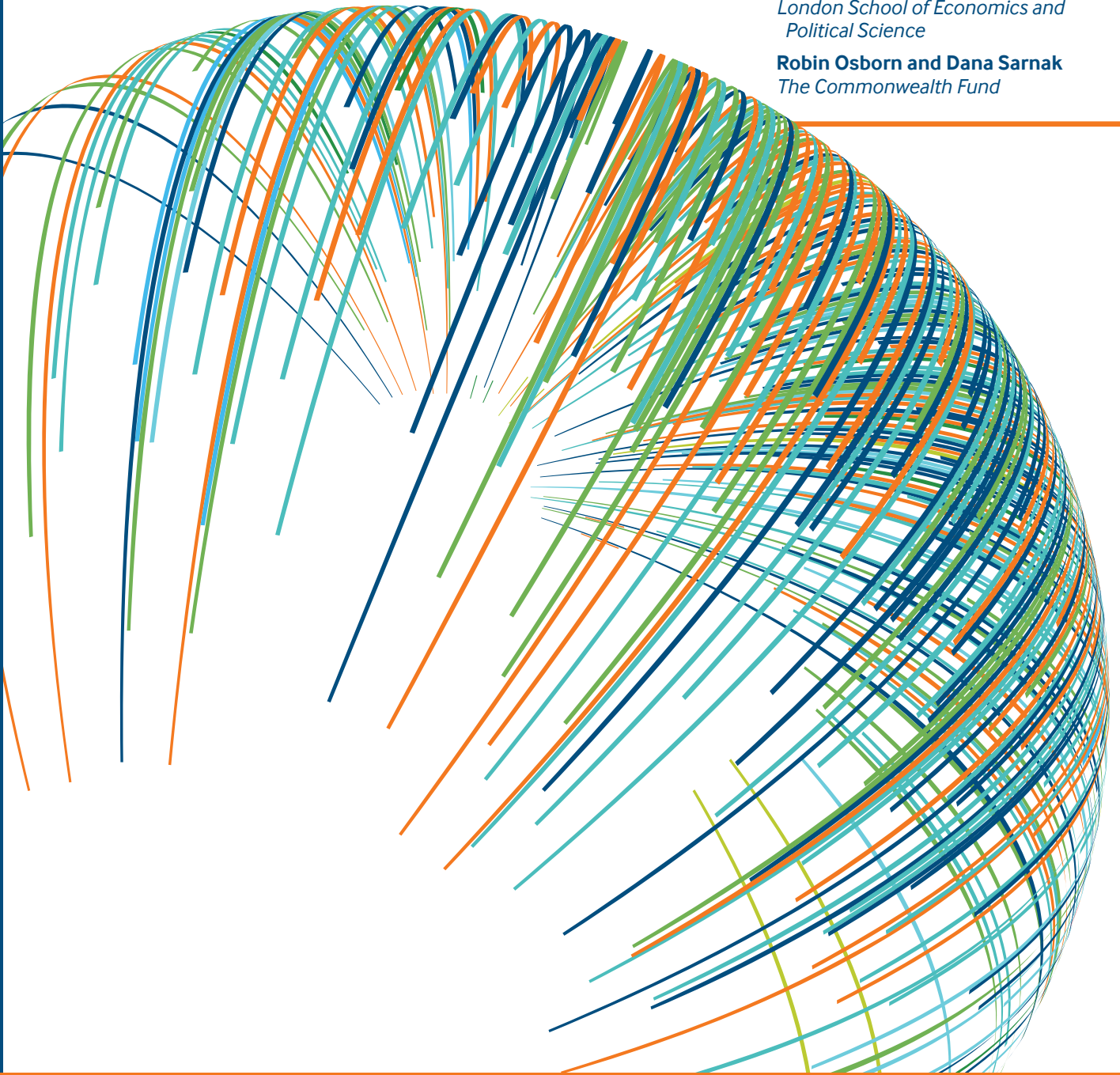


MAY 2017

EDITED BY

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The Commonwealth Fund



International Profiles of Health Care Systems

Australia, Canada, China, Denmark, England, France, Germany, India,
Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Singapore,
Sweden, Switzerland, Taiwan, and the United States

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MAY 2017

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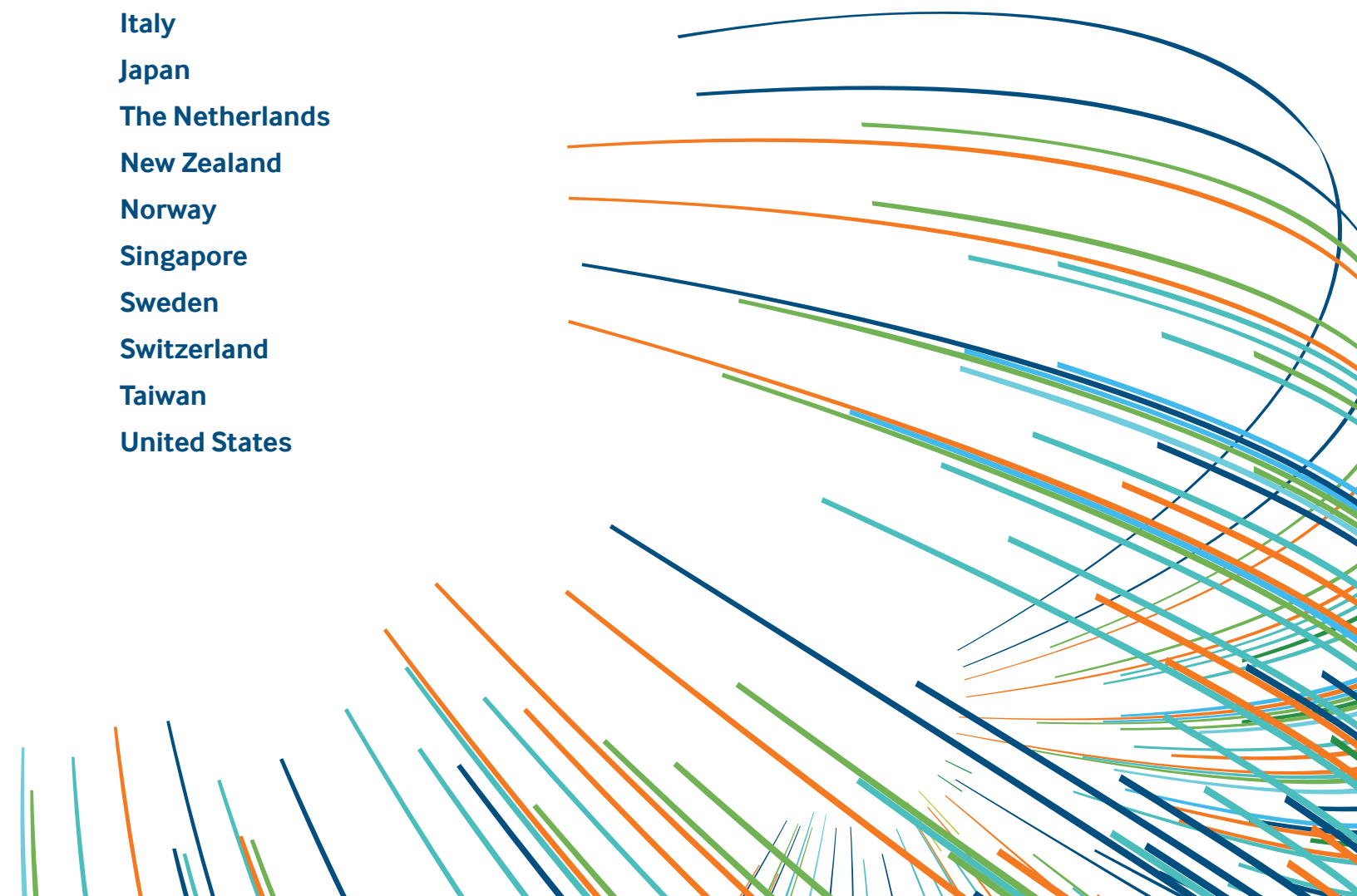
United States

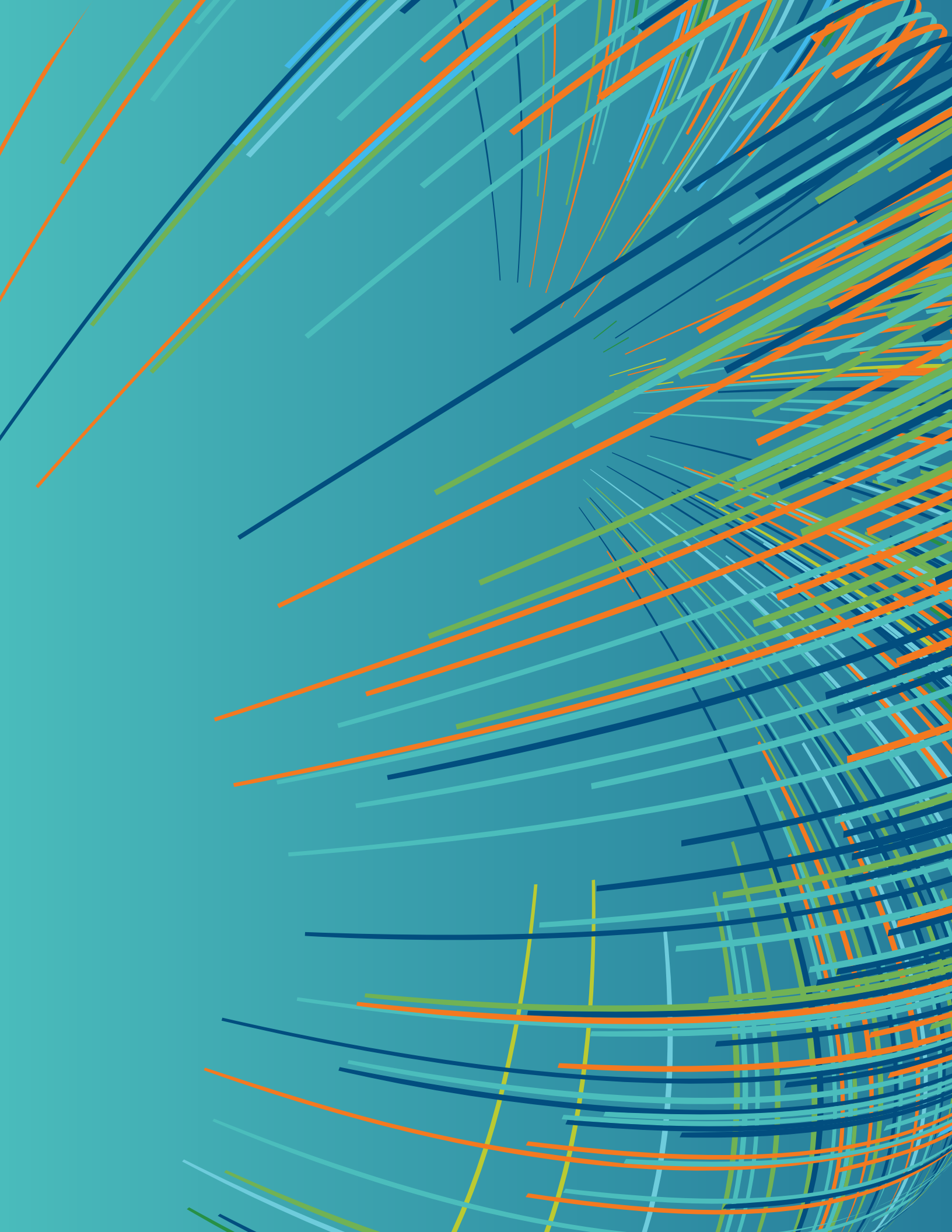
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Table 1. Health Care System Financing and Coverage in 19 Countries

	Health System and Public/Private Insurance Role			Benefit Design	
	Government role	Public system financing	Private insurance role (core benefits; cost-sharing; noncovered benefits; private facilities or amenities; substitute for public insurance)	Caps on cost-sharing ^a	Exemptions and low-income protection ^a
Australia	Regionally administered, joint (national & state) public hospital funding; universal public medical insurance program (Medicare)	General tax revenue; earmarked income tax	~47% buy complementary (e.g., private hospital and dental care, optometry) and supplementary coverage (increased choice, faster access for nonemergency services, rebates for selected services)	Caps for pharmaceutical out-of-pocket expenditure only, dependent on income and total out-of-pocket expenditure in the same year	Low-income and older people: Lower cost-sharing; lower pharmaceutical out-of-pocket cap and lower out-of-pocket maximum for 80% Medicare services rebate
Canada	Regionally administered universal public insurance program that plans and funds (mainly private) provision	Provincial/federal general tax revenue	~67% buy complementary coverage for noncovered benefits (e.g., private rooms in hospitals, drugs, dental care, optometry)	No	There is no cost-sharing for publicly covered services; protection for low-income people from cost of prescription drugs varies by region
China	Supervision by health authorities (Health and Family Planning Commissions) at the national, provincial and local levels; some direct provision through public ownership of hospitals	There are three main publicly financed health insurance types with local-area risk pooling: urban employer-based (mainly payroll taxes, for formally employed urban residents), urban resident basic (mainly government-funded, for urban nonemployed residents), and rural cooperative medical scheme (government-funded, for rural residents)	Complementary to cover cost-sharing and gaps, as well as better health care quality and/or higher reimbursements; no data on coverage, but growth has been rapid	No	Government subsidies to low-income families for insurance contributions and out-of-pocket costs; emergency assistance by local governments for specific diseases and unpaid emergency department or other expenses
Denmark	National health care system; regulation, central planning, and funding by national government; provision by regional and municipal authorities	Earmarked income tax	~39% have complementary coverage (cost-sharing, noncovered benefits such as physiotherapy). ~26% have supplementary coverage (access to private providers)	No; decreasing copayments with higher drug out-of-pocket spending	Drug out-of-pocket cap for chronically ill (DKK3,775 [USD498]); financial assistance for low-income and terminally ill
England	National Health Service (NHS)	General tax revenue (includes employment-related insurance contributions)	~11% buy supplementary coverage for more rapid and convenient access (including to elective treatment in private hospitals)	No general cap, but out-of-pocket payments almost exclusively apply to prescription drugs and medical appliances only; for drugs, prepayment certificate with GBP29.10 [USD41.10] per three months or GBP104 [USD147] per year ceiling for those needing a large number of prescription drugs	Drug cost-sharing exemption for low-income, older people, children, pregnant women and new mothers, and some disabled/chronically ill; financial assistance with transport costs available to people with low incomes; vision tests free for young people, older people, and low-income people
France	Statutory health insurance system, with all SHI insurers incorporated into a single national exchange	Employer/employee earmarked income and payroll tax; general tax revenue, earmarked taxes	~95% buy or receive government vouchers for complementary coverage (mainly cost-sharing, some noncovered benefits); limited supplementary insurance	No; EUR50 [USD60] cap on deductibles for consultations and services	Exemption for low income, chronically ill and disabled, and children
Germany	Statutory health insurance system, with 118 competing SHI insurers ("sickness funds" in a national exchange); high income can opt out for private coverage	Employer/employee earmarked payroll tax; general tax revenue	~11% opt out from statutory insurance and buy substitutive coverage; some complementary (minor benefit exclusions from statutory scheme, copayments) and supplementary coverage (improved amenities)	Yes; 2% of household income; 1% of income for chronically ill	Children and adolescents <18 years of age exempt
India	Financing, legislation, and regulation by central government; financing, regulation, and direct provision of services by state governments	General tax revenue	Limited role (<4% of total expenditure) providing substitutive coverage for the upper-class urban population	No; significant reliance on out-of-pocket payments (~70% of total health expenditure)	Various government-financed health insurance schemes for poor and vulnerable population groups to improve access to hospitalization and reduce out-of-pocket payments
Israel	National health insurance (NHI) system with four competing, nonprofit health plans; government distributes the NHI budget among the health plans primarily through capitation	Earmarked income-related tax and general government revenues	Complementary (for benefits such as dental care, drugs, or long-term care) and supplementary coverage (for quicker access and superior service) provided by two types of voluntary health insurance: VHI offered by statutory health plans (HP-VHI) (~87% of adult population coverage); commercial VHI (C-VHI) (~53% coverage); C-VHI tend to be more comprehensive and more expensive	Not overall; caps on out-of-pocket costs for drugs (chronically ill only) and specialist visits (at household level)	Quarterly out-of-pocket caps for drugs for the chronically ill and age-, income-, and health status-related discounts; copayment exemptions for Holocaust survivors; age-, income-, disability-, and health status-related exemptions on copayments for specialist consultations; reduced health tax (3% instead of 5%) for people on low incomes
Italy	National health care system; funding and definition of minimum benefit package by national government; planning, regulation, and provision by regional governments	National earmarked corporate and value-added taxes; general tax revenue and regional tax revenue	Patients buy complementary (services excluded from statutory benefits) or supplementary coverage (more amenities in hospitals, wider provider choice); around 5.5% buy individual VHI coverage (1.33 million families), while around 2.5 million people have group coverage	No; max EUR46.15 [USD61] copayment per outpatient specialist consultation or diagnostic procedure; limited copayment (regional rates) on drugs	Exemptions for low-income older people/children, pregnant women, chronic conditions/disabilities, rare diseases
Japan	Statutory health insurance system, with >3,400 noncompeting public, quasi-public, and employer-based insurers; national government sets provider fees, subsidizes local governments, insurers, and providers, and supervises insurers and providers	General tax revenue; insurance contributions	Majority of population have coverage for cash benefits in case of sickness, usually together with life insurance; limited role of complementary and supplementary insurance offered separately from life insurance	Yes; coinsurance reduced to, e.g., 1% after JPY80,100 [USD763] monthly cap, depending on enrollee age and income; annual cap of total out-of-pocket payments at between JPY340,000 [USD3,238] and JPY2.12M [USD20,190] per household, depending on income and ages of household members	Low-income monthly out-of-pocket ceiling: JPY35,400 [\$336USD]; reduced cost-sharing for young children, older people, those with chronic conditions, mental illness, and disabilities; tax-funded health services for those on social assistance
Netherlands	Statutory health insurance system, with universally mandated private insurance (national exchange); government regulates and subsidizes insurance	Earmarked payroll tax; community-rated insurance premiums; general tax revenue	Private plans provide statutory benefits; 84% buy complementary coverage for benefits excluded from statutory package such as dental care, alternative medicine, physiotherapy, eyeglasses, contraceptives, and copayments	No, but annual deductible of EUR385 [USD465] covers most cost-sharing	GP care and children exempt from cost-sharing; premium subsidies for low-income
New Zealand	National health care system; responsibility for planning, purchasing, and provision devolved to geographically defined District Health Boards	General tax revenue	~33% buy complementary coverage for cost-sharing, specialist fees, and elective surgery in private hospitals) and supplementary coverage for faster access to nonurgent treatment	No; reduced fees after 12 doctor visits per year/patient and no drug copayments after 20 prescriptions per year/family	No primary care consultation charges for children under 13; subsidies for low-income, some chronic condition and high-need groups, Maori and Pacific islanders
Norway	National health care system; regulation and some direct funding and provision roles for national government and some responsibilities devolved to Regional Health Care Authorities and municipalities	General tax revenue, national and municipal taxes	~8% holds supplementary voluntary health insurance, mainly bought by employers for providing employees quicker access to publicly covered elective services and choice among private providers	Yes; overall annual cost sharing ceiling is NOK2,105 [USD223]	Exemptions for children <16 years somatic, <18 years psychiatric, pregnant women, for some communicable diseases (including STDs), and those with work-related injuries; low-income groups receive free essential drugs and nursing care
Singapore	Government subsidies at public health care institutions and some providers; Medisave; mandatory medical savings program for routine expenses; MediShield: catastrophic health insurance; Medifund; government endowment fund to subsidize health care for low-income and those with large bills; government regulation of private insurance, central planning and financing of infrastructure, and some direct provision through public hospitals and clinics	General tax revenue	Medisave-approved Integrated Shield Plans (private insurance plans) supplement MediShield coverage to provide catastrophic health coverage for additional ward classes; other types of private insurance are also available, including private insurance provided by employers	No	Subsidized care for low-income population, with income- and asset-based means test to target subsidies; Medifund as safety net to pay for low-income and people with no means to pay for their health care bills
Sweden	National health care system; regulation, supervision, and some funding by national government; responsibility for most financing and purchasing/provision devolved to county councils	Mainly general tax revenue raised by county councils; some national tax revenue	~10% of all employed individuals ages 15–74 get supplementary coverage from employers for quicker access to specialists and elective treatment	Yes; SEK1,100 [USD123] for health services and SEK2,200 [USD246] for drugs	Some cost-sharing exemptions for children, adolescents, pregnant women, and elderly
Switzerland	Mandatory health insurance system, with universally mandated private insurance (regional exchanges); some federal legislation, with cantonal (state) government responsible for provider supervision, capacity planning, and financing through subsidies	Community-rated insurance premiums; general tax revenue	Private plans provide universal core benefits; some people buy complementary (services not covered by mandatory insurance) and supplementary (improved amenities and access); no coverage data available	Yes; CHF700 [USD549] maximum after deductible	Some copayment exemptions and CHF350 [USD274] cap for <19 year-olds; income-related premium subsidies (27% receive); maternity care fully covered
Taiwan	Single-payer government administered national health insurance system with mixed private—public, albeit predominantly private, delivery system; government subsidies to disadvantaged populations	Payroll-based premium, supplementary premium based on non-payroll incomes, general tax revenue for premium subsidies, tobacco tax, and lottery gains	National Health Insurance provides comprehensive benefits including outpatient and inpatient care, drugs, dental, Chinese medicine, dialysis, rehabilitation, home nursing care, care for the mentally ill, etc.; private insurance plays at best a supplemental role; main benefit is cash indemnity payments to policyholders to use as they see fit, for example, private rooms, coinsurance for inpatient stays; private insurance plays no substitutive role to the public insurance system	Caps apply to coinsurance for both episodic and annual inpatient stays; for 2015, cap on per episode of inpatient stay was NTD33,000 (USD1,022), and the annual cap NTD56,000 (USD1,734)	Premium exemptions apply to low-income households, active service military personnel and military school students on scholarships, widows of deceased military personnel on pensions, prison inmates, and veterans; copayment and coinsurance exemptions apply to low-income patients and patients with any of 30 catastrophic diseases or conditions (for example, cancer, chronic mental disorders, rare diseases, congenital diseases, end-stage kidney disease, etc.)
United States	Medicare: age 65 and older, some disabled; Medicaid: some low-income; for those without employer coverage, state-level insurance exchanges with income-based subsidies; insurance coverage mandated, with some exemptions (10.4% of adults uninsured)	Medicare: payroll tax, premiums, federal tax revenue; Medicaid: federal, state tax revenue	Primary private voluntary insurance covers ~66% of population (employer-based and individual); supplementary for Medicare	Yes for most private insurance plans: \$6,600 yearly limit for individuals; \$13,200 for families as of 2015	Low income; Medicaid; older people and some disabled; Medicare; premium subsidies and lower cost-sharing for low- and middle-income families on the exchanges; some affordability exemptions from insurance mandate

^a All bracketed figures in USD were converted from local currency using the purchasing power parity conversion rate for GDP in 2015 reported by the Organisation for Economic Co-operation and Development (2016).

Table 2. Selected Health Care System Indicators for 18 Countries

	Australia	Canada	China	Denmark	France	Germany	India	Israel	Italy	Japan	Netherlands	New Zealand	Norway	Singapore	Sweden	Switzerland	United Kingdom	United States
Population, 2014																		
Total Population (Millions of People)	23.78	35.85	1,360.72 ^l	5.66	66.42	81.20	1,295.29	8.31	60.80	127.11	16.90	4.60	5.17	5.54 ^k	9.75	8.24	64.88	321.19
Percentage of Population Age 65 and Older	14.7%	15.7%	9.6% ^l	18.2%	18.0%	20.8%	5.50%	10.7% ^c	21.4%	25.1%	17.3%	14.4%	15.8%	11.7% ^k	19.3%	17.5%	17.4%	14.5%
Health Care Spending, 2014																		
Percentage of GDP Spent on Health Care	9.0% ^h	10.5%	5.6% ^h	10.7% ^h	11.8%	11.0% ^h	4.7% ^h	7.4%	9.1% ^h	11.4% ^h	10.9% ^h	10.9%	9.3%	4.9%	11.7%	11.4% ^h	10.2%	17.2%
Health Care Spending per Capita ^f	\$4,207 ^h	\$4,728	\$420 ^l	\$5,012 ^b	\$4,620	\$5,119 ^h	\$215 ^a	\$2,353 ^c	\$3,207 ^h	\$4,152 ^h	\$5,227 ^h	\$4,038 ^b	\$6,432	\$2,752 ^k	\$5,306	\$6,787 ^h	\$4,094	\$9,364
Out-of-Pocket Health Care Spending per Capita ^e	\$532 ^b	\$644		\$671	\$305	\$664		\$602	\$706	\$126 ^b	\$649	\$263 ^b	\$882		\$787	\$1,815	\$586	\$1,034
Spending on Pharmaceuticals per Capita ^f	\$626 ^b	\$772		\$325	\$656	\$741		\$306 ^c	\$544	\$783 ^b	\$401		\$457		\$489	\$730	\$485	\$1,112
Physician Capacity and Utilization, 2014																		
Number of Practicing Physicians per 1,000 Population	3.5 ^j	2.5	1.9 ^j	3.7 ^b	3.1	4.1	0.7	3.5	3.9	2.4		2.8	4.4	2.0 ^j	4.1 ^b	4.1	2.8	2.6 ^b
Average Annual Number of Physician Visits per Capita	7.3	7.6 ^b	5.6 ^j	4.5	6.3	9.9			6.8 ^b	12.8 ^b	8.0	3.7 ^c	4.3		2.9	3.9 ^c		4.0 ^e
Hospital Spending, Utilization, and Capacity, 2014																		
Total Curative (Acute) Care Beds, per 1,000 Population		2.1 ^b	4.9 ^j	2.6	4.1	6.2		2.3	2.8 ^b	7.9	3.3 ^c	2.7	3.4	2.0 ^m	2.4	3.8	2.3	2.5 ^b
Hospital Spending Per Discharge ^f	\$10,530 ^b	\$16,451		\$14,105	\$10,591	\$5,900		\$5,069 ^c	\$12,150	\$14,388 ^d	\$14,181 ^c		\$13,923 ^b		\$12,393	\$14,624	\$11,663	\$21,063 ^e
Hospital Discharges per 1,000 Population	163 ^b	84 ^b			159 ^b	236		156	107	113	115 ^e	132 ^b	187		139	150	125	
Average Length of Stay for Curative (Acute) Care in Days	4.7 ^b	7.5 ^b			5.8 ^b	7.6		5.1	6.8	16.9	6.4 ^c	5.2 ^b	5.5		5.4	5.8	6.0	5.4 ^b
Medical/Information Technology																		
Magnetic Resonance Imaging (MRI) Machines per Million Population, 2014	15.2	8.9 ^b			10.9	30.5		4.0	25.2 ^b	51.7	12.9	11.3 ^b					6.1	38.1
Magnetic Resonance Imaging (MRI) Exams per 1,000 Population, 2014	35.3	54.9		75.0	95.5	114.3 ^c		32.1		63.0 ⁿ	51.2 ⁿ						76.0	109.5
Primary Care Physicians' Use of Electronic Medical Records, 2015 ^o	92%	73%			75%	84%					98%	100%	99%		99%	54%	98%	84%
Health Risk Factors, 2014																		
Percentage of Adults Who Report Being Daily Smokers	13% ^b	14%	26% ^c	17%	22%	21% ^b	13% ^c	17%	20%	20%	19%	16%	13%		12%	20% ^c	19% ^b	13%
Prevalence of Obesity (BMI >30)	28% ^b	26% ^b	7% ^g	14% ^g	15% ^{g,b}	16% ^{g,b}	5% ^g	18% ^g	10% ^g	4%	13% ^g	30%	10% ^{g,c}		12% ^g	10% ^{g,c}	26%	38%

Source: OECD Health Data 2016 unless otherwise noted.

^a 2015.

^b 2013.

^c 2012.

^d 2011.

^e 2010.

^f Adjusted for differences in the cost of living.

^g All data self-reported except in Australia, Canada, Japan, New Zealand, United Kingdom, and United States, where it is measured.

^h Current spending only, and excludes spending on capital formation of health care providers.

ⁱ Source: China Health and Family Planning Statistical Yearbook, 2015.

^l Source: China Health and Family Planning Statistical Yearbook, 2011.

^k Source: World Bank, 2015.

^l Source: World Bank, 2012.

^m Source: World Bank, 2011, and may include chronic care beds as well as acute care beds.

ⁿ Unpublished Commonwealth Fund grant, 2014.

^o Source: 2015 Commonwealth Fund International Health Policy Survey of Primary Care Physicians.

Table 3. Selected Health System Performance Indicators for 17 Countries

	Australia	Canada	China	Denmark	France	Germany	India	Israel	Italy	Japan	Netherlands	New Zealand	Norway	Sweden	Switzerland	United Kingdom	United States	
Access to Care, 2016	Able to Get Same-Day/Next-Day Appointment When Sick	67%	43%			56%	53%				77%	76%	43%	49%	57%	57%	51%	
	Very/Somewhat Easy to Get Care After Hours ^a	44%	63%			64%	64%				25%	44%	40%	64%	58%	49%	51%	
	Waited Two Months or More for Specialist Appointment ^b	13%	30%			4%	3%				7%	20%	28%	19%	9%	19%	6%	
	Waited Four Months or More for Elective Surgery ^c	8%	18%			2%	0%				4%	15%	15%	12%	7%	12%	4%	
	Experienced Access Barrier Because of Cost in Past Year ^d	14%	16%			17%	7%					8%	18%	10%	8%	22%	7%	33%
Safety Problems Among Older Adults, 2014 ^e	Health Professional Did Not Review Their Prescriptions in Past Year	16%	16%			47%	19%				37%	23%	36%	48%	27%	21%	14%	
	Experienced a Coordination Problem in Past Two Years ^f	22%	30%			31%	19%				23%	22%	35%	32%	30%	19%	35%	
Care Coordination and Transitions, 2016	Experienced Gaps in Hospital Discharge Planning in Past Two Years ^g	29%	40%			60%	28%				47%	31%	61%	52%	45%	28%	22%	
	Doctor or Health Care Professional Discussed Patient's Main Goals or Priorities in Caring for Condition	71%	56%			66%	67%				59%	62%	41%	26%	64%	61%	63%	
Chronic Care Management, 2016 ^h	Doctor or Health Care Professional Discussed Treatment Options with Patient, Including Side Effects	67%	57%			61%	60%				57%	62%	32%	30%	59%	54%	60%	
	Primary Care Practice Routinely Receives and Reviews Clinical Outcomes Data	35%	23%			43%	44%				88%	65%	32%	79%	9%	86%	52%	
Performance Feedback, 2015	Primary Care Practice Routinely Receives and Reviews Patient Satisfaction and Experience Data	46%	17%			3%	25%				61%	60%	9%	88%	15%	88%	63%	
	Primary Care Practice Routinely Receives Data Comparing Performance to Other Practices	13%	17%			49%	29%				42%	61%	4%	55%	37%	71%	37%	
	Diabetes-Related Lower Extremity Amputation Rates per 100,000 Population, 2013	4.5	7.4		8.5	7.5	9.2		15.9	2.7		4.7 ^j	5.9 ^k	5.7	4.1	3.1 ^k	3.1	
Health Care Quality Indicators	Breast Cancer Five-Year Survival Rate, 2008-2013 (or nearest period)	88%	88%		86%		86%		88%	86%	85%	86%	89%	89%		81%	89%	
	Mortality After Hospital Admission for Acute Myocardial Infarction per 100 Admissions, Patients Age 45 and Older, 2013	4.1 ^l	6.7		5.7 ^l	7.2	8.7		6.7 ^l	5.5	12.2 ^{li}	7.6 ^{li}	6.6	6.7	4.5 ^l	7.7 ^k	7.6 ^l	5.5 ^k
	Mortality Amenable to Health Care (Deaths per 100,000 Population)	62 ^{o,q}	78 ^p		82 ⁿ	61 ⁿ	83 ^{n,q}			75 ⁿ		72 ⁿ	87 ^{o,q}	64 ^{n,q}	69 ^{n,q}	55 ⁿ	85	112 ^{o,p,q}
Avoidable deaths, 2013 ^o	Percentage of Children with Measles Immunization	93	95	99	90	90	97	83	96	86	98	96	93	94	97	93	91	
	Percentage of Population Age 65 and Older with Influenza Immunization		63.1		43	48.5	58.6 ^k		63.8	55.4	50	72	69	26.9	49.7	74.5	67.9 ^z	
Overall Views of Health Care System ¹	Works Well, Minor Changes Needed	44%	35%			54%	60%				43%	41%	59%	31%	58%	44%	19%	
	Fundamental Changes Needed	46%	55%			41%	37%				46%	52%	33%	58%	37%	46%	53%	
	Needs to Be Completely Rebuilt	4%	9%			4%	3%				8%	6%	5%	8%	3%	7%	23%	

Sources (unless noted otherwise): 2015 and 2016 Commonwealth Fund International Health Policy Surveys.

^a Base: Sought care after hours.

^b Base: Saw or needed to see a specialist in past two years.

^c Base: Needed elective surgery in past two years.

^d Access barrier because of cost defined as at least one of the following: did not fill/skipped prescription, did not visit doctor with medical problem, and/or did not get recommended care.

^e Base: Adults age 65 or older who are taking four or more prescription medications regularly.

^f Coordination problem includes one or more of the following: test results/records not available at appointment or duplicate tests ordered; specialist lacked medical history or regular doctor not informed about specialist care; and received conflicting information from different doctors or health care professionals.

