although registration with a primary care doctor is not a legal obligation, there are strong financial incentives that encourage patients to have coordinated care, with higher copayments for visits and prescriptions without a referral from the gatekeeper. More than 85 percent of the population has registered with a primary care physician.

Physicians (primary care physicians or specialists) who are not working in public or not-for-profit facilities are self-employed and paid on a fee-for-service basis. As of 2011, the cost per visit (€23 [$32 USD]) is identical for specialists and GPs, and is based on negotiation between the government, the public insurance scheme, and the medical unions. Depending on the duration of their medical training, physicians may charge above this level. There is no limit to what physicians may charge, but medical associations recommend restrained fee levels. In addition to fees, physicians are compensated for providing coordination of care for chronic patients (€40 per patient [$56 USD]) and, as of 2009, may opt for additional payment through a pay-per-performance (CAPI) system (see below). Physicians are office-based or based in private, for-profit clinics (or both). Office-based physicians are self-employed. Self-employment, which averages 59 percent, is more prevalent among GPs (68%) than among specialists (51%) (Eco-Santé 2010). Solo practice for both GPs and specialists is still predominant in France. Physicians in solo practice do not employ nurses. Physicians in group practice usually do not share a common patient list but aim to ensure continuity of care and mutualize extensive capital investments. About 40 percent of self-employed physicians are involved in such practices. Self-employed nurses provide care to patients at home. As a rule, nurses do not work in doctors' practices but are self-employed and paid by fee for service. Hospital physicians in public or not-for-profit facilities are salaried.

The 2002 Patients' Rights and Quality of Care Act combined diverse provider network initiatives under a simple concept of "health networks," which are defined as a form of managed care that aims to strengthen the coordination, continuity, and interdisciplinary nature of health care provision with particular focus on selected population groups, disorders, and activities (see below). Following the 2009 Hospital, Patients, Health, Territories Reform Act, assessment and financing of provider networks fell under the purview of regional health authorities. The 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 physicians' unions has led to the withdrawal of the measure. However, nurses' unions have agreed to a similar arrangement with the ministry of health.

Hospitals: Two-thirds of hospital beds are in government-owned or not-for-profit hospitals. These hospitals are funded by SHI (80%), VHI, or direct patient payment (20%). All university hospitals are public. 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. The remaining hospitals are private, for-profit clinics. They are owned either by individuals or, increasingly, by large corporations (e.g., Générale de Santé). The funding mechanism is the same as for public hospitals, but the respective share of SHI, VHI, and out-of-pocket costs differs.

Since 2008, all hospitals and clinics are reimbursed via the DRG-like prospective payment system, which applies to all inpatient and outpatient admissions. Public and not-for-profit hospitals benefit from additional non–activity-based grants that compensate research and teaching (up to an additional 13% of the budget) and the provision of emergency services, organ harvesting, and transplantation (on average, an additional 10%–11% of a hospital's budget). The DRG tariffs are different for public hospitals and private clinics. Doctors' fees are billed in addition to the DRG in private clinics. In public and not-for profit hospitals, DRG tariffs cover physicians' salaries. In private, for-profit clinics, physicians bill patients in addition to the DRG tariff.

After-hours care: After-hours care is delivered by the emergency departments of public hospitals, private hospitals that have signed an agreement with the Regional Health Authority and receive financial compensation, self-employed physicians who work for emergency services, and more recently *maisons médicales de garde*, which are public facilities open after hours, financed by SHI funds and staffed by health professionals on a voluntary basis. Physicians are paid an hourly rate when working at *maisons de garde*, regardless of the number of patients actually seen. Emergency services can be accessed via the national emergency phone number, 15; the line is staffed with trained professionals who decide on the type of response, from GP visit to resuscitation ambulance.

Long-term care: In 2004, *Caisse nationale de solidarité pour l'autonomie* (CNSA), or the National Solidarity Fund for Autonomy, was created. The fund pooled SHI resources to provide services for the elderly, both at home and in long-term care institutions, for a total amount of nearly €15 billion per year ($20.9 billion USD). Local government finances long-term care allowances that provide home-based support for the frail elderly for over €2 billion per year ($2.78 billion USD). As mentioned above, out-of-pocket payment for care in nursing homes currently averages €1,500 per individual per month ($2,086 USD). This steady increase in out-of-pocket payment for elderly care is one major concern for the government as it challenges equity in access to long-term care services.

Mental health care: Mental care (adult population) is organized through the following structures:

- Outpatient facilities, either medical-psychological centers, day clinics or home care (67% of patients)
- Inpatient, full-time (25% of patients)
- Inpatient, part-time either through hospitalization during the day or night or at part-time therapeutic centers (9% of patients)

Expenditures for mental health (dementia excluded) represent roughly 8 percent of total health expenditures; hospital care represents two-thirds and community care one-third of spending. Over 90 percent of inpatient expenditure is provided by SHI/state-funded public or not-for-profit institutions. Public mental health institutions do not use a DRG prospective payment system but a capitated budget determined retrospectively. Private institutions charge a per diem rate in addition to standard fees. Out-of-hospital care is provided by self-employed, fee-for-service primary care physicians and specialists. Social care and support is provided by state and local governments.

What are the key nongovernmental entities for system governance?

Haute autorité de santé (HAS): The National Authority for Health was set up by the French government in August 2004 in order to streamline a number of activities designed to improve the quality of patient care and to guarantee equity within the health care system. HAS activities range from assessment of drugs, medical devices, and procedures to publication of guidelines, accreditation of health care organizations, requirements for patient safety, and certification of doctors. All are based on rigorously acquired scientific expertise. The transparency commission and the devices commission rate drugs and devices based on the medical benefits. The rating is then used by the MoH to decide on prices, following discussions with the manufacturer.

Agence française de sécurité sanitaire des produits de santé (AFSSAPS): The French Health Products Safety Agency is the competent authority making all safety decisions that concern health products, from manufacturing to marketing. AFSSAPS carries out three core missions: scientific evaluation; laboratory control and advertising control; and inspection of industrial sites. It also coordinates vigilance activities relating to all products for which it is relevant. In 2010 and 2011, a major scandal over a weight-control drug marketed by a French company resulted in a general reorganization of the market approval and safety monitoring system. The drug Mediator remained on the French market for two years after it was withdrawn in other countries because of suspected serious side effects. A report published in 2011 by the general inspectorate of health affairs pointed to the responsibility of the manufacturer but also to deficiencies in AFSSAPS, noting that it "was incomprehensibly lenient toward the drug and severely deficient in the methods and organisation of its safety monitoring systems." The report prompted a national conference on how to reorganize the market approval and safety monitoring systems in France. A new director was appointed to reorganize the agency and ensure better transparency and reporting of adverse events.

Agence de la biomédecine: The French Bioethics Law of August 6, 2004, created the Biomedicine Agency, the only such public body in Europe. The Biomedicine Agency is a public organization under the supervision of the ministry of health (MoH), operating in four key areas of human biology and medicine: assisted reproductive technologies; prenatal and genetic diagnosis; embryo and stem cell research; and the procurement and transplant of organs, tissues and cells, previously entrusted to *l'Établissement Français des Greffes* (the French Transplant Agency) between 1994 and 2005.

Agence nationale d'appui à la performance des établissements de santé et médico-sociaux (ANAP): The National Support Agency for the Performance of Health and Medico-Social Facilities provides guidance to institutions in need of structural changes, performance audits, and dashboard indicators such as length of stay, occupancy, patient satisfaction, incidence of bedsores, etc. Indicators are classified by category and type of medical activity.[11]

Direction générale de l'offre de soins (DGOS): The General Directorate of Health Care Supply, under the ministry of health, most closely fulfills the role of ensuring fair competition among health care organizations; however, its primary function is to ensure appropriate supply and access to care rather than to promote competition. Until now, France has discouraged competition, although the introduction of a prospective payment system certainly fosters a competitive environment. But the effects of a competitive environment are limited by the possibility of public hospitals facing a large deficit and because currently the funding models for public and private hospitals remain different, and the tariffs of DRGs will continue to be calculated differently until they finally converge in 2019. In September 2011, the French consortium of private, for-profit clinics made a rather dramatic move, suing the French government (in Brussels) for "unjustified, detrimental and discriminatory financing."[12]

What is being done to ensure quality of care?

Disease management programs: Disease management programs exist in the form of provider networks. SHI and the MoH have funded provider networks for the past decade to carry out the following goals: to improve coordination between providers; to provide services that are currently not part of the SHI benefit package (e.g., dietary advice); to improve access to specialized services (e.g., by using image transfer in areas without ophthalmologists); and

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[11] http://www.anap.fr/index.php?/anap/content/download/204/938/file/Repertoire_Indicateurs_nov2009.pdf

[12] http://www.fhpmco.fr/tarifs-hospitaliers-les-cliniques-et-hopitaux-prives-mco-portent-plainte-a-bruxelles-pour-atteinte-a-la-libre-concurrence/

to experiment with new models of care delivery (e.g., nurses performing tasks formerly reserved for doctors). Provider networks are disease- and region-specific, meaning that aside from performing required periodic performance assessments, networks are free to choose the type of services they want to provide and the professionals involved. Enrollment of both providers and patients is voluntary. The incentive for patients is that networks may offer services that are not usually covered by SHI (e.g., foot care or dietary advice for diabetic patients). The incentive for physicians is that preventive services and patient education can be paid by SHI. Some VHI schemes are developing their own networks, but price discrimination based on enrollment in these networks is not permitted.

Disease registries: Disease registries (cohorts) exist in France but are considered too few in number to ensure sufficient quality of care. The 2004 Public Health Act underlined the need for larger national cohorts. Large cohorts, such as that for Alzheimer's disease, are currently being recruited. The 2010 presidential loan is also expected to finance such cohorts (e.g., a cohort of patients with mental health disorders).

Accreditation: An accreditation system is further used to monitor the quality of care in hospitals and clinics. The quality of ambulatory care depends on a professional appraisal system. Both systems are mandatory, and fall 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 on the HAS Web site (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 office-based physicians, certification and revalidation 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 reviews 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.

Public reporting: Accreditation results are publicly reported on the HAS Web site. CompaqH, a national program of performance indicators, also reports results on selected indicators. Quality assurance and risk management in hospitals are monitored nationally by the PLATINES (*Plateforme d'informations sur les établissements de santé*), under the authority of the MoH. PLATINES publishes online technical information, data on hospital activity, and data on control of hospital-acquired infection. There is also a yearly nonofficial hospital ranking by two newsmagazines. Currently, financial rewards or penalties are not linked to public reporting, although this remains a contested issue.

What is being done to reduce disparities?

Reducing disparities in clinical care and other health services constitutes an important aspect of quality care assurance in France. The 2004 Public Health Act made reducing health inequalities a national priority, and it has been reemphasized by the National Public Health Council, which is in charge of preparing the next Public Health Act. The Public Health Act sets targets for the reduction of inequities; strategy is then established and implemented by the directorate of statistics within the ministry of health and by the National Institute for Prevention and Health Education (*Institut national de prévention et d'éducation pour la santé*), or INPES. The Finance Act for SHI also set targets to improve access for beneficiaries of the CMU-C (who were sometimes denied care by office-based physicians who wished to extra-bill). In order to identify and eliminate discriminatory practices, the 2009 Hospital, Patients, Health, Territories Reform Act allows random testing of office-based physicians. If denial of care is proven, penalties will be imposed by SHI.[13]

Despite universal coverage and access to health care, health inequities are a significant issue in France. There is a seven-year gap in male life expectancy (and a 10-year gap in male healthy life expectancy) between the highest and lowest social categories. Visible measures taken at the national level to reduce health inequities have targeted access to care

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[13] http://www.discriminations.inegalites.fr/spip.php?article74.

(mostly curative care) by ensuring coverage and limiting out-of-pocket payments, controlling physicians' extra billing, and including indicators of health inequities in the next public health law.

Indicators of health inequities include:

- geographic inequities (so far only nurses have agreed to sign a contract limiting new practices in overserved areas)
- financial inequities (out-of-pocket payments will be limited by providing free means-tested VHI)
- inequities in prevention (obesity, screening, immunization)

At the regional level, regional health agencies created in 2010 have been given a specific mandate to reduce health inequities by:

- ensuring access to prevention for low-income (excluded) populations
- including in the strategic plan the improvement of health for low-income populations
- reducing social exclusion through setting certain imperatives for health care professionals and other stakeholders

Moreover, variation in practice is monitored on an ongoing basis by SHI. SHI compares practices and case mix within the regions and provides feedback to office-based physicians and private clinics.

What is being done to improve efficiency and integration of care?

Improving efficiency is the major challenge facing the public health insurance funds, which are currently working on structural and procedural changes. Structural changes include the creation of a national computerized system of medical records to limit duplication of tests, overprescribing, and adverse side effects of drugs, and to facilitate the implementation of prospective payment for all hospitals and clinics (as of 2008). Procedural changes on the supply side focus mainly 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. As of 2008, it is also transferring some drugs to over-the-counter status. The 2009 Hospital, Patients, Health, Territories Reform Act reformed the governance of public and not-for-profit hospitals by increasing the role of the hospital director in defining a hospital's strategies and making decisions regarding operations. At the regional level, one single authority (regional health agency) combines the roles of planner and regulator with that of purchaser of hospital and ambulatory care.

How is health information technology being used?

In 2008, the General Inspection for Social Affairs (*Inspection générale des affaires sociales*, or IGAS) published a report[14] that expanded on earlier projects and presented six principles for the success of electronic health record (EHR) technology: (1) to be useful for professionals; (2,3) to be modular and implemented incrementally, based on emerging requirements; (4) to be deployed according to an agreed-upon time frame; (5) to strike a balance between informational requirements and the protection of patients' privacy; and (6) to have clear governance. The report recommends the creation of a high-level committee, chaired by the minister of health and comprising members of parliament and representatives of all stakeholders, to govern the project, and also recommends the creation of a government agency in charge of IT. It estimates the total cost of developing pilot projects to be €900 million (US$1.25 billion) through 2012.

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[14] http://www.sante-jeunesse-sports.gouv.fr/IMG//pdf/Rapport_DMP_mission_ Gagneux.pdf

Following the relaunch of the electronic patient record project, and in order to improve the interoperability of existing systems and monitor the creation of one single patient identifier, a dedicated information systems agency was created in late 2009: the Agency for Health Information Systems (*Agence des systèmes d'information partagés de santé*, or ASIP Santé).

Besides the EHR project, there are currently two coexisting types of information system in France: one for hospital admissions (the PMSI), which is used by hospitals to bill SHI using the French DRG system; and one for patient reimbursement claims for outpatient and hospital care. For PSMI, all data are grouped at the national level within the National Agency of Hospital Information (Agence technique de l'information hospitalière, or ATIH); for the latter project, there are several systems attached to different SHI funds. Both types of data end up with the SHI funds and both are used for reimbursement claims and not for medical purposes. The National Health Insurance Inter-Plan Information System (*Système national d'informations inter-régimes de l'assurance maladie*, or SNIIR-AM) was created in 2004 to connect these two systems into one comprehensive system, the SHI interfund system. The PMSI system comprises information of medical diagnoses and procedures performed during an admission. SNIIR-AM includes claims data only, with demographic information but no medical information, although some claims can be directly connected to a medical condition. The unique identifier that allows linkage of PMSI and SNIIR-AM is being pilot-tested.

How is evidence-based practice encouraged?

Health technology assessment (HTA) governance and organization are defined by the government and SHI funds. The major HTA body in France is HAS, which has in-house expertise and also the capacity to commission assessments by external groups such as academic centers or professional societies. All medical procedures and technologies (drugs, devices, equipment, reagents, and tests) are assessed on the request of manufacturers or professional societies. For technologies, a first assessment concerns safety and can be supra-national (for example, the European Medicines Agency for drugs). The second assessment is specific to the French health system. Assessments are performed by ad hoc committees for drugs, devices, and procedures. Stakeholders such as patients, professionals (via their professional societies), and manufacturers are members of the assessment committees.

All new drugs, devices, and procedures must undergo an assessment in order to be listed on one of the positive lists and covered by SHI. Assessments are made prior to market launch and are used directly to determine the coverage rate and less directly the market price. For new technologies, assessment is based on documents provided by the manufacturer. The studies are critically appraised by two reviewers and discussed by the committee. Conclusions about the level of medical benefit and the relative medical benefit are published on the HAS Web site. Old technologies are reassessed every five years based on documents provided by the manufacturer and on systematic reviews of the literature. Manufacturers have an incentive to provide sufficient data to assess drugs and devices, because of the pricing objective.

Following the 2008 Social Security Finance Act, economic evaluation is required in the case of reassessments of old technologies, and appraisal of public health relevance is to be conducted for new and old technologies. The notion of public health relevance includes epidemiological aspects, quality of life, and cost information. A specific committee, the Commission for Economic Evaluation and Public Health (*Commission* évaluation économique *et de santé publique*, or CEESP*)* has been set up within the national health authority to advise the committees mentioned above.

For other technologies, such as medical devices, reports are commissioned by the MoH. The HTA report can recommend waiting until additional information is available or undertaking surveys or observational studies. Additionally, the national health authority can undertake evaluation of health programs (such as screening programs), medical practice, or strategies. HAS can either define the topic it wants to work on itself or work on the request of the MoH and SHI funds. Topics are prioritized according to their public health and policy relevance, and priorities are published on the HAS Web site. For example, 2011 priorities are patient safety, cardiovascular diseases, obesity, and autism.

How are costs controlled?

Cost control is a key issue in the French health system, as the health insurance scheme has faced large deficits over the last 20 years. More recently the deficit has fallen, from €10 billion to €12 billion per year in 2003 ($13.9 billion–$16.7 billion USD) to €5 billion ($7 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-care 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 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 package for the management of chronic conditions
- since 2008, non-reimbursement by complementary private health insurance of new copayments for prescription drugs, doctor visits, and ambulance transport
- as of 2011, a decrease in the drug reimbursement rate
- as of 2011, exclusion of newly diagnosed hypertension from the list of chronic diseases (meaning it is no longer 100% covered)
- as of 2011, reimbursement of transportation for chronically ill patients only if medically justified

At the same time, there has been an increase in the number of medical students admitted to university, due to a projected 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 specialists and their cost per visit has risen from €20 ($28 USD) to €23 ($32 USD).

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

Cost-effectiveness studies are not currently used to determine prices or coverage. Cost-containment strategies have rather focused on:

- Delisting drugs (over 600 in the past 5 years) or reducing coverage, which is under the responsibility of HAS;
- Providing targeted feedback to prescribers on cheaper alternatives, either generic drugs or cheaper branded drugs; this is done by physicians working for SHI;
- Conducting budget impact analyses at the national level, under the authority of the MoH (pricing committee).

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, a 2000 merger created one department responsible for health care and public health policies, managed care, and social services (previously overseen by seven departments). The merger was intended to be a major step toward a more consistent system.

In April 2009, SHI launched a series of individual contracts with office-based physicians (*Contrats d'amélioration des pratiques individuelles*, or CAPI).[15] The contracts introduced a pay-per-performance mechanism, in addition to the traditional fee for service and the flat €40 ($56 USD) capitation for chronic patients, of up to €5,000 ($6,953 USD) per year for the achievement of targets in caring for asthma, diabetes, hypertension, and immunization, and in breast cancer screening. The contracts also stipulate the prescription of generic drugs, particularly for cardiovascular conditions. Although initially opposed by the physicians' unions, the national physicians' regulation authority, and the union of the pharmaceutical industry, three months after implementation the contracts had been accepted by more than 5,000 GPs (or 10% of the total GP population). To date, roughly 15,000 physicians have signed these contracts, and the average additional payment is €3,100 ($4,311 USD).[16]

In 2009, the Hospital, Patients, Health, Territories Reform Act reformed the regional organization of health care delivery by creating regional health agencies (*agences régionales de santé*, or ARS), that merge the governance of hospital and community care, public health, population health monitoring, and health care financing. Regional health agencies are provided with a range of tools and incentives to determine population needs and contract with providers (e.g., through contractual agreements between SHI and physicians in overserved areas to provide care in underserved areas, and contractual agreements between the regional health agencies and care centers or provider networks to ensure sufficient provision of services in each region). Earmarked funds are available to promote the coordination of care, 24-hour access, and multi-professional and multidisciplinary practices. These funds have been made recurrent in order to allow for long-term planning. Finally, public service involvement contracts (*contrats d'engagement de service public*) are offered to medical students with financial incentives to attract them to underserved areas, on condition that they agree not to practice extra billing.

The reform of long-term care financing is a major challenge for the future. The president announced in 2008 that a new fund will be created. However, discussions surrounding the resources for this new fund are continuing.

References

OECD Health Data 2011 (June).

K. Chevreul, I. Durand-Zaleski, S. Bahrami, C. Hernández-Quevedo, and P. Mladovsky. "France: Health System Review," *Health Systems in Transition* 2010 12(6):1–291.

Code of Social Security (2009), Article L. 162-12-21 http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020534299.

Financing of Social Security Bill (2011), Articles 34a and 36a http://www.senat.fr/rap/a10-090/a10-09046.html

Observatoire des inegalites, (2011) Mesure des discriminations à l'accès aux soins par testing, http://www.discriminations.inegalites.fr/spip.php?article74&lang=en.

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[15] JORF n°0093 du 21 avril 2009 page 6839 texte n° 34.

[16] http://www.senat.fr/rap/a10-090/a10-09046.html.

The German Health Care System, 2011

CONTRIBUTING AUTHORS:

REINHARD BUSSE, BERLIN UNIVERSITY OF TECHNOLOGY, MIRIAM BLÜMEL,
BERLIN UNIVERSITY OF TECHNOLOGY, AND STEPHANIE STOCK, UNIVERSITY OF COLOGNE MEDICAL SCHOOL

Who is covered?

Statutory health insurance (SHI) covers about 85 percent of the population of Germany. Around 10 percent of the population is covered by private health insurance, with civil servants and the self-employed being the largest groups. The remainder (e.g., soldiers, policemen, and others) are covered under special regimes. Undocumented immigrants are covered by social security in case of illness. Since 2009, health insurance has been mandatory for all citizens and permanent residents, either in the statutory or the private health insurance scheme. All employed citizens (and other groups such as pensioners) earning less than €4,125 (US$5,791) per month or €49,500 (US$69,492) per year (in 2011) are mandatorily covered by SHI and their dependents (nonearning spouses and children) are covered free of charge. Individuals whose gross wages exceed the threshold[17] can choose either to remain in the publicly financed scheme on a voluntary basis (and 75% of them do) or to purchase private health insurance.

What is covered?

Services: SHI covers preventive services, inpatient and outpatient hospital care, physician services, mental health care, dental care, prescription drugs, medical aids, rehabilitation, hospice care, and sick leave compensation. SHI preventive services include regular dental check-ups, well-child check-ups, basic immunizations, check-ups for chronic diseases, and cancer screening at certain ages. All prescription drugs—including newly licensed ones—are covered unless explicitly excluded by law (applies to so-called lifestyle drugs) or following evaluation. While the broad contents of the benefits package are legally defined, specifics are decided upon by the Federal Joint Committee (G-BA, see below).

Since 1995, long-term care has been covered by a separate insurance scheme, which is mandatory for the whole population. Contrary to health insurance, however, benefits in long-term care insurance are a) dependent on an evaluation of individual care needs by the SHI Medical Review Board (which either leads to a denial or a grouping into one of three levels of care), and b) limited to certain maximum amounts depending on the level of care. Beneficiaries can choose between receiving a cash amount or benefits in kind. As benefits are not usually sufficient to cover institutional care completely, citizens are advised to buy supplementary private long-term care insurance.