^g Hospital discharge planning gap defined as: When discharged from the hospital: you did not receive written information about what to do when you returned home and symptoms to watch for; hospital did not make sure you had arrangements for follow-up care; someone did not discuss with you the purpose of taking each medication; and/or you did not know who to contact if you had a question about your condition or treatment. Base: Hospitalized overnight in past two years.

^h Base: Had ever been diagnosed with: asthma or chronic lung disease; diabetes; heart disease, including heart attack; hypertension or high blood pressure.

ⁱ Source: OECD Health Data 2015.

^j 2011.

^k 2012.

^l Admissions resulting in a transfer are included.

^m Source: Marina Karanikolos, European Observatory on Health Systems and Policies 2017.

ⁿ Trends in mortality amenable to health care for selected countries, 2000–2014. World Health Organization mortality files (number of deaths by age group) and populations.

^o List of amenable causes: Nolte and McKee 2004.

^p Calculations by European Observatory on Health Systems and Policies 2016; amenable mortality causes based on Nolte and McKee 2004; mortality and population data from World Health Organization mortality files, released Sept. 2016.

^q Age-specific rates standardized to European Standard Population 2013; data from 2014.

^r Source: OECD Health Data 2016.

^s 2013.

¹ Question asked on survey: "Which of the following statements comes closest to expressing your overall view of the health care system in your country?"

Table 4. Provider Organization and Payment in 19 Countries

	Provider ownership		Provider payment		Primary care role	
	Primary care	Hospitals	Primary care payment ^a	Hospital payment	Registration with GP required	Gatekeeping
Australia	Private	Public (~65% of beds), private (~35%)	~95% fee-for-service, ~5% incentive payments	Global budgets and case-based payment in public hospitals (includes physician costs); fee-for-service in private hospitals	No	Yes
Canada	Private	Public/private mix (proportions vary by region), mostly not-for-profit	Mostly fee-for-service (~45% to 85%, depending on province), but some alternatives (e.g., capitation) for group practices	Mostly global budgets, case-based payment in some provinces (does not include physician costs)	Not generally, but yes for some capitation models	Yes, mainly through financial incentives varying across provinces (e.g., in most provinces, specialists receive lower fees for patients not referred)
China	Private/public mix (private village doctors and clinics, public township and community hospitals providing GP services)	Public (~55%)/private (~45%) mix (mainly public in rural areas, public and private in urban areas)	Fee-for-service for private providers, salaries and fee-for-service for GPs employed by hospitals	Mainly fee-for-service, with some pilot projects using case-based payments, capitation, or global budgets	Not generally, with exceptions in some areas	Not generally, with exceptions in some areas
Denmark	Private	Almost all public	~70% fee-for-service, ~30% capitation	Mainly global budgets and case-based payments (includes physician costs)	Yes (for 98% of population)	Yes (for 98% of population)
England	Mainly private, limited number of NHS-owned practices with salaried physicians	Mostly public, some private	Mix capitation/fee-for-service/pay-for-performance: salary payments for a minority (the salaried GPs are employees of private group practices, not of the NHS)	Mainly case-based payments (60%) plus budgets for mental health, education, and research and training. All include physician costs, drug costs, etc.	Yes	Yes
France	Private	Mostly public (67% of capacity) some private for-profit (25%) and private not-for-profit	Mix fee-for-service/pay-for-performance/flat EUR40 [USD48] bonus per year per patient with chronic disease and regional agreements for salaried GPs	Mainly case-based payments (includes physician costs in public hospitals but not in private) and non-activity-based grants for education, research, etc.	All patients aged over 18 years are requested to register with a referring physician	Voluntary but incentivized: higher cost-sharing for visits and prescriptions without a referral from physician registered with GPs or specialist
Germany	Private	Public (~48% of beds), private nonprofit (~35%), private for-profit (~17%)	Fee-for-service	Case-based payment (includes physician costs)	No	Generally no, present in specific programs by sickness funds
India	Mainly public, some private especially in urban areas	Private non- and for-profit (~63% of beds) and public	Salary for staff at public providers, fee-for-service (paid out of pocket) for private providers	Global budgets for public hospitals	No	No
Israel	Nonprofit, either salaried by health plan or health plan contractors	Public (~50%), private nonprofit (including health plans, ~45%), private for-profit (~5%)	Mainly capitation and some fee-for-service to private providers, salary if owned by health plan	Mainly per-diem and some case-based payments for inpatient care, fee-for-service for outpatient (all include physician cost)	Yes in the largest health plan (Clalit), no in the other three	Yes in two of the four health plans (including the largest, Clalit), no in the other two
Italy	Private	Mostly public (~80% of beds), some private (~20%)	Mix capitation (~70% of total), fee-for-service and limited P4P (~30%)	Subject to regional variation, mainly case-based payment (except hospitals owned by regional authorities) and global budgets (includes physician costs)	Yes	Yes
Japan	Mostly private	Mainly private nonprofit (~80% of beds), some public (~20%)	Most fee-for-service, some per-case daily or monthly payments	Case-based per diem payments and fee-for-service or fee-for-service only (includes physician costs)	No	No, but large hospitals and academic centers charge extra fees to patients not referred
Netherlands	Private	Mostly private, nonprofit	Mix capitation and fee-for-service for "core" activities (75% in total), some bundled payments and pay-for-performance negotiated with insurers	Mainly case-based payment (include physician costs)	No, but most patients register voluntarily	Yes
New Zealand	Private	Mostly public, some private	Mix capitation (~50% of total)/fee-for-service patient payments (~50%)	Global budgets (includes physician costs)	No	Yes
Norway	Mainly private (95% of general practitioners)	Almost all public, some private not-for-profit, some for-profit hospitals offering elective treatment only	GPs: Capitation from municipal contracts (~35% of income), government-sponsored fee-for-service (~35%) and user-charges (~30%)	Somatic: global budgets (~50%) and case-based payment (~50%) (includes physician costs); psychiatric: 100% global budgets	No, but more than 95% of patients register voluntarily	Yes
Singapore	Almost all private, with some larger public clinics for lower-income population	Mainly public, 20%–30% private based on activity	Fee-for-service	For public hospitals, combination of global budgets and case-based payments	No	No, but public system requires referrals to provide services at subsidized prices
Sweden	Mixed, ~40% private, ~60% public	Almost all public, some private for-profit and not-for-profit	Mix capitation (~80% of total) and fee-for-service/limited pay-for-performance (~20% of total)	Global budgets (~66% of total) and case-based payment/limited pay-for-performance (includes physician costs)	Yes, in all counties except Stockholm	No
Switzerland	Private	Mostly public or publicly subsidized private, some private	Most fee-for-service, some capitation in managed care plans offered by insurers	Inpatient care: case-based payments for acute care, per-diem payments for psychiatric and rehabilitation care; subsidies from cantonal government	No, except in some managed care plans offered by insurers	No, except in some managed care plans with gatekeeping offered by insurers
Taiwan	98% clinics private	Mixed public (16% hospitals, 28% beds) and private not-for-profit (84% hospitals, 72% beds)	Fee-for-service predominant, some pay-for-performance, and capitation pilot under primary care global budget	Fee-for-service, diagnosis-related groups, case payment under hospital global budget	No	No
United States	Private	Mix of nonprofit (~70% of beds), public (~15%), and for-profit (~15%)	Most fee-for-service, some capitation with private plans, some incentive payments	Outpatient care: fee-for-service	No	In some insurance programs

^a All bracketed figures in USD were converted from local currency using the purchasing power parity conversion rate for GDP in 2015 reported by the Organisation for Economic Co-operation and Development (2016).



Lucinda Glover



What is the role of government?

Three levels of government are collectively responsible for providing universal health care: federal; state and territory; and local. The federal government mainly provides funding and indirect support to the states and health professions, subsidizing primary care providers through the Medicare Benefits Scheme (MBS) and the Pharmaceutical Benefits Scheme (PBS) and providing funds for state services. It has only a limited role in direct service delivery.

States have the majority of responsibility for public hospitals, ambulance services, public dental care, community health services, and mental health care. They contribute their own funding in addition to that provided by federal government. Local governments play a role in the delivery of community health and preventive health programs, such as immunization and the regulation of food standards.¹



Who is covered and how is insurance financed?

Publicly financed health insurance: Total health expenditures in 2014–2015 represented 10.0 percent of GDP, an increase of 2.8 percent from 2013–2014. Two-thirds of these expenditures (67.0%) came from government.²

The federal government funds Medicare, a universal public health insurance program providing free or subsidized access to care for Australian citizens, residents with a permanent visa, and New Zealand citizens following their enrollment in the program and confirmation of identity.³ Restricted access is provided to citizens of certain other countries through formal agreements.⁴ Other visitors to Australia do not have access to Medicare. Medicare is funded in part by a government levy collected through the tax system, which raised an estimated AUD10.3 billion (USD6.7 billion⁵) in 2013–2014.⁶ (In July 2014, the levy was expanded to raise funds for disability care.)

Private health insurance: Private health insurance (PHI) is readily available and offers more choice of providers (particularly in hospitals), faster access for nonemergency services, and rebates for selected services. Government policies encourage enrollment in PHI through a tax rebate and, above a certain income, a penalty payment for not having PHI (the Medicare Levy surcharge).⁷ The Lifetime Health Coverage program provides a lower premium for life if participants sign up before age 31. For people who do not sign up, there is a 2 percent increase in the base premium for each year after age 30. Consequently, take-up is highest among those 30 and under but rapidly drops off as age increases, with a trend to opt out starting at age 50.

Nearly half of the Australian population (47%) had private hospital coverage and nearly 56 percent had general treatment coverage in 2016.⁸

Insurers are a mix of for-profit and nonprofit providers. In 2014–2015, private health insurance expenditures represented 8.7 percent of all health spending.⁹

Private health insurance can include coverage for hospital care, general treatment, or ambulance services. When accessing hospital services, patients can opt to be treated as a public patient (with full fee coverage) or as a private patient (with 75% fee coverage). For private patients, insurance covers the MBS fee. If a provider charges above the MBS fee, the consumer will bear the gap cost unless they have gap coverage. The patient may also be charged for costs such as hospital accommodation, surgery fees (implants and theater fees), and diagnostic tests.

General coverage provides insurance for dental, physiotherapy, chiropractic, podiatry, home nursing, and optometry services. Coverage may be capped by dollar amount or by number of services.

Private health insurance coverage varies by socioeconomic status. PHI covers just one in five (22.1%) of the most disadvantaged 20 percent of the population, a proportion that rises to more than 57.2 percent for the most advantaged population quintile. This disparity is due in part to the Medicare Levy surcharge applied to higher-income earners.¹⁰



What is covered?

Services: The federal government defines and funds Medicare benefits, which include hospital care, medical services, and pharmaceuticals, to name a few. States provide further funding and are responsible for the delivery of free public hospital services, including subsidies and incentive payments in the areas of prevention, chronic disease management, and mental health care. The MBS provides for limited optometry and children’s dental care.

Pharmaceutical subsidies are provided through the PBS. To be listed, pharmaceuticals need to be approved for cost-effectiveness by the independent Pharmaceutical Benefits Advisory Committee (PBAC). War veterans, the widowed, and their dependents may be eligible for the Repatriation PBS.¹¹

Nearly half (49%) of federal support for mental health is for payments to people with a disability; the remaining support goes toward payments to states, payments and allowances for caregivers, and subsidies provided through the MBS and PBS.¹² State governments are responsible for specialist and acute mental care services.

Home care for the elderly and hospice care coverage are described below in the section “How is the delivery system organized and financed?”

Cost-sharing and out-of-pocket spending: Out-of-pocket payments accounted for 18 percent of total health expenditures in 2013–2014. The largest share (38%) was for medications, followed by dental care (20%), medical services (e.g., referred and unreferred private health insurance), medical aids and equipment, and other health practitioner services.¹³

There are no deductibles or out-of-pocket costs for public patients receiving public hospital services. General practitioner (GP) visits are subsidized at 100 percent of the MBS fee, and specialist visits at 85 percent. GPs and specialists can choose whether to charge above the MBS fee. About 83 percent of GP visits were provided without charge to the patient in 2014–2015. Patients who were charged paid an average of AUD31 (USD20).¹⁴

Out-of-pocket pharmaceutical expenditures are capped. In 2016, the maximum cost per prescription for low-income earners was set at AUD6.20 (USD4.00), with an annual cap of AUD372.00 (USD242.00). For the general population, the cap per prescription is AUD38.30 (USD25.00), which reverts to the low-income cost cap if a patient incurs more than AUD1,476.00 (USD958.00) in out-of-pocket expenditure within a year.¹⁵ Consumers pay the full price of medicines not listed on the PBS. Pharmaceuticals provided to inpatients in public hospitals are generally free.

Safety nets: There are three safety nets. The Original Medicare Safety Net covers the cost of all Medicare services out of hospital above an annual out-of-pocket threshold of AUD447 (USD290). The Extended Medicare Safety Net covers 80 percent of out-of-pocket costs over an annual threshold of AUD648 (USD420) for those with government-issued concession cards (e.g., low-income, seniors, caregivers) and AUD2,030 (USD1,318) for others. The “Greatest Permissible Gap” sets the maximum out-of-pocket fee per out-of-hospital service at AUD79.50 (USD52.00). The government is seeking to replace these with a single Medicare Safety Net that would reimburse 80 percent of out-of-pocket costs (up to a cap of 150 percent of the MBS fee) for the remainder of the calendar year once annual thresholds are met: AUD638 (USD414) for concessional patients (including low-income adults, children under 16, and certain veterans); AUD648 (USD420) for parents of school children; and AUD2,030 (USD1,318) for singles and all other families.



How is the delivery system organized and financed?

Primary care: In 2015, there were 34,367 GPs, 49,060 practitioners registered as generalists and specialists, and 8,386 specialists.¹⁶ GPs are typically self-employed, with about four per practice on average.¹⁷ In 2012, those in nonmanagerial positions earned an average of AUD2,862 (USD1,858) per week. The schedule of service fees is set by the federal health minister through the MBS.

Registration with a GP is not required, and patients choose their primary care doctor. GPs operate as gatekeepers, in that a referral to a specialist is needed for a patient to receive the MBS subsidy for specialist services. The fee-for-service MBS model accounts for the majority of federal expenditures on GPs, while the Practice Incentives Program (PIP) accounts for 5.5 percent.¹⁸

State community health centers usually employ a multidisciplinary provider team. The federal government provides financial incentives for the accreditation of GPs, for multidisciplinary care approaches, and for care coordination through PIP and through funding of GP “Super Clinics” and Primary Health Networks (PHNs). PHNs (which have replaced Medicare Locals) are being implemented in 2015–2016 to support more efficient, effective, and coordinated primary care.

In 2015, there were 11,040 nurses or midwives working in a general practice setting.¹⁹ Their role has been expanding with the support of the PIP practice nurse payment. Nurses are also funded through practice earnings. Nurses in general practice settings provide chronic-disease management and care coordination; preventive health education; and oversight of patient follow-up and reminder systems.²⁰

Outpatient specialist care: Specialists deliver outpatient care in private practice (8,001 specialists in 2015) or in a public hospital (3,745).²¹ Patients are able to choose which specialist they see, but must be referred by their GP to receive MBS subsidies. Specialists are paid on a fee-for-service basis. They receive a subsidy through the MBS of 85 percent of the schedule fee and set their patients’ out-of-pocket fees independently. Many specialists split their time between private and public practice.

Administrative mechanisms for direct patient payments to providers: Many practices have the technology to process claims electronically so that reimbursements from public and private payers are instantaneous, and patients pay only their copayment (if the provider charges above the MBS fee). If the technology is not in place, patients pay the full fee and seek reimbursement from Medicare and/or their private insurer.

After-hours care: GPs are required to ensure that after-hours care is available to patients but are not required to provide care directly. They must demonstrate that processes are in place for patients to obtain information about after-hours care and that patients can contact them in an emergency. After-hours walk-in services are available and may be provided in a primary care setting or within hospitals. As there is free access to emergency departments, these also may be utilized for after-hours primary care.

The federal government provides varying levels of practice incentives for after-hours care, depending on whether access is direct or provided indirectly through arrangements with other practitioners in the area. Government also funds PHNs’ support for and coordination of after-hours services, and there is an after-hours advice and support line.

Hospitals: In 2014–2015, there were 698 public hospitals (678 acute, 20 psychiatric), with a total of nearly 60,300 beds, an increase of 1,700 beds over the previous year, despite there being 20 fewer hospitals. In the same period, there were 624 private hospitals (342 day hospitals and 282 others) with 32,000 beds.²² Private hospitals are a mix of for-profit and nonprofit.

Public hospitals receive a majority of funding (91%) from the federal government and state governments, with the remainder coming from private patients and their insurers. Most of the funding (62% of the total recurrent expenditure) is for public-physician salaries. Private physicians providing public services are paid on a per-session or fee-for-service basis. Private hospitals receive most of their funding from insurers (47%), federal government’s rebate on health insurance premiums (21%), and private patients (12%).²³

Public hospitals are organized into Local Hospital Networks (LHNs), of which there were 147 in 2016. These vary in size, depending on the population they serve and the extent to which linking services and specialties on a regional basis is beneficial. In major urban areas, a number of LHNs comprise just one hospital.

State governments fund their public hospitals largely on an activity basis, using diagnosis-related groups. Federal funding for public hospitals includes a base level of funding, with funding for growth set at 45 percent of the “efficient price of services,” determined by the Independent Hospital Pricing Authority. From July 2017, the Commonwealth will fund 45

percent of the efficient growth in these services, capped at 6.5 percent of total growth.²⁴ States are required to cover the remaining cost of services, providing an incentive to keep costs at the efficient price or lower. Small rural hospitals are funded through block grants.²⁵

Mental health care: Mental health services are provided in many ways, including by GPs and specialists, in community-based care, in hospitals (both in- and outpatient, public and private), and in residential care. GPs provide general care and may devise treatment plans of their own or refer patients to specialists. Specialist care and pharmaceuticals are subsidized through the MBS and PBS.

State governments fund and deliver acute mental health and psychiatric care in hospitals, community-based services, and specialized residential care. Public hospital-based care is free to public patients.²⁶

As part of the federal government's response to a recent review by the National Mental Health Commission, funding through Primary Health Networks will be redirected to commission mental health services that meet local needs. The focus will be on suicide prevention and coordinated care.²⁷

Long-term care and social supports: The majority of people living in their own homes with severe or profound limitations in core activities receive informal care (92%). Thirty-eight percent receive only informal assistance, and 54 percent receive a combination of informal and formal assistance. In 2009, 12 percent of Australians were informal caregivers, and around 30 percent of those were the primary caregiver (carer). In 2011–2012, federal government provided AUD3.18 billion (USD2.07 billion) under the income-tested Carer Payment program, and AUD1.75 billion (USD1.14 billion) through the Carer Allowance (not income-tested and offered as a supplement for daily care). Federal government also provides an annual Carer Supplement of AUD480 million (USD312 million) to help with the cost of caring. Recipients of the Carer Allowance who care for a child under the age of 16 receive an annual Child Disability Assistance Payment of AUD1,000 (USD649). There are also a number of respite programs providing further support for caregivers.²⁸

Home care for the elderly is provided through the Commonwealth Home Support Program in all states except Western Australia. Subsidies are income-tested and may require copayments from recipients. Services can include assistance with housework, basic care, physical activity, and nursing, among others. The program began in July 2015 as a consolidation of home and community care, planned respite for caregivers, day therapy, and assistance with care and housing.²⁹ The Western Australian government administers and delivers its Home and Community Care Program with funding support from federal government.

Aged-care, or nursing, homes may be private nonprofit or for-profit, or run by state or local governments. Federally subsidized residential aged-care positions are available to those who are approved by an Aged Care Assessment Team. Hospice care is provided by states through complementary programs funded by the Commonwealth. The Australian government supports both permanent and respite residential aged care. Eligibility is determined through a needs assessment, and permanent care is means-tested.³⁰

In 2013, the federal government, in partnership with states, implemented the pilot phase of the National Disability Insurance Scheme, with full implementation planned for 2019–2020. The scheme provides more-flexible funding support (not means-tested), allowing greater tailoring of services.



What are the key entities for health system governance?

Intergovernmental collaboration and decision-making at the federal level occur through the Council of Australian Governments (COAG), with representation from the prime minister and from the first ministers of each state. The COAG focuses on the highest-priority issues, such as major funding discussions and the interchange of roles and responsibilities between governments. The COAG Health Council is responsible for more-detailed policy issues and is supported by the Australian Health Ministers' Advisory Council (www.coaghealthcouncil.gov.au/).

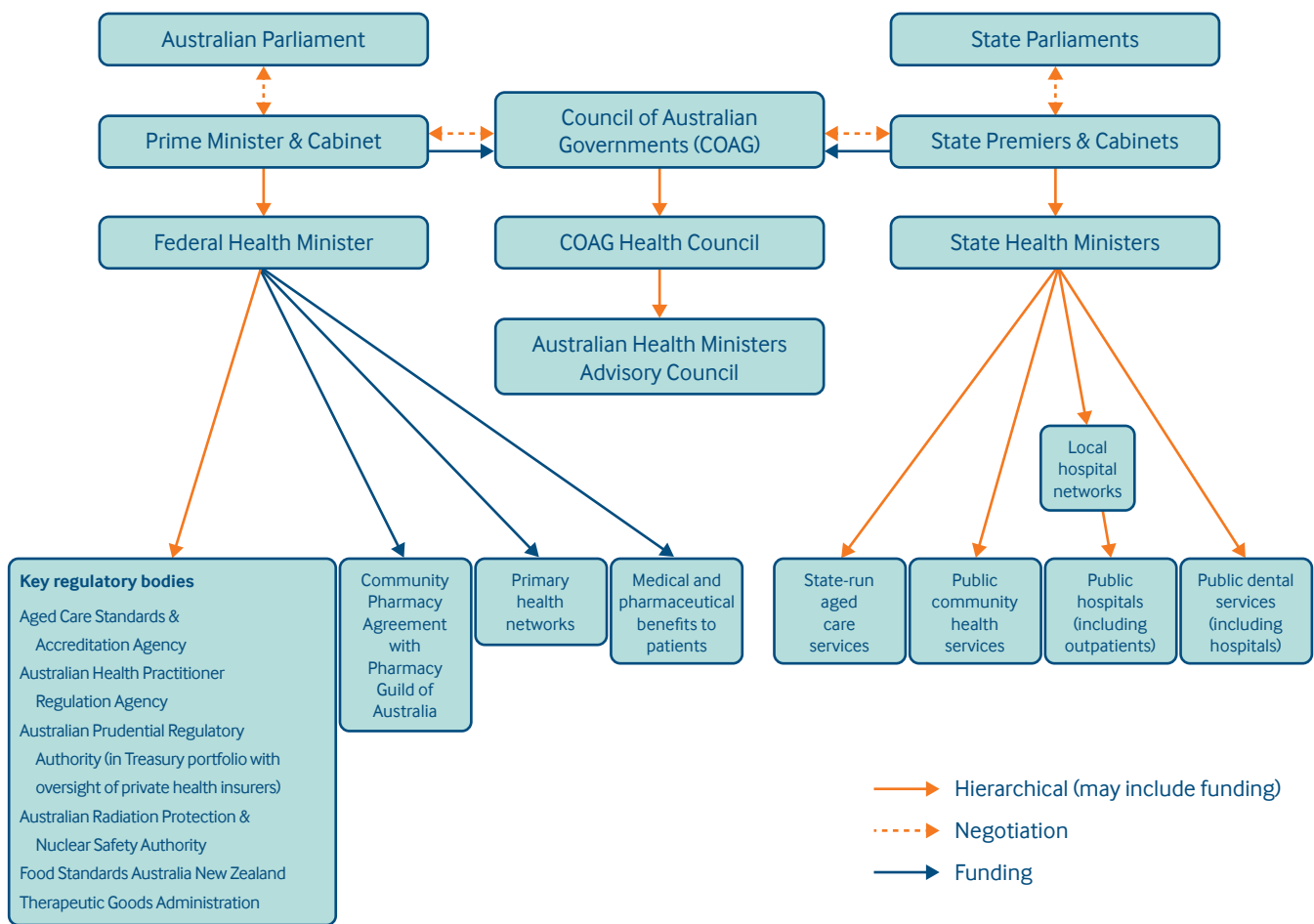
The federal Department of Health oversees national policies and programs such as the MBS and PBS. Payments through these schemes are administered by the Department of Human Services. The PBAC provides advice to the Minister for Health on the cost-effectiveness of new pharmaceuticals (but not routinely on delisting).

Several national agencies and the state governments are responsible for the quality and safety of care (see below). The Australian Institute of Health and Welfare and the Australian Bureau of Statistics (ABS) are the major providers of health data.

Regulatory oversight is provided by a number of agencies, such as the Therapeutic Goods Administration, which oversees supply, imports, exports, manufacturing, and advertisement; the Australian Health Practitioner Regulation Agency, which ensures registration and accreditation of the workforce in partnership with National Boards; and the Australian Prudential Regulation Authority, for private health insurance. The Australian Competition and Consumer Commission promotes competition among private health insurers. Beginning in July 2016, the Australian eHealth Commission will take over responsibility from the National eHealth Transition Authority for matters relating to electronic health data.

The state governments operate their own departments of health and have devolved the management of hospitals to the LHNs. The LHNs are responsible for working collaboratively with PHNs. There are patient–consumer organizations and groups operating at the national and the state level.

Organization of the Health System in Australia



Source: L. Glover, 2015.



What are the major strategies to ensure quality of care?

The overarching strategy for ensuring quality of care is captured in the National Healthcare Agreement of the COAG (2012). The agreement sets out the common objective of Australian governments in providing health care—improving outcomes for all and the sustainability of the system—and the performance indicators and benchmarks on which progress is assessed. It also sets out national-priority policy directions, programs, and areas for reform, such as that of major chronic diseases and their risk factors. Indicators and benchmarks in the agreement address issues of quality from primary to tertiary care and include disease-specific targets of high priority, as well as general benchmarks.

The Australian Commission on Safety and Quality in Health Care (ACSQH) is the main body responsible for safety and quality improvement in health care. The ACSQH has developed service standards that have been endorsed by health ministers. These include standards for conducting patient surveys, which must be met by hospitals and day surgery centers to ensure accreditation. The ABS, the national government statistical body, also undertakes an annual patient experience survey.

The Australian Council on Healthcare Standards is the (nongovernment) agency authorized to accredit provider institutions. States license and register private hospitals and the health workforce, legislate on the operation of public hospitals, and work collaboratively through a National Registration and Accreditation Scheme to facilitate workforce mobility across jurisdictions while maintaining patient protections.

The Royal Australian College of General Practitioners has responsibility for accrediting GPs. The MBS includes financial incentives such as the PIP, and approximately 85 percent of GPs are accredited. To be eligible for government subsidies, aged-care services must be accredited by the government-owned Aged Care Standards and Accreditation Agency.

There are a number of disease and device registries. Government-funded registries are housed in universities and nongovernmental organizations, as well as within state governments. The ACSQH has developed a national framework to support consistent registries.

The National Health Performance Authority reports on the comparable performance of LHNs, public and private hospitals, and other key health service providers. The reporting framework, agreed to by the COAG, includes measures of equity, effectiveness, and efficiency.

The federal government has regulatory oversight of quarantine, blood supply, pharmaceuticals, and therapeutic goods and appliances.³¹ In addition, there are a number of national bodies that promote quality and safety of care through evidence-based clinical guidelines and best-practice advice. They include the National Health and Medical Research Council and Cancer Australia.



What is being done to reduce disparities?

The most prominent disparities in health outcomes are between the Aboriginal and Torres Strait Islander population and the rest of Australia's population; these are widely acknowledged as unacceptable. In 2008, the COAG agreed to set a target of closing the gap in life expectancy by 2031. Progress toward this target is not on track, with the gap currently at 10.6 years for males and 9.5 for females. From 2005–2007 to 2010–2012 there was a very small reduction of 0.8 years for males and 0.1 years for females.³²

Disparities between major urban centers and rural and remote regions, and across socioeconomic groups, are also major challenges. The federal government provides incentives to encourage GPs and other health workers to work in rural and remote areas, where it can be very difficult to attract a sufficient number of practitioners. This challenge is also addressed, to an extent, through the use of telemedicine. Since 1999, the Australian government has funded the Public Health Information Development Unit (www.phidu.torrens.edu.au) to publish small-area data showing disparities in access to health services and in health outcomes on a geographic and socioeconomic basis.

What is being done to promote delivery system integration and care coordination?

Approaches to improving integration and care coordination include the PIP, which provides a financial incentive to providers for the development of care plans for patients with certain conditions, such as asthma, diabetes, and mental health needs. The PHNs were established in July 2015 with the objective of improving coordinated care, as well as the efficiency and effectiveness of care for those at risk of poor health outcomes. These networks are funded through grants from the federal government and will work directly with primary care providers, health care specialists, and LHNs. Care also may be coordinated by Aboriginal health and community health services.

What is the status of electronic health records?

The Australian Digital Health Agency, established in July 2016, has national responsibility for digital health strategy. An interoperable national e-health program based on personally controlled unique identifiers is now in operation. Around 4 million patients and more than 8,900 providers, two-thirds of whom are in primary care, are registered.³³ The record supports prescription information, medical notes, referrals, and diagnostic imaging reports. Patients are also able to add information about allergies, adverse reactions, and their wishes for their health care in the event that they are too unwell to communicate.

How are costs contained?

The major drivers of cost growth are the MBS and PBS. The federal government regularly considers opportunities to reduce spending growth in the MBS through its annual budget process and has established an expert panel to undertake a review of the entire schedule and to report by the end of 2016.

The federal government influences the cost of the PBS by making determinations about which pharmaceuticals to list on the scheme and by negotiating the price with suppliers. It also provides funds to pharmacies to dispense medicines subsidized through the PBS and to support professional programs and the wholesale supply of medicines. This arrangement is implemented through the current Community Pharmacy Agreement (the Community Pharmacy Agreements were instituted in 1991 and are subject to renegotiation every five years). The Sixth Community Pharmacy Agreement, which began in July 2015, supports AUD6.6 billion (USD4.29 billion) in savings through supply chain efficiencies.³⁴

Hospital funding is set through policy decisions by the federal government, with states required to manage funding within their budgets. Beyond these measures, the major control is through the capacity constraints of the health system, such as workforce supply.

What major innovations and reforms have been introduced?

In 2016, the federal government announced that it will implement “health care homes” for the 20 percent of patients with multiple chronic conditions who are most in need of support. Patients will enroll with a GP, who will be paid a bundled payment for their care. The first of these patients are due to begin treatment in a health care home by July 2017.

The federal government has committed to doubling its investment in the public dental program to AUD5.0 billion (USD3.25). It is estimated that the Child and Adult Public Dental Scheme, implemented by states and territories, will help more than 10 million Australians, providing coverage for the 5.3 million children under age 18 and some 5 million low-income adults.

Notes

1. Department of the Prime Minister and Cabinet, Australian Government, *Reform of the Federation White Paper: Roles and Responsibilities in Health. Issues Paper 3* (DPMC, 2015).
2. Australian Institute of Health and Welfare, Australian Government, *Health Expenditure Australia 2014–15* (AIHW, 2016).
3. Australian Institute of Health and Welfare, Australian Government, *Australia's Health 2014* (AIHW, 2014).
4. Department of Human Services, Australian Government (2015), <http://www.humanservices.gov.au/>; accessed Nov. 16, 2015.
5. Please note that, throughout this profile, all figures in USD were converted from AUD at a rate of about AUD1.48 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2016) for Australia.
6. The Commonwealth of Australia, *Budget Paper No. 1: Budget Strategy and Outlook 2013–14* (Commonwealth of Australia, 2013), http://www.budget.gov.au/2013-14/content/bp1/download/bp1_consolidated.pdf; accessed Dec. 9, 2015.
7. Private Health Insurance Ombudsman, Australian Government, *What Is Covered by Private Health Insurance?* (PHIO, 2015), <http://www.privatehealth.gov.au/healthinsurance/whatiscovered/privatehealth.htm>; accessed Nov. 16, 2015.
8. Australian Prudential Regulation Authority, Australian Government, *Statistics: Private Health Insurance Quarterly Statistics*, June 2016 (APRA, 2016).
9. Australian Institute of Health and Welfare, Australian Government, "Health Expenditure Australia 2013–14" (AIHW, 2015).
10. Australian Bureau of Statistics, Australian Government, *Australian Health Survey: Health Service Usage and Health Related Actions, 2011–12*, cat no. 4364.0.55.002 (ABS, 2013).
11. Department of Human Services, Australian Government (2015), <http://www.humanservices.gov.au/>; accessed Nov. 16, 2015.
12. National Mental Health Commission, Australian Government, *Contributing Lives, Thriving Communities: Report of the National Review of Mental Health Programmes and Services* (NMHC, 2014).
13. Australian Institute of Health and Welfare, Australian Government, "Health Expenditure Australia 2013–14" (AIHW, 2015).
14. Department of Health, Australian Government, *General Practice Workforce Statistics* (DH, 2015), <http://www.health.gov.au/internet/main/publishing.nsf/content/General+Practice+Statistics-1>; accessed Aug. 12, 2015.
15. Department of Health, Australian Government, www.pbs.gov.au; accessed Aug. 22, 2016.
16. Australian Institute of Health and Welfare, Australian Government, *National Health Workforce Data Set: Medical Practitioners 2015*, table 1, <http://www.aihw.gov.au/workforce/medical/how-many-medical-practitioners/>.
17. Department of Health, Australian Government, *General Practice Workforce Statistics* (DH, 2015), [http://www.health.gov.au/internet/main/publishing.nsf/content/F210D973E08C0193CA257BF0001B5F1F/\\$File/GP Workforce Statistics 2013-14 PUBLIC Web version.pdf](http://www.health.gov.au/internet/main/publishing.nsf/content/F210D973E08C0193CA257BF0001B5F1F/$File/GP+Workforce+Statistics+2013-14+PUBLIC+Web+version.pdf); accessed Aug. 12, 2015; and Department of Human Services, Australian Government (2015), <http://www.humanservices.gov.au/>; accessed Nov. 16, 2015.
18. Australian National Audit Office, *Audit Report No. 5 2010–11. Performance Audit: Practice Incentives Program* (ANAO, 2010).
19. Australian Institute of Health and Welfare, Australian Government, *National Health Workforce Data Set: Nursing and Midwifery 2015*, overview table 10, <http://www.aihw.gov.au/workforce/nursing-and-midwifery/additional/>.
20. Health Workforce Australia, Australian Government (HWA, 2015), <http://data.hwa.gov.au/webapi/jsf/tableView/tableView.xhtml>; accessed Sept. 6, 2015.
21. Australian Institute of Health and Welfare, Australian Government, *National Health Workforce Data Set: Medical Practitioners 2015*, supplementary table 26.
22. Australian Institute of Health and Welfare, Australian Government, *Australia's Hospitals 2014–15 At a Glance* (AIHW, 2014); and Australian Institute of Health and Welfare, Australian Government, *Hospital Resources 2014–15: Australian Hospital Statistics* (AIHW, 2016).
23. Australian Institute of Health and Welfare, Australian Government, *Hospital Resources 2014–15: Australian Hospital Statistics* (AIHW, 2016).
24. Council of Australian Governments, <http://www.coag.gov.au/sites/default/files/Heads%20of%20Agreement%20between%20the%20Commonwealth%20and%20the%20States%20on%20Public%20Hospital%20Funding%20-%202015%20April%202016.pdf>; accessed Aug. 22, 2016.
25. Independent Hospital Pricing Authority, *National Efficient Price Determination 2015–16* (IHPA, 2015).
26. Australian Institute of Health and Welfare, Australian Government, *Mental Health Services in Australia* (AIHW, 2015), <https://mhsa.aihw.gov.au/home/>; accessed Nov. 18, 2015.
27. Department of Health, Australian Government Response to Contributing Lives, *Thriving Communities—Review of Mental Health Programmes and Services* (Commonwealth of Australia, 2015).
28. Australian Institute of Health and Welfare, Australian Government, "Australia's Welfare" (AIHW, 2013).

29. Department of Social Services (DSS, 2015), *Commonwealth Home Support Programme*, <https://www.dss.gov.au/our-responsibilities/ageing-and-aged-care/aged-care-reform/commonwealth-home-support-programme#03>; accessed Sept. 6, 2015.
30. Australian Institute of Health and Welfare, Australian Government, *Aged Care in Australia* (AIHW, 2015), <http://www.aihw.gov.au/aged-care/residential-and-community-2011-12/aged-care-in-australia/>; accessed Nov. 18, 2015.
31. Australian Institute of Health and Welfare, Australian Government, *Australia's Health 2014* (AIHW, 2014).
32. Department of the Prime Minister and Cabinet, *Closing the Gap: Prime Minister's Report*, "Healthy Lives," <http://closingthegap.dpmc.gov.au/chapter-05/index.html/>; accessed Oct. 2, 2016.
33. Department of Health, <https://myhealthrecord.gov.au/internet/mhr/publishing.nsf/Content/news-002>; accessed Aug. 28, 2016.
34. S. Ley, "Pharmaceutical Benefits Scheme to Be Reformed," media release (Minister for Health, 2015), [https://www.health.gov.au/internet/ministers/publishing.nsf/Content/FDA6A9682797EDD7CA257E52001F423C/\\$File/SL063.pdf](https://www.health.gov.au/internet/ministers/publishing.nsf/Content/FDA6A9682797EDD7CA257E52001F423C/$File/SL063.pdf); accessed Sept. 6, 2015.

The Canadian Health Care System

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What is the role of government?

Provinces and territories in Canada have primary responsibility for organizing and delivering health services and supervising providers. Many have established regional health authorities that plan and deliver publicly funded services locally. Generally, those authorities are responsible for the funding and delivery of hospital, community, and long-term care, as well as mental and public health services. The federal government cofinances provincial and territorial programs, which must adhere to the Canada Health Act (1985), which in turn sets standards for “medically necessary” hospital, diagnostic, and physician services.¹ The act states that to be eligible to receive full federal cash contributions for health care, each provincial health care insurance plan needs to be: publicly administered, comprehensive in coverage, universal, portable across provinces, and accessible (for example, without user fees).

The federal government also regulates the safety and efficacy of medical devices, pharmaceuticals, and natural health products; funds health research; administers a range of services for certain populations, including First Nations, Inuit, members of the Canadian Armed Forces, some veterans, resettled refugees and some refugee claimants, and inmates in federal penitentiaries; and administers several public health functions.



Who is covered and how is insurance financed?

Publicly financed health care: Total and publicly funded health expenditures were forecast to account for an estimated 11.1 percent and 8.0 percent of GDP, respectively, in 2016; by that measure, 69.8 percent of total health spending comes from public sources.² The provinces and territories administer their own universal health insurance programs, covering all provincial and territorial residents in accordance with their own residency requirements.³ Temporary legal visitors, undocumented immigrants, those who stay in Canada beyond the duration of a legal permit, and those who enter the country “illegally,” are not covered by any federal or provincial program, although provinces and territories provide some limited services.

The main funding sources are general provincial and territorial spending, which was forecast to constitute 93 percent of public health spending in 2016.⁴ The federal government contributes cash funding to the provinces and territories on a per capita basis through the Canada Health Transfer, which will total an estimated CAD36 billion (USD28.8 billion) in 2016–2017, accounting for an estimated 24 percent of total provincial and territorial health expenditures.⁵

Private health insurance: Private insurance, held by about two-thirds of Canadians, covers services excluded from public reimbursement, such as vision and dental care, prescription drugs, rehabilitation services, home care, and private rooms in hospitals. In 2014, approximately 94 percent of premiums for private health plans were paid through employers, unions, or other organizations under a group contract or uninsured contract (by which a plan sponsor provides benefits to a group outside of an insurance contract).⁶ In 2014, private insurance accounted for approximately 12 percent of total health spending.⁷ The majority of insurers are for-profit.



What is covered under the mandated benefit package?

Services: To qualify for federal financial contributions under the Canada Health Transfer, provincial and territorial insurance plans must provide first-dollar coverage of medically necessary physician, diagnostic, and hospital services (including inpatient prescription drugs) for all eligible residents. There is no nationally defined statutory benefit package; most public coverage decisions are made by provincial and territorial governments in conjunction with the medical profession.

Provincial and territorial governments' insurance plans provide varying levels of additional benefits, such as outpatient prescription drugs, nonphysician mental health care, vision care, dental care, home care, and hospice care. They also provide public health and prevention services (including immunizations) as part of their public programs.

Cost-sharing and out-of-pocket spending: There is no cost-sharing for publicly insured physician, diagnostic, and hospital services. User fees for ambulance services vary considerably across provinces.⁸ All prescription drugs provided in hospitals are covered publicly, with outpatient coverage varying by province or territory. Physicians are not allowed to charge patients prices above the negotiated fee schedule. In 2014, out-of-pocket payments represented about 14 percent of total health spending, going mainly toward prescription drugs (21%), nonhospital institutions, mainly long-term care homes (22%), dental care (16%), vision care (9%), and over-the-counter medications (10%).⁹

Safety nets: Cost-sharing exemptions for noninsured services such as prescription drugs vary among provinces and territories, and there are no caps on out-of-pocket spending. For example, Ontario administers a universal prescription drug program for seniors and social assistance recipients¹⁰ that includes copayments and deductibles.¹¹ There are no caps on out-of-pocket spending. However, the federal Medical Expense Tax Credit supports tax credits for individuals whose medical expenses, for themselves or their dependents, are significant.^{12,13}



How is the delivery system organized and financed?

Primary care: In 2015, there were 2.28 practicing physicians per 1,000 population, about half of whom were general practitioners, or GPs (1.15 per 1,000 population), and the rest specialists (1.13 per 1,000 population).¹⁴ Primary care physicians act largely as gatekeepers, and many provinces pay lower fees to specialists for non-referred consultations. Most physicians are self-employed in private practices and paid fee-for-service, although there has been a movement toward group practice and alternative forms of payment, such as capitation. In 2014–2015, fee-for-service payments made up 45 percent of payments to GPs in Ontario, compared with 68 percent in Quebec and 84 percent in British Columbia.¹⁵ In 2014, 46 percent of GPs reported to work in a group practice, 19 percent in an interprofessional practice, and 15 percent in a solo practice.¹⁶

Patients have free choice of primary care doctor. The requirement for patient registration varies.¹⁷ Clinical fee-for-service payments to primary care physicians in Canada averaged CAD271,417 (USD217,134) in 2014–2015.¹⁸ In several provinces, networks of GPs work together and share resources, with variations across provinces in the composition and size of teams.

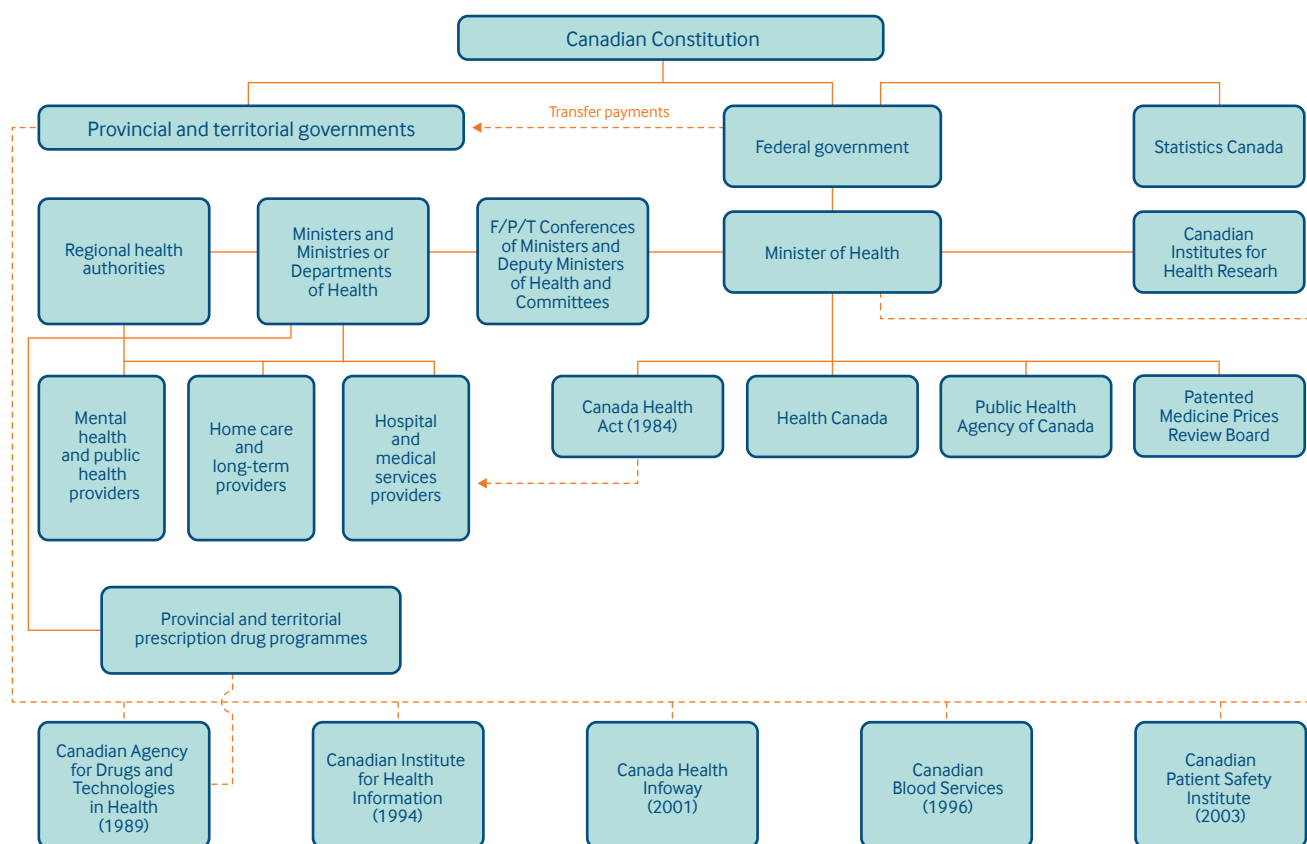
Provincial and territorial ministries of health negotiate physician fee schedules (for primary and specialist care) with provincial and territorial medical associations. In some provinces, such as British Columbia and Ontario, payment incentives have been linked to performance.¹⁹

Outpatient specialist care: The majority of specialist care is provided in hospitals, although there is a trend toward providing services in private nonhospital facilities. Specialists are mostly self-employed and paid fee-for-service, although there is variation across provinces.²⁰ Specialists in Canada received an average of CAD370,091 (USD296,073) annually in clinical fee-for-service payments in 2014–2015.²¹ In most provinces, specialists have the same fee schedule as primary care physicians. In 2014, 65 percent of specialists reported to work in a hospital, compared with 24 percent in a private office or clinic.²² Patients can choose, and have direct access to, a specialist, but it is common for GPs to refer patients to specialty care. Specialists who work in the public system are not permitted to receive payment from private patients for publicly insured services. There are few formal multispecialty clinics.

Administrative mechanisms for paying primary care doctors and specialists: The majority of physicians and specialists bill provincial governments directly, although some are paid a salary by a hospital or facility. There are no direct payments from patients to physicians; there is no cost-sharing, although patients may be required to pay for services that are not medically necessary.²³

After-hours care: After-hours care is provided generally by physician-led (and mainly privately owned) walk-in clinics and by hospital emergency rooms. In most provinces and regions, a free telephone service (“telehealth”) is available 24 hours a day for health advice from a registered nurse. Traditionally, primary care physicians were not required to provide after-hours care, although many of the government-enabled group practice arrangements have requirements or financial

Organization of the Health System in Canada



Note: Solid lines represent direct relationships of accountability while dotted lines indicate more indirect or arm's length relationships.

Source: Adapted from G. P. Marchildon, "Canada: Health System Review," *Health Systems in Transition*, vol. 15, no. 1, 2013, p. 22.

incentives for providing after-hours care to registered patients.²⁴ In 2015, 48 percent of primary care physicians in Canada (67% in Ontario) reported having arrangements for patients to see a doctor or nurse after hours.²⁵

Hospitals: Hospitals are a mix of public and private, predominantly not-for-profit, organizations, often managed locally by regional authorities or hospital boards representing the community. In provinces with regional health authorities, many hospitals are publicly owned,²⁶ whereas in other provinces, such as Ontario, they are predominantly private nonprofit corporations.²⁷ There are no data on the number of private for-profit clinics (which are mostly diagnostic and surgical).²⁸

Hospitals in Canada generally operate under annual global budgets, negotiated with the provincial or territorial ministry of health or regional health authority. However, several provinces, including Ontario, Alberta, and British Columbia, have considered introducing activity-based funding for hospitals.²⁹ Hospital-based physicians generally are not hospital employees and are paid fee-for-service directly.

Mental health care: There is universal coverage for physician-provided mental health care, along with a fragmented system of allied services. Hospital mental health care is provided in specialty psychiatric hospitals and in general hospitals with mental health beds. The provinces and territories all provide a range of community mental health and addiction services including case management, help for families and caregivers, community-based crisis services, and supportive housing^{30,31} Psychologists may work privately and are paid out-of-pocket or through private insurance, or under salary in publicly funded organizations. Mental health has not been formally integrated into primary care; any coordination or colocation of mental health services with primary care is unique to its particular practice. In Ontario, an inter-sectoral mental health strategy has been in place since 2011³² and was expanded in 2014³³ to better integrate mental health care into primary care.

Long-term care and social supports: Long-term care and end-of-life care provided in nonhospital facilities and in the community are not considered insured services under the Canada Health Act.³⁴ All provinces and territories fund services, but coverage varies among and within them. All provinces provide some nursing home care and some combination of case management and nursing care for home care clients, but there is considerable variation when it comes to other services, including medical equipment, supplies, and home support, and many jurisdictions require client contributions.³⁵ About half of the provinces and territories provide some home care without means-testing, but access may depend both on assessed priority and on availability within capped budgets.³⁶

Eligibility criteria for home and institutional long-term care services generally include a needs assessment based on health status and functional impairment. Some provinces have established minimum residency periods as an eligibility condition for facility admission. Spending on nonhospital institutions, of which the majority are long-term care facilities, accounted for just under 11 percent of total health expenditure in 2015, with financing mostly from public sources (70%).³⁷

A mix of private for-profit (44%), private not-for-profit (30%), and public facilities (27%) provide facility-based long-term care.³⁸ Public funding of home care is provided either through provincial or territorial government contracts with agencies that deliver services or through government stipends to patients to purchase their own services.³⁹

Provinces and territories are responsible for delivering palliative and end-of-life care in hospitals, where the majority of such costs occur. But many provide some coverage for services outside those settings, such as doctors, nurses, and drug coverage in hospices, in nursing facilities, and at home.

Support for informal caregivers (estimated to provide 66% to 84% of care to the elderly) varies by province and territory.⁴⁰ In Ontario, for example, the Family Caregiver Leave Bill offers job protection to caregivers. There are also some federal programs, including the Family Caregiver Tax Credit and the Employment Insurance Compassionate Care Benefit.⁴¹



What are the key entities for health system governance?

Because of the high level of decentralization, provinces have primary jurisdiction over administration and governance of their health systems. The federal ministry of health, Health Canada, plays a role in the following: promoting overall health; funding and delivery of certain health services for First Nations and Inuit; food and drug safety; and medical device and technology review. The Public Health Agency of Canada is responsible for public health, emergency preparedness and response, and infectious and chronic disease control and prevention.

At the national level, several intergovernmental nonprofit organizations aim to improve governance by monitoring and reporting on health system performance; disseminating best practices in patient safety (the Canadian Patient Safety Institute); providing information to the public on health and health care and standardizing health data collection (the Canadian Institute for Health Information); and providing funding and support for provincial health information systems (Canada Health Infoway). The Canadian Agency for Drugs and Technologies in Health oversees the national health technology assessment process, which produces information about the clinical effectiveness, cost-effectiveness, and broader impact of drugs, medical technologies, and health systems. The agency's Common Drug Review reviews the clinical effectiveness and cost-effectiveness of drugs and provides common, nonbinding formulary recommendations to the publicly funded provincial drug plans (except in Quebec) to support greater consistency in access and evidence-based resource allocation.

Nongovernmental organizations with important roles in system governance include professional organizations such as the Canadian Medical Association; provincial regulatory colleges, which are responsible for licensing professions and developing and enforcing standards of practice; and Accreditation Canada (see below). Most providers are self-governing under provincial and territorial law; they are registered with professional associations that ensure that education, training, and quality-of-care standards are met. The professional associations for physicians are also responsible for negotiating fee schedules with the provincial ministries of health. Most provinces have an ombudsperson providing patient advocacy.



What are the major strategies to ensure quality of care?

Many provinces have agencies responsible for producing health care system reports and for monitoring system performance, and many quality improvement initiatives take place at the provincial and the territorial level.⁴² The use of financial incentives to improve quality is limited. At the physician level, these have had little demonstrable effect on quality to date.⁴³ Professional revalidation for physicians, including requirements for continuing education and peer review, varies across provinces.

The federally funded Canadian Patient Safety Institute promotes best practices and develops strategies, standards, and tools. The Optimal Use Projects program, operated by the Canadian Agency for Drugs and Technologies in Health, provides recommendations (though not formal clinical guidelines) to providers and consumers to encourage the appropriate prescribing, purchasing, and use of medications. The Canadian Institute for Health Information produces regular public reports on health system performance, including indicators of hospital and long-term care performance. To date, there is no information available on doctors' performance. The federally funded Canadian Foundation for Healthcare Improvement works with the provinces and territories to implement performance improvement initiatives, recently, for example, to reduce inappropriate prescribing for seniors in long-term care facilities.⁴⁴ Accreditation Canada—a not-for-profit organization—provides noncompulsory accreditation services to about 1,200 health care organizations across Canada, including regional health authorities, hospitals, long-term care facilities, and community organizations.

Provincial cancer registries feed data to the Canadian Cancer Registry, a national administrative survey that tracks cancer incidence. There is no national patient survey, although a standardized acute-care hospital inpatient survey developed by the Canadian Institute for Health Information has been implemented in several provinces. Each province has its own strategies and programs to address chronic disease (see below). The provinces' and territories' premiers established the Health Care Innovation Work Group in 2012 to improve quality, for example, to promote guidelines for treating heart disease and diabetes and to reduce costs.⁴⁵



What is being done to reduce disparities?

The Public Health Agency of Canada includes in its mandate reporting on health disparities, and the Canadian Institute for Health Information also reports on disparities in health care and health outcomes, with a focus on lower-income Canadians.⁴⁶ No formal and periodic process exists to measure disparities; however, several provincial or territorial governments have departments and agencies devoted to addressing population health and health inequities.

Aboriginal health is a concern for federal as well as provincial and territorial governments. The 2016 federal budget⁴⁷ included CAD8.4 billion (USD6.7 billion) over a five-year period earmarked for services for indigenous people, including education, environment (e.g., water quality), and health and social services. In Ontario, a new strategy to improve the health of indigenous people was launched in 2016, with emphasis on investments in primary care, cultural competency training for health care providers, access to fresh fruit and vegetables, and mental health services for youth for First Nations.⁴⁸ In 2008, the Truth and Reconciliation Commission was established to collect stories regarding the events and effects of the Indian Residential School legacy. In 2015, the commission ended its mandate, releasing a series of calls to action including several to address health disparities affecting Aboriginal communities.⁴⁹



What is being done to promote delivery system integration and care coordination?

Provinces and territories have introduced several initiatives to improve integration and coordination of care for chronically ill patients with complex needs. These include Divisions of Family Practice (British Columbia),⁵⁰ the Regulated Health Professions Network (Nova Scotia), and Health Links (Ontario). Also, Ontario has long-standing alternative community-based and multidisciplinary primary care models including Community Health Centres and Aboriginal Health Access Centres. Also in Ontario, a pilot program that bundles payments across different providers is being expanded (from one to six communities) to improve coordination of care for patients as they transition from hospital to the community.^{51,52}

Each province determines its own structure for the coordination of health and social care services.⁵³ In Ontario and Quebec, there is a single ministry responsible for health care that includes long-term and social care, with funding devolving to the regional level.



What is the status of electronic health records?

Uptake of health information technologies has been slowly increasing in recent years. Provinces and territories are responsible for developing their own electronic information systems, with support from Canada Health Infoway; however, there is no national strategy for implementing electronic health records and no national patient identifier. According to Canada Health Infoway, provinces have systems for collecting data electronically for the majority of their populations.⁵⁴ However, interoperability is limited.⁵⁵ In 2014, 42 percent of GPs reported using exclusively electronic records to enter and retrieve patient clinical notes, and 38 percent used a combination of paper and electronic charts.⁵⁶ In the same survey, 87 percent of GPs report that their patients are not able to access their personal health record for any function, and only 6 percent reported that patients can request appointments online.



How are costs contained?

Costs are controlled principally through single-payer purchasing, and increases in real spending mainly reflect government investment decisions or budgetary overruns. Cost-control measures include mandatory global budgets for hospitals and regional health authorities, negotiated fee schedules for providers, drug formularies, and resource restrictions vis-à-vis physicians and nurses (e.g., provincial quotas for students admitted annually), as well as restrictions on new investment in capital and technology. The national health technology assessment process is one of the mechanisms for containing the costs of new technologies (see above).

The federal Patented Medicine Prices Review Board, an independent, quasi-judicial body, regulates the introductory prices of new patented medications. The board regulates “ex-factory” prices but does not have jurisdiction over wholesale or pharmacy prices, or over pharmacists’ professional fees. Since 2010, the Pan-Canadian Pharmaceutical Alliance⁵⁷ has negotiated lower prices for 95 brand-name medications and has set price limits at 18 percent of equivalent brand-name drugs for the 15 most common generics.⁵⁸ Notwithstanding this pan-Canadian collaboration, jurisdiction over prices of generics and control over pricing and purchasing under public drug plans (and, in some cases, pricing under private plans) are held by provinces, leading to some interprovincial variation. The “Choosing Wisely Canada” campaign provides recommendations to governments, providers, and the public on reducing low-value care.⁵⁹



What major innovations and reforms have been introduced?

In June 2016, the federal government introduced legislation that amended the criminal code to allow eligible adults to request medical assistance in dying from a physician or nurse practitioner.⁶⁰

Provincial health system governance: Provinces and territories continue to implement structural reforms to improve efficiency. For example, in August 2016 the new Northwest Territories Health and Social Services Authority became operational, consolidating eight former regional authorities to improve care coordination across health and social services. In June 2016, Ontario announced a proposal to transfer responsibility for the contracting and coordination of home and community care from Community Care Access Centres to the Local Health Integration Networks. The provincial government also announced it will increase the integration of primary care and public health within health regions.⁶²

Notes

1. Canada Health Act, RSC 1985, c. C-6.
2. Canadian Institute for Health Information (CIHI), *National Expenditure Trends 1975–2016* (Canadian Institute for Health Information, 2016).
3. Health Canada, *Canada Health Act Annual Report 2012–2013*, (Minister of Health of Canada, 2013). <http://www.hc-sc.gc.ca/hcs-sss/pubs/cha-lcs/2013-cha-lcs-ar-ra/index-eng.php>.
4. CIHI, *National Expenditure Trends*.
5. Please note that, throughout this profile, all figures in USD were converted from CAD at a rate of about CAD1.25 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2016) for Canada. CIHI, *National Expenditure Trends*; Government of Canada, *Federal Support to Provinces and Territories*, www.fin.gc.ca/fedprov/mtp-end.asp (2015).
6. Canadian Life and Health Insurance Association Inc., *Canadian Life and Health Insurance Facts*. clhia.uberflip.com/i/563156-canadian-life-and-health-insurance-facts, 2015.
7. CIHI, *National Expenditure Trends*.
8. CBC, *Marketplace Blog*, “How Much Are Ambulance Fees in Your Area?” (map), www.cbc.ca/marketplace/blog/map-ambulance-fees; accessed Aug. 26, 2016.
9. CIHI, *National Expenditure Trends*.
10. Ontario Ministry of Health and Long-Term Care, *Ontario’s Drug Plans: How Much Do I Pay?* www.health.gov.on.ca/en/public/programs/drugs/programs/odb/opdp_pay.aspx, 2016; accessed Aug. 23, 2016.
11. Seniors pay a CAD6.11 (USD5.00) copayment per prescription and CAD100 (USD80) annual deductible, but low-income seniors and social assistance recipients are exempt from all cost-sharing except for a CAD2.00 (USD1.60) copayment, which is often waived by pharmacies. In August 2016, the low-income threshold for seniors was increased for the first time since cost-sharing was introduced in Ontario in 1996. The threshold is set at an annual income of less than or equal to CAD19,300 (USD15,440) for single people and less than or equal to CAD32,300 (USD25,840) for couples.
12. Canada Revenue Agency, lines 330 and 331—“Eligible medical expenses you can claim on your return.” www.cra-arc.gc.ca/medical; accessed Aug. 26, 2016.
13. Above 3 percent of income or over \$2,208 (USD1,766), whichever is less.
14. Canadian Institute for Health Information (CIHI), *Supply, Distribution and Migration of Canadian Physicians* (Canadian Institute for Health Information, 2016).
15. CIHI, *National Physician Database, 2014–2015* (Canadian Institute for Health Information, 2016).
16. College of Family Physicians of Canada, Canadian Medical Association, and Royal College of Physicians and Surgeons of Canada, *National Physician Survey, 2014*, <http://nationalphysiciansurvey.ca/>; accessed Aug. 26, 2016.
17. In Ontario, some new primary care teams paid partly by capitation must require patients to register to receive those partial payments; otherwise, registration is not required.
18. CIHI, *National Physician Database*.

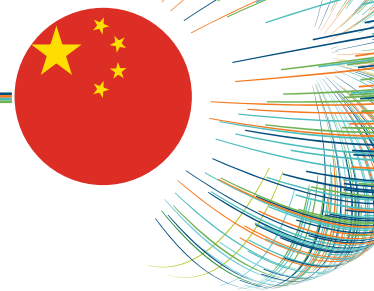
19. Ontario Ministry of Health and Long-Term Care, *Billing & Payment Guide for Family Health Organization (FHO) Physicians* (2014), http://www.health.gov.on.ca/en/pro/programs/ohip/publications/docs/fho_billing_payment_guide_nov2014_en.pdf; M. R. Lavergne, M. R. Law, S. Peterson et al., "A Population-Based Analysis of Incentive Payments to Primary Care Physicians for the Care of Patients with Complex Disease," *Canadian Medical Association Journal*, Oct. 18, 2016 188(15):E375–E383.
20. For example, in Quebec and Ontario, alternative payments made up about 15 percent of total payments to specialists in 2014–2015, compared to 20 percent in British Columbia and 33 percent in Saskatchewan.
21. CIHI, *National Physician Database*.
22. College of Family Physicians of Canada et al., *National Physician Survey*, 2014.
23. For example, physician letters sent to employers when employees are ill.
24. For example, in Ontario, physicians practicing in non-fee-for-service models have to provide sessions during some evenings and weekends. In some models, this amounts to a single three-hour session per week per physician in the group, up to five sessions per week. These physicians are paid a 30 percent bonus for primary care services provided during evenings, weekends, and holidays. Manitoba has implemented QuickCare clinics, staffed by registered nurses and nurse practitioners, to meet health care needs after hours.
25. CIHI, *How Canada Compares: Results for the Commonwealth Fund 2015 International Survey of Primary Care Physicians* (CIHI, 2016).
26. G. P. Marchildon, *Canada: Health System Review* (WHO Regional Office for Europe on Behalf of the European Observatory on Health Systems and Policies, 2013).
27. Ontario Ministry of Health and Long-Term Care, *Hospitals: Questions and Answers*, www.health.gov.on.ca/en/common/system/services/hosp/faq.aspx, 2014.
28. In Ontario, as of May 2014, the government was providing funding to 145 not-for-profit hospital corporations (with 224 facilities and sites) and six private for-profit hospitals.
29. J. M. Sutherland, R. T. Crump, N. Repin et al., *Paying for Hospital Services: A Hard Look at the Options* (C.D. Howe Institute, 2013). J. M. Sutherland, R. T. Crump, and N. Repin, *The Alberta Health Services Patient/Care-Based Funding Model for Long-Term Care: A Review and Analysis* (Centre for Health Services and Policy Research, 2013).
30. P. Goering, D. Wasylenki, and J. Durbin, "Canada's Mental Health System," *International Journal of Law and Psychiatry*, May–Aug. 2000 23(3–4):345–59.
31. Other common community mental health services include Assertive Community Treatment programs and Early Intervention for Psychosis programs. Some of these teams are multidisciplinary and may include nurses and physicians, but generally include social workers and case managers.
32. Government of Ontario, "Open Minds, Healthy Minds: Ontario's Comprehensive Mental Health and Addictions Strategy (2011)," www.health.gov.on.ca/en/common/ministry/publications/reports/mental_health2011/mentalhealth_rep2011.pdf.
33. Government of Ontario, *Open Minds, Healthy Minds: Ontario's Comprehensive Mental Health and Addictions Strategy* (2014), www.health.gov.on.ca/en/public/programs/mentalhealth/docs/open_minds_healthy_minds.pdf.
34. Canada Health Act, RSC 1985, c. C-6.
35. Organisation of Economic Co-operation and Development (OECD), *Long-Term Care* (OECD, 2011).
36. A. Blomquist and C. Busby, *Long-Term Care for the Elderly: Challenges and Policy Options* (C.D. Howe Institute, 2012).
37. CIHI, *National Expenditure Trends*.