Cost-sharing: Traditionally, SHI has imposed few cost-sharing provisions (mainly for pharmaceuticals and dental care). However, in 2004 copayments were introduced for office visits in ambulatory care (GPs, specialists, and dentists) for adults age 18 years and older (€10 [US$14] for the first visit per quarter or subsequent visits without referral). Other copayments were made more uniform: €5 to €10 (US$7–$14) per outpatient prescription (except if the price is at least 30% below the reference price, i.e. the maximum reimbursable amount for drugs of equivalent effectiveness, which means that over 5,000 drugs are effectively free of charge), €10 per inpatient day for hospital and rehabilitation stays (up to 28 days per year), and €5 to €10 for prescribed medical aids. Cost-sharing in SHI amounted to 2.85 percent of total SHI revenue (€175.6 billion or US$247 billion) in 2010, mostly for drugs (€1.7 billion [US$2.4 billion]) and ambulatory physician care (€1.5 billion [US$2.1]). Children under 18 years of age are generally exempt from copayments. Additionally, sickness funds in SHI may offer their insured various forms of deductibles, i.e., insured

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[17] From 2007 to 2010 the threshold was raised to include only those whose earnings surpassed €49,500 (US$69,492) per year for three years in a row.

receive a certain amount of their contribution payment back if they have not claimed any services for one year. Preventive services do not count toward the deductible.

Safety net: Cost-sharing is generally limited to 2 percent 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 percent of annual gross income. A G-BA directive lists eligibility criteria for being regarded as chronically ill; for example, patients who suffer from breast cancer, cervical cancer, and colon cancer have to demonstrate that they attended recommended counseling on screening measures prior to the illness in order to qualify for the 1 percent threshold.

How is the health system financed?

Statutory health insurance (SHI): The SHI scheme is operated by 154 (in July 2011) competing health insurance funds (called "sickness funds"): autonomous, not-for-profit, nongovernmental bodies regulated by law. They are funded by compulsory contributions levied as a percentage of gross wages up to a ceiling. Earnings above €44,550 (US$62,542) per year (in 2011) are exempt from contribution. As of 2011, the insured employee (or pensioner) contributes 8.2 percent of the gross wage, while the employer (or the pension fund) adds another 7.3 percent on top of the gross wage, so the combined maximum contribution is around €575 (US$807) per month. This includes dependents (nonearning 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 has been set by the government (and has been set in federal law since 2011) and, although sickness funds continue to collect contributions, all contributions are centrally pooled by a central reallocation pool (*Gesundheitsfonds*), which allocates resources to each sickness fund based on a risk-adjusted capitation formula. This formula takes age, sex, and morbidity from 80 chronic and/or serious illnesses into account. Since 2009, sickness funds have been able to charge the insured person an additional nominal premium if a sickness fund's revenue is insufficient (or pay back money in the case of surplus revenue), and there is a growing amount of tax-financed federal subsidy for "insurance-extraneous" benefits provided by SHI (especially coverage of children). These expenses are considered to be of common interest and are therefore are (partly) covered from general taxes. In 2010, general tax subsidies amounted to €15.4 billion ($21.6 billion), equal to about 8 percent of total SHI revenue. In 2009, SHI accounted for 57.8 percent of total health expenditure. All public sources of finance combined (i.e., including the long-term care scheme and taxes) accounted for 77 percent in 2009.

Private health insurance (PHI): Private health insurance plays a substitutive role in covering the two groups who are mostly exempt from SHI (civil servants, who are refunded parts of their health care costs by their employer, and the self-employed), and those who have chosen to opt out of the SHI scheme. All pay a risk-related premium, with separate premiums for dependents; risk is assessed upon entry only, and contracts are based on lifetime underwriting. Private health insurance is regulated by the government to ensure that the insured do not face large premium increases as they age and are not overburdened by premiums if their income decreases. Since January 2009, private insurers offering substitutive coverage have been required to take part in a risk-adjustment scheme (separate from SHI) to be able to offer basic insurance for people with ill health who are not eligible to return to SHI and who cannot afford a risk-related premium. In addition, recent legislation has 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 with age. Previously, these aging reserves remained with the insurer when a person canceled a policy or changed to another insurer. Since January 2009, individual aging reserves have been transferable if privately insured persons cancel their policy and change to another insurer. PHI also plays a mixed complementary and supplementary role, covering minor benefits not covered by SHI, providing access to better amenities (such as single/double hospital rooms), and covering some copayments, especially for dental care. The government determines provider fees in both substitutive and supplementary PHI through a specific fee schedule. There are no government subsidies for supplementary PHI. In 2009, PHI accounted for 9.3 percent of total health expenditure.

Out-of-pocket spending: Out-of-pocket spending has risen from around 10 percent of total health expenditure in 1992 to 13.5 percent in 2009, equal to €37.5 billion (US$53 billion) in total or around €460 (US$646) per capita. Most out-of-pocket spending goes toward pharmaceuticals (around €6.5 billion or US$9.1 billion), nursing homes (around €6 billion [US$8.4 billion]), and medical aids (around €5.7 billion [US$8 billion]), while expenditure in physicians' offices and dentists' offices was only around €3.5 billion (US$4.9 billion) each.

How is the delivery system organized?

Government: The various levels of government have virtually no role in the direct delivery of health care. However, states own the vast majority of university hospitals and municipalities play a role in public health activities and own around half of hospital beds. A large degree of regulation is delegated to the self-governing corporatist bodies of both the sickness funds and the provider associations. The most important body is the Federal Joint Committee (G-BA), which was created in 2004 (see below).

Physicians: Ambulatory general practice/family medicine and specialist care is delivered by physicians who are by law mandatory members of regional associations (which negotiate contracts with the sickness funds, are responsible for organizing care, and act as financial intermediary) but who work in their own practices—around 60 percent of them in solo practice and 25 percent in dual practices. The role of hospitals in this sector is extremely limited, although multispeciality clinics in ambulatory care with employed physicians have been allowed since 2004 (and by 2009, almost 5% of ambulatory care physicians worked in such institutions). Most physicians employ doctors' assistants, while other nonphysicians (e.g., physiotherapists) have their own premises.

Registration with a primary care physician is not required and general practitioners have no formal gatekeeper function. However, since 2004 sickness funds have been required to offer their members the option to enroll in a family physician care model (*Hausarztmodell*), which has been shown to provide not only better services, but often also a bonus for complying with gatekeeping rules. In January 2007, about 24.6 million SHI insureds had the option of subscribing to a family physician care model; about 4.6 million subscribed. About 1.8 million insureds took part in the nationwide model of the Barmer Ersatzkasse (a sickness fund), which allows for exemptions from copayments for prescriptions if prescribed by their family physician.

Physicians in ambulatory care, both GPs and medical specialists, are generally reimbursed on a fee-for-service basis with a fee schedule negotiated between sickness funds and physicians. However, payments are limited to predefined maximum numbers of patients per practice and reimbursement points per patient. Sickness funds annually negotiate aggregate payments with the regional associations of physicians, which ensures service provision and cost control. In 2003, the first disease management programs (DMPs) were implemented in SHI to improve coordination of care for chronically ill patients (see below). As a financial incentive, GPs receive an average flat rate of approximately €100 (US$140) per year for each enrolled patient.

Individuals have free choice of ambulatory care physician and, if referred to inpatient care, of hospital.

After-hours care: After-hours care is organized by the regional associations of physicians to ensure access to ambulatory care around the clock. Physicians are obliged to provide after-hours care with regionally differing regulations. In a few areas (e.g., Berlin), after-hours care has been delegated to hospitals. The after-hours provider gives the patient a short overview of the visit to hand to his/her personal primary care doctor. In additional to after-hours care, there is a tight network of emergency care providers (the responsibility of the municipalities).

Hospitals: Hospitals are mainly not-for-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. Regardless 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 office-based specialists. 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 (DRGs) per admission, currently (2011) based on 1,194 DRG categories. The system was made obligatory in 2004 and is revised annually to account for new technologies, changes in treatment patterns, and associated costs.

Long-term care: Long-term care insurance (LTCI) is mandatory and usually provided by the same carrier as health insurance. Thus, there is the same public–private insurance mix as in health insurance. The contribution rate of 1.95 percent of gross salary is shared between employers and employees. People without children pay an additional 0.25 percent. Everybody with a physical or mental illness or disability who needs help (and who has contributed for at least two years) can apply for benefits. If need is acknowledged, beneficiaries are stratified into three groups of care needs. There is a choice of in-kind benefits or cash payment (around one quarter of LTCI expenditure). Both home care and institutional care are provided almost exclusively by private not-for-profit and for-profit providers. LTCI covers approximately 50 percent of institutionalized care. Hospices and ambulatory palliative care have been expanded and are provided as a health insurance benefit.

Mental health care: During the process of dehospitalization, the number of hospitals providing care only for patients with psychiatric and/or neurological illness fell substantially. Acute psychiatric inpatient care was largely shifted to psychiatric wards in general (acute) hospitals. The process was accompanied by a significant increase in the number of office-based psychiatrists, neurologists, and psychotherapists working in the ambulatory care sector (all funded by both SHI and PHI), all paid fee-for-service. Since 2000, ambulatory psychiatrists have been made coordinators of a new set of SHI-financed benefits called sociotherapeutic care to encourage the chronically mentally ill to use necessary care and to avoid unnecessary hospitalizations. Primary care doctors refer their patients to psychiatrists who are authorized to prescribe SHI funded sociotherapeutic care.

What are the key nongovernmental entities for system governance?

The Federal Joint Committee (G-BA) is by far the most important nongovernmental entity within the system of delegated decision-making. Since 2008, it has had 13 voting members: five from the Federal Association of Sickness Funds, two each from the Federal Association of SHI Physicians (KBV) and the German Hospital Federation (DKG), one from the Federal Association of SHI Dentists, and three neutral. Five patient representatives have an advisory role but no vote in the committee. Within the legal framework, the G-BA has wide-ranging regulatory power to formulate and implement in detail what services have to be covered by all sickness funds and what quality measures have to be implemented by all providers (see below). It is supported by the Institute for Quality and Efficiency (IQWiG), a foundation, and the AQUA Institute for Applied Quality Improvement and Research in Health Care. Sickness funds make a global payment to each Regional Association of SHI Physicians (KV) in whose region their insured persons reside. Each KV distributes this payment among its GPs and specialists on a fee-for-service basis according to a fee schedule. The Federal Association of Sickness Funds and KBV or DKG respectively develop the ambulatory care fee schedule and the DRG catalog, which is then adopted by bilateral joint committees. To extend competition beyond these jointly regulated issues, some purchasing powers have been handed over to the sickness funds, e.g., to contract providers directly within the framework of integrated care or to negotiate rebates with pharmaceutical companies.

What is being done to ensure quality of care?

Quality of care is addressed through a range of measures, broadly defined by law and by the G-BA in more detail. *Structural quality* is assured through 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 IQWiG was founded in 2004). All diagnostic and therapeutic procedures applied in ambulatory care must be positively evaluated in terms of benefits and efficiency before they can be reimbursed by the sickness funds. Hospital accreditation is voluntary. Minimum volume requirements have been 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 individual feedback. Since 2007, all hospitals have been required to publish results on 27 selected indicators of the Federal Office for Quality Assurance (*Bundesgeschäftsstelle Qualitätssicherung*), thus allowing for a targeted comparison of hospitals. Since January 2010, the AQUA Institute has been charged with developing quality assurance across ambulatory and inpatient care. Although there are several approaches and associations to ensure quality of care and patient safety, a national safety agency does not yet exist.

Disease Management Programs (DMPs): Legislation in 2002 introduced DMPs for chronic illnesses in SHI to incentivize the sickness funds to provide better care for chronically ill patients. Sickness funds receive a per capita administration compensation of €168 (US$236) per year for each insured enrolled in a DMP, and they may reduce or waive copayments for the insured in the programs. DMPs currently exist for diabetes types 1 and 2, breast cancer, coronary heart disease, asthma, and chronic obstructive pulmonary disease. They are modeled on evidence-based treatment recommendations with mandatory documentation and quality assurance. Specific quality assurance measures include feedback reports, reminders, quality circles, and patient education. In June 2011, there were 10,893 regional DMPs registered with more than 5.9 million patients enrolled (almost 8% of all SHI-insured). DMPs have been introduced not only to incentivize sickness funds to provide better care, but also to improve care coordination between providers in the ambulatory sector. Participating in a DMP is voluntary and can be operated through GPs as well as medical specialists. Physicians receive an extra payment for their effort in documentation. Sickness funds are free to give patients incentives for enrollment such as exemptions from copayments for pharmaceuticals. Disease registries exist for specific diseases, such as certain cancers, and are usually regionally organized. Pay for performance has not been established yet.

What is being done to reduce disparities?

Strategies to reduce health disparities are mainly delegated to public health services, and the levels at which they are carried out differ from state to state. Health disparities are implicitly mentioned in the national health targets (*gesundheitsziele*), an association of 70 health care stakeholders that encourages strategies for better living environment, physical activity, nutrition, and child health. In 2001, the Federal Center for Health Education (*Bundeszentrale für gesundheitliche Aufklärung*) initiated a network to promote the health of the socially deprived (*Kooperationsverbund bei sozial Benachteiligten*), a nationwide cooperation of 53 health-related institutions, e.g., sickness funds and their associations. The cooperation focuses on health promotion for children, adolescents, unemployed, elderly people, and in problem areas.

The law SGB V § 20 makes primary prevention mandatory for sickness funds. Furthermore, it emphasizes that services should contribute to the decrease of health disparities due to social factors. Detailed regulations are delegated to the Federal Association of Sickness Funds, which has developed guidelines regarding need, target groups, and access to them, as well as content and methods. Sickness funds have particularly expanded environmental strategies as they supported 22,000 provisions, e.g., nurseries and schools, with health-related programs.

What is being done to improve efficiency and system integration?

Besides the quality measures listed above, other measures aim to enhance 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 has been legally charged with explicitly evaluating the cost-effectiveness of drugs with an added therapeutic benefit, thereby theoretically adding pressure on pharmaceutical prices. Since 2011, to strengthen the assessment of the benefit of a drug, pharmaceutical companies have been obliged to produce a scientific dossier in which they demonstrate the added medical benefit compared with alternatives. The G-BA evaluates the benefits of the new drug (in collaboration with IQWiG) and decides on the assessment within three months. As mentioned, all hospitals are reimbursed through DRGs, so hospitals are paid the same for the same type of patient. As DRG weights are calculated based on average costs, this puts enormous pressure on less-efficient hospitals.

In 2000, integrated care contracts were introduced to improve cooperation between ambulatory physicians and hospitals on the basis of contracts between sickness funds and individual providers or groups of providers belonging to different sectors. Because of legal and financial barriers, only a few initiatives were established. Since 2004, integrated care has been further strengthened and the rules of accountability have been clarified. Integrated care contracts do not need to extend across sectors now, but have to involve at least different categories of providers within a sector. Integrated care contracts do not require the approval of the Regional Associations of SHI Physicians. Other sickness funds or providers may only join the integrated care models if all contract partners agree. Additionally, from 2004 to 2008 sickness funds had a clear right to deduct 1 percent of the resources for ambulatory physicians and hospital care once integrated care contracts had concluded. Under the new regulations and incentives, integrated care has attracted substantial interest among hospitals, most of which have been hesitant up to now to join DMPs. Furthermore, since 2004, hospitals may provide ambulatory care services to certain groups of people with highly specialized treatment needs.

How is health information technology being used?

Almost 90 percent of physicians in private practice use health information technology (HIT) to help with billing, documentation, tracking of laboratory data, and quality assurance. In some regions around 60 percent of physicians use online services to transmit billing information and documentation from DMPs. Software for ambulatory care and the disease management programs is quite sophisticated. Despite these numbers there is no national strategy for the implementation of HIT or telemedicine and its use to improve quality of care. Neither the electronic health professional card nor the electronic medical chip card for patients is ready for routine use (with the latter currently in the roll-out phase). Data safety concerns represent a significant obstacle. Nevertheless, many hospitals have implemented electronic medical records to various degrees. The greatest problem with implementing systemwide HIT is the incompatibility of the different programs within hospitals, between hospitals, and between hospitals and ambulatory care. Patient information is usually stored on a server in the solo ambulatory practice or the hospital with no provider access after hours or by patients or pharmacists.

How is evidence-based practice encouraged?

As much as possible, the G-BA's coverage decisions are based on evidence from health technology assessment and comparative effectiveness evaluations. Providers and patients voluntarily participating in DMPs (see above) fall under DMP guidelines, which are regularly updated and monitored with respect to adherence and outcomes. Further nonbinding clinical guidelines are produced the Physicians' Agency for Quality in Medicine and by professional societies.

How are costs controlled?

Relatively crude but successful cost-containment measures (especially overall budgets for ambulatory physicians, hospital budgets, and collective prescription caps for physicians on a regional basis) have been revised in line with a more recent emphasis on quality and efficiency. The prescription cap, which complemented reference prices for pharmaceuticals, was lifted in 2001, initially leading to an unprecedented increase in spending on pharmaceuticals by the sickness funds. Following this, prescription caps were reintroduced, with physicians liable for exceeding regular volumes for their patient mix. More recently, negotiated rebates between sickness funds and pharmaceutical manufacturers and incentives to lower prices below the reference price have been the main instruments in use. Beginning in 2011, all new drugs are liable to comparative effectiveness assessments, leading to either inclusion in the respective reference group (in case of no added benefit) or price negotiations between the manufacturer and the Federal Association of Sickness Funds; in the case of no agreement, an arbitration process is initiated and may be followed by a formal cost-effectiveness assessment.

Hospital budgets were phased out between 2005 and 2009, while per-case DRGs have become the main method of funding inpatient care. Since 2009 the fixed budgets for ambulatory care have been replaced by more flexible budgets that account for population morbidity. The 16 state governments determine hospital capacity, while ambulatory care capacity is subject to delegated decision-making according to rules set by the G-BA.

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 have been evaluated by an independent institution in five areas with respect to over 50 quality indicators. They are rated on grades equivalent to school marks and the results are posted on the Web. This simple procedure is designed to improve transparency in several important areas of long-term care.

Incentives for minimizing health service use 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 their use of health care services or taking part in specific disease management programs. Usually schemes are binding for a minimum of one year.

Sustainability of health care financing: With the introduction of the central reallocation pool (*Gesundheitsfonds*) in 2009, sickness funds receive a flat amount for each insured, adjusted for risk factors. If the total allocations do not cover the costs of a sickness fund, this sickness fund is obliged to introduce a nominal community-rated premium in addition to the national wage-related contribution rate. Since 2011, the premium is no longer limited up to 1 percent of the insured's income. So far, only a handful of sickness funds have introduced nominal premiums in addition to the national contribution rate.

Enhancing competition: A central element of the most recent health reform legislation (2007) was enhancing competition in health care services. The introduction of various elective insurance schemes by the sickness funds offers the insured more choice and gives insurers parameters for competition. Elective insurance schemes include, for example, new forms of health care provision such as DMPs or family physician care models, sick pay for the self-employed, or optional deductible and other cost-sharing schemes. Sickness funds can also charge an extra premium to cover additional costs or—in the case of deductibles—pay a bonus to members signing up. They are obliged by law to report regularly on the results of elective insurance plans, notably on efficiency and savings.

References

The information presented here draws on R. Busse, M. Blümel, and D Ognyanova, “Germany: Health System Review,” *Health Systems in Transition*, forthcoming 2012.

(*Federal Ministry of Health*) Bundesministerium für Gesundheit (2011): Daten des Gesundheitswesens 2011. Available at: http://www.bmg.bund.de, accessed 31.10.2011.

(*Federal Association of Sickness Funds*) GKV Spitzenverband (2010): Kennzahlen der gesetzlichen Krankenversicherung. Available at: http://www.gkv-spitzenverband.de, accessed 31.10.2011.

(*Federal Association of SHI Physicians*) Kassenärztliche Bundesvereinigung (2009): Grunddaten zur vertragsärztlichen Versorgung 2009. Available at: http://www.kbv.de, accessed 31.10.2011.

(*Federal Statistical Office*) Statistisches Bundesamt (2011). Gesundheitsberichterstattung des Bundes. Available at: http://www.gbe-bund.de, accessed 31.10.2011.

The Italian Health Care System, 2011

CONTRIBUTING AUTHORS:

ANDREA DONATINI, EMILIA-ROMAGNA REGIONAL HEALTH AUTHORITY,
SARAH JANE REED, LSE HEALTH, LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE,
AND DAVID SQUIRES, THE COMMONWEALTH FUND

Who is covered?

The public health care system (Servizio Sanitario Nazionale, SSN)—covers all citizens and legal foreign residents. Since 1998, illegal immigrants have been granted access to basic services. Modeled after the British National Health Service, the SSN replaced a Bismarckian system of health insurance funds in 1978.

What is covered?

Services: In 1998-2000, the second National Health Plan laid the foundation for the national government to define, for the first time, a standard benefit package that applies universally in all regions. In 2001, the central government defined the minimum national benefits package to be offered to all residents—the "essential levels of care" (livelli essenziali di assistenza, LEAs). Positive and negative lists (i.e., lists of covered and excluded services) were developed to mandate the coverage of certain services based on criteria related to medical necessity, effectiveness, human dignity, appropriateness, and efficiency in delivery. Positive lists explicitly define covered services with regard to pharmaceuticals, inpatient care, and preventive medicine. For hospital care, there is no explicit and specific definition of what is covered. Negative lists apply to three areas of exclusion: services that are ineffective or not within the province of the SSN, such as cosmetic surgery or certain types of physical therapy; services that are only covered on a case-by-case basis, such as orthodontics and laser eye surgery; and in-patient services classified by diagnosis related groups (DRGs) for which hospital admissions are likely to be inappropriate, such as for cataract surgery or hypertension care. Regions can choose to offer non-LEA services, but must finance these themselves. Regions are allowed to provide services not included on the positive list, but are prohibited from using national resources to do so.

LEAs do not include a specific list of mental health services provided throughout the country. Rather, national legislation creates an organizational framework for mental health services, where local health authorities are obliged to define the diagnostic, curative, and rehabilitative services available at each level of care. Nor do the LEAs explicitly define the preventive, public health, or long-term care services that are covered by SSN. Instead, they outline general community and individual levels of preventive services to be covered, including hygiene and public health, immunization, and early diagnosis tools. In addition, they broadly state that rehabilitative and long-term inpatient care are to be appropriately delivered as a part of standard, inpatient curative care. Generally for long-term care services, patients are treated in residential or semi-residential facilities, and community home care. Residential and semi-residential services are managed by public or private for-profit and nonprofit organizations and provide nurse, physician, and specialist care; rehabilitation services; and medical therapies and devices. SSN and patients share the cost of residential and semi-residential services, whereas community home care is fully covered. Unlike residential and semi-residential care, community home care is not designed to provide physical or mental care services but rather enhance a patient's autonomy by providing residual assistance throughout a course of treatment or therapy. In spite of government provision of residential and home care services, long-term care in Italy has traditionally been characterized by a low degree of public financing and provision when compared to other European countries.

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. For some categories of drugs, therapeutic plans are mandated and prescriptions must follow clinical guidelines. Dental care is generally not covered and paid for out-of-pocket. In particular, public provision of dental care (i.e., volume of services actually provided) is very low even when it is covered by the SSN.