38. CIHI, *Residential Long-Term Care Financial Data Tables* (2012), https://www.cihi.ca/web/resource/en/data_tables_ltc_en.xlsx, 2012.
39. For example, British Columbia's Choice in Support for Independent Living program.
40. M. Grignon and N. F. Bernier, *Financing Long-Term Care in Canada* (Institute for Research on Public Policy, 2012).
41. Canada Revenue Agency, *Family Caregiver Amount (FCA)* (2014), www.cra-arc.gc.ca/familycaregiver/; Government of Canada, *El Compassionate Care Benefit—Overview*, www.esdc.gc.ca/en/ei/compassionate/index.page, 2016.
42. Examples include the Saskatchewan Health Quality Council, Health Quality Ontario, the British Columbia Patient Safety & Quality Council, and the New Brunswick Health Council.
43. M. R. Lavergne, M. R. Law, S. Peterson et al., "A Population-Based Analysis of Incentive Payments to Primary Care Physicians for the Care of Patients with Complex Disease," *Canadian Medical Association Journal*, Oct. 18, 2016 188(15):E375–E383; R. Carter, B. Riverin, J.-F. Levesque et al., "The Impact of Primary Care Reform on Health System Performance in Canada: A Systematic Review," *BMC Health Services Research*, July 30, 2016 30(16):324; J. Li, J. Hurley, P. DeCicca et al., "Physician Response to Pay-for-Performance: Evidence from a Natural Experiment," *Health Economics*, Aug. 2014 23(8):962–78.
44. Canadian Foundation for Healthcare Improvement New National Results, "Taking Seniors Off Antipsychotics Shows Dramatic Improvement in Care," press release, <http://www.cfhi-fcass.ca/NewsAndEvents/NewsReleases/NewsItem/2016/05/16/new-national-results-taking-seniors-off-antipsychotics-shows-dramatic-improvement-in-care>; accessed Aug. 26, 2016.
45. Council of the Federation, Health Care Innovation Working Group, <http://www.pmprovinceterritoires.ca/en/initiatives/128-health-care-innovation-working-group>; accessed Aug. 26, 2016.
46. CIHI, *Trends in Income-Related Health Inequalities in Canada* (CIHI, 2015).
47. Government of Canada, *Budget 2016*, www.budget.gc.ca/2016/home-accueil-en.html, 2016.
48. Government of Ontario, "Ontario Launches \$222 Million First Nations Health Action Plan," news release, <https://news.ontario.ca/mohlhc/en/2016/05/ontario-launches-222-million-first-nations-health-action-plan.html>; accessed Aug. 26, 2016.
49. Truth and Reconciliation Commission of Canada, *Calls to Action* (Truth and Reconciliation Commission, 2015).
50. Divisions of Family Practice, *Welcome to the Divisions of Family Practice*, <https://www.divisionsbc.ca/provincial/home>, 2014.
51. Government of Ontario, "Ontario Funds Bundled Care Teams to Improve Patient Experience," news release, news.ontario.ca/mohlhc/en/2015/09/ontario-funds-bundled-care-teams-to-improve-patient-experience.html, 2015.
52. As discussed above, some provinces also have implemented incentives to encourage physicians to provide guideline-based care for chronic disease. In Ontario, for example, Diabetes Education Programs (employing teams of diabetes education nurses and registered dietitians) support individuals and primary care physicians in providing guideline-based diabetes care.
53. In Ontario, for instance, Community Care Access Centres are also responsible for coordinating services for vulnerable populations, particularly seniors and individuals with disabilities, including health and social care services (e.g., supportive housing and meal delivery programs), although this responsibility may be transferred to the Local Health Integration Networks.
54. Canada Health Infoway, *Annual Report, 2013–2014* (Canada Health Infoway, 2014), <https://www.infoway-inforoute.ca/en/component/edocman/resources/i-infoway-i-corporate/annual-reports/1957-annual-report-2013-2014>.

55. K. K. Ogilvie and A. Eggleton, *Time for Transformative Change: A Review of the 2004 Health Accord* (Standing Senate Committee on Social Affairs, Science and Technology, 2012).
56. College of Family Physicians of Canada et al., *National Physician Survey, 2014*.
57. This is a collaboration between provinces' and territories' premiers, as well as the federal government as of 2016.
58. The Council of the Federation, *The Pan-Canadian Pharmaceutical Alliance*, <http://www.pmprovinceterritoires.ca/en/initiatives/358-pan-canadian-pharmaceutical-alliance>; accessed Aug. 26, 2016.
59. Choosing Wisely Canada, *What Is CWC?* (2015), <http://www.choosingwiselycanada.org/about/what-is-cwc/>.
60. Government of Canada, "An Act to Amend the Criminal Code and to Make Related Amendments to Other Acts," (medical assistance in dying), S.C. 2016, c. 3. http://laws-lois.justice.gc.ca/eng/AnnualStatutes/2016_3/FullText.html; accessed Aug. 2016.
61. Northwest Territories Health and Social Services, *Establishment of the Northwest Territories Health and Social Services Authority*, <http://www.hss.gov.nt.ca/news/establishment-northwest-territories-health-and-social-services-authority>; accessed Aug. 26, 2016.
62. Government of Ontario, *Patients First: Reporting Back on the Proposal to Strengthen Patient-Centred Health Care in Ontario*, http://health.gov.on.ca/en/news/bulletin/2016/docs/patients_first_report_back_20160602.pdf; accessed Aug. 26, 2016.

The Chinese Health Care System

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What is the role of government?

In China, the central government has overall responsibility for national health legislation, policy, and administration. It is guided by the principle that every citizen is entitled to receive basic health care services, with local governments—provinces, prefectures, cities, counties, and towns—responsible for providing them, with variations for local circumstances. Health authorities include the National Health and Family Planning Commission and the local Health and Family Planning Commissions, which have primary responsibility for organizing and delivering health care and supervising providers (mainly hospitals). Health authorities at the prefecture, county, and town levels have limited flexibility in carrying out provincial health policies.



Who is covered and how is insurance financed?

Generally, health insurance is publicly provided and financed by local governments.

Publicly financed health insurance: In 2014, China spent approximately 5.6 percent of GDP (CNY3,531 billion, or USD992 billion¹) on health care, with 30 percent financed by the central government and local governments and 38 percent by publicly financed health insurance, private health insurance, or social health donations.² There were three main types of publicly financed insurance: 1) urban employment-based basic medical insurance (launched in 1998); 2) urban resident basic medical insurance (launched in 2009); and 3) the “new cooperative medical scheme” for rural residents (launched in 2003).

Urban employment-based basic medical insurance is financed mainly from employee and employer payroll taxes, with minimal government funding. Participation is mandatory for employees in urban areas; the insured population was 283.3 million in 2014.³ Employees’ nonemployed family members are not covered. Urban resident basic medical insurance, which is voluntary at the household level, covered 314.5 million self-employed individuals, children, students, and elderly adults in 2014. Both urban employment-based and urban resident basic medical insurance are administered by the Ministry of Human Resources and Social Security and run by local authorities. The rural new cooperative medical scheme, administered mainly by the National Health and Family Planning Commission and run by local authorities, is also voluntary at the household level and covered a rural population of 736 million in 2014, representing a coverage rate of 98.9 percent of rural residents.

Urban resident basic insurance and the new cooperative medical scheme are financed mainly by government, with minimal individual premium contributions. In regions where the economy is less developed, the central government provides the largest share of subsidies, with provincial and prefectural governments accounting for the rest. In more-developed provinces, most subsidies are locally provided (mainly by provincial government).

The financing strategies and coverage benefits of urban resident basic insurance and the rural cooperative medical scheme are similar. In 2016, China’s central government, the State Council, announced that it will merge the two, with the expectation that doing so will expand the risk pool and reduce administrative costs.⁴ Each province was required to make merging arrangements by June 2016; prefectures and cities need to have developed implementation plans by December 2016.

Coverage by publicly financed health insurance is near-universal—exceeding 95 percent of the population since 2011.⁵ The few permanent foreign residents are entitled to the same coverage benefits as citizens. Undocumented immigrants (there are very few) and visitors are not covered by publicly financed health insurance.

Private health insurance: Complementary private health insurance is purchased to cover deductibles, copayments, and other cost-sharing, as well as coverage gaps, in publicly financed health insurance, which serves as the primary coverage source for most people. Private health insurance is also called commercial health insurance, because it is provided mainly by for-profit commercial insurance companies. The total of collected private health insurance premiums increased from CNY67.7 billion (USD19.0 billion) in 2010 to CNY241.0 billion (USD67.7 billion) in 2015, representing an annual growth rate of 28.9 percent.⁶ In 2015, private health insurance premiums accounted for 9.9 percent of total premiums collected in the entire insurance industry, or 5.9 percent of total health expenditures.⁷

Purchased primarily by higher-income individuals and by employers for their workers, private insurance often enables people to receive a better quality of care and higher reimbursement, as some health services are very expensive or are not covered by public insurance. There are currently no statistics on the percentage of the population with private coverage, but the Chinese government is encouraging development of this market. Growth in private coverage has been rapid, with some foreign insurance companies recently entering the market.



What is covered?

Services: Publicly financed insurance covers primary, specialist, emergency department, hospital, and mental health care, as well as prescription drugs and traditional medicine. A few dental services (e.g., tooth extraction, but not cleaning) and optometry services are covered, but mostly such services are paid for completely out-of-pocket. Home care and hospice care are often not included either. Local health authorities define the benefit packages. Preventive services such as immunization and disease screening are included in a separate public-health benefit package funded by central and local governments; every resident is entitled to these without copayments or deductibles. Coverage is person-specific; there are no family or household benefit arrangements.

Cost-sharing and out-of-pocket spending: Inpatient and outpatient care, including prescription drugs, are subject to different deductibles, copayments, and reimbursement ceilings. There are no annual caps on out-of-pocket spending. In 2014, out-of-pocket spending per capita was CNY1,306 (USD367) and CNY754 (USD212) in urban and rural areas, respectively—representing about 32 percent of total health expenditures.⁸

Most out-of-pocket spending is for prescription drugs. Reimbursement ceilings are significantly lower for outpatient care than for inpatient care. For example, in 2016, ceilings were CNY3,000 (USD843) for outpatient care in primary care facilities, CNY10,000 (USD2,809) for outpatient care in secondary/tertiary hospitals, and CNY180,000 (USD50,562) for outpatient care in the rural new cooperative medical scheme in Beijing.

Provider networks are specific to the insurance scheme, normally at the prefecture level for urban employment-based basic health insurance and urban resident basic health insurance (which may share the same network, but with different benefits) and at the county level for the new cooperative medical scheme. People can use out-of-network health services (even across provinces), but these have higher copayments. There are no universal cost-sharing arrangements, and each risk-pooling unit (network) has its own policies. Cost-sharing in primary care facilities (village clinics, rural township hospitals, and urban community hospitals) is also different from that in secondary or tertiary hospitals, with the lower copayments in the former. Secondary and tertiary hospitals are accredited by the local health authorities based on their qualifications, and both provide primary care, outpatient specialists, and inpatient hospital care. Migrant populations face much higher cost-sharing and out-of-pocket spending, since they often use out-of-network care.

Fee schedules for primary and secondary care are regulated by the local health authorities and the Bureaus of Commodity Prices, and it is unlawful for public clinics and hospitals to charge patients above the fee schedules. To encourage nongovernmental investment in health care, in 2014 China began allowing private clinics and hospitals to charge more.⁹

Safety net: For individuals who are not able to afford individual premiums for publicly financed health insurance or who cannot cover out-of-pocket spending (which is not capped), a medical financial assistance program, funded by local governments and social donations, serves as a safety net in both urban and rural areas. In Beijing, individual poverty-level income in 2016 was defined as CNY800 (USD225) per month in both rural and urban areas; poverty levels for other provinces may be lower than in Beijing. Medical financial assistance programs prioritize inpatient care expenses. Funds are used mainly to pay for individual deductibles, copayments, and medical spending exceeding annual caps, as well as

individual premiums for publicly financed health insurance. In 2014, 67.2 million people (approximately 5% of the Chinese population) received such assistance for health insurance enrollment, and 24.0 million people (1.8% of the population) received funds for direct health expenses.¹⁰

There are other financial assistance programs to help with unreimbursed emergency department and other health expenses. These are funded mostly by local governments.



How is the delivery system organized and financed?

Primary care: Primary care is delivered mainly through village doctors and health workers in rural clinics, general practitioners (GPs) in rural township and urban community hospitals, and medical professionals in secondary and tertiary hospitals. Village doctors, who are not licensed GPs, can work only in village clinics. In 2014, there were 1.06 million village doctors and health workers.¹¹ Although rural patients are encouraged to seek care in village clinics or township hospitals and urban patients in community hospitals—as such providers are associated with lower cost-sharing rates—residents can also see any GP in upper-level hospitals directly.

Registration with a GP is not required and, except for the very few areas that use GPs as gatekeepers, referrals are generally not necessary to see outpatient specialists. In 2014, China had some 173,000 licensed and assistant GPs, representing 6.0 percent of all licensed physicians and assistant physicians.¹² Unlike village doctors and health workers in the village clinics, GPs rarely practice solo or through partnership but instead work in a hospital with nurses and nonphysician clinicians. Village clinics in rural areas receive technical support from township hospitals.

Fee schedules for primary care in government-funded health institutions are regulated by local health authorities and the Bureaus of Commodity Prices. Village doctors and health workers in the village clinics receive income through reimbursement of public health services (e.g., immunizations and chronic disease screening) and clinical services, as well as through markups on prescription drugs and government subsidies. Incomes vary substantially by region.

GPs at hospitals receive a base salary along with activity-based payments (e.g., patient registration fees, surgeries performed). With fee-for-service still the dominant payment mechanism for hospitals (see below), hospital-based physicians have strong financial incentives to induce demand. It is estimated that wages constitute only one-quarter of physician incomes; the rest is thought to be derived from practice activities.

In 2014, 47 percent of outpatient revenues and 38 percent of inpatient revenues were from prescription drugs provided to patients in tertiary hospitals.¹³ Care coordination is generally not incentivized, although it is always encouraged by health authorities.

Outpatient specialist care: Outpatient specialists are employed by and usually work in hospitals, through which they obtain their practice licenses. Although practicing in multiple settings is being introduced and encouraged in China, most specialists practice in one hospital only. They receive compensation in the form of a base salary plus activity-based payments. Patients can usually see outpatient specialists without GP referral and have a choice of specialist through their hospital.

Administrative mechanisms for direct patient payments to providers: Patients pay deductibles and copayments to hospitals at the point of service. Hospitals directly bill insurers for the covered payment at the same time if the payment mechanism is fee-for-service or a diagnosis-related group (DRG) system. Hospitals receive annual lump-sum payments under global budgets or capitation.

After-hours care: Because village doctors and health workers often live in the same community as patients, they voluntarily provide some after-hours care when needed. Rural township hospitals and urban secondary and tertiary hospitals have emergency rooms or departments (EDs) where both primary care doctors and specialists are available, minimizing the need for walk-in after-hours care centers. In EDs, nurse triage is not required and there are few other restrictions, so people can simply walk in and register for care at any time. (Urban community hospitals often do not provide after-hours care, given the availability of secondary and tertiary hospitals.) ED use is not substantially more expensive than usual care for patients. Information on patients' emergency visits is not routinely sent to their primary care doctors.

Hospitals: Hospitals can be public or private, nonprofit or for-profit. Most township hospitals and community hospitals are public, but both public and private secondary and tertiary hospitals exist in urban areas. Rural township hospitals and urban community hospitals are often regarded as primary care facilities—closer to village clinics than “true” hospitals. In 2014, there were 13,314 public hospitals and 12,546 private hospitals (excluding township hospitals and community hospitals), of which 17,705 were nonprofit and 8,155 were for-profit.¹⁴ In 2014, there were 491,885 public primary care facilities and 425,450 private village clinics.

Hospitals are paid through a combination of out-of-pocket payments, health insurance compensation, and, in the case of public hospitals, government subsidies—the last of these representing 13.2 percent of total revenue in 2014.¹⁵ A significant number of patients pay 100 percent out-of-pocket, because they receive out-of-network services. Although fee-for-service is dominant, DRGs, capitation, and global budgets are becoming more popular in selected areas. Local health authorities set fee schedules, and doctors’ salaries and other payments are included in hospital reimbursement.

Mental health care: Mental health care, including disease diagnosis, treatment, and rehabilitation services, is provided in special psychiatric hospitals and in the psychology departments of tertiary hospitals. Patients with mild illness are often treated at home or in the community; only severely mentally ill patients are treated in psychiatric hospitals. Both outpatient and inpatient mental health services are covered by insurance, with benefits subject to lower copayment rates. In 2014, there were 34 million mental health patient visits to special psychiatric hospitals, and on average one psychiatrist treated 4.8 patients per day.¹⁶ Mental health care is not integrated with primary care.

Long-term care and social supports: In accordance with Chinese tradition, long-term care is provided mainly by family members at home. There are very few formal long-term care providers. Family caregivers are not entitled to financial support or tax benefits, and long-term care insurance is virtually nonexistent; expenses for care in long-term care facilities are paid almost entirely out-of-pocket. Local governments often provide some subsidies to long-term care facilities.

On average, conditions in long-term care facilities are poor, and there are long waiting lists for enrollment in high-end facilities. Formal long-term care facilities usually provide only housekeeping, meals, and basic services such as transportation, with very few health care services. Some, however, may coordinate health care with local township or community hospitals. Governments encourage integration of long-term care and health care services, particularly those funded by private investment. There were 3.9 million beds for aged and disabled people in 2014.¹⁷ Some hospice care is available, but it is normally not covered by health insurance.¹⁸



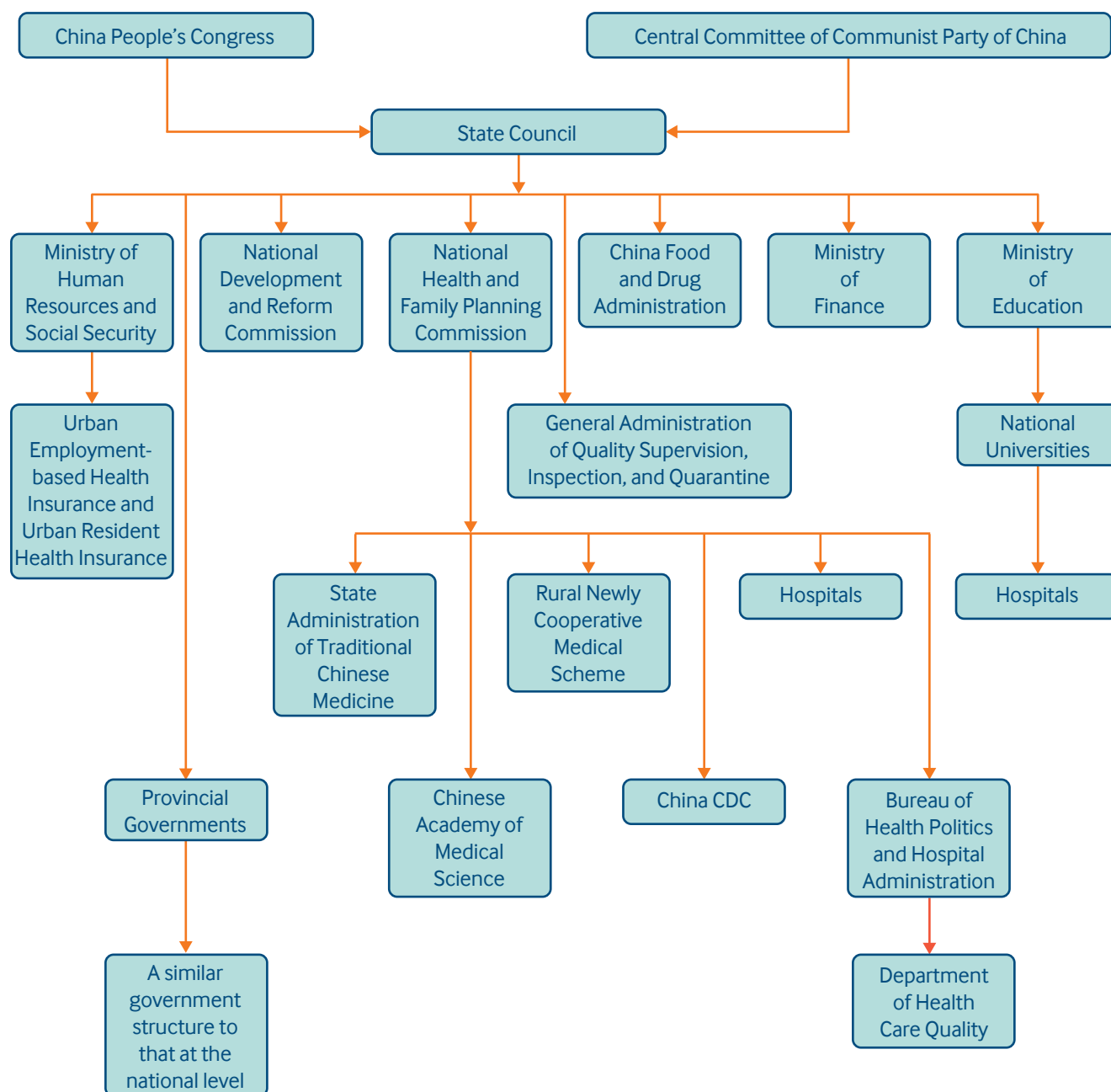
What are the key entities for health system governance?

In 2013, the Ministry of Health and the National Population and Family Planning Commission were merged into the National Health and Family Planning Commission as the main agency for health controlled by the State Council. The State Administration of Traditional Chinese Medicine is affiliated with the new agency. The National People’s Congress is responsible for health legislation. However, major health policies and reforms may be initiated by the State Council and the Central Committee of the Communist Party as well, and these are also regarded as law.

The National Development and Reform Commission, which has been heavily involved in the recent health care system reform, oversees health infrastructure plans and competition among health care providers. The Ministry of Finance provides funding for government health subsidies, health insurance contributions, and health system infrastructure. The Ministry of Human Resources and Social Security runs urban employment-based basic insurance and urban resident basic insurance. The China Food and Drug Administration is responsible for drug approvals and licenses, but assessment of health technology and cost-effectiveness has not played a significant role yet. The China Center for Disease Control and Prevention is administrated by the National Health and Family Planning Commission, although it is not a government agency. The Chinese Academy of Medical Science, under the National Health and Family Planning Commission, is the national center for health research.

The National Health and Family Planning Commission directly owns some hospitals in Beijing, and national universities directly administrated by the Ministry of Education also own affiliated hospitals. Local government health agencies, usually the Bureau of Health or the Health and Family Planning Commission in each province, may have a similar structure and often own provincial hospitals. Local governments (of prefectures, counties, and towns) may have departments of health

Organization of the Health System in China



Source: Hai Fang, Peking University, 2015.

and own hospitals directly. Centers for disease control and prevention also exist in local areas and are administered by the local bureaus or departments of health. At the national level, the China Center for Disease Control and Prevention provides only technical support to the local centers.

Both the national and local Health and Family Planning Commissions have comprehensive responsibilities for health quality and safety, cost control, provider fee schedules, health information technology, and clinical guidelines.



What are the major strategies to ensure quality of care?

The Department of Health Care Quality, which is within the Bureau of Health Politics and Hospital Administration and is overseen by the National Health and Family Planning Commission, is responsible at the national level for the quality of care. The National Health Service Survey is conducted every five years (the latest was in 2013), and a report is published after each survey highlighting data on selected quality indicators.

To be accredited, hospitals must obtain a license from the local health authority. Physicians get their practice licenses through hospitals; licenses are subject to renewal. Several national rankings of hospitals are published by third parties, although there are no financial incentives for hospitals to meet quality targets.¹⁹ No public information about individual doctors is made available.

Following release of the “Temporary Directing Principles of Clinical Pathway Management” by the former Ministry of Health in 2009, clinical pathways are now regulated nationally and used in a similar manner as clinical guidelines are in Western countries. Previously, pathways were created at the hospital, rather than the national, level.



What is being done to reduce disparities?

There are still severe disparities in accessibility and quality of health care, although China has made significant improvements in this regard in the past decade. Income-related disparities in health care access were especially serious before the reform of the health insurance system more than 10 years ago, as most people did not have any coverage at all. Health coverage through publicly financed insurance is now nearly universal, and there are safety nets for the poor (see above). As a result, income-related disparities have been reduced substantially.

Remaining disparities in access are due mainly to variation in insurance benefit packages, urban and rural factors, and income inequality. Urban employment-based basic insurance offers broader benefit packages than the other two insurance schemes. To improve benefit packages and reduce disparities, central and local governments intend to consolidate insurance schemes, an effort that has already been piloted in selected areas, such as Dongying City in Shandong Province and Jinhua City in Zhejiang Province. In addition, central and local government subsidies of urban resident basic insurance and the rural newly cooperative medical scheme have increased in recent years.

Most good hospitals (particularly tertiary hospitals) are in urban areas, where there are better-qualified health professionals. Village doctors are often undertrained. To help bridge the urban–rural health care divide, the central government and local governments sponsor training for rural doctors in urban hospitals and require new medical graduates to work as residents in rural health facilities. Nevertheless, the China Health and Family Planning Statistical Yearbooks show that substantial disparities remain.



What is being done to promote delivery system integration and care coordination?

Medical alliances are regional hospital groups, often including one tertiary hospital and several secondary hospitals and primary care facilities, that provide access to primary care facilities for patients with minor health issues. The aim is to reduce the need for people to visit tertiary hospitals. At the same time, patients with serious health problems can be referred to tertiary hospitals easily and moved back to primary care facilities after their condition improves. It is hoped that this type of care coordination will meet the demand for chronic disease care, improve health care quality, and contain rising costs. The hospitals within a medical alliance share a common electronic health record system, and results of labs, images, and diagnoses are easily available within the alliance.

There are three main medical alliance models.²⁰ Hospitals in the Zhenjiang model have only one owner (usually the local bureau of health). Those in the Wuhan model do not belong to the same owner, but administration and finances are all handled by one tertiary hospital. Hospitals in the Shanghai model share management and technical skills only; ownership and financial responsibility are separate.



What is the status of electronic health records?

Nearly every health care provider has set up its own electronic health record (EHR) system. Within hospitals, EHRs are also linked to the health insurance systems for payment of claims, with unique patient identifiers (insurance ID or citizenship ID). However, EHR systems vary significantly by hospital and are usually not integrated or interoperable. Patients often must bring with them a printed health record if they want to see doctors in different hospitals. Even if hospitals are owned by the same local bureau of health or affiliated with the same universities, different EHR systems may be used. Patients generally do not use EHR systems for accessing information, scheduling appointments, sending secure messages, refilling prescriptions, or accessing doctors' notes.



How are costs contained?

Health expenditures have risen significantly in recent decades because of health insurance reform, an aging population, economic development, and health technology advances. Health expenditures increased from CNY584 (USD164) per capita in 2004 to CNY2,582 (USD725) in 2014.²¹ The key cost-containment strategy is reform of provider payment. Prior to the introduction in 2009 of DRGs, global budgets, and capitation, fee-for-service was the main provider payment mechanism, and consumer- and physician-induced demand increased costs significantly. Global budgets have been used in many regions, since these are relatively easy for authorities to implement. As noted above, government encourages the use of community and township hospitals over the more expensive care provided in tertiary hospitals. Hospitals compete on quality, level of technology, and copayment rates.

In township, community, and county hospitals, a campaign of “zero markups” for prescription drugs was introduced in 2013 (see below) to contain the rising drug costs. The National Development and Reform Commission places stringent supply constraints on new hospital buildings and hospital beds, and the National Health and Family Planning Commission controls the purchase of high-tech equipment such as MRI scanners.



What major innovations and reforms have been introduced?

Sales of prescription drugs have been a major revenue source for hospitals, which are allowed a 15 percent markup, and providers have strong financial incentives to induce demand for more and expensive drugs. Prices for services, on the other hand, are rather low, in accordance with traditional health practice in China. However, as of 2015, 3,077 public county hospitals and 446 public city hospitals were participating in a government-financed pilot program to eliminate the markup of prescription drug prices. At the same time, 224 prefectures and cities in 21 provinces adjusted the prices of health care services upward to reflect true costs. In 2016, more public city hospitals participated in the zero-markup drug policy. For example, all public city hospitals in Beijing and Hunan Province were to end markups by the end of 2016, and by 2020 all public hospitals in the country are to do so as well. Where it has been implemented, zero markup has been found to have significantly reduced total medical spending.²²

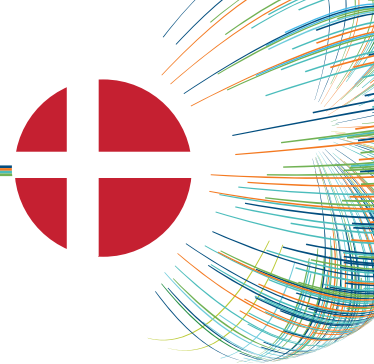
Another important health reform was the introduction in 2015 of special health insurance for severe diseases, such as cancers, kidney disease, and acute myocardial infarction, that supplements the regular publicly financed schemes. Severe-disease health insurance provides reimbursement beyond the rather low reimbursement ceilings. It is also mostly publicly financed, particularly for urban resident basic insurance and the current rural cooperative medical scheme, and administrated by local health authorities. However, private commercial health insurance companies, given their experience in providing complementary insurance, are heavily involved as well. In 2016, the central government provided CNY16 billion (USD4.5 billion) in subsidies to severe-disease insurance. By 2016, severe-disease insurance is expected to be available throughout China.

Notes

1. Please note that, throughout this profile, all figures in USD were converted from CNY at a rate of about CNY3.56 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2016) for China. Organisation for Economic Co-operation and Development (OECD), OECD.Stat. (2016), https://stats.oecd.org/Index.aspx?DataSetCode=SNA_TABLE4; accessed Aug. 8, 2016.
2. National Health and Family Planning Commission, *China Health and Family Planning Statistical Yearbook 2015* (China Union Medical University Press, 2015).
3. Ibid.
4. The State Council, *The State Council's Suggestion on Merging Urban-Rural Resident Basic Health Insurance* (2016), http://www.gov.cn/zhengce/content/2016-01/12/content_10582.htm (in Chinese); accessed Aug. 8, 2016.
5. C. Jiang and J. Ma, "Analyzing the Role of Overall Basic Medical Insurance in the Process of Universal Health Coverage," *Chinese Health Service Management*, 2015 2(320):108–10.
6. Z. Song and Q. Hu, "Development Forecast of Commercial Health Insurance in the Period of the Thirteenth Five-Year Plan," *China Insurance*, 2016 5:12–15.
7. National Health and Family Planning Commission, *Statistical Communiqué of China Health and Family Planning Development in 2015* (2016), <http://www.nhfpc.gov.cn/guihuaxxs/s10748/201607/da7575d64fa04670b5f375c87b6229b0.shtml>; accessed Aug. 2, 2016.
8. National Health and Family Planning Commission, *China Health and Family Planning Statistical Yearbook 2015* (China Union Medical University Press, 2015).
9. National Development and Reform Commission, National Health and Family Planning Commission, and Ministry of Human Resources and Social Security, *Announcement About Issues Related to Market Adjustment Prices of Health Care Services by Non-Government-Funded Health Institutions* (2014), http://www.gov.cn/xinwen/2014-04/09/content_2655189.htm; accessed Aug. 8, 2016.
10. National Health and Family Planning Commission, 2015.
11. Ibid.
12. Ibid.
13. Ibid.
14. Ibid.
15. Ibid.
16. Ibid.
17. National Bureau of Statistics, *China Statistical Yearbook 2015* (China Statistics Press, 2015).
18. X. Chen, "Hospice Care: Pass Away with Warmth," *China Social Protection*, 2014 12:64–65.
19. S. Dong, S. Guo, L. He et al., "Study of Present Situation and Countermeasures of China's Hospital Rankings," *Chinese Hospital Management*, 2015 35(3):38–40.
20. L. Jiang, S. Song, and W. Guo, "Study on the Models and Development Status of the Regional Longitudinal Medical Alliance in China," *Medicine and Society*, 2014 27(5):35–38.
21. National Health and Family Planning Commission, 2015.
22. C. Fu and J. Yang, "Influence of Carrying Out Zero Price Addition Policy of Drugs on Public Hospital Expenses in Shenzhen," *Chinese Hospital Management*, 2013 33(2):4–6.

The Danish Health Care System

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What is the role of government?

Universal access to health care is the underlying principle inscribed in Denmark's Health Law, which sets out the government's obligation to promote population health and prevent and treat illness, suffering, and functional limitations. Other core principles include ensuring: a high quality of care; easy and equal access to care; service integration; choice; transparency; access to information; and short waiting times for care. The law also assigns responsibility to regions and municipalities for delivering health services.

The national government sets the regulatory framework for health services and is in charge of general planning and supervision. Five administrative regions governed by democratically elected councils are responsible for the planning and delivery of specialized services and also have tasks related to specialized social care and coordination. The regions own, manage, and finance hospitals and finance the majority of services delivered by private general practitioners (GPs), office-based specialists, physiotherapists, dentists, and pharmacists. Municipalities are responsible for financing and delivering nursing home care, home nurses, health visitors, some dental services, school health services, home help, and treatment for drug and alcohol abuse. The municipalities are also responsible for general prevention and rehabilitation tasks; the regions are responsible for specialized rehabilitation.



Who is covered and how is insurance financed?

Publicly financed health care: Public expenditures in 2015 accounted for 84.2 percent of total health spending, representing 10.6 percent of GDP in 2015.¹ It should be noted, however, that Danish cost reporting with regard to the "gray zone" of long-term care tends to include more activities (services) than reporting requirements do in many other member countries of the Organisation for Economic Co-operation and Development (OECD).²

All registered Danish residents are automatically entitled to publicly financed health care, which is largely free at the point of use. In principle, undocumented immigrants and visitors are not covered, but a voluntary, privately funded initiative by Danish doctors, supported by the Danish Red Cross and Danish Refugee Aid, provides this population with access to care.

Health care is financed mainly through a national health tax, set at 8 percent of taxable income. Revenues are allocated to regions and municipalities, mostly as block grants, with amounts adjusted for demographic and social differences; these grants finance 77 percent of regional activities. A minor portion of state funding for regional and municipal services is activity-based or tied to specific priority areas, usually defined in the annual economic agreements between the national government and the municipalities or regions. The remaining 20 percent of financing for regional services comes from municipal activity-based payments, which are financed through a combination of local taxes and block grants.

Private health insurance: Complementary voluntary insurance, purchased on an individual basis, covers statutory copayments—mainly for pharmaceuticals and dental care—and services not fully covered by the state (e.g., physiotherapy). Some 2.2 million Danes have such coverage, which is provided almost exclusively by the not-for-profit organization Danmark.³

In addition, nearly 1.5 million people hold supplementary insurance to gain expanded access to private providers.⁴ Policies are purchased mostly from among seven for-profit insurers and are provided mainly through private employers as a fringe benefit, although some public-sector employees are also covered. Students, pensioners, the unemployed, and others outside the job market are generally not covered by supplementary insurance.

Private expenditures accounted for nearly 16 percent of health care spending in 2013, and private insurance accounted for about 12 percent of total private expenditures.⁵



What is covered?