Cost-sharing: Primary and inpatient care are free at the point of use, but copayments have been applied for ambulatory specialist, imaging, and laboratory services at the national level, and outpatient drugs at the regional level. Furthermore, since 2007, a €25 ($35 USD) copayment has been introduced for "unwarranted" use of emergency services—that is, instances deemed to be non-critical and non-urgent, although some regions have not enforced this payment. To face rising public debt, in July 2011, the government introduced, with other economic initiatives, a €10 ($14 USD) fixed rate for ambulatory specialists visits and imaging and laboratory services.

Safety net: All individuals with out-of-pocket payments over €129 ($179 USD) in a given year are eligible for a tax credit equal to roughly one-fifth of their spending. Furthermore, cost-sharing exemptions are applied to people over the age of 65 or under the age of 6 with a gross household income below a certain threshold (approximately $36,000), people with chronic or rare diseases, people with disabilities, people who are HIV positive, prisoners, and pregnant women. Most screening services are also provided free of charge.

How is the health system financed?

Publicly financed health care: Public financing accounted for 77.9 percent of total health spending in 2009. The public system is primarily financed through two taxes. The first is a business tax pooled nationally and allocated back to the regions, typically the source region. There are large interregional gaps in the business tax base, leading to financing inequalities. The second is a fixed proportion of national value added tax revenue collected by the central government and used to redistribute funds to the regions unable to raise sufficient resources to provide the LEAs. The Standing Conference on the Relations between the State, the Regions and the Autonomous Provinces defines yearly the criteria to be used to define the level of funding for the delivery of LEAs. Criteria used so far include population size, age structure, and to a lesser extent, social deprivation. In addition to these central taxes, regions are allowed to generate their own revenue, leading to further interregional financing differences. The 2008 financial law established that regions would be financed through standard costs (although these are not yet operationally defined) established for specific functions (e.g., hospital care, pharmaceuticals, primary care) and set on the basis of actual costs of services provided in the regions that are considered most efficient.

Private health insurance: Private voluntary health insurance (VHI) plays a limited role in the health care system, accounting for roughly 1 percent of overall health spending in 2006. Approximately 15 percent of the population has some form of VHI, generally to cover services excluded under the SSN, to benefit from a higher standard of comfort and privacy in hospital facilities, and to have wider choice of public and private providers. Some VHI policies cover copayments, but the main use of VHI is to cover private services, shorter waiting times, better amenities, and unrestricted choice of specialist or to provide compensation for hospitalizations, with patients receiving a fixed sum per day for admissions in public or private hospitals.

Before 1999, all physicians could earn additional income by treating patients privately on a fee-for-service basis. In 1999, the organization and management of hospital physicians was reformed in an attempt to clarify the boundaries between private and public practice and to suppress the perverse incentives associated with dual practice. The possibility for public hospital physicians to increase their salaries by treating patients in private hospitals was abolished: all public physicians can see private patients within public hospitals by paying a proportion of their extra income to the hospital.

Out-of-pocket spending: In 2009, 19.7 percent of overall health spending was paid out-of-pocket. Much of this spending was for drugs not covered by the public system (mainly over-the-counter drugs) and dental care. Also, out-of-pocket payments are used to access specialist care and, to a lesser extent, inpatient care delivered in private and public facilities to paying patients.

How is the delivery system organized?

Regions: While the central government determines LEAs and controls the distribution of tax revenue, the 20 regions have responsibility for the organization and delivery of health services. Regions are allowed a large degree of autonomy in how they perform this role and regarding decisions about the macro structure of the system. In all regions there are local health units (LHUs) responsible for the health of the population residing in their territory. LHUs are managed by a CEO appointed by the governor of the region and deliver primary care, public health, occupational health, and health care related to social care. They are mainly funded through capitated budgets. Depending on specific regional decisions, specialist outpatient and inpatient care may be mainly delivered by hospitals managed by LHUs or by independent hospital with trust status (public and private). For example, in the Veneto or the Emilia–Romagna region, only a few teaching and tertiary care hospitals are independent, with most specialized care provided by hospitals and centers run by LHUs, while in the Lombardy region all specialized care (including psychiatry) is delivered by independent organizations (SSN independent hospitals and accredited private providers).

Primary/Ambulatory Care: General practitioners (GPs) are paid via a combination of capitation and fee-for-service—sometimes related to performance—and are regulated under national and regional contracting. Capitation is based on the number of patients and is adjusted for age—higher payments are awarded for people over 75 and under 14. The majority of GPs generally operate in solo practices, though the central government and regions have offered economic incentives to encourage group practice and greater integration between GPs and social care, home care, health education, and environmental health services. In the last few years general practice has witnessed a transformation in which the solo practice model is being progressively modified by new organizational forms (networks, groups, etc.), particularly in the northern part of the country. Specifically, recent legislation promotes multidisciplinary teams to work in three ways: base group practice, where GPs from different offices share clinical experiences, develop guidelines, and participate in workshops that assess performance; network group practice, which functions like base group practice but allows GPs to access the same patient electronic health record system; and advanced group practice, where GPs share the same office and patient health record system, and are able to provide care to patients beyond individual catchment areas.

In an attempt to promote coordination among health care professionals and improve patient accessibility to primary care, government and GP associations have agreed to implement a model where GPs, specialists, and nurses coordinate to ensure 24-hour access and avoid unnecessary use of hospital emergency departments. The general structure of the model has been outlined in the national contract with no additional payment attached; regions have been given the responsibility of developing the model. Implementation is uneven across regions.

GPs have a gatekeeping role and incentives have been introduced to motivate efficient decision-making regarding prescriptions and referrals. Patients register with one physician who, when needed, refers patients to the necessary specialist departments. Outpatient specialist care is generally provided by LHUs or by public and private accredited hospitals under a contractual agreement with an LHU. Once referred, the Italian system allows freedom of choice for patients among all accredited institutions in any region. Ambulatory specialists are generally paid on a per hour basis while hospital-based physicians are salaried employees.

In recent years, significant inroads have been made to better integrate health and social care services, with the vision of shifting long-term care from institutional services to community care with an emphasis on the home. The community home care scheme was founded as part of the National Health Plan for 1998–2000, and establishes a home care network that integrates the different competencies of nurse, GP, and specialist physician care with the needs and involvement of the family. GPs oversee the home care network, liaise with social workers and other strands of care, and take responsibility for patient outcomes.

Hospitals: Depending on the region, public funds are allocated by the region or the LHU to public and accredited private hospitals. Public hospitals are either managed directly by the LHUs or operate as semi-independent public enterprises, similar to the British trust hospitals. A DRG-based prospective payment system operates across the country, though it is generally not applied for locally run hospitals. There is considerable interregional variability in the prospective payment system, such as how the fees are set, which services are excluded, and the tools employed to influence patterns of care. Regions even use different coding and classification systems. Moreover, in all regions, a portion of funding is administered outside the prospective payment system (e.g. funding of specific functions such as emergency departments and teaching functions). 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. Patients are given free choice of hospital while choice of specialist is not allowed; free choice of hospital implies that patients are not confined to regional lists of providers but can decide to receive care in any public or private accredited hospital.

Long-term care: Older and disabled individuals receive care through residential or semi-residential facilities and community home care. Residential care is generally reserved for patients with more critical health conditions, whereas community home care is designed to maintain individual autonomy through rehabilitation, primary care, and the delivery of drugs or medical devices. Community home care is funded publicly, whereas residential facilities are managed by a mixture of public and private, for-profit and nonprofit organizations. Patients must be referred to receive residential care and cover a portion of the costs through copayments. User charges for residential services vary widely according to region, but are generally determined by patient income.

Mental health care: Mental health care is provided by SSN in a variety of community-based, publicly funded settings, including: community mental health centers, community psychiatric diagnostic centers, general hospital inpatient wards, and residential facilities. Flat copayments apply to diagnostic procedures, pharmaceuticals, and specialist visits. Physicians or specialists providing mental health services are reimbursed on a capitation basis.

What are the key nongovernmental entities for system governance?

The Ministry of Health draws on the expertise of various institutions for technical support, many governmental in nature. Among the key nongovernmental entities are the National Health Council, which includes scientists, physicians, and other experts, to provide technical and consultative support to the SSN. It is structured as a commission with a president and 50 members, including scientists, physicians. and other experts with nationwide expertise in health care. Main topics of interest are national health planning, hygiene and public health, pharmacology and pharmaco-epidemiology, continuing medical education for health care professionals, and information systems for health care. The National Institute of Health is the main body for scientific and technical research, providing recommendations and control in the area of public health.

The Agency for Regional Health Services is the main institution responsible for conducting comparative effectiveness analysis, and is accountable to the regions and Ministry of Labor. The Agenzia Italiana del Farmaco (AIFA), founded in 2003, is responsible for all matters related to the pharmaceutical industry, focusing on quality, production, distribution, scientific research, as well as pricing and reimbursement policies. The agency is accountable to the Ministry of Health, as well as the Ministry of Economy and Finance.

At the regional level, some local governments have established agencies responsible for the evaluation and monitoring of local health care quality as well as providing technical and scientific support to regional health departments. It is the responsibility of regional governments to manage expenditure control by balancing health care spending each year, with failure to do so resulting in a review by an external commissioner. Moreover, regional governments are responsible for underwriting annual "Pacts for Health" that link additional resources to the completion of various health care planning and expenditure goals.

What is being done to ensure quality of care?

Both national and regional ministries are responsible for quality assurance, for which they ensure that LEA services are provided and waiting times are monitored. 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 by the region where they operate in order to contract with the SSN. Accreditation rules are regional and vary considerably across the system. Both the central and regional governments take part in creating and distributing guidelines. A National Commission for Accreditation and Quality of Care is responsible for broadly outlining the criteria used to select providers and for evaluating the accreditation model selected by different regions. Medical professionals in both the public and private sectors are responsible for developing skills and maintaining training through various seminars and research activities necessary for accreditation.

A national program of clinical guidelines has been implemented in recent years. The program involves institutions, organizations and professionals at different levels of the health system and has produced guidelines on different topics. In 1995, national legislation stated that all public health care providers issue a "health service chart" that provides the public with information on service performance, highlighting quality indicators, waiting times, and a strategy for quality assurance, while also outlining the process by which patients can make complaints in the system. Health service charts have been extended to the accreditation process in the private sector, and must be published annually, although dissemination methods are decided regionally. Most providers issue performance data through leaflets and the Internet. Nurses and other medical staff are offered financial incentives for performance. Rewards, however, are not linked to publicly reported data but only to manager evaluations.

A national strategy for patient safety has emerged in the last few years. In 2003, a National Technical Committee on Clinical Risk was established, and a year later the Working Group for the Assessment of Methodological Approaches for the Evaluation of Clinical Risk was formed. In February 2006, the two groups merged into the Working Group on Patient Safety. In 2007, the Ministry of Health initiated the National System for Patient Safety as a two-year pilot project, which also functions as the National Observatory for Patient Safety (Osservatorio Nazionale per la Sicurezza dei Pazienti) in collaboration with the Working Group on Patients Safety.

In terms of patient satisfaction, the Eurobarometer survey in 2002 on public satisfaction with the health system in 15 EU countries shows that Italy remained below the EU average, despite a slight increase after 1999 and with significant differences across the North–South divide

What is being done to reduce health disparities?

Interregional inequity 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. Also, community care is less developed in southern regions. The National Health Plan for 2006–2008 cites overcoming the large regional discrepancies in quality of care, a key objective for future reform. The Ministry of Health and Ministry of Economics signed an agreement in April 2007 to direct EU resources towards health services in eight regions in the south as a first step in reducing this persistent variation. To avoid inequalities among regions and to provide equal access to the LEAs to the whole population, regions receive a quota from an equalization fund (the National Solidarity Fund), which aims to reduce inequalities between the northern regions (which are traditionally the richest and therefore have greater own-source tax revenues to guarantee the core benefits package) and the southern regions. Aggregate funding for the regions is set by the Ministry of the Economy and Finance and the resource allocation mechanism for the pooled National Health Fund for regional health care services is based on a capitation quota, which is weighted by factors linked to the demographic characteristics of each region's population, and the frequency of consumption of health care services by age and sex.

In terms of geographical equity, data show a significant decrease in patient flows abroad in the 1990s (France 1997), but at the same time there was a rise in interregional mobility, particularly from southern to central and northern regions, showing that the North–South divide is still present and that health inequality is still an issue in Italy. In terms of vertical equity, data report significant inequality in health status in favor of higher income groups in Italy, although these differences are lower compared to other European countries (Van Doorslaer and Koolman, 2004). There is also evidence that, in 2002–2004, there was a core of groups experiencing social unfairness, consisting of 11 percent of poor families and 1.3 percent of the population suffering impoverishment due to health care. These figures indicate that health costs caused an increase of about 10 percent in the number of poor people, with a strong concentration among older people (over 60%) and significant differences at the regional level (Donia Sofio et al., 2006). Access to health care is still limited by waiting lists, although several regions have introduced effective programs for prioritizing the delivery of care on the basis of clinical appropriateness of the services prescribed and patient severity (France et al 2005).

In terms of health care performance, data commonly used to make cross-country comparisons of the SSN show a positive trend and an improvement in the population's general health status. With regard to perceived health, 59.6 percent of a sample of Italy's population self-assessed their health status as being good in 2002, although differences are evident across the North–South divide. However, there is no clear evidence of a relationship between health system reforms and the improvement of health outcomes

What is being done to improve efficiency?

There is a strong emphasis on treating patients at the least intense level appropriate for their condition. The catalogue of SSN benefits was defined in terms of a positive and a negative list and based on criteria of necessity, human dignity, 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 according to the following criteria: cost effectiveness for pharmaceuticals where no effective therapies exist; comparison with the prices of alternative therapies for the same condition; costs per day compared to products of the same effectiveness; the financial impact on the health system; the estimated market share of the new drug; and average prices and consumption data from other European countries. Prices for non-reimbursable drugs are set freely by the market.

Regarding the organization and delivery of care, the 1992 reform aimed toward a quasi-market for health care services, with LHUs and regions able to contract with competing public and private accredited providers. This new model of competition has emerged to varying degrees across regions and has changed over time. In some regions, the model was fully implemented (e.g. Lombardia regions in the late 1990s), while in others the actual allocation of resources to hospitals has never followed competitive mechanisms (as in southern Italy). In addition, over time, market mechanisms have increasingly evolved to balance relevant financial incentives towards quality and efficiency with clear safeguards for the financial viability of the system. Regions have used the accreditation system and introduced caps on spending to create barriers to entry and to maintain control over expenditure.

Waiting times are a concern. National legislation has set maximum wait time guarantees for ambulatory care and some elective procedures, though there is no system to comprehensively track performance. 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 is health information technology being used?

In 2001, the New Health Information System (NSIS) was developed to establish a universal system of electronic health records that operates between every level of care and provides information on the services delivered, resources used, and associated costs. The NSIS has been implemented incrementally since 2002, but is not yet universal. A core part of NSIS is represented by a nationwide clinical coding program, the so-called "bricks" program, which establishes the semantic toolkit required to ensure a common language to classify and codify concepts in a uniform manner; to share methodologies for measuring quality, efficiency, and appropriateness of care; and to allow an efficient exchange of information between the national level and regional authorities. The bricks program has been the focus of considerable effort and is one of the most mature elements of Italy's developing electronic health program.

Some regions have developed computerized networks connecting physicians, pediatricians, hospitals, and territorial services to ease communication among health care professionals and consequently to simplify citizens' access to services, thus improving treatments and continuity of care for patients. These networks allow automatic transfer of patients registers, of services supplied to patients, of prescriptions for specialist visits and diagnostics, and of laboratory and radiology test outcomes.

How is evidence-based practice being encouraged?

Health technology assessment (HTA) is not formalized or undertaken systematically within the Italian health system; very few regions have an HTA agency in place. However, the majority of public hospitals and LHUs conduct comparative effectiveness assessments, although they are used primarily for cost-containment purposes, rather than for promoting innovation. Among regions with a specific HTA entity in place, the primary function is to perform and plan evaluation processes of individual technologies, though the assessments are not mandatory for new or referred procedures and devices.

At the national level, the National Committee for Medical Devices was created in 2003 to develop cost-benefit analyses while also determining reference prices for all medical devices. In 2007, the Agency for Regional Health Services, in collaboration with the Ministry of Health, was given the authority to conduct HTA and disseminate the implementation of its findings at the regional level. Clinical guidelines exist in Italy but are coordinated by the National Plan for Clinical Guidelines, and are not directly informed by cost-effectiveness analysis. Additionally, the national benefit package bases coverage decisions chiefly on clinical effectiveness and appropriateness rather than on any explicit cost-effectiveness criteria (Lo Scalzo et al. 2009).

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, and fiscal capacity greatly varies. This division between financing and delivery creates a tension, as the regions claim the government underbudgets and the government claims many regions need greater cost control. There is clear evidence of large geographical variations in respect to cost-control attitude and competences. Recently, the central government has imposed specific recovery plans (piani di rientro) on those regions that have generated financial deficits in health care expenditure. The aim is to evaluate areas of regional health care provision responsible for excess spending and to identify tools and measures needed to achieve economic balance. These tools generally include revision of hospital rates and diagnostic rates, reduction of hospital beds, additional copayments for pharmaceuticals, and reduction in personnel through limits on staff turnover.

What system innovations have been introduced?

Due to the regionalization of the health system, most innovations in the delivery of care take place at regional rather than national level, with some regions viewed as leaders in innovation. Relevant innovations can be found in:

- primary care, with several models to develop group practices and collaboration between professionals;
- psychiatric care, where Italy was the first country in the world to close mental hospitals and to promote community care;
- home care, with several projects involving multiprofessional teams;
- pharmaceutical care, where both the Central Agency on Pharmaceuticals (AIFA) and regions are particularly active in coordinating guidelines and rules to promote appropriate and cost-effective prescribing;
- and hospital care, where various innovations have been introduced concerning the overall organization, management of operations (e.g., planning of surgical theaters and delivery of drugs), and health information technology (e.g., electronic medical records, automation of administrative and clinical activities).

References

Dona Sofio A et al (eds) (2006). *Management of the Italian national health system: complexity and perspectives of the new institutional set-up*. Rome, Health Communication.

France G (1997). Cross-border flows of Italian patients within the European Union: an international trade approach. *European Journal of Public Health*, 7(3 Suppl.):18–25.

France G, Taroni F and Donatini A (2005), The Italian Health-care System, *Health Economics*, 14: S187-S202.

Lo Scalzo A, Donatini A, Orzella L, Cicchetti A, Profili S, Maresso A (2009). Italy: Health system review. *Health Systems in Transition*; 11(6)1-216.

Van Doorslaer E, Koolman X (2004). Explaining the differences in income related health inequalities across European countries. *Health Economics*, 13(7):609–628.

The Japanese Health Care System, 2011

David Squires, The Commonwealth Fund

Who is covered?

Japan operates a universal social health insurance system with more than 3,500 insurers. Employees and their families (60 percent of the population) are required to enroll in the health insurance offered through their employers, and the remaining 40 percent (unemployed, self-employed, and retired) are covered through plans administered by their local municipality or prefecture. All plans cover the same statutory benefit package. Individuals cannot choose their plans. Those who evade enrolling must pay back up to two years of premiums when they re-enter the system (although public assistance will cover them if they are unable to pay this fee). Permanent residents and long-term visitors are also required to obtain coverage; undocumented immigrants are not covered.

What is covered?

Services: The statutory national benefit package covers hospital care, ambulatory care, and approved prescription drugs, and covers most dental care; it does not cover eyeglasses. Since 2000, long-term care has been covered under its own insurance system, administered by local governments. A number of preventive measures are publicly provided to those aged 40 and older, including screening, health education, and counseling. Mental health care is also covered under the statutory benefit package.

Cost-sharing: In 2009, out-of-pocket payments made up 15.8 percent of total health care expenditures. In general, a 30 percent copayment is required for all covered services, all of which are subject to a government-determined universal fee scale. Some employer-based health insurance funds offer reduced cost-sharing.

Safety net: While 30 percent copayments are quite high by international standards, several measures are designed to protect against excessive out-of-pocket payments, particularly for vulnerable populations. Copayment is only 20 percent for young children and 10 percent for those aged 70 or older (30% for those with high incomes). Also, all insurance plans include a monthly out-of-pocket ceiling, usually 80,100 yen (US$1,056), above which only a 1 percent copayment applies. This ceiling varies for low-income (35,400 yen [US$467]) and high-income (150,000 yen [US$1,978]) insurees. Finally, annual out-of-pocket costs between 100,000 and 2 million yen (US$1,319 to $36,370) can be deducted from taxable income.

How is the health system financed?

Different health insurance schemes cover different portions of the population, based largely on employment status and age, and premium requirements vary by insurance scheme.

Employment-based insurance: Employees of large employers, which operate their own insurance programs, contribute between 3 and 10 percent of their income in premiums, while employees of small and medium-sized employers contribute a uniform 9.5 percent to a single health plan (the National Health Insurance Association). Since this overall 8.2 percent of employee income does not sufficiently cover health care costs for that population, the government provides a subsidy amounting to 16.4 percent of the National Health Insurance Association's costs. Government employees are covered by their own system of insurers (known as Mutual Aid Societies), as are some groups of professionals (e.g., doctors in private practice). All provider fees paid by insurers are set centrally and revised every two years, in what has proven to be a very effective cost-containment strategy (see below).

Government insurance and financing: Roughly one-third of health care spending is financed through central and local tax revenue, not earmarked for health spending. These funds are mainly used, along with insurance-related premiums, to cover the 40 percent of the population not enrolled in employer-based insurance (retired, self-employed, or unemployed) through the Citizens' Health Insurance system, which is administered by the municipalities. Those aged 75 or older are covered under a distinct health insurance system (Late Elder Insurance), administered by coalitions of municipalities within each prefecture and funded through a combination of general tax revenue, pooled contributions from the other insurance schemes, and, to a lesser extent, premiums.

Out-of-pocket payments: In 2008, out-of-pocket payments made up 15.8 percent of total health expenditures, stemming mainly from a 30 percent coinsurance charge on all services covered under statutory health insurance (which is limited by monthly out-of-pocket ceilings and other protections as described above).

Private health insurance: Private insurance is held by a majority of the adult population, with benefits provided mainly in the form of cash, such as a daily amount for hospitalization.

How is the delivery system organized?

Physicians: In Japan, primary and specialist care are not held apart as distinct disciplines, as they are in other countries; rather, specialists generally operate in community-based clinics, provide many primary care functions, and can be easily accessed without referral. Very few clinics have a formal scheduling system; rather, patients wait in the waiting room until they can be seen. Outpatient visits are typically very short, yet common—in 2009, physician visits per year (13.9 per capita) were more than twice as frequent as the OECD median (6.2) and three times as frequent as in the U.S. (3.9). Virtually all clinics used to dispense medication (which doctors can provide directly to patients), but only a minority do so now. Clinics are mostly physician-led, with nurses playing less of a role in caring for patients than in some other countries, such as the U.S. Outpatient care is also provided at hospitals. After-hours care is usually provided by on-call physicians; there are few emergency departments in Japan. Hospital-based physicians are paid fixed salaries.

Hospitals: Approximately 55 percent of hospital beds are in private, nonprofit hospitals. Public hospitals tend to be larger than private. While in general patients are free to self-refer, some large hospitals and academic medical centers charge a fee to patients not referred by a physician. Roughly half of acute-care hospital beds are paid for solely on a fee-for-service basis, and the other half partially paid for through Diagnosis Procedure Combination (DPC) case mix–based payments. DPC payments offer per-diem rates that vary depending on diagnosis and procedure, and on how long the patient remains hospitalized. They also include physicians' fees. Hospitals voluntarily elect to receive DPC payments or remain under fee-for-service; DPC rates are multiplied by a hospital-specific coefficient, so as to keep them relatively in line with fee-for-service payments.

Traditionally, hospitals have been used as both a source for acute care and a site for long-term care for the elderly. Other forms of long-term care have since developed, particularly since the introduction of public long-term care insurance in 2000, but it is still common for hospitals to provide long-term care.

Long-term care: Long-term care has traditionally been provided by hospitals far more routinely in Japan than in other countries, although directing more patients to nursing home equivalents is a policy focus. Since 2000, all patients aged 65 and older and some disabled between 40 and 64 are covered under the national long-term insurance program, administered by the municipalities. Roughly half of the financing flows through taxation and half through premiums. Premiums vary by municipality and are linked to income (6 different premium levels for age 65 and older; 1 percent of income, up to a ceiling, for age 40 to 64). A 10 percent copayment applies to all covered services, up to an income-related ceiling. Covered services include institutional care, visiting nursing, rehabilitation, home help, and day services. There is additional copayment for bed and board in institutional care, but it is waived or reduced for those with low income. Providers are both for-profit and nonprofit, but for-profits are not allowed in institutional care.

Mental health: Japan has the largest number of psychiatric beds per capita in the world, but has been taking some steps in the past decade to move mental health care more into the community. Approximately 80 percent of psychiatric beds are private and nonprofit, and providers are generally paid fee-for-service. Mental health care is covered under national health insurance, along with the standard 30 percent coinsurance, although protections exist that include reduced cost-sharing for patients recently discharged from psychiatric institutions. Suicide prevention is a particular priority at present.

What are the key nongovernmental entities for system governance?

System governance is largely in the control of the Ministry of Health, Labor and Welfare and regional governments, but some nongovernmental entities still play a role. Perhaps the most significant is the Central Social Insurance Medical Council, made up of ministry-appointed representatives from payer (7 members) and provider (7 members) organizations, public representatives (6 members), and technical experts (10 members). The Central Council's primary function is to approve the biennial revisions to the national fee schedule, which determines prices for all publicly covered health services. Current reforms aim to increase the number of public representatives on the Central Council and make the decision-making process more transparent.

The Japan Council for Quality Health Care (JCQHC), established in 1995, undertakes a number of activities related to improving quality throughout the health system. They include hospital accreditation, creating clinical guidelines, and tracking complaints made to medical safety support centers (see below). The JCQHC does not have any regulatory power to punish poorly performing providers.

What is being done to ensure quality of care?

There is little in the way of regulation regarding quality improvement. Hospital accreditation in Japan is voluntary, and undertaken largely as an improvement exercise rather than as a way to penalize poor providers; roughly one-third of hospitals are accredited by the JCQHC (described above), which does not disclose names of hospitals that have failed the accreditation process. Hospitals can be sanctioned through reduced reimbursement rates if staffing per bed falls below a certain ratio. About 300 hospitals voluntarily participate in benchmarking projects and publicly report on quality indicators.

Physicians can proclaim any subspecialty at their discretion without accreditation. Accreditation processes vary by specialty, but often are not rigorous and do not require recertification. Consequently, certain subspecialties such as neurosurgery and orthopedic surgery are far more common than in the U.S.

Every prefecture has a medical safety support center for handling complaints and promoting safety. Since 2004, advanced academic and public hospitals are required to report adverse events, although significant underreporting may occur.

What is being done to improve efficiency?

Provider payment in Japan has traditionally been dominated by fee-for-service, which is still near-universal in outpatient care. The introduction of the voluntary Diagnosis Procedure Combination (DPC) system for hospitals represents an attempt to evolve beyond fee-for-service. DPC payment is designed to allow hospitals more flexibility in the services they provide to patients—hopefully leading to greater efficiency—while in most cases maintaining (or even improving) their financial position. Additionally, since 2008, some experiments with financial incentives have been introduced to try to improve care coordination. Hospitals admitting stroke victims or patients with hip fractures are offered an incentive to use post-discharge protocols and to contract with physician offices to provide follow-up care after discharge. Physician offices also receive an extra fee for seeing these referred patients. The effect of these incentives has yet to be evaluated.

How is health information technology being used?

Despite a number of initiatives over the past decade, health information technology (HIT) is not widely developed in Japan other than for billing purposes. In 2010, the government announced the New IT Strategy to spread the use of HIT. The strategy has four parts: (1) develop patient electronic medical records that can be accessed by all providers; (2) develop HIT and telehealth platforms to help link patients with doctors and nurses in underserved areas; (3) create a platform that can monitor pharmaceutical prescriptions and adverse events in real time, in order to improve patient safety and monitoring; and (4) create a claims database of all conditions and interventions to facilitate assessment of community needs and development of interventions. However, there are many barriers to widespread HIT adoption. They include creating unique identifiers; creating standards for information exchange between providers and linking between different databases; ensuring privacy and data security; and defining the proper roles for government and private companies as HIT moves forward.

How is evidence-based practice encouraged?

For new drugs, the Ministry of Health, Labor and Welfare considers efficacy and innovation when making coverage and pricing decisions, but not cost-effectiveness. There is no entity that conducts comparative effectiveness research. Specialist societies produce clinical guidelines, as does the Japan Council for Quality Health Care.

How are costs controlled?

Japan has one of the largest elderly populations in the world, with 22.7 percent of the population in 2009 over age 65 (compared to the U.S.'s 13.0% and the OECD median of 15.5%). But per capita expenditure on health care was just \$2,878—far less than what was spent in the U.S. (\$7,960) and even below the OECD median (\$3,128). This remarkable achievement is thought to be due largely to strict regulation of the prices paid for all health care services included in the national benefit package. All insurers adhere to a national fee schedule, and providers are banned from charging above that fee. Every two years, this fee schedule is revised. The cabinet begins this process by determining what the overall rate of change in health care payments should be, first globally across the health system and then in each of four categories—medical services, drugs and devices, dental services, and pharmacy. The fee revisions for drugs and devices are then determined by a market survey of the actual prices being paid by providers (which are often negotiated below what is listed on the fee schedule); fees are revised to 2 percent above the actual price. Drug fees can also be revised downward for new drugs selling in greater volume than expected and for brand-name drugs when generic equivalents hit the market. For medical, dental, and pharmacy services, the Central Social Insurance Medical Council (described above) revises fees on an item-by-item basis to keep them on the projected track to meet overall spending targets set by the cabinet. One consideration in doing so is the average profit margins reported by different categories of hospitals and specialties; highly profitable categories see larger reductions in the fee schedule.

In addition to price regulation, there are other policies that limit, on an ad hoc basis, services deemed to be inflating costs, such as MRI imaging or certain expensive drugs. Peer review committees in each prefecture also monitor claims and may deny payment for services deemed inappropriate.

What system innovations have been introduced?

A theme in recent years has been to promote evidence-based health care policymaking in Japan. For example, the current process through which the Central Social Insurance Medical Council revises the national fee schedule has been criticized for a lack of transparency and for vulnerability to potential abuses and conflicts of interest. The DPC hospital payment system may offer one opportunity to create a more robust and transparent policymaking infrastructure.

In order to cope with a large and growing elderly population, Japanese policymakers have stressed the importance of prevention and wellness in reducing health care costs. Current priorities include reducing smoking and improving blood pressure management. Since 2008, annual checkups have been obligatory for those between ages 40 and 74.

Formal policies and structures for monitoring and promoting quality remain relatively underdeveloped in Japan. Information on quality is rarely collected or reported, and few mechanisms exist to encourage quality-improvement activities. Policies that establish incentives for quality and efficiency, while still in the beginning stages, are being developed and implemented.

The devastating earthquake, tsunami, and nuclear emergency that occurred in March 2011 created a health crisis while also destroying a significant portion of the health care infrastructure, particularly in the Tohoku region. Restoring needed health services to the affected areas has been a national priority, and rebuilding is a primary focus of the current government. These activities may offer an opportunity to improve upon the previous system, e.g., with improved health information technology infrastructure.

Acknowledgements

The author would like to thank Professor Naoki Ikegami for his assistance with this profile.

References

Organization for Economic Cooperation and Development (OECD), *Health Data*, June 2011.

J. C. Campbell, N. Ikegami, M. J. Gibson, “Lessons from Public Long-Term Care Insurance in Germany and Japan,” *Health Affairs* (Millwood), Jan.–Feb. 2010 29(1):87–95.

J. Halamka, “Addressing Japan’s Healthcare Challenges with Information Technology: Recommendations from the U.S. Experience,” CSIS Global Health Policy Center, Aug. 22, 2011 p.14.

N. Ikeda, E. Saito, N. Kondo et al., “Cost Containment and Quality of Care in Japan: Is There a Trade-Off?” *Lancet*, Sept. 24, 2011 378(9797):1174–82. Epub, Aug. 30, 2011.

N. Ikegami and G. Anderson, “All Payor Rate Setting: The Japanese Experience,” manuscript, 2011.

N. Ikeda, E. Saito, E., N. Kondo, et al., “What Has Made the Population of Japan Healthy?” *Lancet*, Sept. 17, 2011 378(9796):1094–105. Epub Aug. 30, 2011.

N. Ikegami, B. K. Yoo, H. Hashimoto, et al., “Japanese Universal Health Coverage: Evolution, Achievements, and Challenges,” *Lancet*, Sept. 17, 2011 378(9796):1106–15. Epub Aug. 30, 2011.

C. Ng, Y. Setoya, A. Koyama, T. Takeshima, “The Ongoing Development of Community Mental Health Services in Japan: Utilizing Strengths and Opportunities,” *Australas Psychiatry*, Feb. 2010 18(1):57–62.

T. Onaya, N. Kaneda, H. Fujii, “Trends in National Information Technology Strategy in Healthcare,” *Sci Tech J.*, Jan. 2011 47(1).

T. Tatara and E. Okamoto, “Japan: Health System Review,” *Health Systems in Transition*, 2009 11(5):1–164.

The Dutch Health Care System, 2011

CONTRIBUTING AUTHORS:
GERT WESTERT, PROFESSOR OF HEALTH SERVICES RESEARCH,
RADBOUD UNIVERSITY NIJMEGEN MEDICAL CENTRE
AND NIEK KLAZINGA, PROFESSOR OF SOCIAL MEDICINE,
ACADEMIC MEDICAL CENTRE, UNIVERSITY OF AMSTERDAM

Who is covered?

Since January 1, 2006, all residents of the Netherlands, as well as nonresidents who pay Dutch income tax, are required to purchase health insurance coverage, except those with conscientious objections and active members of the armed forces. Coverage is statutory under the Health Insurance Act (*Zorgverzekeringswet*, or ZVW), but is provided by private health insurers and regulated under private law. In 2009, roughly 152,000 persons (1% of the Dutch population) were uninsured. That figure has remained stable since 2007. Approximately 50 percent of the uninsured are in their twenties or thirties. In addition to those who should be insured but are not, there is a category of the uninsured who failed to pay their premium for at least six months (so-called defaulters). In December 2009, 318,500 defaulters were reported. This number has increased by 17 percent per year since 2006. In 2009, additional policy measures were taken to enforce 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 (US$42,116) per year and their dependents (around 35% of the population) were excluded from statutory coverage provided by public sickness funds and could purchase coverage from private health insurers. The government regulated this form of substitutive private health insurance to ensure that the elderly and people in poor health had adequate access to health care and that the publicly financed health insurance scheme was properly compensated for covering a disproportionate number of high-risk individuals. Growing dissatisfaction with the dual system of public and private coverage eventually led to the reforms of 2006. In 2004, the number of people without insurance coverage was estimated at 223,000, representing 1.4 percent of the population, a higher number than in 2009, three years after the reforms.

What is covered?

Services: Insurers are legally required to provide a standard benefit package (per the Health Insurance Act) covering the following: medical care, including care provided by general practitioners (GPs), hospitals, specialists, and midwives; hospitalization; dental care (up to the age of 18; coverage after age 18 is confined to specialist dental care and dentures); medical aids and devices; pharmaceutical care; maternity care; ambulance and patient transport services; paramedical care (limited physiotherapy/remedial therapy, speech therapy, occupational therapy, and dietary advice); ambulatory mental care (primary care psychologist, eight sessions); and outpatient and inpatient mental care for the first year. Insurers may decide by whom and how this care is delivered, giving the insured a choice of policies based on quality and costs. A limited number of effective lifestyle improvement programs (e.g., smoking cessation) are also covered.

The government defines the benefit package based on the advice of the Health Care Insurance Board (CVZ). When clarification is required, a detailed interpretation of the package is delegated to the board.

Some treatments are only partially covered or are excluded from the basic insurance package:

- For allied health care in general, a maximum number of sessions are reimbursed; for physiotherapy, this limitation is not applicable for a fixed list of chronic diseases;
- Some elective procedures, e.g., cosmetic plastic surgery without a medical indication, are excluded; and
- For in vitro fertilization, only the first three attempts are included.

The current government has recently decided to exclude preventive care that is intended to benefit people with healthy lifestyles.

The vast majority of people also purchase complementary VHI for services not covered by the standard benefit package, such as adult dental care, although insurers are not required to accept all applications.

Long-term care: The Exceptional Medical Expenses Act (AWBZ) is a statutory health insurance scheme for long-term care (see Schäfer, et al., 2010). This scheme is intended to provide for those with chronic conditions requiring continuous care that involves considerable financial consequences, such as care for disabled people with congenital physical or mental disorders. Everyone who is legally residing in the Netherlands, as well as nonresidents who are employed in the Netherlands and therefore liable for Dutch payroll tax, is compulsorily insured under this act. The entitlements that exist under the AWBZ have been defined in terms of functions. The definitions are broad and should describe the need of the patient, thus following demand instead of supply. The functions are:

- Personal care regarding activities of daily living, e.g., help with taking a shower, bed baths, dressing, shaving, skin care, going to the toilet, eating, and drinking;
- Nursing, e.g., dressing wounds, giving injections, advising on how to cope with illness, showing clients how to self-inject;
- Guidance, e.g., helping the client organize his/her day and manage his/her life better, as well as day care or provision of daytime activities, or talking to the client to help him/her modify behavior or learn new forms of behavior in cases where moderate to severe behavioral or psychological problems exist;
- Treatment, e.g., care in connection with an ailment, such as dementia; and
- Accommodation, e.g., for people who are not capable of living independent lives, but require, for example, sheltered housing or continuous supervision in connection with serious mental illness (e.g. depression).

In addition, the insured are entitled to the use of a nursing aid because of a somatic disability or illness, for a maximum of 26 weeks; the use of an interpreter for the deaf; and examination into congenital metabolic diseases as regulated in the regulation care entitlements of the AWBZ (*Regeling zorgaanspraken AWBZ*).

Health insurers are formally responsible for implementing the AWBZ; however, this task is mandatorily delegated to regional care offices (*Zorgkantoren*).

In the Netherlands, long-term disability protection is organized separately from health care insurance. Employers have to pay sick employees 70 percent of their salary (up to a certain maximum) for the first two years of their illness. The first two days of sickness may be deducted from their salary. In most sectors, collective negotiations between employers and employees have resulted in a 100 percent salary payment in the first year of illness. After two years of illness, employees receive a disability pension based on the percentage of income loss they experience because of their disability. Disability applies to both physical and mental conditions.

Cost-sharing: Every insured person age 18 and over must also pay a deductible ranging from €170 to €670 (US$239 to $941) for any health care costs in a given year (with some services, like GP care, excluded from this general rule).

Safety net: GP care and children's health care are exempt from cost-sharing. The government provides "health care allowances" or premium subsidies for low-income families if the average community-rated premium (see below) exceeds 5 percent of their household income.

How is the health system financed?

Statutory health insurance: The statutory health insurance system under the ZVW is financed through a nationally defined income-related contribution and through community-rated premiums set by each insurer (everyone with the same insurer pays the same premium, regardless of age or health status). The income-related contribution is set at 6.9 percent of the first €32,369 (US$45,442) 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 percent. 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 that considers age, gender, labor force status, region, and health risk (based on past drug and hospital utilization). In 2009, the average annual community-rated premium for adults was €1,065 (US$1,495). The government pays for the premiums of children up to the age of 18. In 2008, total spending on health care was €79 billion (US$111 billion). In 2009, €83.8 billion (US$118 billion) was spent, an increase of 5.8 percent.

The insurance market is dominated by the five largest insurer conglomerates, which account for over 80 percent of all enrollees. All insured have the right to switch basic insurance providers during annual open enrollment, and insurers must accept all applicants.

The Dutch Health Care Authority (*Nederlandse Zorgautoriteit*, or NZa)(NZa) determines provider fees, although a portion of hospital care (33 percent in 2010 and 75% in 2012) is determined through negotiation between insurers and providers.

Private health insurance: Substitutive private health insurance was abolished in 2006. Most of the population purchases a mixture of complementary and supplementary VHI from the same health insurers who provide statutory coverage. The premiums and products of VHI coverage are not regulated. VHI accounts for roughly 3 to 5 percent of total annual spending and provides, for instance, additional coverage for dentistry and extra visits to a physiotherapist. People with VHI do not receive faster access to any type of care, nor do they have more choice of specialist or hospital.

How is the delivery system organized?

In the Dutch health care system, private health care providers and health insurers are primarily responsible for the provision of services. Health care is mainly divided into preventive care, primary care, secondary care, and long-term care. Preventive care is provided mainly by public health services.

Primary care: The general practitioner is the central figure in primary care. The gatekeeping principle, one of the main features of the Dutch system, stipulates that hospital care and specialist care (except emergency care) are accessible only upon referral from a GP. All citizens are registered with a GP of their choice, usually in their own neighbourhood.

Patients can switch to a new one without formal restriction. In 2008, there were 8,783 practicing GPs. Many GPs (51%) work in group practices of three to seven, 29 percent work in two-person practices, and 20 percent work solo. Most GPs are independent entrepreneurs or work in a partnership. 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. There are ongoing experiments with pay-per-performance to improve quality in primary and hospital care. A small percentage of GPs are employed in a practice that is owned by another GP. A full-time working GP has a practice list of approximately 2,300 patients. On average, patients contact their GP five times per year. Only 4 percent of appointments with a GP result in a referral to secondary care.

Since the 2006 reform, remuneration of GPs combines elements of both the old payment system for ZFW insured (capitation fee per registered patient) and the old payment system for the privately insured (fee-for-service). As a result, the system consists of several components:

- Capitation fee per registered patient;
- Consultation fee for GPs, including phone consultation;
- Consultation fee for practice nurses (if any), including phone consultation;
- Contribution for activities that either increase efficiency of GPs or substitute for secondary care (fee-for-service); and
- Compensation for providing after-hours care, mostly based on an hourly rate.

In addition, there are bundled payments for a few chronic diseases (diabetes and chronic obstructive pulmonary disease), and this program is currently broadening to include heart failure and depression. Many GPs employ nurses on salary; the reimbursement for the nurse is received by the GP, so any productivity gains that result from substituting a nurse for a GP's work accrue to the GP. GPs negotiate the hiring of additional staff with the insurer.

(Outpatient) specialist care: Secondary care encompasses those forms of care that are accessible only upon referral from a primary care health provider, such as a GP, dentist, or midwife. Hospitals and mental care providers are the main dispensers of secondary care.

Almost all specialists are hospital-based and either in group practice (65%–70%) or on salary (most but not all in university clinics). There is a nascent trend for specialists to work outside hospitals—for example, in the growing numbers of ambulatory surgery centers. However, this shift is rather marginal, and most ambulatory surgery centers are tied to hospitals.

Hospitals have both inpatient and outpatient departments, as well as 24-hour emergency wards. Outpatient departments are also used for pre- or post-hospitalization diagnosis. There are five types of institutions that provide hospital or medical specialist care:

- Community hospitals;
- Academic (university) hospitals;
- Specialty hospitals;
- Independent treatment centers and ambulatory surgery centers; and

- Community hospitals with designated maximum-care facilities (e.g., for certain cancer treatments, organ transplantation, in vitro fertilization, or trauma).

After-hours care and emergency care: After-hours primary care is organized at the municipal level in GP posts, a centralized service typically with a nearby hospital that provides GP care between 5:00 p.m. and 8:00 a.m. All hospitals have an emergency department, but also a GP post. GPs decide whether or not patients need to be referred to the hospital. The GP post sends the information regarding a patient's visit to his or her GP.

Emergency care is provided by GPs, emergency departments, and trauma centers. Depending on the urgency of the situation, patients or their representatives can contact the GP or the GP post (for after-hours care), call an ambulance, or go directly to the emergency department at the nearest hospital (Schäfer, et al., 2010).

Hospitals: In 2009, the Netherlands had 141 hospital locations and 52 outpatient specialty clinics divided among 93 organizations, which included eight university hospitals. The hospitals provide practically all forms of outpatient as well as inpatient secondary care. Except in cases of emergency, patients consult a specialist only upon referral from a GP. Most hospitals also have 24-hour emergency departments. There were 98 specialty hospital centers concentrating on specific forms of care or illnesses (e.g., revalidation, asthma, epilepsy, or dialysis). In 2009, there were also more than 150 independent private and nonprofit treatment centers, whose services are limited to nonacute, elective care that can be provided during one-day admissions (e.g., eye clinic, orthopedic surgery). Practically all hospitals are private, nonprofit 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. Hospital budgets are now determined through negotiations over price and volume between insurers and hospitals. Additional funds were provided for capital investment. Since 2006, capital is funded through a prospective payment mechanism. Currently, payment of 34 percent of hospital care is freely negotiable and takes place through the Dutch version of DRGs, known as Diagnosis Treatment Combinations (DTCs), meaning that each hospital negotiates with each insurer for a DTC rate. The current government aims to expand the negotiable percentage to 75 in the years ahead. These DTCs cover both outpatient and inpatient hospital costs as well as specialist costs, thereby strengthening the integration of specialist care in the hospital organization. Hospital specialists practice directly or indirectly under contracts negotiated with private health insurers. Two-thirds of hospital-based specialists are self-employed, organized in partnerships; the remainder are salaried.

Long-term care: Long-term care is provided both in institutions (residential care) and in communities (home care). Long-term care forms an important share of the health care system and costs 38 percent of the total health care budget. Long-term care is financed by the Exceptional Medical Expenses Act (AWBZ). The Center for Needs Assessment (CIZ) has been commissioned by the government to carry out assessment for eligibility under the AWBZ. Patients, their relatives, or their health care providers can file a request with the CIZ for long-term care. The CIZ assesses the patient's situation and decides what care is required. The CIZ then sends this decision to a care office (*Zorgkantoor*). Patients can choose between receiving a personal care budget to purchase care themselves or receiving the care itself. Between 1998 and July 2006, the number of personal budget recipients for AWBZ care rose considerably, from 10,000 to almost 95,000.

Home care is provided by home care organizations, residential homes, and nursing homes. In 2007, there were 248 home care organizations and 255 nursing homes or residential homes that also provided home care extramurally. In addition to care for the elderly and people with disabilities, home care organizations provide maternity care.