Services: Publicly financed health care covers all primary, specialist, hospital, and preventive care, as well as mental health and long-term care services. Dental services are fully covered for children under age 18. Outpatient prescription drugs, adult dental care, physiotherapy, and optometry services are subsidized. Home care and hospice care are organized and financed by the regions, as described below.

Decisions about levels of service and new medical treatments are made by the regions, within a framework of national laws, agreements, guidelines, and standards. Municipalities decide on the service level for most other welfare services, within a framework of national regulation. There is no defined benefit package for health care, but very few restrictions exist for treatments that are evidence-based and clinically proven.

Cost-sharing: There is no cost-sharing for hospital and primary care services. Cost-sharing is applied to dental care for those age 18 and older (coinsurance of 35% to 60% of total cost), outpatient prescriptions, and corrective lenses. Out-of-pocket payments represented 12.4 percent of total health expenditures in 2013,⁶ covering mostly outpatient drugs, corrective lenses, hearing aids, and doctor and dental care. Patients with outpatient drug expenses of more than DKK3,045 (USD406) per year receive the highest reimbursement rate—85 percent.⁷ Private specialists, hospitals, and dentists are free to set their own fees for patients not covered by public funding.

Safety net: There are cost-sharing caps of DKK22,115 (USD2,949)⁸ for children and DKK17,975 (USD2,397) for adults, and the municipalities provide means-tested social assistance to older people. Chronically ill people with high drug usage and costs can apply for full reimbursement above an annual out-of-pocket ceiling of DKK3,775 (USD503). The terminally ill also can apply for full coverage of prescriptions. Municipalities may grant financial assistance to individuals certified as otherwise unable to pay for needed medicine.



How is the delivery system organized and financed?

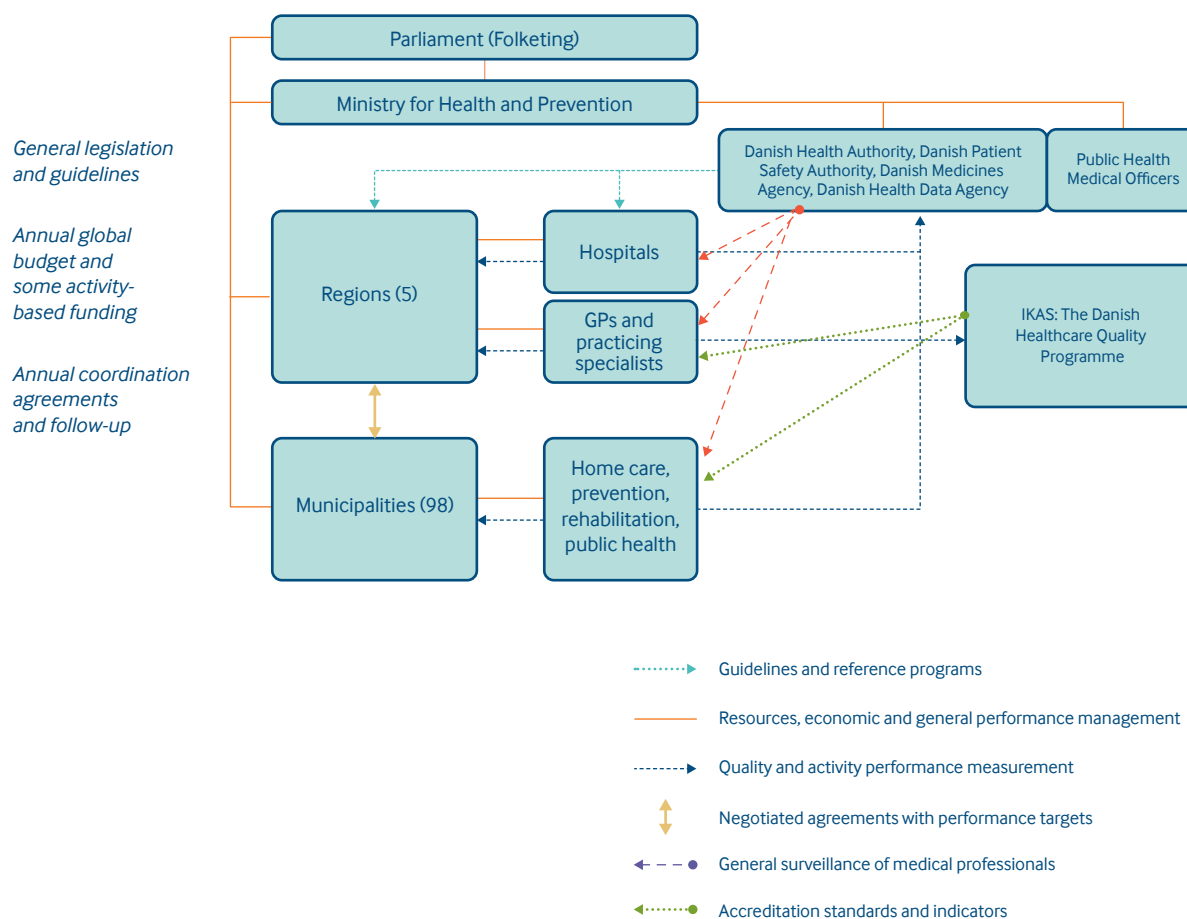
Primary care: Around 22 percent of all doctors work in general practice. Almost all GPs are self-employed and are paid by the regions via capitation (about 30% of income) and fee-for-service (70% of income). Rates are set through national agreements with doctors' associations. Service-based fees are used as financial incentives to prioritize services. National fees are paid per consultation, whether for office visits, e-consults, or home visits. The average income for a GP was DKK1.1 million (USD146,000) in 2011. The average salary for senior hospital doctors was DKK1 million (USD133,000).⁹

The practice structure is gradually shifting from solo to group practices, typically consisting of two to four GPs and two to three nurses.¹⁰ The number of nurses employed has increased in the past decade; they are paid by the practice and have gradually assumed responsibility for such tasks as blood sampling and vaccination. Colocation of various clinicians is also on the rise, with GPs, physiotherapists, and office-based specialists operating out of the same facilities but under separate management.

Anyone who chooses the “group 1” coverage option (98% of the population), under which GPs act as gatekeepers for secondary care, is required to register with a GP. People can register with any available local GP. “Group 2” coverage provides free choice of GP and access to practicing specialists without referral, though a copayment is required. Under both groups, access to hospitals requires referral.

Outpatient specialist care: Outpatient specialist care is delivered through hospital-based ambulatory clinics (fully integrated and funded, as are other public hospital services) or by self-employed specialists in privately owned facilities. Private self-employed specialists can be full-time or part-time; full-timers may not have other full-time jobs. Part-timers may also work in the hospital sector, subject to codes of conduct, with their activity level monitored and their incomes limited by the regions. Practices may be colocated but normally do not operate in formal multispecialty groups.

Organization of the Health System in Denmark



Source: K. Vrangbaek, University of Copenhagen, 2015.

Services from self-employed private providers are paid by the regions on a fee-for-service basis for referred public patients. Fees are set through negotiations with the regions and are based on regional priorities and resource assessments. Private specialists and hospitals also receive patients paying out-of-pocket or covered by voluntary insurance. Fees for patients without referral are set by the specialists. As a result of legislation introduced in 2013 guaranteeing patients the right to diagnostic assessment within 30 days of referral, private practitioners and hospitals may also receive patients referred from public-sector providers; they are paid for these services through specific agreements with the regions.

Patients have a choice of private outpatient specialists upon referral (group 1) or without referral (group 2).

Administrative mechanisms for direct patient payments to providers: There is no out-of-pocket payment for medical services for patients in group 1. Primary care doctors and specialists are paid directly by the regions when registering provision of services electronically. Group 2 patients make a copayment to supplement the automatic payment.¹¹

After-hours care: After-hours care is organized by the regions, mainly by collective agreement with GPs. The Copenhagen region employs staff including specialized nurses, who do the initial screening of calls. GPs can volunteer to take on more or less responsibility within this scheme and receive a higher rate of payment for after-hours than for normal care. Capitation does not apply to after-hours care. The first line of contact is a regional telephone service, with a GP (or a nurse, in the Copenhagen region) deciding whether to refer the patient for a home visit or to an after-hours clinic, which is usually colocated with a hospital emergency department. Information on patient visits is sent routinely to GPs. There are walk-in emergency units in larger hospitals.

Hospitals: Approximately 97 percent of hospital beds are publicly owned. Regions decide on budgeting mechanisms, generally using a combination of fixed-budget and activity-based funding based on diagnosis-related groups (DRGs), with the fixed budget making up the bulk of the funding (although significant fluctuations occur among specialties and hospitals). DRG rates are calculated by the Ministry of Health at the national level, based on average costs. Activity-based funding is usually combined with target levels of activity and declining rates of payment to control expenditure. This strategy succeeded in increasing activity and productivity by an average of 5 percent annually from 2009 to 2011 and by 1.4 percent from 2011 to 2012.¹² Bundled payments are not yet used extensively, but experiments are being carried out in all five regions. Hospital physicians are salaried and employed by regional hospitals, which bear the attendant costs, as are other health care professionals in hospitals and in most municipal health services. Patients can choose among public hospitals upon referral, and payment follows the patient to the receiving hospital if it is located in another region. Physicians at public hospitals are not allowed to see private patients within the hospital.

Mental health care: There is no cost-sharing for inpatient psychiatric care, but there is some cost-sharing (which may be covered by voluntary health insurance) for psychologists in private practice. Some GPs offer specific therapeutic consultations, but their main role is early detection and referral.

Social psychiatry and care are a responsibility of the municipalities, which can choose to contract with a combination of private and public service providers, but most providers are public and salaried. A right to diagnostic assessment for psychiatry within one month of referral was introduced in 2014. Treatment must be commenced within two months for less serious conditions and one month for more serious conditions. There are walk-in units for acute psychiatric care in all regions.

Long-term care: Responsibility for chronic care is shared between regional hospitals, general practitioners, and providers of municipal institutional and home-based services. Hospital-based ambulatory chronic care is financed in the same way as other hospital services. Long-term care outside of hospitals is needs-based and is organized and funded by municipalities. Most municipal long-term care is provided at home, in line with a policy initiative to enable people to remain at home as long as possible. Home nursing is fully funded after medical referral. Permanent home care is free of charge, while temporary home care can be subject to cost-sharing if the recipient's income is above DKK143,300 (USD18,890) for single individuals and DKK215,300 (USD28,380) for couples.¹³ Municipalities are obliged to organize markets with open access for both public and private providers of home care (personal and practical care such as cleaning and shopping), and patients may choose between public or private providers. While this system functions relatively well in most municipalities, it has been difficult to attract private providers to remote areas. A considerable number of the elderly choose private providers. Some municipalities also have contracted with private institutions for institutional care of older people, but more than 90 percent of residential care institutions (nursing homes) remain public.

Providers are paid directly by the municipalities, and no cash benefits are paid to patients. Public providers are employed by the municipalities. For staying in residential care institutions, patients pay according to the facility's costs, the size of the dwelling, and their income and savings; patients also are responsible for heating and electricity charges.¹⁴

Relatives of seriously ill individuals are allowed to take paid leaves of absence from their jobs for up to nine months. These can be incremental and may be divided among several relatives. A similar scheme exists for relatives of terminally ill patients who no longer receive treatment.

Hospices, which may be public or private, are organized by the regions and are funded by regions and municipalities. There is free choice of hospice upon referral.



What are the key entities for health system governance?

The general regulation, planning, and supervision of health services, including cost-control mechanisms, take place at the national level through the Parliament, the Ministry of Health, the Danish Health Authority, the Danish Medicines Agency, and the Danish Patient Safety Authority. The national authorities are responsible for the general supervision of health personnel and for development of quality management in line with national clinical guidelines and standards, usually in close collaboration with representatives from medical societies. These authorities also have important roles in planning the location of specialist services, approving regional hospital plans, and approving mandatory “health agreements” between regions and municipalities to coordinate service delivery. Health technology assessments are developed at the regional level, while the national authorities do comparative-effectiveness (productivity) studies that are published regularly, allowing regions and hospital managers to benchmark performance of individual hospital departments.¹⁵

The regions are in charge of defining and running hospital services and supervising and paying general practitioners and specialists. Municipalities have important roles in prevention, health promotion, and long-term care. Rates for general practitioners and practicing specialists are set through national agreements. Doctors’ associations negotiate with a collective body of the regions, also including state representatives. Regions may enter into additional regional agreements for specific services.

A national website (esundhed.dk) provides access to benchmarking data related to service, quality, and number of treatments performed. Users can compare performance at the hospital department level but not at the individual doctor level. The website also provides access to data from a number of Danish health registries (see below) and information about developments in pharmaceutical prices and reimbursement levels.¹⁶ Selected performance data are published annually by regional governments.¹⁷

Organized patient groups engage in policymaking at the national, regional, and municipal levels. The Danish Patient Safety Authority handles patient complaints and compensation claims, collects information about errors for systematic learning, and provides information about treatment abroad.



What are the major strategies to ensure quality of care?

The Danish Healthcare Quality Programme (DDKM), based on accreditation and a set of accreditation standards, was in operation at the hospital level through 2015.¹⁸ It is currently being replaced in hospitals with a new program featuring fewer standards and more emphasis on clinical and local dimensions (due in part to pressure from the medical profession). The DDKM continues to be rolled out in primary and municipal health care.

Quality data for a number of treatment areas are captured in clinical registries and made available online for institutions but not for individual health providers at the hospital level.¹⁹ General quality and efficiency data are published regularly in national-level reports as a follow-up to national budget agreements between the state and the regions.²⁰ Patient experiences are collected through biannual national, regional, and local surveys.

The Danish Health Authority has laid out standard treatment pathways, with priorities including chronic disease prevention and follow-up interventions. Pathways for 34 cancers have been in place since 2008, covering nearly all cancer patients. The authority monitors pathways and the speed with which patients are diagnosed and treated. DDKM standards enforce the use of pathway programs and national clinical guidelines for all major disease types. The regions develop more specific practice guidelines for hospitals and other organizations, based on general national recommendations. There are no explicit national economic incentives tied to quality, but all five regions are experimenting with such schemes. In general, regions are obliged to take action in the event of poor results. The Danish Health Authority can step in if regions fail to live up to standards.

The Danish Patient Safety Authority was created in 2015 when the former Danish Health and Medicines Authority was split into separate agencies. It receives anonymized reports of accidents and near-accidents that health care professionals at all levels are obliged to submit to regional authorities, which evaluate the incidents. The information is published in an annually updated database, with the intention of fostering learning rather than sanctioning.



What is being done to reduce disparities?

Regular reports are published on variations in health and health care access.²¹ These have prompted the formulation of action plans, with initiatives including:

- higher taxes on tobacco
- targeted interventions to promote smoking cessation
- prohibition of the sale of strong alcohol to young people
- establishment of anti-alcohol policies in all educational institutions
- further encouragement of municipal disease prevention activities (e.g., through increased municipal cofinancing of hospitals, thus creating economic incentives for municipalities to keep citizens healthy and out of the hospital)
- improved psychiatric care
- a mapping of health profiles in all municipalities, to be used as a tool for targeting municipal disease-prevention and health-promotion activities

The introduction of pathway descriptions (see above) is reported to have increased equity.



What is being done to promote delivery system integration and care coordination?

Current mandatory health agreements between the municipalities and regions on coordination of care address a number of topics related to admission and discharge from hospitals, rehabilitation, prevention, psychiatric care, information technology (IT) support systems, and formal progress targets. Agreements are formalized for municipal and regional councils at least once per four-year election term, generally take the form of shared standards for action in different phases of a patient's journey within the system, and must be approved by the Danish Health Authority. The agreements are partially supported by IT systems with information that is shared among caregivers. The degree to which the regions and municipalities succeed in reaching the goals is measured by national indicators published online.²²

Regions and municipalities have implemented various measures to promote care integration. Examples include the use of outreach teams from hospitals doing follow-up home visits; training programs for nursing and care staff; the establishment of municipal units located within hospitals to facilitate communication, particularly in regard to discharge; and the use of "general practitioner practice coordinators." Many coordination initiatives place an emphasis on people with chronic care needs, multimorbidity, or frailty resulting from aging or mental health conditions.²³ The municipalities are in charge of a range of services, including social care, elder care, and employment services; most are currently working on models for better integration of these services, such as through joint administration with shared budgets and formalized communication procedures.

Practices increasingly employ specialized nurses, and several municipalities and regions have set up joint multispecialty facilities, commonly called "health houses." Models vary, but often include GPs, practicing specialists, and physiotherapists, among others. GPs in medical homes are encouraged to function as coordinators of care for patients and to develop a comprehensive view of their patients' individual needs in terms of prevention and care. This principle is supported by the general national-level agreements between GPs and regions. GPs participate in various formal and informal network structures and are included in the health service agreements made between regions and municipalities to facilitate cooperation and improve patient pathways. All GPs use electronic information systems as a conduit for discharge letters, electronic referrals, and prescriptions.



What is the status of electronic health records?

Information technology (IT) is used at all levels of the health system as part of a national strategy supported by the National Agency for Health IT. Each region uses its own electronic patient record system for hospitals, with adherence to national standards for compatibility. Danish general practitioners were ranked first in an assessment of overall implementation of electronic health records in 2014.²⁴ All citizens in Denmark have a unique electronic personal identifier, which is used in all public registries, including health databases. The government has implemented an electronic medical card containing encoded information about each patient's prescriptions and medication use; this information is accessible by the patient and all relevant health professionals. General practitioners also have access to an online medical handbook with updated information on diagnosis and treatment recommendations. Attempts to develop national clinical databases to monitor quality in primary care (DataFangst) were aborted in 2015, as they were found to violate privacy rights and to endanger the trust between GPs and their patients.

Sundhed.dk is a national IT portal with differentiated access for health staff and the wider public.²⁵ It provides general information on health and treatment options and access to individuals' own medical records and history. For professionals, the site serves as an entry to medical handbooks, scientific articles, treatment guidelines, hospital waiting times, treatments offered, and patients' laboratory test results. The portal also provides access to available quality-of-care data for primary care clinics, all of which use IT for electronic records and communication with regions, hospitals, and pharmacies.



How are costs contained?

The overall framework for controlling health care expenditures is outlined in a "budget law," which sets budgets for regions and municipalities and specifies automatic sanctions if they are exceeded. The budget law is supplemented by annual agreements among regions, municipalities, and government to coordinate policy initiatives aimed at limiting spending, including direct controls of supply.

Block grants to the regions are conditional on annual increases in productivity of 2 percent on the basis of diagnosis-related groups and are withheld if productivity falls short of targets. Even though the activity-based portion is small, it makes up regions' marginal income and presents a strong incentive.²⁶ Furthermore, regions are under pressure to deliver good performance, as they can be reformed if they do not deliver.

At the regional level, hospital cost control includes a combination of global budgets and activity-related incentives (see above).

Inpatient pharmaceutical expenditure is controlled through national guidelines and clinical monitoring combined with collective purchasing. The purchase of medicine takes place through tendering by the joint regional organization Amgros. A new regional "medicines council" will be established in 2017 to provide information to Amgros and other decision-makers on the cost-effectiveness of new pharmaceuticals.

Policies to control outpatient pharmaceutical expenditure include generic substitution, prescribing guidelines, and assessment by the regions of deviations in prescribing behavior. Pharmaceutical companies report a monthly price list to the Danish Health Authority, and pharmacies are obliged to choose the cheapest alternative with the same active ingredient, unless a specific drug is prescribed. Patients may choose more expensive drugs, but they have to pay the difference.

Collective agreements with general practitioners and specialists include various clauses about rate reductions if overall expenditures exceed given levels. Regions also monitor the activity level of individual practices and may intervene if they deviate significantly from the average.

Health technology assessment and cost-effectiveness information provide input to decision-making on new treatments and guidelines.

Regions may enter into contracts with private providers to deliver diagnostic and curative procedures. Prices for those services are negotiated among regions and private providers and can be lower than rates in the public sector.

Together, these measures have been relatively successful in controlling expenditures and driving up activity levels. General productivity in the hospital sector increased almost 20 percent from 2008 to 2012, while maintaining high patient satisfaction and reducing standardized hospital mortality rates.²⁷



What major innovations and reforms have been introduced?

A plan for reorganization of the central governance structure was implemented by the incoming government in the fall of 2015. The reorganization created four agencies, dealing with health, medicines, patient safety, and IT, to replace the previous Health and Medicines Agency. The intent is to provide a clearer division of labor and more transparency and to improve the overall surveillance and accountability structure.

A new regional “medicines council” will be established in 2017 to evaluate the cost-effectiveness of new pharmaceuticals. The council will replace the existing assessment structure, which does not include economic evaluation. The council will provide guidance for regional decision-making and the administration of tenders within Amgros, the joint regional purchasing organization.

The Danish government and the regions have agreed to implement a new quality management scheme for hospitals in 2017 to replace the existing accreditation-based model. The new scheme includes a set of national indicators to be published annually and will allow more freedom for the regions and hospitals in designing their internal quality procedures and standards. The new model accommodates input from health professionals and hospitals that considered the accreditation-based scheme too burdensome and inflexible. The new scheme is based on the ideas of “permanent improvement culture” and “value-based health care.” The existing accreditation-based scheme will continue to operate for primary care and municipalities.

Notes

1. Organisation for Economic Co-operation and Development, *OECD Health Statistics 2016*, <http://www.oecd.org/els/health-systems/health-data.htm>.
2. J. Sjøgaard, *How High Are Health Expenditures in Denmark? Report for Danish Regions (2014)*, <http://www.regioner.dk/media/2981/2014-hvor-hoeje-er-sundhedsudgifterne-i-danmark.pdf>; accessed Oct. 3, 2014.
3. Health Insurance Denmark, *Annual Report 2014*, <http://www.sygeforsikring.dk/Default.aspx?ID=23>.
4. Center for Politiske Studier (CEPOS), *Half of Danes Now Have Private Health Insurance* (April 2014), <https://www.cepos.dk/artikler/halvdelen-af-danskerne-har-nu-en-privat-sundhedsforsikring>.
5. Organisation for Economic Co-operation and Development, OECD.Stat (database). DOI: 10.1787/data-00285-en; accessed July 2, 2015.
6. Organisation for Economic Co-operation and Development, OECD.Stat, (database). DOI: 10.1787/data-00285-en; accessed Oct. 6, 2014.
7. Danish Medicines Agency, <https://laegemiddelstyrelsen.dk/da/tilskud/beregn-dit-tilskud/tilskudsgraenser>.
8. Please note that throughout this profile, all figures in USD were converted from DKK at a rate of about DKK7.5 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2016) for Denmark.
9. Danish Regions, *Facts About Economy and Activity in General Practice* (2012), <http://intranet.regioner.dk/danskeregionerinternet/aktuelt/nyheder/2012/november/~media/7996F7E7A4FA4AA1AF258283F664D819.ashx>.
10. Danish Regions, *Organization of General Practice* (2007).
11. M. Olejaz, A. Juul Nielsen, A. Rudkjøbing et al., "Denmark: Health System Review," in *Health Systems in Transition, 2012*, 14(2):1–192.
12. Danish Regions, *Ongoing Publication of Productivity in the Hospital Sector*, Interim Report 10 (2015), <http://www.regioner.dk/media/3546/produktivitet-i-sygehussektoren.pdf>.
13. Frederiksberg Kommune (2015), <http://www.frederiksberg.dk/Borger/Aeldre/Hjemmehjaelp-og-sygepleje/Hjemmehjaelp.aspx>.
14. Aeldresagen, <https://www.aeldresagen.dk/viden-og-raadgivning/hjaelp-og-stoette/plejebolig-og-plejehjem>.
15. Danish Regions, *Ongoing Publication of Productivity in the Hospital Sector*, Interim Report 10 (2015), <http://www.regioner.dk/aktuelt/nyheder/2015/januar/~media/64631EF66EEC42E6AAC59A420C566124.ashx>.
16. See <http://www.esundhed.dk/sundhedsaktivitet/sundhedsaftaler/Sider/Sundhedsaftaler.aspx>.
17. Danish Regions, *Regional Performance 2016* (2016), http://www.regioner.dk/media/1229/6077_dkr_publication_regionale_resultater_high-modt-af-tfr-142016-i-mail.pdf.
18. Danish Healthcare Quality Program (DDKM), <http://www.ikas.dk>.
19. See <http://www.esundhed.dk/Sider/Forside.aspx>.
20. Ministry of Health, *Increased Focus on Good Results at Hospitals (2013)*, http://www.sum.dk/Aktuelt/Nyheder/Tal_og_analyser/2013/Maj/~media/Filer%20-%20Publikationer_i_pdf/2013/Oeget-fokus/oeget-fokus-paa-gode-resultater-paa-sygehusene-maj-2013.ashx.
21. Danish Health Authority, *National Health Profile* (Jan. 2014), <http://sundhedsstyrelsen.dk/da/nyheder/2014/den-nationale-sundhedsprofil>.
22. See <http://www.esundhed.dk/Sider/Forside.aspx>.
23. Økonomi og Indenrigsministeriet *Evaluation of the Structural Reform* (2013), <http://sim.dk/media/15185/evaluering-af-kommunalreformen.pdf>.
24. HimSS Europe, *Electronic Medical Record Adoption in Denmark* (2014) http://www.regioner.dk/~media/Mediebibliotek_2011/SUNDHED/Sundheds-it/HIMMS_Denmark_2014.ashx.
25. See <https://www.sundhed.dk>.
26. Danish Regions, *Financial Guidance 2013*, <http://www.regioner.dk/aftaler-og-oekonomi/oekonomisk-vejledning/oekonomisk-vejledning-2013>.
27. Danish Regions, *Styr på regionernes økonomi*, Danish Regions, Quality and management, facts and figures about the health care sector. <http://www.regioner.dk/sundhed/kvalitet-og-styring/fakta-og-tal-om-sundhedsvaesenet>.

The English Health Care System

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What is the role of government?

Responsibility for health legislation and general policy in England rests with Parliament, the Secretary of State for Health, and the Department of Health.¹ Under the Health Act (2006), the Secretary of State has a legal duty to promote a comprehensive health service that provides care free of charge, apart from services with charges already in place. Rights for those eligible for National Health Service (NHS) care are summarized in the NHS Constitution; they include the right to access to care without discrimination and within certain time limits for some categories, such as emergency and planned hospital care.² The Department of Health provides stewardship for the overall health system, but day-to-day responsibility for running the NHS rests with a separate public body, NHS England.

NHS England manages the NHS budget, oversees 209 local Clinical Commissioning Groups (CCGs), and ensures that the objectives set out in an annual mandate by the Secretary of State for Health are met, including both efficiency and health goals. Budgets for public health are held by local government authorities, which are required to host “health and well-being boards” to improve coordination of local services and reduce health disparities.



Who is covered and how is insurance financed?

Publicly financed health care: In 2014, the United Kingdom (U.K.) spent 9.9 percent of GDP on health care, of which public expenditure, mainly on the NHS, accounted for 79.5 percent.³ The majority of funding for the NHS comes from general taxation, and a smaller proportion from national insurance (a payroll tax). The NHS also receives income from copayments, people using NHS services as private patients, and some other minor sources.

Coverage is universal. All those “ordinarily resident” in England are automatically entitled to NHS care, largely free at the point of use, as are nonresidents with a European Health Insurance Card. For other people, such as non-European visitors or undocumented immigrants, only treatment in an emergency department and for certain infectious diseases is free.⁴

Private health insurance: In 2015, an estimated 10.5 percent of the U.K. population had private voluntary health insurance, with 3.94 million policies held at the beginning of 2015.⁵ Private insurance offers more rapid and convenient access to care, especially for elective hospital procedures, but most policies exclude mental health, maternity services, emergency care, and general practice.⁶ Data on private insurers are not freely available, but according to the Competition and Markets Authority (2014), four insurers account for 87.5 percent of the market, with small providers making up the rest.⁷



What is covered?

Services: The precise scope of the NHS is not defined in statute or by legislation, and there is no absolute right for patients to receive a particular treatment. However, the statutory duty of the Secretary for Health is to ensure comprehensive coverage. In practice, the NHS provides or pays for preventive services, including screening, immunization, and vaccination programs; inpatient and outpatient hospital care; physician services; inpatient and outpatient drugs; clinically necessary dental care; some eye care; mental health care, including some care for those with learning disabilities; palliative care; some long-term care; rehabilitation, including physiotherapy (e.g., after-stroke care); and home visits by community-based nurses.

The volume and scope of these services are generally a matter for local decision-making, but the NHS Constitution also states that patients have a right to drugs or treatment approved in technology appraisals carried out by the National Institute of Health and Clinical Excellence (NICE), if recommended by their clinician. For drugs or treatments that have not been appraised by NICE, the NHS Constitution states that CCGs shall make rational, evidence-based decisions.^{8,9}

Cost-sharing and out-of-pocket spending: There are limited cost-sharing arrangements for publicly covered services. Out-of-pocket payments for general practice are limited to some services, such as examinations for employment or insurance purposes and the provision of certificates for travel or insurance.

Outpatient prescription drugs are subject to a copayment (currently GBP8.40, or USD12.14, per prescription item in England); drugs prescribed in NHS hospitals are free. NHS dentistry services are subject to copayments of up to GBP233.70 (USD338.00) per course of treatment.¹⁰ These charges are set nationally by the Department of Health. Out-of-pocket expenditure on health by households accounted for 14.8 percent of total expenditures in the U.K. in 2014. Also in 2014, the largest portion of out-of-pocket spending (42.4%) was for medical goods (including pharmaceuticals), followed by 35.9 percent on long-term care services, including residential care.^{11,12}

Safety net: People who are exempt from prescription drug copayments include children age 15 and under and those ages 16 to 18 in school full-time; people age 60 or older; people with low income; pregnant women and those who have given birth in the past 12 months; and people with cancer, certain other long-term conditions, or certain disabilities. Patients who need large amounts of prescription drugs can buy prepayment certificates costing GBP29.10 (USD42.00) for three months and GBP104.00 (USD150.00) for 12 months. Users incur no further charges for the duration of the certificate, regardless of how many prescriptions they need. In 2015, 89.7 percent of prescriptions in England were dispensed free of charge.¹³ Young people, students, pregnant and recently pregnant women, prisoners, and those with low incomes are not liable for dental copayments. Vision tests are free for young people, those over 60, and people with low incomes, and financial support to meet the cost of corrective lenses is available to young people and those with low incomes. Transportation costs to and from provider sites also are covered for people who qualify for the NHS Low Income Scheme.

How is the delivery system organized and financed?

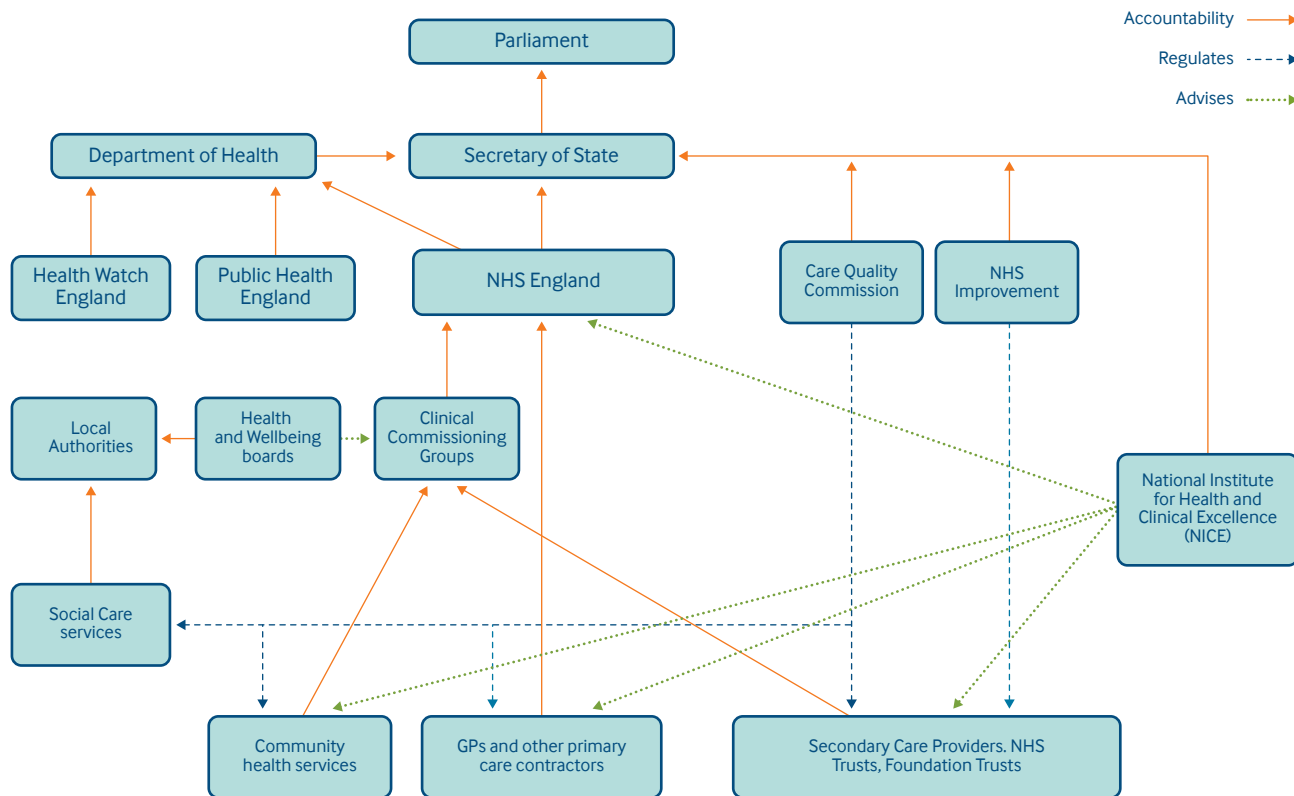


Primary care: Primary care is delivered mainly through general practitioners (GPs), who act as gatekeepers for secondary care. In 2015, there were 34,592 general practitioners (full-time equivalents) in 7,674 practices, with an average of 7,450 patients per practice and 1,530 patients per GP.¹⁴ There were 43,632 hospital specialists and a further 51,460 hospital doctors in training.¹⁵ The number of solo practices was 843 in 2014, while there were 3,589 practices with five or more GPs. General practices are normally patients' first point of contact, and people are required to register with a local practice of their choice; however, choice is effectively limited because many practices are full and do not accept new patients. In some areas, walk-in centers offer primary care services, for which registration is not required.