Palliative care/hospices: Most palliative care is integrated into the regular health care system. GPs, home care, nursing homes, specialists, and voluntary workers are responsible for the provision of palliative services. Furthermore, the number of hospices and palliative units is growing throughout the country. The Ministry of Health, Welfare and Sport strives for the further integration of palliative care into the mainstream health care system. Health care providers, palliative units, and hospices currently participate in regional networks. The purpose of these networks is to promote integration and coordination of care.

Mental health care: Mental health care is provided both in primary and in secondary health care locations. Primary health care professionals in mental health care include GPs, psychologists, and psychotherapists. In 2007, GPs had 357 contacts per 1,000 listed patients concerning a psychological symptom or diagnosis. When more specialist care is required, the GP refers the patient to a psychologist, an independent psychotherapist, or a specialized mental health care institution. In 2006, 772,000 people were treated in specialized mental health care organizations. Around 75 percent of them received ambulatory treatment; 4 percent received part-time inpatient care, meaning that the patient stays in the institution for one or more daily periods per week; 14 percent were hospitalized in a closed institution; and approximately 6 percent lived in a sheltered housing facility. Prior to 2008, the AWBZ financed the majority of mental health care; in 2008 the financing structure was fundamentally reformed. The first 365 days of mental health treatment became coverable under basic health insurance and are therefore financed under the Health Insurance Act (ZVW).

What are the key nongovernmental entities for system governance?

The national government monitors access, quality, and costs of the health care system. The 2006 reforms introduced a prominent role for health insurers. Health insurers are given the task of increasing the efficiency of health care through prudent purchase of health services on behalf of their enrollees. Enrollees are given the right to change insurer every year in case of dissatisfaction. The underlying logic is that critical consumers who have the right to exercise choice induce competition among insurers, and insurers will therefore push health care providers to increase the quality and efficiency of their services. In essence, the government has opted for control at a distance, and future research will be required to determine whether this policy has led to optimal performance for all actors involved.

A number of arm's-length agencies are responsible for the setting of more operational priorities, including the Health Council, which advises the government on evidence based medicine, health care, public health, and environmental protection; the Health Care Insurance Board (CVZ), which advises on the components and implementation of the basic health insurance package; and the Medicines Evaluation Board (CBG), which assesses and safeguards the efficacy, safety, and quality of medicinal products. The Dutch Health Care Authority (NZa) has primary responsibility for ensuring that markets function appropriately, while the Dutch Competition Authority (NMa) enforces fair competition among both insurers and providers, subject to the Dutch Competition Act.

What is being done to ensure quality of care?

At the health system level, quality of care is ensured through legislation governing professional performance, quality in health care institutions, patient rights, and health technologies.

The Dutch Health Care Inspectorate: The Dutch Health Care Inspectorate (IGZ) is responsible for monitoring quality and safety . Most quality assurance is carried out by health care providers, sometimes in close cooperation with patient and consumer organizations and insurers. Mechanisms to ensure quality of care provided by individual professionals include re-registration/revalidation for specialists based on compulsory continuous medical education; regular on-site peer assessments organized by professional bodies; and 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* ("faster, quicker"). Patient experiences are systematically assessed and, since 2007, a national center has been working with validated measurement instruments comparable to the approach of the

Consumer Assessment of Healthcare Providers and Systems (CAHPS) in the United States. The center also generates publicly available information for consumer choice on such topics as waiting lists, patient satisfaction, and a few quality indicators.

National Institute for Health Care Quality: Recently, the ministry of health issued a directive to the Dutch parliament stating that a central body (National Institute for Health Care Quality) needs to be established to further accelerate the process of quality improvement and to encourage evidence-based practice. The form and content of this initiative remain unclear. An institute comparable to the National Institute for Health and Clinical Excellence (NICE) in the United Kingdom is a possibility, but it could also take the form of a virtual umbrella organization that aims to bundle existing initiatives. The urgency is evident. The *Dutch Health Care Performance Report 2010* provided indisputable evidence that the quality and price of Dutch health services vary substantially across providers, and that more needs to be done to address the variation in quality between providers (Westert, et al., 2010).

What is being done to reduce disparities?

In 2005–2008, the life expectancy of men with only primary school was 74.1 years and that of men with a college or academic education averaged 81.4 years (a difference of 7.3 years). Less-educated women had a life expectancy of 78.9 years, while highly educated women on average lived 85.3 years (a difference of 6.4 years). The latest *Public Health Status and Forecast Report (2010)* reveals that, since 2003, the life expectancy of the Dutch has greatly increased, but not enough to bring them up to par with the longest-lived Europeans. Smoking is still responsible for most of the degradation of health, followed by obesity. For many determinants, lower socioeconomic groups do worse on all fronts. The current government has formulated no specific policy to overcome health disparities. The cornerstone of present policy is an emphasis on people's personal responsibility for healthy lifestyles.

What is being done to improve efficiency and health system integration?

The main approach to improving efficiency in the Dutch health system rests on regulated competition between insurers, combined with central steering of performance and transparency about outcomes via the use of performance indicators. These are complemented by provider payment reforms involving a general shift from a budget-oriented reimbursement system to a performance- and outcome driven 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 the national level, health technology assessment (HTA), carried out by the Health Council and Health Care Insurance Board, is used to encouraging cost effective use of health technologies. At the local level, there are several mechanisms to ensure appropriate prescribing. Dutch authorities are working to establish a central HIT network to enable information exchange across sites of care. As mentioned above, bundled payments for patients with select chronic conditions are also being offered. This program is currently being expanded.

How is health information technology being used?

Virtually all GPs have a degree of electronic information capacity—for example, they use an electronic medical record (EMR), and can order prescriptions and receive lab results electronically. Hospitals do not show the same degree of uptake, with only 10 to 20 percent of hospital specialists using EMRs. In addition, these electronic systems for the most part are not nationally standardized or interoperable across domains of care, reflecting their historic development as regional initiatives. The National IT Institute for Healthcare, operating under the health ministry, is tasked with bringing together all[initiatives to coordinate their efforts and promote the development and adoption of national standards. All Dutch patients have a unique identification number (BSN).

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 use community rating but may selectively contract with providers (network policies), 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. When the 2006 reforms were first introduced, the government aimed to take a back seat and allow market forces to operate. However, rising health care costs—not least as a result of a rise in doctors' incomes and volume of services delivered—combined with the economic crisis may force the government to intervene. Recent figures from Statistics Netherlands indicate that health expenditures have risen substantially, to €83.8 billion (US$118 billion) in 2009. In 2010 expenditure growth slowed down to 3.6 percent.

What system innovations have been introduced?

A major change in the insurance system took place in recent years, with the introduction of a universal insurance scheme executed by private insurers. This created a level playing field. There is an ongoing review of 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 2011, 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. Disease management for specific chronic disease groups will be strengthened through the introduction of new financing schemes for integrated care and bundled payment.

References

W. Schäfer, M. Kroneman, W. Boerma et al., "The Netherlands: Health System Review," *Health Systems in Transition*, 2010 12(1):1–229.

G. P. Westert, M. J. van den Berg, S. L. N. Zwakhals et al., *Dutch Health Care Performance Report 2010*. http://www.gezondheidszorgbalans.nl/object_binary/o10229_DHCPR-2010(def)[1].pdf.

G.P. Westert, J.S Burgers, H. Verkleij. "The Netherlands: regulated competition
behind the dykes?" *BMJ*. 2009 Sep 7;339:b3397.

The New Zealand Health Care System, 2011

CONTRIBUTING AUTHORS:

ROBIN GAULD, UNIVERSITY OF OTAGO, MINISTRY OF HEALTH, NEW ZEALAND,
AND THE COMMONWEALTH FUND

Who is covered?

All New Zealand residents have access to a broad range of health and disability services with substantive government funding drawn from general taxes. Public hospital services are free, but patients are required to make copayments for primary care medical services. Nonresidents, such as tourists and illegal immigrants, are charged full-cost for services provided by public hospitals or primary medical care providers.

What is covered?

Services: The publicly funded system covers public health preventive and promotional services, inpatient and outpatient hospital care, primary health care services (excluding optometry), inpatient and outpatient prescription drugs, mental health care, dental care for school children, long-term care, and disability support services. Residents have free choice of a general practitioner (GP). There is no defined benefit package; rather, the government has a set of national service requirements implemented by 20 geographically based District Health Boards (DHBs). Rationing and prioritization occur largely at the margins and vary by DHB.

Cost-sharing: Copayments are required for GP and nurse primary health care services (NZ$10 to $60 [US$8 to $48] depending on the level of subsidy, with higher subsidies for those with low incomes or with high health care needs) and for community-prescribed drugs (NZ$3.00 per item [US$2.38]). Subsidies for long-term care for the elderly are means-tested, with eligibility only for those with limited financial means or assets, meaning that once a person's assets fall below a certain level they become eligible for public funding. Access to subsidized long-term residential care or home help is also subject to a needs assessment. Complementary and alternative medicines and therapies are paid for in full out-of-pocket, as are private hospital or specialist care, and adult dental care. There are no copayments for public hospital specialist services, including outpatient clinics.

Safety net: Primary health care is mostly free for children under age 6 and subsidized for the 96 percent of the population enrolled with Primary Health Organizations (PHOs). Additional PHO funding and services are available for chronic disease patients, those with lower incomes or access difficulties, and Maori and Pacific people, meaning that copayments are further reduced for such groups. Public hospitals, including emergency departments, are free and routinely report seeing patients that should have been treated in primary care settings.

How is the health system financed?

Government: Public funding is derived from general taxation (87.7%), the accident compensation scheme (11.3%), and local government (0.9%). Public funding accounted for about 81 percent of health care expenditures in 2010/11. The government sets an annual global budget for most publicly funded health services. This is distributed to DHBs using a weighted, population-based formula, although the Ministry of Health directly funds around 25 percent of public services. DHBs provide services at government-owned facilities and purchase other services from private providers such as GPs (most of whom are grouped as PHOs), private surgical hospitals for some publicly funded patients, disability support services, and community care. Accident and injury care is financed by a separate, quasi-governmental agency, the Accident Compensation Corporation (ACC), funded by employer and employee levies.

Private insurance: Insurers generally cover medical care in parallel private markets. Private insurance is mostly used to cover cost-sharing requirements, elective surgery in private hospitals, and specialist outpatient consultations. Those with insurance using the private sector gain much quicker access to procedures and specialists, provided in private facilities. Waiting lists are almost nonexistent and, depending on the concentration of specialists in the part of the country, those with private insurance have a choice of providers. This does not extend to emergency care, as such care is only available in the public sector. About one-third of New Zealanders have some form of private health insurance, which accounts for approximately 5 percent of total health care expenditures. Nearly 75 percent of people with private insurance are covered through nonprofit companies, the remainder through for-profits. Insurers largely self-regulate and are subject to a variety of laws including the Insurance (Prudential Supervision) Act of 2010. There is no common fee schedule among private insurers, as it would be in breach of competition law. Insurers therefore reimburse providers who claim payment for services up to company-specific maximums.

Out-of-pocket spending: Patients are billed copayments for pharmaceuticals and private hospital or specialist care; copayments for GPs have been reduced in recent years as a result of a significant increase from 2002 to 2008 in government funding for primary care but, since then, have been increasing again. Adults pay the full cost of dental care. Subsidies for long-term care for the elderly are asset-tested. Out-of-pocket payments, including both cost-sharing and costs paid directly by private households, accounted for 14 percent of total health expenditures in 2010.

How is the delivery system organized?

District Health Boards (DHBs): DHBs cover most aspects of care under a one-budget umbrella. They are responsible for planning, purchasing, and providing health and disability support services for the population in their districts. A DHB has a funding and a service-provision arm, operating government-owned hospitals, health centers, and community services. The 20 DHBs (covering populations ranging from 32,000 to 520,000) are partly elected (seven members) by the people of a geographic area, and partly appointed (up to four members) by the Minister of Health.

Physicians: General practitioners act as gatekeepers and are usually independent, self-employed providers, paid through fee-for-service and copayments with government subsidy largely by capitation through PHOs. As noted, GPs, via PHOs, receive additional per capita funding for health promotion, for coordinating care and providing additional services for chronic disease patients, and for reducing barriers for patients that experience access difficulties. Around 40 percent of specialists hold joint appointments, working for salaries in public hospitals while maintaining their own private clinics or treating patients in private hospitals where income is on a fee-for-service basis. In public hospitals, patients generally have limited choice of specialist, whereas they are free to select an available provider in the private sector. GPs and private specialists tend to own and manage their practices. Many GPs are members of Independent Practice Associations that provide various "back office" and clinical support services.

Hospitals: New Zealand has a mix of public and private hospitals, but public hospitals make up the majority, providing all emergency and intensive care. Public hospitals receive a capped budget from their owners, DHBs, based on historic utilization patterns, population needs projections, and government goals in areas such as elective surgery. Certain areas of funding, such as mental health and electives, are "ring-fenced," meaning a hospital cannot reallocate money to other areas. Private hospital patients with complications are often admitted to public hospitals, in which case the costs are absorbed by the public sector.

Primary care: Over recent years, there has been substantial additional funding to subsidize primary care and improve access to care. Since July 2002, 81 PHOs were formed, with 96 percent of New Zealanders now enrolled with a PHO. PHOs are networks of self-employed providers, including GPs, practice nurses, and allied practitioners, funded by capitation and fee-for-service. The providers work collaboratively, with nurses—employed on salary by a mix of GP and

PHO funding—playing a significant role in managing and providing services, particularly for patients with chronic care needs (e.g., diabetics). Patient registration is not mandatory, but physicians and PHOs must have a formally registered patient list to be eligible for government subsidies. Patients enroll with one GP but can freely switch their chosen GP. In smaller communities choice is often limited. In theory, those enrolled in PHOs have a medical home. However, PHOs vary widely in their size, performance, and activities. The best are exemplars that, if nationally emulated, would mean all New Zealanders had a fully functional, multidisciplinary medical home, although institutional barriers to integrating primary and hospital care remain. There is currently no formal mechanism for promoting learning among PHOs. Since 2008, a new government has ordered PHO mergers to improve their functioning. In 2011, there are 32 PHOs. In line with its "Better, Sooner, More Convenient" policy—which aims to improve access to integrated care that is provided by networks of practitioners, in more convenient locations for patients (outside of hospital settings), and focused on chronic disease management—this same government has also commenced development of larger Integrated Family Health Centers. It is intended that these will provide comprehensive primary care, after-hours service, and elective procedures for an enrolled population. While still largely in the planning phase, there is some expectation that the new, larger facilities will see services and providers co-located, or coordination of services improved, with funding from both primary care budgets and DHBs. The main incentive for providers participating in an Integrated Center is the motivation to provide better and more convenient services in community settings.

After-hours care: GPs are expected to provide after-hours care and receive government subsidies for doing so. In cities, GPs tend to provide after-hours service on a roster at purpose-built, privately owned clinics that they are shareholders of, though patient charges are high as the costs of after-hours care are higher than those during the day and well above the government subsidy. This means some patients will visit the hospital emergency department or avoid after-hours service altogether. A patient's usual GP routinely receives information on after-hours encounters. In rural areas and small towns, GPs work on call.

Long-term care: DHBs fund long-term care for patients based on needs assessments, various age requirements, and a means test. Those eligible receive comprehensive, fully funded services, including medical care. Residential facilities are mostly private. Many elderly or disabled people receive in-home care. DHBs provide hospital and community-based palliative care. A network of hospices provides end-of-life care. Approximately 70 percent of hospice funding is through DHBs, with the remainder coming through fundraising.

Mental health care: DHBs fund mental health care provided in the community and institutional settings with GPs acting as gatekeepers. Patients with routine needs are treated by GPs. Those with more intensive requirements may see a hospital-based specialist, usually in the public sector. DHBs own and run a range of mental health facilities, from acute inpatient to outpatient community services. Those with long-term care needs are cared for in community settings, usually by nongovernmental agencies that provide various support services on contract to DHBs. New Zealand has only one private psychiatric hospital which does not receive government funding.

What are the key nongovernmental entities for system governance?

As the New Zealand health system is primarily controlled and financed through the public sector, government-funded and -appointed entities dominate governance structures, with nongovernmental agencies playing only a very minimal role. Of government-funded agencies, many—like the Quality Commission—sit at arm's length from central government. While not directly involved in governance work, District Health Boards New Zealand (DHBNZ) is a national forum for coordinating DHB activities. No nongovernmental agency is involved in cost-control work. Competition issues pertain largely to the private sector and are monitored by the Commerce Commission, a government agency.

What is being done to ensure quality of care?

From 2004 to 2010, the Ministry of Health issued a quarterly *Hospital Benchmark Information Report* aimed to improve DHB performance. The report included quality and outcome data on emergency triage rates, acute readmissions, patient satisfaction, hospital-acquired bloodstream infections, and a range of other indicators. From mid-2010, reflecting a renewed focus on hospital performance and quality, DHBs are held formally accountable to the government for delivering efficient, high-quality care, as measured by achievement of targets across several indicators, many of which resemble those in the *Hospital Benchmark* reports. Also released are public reports on DHB performance that rate each DHB on a series of indicators, in such areas as waiting times, access to primary care services, and mental illness outcomes. Data on individual doctor performance are not routinely available. The Health and Disability Commissioner—the government-funded yet independent patients' advocate within the health system—investigates and reports on patient complaints. Such complaints range from simple breaches of the Code of Health and Disability Services Consumers' Rights which the Commissioner is charged with investigating, through to in-depth inquiries into cases of medical malpractice that may have occurred in either public or private practice. The Commissioner, who reports directly to Parliament, has been an important source of pressure on DHBs and the government for quality and patient safety improvements.

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

As previously noted, a number of policy elements have been introduced via PHOs, motivated by the desire to reduce disparities and improve patient access. PHOs also receive performance payments for meeting various quality and service delivery targets under what is known as the PHO Performance Program. This requires individual GPs to reach targets for vaccinations and cancer, diabetes, and cardiovascular disease screening and follow-up. Data comparing PHO performance are publicly-reported.

A new Health Quality and Safety Commission replaced the government's Quality Improvement Committee in mid-2010. The new Commission is intended to increase the focus on quality while better coordinating the varied approaches to quality improvement across DHBs. It will continue to oversee existing public hospital programs, which are focused on such issues as optimizing the patient journey, safer medication management, reducing rates of health care–acquired infection, and standardizing national incident management. In addition, the Ministry of Health, DHBs, and nongovernmental organizations work collaboratively to achieve health targets identified by the government at the DHB and national levels. The new National Health Board, created in late 2009 as a business unit of the Ministry of Health, is also working on quality improvement in DHBs with a particular focus on management systems, clinical services and patient pathways.

What is being done to reduce health disparities?

Disparities in health are a central concern in New Zealand, with indigenous Maori and people of Pacific Island origin having an average life expectancy around eight years shorter than that of other New Zealanders. Maori and Pacific people are also known to experience greater difficulty accessing health services. Since the late 1990s, governments have made reducing disparities a policy priority. The formula that DHBs are funded under contains specific categories and weightings to recognize the additional resources required to provide services for Maori and other underserved populations. Through much of the 2000s, a multipronged policy approach saw investments in housing and education as well as health, where DHBs and PHOs were required to develop strategies for reducing disparities. Many PHOs were created especially to serve Maori or Pacific populations. The post-2008 government has been more focused on specific initiatives such as Whanau Ora, a policy designed to integrate the various social services providers, including health, to improve services for disadvantaged Maori who often fall between the boundaries of different agencies. The aim here has been to develop joined-up agency approaches to service provision and joint responsibility for outcomes.

What is being done to improve efficiency and health system integration?

New Zealand has given considerable attention to elective surgery prioritization, particularly development of access criteria. For several types of surgeries, patients are assigned a score intended to give priority to patients with the greatest need, thereby rationalizing the waiting system; regional disparities, however, remain in access to surgery. To improve access to elective surgery, DHBs also contract with the private sector. A publicly accessible set of Patient Flow Indicators (Elective Services Performance Indicators) reveals how many patients are awaiting treatment, how long those who received treatment waited, and how many patients were referred back to a primary care provider for monitoring. These statistics are used to plan wait-time reduction policies. As noted previously, various DHB-level measures related to efficiency are publicly reported against a series of six targets in areas such as emergency department treatment times; access to cancer, cardiovascular, and diabetes services; elective surgery volumes; and child immunization rates. 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 criteria used in funding decisions. Improving organizational performance and “lean” thinking in hospitals are recent areas of focus. The National Health Board is designed to centralize and coordinate various DHB “back office” functions and improve DHB performance, including around information technology, funding and planning, shared services, and procurement, thus reducing duplication across the 20 regions. Health Workforce New Zealand was also created in 2009 as a business unit of the National Health Board to plan for future health workforce needs.

How is health information technology being used?

New Zealand is among the first countries to adopt health information technology, particularly in primary care, where it has one of the highest international rates of primary care physician use. Primary care systems are sophisticated, including decision support, e-prescribing, and laboratory referrals. Nevertheless, most physician groups are unable to share records with one another and interoperability with hospital systems and after-hours facilities remains limited, although several DHBs have projects to tackle such issues. Reflecting a host of difficulties, a series of government strategies has been announced since the mid-1990s. Most recently, the national IT Health Board has been created to coordinate developments, including nationally consistent portable electronic patient records, with an aim for all New Zealanders to have access to a basic set of Web-based health information by 2014. The IT Health Board also produced the most recent National Health IT Plan (September 2010) and has a stewardship role in its implementation. This plan has a goal of IT facilitating a fully integrated health system with common information platforms supporting shared care plans. The IT Board works with the range of agencies involved in health IT, including private vendors whose activities, such as working towards common standards, are coordinated under the aegis of the New Zealand Health IT Cluster. All New Zealand residents have a unique National Health Index number linked to health care events and records.

How are costs controlled?

The government sets the annual publicly funded health budget. Using a population-based formula means DHBs must function within their funding allocation. Recent government policy is aimed at reducing administrative duplication and to promote greater sharing of resources across DHB regions, stimulating a focus on DHB and PHO mergers. Primary care funding is shifting to capitation. Scoring systems ensure that elective surgery services are targeted at those most able to benefit. Early intervention, health promotion, disease prevention, and chronic care management are emphasized in primary care and by DHBs. PHARMAC uses a range of tactics, like reference pricing and competitive tendering, to set prices for publicly subsidized drugs dispensed through community pharmacies and hospitals. Such strategies have helped drive down pharmaceutical costs and, as a result, New Zealand has around the lowest drug expenditure per capita in the OECD. If patients prefer unsubsidized medicines, and there are no clinical indications for this, they pay the full cost.

How is evidence-based practice encouraged?

New Zealand has no specific agency for comparative effectiveness research. However, the government has highlighted a desire for this and, from mid-2010, PHARMAC shifted into assessment of medical devices in what may be an increasing role in broader comparative effectiveness research. PHARMAC assesses the effectiveness of drugs and distributes prescribing guidelines. The New Zealand Guidelines Group, an independent contractor to the Ministry of Health, develops clinical guidelines that are widely disseminated across the health sector. The National Health Committee, an independent advisor to the Minister, has previously explored comparative effectiveness research and was reconfigured in mid-2011 to focus exclusively on this area. It will probably assume a similar approach and role within the health system to that of NICE in the English NHS. An Independent Practitioner Association–owned Best Practice Advocacy Centre collates guidelines and effectiveness information and—with funding from the government and PHARMAC—distributes this information to all GPs.

What recent system innovations and reforms have been introduced?