Most GPs (66%) are private contractors, and approximately 56 percent of practices operate under the national General Medical Services contracts, negotiated between the British Medical Association (representing doctors) and government. These provide payment using a mixture of capitation to cover essential services (representing about 60% of income), optional fee-for-service payments for additional services (e.g., vaccines for at-risk populations, about 15%), and an optional performance-related scheme (about 10%).¹⁶ Capitation is adjusted for age and gender, local levels of morbidity and mortality, the number of patients in nursing and residential homes, patient list turnover, and a market-forces factor for staff costs as compared with those of other practices. Performance bonuses are given mainly on evidence-based clinical interventions and care coordination for chronic illnesses. The proportion of income from these bonuses will fall when the new 2014–2015 contract is fully implemented, as the number of bonus-related services is reduced and funding rerouted into capitation.

The proportion of GPs employed in practices or on a salaried basis as locums (e.g., standing in when other GPs are unavailable) is increasing (currently around 20%). Most general practices employ other professionals such as nurses, whose duties include monitoring patients for blood pressure and providing minor treatments. General practice is undergoing a structural change, from single-handed "corner shops" to networked practices, including larger multipractice organizations using multidisciplinary teams of specialists, pharmacists, and social workers.¹⁷ The average income for combined GPs (contracted and salaried) in England was GBP91,000 (USD131,503) before tax in 2014–2015.¹⁸

Organization of the Health System in England



Source: R. Thorlby and S. Arora, Nuffield Trust, 2014.

Outpatient specialist care: Nearly all specialists are salaried employees of NHS hospitals, and CCGs pay hospitals for outpatient consultations at nationally determined rates. Specialists are free to engage in private practice within specially designated wards in NHS or private hospitals; the most recent estimates (in 2006) were that 55 percent of doctors performed private work, a proportion that is declining as the earnings gap between public and private practice narrows.¹⁹ Patients are able to choose which hospital to visit, and the government has introduced the right to choose a particular specialist within a hospital (not yet fully implemented). Most outpatient specialist consultations are carried out in hospitals, although consultation may take place in general practices. Some GPs “with specialist interests” also offer specialist consultations, paid on a per-session or fee-for-service basis.

Administrative mechanisms for paying primary care doctors and specialists: The bulk of general practices are reimbursed monthly for the services they deliver on the basis of data extracted automatically from practices’ electronic records. Some payments may require practices to enter data manually on the number of patients screened or treated for “enhanced services” that qualify for additional payments, such as diagnosis and support for patients with dementia. These data are collated and validated by NHS England.

After-hours care: GPs are no longer required personally to provide after-hours care to their patients (a small minority still do), but must ensure that adequate arrangements for its provision are in place. In practice, this means that CCGs contract mainly with GP cooperatives and private companies, both of which usually pay GPs on a per-session basis.

Serious emergencies are handled by hospital emergency departments. In some areas, less-serious cases are seen in urgent care centers or minor-injury units, which are staffed in a variety of ways and include both nurse-led and GP-led centers. Telephone advice is available on a 24-hour basis through NHS 111 for those with an urgent but not life-threatening condition.

Hospitals: Publicly owned hospitals are organized either as NHS trusts (currently 72) directly accountable to the Department of Health or as foundation trusts (currently 150)²⁰ regulated by NHS Improvement, whose functions include the economic regulation of public and private providers.

Both NHS trust and foundation trust hospitals contract with local CCGs to provide services. They are reimbursed mainly at nationally determined diagnosis-related group (DRG) rates, which include medical staff costs and account for about 60 percent of income, with the remainder coming from activities not covered by DRGs, such as mental health, education, and research and training funds.²¹ Responsibility for setting those rates is shared between NHS England and NHS Improvement. In some areas, rates are not applied and payments are made for an overall service, such as emergency care. Also at the local level, fees for “years of care”—for example, for the total cost of the care a diabetic patient receives over 12 months—are being developed but as yet are not in widespread use. There is no cap on hospital incomes.

An estimated 548 private hospitals and between 500 and 600 private clinics in the U.K. offer a range of services, including treatments either unavailable in the NHS or subject to long waiting times, such as bariatric surgery and fertility treatment, but generally do not have emergency, trauma, or intensive-care facilities.²² Private providers must be registered with the Care Quality Commission and with NHS Improvement, but their charges to private patients are not regulated, and there are no public subsidies. Although the volume of care purchased from private providers by the NHS has increased recently in areas outside of mental health, NHS use of private hospitals remains low—3.6 percent of overall spending by commissioners on hospital services in 2012–2013.²³

Mental health care: Mental health care is an integral part of the NHS and covers a full range of services. Less-serious illnesses—mild depressive and anxiety disorders, for example—are usually treated by GPs. Those requiring more advanced treatment, including inpatient care, are treated by mental health or hospital trusts. Some of these services are provided by community-based staff. About a quarter of NHS-funded, hospital-based mental health services are provided by the private sector.

Over the past decade, policy has focused on increasing access to psychological therapies for mild-to-moderate mental health problems, although there can still be long waiting times. Policies to improve the care of more severe conditions in the community have focused on outreach and early intervention, and there is an overarching aim to ensure “parity of esteem” between mental health and other kinds of health services. A review conducted in 2012 suggested that treatment of mental health, by comparison with that of physical illnesses, has been underfunded.²⁴

Long-term care and social supports: The NHS pays for some long-term care, such as care for people with continuing medical or skilled-nursing needs, but payments in recent years have been substantially reduced. Most long-term care is provided by local authorities and the private sector. Local authorities are legally obliged to assess the needs of all people who request it, but, unlike NHS services, state-funded social care is not universal. With the exception of time-limited “reablement” services, some equipment and home modifications (in some areas), and information services, residential and home care are needs- and means-tested. Full state support for residential care, for example, is available only to those with less than GBP14,250 (USD20,592) in assets who are also assessed as having high levels of need, with a sliding scale applied up to GBP23,250 (USD33,600). There is a national framework for assessing need, but local authorities are free to set eligibility thresholds for access to funds, which has become progressively more restricted.²⁵ Plans to impose a cap on total out-of-pocket spending on long-term care have been postponed until 2020.

Those eligible are liable for copayments, with some people contributing almost all of their “assessed income,” including pensions. Beneficiaries can receive personal budgets to purchase their own care or can opt to have the local authority arrange it. Some additional allowances paid to users and carers are exempt from means testing, such as “attendance allowance,” worth a maximum of GBP82.30 (USD119.00) a week.

In 2009, the private sector provided 78 percent of residential care places for older people and the physically disabled in the U.K.²⁶ The NHS provides end-of-life palliative care at patients’ homes, in hospices (usually run by charitable organizations), in care homes, or in hospitals. Separate government funding is available for working-age people with disabilities.



What are the key entities for health system governance?

The Department of Health and the Secretary of State for Health are ultimately responsible for the health system as a whole. The Health and Social Care Act 2012 transferred important functions to NHS England, including overall budgetary control, supervision of CCGs, and, along with Monitor (now NHS Improvement), responsibility for setting DRG rates for the provision of NHS services. NHS England also commissions some specialized low-volume services, national immunization and screening programs, and primary care. It is responsible for setting the strategic direction of health information technology, including the development of online services to book appointments, the setting of quality standards for electronic medical record-keeping and prescribing, and the IT infrastructure of the NHS.

The National Institute for Health and Clinical Excellence (NICE) sets guidelines for clinically effective treatments and appraises new health technologies for their efficacy and cost-effectiveness. The Care Quality Commission (CQC) ensures basic standards of safety and quality through provider registration and monitors care standards achieved (described further below). It can require closure of services if serious quality concerns are identified.

NHS Improvement licenses all providers of NHS-funded care and may investigate potential breaches of NHS cooperation and competition rules, as well as mergers involving NHS foundation trusts. Where such mergers are found to be prima facie undesirable, they are referred to the Office of Fair Trading and the Competition Commission.

Healthwatch England promotes patient interests nationally. In each community, local Healthwatches support people who make complaints about services; quality concerns may be reported to Healthwatch England, which can then recommend that the CQC take action. In addition, local NHS bodies, including general practices, hospital trusts, and CCGs, are expected to support their own patient engagement groups and initiatives. The Department of Health owns NHS Choices, the primary website for public information about health conditions, the location and quality of health services, and other information. The website, which also offers a platform for user feedback, received 27 million visits a month in 2012–2013.²⁷



What are the major strategies to ensure quality of care?

The CQC regulates all health and adult social care in England. All providers, including institutions, individual partnerships, and solo practitioners, must be registered with the CQC, which monitors performance using nationally set quality standards and investigates individual providers when concerns have been raised (e.g., by patients). It rates hospitals' inspection results and can close down poorly performing services. New "fundamental standards" for all health and social care came into force in 2015.²⁸ The monitoring process includes results of national patient experience surveys.

NICE develops quality standards covering the most common conditions occurring in primary, secondary, and social care. National strategies have been published for a range of conditions, from cancer to trauma. There are national registries for key disease groups and procedures. Maximum waiting times have been set for cancer treatment, elective treatments, and emergency treatment. A website, NHS Evidence, provides professionals and patients with up-to-date clinical guidelines. Support is also provided by NHS Quality Improvement, part of NHS England.

Information on the quality of services at the organization, department, and (for some procedures) physician levels is published on NHS Choices. Results of inspections by the CQC are also publicly accessible. The Quality and Outcomes Framework provides general practices with financial incentives to improve quality. General practices are awarded points (which determine a portion of their remuneration) for keeping a disease registry of patients with certain diseases or conditions and their management and treatment. For hospitals, 2.5 percent of contract value is linked to the achievement of a limited number of quality goals through the Commissioning for Quality and Innovation initiative. In addition, DRG rates for some procedures are linked to best practice.

All doctors are required by law to have a license to practice from the General Medical Council. Similar requirements apply to all professions working in the health sector. A process of revalidation every five years is being introduced for doctors. Providers of hospital services also must be registered with the CQC.



What is being done to reduce disparities?

The Secretary of State, NHS England, and CCGs have a legal duty to “have regard” for the need to reduce health disparities, although the applicable legislation does not specify what actions need to be taken. NHS England publishes an annual report on the actions taken and progress being made in reducing disparities in access and outcomes, by gender, disability, age, socioeconomic status, and ethnicity.²⁹ Strategies include ensuring that local areas receive adequate resources to tackle inequalities and that the outcomes for at-risk groups are routinely monitored.



What is being done to promote delivery system integration and care coordination?

GPs increasingly work in multipartner practices that employ nurses and other clinical staff, who carry out much of the routine monitoring of patients with long-term conditions. These practices also have some of the features of a medical home—that is, they direct patients to specialists in hospitals or to community-based professionals, like dietitians and community nurses, and hold treatment records of their patients. GPs are responsible for care coordination as part of their overall contract; to improve coordination for older patients, the latest version of the contract (2014–2015) requires practices to have a “named accountable GP” for all patients over age 75. GPs also have financial incentives to provide continuous monitoring of patients with the most common chronic conditions, such as diabetes and heart disease.

The 2012 Act charged NHS England, Monitor, and CCGs with promoting integrated care, i.e., closer links between hospital- and community-based health services, including primary and social care. The health and well-being boards within local authorities are intended to promote integration between NHS and local authority services, particularly at the intersection of hospital and social care.

Practical initiatives include the Better Care Fund (GBP3.9 billion, or USD5.6 billion), pooled from existing health and social care budgets, for integration projects by local health and social care commissioners starting in 2015–2016. These funds are being used to improve the discharge process for hospital patients, reduce reliance on long-term care, and improve access to out-of-hospital care.



What is the status of electronic health records?

The NHS number assigned to every registered patient serves as a unique identifier. All general-practice patient records are computerized. Since April 2015, GP practices have been contractually obliged to offer patients the choice of booking appointments and ordering prescriptions online. As of March 31, 2016, practices are required to offer patients access to their detailed coded record—including information about diagnoses; medications and treatments; immunizations; and test results. Practices are not required to allow patients access to information that clinicians enter in free-text fields. Where electronic records are not available to patients, such as in dentistry, they can request a paper copy. Records are not routinely linked among providers.

The NHS had aimed to make primary, urgent, and emergency care services paperless by 2018, and all other parts of the NHS by 2020. However, this time line has already slipped, and a recent independent review of digital use in the NHS suggests that 2023 is a more reasonable target for trusts to reach digital maturity.³⁰

NHS Choices will serve as a single point of access for patients to register with a GP, book appointments and order prescriptions, access apps and digital tools, speak to their doctor online or via video link, and view their full health record.³¹



How are costs contained?

Costs in the NHS are constrained by a global budget that cannot be exceeded, rather than through patient cost-sharing or direct constraints on supply. NHS budgets are set at the national level, usually on a three-year cycle. CCGs are allocated funds by NHS England, which closely monitors their financial performance to prevent overspending. They are expected to achieve a balanced budget each year.

Since 2010, the allocation of funds by the central government has grown much more slowly than the long-term historical rate, which averaged 4 percent in real terms between 1949–1950 and 2010–2011.³² Between 2010–2011 and 2014–2015, average real-term growth in spending on health rose by 1.2 percent and is projected to rise by 1.1 percent between 2015–2016 and 2020–2021.³³

The mismatch between funding, demand, and the cost of providing services has led to NHS hospitals and other providers recording a deficit of GBP 3.7 billion (USD5.3 billion) for 2015–2016 and a projected gap of GBP6.0 billion (USD8.7 billion) by 2020–2021, even if hospitals can continue to create efficiencies of 2 percent a year.³⁴

Although some of the savings targets have been met in the past five years, the financial pressure on the NHS is being associated with some deterioration in the quality of care—notably waiting time targets.³⁵

Cost-containment strategies to date include freezing staff pay increases, supporting the increased use of generic drugs, reducing DRG payments for hospital activity, managing demand, and reducing administration costs. In 2016, NHS Improvement launched a program to help hospital providers generate savings through more efficient use of staff, more cost-effective purchasing of drugs and medical equipment, and better management of estates and facilities, which, if implemented, could save GBP5.0 billion (USD7.2 billion) by 2020.³⁶ There are a number of tools whereby local purchasers can maximize value by addressing unwarranted variations in utilization and clinical practice, provided by the government-funded Rightcare program. Local purchasers can also run competitive tenders for certain services.

The costs of prescription (branded) drugs are contained by the Pharmaceutical Price Regulation Scheme. The latest scheme, lasting five years through 2018, regulates the profits that drug companies can make selling drugs to the NHS. It is a voluntary scheme, negotiated between the U.K. government and the pharmaceutical industry, with new medicines to be introduced to the NHS at prices set by the manufacturer as long as they remain within the profit cap.³⁷ This scheme runs parallel with the cost-effectiveness appraisals by NICE, which tends not to recommend new drugs as cost-effective if they exceed GBP20,000–GBP30,000 (USD28,900–USD43,350) per Quality Adjusted Life Year (QALY).



What major innovations and reforms have been introduced?

In October 2014, NHS bodies, led by NHS England, published the *Five Year Forward View*, which sets out the challenges facing the NHS and strategies to address them.³⁸ These include pilot programs across England to test new models of care known as “vanguards.” To date, there are 50 vanguard sites testing such innovations as scaled-up primary care, enhanced health care in long-term care homes, vertically integrated hospital and community care, and networks to improve emergency care. NHS England hopes that these will lead to better tools for identifying those at risk of becoming high-need, high-cost patients, and to the development of capitated contracts to encourage providers to collaborate in the care of complex patients. *The Five Year Forward View* also sets out strategies to improve health and well-being, including a diabetes prevention initiative.³⁹ All NHS areas are also expected to implement full seven-day working weeks in hospitals and general practice by 2020, as pledged in an election manifesto in 2015.

To accelerate the process of reform, in December 2015 the government announced a new approach that involves all local purchasers and providers coming together across 44 local “footprints” to create multiyear plans to transform services, based on a conglomerated budget for their local populations.⁴⁰ Although the legal responsibility of individual NHS organizations to break even remains unchanged, this approach calls for organizations to collaborate, and represents an important break with the previous policy of competition.

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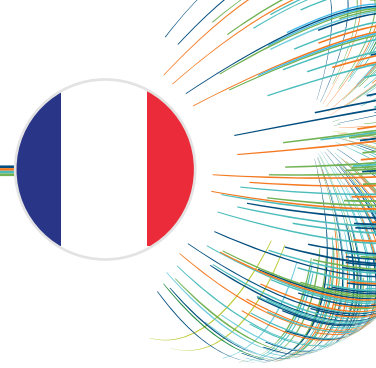
Notes

1. In cases where data for England are unavailable (e.g., financial or funding data), U.K. data are used instead.
2. Department of Health, *NHS Constitution for England*, updated Oct. 14, 2015, <https://www.gov.uk/government/publications/the-nhs-constitution-for-england>.
3. Office for National Statistics, *UK Health Accounts: 2014*, May 19, 2016, <https://www.ons.gov.uk/releases/ukhealthaccounts2014>.
4. Department of Health, *Guidance on Implementing the Overseas Visitors Hospital Charging Regulations*, 2015, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/496951/Overseas_visitor_hospital_charging_accs.pdf.
5. LaingBuisson, *Health Cover UK Market Report*, 12th ed., Aug. 2015, http://www.laingbuisson.com/wp-content/uploads/2016/06/Health_Cover_12ed_Bro_WEB.pdf.
6. King's Fund, *The UK Private Healthcare Market: Appendix to the Commission on the Future of Health and Social Care in England: Final Report*, 2014, <https://www.kingsfund.org.uk/sites/files/kf/media/commission-appendix-uk-private-health-market.pdf>.
7. Competition and Markets Authority, *Private Healthcare Market Investigation*, April 2, 2014, https://assets.publishing.service.gov.uk/media/533af065e5274a566000023/Private_healthcare_main_report.pdf.
8. Department of Health, *The NHS Constitution for England*, updated Oct. 14, 2015, <https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-england>.
9. A total of 533 appraisals were carried out between March 2000 and August 2014.
10. Please note that, throughout this profile, all figures in USD were converted from GBP at a rate of GBPO.692 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2016) for England.
11. Office for National Statistics, *UK Health Accounts: 2014*, May 19, 2016, <https://www.ons.gov.uk/releases/ukhealthaccounts2014>.
12. Including consumer spending on drugs and medical products not covered by the NHS, such as glasses, dental treatment, and spending on hospital and outpatient care.
13. Health and Social Care Information Centre, *Prescriptions Dispensed in the Community: England, 2005–15*, July 5, 2015, <http://content.digital.nhs.uk/catalogue/PUB20664/pres-disp-com-eng-2005-15-rep.pdf>.
14. Health and Social Care Information Centre, *General and Personal Medical Services, England 2005–2015*, <http://content.digital.nhs.uk/catalogue/PUB20503>.
15. Health and Social Care Information Centre, *Healthcare Workforce Statistics, England, March 2016*, <http://content.digital.nhs.uk/catalogue/PUB21783/nhs-staf-sep-2015-mar-2016-rep.pdf>.
16. Health and Social Care Information Centre, *Investment in General Practice, 2010/11 to 2014/15, England, Wales, Northern Ireland and Scotland*, Sept. 17, 2015, <http://www.hscic.gov.uk/catalogue/PUB18469>.
17. King's Fund and Nuffield Trust, *Securing the Future of General Practice: New Models of Primary Care*, July 2013, http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/130718_securing_the_future_summary_0.pdf.
18. Health and Social Care Information Centre, *GP Earnings and Expenses: 2014 to 2015*, Sept. 14, 2016, <http://content.digital.nhs.uk/catalogue/PUB21314/gp-earn-ex-1415-rep.pdf>.
19. GHK Consulting Ltd. and Office of Fair Trading, *Programme of Research Exploring Issues of Private Healthcare Among General Practitioners and Medical Consultants: Population Overview Report for the Office of Fair Trading*, 2011.
20. NHS Confederation, *Key Statistics on the NHS*, <http://www.nhsconfed.org/resources/key-statistics-on-the-nhs>; accessed Aug. 30, 2016.
21. Department of Health, *A Simple Guide to Payment by Results*, March 25, 2013, <https://www.gov.uk/government/publications/simple-guide-to-payment-by-results>.
22. Competition and Markets Authority, *Private Healthcare Market Investigation*, 2014, https://assets.publishing.service.gov.uk/media/533af065e5274a566000023/Private_healthcare_main_report.pdf.
23. Nuffield Trust, *Public Payment and Private Provision: The Changing Landscape of Health Care in the 2000s*, May 2013, http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/130522_public-payment-and-private-provision.pdf.
24. Centre for Economic Performance and London School of Economics, *How Mental Health Loses Out in the NHS: A Report by the Centre for Economic Performance's Mental Health Policy Group*, June 2012, <http://cep.lse.ac.uk/pubs/download/special/cepsp26.pdf>.
25. Nuffield Trust, *Focus On: Social Care for Older People—Reductions in Adult Social Services for Older People in England*, March 2014, http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/140326_qualitywatch_focus_on_social_care_older_people_0.pdf.
26. LangBuisson, *Laing's Healthcare Market Review*, 2013.
27. NHS Choices, *Transparency, Transaction, Participation: Annual Report 2012/13*, <http://www.nhs.uk/aboutNHSChoices/professionals/developments/Documents/annual-report/nhs-choices-annual-report-2012.pdf>.
28. Department of Health, *Hard Truths: The Journey to Putting Patients First, Volume One of the Government Response to the Mid Staffordshire NHS Foundation Trust Public Inquiry*, Jan. 2014, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/270368/34658_Cm_8777_Vol_1_accessible.pdf.

29. NHS England, *Our 2014–15 Annual Report: Health and High Quality Care for All, Now and for Future Generations*, July 21, 2015, <https://www.england.nhs.uk/wp-content/uploads/2015/07/nhse-annual-report-2014-15.pdf>.
30. R. M. Wachter, *Making IT Work: Harnessing the Power of Health Information Technology to Improve Care in England*, Report of the National Advisory Group on Health Information Technology in England, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/550866/Wachter_Review_Accessible.pdf.
31. Department of Health, *Personalised Health and Care 2020—Using Data and Technology to Transform Outcomes for Patients and Citizens: A Framework for Action*, Nov. 2014, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/384650/NIB_Report.pdf.
32. Nuffield Trust, *NHS and Social Care Funding: The Outlook to 2021/22*, Nuffield Trust, July 2012, http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/120704_nhs-social-care-funding-outlook-2021-22-update2.pdf.
33. Nuffield Trust, Health Foundation, and King's Fund, *The Autumn Statement: Joint Statement on Health and Social Care*, Nov. 2016, http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/autumn_statement_kings_fund_nov_2016.pdf.
34. S. Gainsbury, *Feeling the Crunch: NHS Finances to 2020*, Nuffield Trust, Aug. 2016, <http://www.nuffieldtrust.org.uk/publications/feeling-crunch-nhs-finances-2020>.
35. Nuffield Trust and Health Foundation, *Closer to Critical? Quality Watch Annual Statement*, 2015, <http://www.qualitywatch.org.uk/annual-statement/2015-closer-critical>.
36. Department of Health, *Operational Productivity and Performance in English NHS Acute Hospitals: Unwarranted Variation—An Independent Report for the Department of Health by Lord Carter of Coles*, Feb. 2016, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/499229/Operational_productivity_A.pdf.
37. Department of Health and ABPI, *The Pharmaceutical Price Regulation Scheme 2014*, Dec. 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/282523/Pharmaceutical_Price_Regulation.pdf.
38. NHS England, *Five Year Forward View*, Oct. 2014, <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf>.
39. NHS England, *Five Year Forward View: Time to Deliver*, June 4, 2015, <https://www.england.nhs.uk/wp-content/uploads/2015/06/5yfv-time-to-deliver-25-06.pdf>.
40. NHS England, *Delivering the Forward View: NHS Planning Guidance 2016/17–2020/21*, Dec. 2015, <https://www.england.nhs.uk/wp-content/uploads/2015/12/planning-guid-16-17-20-21.pdf>.

The French Health Care System

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What is the role of government?

The provision of health care in France is a national responsibility. The Ministry of Social Affairs, Health, and Women's Rights is responsible for defining national strategy. Over the past two decades, the state has been increasingly involved in controlling health expenditures funded by statutory health insurance (SHI).¹

Planning and regulation within health care involve negotiations among provider representatives, the state, and SHI. Outcomes of these negotiations are translated into laws passed by Parliament.

In addition to setting national strategy, the responsibilities of the central government include allocating budgeted expenditures among different sectors (hospitals, ambulatory care, mental health, and services for disabled residents) and, with respect to hospitals, among regions. The ministry is represented in the regions by the regional health agencies, which are responsible for population health and health care, including prevention and care delivery, public health, and social care. Health and social care for elderly and disabled people come under the jurisdiction of the General Councils, which are the governing bodies at the local (departmental) level.



Who is covered and how is insurance financed?

Publicly financed health insurance: Total health expenditures constituted 12 percent of GDP (EUR257 billion, or USD310 billion) in 2014, of which 76.6 percent was publicly financed.

SHI is financed by employer and employee payroll taxes (50%); a national earmarked income tax (35%); taxes levied on tobacco and alcohol, the pharmaceutical industry, and voluntary health insurance companies (13%); and state subsidies (2%).

Coverage is universal and compulsory, provided to all residents by noncompetitive SHI. As of January 2016, SHI eligibility is universally granted under the PUMA (Protection universelle maladie, or universal health care coverage) law.² Citizens can opt out of SHI only in rare cases—for example, individuals employed by foreign companies.

The state finances health services for undocumented immigrants who have applied for residence. Visitors from elsewhere in the European Union (EU) are covered by an EU insurance card. Non-EU visitors are covered for emergency care only.

Private health insurance: Most voluntary health insurance (VHI) is complementary, covering mainly the copayments for usual care, balance billing, and vision and dental care (minimally covered by SHI). Complementary insurance is provided mainly by not-for-profit, employment-based mutual associations or provident institutions, which are allowed to cover only copayments for care provided under SHI; 95 percent of the population is covered either through employers or via means-tested vouchers. Private for-profit companies offer both supplementary and complementary health insurance, but only for a limited list of services.

VHI finances 13.5 percent of total health expenditure.³ The extent of VHI coverage varies widely, but all VHI contracts cover the difference between the SHI reimbursement rate and the service fee according to the official fee schedule. Coverage of balance billing is also commonly offered, and most contracts cover the balance for services billed at up to 300 percent of the official fee.

In 2013, standards for employer-sponsored VHI were established by law to reduce inequities in coverage stemming from variations in access and quality. By 2017, all employees will benefit from employer-sponsored insurance (for which they pay 50% of the cost), which will cover at least 125 percent of SHI fees for dental care and EUR100 (USD121) for vision care per year.⁴ The population of beneficiaries without supplementary insurance is estimated at 4 million. Choice among insurance plans is determined by the industry in which the employer operates.



What is covered?

Services: Lists of procedures, drugs, and medical devices covered under SHI are defined at the national level and apply to all regions of the country. The health ministry, a pricing committee within the ministry, and SHI funds set these lists, rates of coverage, and prices.

SHI covers hospital care and treatment in public or private rehabilitation or physiotherapy institutions; outpatient care provided by general practitioners, specialists, dentists, and midwives; diagnostic services prescribed by doctors and carried out by laboratories and paramedical professionals; prescription drugs, medical appliances, and prostheses that have been approved for reimbursement; and prescribed health care–related transportation and home care. It also partially covers long-term hospice and mental health care and provides only minimal coverage of outpatient vision and dental care.

While preventive services in general receive limited coverage, there is full reimbursement for targeted services, such as immunization, mammography, and colorectal cancer screening, as well as targeted populations. A measure of the “Touraine law,” adopted on April 14, 2015, mandated the legalization of drug-use centers over a subsequent six-year period. These centers will be used exclusively for treatment of especially vulnerable drug addicts, under the supervision of health professionals.⁵

Cost-sharing and out-of-pocket spending: Cost-sharing takes three forms: coinsurance; copayments (the portion of fees not covered by SHI); and balance billing in primary and specialist care. In 2014, total out-of-pocket spending made up 8.5 percent of total health expenditures (excluding the portion covered by supplementary insurance), a lower percentage than in previous years—possibly because of the agreement signed between physicians’ unions and government to limit balance billing in exchange for its voluntary capping at twice the official fee. This contract offers patients partial reimbursement of balance billing by SHI and reduced social charges for physicians.

Most out-of-pocket spending is for dental and vision services, for which official fees are very low, not more than a few euros for glasses or hearing aids and a maximum of EUR200 (USD241) for dentures, but all of these are commonly balance-billed at more than 10 times the official fee. The share of out-of-pocket spending on dental and optical services is decreasing, however. At the same time, out-of-pocket expenditures on drugs are increasing, owing to increased VHI coverage of dental and optical care and increasing numbers of delisted drugs, as well as a rise in self-medication.

Coinsurance rates are applied to all health services and drugs listed in the benefit package and vary by:

- type of care (inpatient, 20%; doctor visits, 30%; and dental, 30%)
- the effectiveness of prescription drugs (highly effective drugs, like insulin, carry no coinsurance; rates for all other drugs are 15% to 100%, depending on therapeutic value)
- compliance with the recently implemented gatekeeping system

The table below lists nonreimbursable copayments for various services. These apply up to an annual ceiling of EUR50 (USD60). There are no deductibles.

Service	Copayment	
	Euros	U.S. Dollars
Inpatient hospital day	18.00	22.00
Doctor visit	1.00	1.20
Prescription drug	0.50	0.60
Ambulance	2.00	2.40
Hospital	18.00	22.00

Safety net: People with low incomes are entitled to free or state-sponsored VHI, free vision care, and free dental care, with the total number of such beneficiaries estimated at around 10 percent of the population.⁶ Exemptions from coinsurance apply to individuals with any of 32 specified chronic illnesses (13% of the population, with exemption limited to treatment for those conditions); individuals who benefit from either complete state-sponsored medical coverage (3%) or means-tested vouchers for complementary health insurance (6%); and individuals receiving invalidity and work-injury benefits (2%).⁷ 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 nonreimbursable copayments.



How is the delivery system organized and financed?

Collective agreements between representatives of the health professions and SHI, signed at the national level, apply to all but those professionals who expressly opt out. These agreements set the fee schedule as well as coordination and quality incentives.

Primary care: There are roughly 221,000 general practitioners (GPs) and 119,000 specialists in France (a ratio of 3.4 per 1,000 population). About 59 percent of physicians are fully or partly self-employed (67% of GPs, 51% of specialists).⁸ Over 50 percent of GPs, predominantly younger doctors, are in group practices. An average practice is made up of two to three physicians. Seventy-five percent of practices are made up exclusively of physicians; the remaining practices comprise a range of allied health professionals, typically paid fee-for-service.

There is a voluntary gatekeeping system for adults age 16 and older, with financial incentives offered for registering with a GP or specialist

Self-employed GPs are paid mostly fee-for-service (currently EUR23, or USD28, to be increased to EUR25, or USD30, in 2017) and can receive a yearly capitated per-person payment of EUR40 (USD48) to coordinate care for patients with a chronic condition. In addition, up to EUR5,000 (USD6,024) annually is provided for achieving targets related to the use of computerized medical charts, electronic claims transmission, delivery of preventive services such as immunization, compliance with guidelines for diabetic and hypertensive patients, generic prescribing, and limited use of psychoactive drugs for elderly patients.

Since 2013, GPs also can enter into a contractual agreement under which they are guaranteed a monthly income of EUR6,900 (USD8,313) if they set up their practice in a region with insufficient physician supply. For those who elect to work full-time in medical centers, the guaranteed salary is around EUR50,000 (USD60,240).

The average income of primary care doctors in 2011 was EUR82,020 (USD98,820), 94 percent of which came from fees and the remainder from financial incentives and salary.⁹ Fees, set by the health ministry and SHI, have been frozen since 2011, but revenues from other sources have increased.

Experimental GP networks providing chronic care coordination, psychological services, dietician services, and other care not covered by SHI are financed by earmarked funds from the Regional Health Agencies. In addition, over 1,000 medical homes, providing multiprofessional services (usually with three to five physicians and roughly a dozen other health professionals) and after-hours care, will be in operation by the end of 2016.

Outpatient specialist care: About 36 percent of outpatient specialist care providers are exclusively self-employed and paid on a fee-for-service basis; the rest are either fully salaried by hospitals or have a mix of income. In October 2014, participation in pay-for-performance programs was extended to all self-employed physicians, including specialists; specialists must meet disease-specific quality targets in addition to those targets that apply to GPs. The average annual income derived from pay-for-performance is EUR5,480 (USD6,602) per physician; such income constitutes less than 2 percent of total funding for outpatient services.

Patients can choose among specialists upon referral by a GP, with the exception of gynecologists, ophthalmologists, psychiatrists, and stomatologists. Bypassing referral results in reduced SHI coverage.

The specialist fee set by SHI is EUR28 (USD34), but specialists can balance-bill. The average yearly income of self-employed specialists is EUR133,460 (USD160,795).¹⁰ Half of specialists are in group practices, which are increasing among specialties that require major investments, such as nuclear medicine, radiotherapy, pathology, and digestive surgery.