Following the advice of the mid-2009 Ministerial Review Group report, the government has announced a series of initiatives, most of which are outlined above. Such initiatives are designed to improve service efficiency, access, and quality while shifting expenditure away from administration and into patient services. The National Health Board aims to enhance administrative and clinical service efficiency, coordination, and national procurement; the Quality Commission to improve quality of care; and the notion of comparative effectiveness is being emphasized in all policy activities. The quarterly publication of DHB performance against six government targets has inspired much of the increased focus on such innovations. Projects to reduce emergency department waiting times have demonstrated the value of "lean" methods designed to improve patient flow, which demand hospital and systemwide application. PHOs have been involved in many provider-driven primary care delivery programs focused on population health and service integration. In elderly care, there have been promising experiments with personal budgets, allowing recipients to directly purchase home help.

New Zealand has experienced some shortages of health professionals in the past. The health system relies heavily on foreign-born and -trained professionals and has been one of the highest importers and exporters of doctors in the OECD. However, the turnover is tracking down, and to address loss of New Zealand-trained professionals overseas, 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 with higher vacancy rates and locum use. The government has also increased the availability of medical and nursing school places with more doctors and nurses expected to join the workforce in coming years. DHBs are increasingly working collaboratively to ensure sustainability of and access to specialist services in smaller towns and regions.

References

R. Gauld, "Revolving Doors: New Zealand's Health Reforms – The Continuing Saga. Wellington," Institute of Policy Studies and Health Services Research Centre, 2009.

Ministerial Review Group, "Meeting the Challenge: Enhancing Sustainability and the Patient and Consumer Experience within the Current Legislative Framework for Health and Disability Services in New Zealand," Wellington, Minister of Health, 2009.

R. Ryall, "Better, Sooner, More Convenient: Health Discussion Paper," Wellington, National Party, 2008.

The Norwegian Health Care System, 2011

Anne Karin Lindahl, The Norwegian Knowledge Centre for Health Services
and David Squires, The Commonwealth Fund

Who is covered?

Coverage is universal for Norway's 4.9 million inhabitants. The system is built on the principle that all residents have equal access regardless of social status, income, and geography. When in Norway, European Union residents have the same access to health services as Norway resident have. Everybody, including undocumented immigrants, receives access to emergency acute care regardless of citizenship or residency status; pregnant women and children also receive access to immunization and primary health care regardless of citizenship and residency status. Since undocumented immigrants only receive access to emergency acute care and frequently avoid contacting public health services for fear of being deported, a health clinic has been established in Oslo by a voluntary organization (Norwegian Red Cross and the Church City Mission) to provide primary care services, including access to medication and specialized services.

What is covered?

Services: There is no defined benefits package. In practice, the statutory health system covers hospital care, ambulatory care, and approved prescription drugs (included on the "blue list"). It also partly covers dental care for children and some other groups and does not cover nonmedical eye care. A physician must consider certain treatments, such as plastic surgery, to be medically essential for the patients to qualify for public coverage. Primary, preventive, and nursing care are organized at the local level by 430 municipalities. Services by general practitioners, physiotherapists, and chiropractors are included in the primary care concept. Preventive care includes checkups, screening, and immunization of infants and school children, and the municipality will decide on public health initiatives or campaigns to promote a healthy lifestyle and reduce social health disparities. Preventive services for mental health are mostly directed toward children and youths through the school system. Long-term care is provided for those who need it, either in their own home or in institutions or nursing homes and copayments are income-regulated. The health budget for these services is decided locally with a number of services being mandatory, particularly those related to pediatric care. After hours emergency services are provided by general practitioners (GPs) in municipality-provided on-call offices. Only physicians or the ambulance services can refer patients to emergency hospital consultation or admit to hospitals. Specialty care is organized by four regional health authorities (RHAs) mandated to provide a full range of specialty health care services within their boundaries, including emergency after-hours specialty care. Complementary medicine does not receive coverage. Parliament determines what is covered, as well as criteria for copayments and the safety net. Small adjustments are made from year to year. Recent discussions have been focused on the level of copayments and the safety net. Ongoing discussions about priority setting and exclusion of some treatments from coverage, or an increased level of copayment (as has been decided for in vitro fertilization), have influenced its decisions.

Cost-sharing: In 2009, out-of-pocket payments made up 15 percent of total health care expenditure, reflecting moderate cost-sharing requirements. However, for primary care services with GPs, out-of-pocket payments from patients account for 37 percent of total costs. All inpatient care in a public hospital, including pharmaceuticals, is free of charge. GP and specialist visits require copayments (in 2011, NOK 180 and NOK 307 [US$33 and $56] per visit, respectively), as do physiotherapy visits (amount varies), prescription drugs on a specified blue list (up to NOK 520 [US$95] per prescription), ambulatory care (including day care and same-day surgery in hospitals), and radiology and laboratory tests (NOK 218 and NOK 47 [US$40 and $9]). Prescription drug copayments are linked to reference prices. Home-based and long-term institutional care for older or disabled people require high cost-sharing and copayment levels are income tested. Cost-sharing levels are set by the central government. The Integration Reform, approved by parliament and set to take effect in 2012, will introduce a copayment for the municipalities for medical patients treated in hospital of approximately 20 percent of the cost of the hospital stay, substantiated by the diagnosis-related group (DRG) weight.

Safety net: There is an annual maximum limit for many cost-sharing requirements, above which out-of-pocket costs are waived. In 2010, the limit was set at 1,880 NOK ($339 USD). However, long-term care and prescription drugs not on the blue list do not qualify as out-of-pocket costs (i.e., there are no limit to these out of pocket costs). Certain groups are exempt from cost-sharing (e.g. children under the age of 16 receive free physician treatment and access to essential drugs on the blue list, children under the age of 18 receive free psychological care and dental care, pregnant woman receive free medical examinations during and after pregnancy, and residents eligible for minimum retirement pension or disability pensions receive free essential drugs and nursing care). Individuals suffering from specified communicable diseases, including HIV/AIDS, receive free medical treatment and medication. A National Insurance Scheme (NIS) provides financial security to individuals and families in case of sickness or disability.

How is the health system financed?

In 2009, Norway had the second highest per capita spending on health care among OECD countries, yet as a percentage of GDP spent as much as the OECD median (9.6% vs. 9.5%).

Government: Public spending accounted for 84.1 percent of total health expenditure in 2009 and is financed through general taxation. Taxes are collected by the central government (83% in 2007), counties (3% in 2007) and municipalities (14% in 2007). Taxpayers with high expenses due to 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 four regional health authorities (RHAs) through a combination of block grants and activity-based funding (in 2011, 60% and 40%, respectively). The General Purpose Grant Scheme redistributes funds among municipalities based on population size, characteristics, and density.

Private health insurance: Private voluntary health insurance (VHI) does not play a significant role in Norway's health system and only about 5 percent of residents are enrolled, of which 88 percent receive coverage through their employer. VHI typically plays a supplementary role, offering shorter waiting times for publicly covered elective services such as elective operations and specialist consultations. Those who have VHI often use a mixture of publicly covered and VHI-covered services, since acute specialized care is almost solely publicly delivered.

How is the delivery system organized?

Physicians: Norway's 430 municipalities are responsible for funding and delivering primary care services—some of which are reimbursed through the Norwegian Health Economics Administration (NHEA)[18]—including health promotion, preventive medicine, general medical diagnosis, treatment and rehabilitation, emergency care, and long-term nursing care. Since 2001, patients have been encouraged to register with a GP who refers them to other providers. Patients have a legal right to seek a second medical opinion and may change their GP twice a year. Virtually all residents are now registered with a regular GP, and those not registered pay higher user charges (an additional 110 NOK [US$ 22]) for GP consultations. The 2001 reform also established the current model in which municipalities contract with private GPs, who receive a combination of capitation from the municipalities, fee-for-service through the NHEA, and out-of-pocket payments from patients. For GPs' contract-bound, after-hours emergency services, the municipalities provide offices, equipment, and assistance, and pay the GPs a small fee. The fee-for-service through the NHEA and out-of-pocket payments are slightly higher for after-hours emergency services. Only physicians or ambulance services can refer

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[18] http://www.helfo.no/omhelfo/Sider/about-helfo.aspx

patients to emergency hospital consultation or admittance to hospitals. The model for GP financing is set nationally with little variation between municipalities. Most GPs are self-employed; a few are salaried municipal employees. GP practices are typically comprised of two to six physicians, in addition to nurses, lab technicians, and secretaries, depending on the size and interest of the practice. Hospital-based specialists are salaried and ambulatory specialists are generally self-employed and paid a combination of annual lump sums, based on the type of practice and number of patients on the list, in addition to fee-for-service payments. There is no payment based on quality of services and there are few quality indicators measured on a national level. Some services, such as secondary prevention for cardiovascular diseases and smoking cessation initiatives, have a comparably larger fee as an incentive for providing such services.

Hospitals: Since the 2002 Norwegian Hospital Reform, the RHAs have been responsible for supervising inpatient and specialist somatic and psychiatric care. Hospitals are state owned, but formally registered as legal entities with an executive board (approved by the Ministry of Health) and governed as publicly owned corporations. RHAs are organized as bona fide corporations fully owned by the state and funded through capitation, activity-based payments (based on 40% of DRG regarding somatic services), and out-of-pocket payments (for outpatient and day care). The hospitals are financed much in the same way, and the budget is set annually regarding total DRGs funds, of which 60 percent is provided as a fixed sum in the budget, while the remaining 40 percent is dependent on the actual patients treated. If a hospital treats more patients than allocated for in the budget, they receive only 40 percent of the DRG. The DRG system does not apply to psychiatric care, thus the budget is a fixed sum per year. All hospitals offer ambulatory services, and virtually all ambulatory care consultations take place in hospitals or through private specialists with contractual agreements with the RHAs. In order to qualify for reimbursement, hospital and specialist consultations must be referred by a GP.

Long-term care: The municipalities are responsible for providing long-term care. Institutions include nursing homes, long-term psychiatric homes, and homes for severely disabled children and youth. Home nursing is provided, if possible. A few of the nursing homes are privately run, but services are provided mainly through contracts with the municipalities, very few patients pay individually for full-time nursing home care. Out-of-pocket payment for institutionalized care is income based, and can comprise up to 85 percent of patients' income.

Mental health: Mental health care is provided primarily by GPs. When specialized services are required, patients are referred by the GP to a private practitioner, psychologist, or psychiatrist, or to a low-threshold outpatient clinic, some of which also have inpatient wards. These hospitals—called district psychiatric centers—are decentralized and designed to be close to the patients' home, in order to best plan for further treatment and follow-up by community health and social care workers. These centers often have psychiatric outreach teams, which try to treat patients in their homes as much as possible. All patients with chronic diseases, including patients with mental health diagnoses, have a right to an individual plan for their care and treatment.

More advanced specialized services are organized in inpatient psychiatric hospital wards. While some of these hospital beds and wards are organized in specialized mental health hospitals, other hospitals include both wards for mentally and physically ill patients. The financing of mental health is basically the same as for the somatic patients, but in hospitals there is no payment based on DRGs for mental health.

The role of private mental hospital care is very small; a few private centers offer services for eating disorders through contracts with the RHAs. Some nursing homes for older psychiatric patients are also private, though most are also contracted with public payers. Some psychiatrists and psychologists have private outpatient practices, reimbursed through a fee-for-service payment system. Likewise, most of these facilities operate through contracts with the RHAs. Hospital treatment is provided free of charge, with the same annual limits in place for all out-of-pockets payments.

What are the key nongovernmental entities for system governance?

The vast majority of system governance is government-controlled in Norway, though a few nongovernmental organizations exist to help shape and form decision-making. With regard to health care safety and quality, the medical association has established a system for quality control of laboratories for GPs and nursing homes, which is voluntary but widely used. The data are used solely for local quality control purposes and are not publicly available. The Norwegian Knowledge Centre for Health Services, financed by the government, focuses on comparative effectiveness, patient safety, quality indicators, and national patient experience surveys. It also contains the National Unit for Patient Safety, which holds the Secretariat for the Patient Safety Campaign initiated in 2011.

Cost control is primarily the concern of government agencies, namely the Norwegian Medicines Agency, which determines which medications to reimburse and the RHAs, which are responsible for maintaining budgets. However, the Knowledge Centre often includes economic analyses in its systematic reviews and health technology assessments (HTA), which are actively used by the Norwegian Council for Quality Improvement and Priority Setting.

Patients are free to choose the hospital they want to go to for elective services, but not for emergency care. Even so, at the moment very little information is available regarding waiting times to inform patient choice. Patients can also theoretically choose their regular GP. However in most places there are too few GPs with availability on their patients list, so many patients do not actually have a choice of provider. Thus, there is not much competition between providers.

What is being done to ensure quality of care?

The Norwegian Directorate for Health is responsible for ensuring quality improvement in the health system. It focuses on safety and efficiency, patient-centered care, coordination, and continuity. Eliminating socioeconomic inequalities, health promotion, and disease prevention are also priority focus areas. In support of these efforts, the Knowledge Centre gathers and disseminates information on the impact and quality of health services through knowledge synthesis (systematic reviews and HTA), 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 licenses and authorizes all health care professionals and can grant full and permanent approval to those meeting educational and professional criteria. Audits of all levels of the health system, including the health care workforce, are carried out by the Norwegian Board of Health.

National performance measurements and quality indicators are currently being developed and these are issued by the Directorate for Health and made publicly available through a new national webportal (helsenorge.no). The lack of structured patient records both in primary and secondary care precludes automatic data extraction; thus there is insufficient data for quality improvement both at the local and national levels. Previously, only process indicators, such as waiting times for services and number of performed procedures, were available from the hospital sector. Since 2010, 30-day survival rates after being admitted for heart attack, stroke, and hip fracture, and also overall 30 day survival have been published by the Knowledge Centre, with all data available online. The Knowledge Centre conducts national patient experience surveys, with results also published online (available at http://www.sykehusvalg.no).

There are currently more than 15 national quality registries, and more are being developed through national funding with technical support from the National Centre for Clinical Documentation and Evaluation (SKDE) established in 2008. Most registries are based on data submitted by hospitals with patient consent and each hospital is given feedback on its performance in relation to average hospital performance across the country. Most of these registries are separate from electronic medical records, but there is currently work towards more automatization and integration by the SKDE.

The Norwegian Institute of Public Health uses the Norwegian Prescription Database to produce annual reports of prescribing trends, which gives national health authorities a statistical base for planning and monitoring prescribing and prescription drug use. Personal information held by the registry is anonymized.

What is being done to address health disparities?

There is ongoing awareness of health disparities and the fact that causes are most often related to factors outside of the health care system, such as social class and level of education. Studies show that some immigrant groups have poorer health, while other immigrant groups in fact have better health than the average native Norwegian. The need for adequate information in immigrants' native languages has been emphasized. Research regarding pregnancy outcomes has been especially informative, as there are significantly more complications for both baby and mother for immigrant women than native Norwegians.[19] Geography also plays a significant role in differences in health outcomes. Recruitment of health personnel, particularly doctors and specialized nurses, is difficult in rural areas, particularly in the north. A national strategy for addressing inequalities in health and health care has recently been issued.[20] The national goal for achieving equal access to specialized health care is founded in the law for specialized health care in Norway, which states that access to and quality of health care should be equal and not related to age, gender, geography, or social or racial status. However, there have been no accurate measures to determine if this goal has been achieved.

What is being done to improve efficiency and system integration?

Improving the effectiveness and efficiency of care is a primary policy goal. The Knowledge Centre disseminates HTA results, research syntheses, cost benefit analyses, and guidelines for treatment, to improve the quality and value of health services. For pharmaceuticals, the Norwegian Medicines Agency determines whether a new drug should be included on the blue list reimbursement scheme, based on cost-effectiveness in comparison with existing treatments. The use of generic drugs is encouraged by setting generic drug prices as a percentage of the proprietary drug price. 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. After both planned and emergency hospitalizations, a discharge letter is sent to the patient's GP. If patients need home-based nursing care after discharge, there are structured routines for alerting the municipality, and in most instances, an evaluation is performed by the municipality before the patient leaves the hospital. New models for integrated care are currently being tested, with joint wards (financed jointly by hospitals and municipalities) for patients with intermediate needs for institutionalized care. In some instances these include wards for palliative end-of-life care (mostly cancer patients); in other areas hospice-type wards are run by nursing homes with more highly qualified nurses and doctors than the average nursing home ward. .

In the hospital sector, payment reform in 1997 aimed to create activity-based payment for services based on the DRG system. This was followed by reforms in 2002 which centralized responsibility, previously held by the 19 counties, for

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[19] N. Ahlberg and S. Vangen, "Pregnancy and Birth in Multicultural Norway," *Tidskr Nor Legefor,* 2005 125(5): 586–88.

[20] http://www.regjeringen.no/nb/dep/hod/dok/regpubl/stmeld/2006-2007/Report-No-20-2006-2007-to-the-Storting.html?id=466505

inpatient and specialist care, through the establishment of the four RHAs. Both reforms have been credited with improving efficiency.

How is health information technology being used?

The aforementioned Norwegian Health Network facilitates flow of information among providers. A national strategy for health information technology (HIT) is the responsibility of the Directorate for Health, and implementation is promoted through a departmental steering committee. Every patient is allotted a personal identifier, which consists of birth date and a five-digit personal number. HIT in primary care is fragmented. GPs use electronic records, and most receive discharge letters electronically from hospitals. Nevertheless, the development of the system is uncoordinated, and thus far data is not organized in a way that facilitates the extraction of useful information for local or national activity registration or quality control. Other primary care services have systems that fail to communicate with GPs, and some areas of service lack the resources and equipment to implement HIT systems. Nonetheless, GPs often communicate with laboratories outside their unit electronically. Many GPs can order x-rays and outpatient specialist services directly through the electronic network, and many can also prescribe drugs over electronic lines to the pharmacy. After-hours emergency care is often organized within the same patient record network, so that patient histories remain available after hours, and primary care providers are able to access information regarding emergency visits.

How are costs controlled?

The central government sets an overall health budget in December every year, although 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 2.9 trillion NOK ($531 billion USD) gives Norway flexibility in addressing rising health costs. New drugs that are expected to have a significant impact on public health system expenditures must receive ministerial and parliamentary approval before being included for reimbursement. Drug prices are set at the average of the three lowest market prices for the drug in a group comparison involving Scandinavian and western European countries. The drug pricing scheme also attempts to encourage the use of generic drugs by setting the generic price as a percentage of the branded price that decreases over time.

What system innovations have been introduced?

There have been a series of major changes in Norwegian health care, with relatively recent reforms at the primary care (regular GP reform, 2001), hospital (2002) and national authority level (2002). The minister of health proposed a Coordination Reform in 2009, focused on prevention, integrating care and strengthening health care in the municipalities.[21] The reform will take place from January 1st 2012 with many of the original proposals intact. There has been rapid growth in health expenditure in the last 10 years, most of which has been spent in hospitals, so the reform aims to curb this growth and direct more investment toward primary care. The reform has introduced an economic incentive for municipalities to work toward less hospitalization of their patients. For instance, 20 percent of DRGs for patients admitted as inpatients will be charged to the municipalities. Although the number of physicians has increased both in the GP and hospital sector, the proportion of physicians working as GPs has fallen dramatically in the last 10 years, indicating unbalanced growth in specialist services and secondary care. The reform will also strengthen information systems and has established a new national, state-owned company, the Norwegian Health Network, to develop and operate information technology infrastructure for the health care sector. In recent years there has been greater 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 has been created to guide referrals to secondary care.

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[21] http://www.regjeringen.no/upload/HOD/Samhandling%20engelsk_PDFS.pdf

References

J. R. Johnsen, *Health Systems in Transition: Norway*, (Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2006).

Ministry of Health and Care Services (2009), *The Coordination Reform: Proper Treatment at the Right Place and Time*, Report No. 47 (Oslo: Minister of Health and Care Services, 2009).

Ministry of Health and Care Services (2007), National Strategy to Reduce Social Inequalities in Health, Report No. 20 (Oslo: Minister of Health and Care Services, 2006- 2007)

Ahlberg, N. and Vangen, S. (2005), "Pregnancy and Birth in Multicultural Norway," *Tidskr Nor Legefor,* 2005 125(5): 586–88.

The Swedish Health Care System, 2011

Anders Anell, Lund University

Who is covered?

Coverage is universal. All residents are entitled to publicly financed health care. Undocumented immigrants under 18 years have the same right to subsidized health care as asylum-seeking children and children who are permanent residents. Undocumented adults have the right to receive non-subsidized immediate 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 long-term and nursing home care. Possibilities for residents to choose any accredited public or private primary care provider is regulated in the Health Care Act. For specialist services, patients typically can choose any public or private hospital or clinic accredited and funded by the county council. Patients may also seek care in other counties if waiting-time targets are not met by local hospitals or clinics. Possibilities to seek specialist services directly without a GP referral vary by county council but are generous in comparison with most other Organization for Economic Cooperation and Development countries. The benefit package for prescription drugs and dental care is determined by a national authority and is the same throughout the country. Priorities related to all other services are determined at the decentralized level by local authorities.

Cost-sharing: Cost-sharing arrangements exist for most publicly financed services. Patients pay SEK 100–200 ($16–$31 USD) per visit to a primary care doctor, SEK 200–300 ($31–$47 USD) for a visit to a specialist or to access emergency care and up to SEK 80 ($12 USD) per day in a hospital. For subsidized outpatient pharmaceuticals, patients pay the entire cost up to SEK 900 per year ($140 USD), while costs above this are subsidized at different rates (50%, 75%, 90% and 100%) depending on the level of out-of-pocket expenditure. Total household out-of-pocket payments accounted for 16.7 percent of total health expenditure in 2009 (OECD 2011). This figure mainly includes private household out-of-pocket expenditure for pharmacueticals and dental services, but also user charges for all other services.

Safety net: The maximum amount to be paid out-of-pocket for publicly financed care in a 12-month period for all residents is SEK 900 ($140 USD) for health services and SEK 1,800 ($279 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 capitation formula that takes into account average income level, demographic characteristics, and geographical conditions across local authorities. One-off central government grants focus on specific problem areas such as waiting times and geographical inequalities in access to health care, but have also supported the development of primary care, psychiatric care, and care of older people generally. 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 percent of county council and municipality budgets; the remainder comes from central government grants and user charges. Overall, public funding accounted for 81.4 percent of total health expenditure in 2009.

Private health insurance: About 4 percent of the population was covered by supplementary voluntary health insurance (VHI) in 2009, which provides faster access to care and specialist services in the private sector. Eighty percent of individuals with VHI are covered through their employers. If the use of services is linked to a copayment for individuals, the benefit is exempt from taxation. In 2009, VHI accounted for 0.2 percent of total expenditure on health (OECD 2011). Fees to private providers from private insurers are based on negotiation.

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 and priorities vary at the local level.

Primary care: In January 2010, a new law supporting choice by the population and privatization of primary care providers came into effect. Registration with a primary care provider is required in all county councils except in Stockholm, where it is optional. In principle, each provider is also required to accept new individuals on their lists. Payments to providers are based on risk-adjusted capitation (in most county councils, not less than 80 percent of total payment) topped up by pay-per-visit fees, which are similar to copayments, and pay-for-performance schemes, which account for 2 percent to 3 percent of total payment. The pay-for-performance schemes are mainly based on financial incentives for preventive care and to promote rational use of prescription drugs. In several county councils, providers operate under a fund-holding scheme for all primary care services for registered individuals, including expenditures for prescription drugs.