Specialists working in public hospitals may see private-pay patients on either an outpatient or an inpatient basis, but they must pay a percentage of their fees to the hospital. A 2013 report to the health ministry estimated that 10 percent of the 46,000 hospital specialists in surgery, radiology, cardiology, and obstetrics had treated private patients. The mounting discontent over excessive balance billing revealed in the press, together with claims by private clinics of unfair competition, has prompted several public inquiries—the latest of which resulted in recommendations to increase public control over this activity.

Administrative mechanisms for paying primary care doctors and specialists: Patients pay the full fee (reimbursable portion and balance billing, if any) and claim reimbursement covering the full sum or less, depending on coverage, minus EUR1.00 (USD1.20), capped at a maximum of EUR50.00 (USD60.00) per patient per year. A very controversial article in the 2015 Touraine law was the third-party payment management system (Système du tiers-payant) as a safety net for the poorest populations. Third-party payment makes physicians' consultations totally free at the point of care: practitioners will be paid directly by social security and supplementary health insurance.¹¹

After-hours care: After-hours care is delivered by the emergency departments of public hospitals, private hospitals that have signed an agreement with their Regional Health Agency, self-employed physicians who work for emergency services, and medical homes financed by SHI and staffed by health professionals on a voluntary basis. Primary care physicians are not mandated to provide after-hours care.

Emergency services can be accessed via the national emergency phone number, which is staffed by trained professionals who determine the type of response needed. The feasibility of telephone or telemedicine advice is undergoing experimentation; it would include sharing information from the patient's electronic medical record with the patient's primary care doctor. Publicly funded multidisciplinary health centers with self-employed health professionals (physicians and nonphysicians) allow better after-hours access to care in addition to more comprehensive care; fee-for-service payment is the rule for these centers.

Hospitals: Public institutions account for about 65 percent of hospital capacity and activity, private for-profit facilities account for another 25 percent, and private nonprofit facilities, the main providers of cancer treatment, make up the remainder. As of 2008, all hospitals and clinics are reimbursed via the diagnosis-related group (DRG) system, which applies to all inpatient and outpatient admissions and covers physicians' salaries in public and not-for-profit hospitals. Bundled payment by episode of care does not exist.

Public hospitals are funded mainly by statutory health insurance (80%), with voluntary insurance and direct patient payment accounting for their remaining income. Public and private nonprofit hospitals also benefit from grants that compensate research and teaching (up to an additional 13% of the budget) and from the provision of emergency services, organ harvesting, and organ transplantation (on average, an additional 10%–11% of a hospital's budget). Private, for-profit clinics owned either by individuals or, increasingly, by large corporations have the same funding mechanism as public hospitals, but the share of respective payers differs. Doctors' fees are billed in addition to the DRG in private clinics, and DRG payment rates are lower there than they are in public or nonprofit hospitals. This disparity is justified by differences in the size of facilities, the DRG mix, and the patients' characteristics (age, comorbid conditions, and socioeconomic status). Rehabilitative hospitals also have a prospective payment system based on length of stay and care intensity.

Mental health care: Services for mentally ill people are provided by both the public and the private health care sector, with an emphasis on community-based provision. Public care is provided within geographically determined areas and includes a wide range of preventive, diagnostic, and therapeutic inpatient and outpatient services. Ambulatory centers provide primary ambulatory mental health care, including home visits.

Mental health care is not formally integrated with primary care, but a large number of disorders are also treated on an outpatient basis by GPs or private psychiatrists or psychologists, some of them practicing psychotherapy and, occasionally, psychoanalysis.

Statutory health insurance covers care provided by GPs and psychiatrists in private practice, public mental health care dispensaries, and private psychiatric hospitals. Copayments do not apply to persons with a diagnosed long-term mental illness. Care provided by psychotherapists or psychoanalysts is fully financed by patients or covered by VHI. Copayments and the flat-rate fee for accommodation can also be fully covered by VHI.

Long-term care and social supports: Total expenditure for long-term care in 2013 was estimated to be EUR39 billion (USD47 billion), or 17 percent of total health expenditures. Statutory health insurance covers the medical costs of long-term care, while families are responsible for the housing costs in hospices and other long-term facilities—on average, EUR1,500 (USD1,809) per month. End-of-life care in hospitals is fully covered. Some funding of care for the elderly and disabled comes from the National Solidarity Fund for Autonomy, which is in turn financed by SHI and the revenues from an unpaid working “solidarity” day. Local authorities, the general councils, and households also participate in financing these categories of care.

Home care for the elderly is provided mainly by self-employed physicians and nurses and, to a lesser extent, by community nursing services. Long-term care in institutions is provided in retirement homes and long-term care units, totaling roughly 10,000 institutions with a total of 720,000 beds. Of these institutions, 54 percent are public, 28 percent private nonprofit, and 18 percent for-profit, although the percentage of for-profit institutions is increasing.

In addition, temporary care for dependent patients and respite services for their caregivers are available without restrictions from the states or regions.

Means-tested monetary allowances are provided for the frail elderly. The allowances are adjusted in relation to the individual’s dependence level, living conditions, and needs, as assessed by a joint health and social care team, and may be used for any chosen service and provider. About 1.1 percent of the total population is estimated to be eligible. Informal caregivers also benefit from tax deductions.

To address loss of autonomy among the elderly, a law enacted at the end of 2015 established local conferences to define priorities, identify existing services, and create new programs as necessary.¹²



What are the key entities for health system governance?

The health ministry sets and implements government policy in the areas of public health and the organization and financing of the health care system, within the framework of the Public Health Act. It regulates roughly 75 percent of health care expenditure on the basis of the overall framework established by Parliament, which includes a shared responsibility with statutory health insurers for defining the benefit package, setting prices and provider fees (including DRG fees and copayments), and pricing drugs.

The French Health Products Safety Agency oversees the safety of health products, from manufacturing to marketing. The agency also coordinates vigilance activities relating to all relevant products.

The Agency for Information on Hospital Care manages the information systematically collected from all hospital admissions and used for hospital planning and financing.

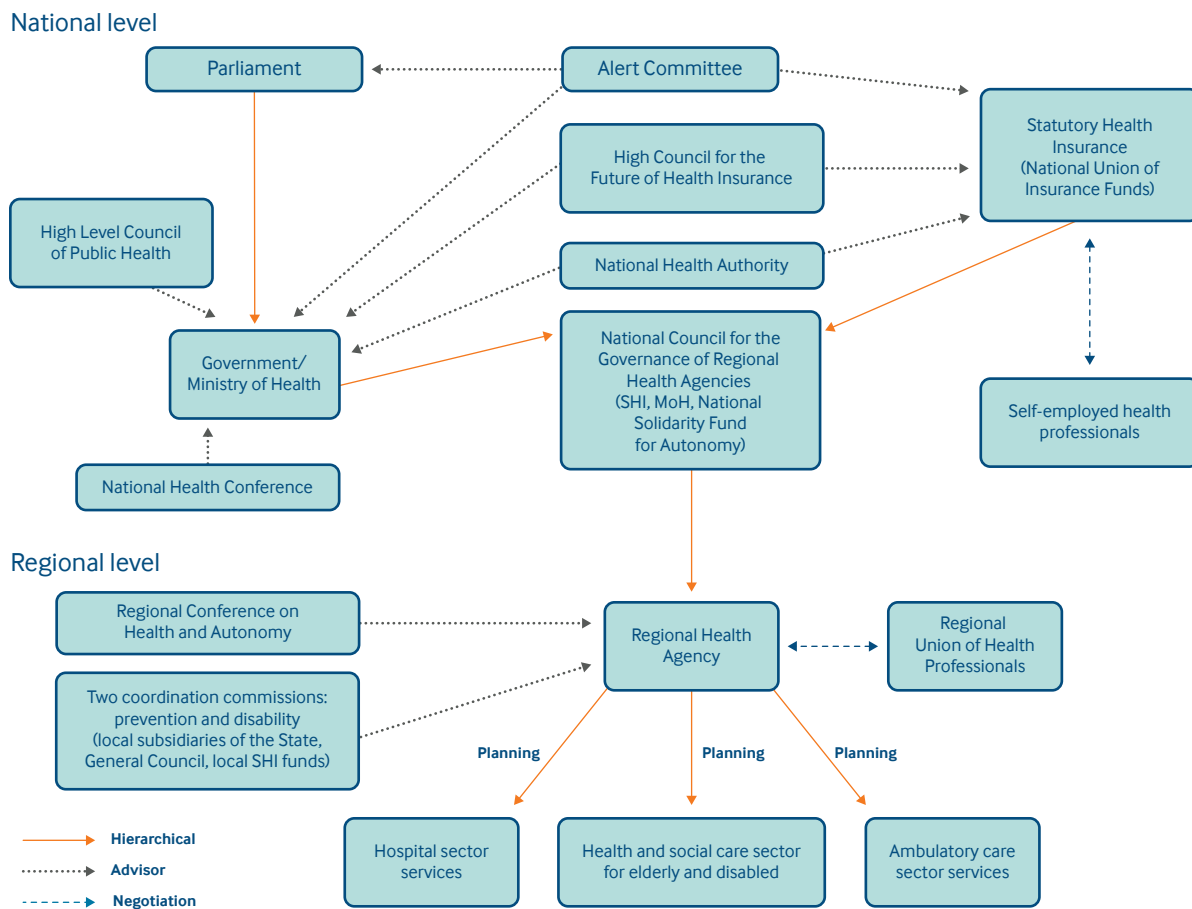
The remit of the National Agency for the Quality Assessment of Health and Social Care Organizations encompasses the promotion of patient rights and the development of preventive measures to avoid mistreatment, particularly in vulnerable populations such as the elderly and disabled, children, adolescents, and socially marginalized people. It produces practice guidelines for the health and social care sector and evaluates organizations and services.

The National Health Authority (HAS) is the main health technology assessment body, with in-house expertise as well as the authority to commission assessments from external groups. The HAS remit is diverse, ranging from the assessment of drugs, medical devices, and procedures to publication of guidelines, accreditation of health care organizations, and certification of doctors.

Competition is limited to VHI, whose providers are supervised by the Mutual Insurance Funds Control Authority.

The Public Health Agency (Santé publique France) was created in 2016 to protect population health.

Organization of the Health System in France



Notes: SHI: Statutory health insurance. MoH: Ministry of Health.

Source: Adapted from K. Chevreul, I. Durand-Zaleski, S. B. Bahrami et al., "France: Health System Review," *Health Systems in Transition*, vol. 12, no. 6, 2010, pp. xxi–xxii.

What are the major strategies to ensure quality of care?

National plans have been developed for treatment of rare diseases and a number of chronic conditions, including cancer and Alzheimer's, and rare diseases, as well as for prevention and healthy aging. These plans establish governance (for example, the cancer plan to coordinate research and treatment in cancer and establish guidelines for medical practice and activity thresholds), develop tools, and coordinate existing organizations. All plans emphasize the importance of supporting caregivers and ensuring patients' quality of life, in addition to enforcing compliance with guidelines and promoting evidence-based practice.

The HAS publishes an evidence-based basic benefit package for 32 chronic conditions. Further guidance on recommended care pathways covers chronic obstructive pulmonary disease, heart failure, Parkinson's, and end-stage renal disease.

SHI and the health ministry fund “provider networks” in which participating professionals share guidelines and protocols, agree on best practices, and have access to a common patient record. Regional authorities fund telemedicine pilot programs to improve care coordination and access to care for specific conditions or populations, like newborns or the elderly. The Paerpa (Personnes âgées en risque de perte d’autonomie) program, established in 2014 in nine pilot regions, is a nationwide endeavor to improve the quality of life and coordination of interventions for the frail elderly.

For self-employed physicians, certification and revalidation are organized by an independent body approved by the HAS. For hospital physicians, both can be performed as part of the hospital accreditation process.

Doctors, midwives, nurses, and other professionals must undergo continuous learning activities, which are audited every fourth or fifth year. Optional accreditation exists for a number of high-risk medical specialties, such as obstetrics, surgery, and cardiology. Accredited physicians can claim a deduction on their professional insurance premiums.

Hospitals must be accredited every four years; criteria and accreditation reports are publicly available on the HAS website (www.has-sante.fr). 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 health ministry, which publishes online technical information, data on hospital activity, and data on control of hospital-acquired infections. Currently, financial rewards or penalties are not linked to public reporting, although they remain a contested issue. Information on individual physicians is not available.



What is being done to reduce disparities?

There is a 6.3-year gap in life expectancy between males in the highest and males in the lowest social categories¹³ and poorer self-reported health among those with state-sponsored insurance and no complementary insurance. The 2004 Public Health Act set targets for reducing inequities in access to care related to geographic availability of services (so far, only nurses have agreed to limit new practices in overserved areas), financial barriers (out-of-pocket payments will be limited by state-sponsored complementary insurance), and inequities in prevention related to obesity, screening, and immunization. In 2009, launching its Second Cancer Plan, France placed inequalities at the heart of its public health policy. In 2012, the French president reaffirmed this priority with the Third Cancer Plan and later the 2015 Touraine law.¹⁴ A contractual agreement allows for the use of incentives for physicians practicing in underserved areas, the extension of third-party payment, and enforced limitations on denial of care.

National surveys showing regional variations in health and access to health care are reported by the health ministry.



What is being done to promote delivery system integration and care coordination?

Inadequate coordination in the health care system remains a problem. Various quality-related initiatives piloted by the health ministry or by regional agencies aim to improve the coordination of hospital, out-of-hospital, and social care (see above). They target the elderly and fragile populations and attempt to streamline the health care pathway, integrating providers of health and social care via a shared portal and case managers.



What is the status of electronic health records?

The initiative to fully integrate electronic health records (EHRs) has faced multiple delays, and the integration of information systems between health care professionals and hospitals remains limited.¹⁵ The EHR project (Projet dossier médical personnel) covers 587,443 patients as of 2016, or 0.8 percent of the population, and an estimated 731 hospitals.¹⁶ Hospital-based and office-based professionals and patients have a unique electronic identifier, and any health professional can access the record and enter information subject to patient authorization. Interoperability is ensured via a chip on patients’ health cards. By law, patients have full access to the information in their own records, either directly or through their GP.

The sharing of information between health and social care professionals is not currently permitted but will be tested as part of the Paerpa program for hospice residents.

The government has created a national agency (ASIP santé) for expanding the uptake and interoperability of existing health information systems.



How are costs contained?

SHI has faced large deficits over the past 20 years, but they have fallen from EUR10.0 billion–EUR12.0 billion (USD12.1 billion–USD14.5 billion) in 2003 to EUR4.6 billion (USD5.5 billion) in 2015.¹⁷ This trend is the result of a range of initiatives, including a reduction in the number of acute-care hospital beds; the removal of 600 drugs from public reimbursement; an increase in generic prescribing and the use of over-the-counter drugs; a reduction in the price of generic drugs¹⁸; and a reduction of the official fees for self-employed radiologists and biology labs. Other measures include central purchasing to better negotiate costs, increasing the share of outpatient surgery, instituting earlier post-surgery and post-delivery discharge, and reducing duplicate testing. Competition is not used as a cost-control mechanism. Global budgets are used only in price–volume agreements for drugs or devices. Patient cost-sharing mechanisms include increased copayments for patients who refuse generics or do not use the gatekeeping system. The increasing price of drugs is addressed in two ways: 1) by using earmarked funds and capping the total cost of treatments at EUR700 million (USD843 million) in 2015, thus providing treatment to successive waves of patients by decreasing severity; and 2) by negotiating price-volume agreements and undisclosed rebates with manufacturers.

A number of initiatives to reduce “low-value” care, launched by SHI and HAS, include pay-for-performance to reduce prescription of benzodiazepines for elderly persons; reductions in avoidable hospital admissions for patients with heart failure; early discharge after orthopedic surgery and normal childbirth; information on the absence of benefit of prostate cancer screening; using DRG payments to incentivize shifts to outpatient surgery; establishing guidelines for the number of allowable off-work days according to disease or procedure; strengthening controls for the prescription of expensive statins and new anticoagulants; encouraging the use of Avastin over Lucentis, and of other less costly biosimilar drugs; and testing the use of taxi vouchers, instead of ambulances, for chronically ill patients.



What major innovations and reforms have been introduced?

The two major reforms of 2016 have been the universal access to statutory health insurance (effective January 2016) and the deployment of third-party payment for physicians’ consultations (to go into effect in 2017). Both reforms have a clear Beveridgian inspiration and are part of the policy to reduce social inequities in access to care; the latter has also been denounced by physicians’ unions as the “nail in the coffin” for private providers. Reducing health inequities was part of the 2012 presidential campaign platform and has been a recurrent theme for a number of years. While universal insurance access was implemented at once and without political difficulty, third-party payment is being implemented in stages. Starting in July 2016, patients with chronic conditions and pregnant women can obtain it, and by January 2017 all patients will be able to do so, with use becoming mandatory in November 2017. The impact on health inequities will be assessed by monitoring the uptake and patients’ use of medical resources.

Notes

1. O. Nay, S. Béjean, D. Benamouzig et al., "Achieving Universal Health Coverage in France: Policy Reforms and the Challenge of Inequalities," *Lancet*, May 28, 2016 387(10034):2236–49.
2. <http://www.ameli.fr/assures/droits-et-demarches/la-protection-universelle-maladie.php>.
3. DREES, *Les dépenses de santé en 2014*, Etudes et Résultats, no. 935, Ministère des Affaires sociales et de la Santé, Sept. 15, 2015, http://drees.social-sante.gouv.fr/IMG/pdf/er_935_depenses_de_sante.pdf.
4. Please note that, throughout this profile, all figures in USD were converted from EUR at a rate of about EURO.83 per USD, the purchasing power parity conversion rate for GDP in 2014 reported by OECD (2015) for France.
5. O. Nay, S. Béjean, D. Benamouzig et al., "Achieving Universal Health Coverage in France: Policy Reforms and the Challenge of Inequalities," *Lancet*, May 28, 2016 387(10034):2236–49.
6. DREES, *Les dépenses de santé en 2014*, Etudes et Résultats, no. 935, Ministère des Affaires sociales et de la Santé, Sept. 15, 2015.
7. http://www.risquesprofessionnels.ameli.fr/fileadmin/user_upload/document_PDF_a_telecharger/brochures/Rapport%20de%20Gestion_2014.pdf.
8. DREES, *Portrait des professionnels de santé*, Série Etudes et Recherche, no. 134, Ministère des Affaires sociales et de la Santé, Feb. 2016, <http://drees.social-sante.gouv.fr/IMG/pdf/ouvrage>.
9. Ibid.
10. Ibid.
11. O. Nay, S. Béjean, D. Benamouzig et al., "Achieving Universal Health Coverage in France: Policy Reforms and the Challenge of Inequalities," *Lancet*, May 28, 2016 387(10034):2236–49.
12. Cour des Comptes, *Le maintien à domicile des personnes âgées en perte d'autonomie*, July 2016, www.ccomptes.fr.
13. DREES, *Les dépenses de santé en 2014*, Etudes et Résultats, no. 935, Ministère des Affaires sociales et de la Santé, Sept. 15, 2015; O. Nay, S. Béjean, D. Benamouzig et al., "Achieving Universal Health Coverage in France: Policy Reforms and the Challenge of Inequalities," *Lancet*, May 28, 2016 387(10034):2236–49.
14. Nay et al., *ibid.*
15. Ibid.
16. Dossier Médical Personnel, 2016, <http://www.dmp.gouv.fr/web/dmp/>.
17. CNAMTS, *Direction Déléguée des Finances et de la Comptabilité*, Comptes CNAMTS exercice 2015, <http://www.ameli.fr/l-assurance-maladie/connaître-l-assurance-maladie/comptes-annuels/comptes-annuels-2015.php>.
18. IRDES, *Historique de la politique du médicament en France*, <http://www.irdes.fr/documentation/syntheses/historique-de-la-politique-du-medicament-en-france.pdf>.

The German Health Care System

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What is the role of government?

Health insurance is mandatory for all citizens and permanent residents of Germany. It is provided by two systems, namely: 1) competing, not-for-profit, nongovernmental health insurance funds (“sickness funds”—there were 118 as of January 2016¹) in the statutory health insurance (SHI) system; and 2) substitutive private health insurance (PHI). States own most university hospitals, while municipalities play a role in public health activities and own about half of all hospital beds. However, the various levels of government have virtually no role in the direct financing or delivery of health care. To a large degree, regulation is delegated to self-governing associations within sickness funds and provider associations, which are together represented by the most important body, the Federal Joint Committee.



Who is covered and how is insurance financed?

Publicly financed health insurance: In 2014, total health expenditure was 11.2 percent of GDP, of which 74 percent was public, mainly SHI spending (58% of total). General tax-financed federal spending on “extraneous benefits” provided by SHI, such as coverage for children, amounted to about 4.5 percent of total expenditure in 2014.² Sickness funds are financed by compulsory contributions levied as a percentage of gross wages up to a ceiling. Coverage is universal for all legal residents. All employed citizens (and other groups such as pensioners) earning less than EUR56,250 (USD71,564) per year as of 2016 are mandatorily covered by SHI, and their nonearning dependents are covered free of charge.³ Individuals whose gross wages exceed the threshold and the previously SHI-insured self-employed can remain in the publicly financed scheme on a voluntary basis (as 75% do) or purchase substitutive PHI, which also covers civil servants. About 86 percent of the population receive their primary coverage through SHI and 11 percent through substitutive PHI. Military members, police, and other public-sector employees are covered under special programs. Visitors are not covered through German SHI. Refugees and undocumented immigrants are covered by social security in case of acute illness and pain, as well as pregnancy and childbirth.

As of 2016, the legally set uniform contribution rate is 14.6 percent of gross wages, shared equally by the employer and employees. A previous legally fixed additional contribution rate for employees (0.9%) and supplementary per capita premiums set by sickness funds have been abolished and replaced by a supplementary income-dependent contribution rate determined individually by each sickness fund.⁴ In 2015, the supplementary contribution rate was, on average, 0.83 percent—that is, most of the SHI-insured paid less than previously, with rates ranging between 0 and 1.3 percent. For 2016, the average supplementary contribution rate is estimated at 1.1 percent.⁵

This contribution also covers dependents (nonearning spouses and children). Earnings above EUR50,850 (USD64,994) per year (as of 2016) are exempt from contribution. The sickness funds’ contributions are centrally pooled and then reallocated to individual sickness funds using a risk-adjusted capitation formula, taking into account age, sex, and morbidity from 80 chronic and/or serious illnesses.

Private health insurance: In 2015, 8.8 million people were covered through substitutive private health insurance.⁶ PHI is especially attractive for young people with a good income, as insurers may offer them contracts with more extensive ranges of services and lower premiums.

There were 42 substitutive PHI companies in April 2016 (of which 24 were for-profit) covering the two groups exempt from SHI (civil servants, whose health care costs are partly refunded by their employer, and the self-employed)⁷ and those who have chosen to opt out of SHI. All of the PHI-insured pay a risk-related premium, with separate premiums for dependents; risk

is assessed only upon entry, and contracts are based on lifetime underwriting. Government regulates PHI to ensure that the insured do not face large premium increases as they age and are not overburdened by premiums if their income decreases.

PHI also plays a mixed complementary and supplementary role, covering minor benefits not covered by SHI, access to better amenities, and some copayments (e.g., for dental care). The federal government determines provider fees under substitutive, complementary, and supplementary PHI through a specific fee schedule. There are no government subsidies for complementary and supplementary PHI. In 2014, all forms of PHI accounted for 8.9 percent of total health expenditure.⁸



What is covered?

Services: SHI covers preventive services, inpatient and outpatient hospital care, physician services, mental health care, dental care, optometry, physical therapy, prescription drugs, medical aids, rehabilitation, hospice and palliative care, and sick leave compensation. Home care is covered by long-term care insurance (LTCI). Preventive services under SHI include regular dental checkups, child checkups, basic immunizations, checkups for chronic diseases, and cancer screening at certain ages. All prescription drugs are covered except for those explicitly excluded by law (mainly so-called lifestyle drugs) and those excluded following benefits assessment. While the broader framework of the benefit package is legally defined, specifics are determined by the Federal Joint Committee (see below). Long-term care services are covered separately by the LTCI scheme (see below).

Cost-sharing and out-of-pocket spending: Out-of-pocket spending accounted for 13.2 percent of total health spending in 2014, mostly on nursing homes, pharmaceuticals, and medical aids.⁹

Copayments include EUR5.00 to EUR10.00 (USD6.36 to USD12.72) per outpatient prescription, EUR10.00 per inpatient day for hospital and rehabilitation stays (for the first 28 days per year), and EUR5.00 to EUR10.00 for prescribed medical devices. Sickness funds offer selectable tariffs with a range of deductibles and no-claims bonuses. Preventive services do not count toward the deductible. SHI-contracted physicians are not allowed to charge above the fee schedule for services in the SHI benefit catalogue. However, a list of “individual health services” outside the comprehensive range of SHI coverage may be offered to patients paying out of pocket.

Safety nets: Children under 18 years of age are exempt from cost-sharing. For adults, there is an annual cap on cost-sharing equal to 2 percent of household income; part of a household’s income is excluded from this calculation for additional family members. About 0.3 million of those insured under SHI exceeded the 2 percent cap in 2014 and were exempted from further cost-sharing. The cap is lowered to 1 percent of annual gross income for qualifying chronically ill people; to qualify, those people have to demonstrate that they attended recommended counseling or screening procedures prior to becoming ill. Nearly 6.3 million people, or around 9 percent of all the SHI-insured, benefited from this regulation in 2014.¹⁰ Unemployed people contribute to SHI in proportion to their unemployment entitlements. For the long-term unemployed, government contributes on their behalf.



How is the delivery system organized and financed?

Physicians: General practitioners (GPs) and specialists in ambulatory care who get reimbursed by SHI are by law mandatory members of regional associations that negotiate contracts with sickness funds. Regional associations of SHI-accredited physicians are responsible for coordinating care requirements within their region and act as financial intermediaries between the sickness funds and the physicians in ambulatory care. However, ambulatory physicians typically work in their own private practices—around 60 percent in solo practice and 25 percent in dual practices. Most physicians employ doctors’ assistants, while other nonphysicians (e.g., physiotherapists) have their own premises. In 2015, of the roughly 108,500 self-employed SHI-accredited physicians in ambulatory care, 51,900 (48%) were practicing as family physicians (including GPs, internists, and pediatricians) and 56,600 (52%) as specialists. There were about 2,000 multispecialty clinics, with more than 13,000 physicians (10% of ambulatory care physicians), in 2015. Around 11,000 physicians working in multispecialty clinics are salaried employees, while 12,000 are employed in practices of self-employed physicians. The total number of ambulatory-care physicians and psychotherapists is more than 140,000.¹¹ Some specialized outpatient care is provided by hospital specialists, including treatment of rare diseases and of severe progressive forms of disease, as well as highly specialized procedures.

Individuals have free choice among GPs, specialists, and, if referred to inpatient care, hospitals. Registration with a family physician is not required, and GPs have no formal gatekeeping function. However, sickness funds are required to offer their members the option to enroll in a “family physician care model,” which has been shown to provide better services and also often provides incentives for complying with gatekeeping rules.

SHI-accredited physicians in ambulatory care (GPs and specialists) are generally reimbursed on a fee-for-service (FFS) basis according to a uniform fee schedule negotiated between sickness funds and physicians (see below). Payments are limited to covering a predefined maximum number of patients per practice and reimbursement points per patient, setting thresholds on the number of patients and of treatments per patient for which a physician can be reimbursed. For the treatment of private patients, GPs and specialists also get an FFS, but the private tariffs are usually higher than the tariffs in the SHI uniform fee schedule. Pay-for-performance has not been established yet. The average reimbursement of a family physician is above EUR200,000 (USD254,452) per year, covering costs for personnel, etc., but excluding income from private patients, which varies substantially.¹²

Financial incentives for care coordination can be part of integrated care contracts, but are not routinely implemented. The only regular financial incentive that GPs receive is a fixed annual bonus (EUR120, or USD153, in 2016) for patients enrolled in a Disease Management Program (DMP), in which physicians provide patient training and document patient data. Bundled payments are not common in primary care, but a regional initiative, “Healthy Kinzigtal” (Kinzigtal is a valley in southeast Germany), provides an example of a shared savings model offering primary care doctors and other providers financial incentives for integrating care across providers and services.

Administrative mechanisms for direct patient payments to providers: SHI physicians in ambulatory care bill their regional associations according to a uniform fee schedule; the associations receive the money from the sickness funds in the form of annual capitations. Copayments or payments for services not included in the benefit catalogue are paid directly to the provider. In cases of private health insurance, patients pay up front and submit claims to the insurance company for reimbursement.

After-hours care: After-hours care is organized by the regional associations of SHI-accredited physicians to ensure access to ambulatory care around the clock. Physicians are obliged to provide after-hours care in their practices, with differing regional regulations. In some areas (e.g., Berlin), after-hours care has been delegated to hospitals. The patient is given a report of the visit afterward to hand to his or her GP. There is also a tight network of emergency care providers (the responsibility of the municipalities). After-hours care assistance is also available via a nationwide telephone hotline (116 117-Ärztlicher Bereitschaftsdienst). Payment for ambulatory after-hours care is based on the above-mentioned fee schedules, again with differences in the amount of reimbursement by SHI and PHI.

Hospitals: Public hospitals make up about half of all beds, while private not-for-profits account for about a third. The number of private, for-profit hospitals has been growing in recent years (now around one-sixth of all beds). All hospitals are staffed principally by salaried doctors. Doctors in hospitals are typically not allowed to treat outpatients (similar to hospitalists in the U.S.), but exceptions are made if necessary care cannot be provided by office-based specialists. Senior doctors can treat privately insured patients on an FFS basis. Hospitals can also provide certain highly specialized services on an outpatient basis.

The 16 state governments determine hospital capacity, while ambulatory care capacity is subject to rules set by the Federal Joint Committee. Inpatient care is paid per admission through a system of diagnosis-related groups (DRGs) revised annually, currently based on around 1,200 DRG categories. DRGs also cover all physician costs. Other payment systems like pay-for-performance or bundled payments have yet to be implemented in hospitals.

Mental health care: Acute psychiatric inpatient care is largely provided by psychiatric wards in general (acute) hospitals, while the number of hospitals providing care only for patients with psychiatric and/or neurological illness is low. In 2015, there were a total of 35,368 office-based psychiatrists, neurologists, and psychotherapists working in the ambulatory care sector (paid FFS).¹³ Qualified GPs can provide basic psychosomatic services. Ambulatory psychiatrists are also coordinators of a set of SHI-financed benefits called “sociotherapeutic care” (which requires referral by a GP), intended to encourage the chronically mentally ill to use necessary care and to avoid unnecessary hospitalizations. To further promote outpatient care

for psychiatric patients (particularly in rural areas with a low density of psychiatrists in ambulatory care), hospitals can be authorized to offer treatment in outpatient psychiatric departments.

Long-term care and social supports: LTCI is mandatory and is usually provided by the same insurer as health insurance and therefore comprises a similar public–private insurance mix. The contribution rate of 2.35 percent of gross salary is shared between employers and employees; people without children pay an additional 0.25 percent. The contribution rate will increase by 0.2 percent in early 2017. Everybody with a physical or mental illness or disability (who has contributed for at least two years) can apply for benefits, which are: 1) dependent on an evaluation of individual care needs by the SHI Medical Review Board (leading either to a denial or to a grouping into currently one of three levels of care); and 2) limited to certain maximum amounts, depending on the level of care. Beneficiaries can choose between in-kind benefits and cash payments (around a quarter of LTCI expenditure goes to these cash payments). Both home care and institutional care are provided almost exclusively by private not-for-profit and for-profit providers. As benefits usually cover approximately only 50 percent of institutional care costs, people are advised to buy supplementary private LTCI. Family caregivers get financial support through continuing payment of up to 50 percent of care costs.

Hospice care is partly covered by LTCI if the SHI Medical Review Board has determined a care level. Medical services or palliative care in a hospice are covered by SHI. The number of inpatient facilities in hospice care has grown significantly over the past 15 years, to 235 hospices and 304 palliative care wards nationwide in spring 2016.¹⁴ The Act to Improve Hospice and Palliative Care passed in 2015, with the aim of guaranteeing care in underserved rural areas and linking long-term care facilities more strongly to ambulatory palliative and hospice care.