A comprehensive and coordinated approach to care with use of multidisciplinary teams comprised of GPs, district and specialist nurses, physiotherapists, and psychologists is generally encouraged. Nurse-led clinics for common chronic diseases such as diabetes or asthma or chronic obstructive pulmonary disease are common, but are always organized within the larger health center and not as a separate clinic. Coordination among primary care, hospital care, and nursing home care by municipalities is encouraged in various ways. Examples include GP practices located at hospitals after hours, multidisciplinary meetings before discharges from hospitals, and payment responsibility for municipalities in cases where patients ready to be discharged from hospitals cannot be admitted to nursing homes. The lack of coordination among these providers, especially for older people with multiple chronic diseases, is still a significant problem. Primary care providers have a responsibility to provide care after-hours within the general payment framework and collaborate on a voluntary basis to fulfill this responsibility.

In spite of the national framework and similarities among local authorities, the organization of primary care still varies among the 21 county councils. Most health centers are owned and operated by county councils with GPs and other staff as salaried employees, although the number of private providers is increasing. Roughly one-third of all providers are private, and in some county councils private providers exceed 50 percent. About half of the private providers are self-employed and the other half consist of local, regional, and national chains. At the national level, chains are in some cases owned by venture capital.

GPs generally work in groups of three to six doctors; there are hardly any solo practices. Primary care has no formal gatekeeping function. Residents remain able to access hospital outpatient departments directly or, if available, private specialists or private GPs that remain on old contracts with county councils established before the new reforms were introduced in 2010. Increasingly, residents are encouraged to visit their primary care provider first. Higher copayments for visits to hospitals and specialists without a referral are used to motivate more efficient use of services. Fee-for-service arrangements with cost and volume contracts are more commonly used to pay private providers with old contracts. For new private providers, reimbursement policies are the same as for public providers.

Hospitals: Almost all hospitals are owned and operated by the county councils and specialists are employed and paid according to a fixed salary similar to other staff. There are no private wings in public hospitals, although physicians employed at public hospitals sometimes work in conjunction with private clinics. Hospitals have historically had large outpatient departments, which in practice have provided care to patients that could have been treated in primary care. This bias towards hospital care reflects both low levels of investment in primary care and the fact that prior to 1971, hospital specialists were paid fee-for-service for outpatient services, which encouraged a high volume of care. For tertiary care, the county councils collaborate in the six regions with at least one university hospital. In contrast to primary care, which has developed toward a market with competing providers, hospitals in each region are developing regional clusters or networks of specialized services. This trend is being supported at the national level with the advent of regional cancer centers. Private hospitals mainly specialize in elective surgery and work under contract with county councils. Payment of hospitals is usually based on diagnosis-related groups (DRGs), combined with global budgets. Physicians and other clinical staff in hospitals are salaried employees.

Mental health care: This is organized by county councils and is an integrated part of primary care and hospital services. Primary care providers are required to have basic mental health care resources but most resources are specialized and organized around outpatient departments at hospitals or in separate public or private clinics. Payments for specialized services are usually based on global budgets, and most services are publicly owned.

Long-term care: Municipalities are now responsible for the financing and organization of long-term care in nursing homes, following a transfer by the national government from the county councils in 1992. The objective was to coordinate care for older people by combining long-term care with other municipal services, such as home assistance and different forms of senior housing. Responsibility for home care varies, but several municipalities have taken over this responsibility from county councils on a voluntary basis. Hospice service is usually organized by the county councils. The number of private nursing homes has increased gradually, but varies significantly among municipalities. Payment to private providers is usually contract-based, following a public tendering process. Eligibility for both public and private nursing home care is based on need and determined by the municipality. Since the 1980s, there has been an established national policy to promote home assistance and home care over institutionalized care at nursing homes. It is national policy that older people are entitled to live in their home for as long as possible.

What are the key nongovernmental entities for system governance?

Seven government authorities are instrumental in promoting governance of quality, efficiency and health technology: the National Board of Health and Welfare (Socialstyrelsen, development of standards, supervision, evaluation, knowledge support), the Medical Responsibility Board (disciplinary measures in the event of complaints or possible malpractice), the Swedish Council on Technology Assessment in Health Care (SBU, review and evaluate health care technology from medical, economic, ethical, and social points of view), the Medical Products Agency (MPA, regulation and surveillance of the development, manufacture and sale of drugs and other medicinal products), the Dental and Pharmaceutical Benefits Agency (Tandsvårds- och läkemedelsförmånsverket, TLV, reimbursement of prescription drugs and dental services), the Swedish Agency for Health and Care Services Analysis (evaluation of health care from the patient/citizen perspective) and the National Institute for Public Health (NIPH, promotion of public health).

Several nongovernmental entities exist to facilitate quality, efficiency, and effectiveness. Specialists associations have played a key role in the development of Swedish health care and are responsible for the national quality registers that enable the monitoring of quality and outcomes in clinical practice. The registers have also been integral in promoting patient safety. More recently, the association of private providers and Confederation of Swedish Enterprise have advocated for greater competition between providers and more transparency in provider performance.

What is being done to ensure quality of care?

Disease management programs: At the national level, the National Board of Health and Social Welfare with SBU and TLV support local governments by preparing systematic reviews of evidence and guidance for priority setting, respectively. This knowledge supports disease management programs developed at the local level. International guidelines and specialists (in addition to the work of the National Board of Health and Social Welfare and SBU) are central to the development of these local programs. There is a tendency to develop regional rather than local guidelines to inform priority setting in order to avoid unnecessary variation in clinical practice. The most important example is within cancer treatment, where a national cancer plan has been established and the development of six regional cancer centers have been initiated, covering the whole population.

Registries: National quality registers have been used to ensure quality of care and are becoming increasingly important for comparison across providers and for assessing new treatment options in clinical practice. The registers receive funding from the national government and county councils, but are managed by specialist organizations. Transparency has increased and some registers are now at least partly available to the public. Quality registers are also used as input for Open Comparison, a public, regional comparison of more than 100 quality indicators across county councils. At present, over 60 quality registers (distinct from electronic medical records) exist, although the information provided and coverage and public availability of each varies significantly.

Public reporting and performance indicators: Since 2006, annual public comparisons of performance indicators reflecting efficiency and quality have been applied to county councils—so-called “Open comparison” (“Öppna jämförelser” in Swedish). The 2010 version included 134 indicators organized in 18 categories, including large disease areas. The focus is on ranking county councils across each indicator and, for approximately 40 indicators, results are also available for hospitals, though without ranking. Comparisons are not linked to any financial rewards. However, the data used for “Open Comparison” can be used to support pay-for-performance schemes at the local level as determined by each county council. Data reflecting access to care have recently been used by the national government to financially reward county councils with shorter waiting times and to support patient safety. In parallel to “Open Comparison”, several private and Web-based initiatives focus on individual provider and doctor performance. The data used for these initiatives come from public information available in the quality registers and various patient surveys. 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 among health care staff and between staff and patients. In 2011, the government implemented a new act on patient safety that confirmed health care providers’ responsibility for patient safety through preventive work.

What is being done to reduce disparities?

International comparisons indicate that health disparities are comparatively low in Sweden. Disparities exist, however, both across county councils and according to socioeconomic background. Differences in health outcomes may be explained by several factors—for example, differences in comorbidity and distance to health services—and may not be directly attributed to differences in the provision and quality of care across socioeconomic groups at the point of service. Still, amenable mortality is three times higher among individuals with a low education compared to individuals with higher education (National Board of Health and Welfare 2009). Implementation of preventive programs to support life-style changes and design of outpatient services that can reach deprived groups and prevent diseases at an early stage is one measure that has been used to address disparities.

What is being done to improve efficiency and system integration?

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 in 2005 (which became law in 2010), all nonacute 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 are entitled—and in most county councils required—to choose a provider based on access and quality and the money follows the patient. The number of private primary care providers has increased and competition is encouraged. At the same time, there is a call for closer collaboration among primary care, hospitals, and nursing homes, particularly where care of older people is concerned. There are similar calls for increased integration of health and social services for mental health patients. In specialist care, there is a continuing focus on process orientation and development of regional strategies and networks. Treatment of low-volume cases and trauma care are being centralized while smaller hospitals focus on elective high-volume surgery or treatment of older people with common diseases.

How is health information technology being used?

The Swedish government has given political priority to eHealth as a key tool for renewal and improvement of the health care sector. Jointly with local authorities, a national strategy has been developed to improve the use of health care technology and reduce inefficiencies. For example, the uptake of electronic medical records and prescriptions in primary care is very high, but problems persist when communicating with hospitals and laboratories. As patients are always identified with a unique personal number, there are plenty of opportunities to collect data about health care episodes and link this information to other data registers that contain information on characteristics such as a patient's socioeconomic background. Due to the potential misuse of these opportunities, however, the use of data from existing registers is strictly regulated and only available in coded form in research projects with approval from ethics committees.

How is evidence-based practice encouraged?

There are several entities involved in effectiveness reviews and health technology assessment. SBU conducts systematic reviews and translates relevant reviews published by similar entities in other countries. It has a special program to assess early evidence for new emerging technologies, the SBU Alert. SBU reviews ideally feed into the work of the National Board of Health and Welfare in developing guidelines on how to set priorities within major disease categories. Actual priorities, however, are determined by each county council, which means that guidance from the National Board of Health and Welfare is strictly advisory. TLV makes decisions about subsidies for prescription drugs and dental services. In contrast to decisions by the National Board of Health and Welfare, TLV decisions are mandatory and have a direct impact on coverage. Pharmaceutical companies have to apply for subsidy of new drugs, which means that part of the agenda for TLV is determined by applications from pharmaceutical companies. In parallel, however, TLV assesses the cost-effectiveness of drugs reimbursed before 2002 (when TLV was initiated) and reconsiders the reimbursement status of these drugs. Reviews from the SBU have been used as an input in these assessments. At the local level, an evidence-based approach is encouraged although resources to conduct assessments and other activities vary. In some larger county councils, regional HTA-organizations have been set up to support developments, with a special focus on controlled diffusion of new and expensive technology.

How are costs controlled?

County councils and municipalities are required by law to set and balance annual budgets for their activities. In the past, the central government has introduced temporary financial penalties by lowering its grants for local governments that raised 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. TLV engages in value-based pricing of prescription drugs, determining reimbursement based on an assessment of health needs and cost-effectiveness. Drugs with unfavorable cost-effectiveness ratios are more likely to receive subsidy for a specific patient group to limit the total volume of prescription, or receive no subsidy at all. Several drugs assessed by TLV prior to 2002 have lost their subsidy. Beginning in 2002, generic substitution has been mandatory and lower prices for generic drugs have been encouraged by mandatory policies for pharmacists to dispense the lowest priced option.

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, capitation formulas 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 beyond a certain level. 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 cost-effectiveness 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 applied to public providers. The role of TLV 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—waiting times, for example. In general, transparent comparison of performance across county councils and providers is not only accepted but also increasingly used to support decision-making at the national, local authority, and clinical levels. Existing medical quality registers have been instrumental in this development. To some extent, performance and quality information are also being used to develop reimbursement schemes and inform patient choice.

References

A. Anell, "Swedish Health Care under Pressure," *Health Economics* 2005 Sep 14;14(S1): S237-54.

A. Anell, "Choice and privatisation in Swedish primary care," *Health Economics, Policy and Law* 2011; 6: 549-569.

A.H. Glenngård, F. Halte, M. Svensson, A. Anell, V. Bankauskaite. *Health Systems in Transition: Sweden*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2005.

National Board of Health and Welfare, "Hälso-och sjukvårdsrapport 2009 [Health Care Report 2009]," Stockholm 2009.

National Board of Health and Welfare, SALAR, "Quality and efficiency in Swedish health care: Regional comparisons 2008," Stockholm 2008, Sveriges Kommuner och Landsting.

Swedish Association of Local Authorities and Regions, "The Swedish Healthcare System: How does it compare with other EU countries, the United States and Norway?" Stockholm 2008, Sveriges Kommuner och Landsting.

Swedish Association of Local Authorities and Regions, "Swedish Health Care in Transition – Structure and Methods for Better Results," Stockholm 2009, Sveriges Kommuner och Landsting.

The Swiss Health Care System, 2011

CONTRIBUTING AUTHORS:
PAUL CAMENZIND, SWISS HEALTH OBSERVATORY,
AND DAVID SQUIRES, THE COMMONWEALTH FUND

Who is covered?

Coverage is universal, with residents mandated under the 1996 Health Insurance Law to purchase statutory health insurance (SHI) from competing insurers. There are virtually no uninsured residents. Every individual is required to take out an insurance policy within three months of arrival in the country, which is then applied retroactively to the date of arrival. Since only individuals with valid residence of more than three months can take out SHI policies, the problem of undocumented immigrants remains unresolved. SHI typically applies to the individual. It is not sponsored by employers and dependents must purchase separate policies.

What is covered?

Services: The SHI benefits package covers most general practitioner (GP) and specialist services, as well as an extensive list of pharmaceuticals, physiotherapy (if commissioned by a physician), and some preventive measures. It also covers outpatient and inpatient out-of-canton services in case of medical need, even though many residents purchase voluntary health insurance (VHI) for nationwide coverage of inpatient care (Cantons are like states, in that they are sovereign in all matters that are not specifically designated the responsibility of the Swiss Confederation by the federal constitution. Each canton and demi-canton has its own constitution and a comprehensive body of legislation stemming from its constitution.) Starting in 2012, the SHI benefits package will also include certain forms of complementary medicine.

The SHI benefits package also covers mental illnesses on the condition that certified physicians provide treatment. Services from nonmedical professionals (e.g. psychotherapy by psychologists) are only covered when prescribed by a qualified specialist. If this is not the case, these services must be covered by VHI or paid for out-of-pocket by patients.

SHI covers the costs of selected vaccinations, selected general health examinations, and early detection of disease among certain risk groups and for certain diseases (e.g., one mammogram a year if a woman has a family history of breast cancer). Once again, additional services have to be paid for by patients themselves unless they have VHI to cover these costs.

Two-thirds of the costs of long-term inpatient care (nursing homes and institutions for disabled and chronically ill persons) are funded by contributions from private households (out-of-pocket and cost sharing). SHI funds only 15 percent of such services (nursing care), with the rest paid for by state subsidies and disability insurance. For long-term outpatient care (called Spitex in Switzerland), SHI also covers the cost of home nursing care; this makes up roughly a third of Spitex's total expenditure. The other two-thirds, devoted mainly to support and household services, are paid for by customers and via state subsidies.

Dental care is largely excluded from the SHI benefits package. More than 90 percent of all expenditure on dental treatment is paid for by households.

Services covered by SHI have to be effective, appropriate, and cost-effective. The Federal Department of Home Affairs decides whether or not to include a service in the catalogue of services and is supported in this task by the Federal

Office for Public Health and various expert authorities; in particular by Swissmedic, the Swiss agency for the authorization and supervision of therapeutic products.

Cost-sharing: Insurers are required to offer a minimum annual deductible of CHF 300 ($341 USD), though enrollees may opt for a higher deductible and a lower premium. Enrollees pay 10 percent coinsurance for all services, except a 20 percent charge for brand-name drugs with a generic alternative unless specifically prescribed, and a CHF 10 (11 USD) copayment per inpatient day. Medical services provided to women during maternity and a few preventive services are exempt from deductibles, but not from copayments. Minors under 19 years of age are exempt from deductibles and from copayments for inpatient care.

Safety net: Copayment charges are waived after an enrollee reaches CHF 700 ($796 USD) in a given year. The Confederation, or federal government, and the cantons provide income-based subsidies to individuals or households to help cover their premiums, though the process varies by canton. The maximum income level of a single adult household to be eligible for subsidies varies by canton from approximately CHF 25,000 to CHF 40,300 ($28,446 to $45,855, USD). Overall around 30 percent of all residents benefit from such individual premium subsidies. Roughly 1.6 percent of residents are not in a position to pay their premiums. This responsibility then falls to the canton. Municipalities or cantons cover health insurance expenses of social-assistance beneficiaries and recipients of supplementary old age and disability benefits.

How is the health system financed?

Statutory health insurance: Mandatory SHI, regulated by law and supervised by the Federal Office of Public Health, is purchased on an individual basis from a number of competing nonprofit insurers. Cantonal average annual premiums in 2011 for adults (ages 26 and above with a deductible of CHF 300 ($341 USD)) range from CHF 3,326 (Appenzell Innerhoden) to CHF 5,810 (Basel-Stadt) ($3,784 to $6,611 USD). Costs are redistributed among insurers by a central fund based on a risk equalization scheme adjusted for canton, age, and gender. From 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 three age categories (children up to age 18, young adults ages 19 to 25, and adults over 25), level of deductible or alternative insurance plan (so-called managed-care plans). Within the same region, the premium variation between insurers can be significant—as much as 70 percent in the city of Zurich, for example. This variation may be due in large part to risk selection, rather than efficiency differences. All premiums for the following year are controlled and authorized by the Federal Office of Public Health, which only refuses premiums that do not cover past, actual, and estimated, future costs for the insured persons in a given premium region. When this is the case the insurance company has to propose a new premium that satisfies the Federal Office of Public Health's criteria.

Managed care plans are available. In 2010, 45.9% percent of residents enrolled for basic coverage with a managed care insurer, either a health maintenance organization, independent practice association, or fee-for-service plan with gatekeeping provisions.

Prices for services are negotiated by insurers and suppliers or their organizations. In 2009, public spending accounted for 60 percent of all health care spending in Switzerland, which made up 11.4% of GDP.

Voluntary health insurance: Many residents also purchase complementary and supplementary VHI to cover services that are not covered under the basic package, for free choice of hospital doctor, or for improved accommodation (e.g., individual or twin room instead of shared room) when hospitalized. Regulated by the Swiss Financial Market Supervisory Authority, health insurers offering voluntary coverage can vary benefit packages and premiums, and refuse enrollment to applicants based on medical history. Unlike insurers offering basic coverage, voluntary insurers are normally for-profit. Often an insurer will have a nonprofit branch offering mandatory basic insurance and a for-profit branch offering voluntary insurance. It is illegal for voluntary insurers to base voluntary insurance enrollment decisions on health information obtained via basic health coverage, but this is not easily enforced. Voluntary insurance covers 9 percent of all health costs. There is no available information about the number of persons covered. Service tariffs are usually negotiated directly between insurers and service providers.

Out-of-pocket payments: Out-of-pocket expenditures are relatively high, accounting for 30.5 percent of total health expenditure, including 5.7 percent in copayments in 2009. Along with deductibles and coinsurance, Switzerland has high rates of out-of-pocket spending on dentistry and long-term care. SHI only covers "medically necessary" services for long-term care. As a result, funding for many services is left to the individual or absorbed by the community. Since January 2011, SHI pays a fixed contribution to cover long-term care, the individual patient pays at most 20 percent of the noncovered costs, and the remaining costs are financed by the canton or locality.

How is the delivery system organized?

Government: Duties and responsibilities in the health system are divided into three governmental levels (federal, cantonal, and communal). The system can, therefore, be considered highly decentralized, as the cantons are given a critical role. The 26 cantons also play several roles as they are responsible for the licensing of providers, hospital planning, and subsidizing a number of institutions and organizations. Cantons finance public acute care hospitals. Private hospitals also receive public subsidies if the cantonal government needs all or a part of their services to guarantee a sufficient supply of acute care services within that canton.

Physicians: Residents generally have free choice of GPs and access without a referral to specialists in private practice (unless enrolled with a gatekeeping managed care plan). Outpatient care tends to be physician-centered with nurses playing a relatively small role. The majority of private medical practices in Switzerland only have one practicing medical doctor. Apart from some managed care plans, where physician groups are paid on a capitation basis, ambulatory physicians are paid according to a national fee-for-service scale. Here the corresponding cost rate values are negotiated between insurers and providers or their organizations at the cantonal level. Hospital-based physicians are normally paid a salary. Fee-for-service remuneration is possible for the treatment of privately insured patients.

After-hours care: The cantons must guarantee the reliability of care provision and are therefore responsible for after-hours care. The cantons delegate this task to the cantonal doctors' associations, which organize and run an appropriate care network in collaboration with their affiliated doctors' facilities. In addition to private practices, this network can also include public and private ambulance and rescue services, hospital emergency services and, increasingly frequently in recent years, walk-in clinics. TARMED, the federal medical tariff schedule reached between physicians and payers, includes an additional payment for doing after-hours care, but is heavily criticized by physicians for not being sufficiently high enough to render such services attractive.

Hospitals: The state (cantons in particular) provides a substantial share (44.8% in 2008) of inpatient hospital funding, and has responsibility for hospital planning. For this planning, the cantons establish hospital lists, which contain only those hospitals that are entitled to cantonal subsidies. About 75 percent of acute inpatient services are provided by public or publicly subsidized, privately owned hospitals. This system of planning and funding hospitals at cantonal level rather than centrally is one of the main reasons why the Swiss system is fragmented along cantonal lines. However, since 2009, the hospitals have been legally bound to coordinate their hospital planning together with other cantons. The introduction of a nationwide diagnosis related group (DRG) system (called the System Swiss DRG) in 2012 will further erode this cantonal fragmentation. Hospitals receive around half of 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.

Long-term care: Long-term inpatient care costs a total of CHF 10 billion representing 17.1 percent of all health care costs. Two-thirds of these costs (65.9%) are paid for by private households, 15.4 percent by SHI, and the rest by government subsidies and disability insurance. A third of the 1,500 long-term care institutions in Switzerland are state-funded, a third privately funded but with public subsidies, and a third exclusively funded by private means. As far as outpatient long-term care is concerned, SHI pays for nursing care required due to illness, making up roughly a third of total Spitex expenditure of CHF 1.3 billion ($1.48 billion USD). At the end of 2009, the Confederation and the cantons adopted a National Palliative Care Strategy 2010–2012 to make palliative care an integral part of the Swiss health system.

Mental health care: The provision of psychiatric health care shows a similar mix of public and private provision to general health services. Outpatient psychiatric practices are generally private; psychiatric clinics and hospital departments are a mix of public, private (but state-subsidized), and fully private. There is also a wide range of socio-psychiatric services and daycare institutions that are mainly state-run and funded. Outpatient psychiatric prices are calculated using the TARMED tariff system, while inpatient care prices are usually calculated on the basis of a daily rate.

What are the key nongovernmental entities for system governance?

The Federal Law on Health Insurance (KVG) of 1996 brought about a fundamental change in the health system. The law introduced regulated competition among nonprofit health insurers and among service providers to achieve a series of key objectives such as containing costs; guaranteeing high-quality, comprehensive health care; and establishing greater solidarity among the insured. While scientific analyses and public perception have been particularly critical of competition's ability to cut or control health care costs, the other objectives are generally regarded as having been successfully achieved. The most important public institutions for implementing these objectives of KVG are the federal and cantonal health departments and their offices and the aforementioned Swissmedics agency. The Ministry of Health has recently announced the creation of a national institute for quality in health care, including an agency for HTA, for 2015.

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. Only the Swiss Medical Association requires regular further education from its member physicians to maintain medical specialist titles. Revalidation by state authorities (i.e. cantons) is not yet foreseen.

Many local quality initiatives have been undertaken, often at the provider level, including the development of clinical pathways and consensus guidelines, though these are not standardized or used systematically nationwide. However, providers have very little financial incentive to improve the quality of outpatient care. In recent years, the government has examined implementing a framework for systematic quality measurement, public reporting, and minimum national standards. At the end of 2009 the Federal Council approved a report on the Quality Strategy of the Swiss Health System. The report establishes in detail different areas of quality control in which the Confederation will play an active role in the future. The main focus is the implementation of legal bases for quality management in the education of medical personnel to promote public health literacy. One of the first measures has been the publication of medical quality indicators for Swiss hospitals, on a voluntary basis.

What is being done to reduce health disparities?

Health disparities have not received much political and professional interest at national level. There are several potential reasons for this. First, health inequalities are not considered to be significant in comparison to other Organization for Economic Cooperation and Development countries; second, it is still difficult to obtain detailed statistical information about the epidemiological situation and health outcomes of the Swiss population as a whole and for its different regional and socioeconomic subgroups in particular; and third, health inequalities are seen more as the responsibility of regional authorities (cantons, communes) than federal government, making them much less visible at the national level. Key actions that would contribute to a better understanding of and more political sensitivity to the problem of health disparities include the creation of stronger health information systems and better transfer of this information to policy makers. Switzerland should create comprehensive and nationally consistent data on health status and outcomes across socioeconomic and geographical groups. Existing data sources are good starting points and include the cantonal cancer registries (SCR), the Swiss Health Survey (SHS), the Swiss Household Panel (SHP) and the Swiss Cause of Death Statistics (SCD), which can be linked to the Swiss Population Census (SPC), with its large variety of socioeconomic information about every inhabitant, called Swiss National Cohort (SNC). But the main limitations of these existing data sources with respect to the description and analysis of health disparities include incomplete coverage (SCR), lack of socioeconomic data (SCR, SCD), self-reported health with limited clinical indicators and limited sample size (SHS, SHP) and a focus on mortality rather than morbidity data (SCD, SNC).

One main reason for the creation of the Swiss Health Observatory (Obsan) 10 years ago was to improve the transfer of health information to political authorities. Different strategies have been developed to realize this goal. Obsan helps raise awareness of health disparities by publishing regular national health reports and cantonal and thematic health and health care reports. Health disparities are always an important issue discussed through these outlets Regular evaluation of Obsan's work shows a continuously growing interest in and sensitivity to these health- and health-care related issues among the public and policymakers.

What is being done to improve efficiency and health system integration?

Health insurers: A system of risk equalization is designed to encourage insurers to compete on cost and quality rather than via risk selection, employing the power of market forces to improve efficiency. However, observers generally acknowledge that risk selection is widespread under the current risk equalization formula, which only considers canton, age, and gender. As previously mentioned, in 2012 the formula will be refined to include hospital and nursing home stays of more than three days in the previous year. This should bolster insurers' incentives to improve efficiency. The current risk equalization scheme also looks retrospectively at insurers' actual costs when determining how much to transfer. Since this may further discourage cost-control and efficiency improvements, it may be changed to a fully prospective system.

Provider payment reform: TARMED, a partially standardized fee schedule (based on points) for outpatient care across Switzerland, gives greater weight to nontechnical than technical services, incentivizing less resource-intensive forms of care. The point value can vary among cantons, as it is negotiated between the health insurers' association and the cantonal medical associations or decided by the cantonal government if the two parties cannot agree. For inpatient care, per diem–payment rates to hospitals, which encourage longer stays, are being replaced by diagnosis or service-related remuneration schedules. From 2012, all inpatient care prices in hospitals will be calculated on the basis of DRGs.

How is health information technology being used?

A national eHealth service called eHealth Suisse (an administrative unit of the Federal Office of Public Health) was established in 2007. EHealth Suisse is coordinated and funded by the federal and cantonal governments and is divided into three fields of action. First, starting in 2015, everyone in Switzerland should be able to give providers electronic access to information relevant to their treatment. Second, online services with health-related content will be obliged to certify the quality of their services and a national health Web site will be constructed. Third, an organizational and legal working environment will be created to realize these measures.

A key element of eHealth Suisse is the insured, enrollee card, introduced in 2010, which contains a personal identification number and allows all insured persons to record information about allergies, illnesses, and medication. GP eHealth is still at a very early stage, with only 10 percent to 15 percent of private practicing physicians using an electronic medical record (EMR). Discussions about how to incentivize physicians to adopt new technologies are ongoing. Financial incentives and binding technical standards are seen to hold the most promise. Hospitals are more advanced: some have merged their internal clinic systems in recent years and hold interdisciplinary patient files. However, the extent of this development varies greatly across hospitals and cantons, in spite of eHealth Suisse efforts to convince providers of the benefits of EMRs for medical practice. A national patient record is not a priority in eHealth Suisse since the principles of decentralization, privacy, and data protection are regarded as very important in Swiss health care.

How is evidence-based practice encouraged?

An analysis of the degree to which evidence-based medicine (EBM) is taught in postgraduate training in different clinical fields in Switzerland shows that teaching EBM is more important in internal medicine than in the other clinical fields examined (Siegrist and Giger 2006). The lowest values were obtained for general surgery. The study concludes that in most clinical fields in Switzerland, EBM seems not yet an important part of the medical curriculum.

How are costs controlled?

Switzerland's health costs are among the highest in the world, amounting to CHF 7,833 ($5,144 USD adjusting for costs of living) per capita in 2009–only the U.S. and Norway spent more. Although regulated competition between insurers and providers is the primary tool intended to contain costs, the fact that it has failed to do so is largely ascribed to inadequate risk equalization, the dual funding of hospitals by cantons and insurers, and comprehensive pressure on insurers to contract with all certified providers. Greater use of managed care plans may help to reduce expenditure in future. For example, some insurance plans employ gatekeeping and capitation payments for physicians. Among managed care plans, HMOs are estimated to achieve savings of between 10 percent and 25 percent.

All new pharmaceuticals are evaluated before a coverage decision is made, during which both effectiveness (by Swissmedics) and prices (by the Federal Office of Public Health) are considered. Efforts are also being made to more frequently reassess the price of older drugs. Generic drugs must be sold for at least 50 percent less than the original brand; however, they make up only 9.7 percent of all drugs sold in the Swiss market in 2010. Patients pay a higher rate of coinsurance for brand drugs that have a generic equivalent (20% instead of 10%). Pharmacists are paid a flat amount for dispensing drugs, which reduces their incentive to dispense more expensive drugs.

What recent system innovations and reforms have been introduced?

The Swiss health system needs reform to control health care expenditure growth. From 2000, two reform packages have been debated in parliament. The first is mainly concerned with reform of risk equalization, care tariffs, monitoring of insurers, insured enrollee cards, selective contracting, premium reduction, and cost sharing. The second involves reform of hospital funding and managed care. There is also a formal statement (Botschaft) of the Executive Federal Council on the reorganization of care funding.

The introduction of an insured enrollee card, increased monitoring of insurers, extension of risk equalization, and freezing of care tariffs were enshrined in law in 2004. At the same time a "necessity clause" regulating the establishment of new outpatient service providers was extended until 2008 and cantonal contributions for hospital treatment within the canton were adjusted. The necessity clause was extended again in 2008: for GPs up to the end of 2009, for specialist physicians and pharmacists to the end of 2011.

In June 2008, the federal parliament reformed long-term care financing. Instead of covering the costs of basic care (i.e., activities of daily living) and nursing care for patients in nursing homes and patients needing home care, compulsory health insurance pays a flat contribution fixed by the Federal Council. The patient also contributes up to 20 percent of the highest amount paid by compulsory health insurance, and the cantons and communes regulate the financing of the remaining costs. The corresponding changes came into force in 2011.

For hospitals, the transition to activity-related funding was introduced at the beginning of 2009. The legal change will come into force nationally at the beginning of 2012 with a full transition to the Swiss DRG System. Payments will be flat rate and service-related and will remunerate hospitals for both operating and capital costs. This financing scheme will facilitate the cantons' ability to plan hospital capacity according to projected demand. In addition, the federal parliament is refining the risk-equalization formula. However, proposals to extend selective contracting, adjust cost sharing, and promote managed care are still under discussion in parliament.

In addition to legal changes, the Federal Council has also decided on urgent measures to contain cost increases, including the introduction of call centers by all insurers and increasing premium reduction thresholds (the insured can reduce their insurance premium by opting for a higher annual deductible, the premium reduction limit being set annually by the federal government). Other suggestions, such as a treatment contribution of CHF 30 ($34 USD) from insured persons for the first six visits to outpatient service providers or extending the commitment to optional deductibles to two years, did not find agreement among health system stakeholders.

The Department of Home Affairs has introduced measures at ordinance level (e.g., the government's legally effective regulation of implementation of the Health Insurance Law), particularly regarding prescription drugs. These concern changes in the area of generic drug regulation, a new three-year periodic monitoring of terms of inclusion, a renewed exceptional price monitoring, the extension of the national basket of goods in foreign price comparison, a reduction in the distributor's mark-up, and further monitoring of terms of inclusion for each additional indication. These measures came into force in, October 2009, with staggered implementation.

References

Minder, A. et al (2000) Health Care Systems in Transition: Switzerland, 1–76. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

OECD (2006) Reviews of Health Systems: Switzerland, Paris: OECD.

Siegrist M. and M. A. Giger (2006) Swiss survey on teaching evidence-based medicine. Swiss Med Wkly 136: 776–8.

The U.S. Health Care System, 2011

THE COMMONWEALTH FUND

Who is covered?

Health insurance coverage is fragmented, with multiple private and public sources as well as wide gaps in coverage rates across the U.S. population. In 2010, 56 percent of U.S. residents received primary coverage from private insurers, with 51 percent receiving it through their employer and 5 percent acquiring coverage directly. Twenty-seven percent were covered under public programs: 14 percent under Medicare (a federal program for those age 65 and older and some of the disabled), 12 percent under Medicaid (a federal-state program for certain low-income populations), and 1 percent under military health care programs. Almost 50 million residents (16% of the population) were uninsured. Among those who are insured, 29 million are "underinsured," with high out-of-pocket expenses in relation to their income. In 2007, about 8.9 million Americans were enrolled in both Medicare and Medicaid (the "dual eligibles"). The federal-state children's health insurance program (CHIP), which offers coverage to low-income children—in some states as an extension of Medicaid and others as a separate program—was reauthorized and expanded in January 2009 and covers 7.7 million children. It is projected that, with the implementation of the Patient Protection and Affordable Care Act, the number of uninsured will decrease by 34 million by 2020.

What is covered?

Services: Benefit packages vary according to type of insurance, but typically include inpatient and outpatient hospital care and physician services. Many also include preventive services, mental health care, physiotherapy, and prescription drug coverage. Dental care and optometry coverage also are available—sometimes through separate policies—as is long-term care insurance. In January 2006, Medicare was expanded to offer outpatient prescription drug coverage through a supplementary program, with individuals eligible for both Medicare and Medicaid receiving their drug coverage through Medicare. Medicaid also offers more extensive coverage of nursing home and home health care than other sources of insurance, although it varies from state to state within federal eligibility and coverage requirements. The Centers for Medicare and Medicaid Services (CMS) administers the Medicare program and the federal portion of Medicaid. Private insurance is regulated at the state level, but generally is allowed wide discretion in designing benefit packages.

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 and for the disabled under age 65, including 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 in varying amounts—in 2011, federal matching ranged from 50.0 percent to 73.2 percent of states' Medicaid expenditures.

Private insurance: More than 1,200 not-for-profit and for-profit health insurance companies provide private insurance. They are regulated by state insurance commissioners. Private health insurance can be purchased by individuals, or it can be funded by voluntary tax-free 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. Private insurers in general pay rates to providers that are higher than the rates paid under public programs, particularly Medicaid, leading to wide variations in payment rates among payment sources and in revenues among providers, depending on their payer mix and market power.

Out-of-pocket spending: Out-of-pocket payments, through cost-sharing insurance arrangements and as expenditure paid directly by private households, accounted for 12 percent of total national health expenditures in 2009, which amounted to US$976 per capita.

How is the delivery system organized?

Physicians: The majority of ambulatory physicians are in private practices, many of which they own themselves or in groups. The majority of primary care doctors operate in small practices with fewer than five full-time-equivalent physicians. Primary care doctors have no formal gatekeeper function, except within some managed care plans. Physicians 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 administered fees paid by the major public programs. Insured patients are generally directly responsible for some portion of physician payment, and uninsured patients are nominally responsible for all or part of physicians' charges, although those charges frequently are reduced or waived (with the extent of charity care varying substantially across providers).

After-hours care: Provisions for after-hours care vary widely, with much of it provided through emergency rooms.

Hospitals: Hospitals can be for-profit, nonprofit, or public. They are paid through a combination of methods: per-service or per-diem charges, per-admission payments, and capitation. Some hospital-based physicians are salaried hospital employees, but most are paid on some form of fee-for-service basis.

Long-term care: Long-term care is provided by a mix of for-profit and nonprofit providers, and paid for through a variety of methods that vary by provider type and payer. Medicaid, but not Medicare, covers long-term care. Hospice is included as a Medicare benefit.

Mental health care: Mental health care is provided by a mix of for-profit and nonprofit providers, and paid for through a variety of methods that vary by provider type and payer. As of 2010, most employer-based insurance needs to provide the same degree of coverage for mental health care as for medical care.

Preventive care: As of September 2010, all private insurance is required to cover certain preventive services (with no cost-sharing if services are provided in-network), and in 2011 Medicare eliminated cost-sharing for a number of preventive services.

What are the key nongovernmental entities for system governance?

The Institute of Medicine, an independent, nonprofit organization that works outside of government, acts as an adviser to policymakers and the private sector on improving the nation's health. Many studies are undertaken in response to specific mandates from Congress or requests from federal agencies or independent organizations. The Institute also convenes a series of forums, roundtables, and standing committees to facilitate discussion and cross-disciplinary thinking. The National Quality Forum promotes quality improvement through the development and implementation of a national strategy for health care quality measurement and reporting.

Stakeholder associations—such as the American Medical Association (physicians), numerous specialty societies, the American Hospital Association, America's Health Insurance Plans (private health insurers), the Advanced Medical Technology Association (device manufacturers), and the Pharmaceutical Research and Manufacturers of America (drug manufacturers)—comment on and lobby for policies affecting the health system. "Quality Alliances" of stakeholders have formed to coordinate and drive quality improvement efforts in many areas of the health system. Many nonprofit organizations and foundations also supply technical and grant support.

What is being done to ensure quality of care?

The Joint Commission—an independent, nonprofit organization—accredits more than 15,000 health care organizations across the country, primarily hospitals, long-term care facilities, and laboratories, using criteria that include patient treatment, governance, culture, performance, and quality improvement. The National Committee for Quality Assurance (NCQA) is the primary accreditor of private health plans. Accredited organizations must report annually on performance measures in over 40 areas and must meet more than 60 standards. The American Board of Medical Specialties and the American Board of Internal Medicine provide certification to physicians who meet various standards of quality. The National Quality Forum builds consensus on national performance priorities, and standards for performance measurement and public reporting.

CMS has moved toward increased public reporting with Hospital Compare, a service that reports on process of care, outcome of care, and patient experience measures, and Nursing Home Compare, which reports on a number of quality indicators measured through inspections and a review of records. In addition, states including California, Pennsylvania, and Wisconsin 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 evidence-based research on practices, outcomes, effectiveness, clinical guidelines, safety, patient experience, HIT, and disparities.

Medicare has developed a variety of pay-for-performance programs, in which payment is tied to a set of quality measures on process of care, health outcomes, cost-efficiency, patient satisfaction, and/or information technology. The majority of private insurance providers also have pay-for-performance programs. In 2008, 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. Beginning in October 2012, Medicare will begin tying hospital reimbursement rates to performance indicators, including both process and patient experience measures. These and other evolving forms of performance-based are informed by the quality measurement standards defined by the National Quality Forum.

What is being done to reduce disparities?

Wide disparities exist in the U.S. in the accessibility and quality of health care. Since 2003, AHRQ releases an annual report—the *National Healthcare Disparities Report*—that documents disparities among racial, ethnic, and income groups and other priority populations, and highlights priority areas for action. Federally Qualified Health Centers (FQHCs), which are eligible for certain types of public reimbursement, provide comprehensive primary and preventive care regardless of their patients' ability to pay. Initially created to provide health care to underserved and vulnerable populations, FQHCs largely provide safety-net services to the uninsured. Medicaid and the Children's Health Insurance Program provide public insurance coverage for certain low-income populations, mostly mothers and children. A multitude of public initiatives and policies on the local, state, and federal level target disparities, as do a wide range of private organizations.

What is being done to improve efficiency?

The government and private insurance companies are funding many initiatives aimed at shifting from a specialist-focused health system to one that is primary care–focused. The "patient-centered medical home" model—in which a patient can receive targeted, accessible, continuous, coordinated, and family-centered care by a personal physician—has gained particular interest among U.S. experts and policymakers as a means to strengthen primary care. For example, under one current program, the Multi-payer Advanced Primary Care Initiative, CMS participates in multi-payer reform initiatives currently being conducted by states to make advanced primary care practices more broadly available. It is hoped that patient-centered medical homes will reduce unjustified utilization and expenditures; improve the safety, effectiveness, timeliness, and efficiency of health care; enable more patient decision-making; and increase the availability and improve delivery of care in underserved areas.

Another movement generating considerable momentum in the U.S. among both public and private payers is the creation of "accountable care organizations" (ACOs). ACOs are networks of providers, including hospitals and physicians, that agree to take responsibility for providing a defined population with care that meets quality targets; in exchange, they can share in the savings that constitute the difference between actual and forecasted health care spending for their population. Two Medicare-driven ACO programs are in the process of being rolled out—the Medicare Shared-Savings Program and the Pioneer ACO Program. Other ACO-like models already exist among private insurers, including in Massachusetts, where a variant of the ACO concept—Blue Cross Blue Shield's "alternative quality contract"—has been in place since 2009.

Medicare, Medicaid, and various private purchasers, including employer groups, are also experimenting with new payment incentives that reward higher-quality and more efficient care. Strategies being implemented include "bundled" payments, under which a single payment is made for services received by one patient from a number of providers.

Innovation is common among private insurers and practices, but the high degree of fragmentation in the national health system poses a barrier to improving efficiency. Insurance administration costs are high, at 7.0 percent of total health expenditure in 2009. Large-scale coordination is difficult to achieve, and local or regional systems are often incompatible with each other. 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 cost-shifting to other payers. Also, the uninsureds' encounters with the health system tend to be more resource-intensive than regular care—for example, more emergency-room use and less preventive care.

How is health information technology being used?

Use of health information technology (HIT) in the U.S. is low compared to that of other industrialized health systems. In 2009, less than half of primary care doctors used an electronic medical record and only 12 percent of hospitals used electronic records. To stimulate the uptake of HIT, the 2009 American Recovery and Reinvestment Act made a significant investment through Medicare and the Office of the National Coordinator for Health Information Technology. Financial incentives for physicians and hospitals, totaling up to $27 billion over six years, will be tied to their attainment of benchmarks for the "meaningful use" of HIT. Regional HIT extension centers are being created to provide technical assistance, guidance, and information on best practices to support providers' use of HIT. "Beacon communities" with already high rates of HIT adoption are being provided with funding to demonstrate how HIT can be leveraged to improve quality, cost-efficiency, and population health. Finally, support is being provided for the development and use of clinical registries and associated health outcomes research networks.

How is evidence-based practice encouraged?

The American Recovery and Reinvestment Act made an investment of $1.1 billion in research comparing the effectiveness of medications and medical devices. The 2010 Patient Protection and Affordable Care Act continued the investment in comparative-effectiveness research through the creation of the Patient Centered Outcomes Research Institute (PCORI), tasked with setting national clinical comparative-effectiveness research priorities and managing the funding and conduct of research. The scope of the research funded through PCORI will be broad, including protocols for treatment, care management, and delivery; procedures; diagnostic tools; medical devices; therapeutics; and any other strategies used to treat, diagnose, or prevent illness or injury. It will not be permitted to present comparative-research findings as practice guidelines, coverage recommendations, or payment or policy recommendations, or to use them as the sole basis for denying coverage. PCORI will be overseen by a board of governors that includes the head of the National Institutes of Health and AHRQ, as well as 19 members from throughout the health care sector who are appointed by the U.S. Comptroller General. PCORI's research will be funded through a tax on private insurance companies.

How are costs controlled?

Annual per-capita health expenditure is the highest in the world—US$7,960 in 2009. Total national health expenditures have been increasing at rates well above increases in national income, with total expenditures reaching 17.4 percent of GDP in 2009 and expected to reach 19.8 percent 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 2003 Medicare Modernization Act included new provisions granting tax credits for Health Savings Accounts—tax-free accounts for out-of-pocket health expenses—if coupled with high-deductible ($1,000+) health insurance plans. Tax incentives plus double-digit increases in premiums have led to a shift in benefit design toward higher patient payments.

What recent system innovations and reforms have been introduced?

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, enacting a sweeping series of insurance and health system reforms. Major provisions of the legislation include expanding Medicaid to include everyone with incomes below 133 percent of the federal poverty level; establishing state-based or, potentially, regional insurance exchanges for individuals and small businesses; providing insurance subsidies for low- and middle-income individuals and tax credits for small businesses; instituting a series of insurance regulations including guaranteed issue and community rating; eliminating copayments for recommended preventive services and immunizations; instituting a mandate for individuals to have, and businesses to offer, health insurance; establishing the PCORI to conduct comparative-effectiveness research; establishing a Center for Medicaid and Medicare Innovation to develop and test payment models for improving quality and lowering costs; establishing an Independent Payment Advisory Board with a mandate to reduce the growth of Medicare expenditures through payment reforms; creating a shared savings program in Medicare as an incentive for "accountable care organizations" that take responsibility for efficiently providing care to a defined population and meeting quality targets; increasing Medicare and Medicaid payments for primary care; and expanding federal funding for community health centers that provide care for low-income and uninsured individuals.

The 2009 American Recovery and Reinvestment Act also made a number of significant investments in the health system, including a short-term boost in federal Medicaid funding and subsidies for the recently unemployed to remain insured. Investments were also made in stimulating the use of HIT and in comparative-effectiveness research.

References

2010 National Healthcare Quality & Disparities Reports, Agency for Healthcare Research and Quality. http://www.ahrq.gov/qual/qrdr10.htm.

2011 OECD Health Data, June 2011.

2011 Current Population Survey Annual Social and Economic Supplement.
K. Davis, S. Guterman, S. R. Collins, K. Stremikis, S. Rustgi, and R. Nuzum, "Starting On the Path to a High Performance Health System: Analysis of the Payment and System Reform Provisions in the Patient Protection and Affordable Care Act of 2010," The Commonwealth Fund, September 2010. http://www.commonwealthfund.org/Publications/Fund-Reports/2010/Sep/Analysis-of-the-Payment-and-System-Reform-Provisions.aspx.

Health Reform Resource Center, The Commonwealth Fund, http://www.commonwealthfund.org/Health-Reform/Health-Reform-Resource.aspx.

The Henry J. Kaiser Family Foundation. www.statehealthfacts.org.

S. P. Keehan, A. M. Sisko, C. J. Truffer et al., "National Health Spending Projections Through 2020: Economic Recovery and Reform Drive Faster Spending Growth," *Health Affairs*, Aug. 30, 2011(8):1594–605.

2010 National Healthcare Quality & Disparities Reports, Agency for Healthcare Research and Quality. http://www.ahrq.gov/qual/qrdr10.htm.

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Tel: 212.606.3800

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