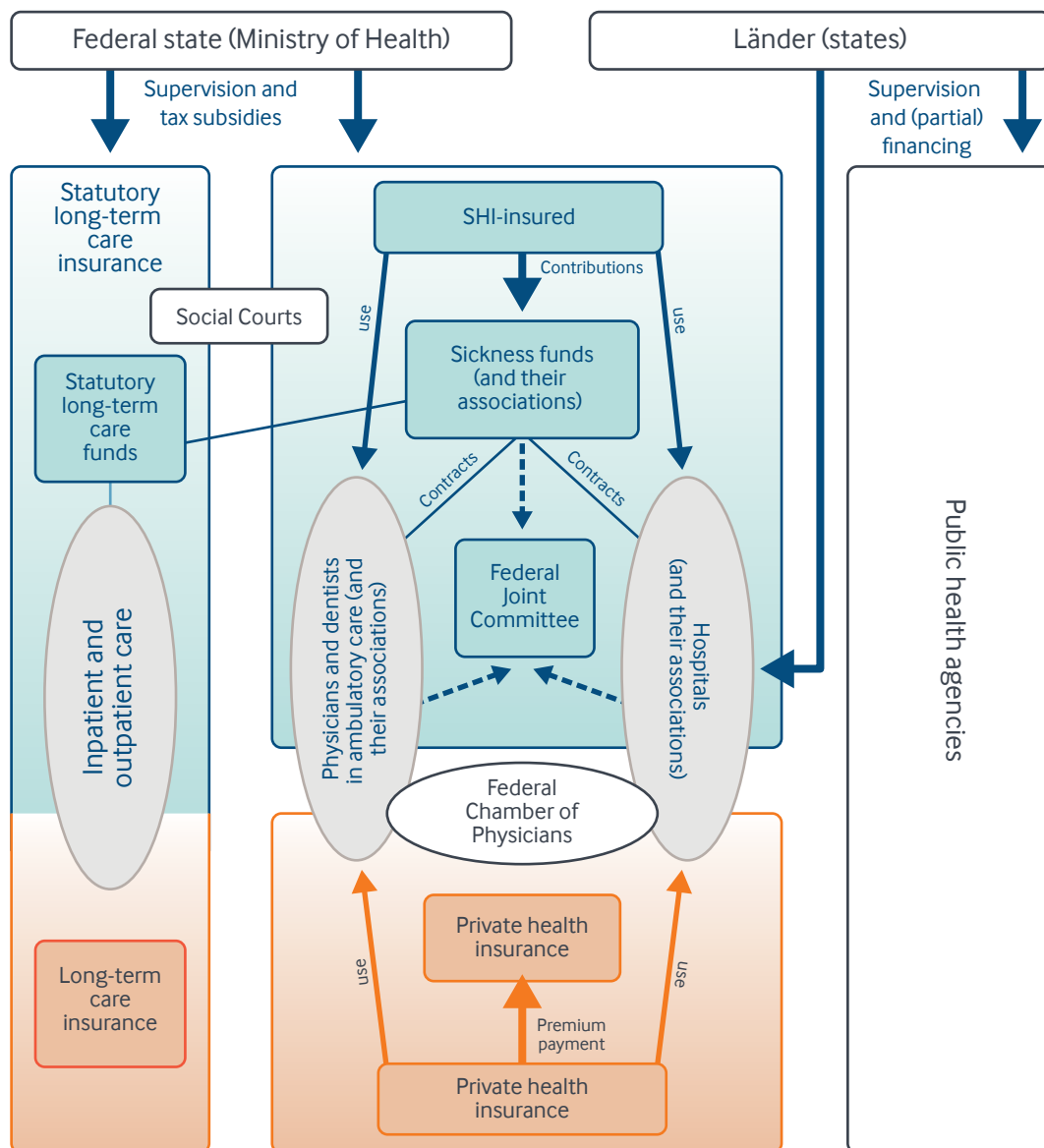
What are the key entities for health system governance?

The German health care system is notable for two essential characteristics: 1) the sharing of decision-making powers between states, federal government, and self-regulated organizations of payers and providers; and 2) the separation of SHI (including the social LTCI) and PHI (including the private LTCI). SHI and PHI (as well as the two long-term care insurance systems) use the same providers—that is, hospitals and physicians treat both statutorily and privately insured patients, unlike those in many other countries.

Within the legal framework set by the Federal Ministry of Health, the Federal Joint Committee has wide-ranging regulatory power to determine the services to be covered by sickness funds and to set quality measures for providers (see below). To the extent possible, coverage decisions are based on evidence from health technology assessments and comparative-effectiveness reviews. The Federal Joint Committee is supported by the Institute for Quality and Efficiency (IQWiG), a foundation legally charged with evaluating the cost-effectiveness of drugs with added therapeutic benefits, and the Institute for Quality and Transparency (IQTiG), which is responsible for intersectoral quality assurance. It has 13 voting members: five from the Federal Association of Sickness Funds, two each from the Federal Association of SHI Physicians and the German Hospital Federation, one from the Federal Association of SHI Dentists, and three who are unaffiliated. Five patient representatives have an advisory role but no vote. Representatives of patient organizations have the right to participate in different decision-making bodies—for example, the subcommittees of the Federal Joint Committee.

The Federal Association of Sickness Funds works with the Federal Association of SHI Physicians and the German Hospital Federation to develop the SHI ambulatory care fee schedule and the DRG catalogue, which are then adopted by bilateral joint committees.

Organization of the Health System in Germany



Source: Adapted from R. Busse and M. Blümel, "Germany: Health System Review," *Health Systems in Transition*, vol. 16, no. 2, 2014, p. 20.

What are the major strategies to ensure quality of care?

Quality of care is addressed through a range of measures broadly defined by law and in more detail by the Federal Joint Committee. As of 2016, the IQTiG is responsible for developing instruments for interfacility and intersectoral quality assurance on behalf of the Federal Joint Committee. In addition, the institute develops criteria for evaluating certificates and quality targets and ensures that the published results are comprehensible to the public.

All hospitals are required to publish findings on selected indicators, as defined by the IQTiG, to enable hospital comparisons. Volume thresholds have been introduced for a number of complex procedures (e.g., transplants), requiring that hospitals perform a minimum number of such procedures to be reimbursed for them. Process and, in part, outcome quality are addressed through the mandatory quality reporting system for the roughly 2,000 acute-care hospitals. The recently passed Hospital Care Structure Reform Act introduces a focus on quality-related hospital accreditation and payment, beginning in 2016.

Structural quality is further assured by the requirement that providers have a quality management system, by the stipulation that all physicians continue their medical education, and by health technology assessments for drugs and procedures. For instance, all new diagnostic and therapeutic procedures applied in ambulatory care must receive a positive evaluation for benefit and efficiency before they can be reimbursed by sickness funds.

Although there is no revalidation requirement for physicians, many institutions and health service providers include complaint management systems as part of their quality management programs; in 2013, such systems were made obligatory for hospitals. At the state level, professional providers' organizations are urged to establish complaint systems and arbitration boards for the extrajudicial resolution of medical malpractice claims.

The Robert Koch Institute, an agency subordinate to the Federal Ministry of Health and responsible for the control of infectious diseases and for health reporting, has conducted national patient surveys and published epidemiological, public health, and health care data. Disease registries for specific diseases, such as certain cancers, are usually organized regionally. In August 2013, as part of the National Cancer Plan, the federal government passed a bill that proposes the implementation of a nationwide standardized cancer registry in 2018 to improve the quality of cancer care.

DMPs, implemented in 2002, ensure quality of care for people with chronic illness. DMPs are modeled on evidence-based treatment recommendations, with mandatory documentation and quality assurance. Nonbinding clinical guidelines are produced by the Physicians' Agency for Quality in Medicine and other professional societies.



What is being done to reduce disparities?

Strategies to reduce health disparities are delegated mainly to public health services, and the levels at which they are carried out differ among states. Health disparities are implicitly mentioned in the national health targets. A network of more than 120 health-related institutions (e.g., sickness funds and their associations) promotes the health of the socially deprived.¹⁵ Primary preventive care is mandatory by law for sickness funds; detailed regulations are delegated to the Federal Association of Sickness Funds, which has developed guidelines regarding need, target groups, and access, as well as procedure and methods. Sickness funds support 22,000 health-related programs, e.g., in nurseries and schools.¹⁶ With the Act to Strengthen Health Promotion and Prevention, these programs have recently been further developed and financially supported.

The Health Monitor (Gesundheitsmonitor) was a national association of nonprofit organizations and sickness funds. To assess the accessibility of health care, it regularly conducted studies from the patient perspective—for example, on the availability of information, experiences with health care, and progress of health system reforms. The Health Monitor, which last conducted a study in 2016, ceased to exist after 15 years. A comparable survey on health access has not been provided.



What is being done to promote delivery system integration and care coordination?

Many efforts to improve care coordination have been implemented; for example, sickness funds offer integrated-care contracts and DMPs for chronic illnesses to improve care for chronically ill patients and to improve coordination among providers in the ambulatory sector. In December 2015, 9,966 registered DMPs for six indications had enrolled about 6.6 million patients (more than 8% of all the SHI-insured).¹⁷ There is no pooling of funding streams by the health and social care sectors.

As of 2016, the Innovation Fund promotes new forms of cross-sectoral and integrated care (also for vulnerable groups) supported by annual funding of EUR300 million, or USD382 million (including EUR75 million, or USD95 million, for evaluation and health services research). Funds are awarded through an application process overseen by the Innovation Committee, based at the Federal Joint Committee.¹⁸



What is the status of electronic health records?

As of 2015, electronic medical chip cards are used nationwide by all the SHI-insured; they encode information as to the person's name, address, date of birth, and sickness fund, along with details of insurance coverage and the person's status regarding supplementary charges.¹⁹ In 2015, the Federal Cabinet passed a bill for secure digital communication and health care applications (E-Health Act), which provides concrete deadlines for implementing infrastructure and electronic applications and introduces incentives and sanctions if schedules are not adhered to. SHI physicians will receive additional fees for transmitting electronic medical reports (2016–2017), collecting and documenting emergency records (from 2018), and managing and reviewing basic insurance claims data online. From July 2018, SHI physicians who do not participate in online review of the basic insurance claims data will receive reduced remuneration. Furthermore, to ensure greater safety in drug therapy, patients who use at least three prescribed drugs simultaneously will receive an individualized medication plan, starting in October 2016. In the medium term, this medication plan will be included in the electronic medical record.²⁰



How are costs contained?

Recently, there has been a shift away from reliance on overall budgets for ambulatory physicians and hospitals and on collective regional prescription caps for physicians toward an emphasis on quality and efficiency. The Hospital Care Structure Reform Act aims not only to link hospital payments to good service quality but also to reduce payments for “low-value” services.

To enhance competition, some purchasing power has been handed over to the sickness funds. For example, the funds can now selectively negotiate integrated care contracts with providers and negotiate rebates with pharmaceutical companies.

All drugs, both patented and generic, are placed into groups with a reference price serving as a maximum level for reimbursement, unless they can demonstrate added medical benefit. For drugs with added benefit (evaluated by IQWiG but decided on by the Federal Joint Committee), the Federal Association of Sickness Funds negotiates a rebate on the manufacturer's price that is applied to all patients. In addition, rebates are negotiated between individual sickness funds and pharmaceutical manufacturers to lower prices below the reference price.



What major innovations and reforms have been introduced?

Since 2012, the German health care system has been undergoing a period of active reform in several areas. The most influential reform in the past year was the Second Act to Strengthen Long-Term Care, which went into effect in January 2016; this followed the First Act, which significantly expanded support for individuals in need of long-term care and for their families. The Second Act, set to start in 2017, will broaden eligibility for long-term care services, which previously have been granted only to people with considerably restricted daily functions. The new act aims to provide services more equitably, by expanding eligibility to people with physical, mental, and psychological impairments. The new benefits are being integrated into the standard legislation on benefits.²¹

To finance these reforms, the contribution rate for LTCI will increase by 0.2 percentage points, up to 2.55 percent of income for people with children and 2.80 percent for people without children. According to the government, the increase in contribution rates will generate about EUR6.0 billion (USD7.6 billion) in additional revenue, which should cover the additional spending on long-term care by 2022.²²

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Notes

1. The Federal Association of Sickness Funds, *Kennzahlen der gesetzlichen Krankenversicherung*. https://www.gkv-spitzenverband.de/presse/zahlen_und_grafiken/gkv_kennzahlen/gkv_kennzahlen; accessed Sept. 5, 2016.
2. The Federal Statistical Office, *Gesundheitsberichterstattung des Bundes*. <http://www.gbe-bund.de>; accessed Sept. 5, 2016.
3. Please note that, throughout this profile, all figures in USD were converted from EUR at a rate of about EURO.786 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2016) for Germany. Organisation for Economic Co-operation and Development (OECD) (2016), "Purchasing power parities (PPP)" (indicator). doi: 10.1787/1290ee5a-en; accessed Sept. 23, 2016.
4. R. Busse and M. Blümel, "Germany: Health System Review," *Health Systems in Transition*, 2014 16(2):1–296. http://www.euro.who.int/__data/assets/pdf_file/0008/255932/HiT-Germany.pdf?ua=1; accessed Sept. 5, 2016.
5. Federal Association of Sickness Funds, Kennzahlen GKV, 2016.
6. The Association of Private Health Insurance Companies, *Zahlen und Fakten*. <https://www.pkv.de/service/zahlen-und-fakten/>; accessed Sept. 5, 2016.
7. Ibid.
8. Federal Statistical Office, *Gesundheitsberichterstattung*, 2016.
9. Ibid.
10. Ibid.
11. The Federal Association of SHI Physicians, *Statistische Informationen aus dem Bundesarztregister 2015*. http://www.kbv.de/html/themen_2826.php#content6889; accessed Sept. 5, 2016.
12. Ibid.
13. Ibid.
14. The German Hospice and Palliative Association, *Stationäre Hospize für Erwachsene, stationäre Hospize für Kinder, Jugendliche und junge Erwachsene sowie Palliativstationen in Deutschland – Daten zur Entwicklung und zum aktuellen Stand*. http://www.dhpv.de/tl_files/public/Service/statistik/20160411_Bericht_StatHospizePalliativ.pdf; accessed Sept. 5, 2016.
15. Cooperative Alliance National Health Targets (2016), *Gesundheitsziele.de*. <http://www.gesundheitsziele.de/>; accessed Sept. 5, 2016.
16. Federal Association of Sickness Funds, Kennzahlen der GKV, 2016.
17. The Federal Social Insurance Office, *Zulassung der strukturierten Behandlungsprogramme durch das Bundesversicherungsamt*. <http://www.bundesversicherungsamt.de/weiteres/disease-management-programme.html>; accessed Sept. 23, 2016.
18. The Federal Joint Committee, *Der Innovationsfonds und der Innovationsausschuss beim Gemeinsamen Bundesausschuss*. <https://innovationsfonds.g-ba.de/>; accessed Sept. 23, 2016.
19. Company for Telematics Applications for the Electronic Health Card, *Elektronische Gesundheitskarte*. <https://www.gematik.de>; accessed Nov. 5, 2015.
20. Federal Ministry of Health, *Gesetze und Verordnungen*. <http://bmg.bund.de/>; accessed July 22, 2015.
21. Health Systems and Policy Monitor, Germany. <http://www.hspm.org/countries/germany28082014/countrypage.aspx>; accessed Sept. 23, 2016.
22. Federal Ministry of Health, *Gesetze und Verordnungen*, 2015.

The Indian Health Care System

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What is the role of government?

The constitution of India considers the “right to life” to be fundamental and obliges the government to ensure the “right to health” for all.^{1,2}

To a significant extent, India’s health sector has been shaped by its federal structure and the federal–state divisions of responsibilities and financing. The states are responsible for organizing and delivering health services to their residents. The central government is responsible for international health treaties, medical education, prevention of food adulteration, quality control in drug manufacturing, national disease control, and family planning programs. It also sets national health policy including the regulatory framework and supports the states.

The draft National Health Policy prepared in 2015 proposes that health be made a fundamental right and views government’s role as critical.³ If accepted, it would clarify, strengthen, and prioritize the role of government in shaping the health system.



Who is covered and how is insurance financed?

Total health expenditures in India for 2013–2014 were 4.02 percent of GDP. Government expenditures amounted to 1.15 percent of GDP, which is lower than the average for low-income countries.^{4,5} Household out-of-pocket health spending was 69.1 percent of total health expenditures, making this a major component of the financing system.

Publicly financed health insurance: In principle, government health services are available to all citizens under the tax-financed public system. In practice, bottlenecks in accessing such services compel households to seek private care, resulting in high out-of-pocket payments.

One key initiative for making health care accessible and affordable is the Rashtriya Swasthya Bima Yojana (RSBY), begun in 2008 under the Ministry of Labour and Employment to provide health insurance coverage to families living on incomes below the poverty line. In 2015–2016, 41.3 million families were enrolled, achieving 57 percent of the target.⁶ The scheme now also includes 11 other categories of unorganized workers, with the aim of increasing coverage.⁷

Among other health coverage schemes, the Employees State Insurance Scheme for factory workers is India’s only true social health insurance scheme, to which both employers and employees contribute. The Central Government Health Scheme is for civil servants. These schemes comprise 4 percent of total government expenditures. In addition, railway and defense employees have their own schemes, and states have schemes for their employees as well. Overall, around 8 percent of all government spending is for health coverage.⁸

Despite these various schemes, evidence indicates that by 2014, less than 20 percent of the population was covered by any form of health coverage.⁹

Private health insurance: The majority of private expenditures are out-of-pocket payments made mainly at the point of service. Despite tax exemptions for insurance premiums, there has been limited uptake of voluntary private insurance among Indians.



What is covered?

Services: In principle, all services at government facilities, including preventive and primary care, diagnostic services, and outpatient and inpatient hospital care, are delivered free of charge. In practice, severe shortages of staff and supplies limit

access to care. Medications on the essential drug list are free (though there are often shortages), while other prescription drugs are purchased from private pharmacies. India has one of the world's largest publicly financed HIV drug programs, and all drugs and diagnostic services for vector-borne diseases, such as dengue fever and malaria, are free, as are insecticide-treated bed nets for malaria control. Immunizations and maternal and child health services are free as well.¹⁰

Most of the services under health packages like the Central Government Health Scheme and Employees State Insurance Scheme are free. These remain the most generous of health coverage programs catering to a small section of the population, raising issues around equity.¹¹ Under the RSBY insurance scheme for the poor, hospitalization services are free, up to allowable amounts.

Cost-sharing and out-of-pocket spending: High out-of-pocket spending (69% of total health expenditures) results in part from patient fees charged by private health care providers and, to some extent, public providers.^{12,13} Under the National Health Mission, described below, free care in public hospitals was extended to certain services: maternity, newborn, and infant care and disease control programs.¹⁴ Also, despite plans to upgrade facilities to meet benchmarks laid down by Indian Public Health Standards, the availability of staff, equipment, and drugs varies significantly between and within states, forcing patients to seek care in the more expensive private sector.¹⁵

More than 63 million Indians are faced with impoverishment every year because of catastrophic health care costs.¹⁶



How is the delivery system organized and financed?

Health care services are delivered by a complex network of public and private providers, ranging from single doctors to specialty and multispecialty tertiary care hospitals.

Public sector: The government health care system is designed as a three-tier structure comprising primary, secondary, and tertiary facilities. In rural areas, primary health care services are provided through a network of subcenters, primary health centers, and community health centers.¹⁷ The subcenter is the first point of contact between the primary health care system and the community, designed to handle maternal and child health, disease control, and health counseling for a population of 3,000 to 5,000. At least one auxiliary nurse midwife or female health worker, one male health worker, and one female "health visitor" supervise six subcenters.

The primary health center is the first point of contact between a village community and a medical officer and provides curative and preventive services to 20,000 to 30,000 people. It serves as a referral unit for six subcenters and has four to six beds for patients.

Community health centers are managed and maintained by state governments and are required to have four medical specialists supported by 21 paramedical and other staff, with 30 beds, laboratory, X-ray, and other facilities. It covers 80,000 to 120,000 people.

Finally, an existing facility like a district or subdivisional hospital or a community health center is named as a fully operational first referral unit if it is equipped to provide round-the-clock emergency obstetric care and blood storage. District hospitals function as the secondary tier of public providers for the rural population. Of a total of 628,708 government beds, 196,182 are in rural areas.¹⁸ Government hospitals operate within a yearly budget allocation.

Despite this elaborate infrastructure, severe shortages of staff and supplies in public-sector health facilities remain. India has a doctor-to-population ratio of 1:1,674, compared with the World Health Organization norm of 1:1,000, a situation that results in acute shortages and uneven distribution of doctors.¹⁹ India's urban poor are especially vulnerable, given that primary care facilities in the cities are generally less organized and fewer in number than in rural communities.^{20,21,22,23} Lack of access to care appears to take a toll: nearly 60 percent of urban poor children have not received all recommended immunizations before age 1. Life in slums also exposes people to a variety of diseases.

Private sector: India's private health care sector is not well regulated. Private health care providers deliver an array of outpatient services in solo practices ranging from those not registered with the relevant medical council to trained medical practitioners to small nursing homes and multispecialty clinics. An estimated 40 percent of private care is provided by unqualified providers.²⁴

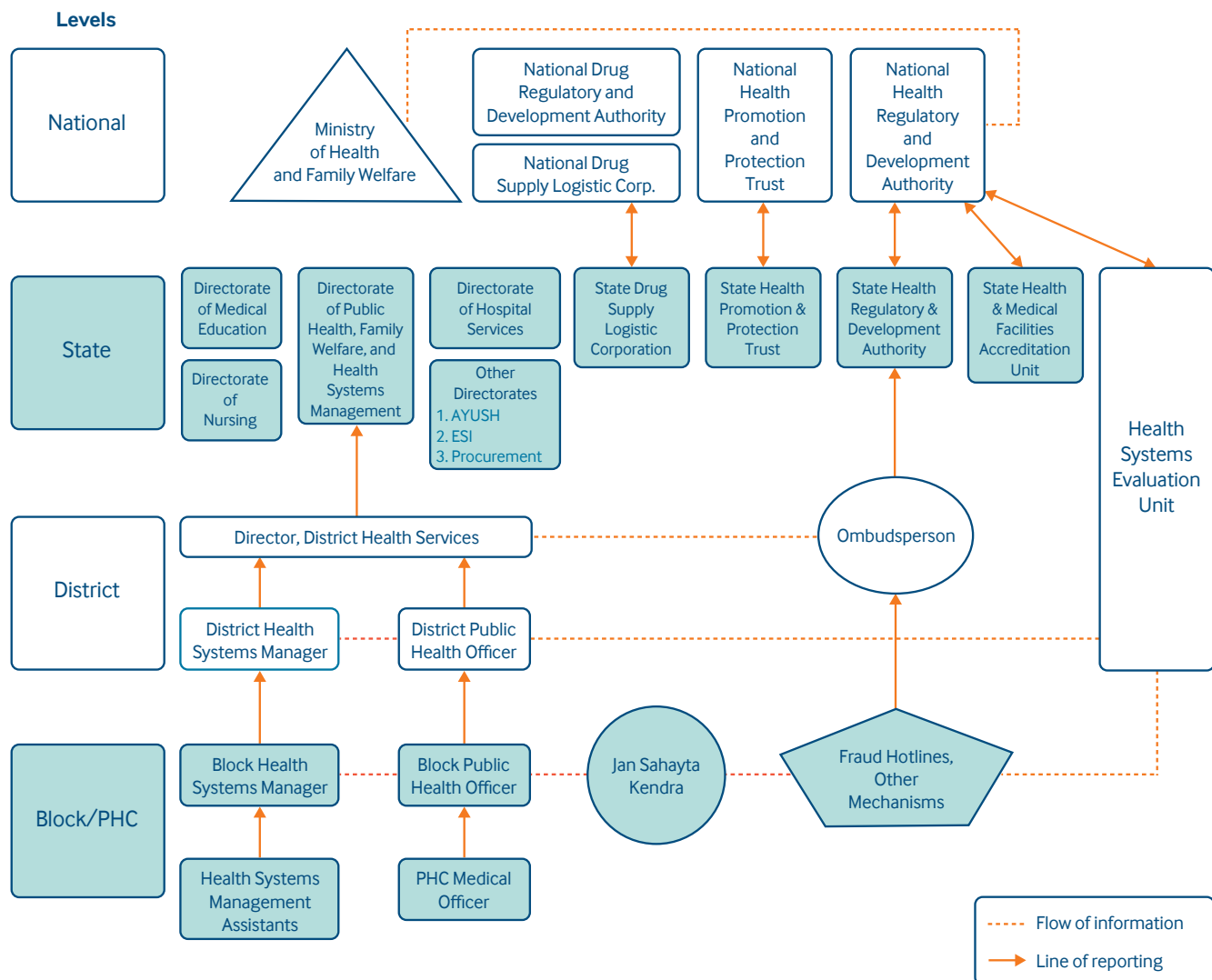
The private hospital sector has expanded rapidly, and government-sponsored health schemes also rely on private hospitals as a part of public–private partnerships. From 2002 to 2010, the private sector created more than 70 percent of new beds, contributing 63 percent of total hospital beds.²⁵ Private hospitals currently provide about 80 percent of outpatient care and 60 percent of inpatient care.²⁶ Until the 1980s, private-sector hospitals were mainly nonprofits run by charitable trusts. With India’s economic liberalization, growing middle class, and the rise in medical tourism, the number of private, for-profit hospitals has grown substantially.²⁷

How are providers paid?

Public sector: Physicians working in government facilities earn salaries and are not permitted to work in private practice in most states. Other staff members such as nurses and technicians also earn fixed salaries.

Private sector: Physician payment in the private sector varies depending on local market conditions. Overall, private-sector physicians are better paid than their government counterparts. However, nurse salaries in the private sector have historically been low; India’s Supreme Court is looking into the issue.²⁸

Organization of the Health System in India



Source: Planning Commission of India, 2011.



What are the key entities for health system governance?

Public actors in the Indian health care system include the Ministry of Health and Family Welfare, state governments, and municipal and local bodies.

Each state has its own Directorate of Health Services and Department of Health and Family Welfare. District-level health services provide a link between each state and primary care services.

Other agencies involved in health system governance include the Insurance Regulatory and Development Authority, which regulates the health insurance industry, and the National eHealth Authority, which is to become the authority for development of an integrated health information system.²⁹ There is lack of clarity in India with respect to which entities are responsible for regulating the private sector and for ensuring quality of care, as there are multiple agencies under different ministries.



What are the major strategies to ensure quality of care?

Over the years, several regulations have been enacted and authorities created at the state and national levels with the aim of protecting patients and improving quality of care. At the state level, the Nursing Home Act and State Drug Controllers ensure quality of care provided by the private sector. A major impetus to establishing patient rights was the inclusion of private medical practice under the Consumer Protection Act in 1986.³⁰ To ensure quality of care and define standards for health facilities, several laws were introduced, including ones creating a national accreditation system for primary and secondary health care services.^{31,32} In addition, many hospitals undergo accreditation and certification from international bodies.³³

The Health Management Information System was launched in 2008 to monitor health programs. Currently, about 633 of 667 districts report data by facility.³⁴ Large-scale surveys are periodically undertaken at the district, state, and national levels. In addition, the Indian Council of Medical Research maintains disease registries for cancer, diabetes, cardiovascular diseases, and other illnesses.

The 2010 Clinical Establishments (Registration and Regulation) Act calls for prescribing minimum standards for all public and private clinical establishments in the country. It has come into force in certain states and in all union territories except Delhi. In addition, the law requires facilities to charge rates for procedures and services as determined by the central government in consultation with the state. The act stipulates fines and penalties if provisions are breached by any facility. A national council will oversee implementation and compliance at the national level. Similar councils at the state and district levels will be established to enforce compliance locally. This is one of the most important, far-reaching pieces of public health legislation enacted to date. However, it is up to the states to adopt this, by passing suitable resolutions in their respective assemblies. If implemented and enforced well, it could change the supply side of health care in significant ways and go a long way toward meeting the comprehensive approach to quality assurance envisaged in the draft Health Policy for 2015.³⁶

To ensure quality of medical education, a common national entrance exam is being debated. A licentiate exam will be introduced for all medical graduates, with renewal at periodic intervals.

In recent years, there has been some progress in government regulation to ensure quality. However, the pace has been slow, and implementation is a challenge, in part because there is no single authority responsible for quality assurance.^{37, 38, 39} The lack of a coherent approach in this area has raised concerns about the extent to which government can influence the rapidly expanding private sector to adopt ethical and standardized health services.^{40, 41, 42, 43}



What is being done to reduce disparities?

Significant inequalities with respect to health care access and outcomes exist between India's states, rural and urban areas, socioeconomic groups, castes, and genders. For example, children in rural areas are about 1.6 times more likely to die

before their first birthday and 1.9 times more likely to die before their fifth birthday than those in urban areas. From 1991 to 2013, neonatal mortality declined by 53 percent in urban areas, compared with 44 percent in rural areas.⁴⁴ There are also significant interstate differences in health outcomes. The social determinants of health play a significant role in health equity, with income, education, caste, and social group determining to a significant extent the distribution of health outcomes. With respect to access, it is estimated that the urban rich obtain 50 percent more health services than the average Indian citizen.⁴⁵ Also, the number of government hospital beds per population in urban areas is more than twice the number in rural areas, and urban areas have four times more health workers per population.^{46,47} There is also evidence that public spending does not always translate into benefits for those most needing them.^{48,49}

Recognizing the lack of a comprehensive national health care system as an important factor in shaping health inequalities, the Ministry of Health and Family Welfare strengthened its flagship program, the National Health Mission. Through the program, 900,000 accredited social health activists work at the community level to promote immunization, disease control, effective breastfeeding, and healthy nutrition. Other initiatives seek to reduce maternal mortality—for example, by incentivizing women, including through cash payments, to deliver their babies in government health facilities. Recent evidence indicates that these policies have reduced disparities in maternal care.⁵⁰

What is being done to promote delivery system integration and care coordination?

Patient care continues to be fragmented in India. There has been very little effort made to redesign how care is delivered or to promote patient-centered care. Likewise, health coverage models are fragmented, with patients given limited choice across packages.

What is the status of electronic health records?

The Ministry of Health and Family Welfare in 2015 set up a National Health Portal that provides the public with information on diseases, health services, health programs, and insurance schemes.⁵¹ In addition, a Health Statistics Information Portal has been set up to provide information and data on health indicators, compiled from multiple sources.⁵²

Recognizing that multiple health information systems are in use across the public and private sectors, the ministry has proposed creation of the National eHealth Authority to set regulations and standards.⁵³ States would be able to develop systems to suit their needs and priorities, provided they were consistent with standards set by the authority. The authority also would be responsible for developing health information systems and enforcing laws and regulations related to the privacy and security of patient health information.

How are costs contained?

The Indian health system does not promote efficiencies or control costs. Studies have found that most hospital systems across states are inefficient.^{54,55} Lack of competition has made the public health infrastructure costly.

Some state governments have been able to control costs, especially for drugs. Tamil Nadu, for example, has a drug procurement system that relies on a centralized process that lowers prices and makes a wider range of drugs available.⁵⁶ Since 2011, Rajasthan has provided essential medicines free of cost to patients visiting public facilities. Evidence indicates that this initiative has resulted in increased financial protection of households and better health outcomes.⁵⁷

There also have been efforts to make medicines more affordable and accessible by increasing the supply of generic pharmaceuticals. Launched in 2008 by the Department of Pharmaceuticals, the Jan Aushadhi scheme has opened stores to sell high-quality generic medicines at low prices. And recently, the National Pharmaceutical Pricing Authority has reduced the allowable prices of certain drugs, which could help reduce costs for consumers.⁵⁹



What major innovations and reforms have been introduced?

The most important recent reform undertaken in India is the National Health Mission, which seeks to strengthen health systems as described above and sets national priorities for efforts such as disease control.⁶⁰

The Ministry of Labor and Employment's effort to expand health coverage through RSBY has also been important. In fact, the Prime Minister has recently announced a similar scheme, the National Health Protection Scheme, to extend health coverage to more of India's poor citizens. However, it has not yet been implemented.

In addition, ongoing fiscal restructuring and program cuts are likely to have significant impacts on the health sector in the future.^{62,63}

Notes

1. Ministry of Health and Family Welfare, *The National Health Bill (working draft)*, Jan. 2009, http://www.prsindia.org/uploads/media/Draft_National_Bill.pdf; accessed Oct. 13, 2016.
2. S. V. Thomas, "The National Health Bill 2009 and Afterwards," *Annals of Indian Academy of Neurology*, April–June 2009 12(2):79, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2812745/>.
3. Ministry of Health and Family Welfare, *National Health Policy 2015 (draft)*, Dec. 2014, <http://www.mohfw.nic.in/showfile.php?lid=3014>; accessed Oct. 13, 2016.
4. Ministry of Health and Family Welfare, *National Health Accounts Estimates for India (2013–14)*, <http://www.mohfw.nic.in/showfile.php?lid=4016>; accessed Oct. 13, 2016.
5. Central Bureau of Health Intelligence, *National Health Profile, 2016*, <http://cbhidghs.nic.in/E-Book HTML-2016/files/assets/basic-html/page-2.html>; accessed Oct. 13, 2016.
6. Ministry of Health and Family Welfare, *Annual Report, Chapter 12: Health Policy and Health Insurance*, 2015, <http://www.mohfw.nic.in/WriteReadData/c08032016/1256325632564578566.pdf>; accessed Oct. 13, 2016.
7. Rashtriya Swasthya Bima Yojana (RSBY), Ministry of Labour and Employment, 2015, http://www.rsby.gov.in/about_rsby.aspx; accessed Oct. 13, 2016.
8. I. Gupta and S. Chowdhury, "Public Financing for Health Coverage in India: Who Spends, Who Benefits and At What Cost?" *Economic & Political Weekly*, Aug. 30, 2014 49(35), <http://www.epw.in/journal/2014/35/special-articles/public-financing-health-coverage-india.html>.
9. National Sample Survey Office, *Key Indicators of Social Consumption in India: Health* (Ministry of Statistics and Programme Implementation, June 2015), http://www.thehinducentre.com/multimedia/archive/02460/nss_71st_ki_health_2460766a.pdf.
10. Ministry of Health and Family Welfare, *National Health Policy 2015 (draft)*, Dec. 2014, <http://www.mohfw.nic.in/showfile.php?lid=3014>; accessed Oct. 13, 2016.
11. I. Gupta and S. Chowdhury, "Public Financing for Health Coverage in India: Who Spends, Who Benefits and At What Cost?" *Economic & Political Weekly*, Aug. 30, 2014 49(35), <http://www.epw.in/journal/2014/35/special-articles/public-financing-health-coverage-india.html>.
12. S. Prinja, A. K. Aggarwal, R. Kumar et al., "User Charges in Health Care: Evidence of Effect on Service Utilization and Equity from North India," *Indian Journal of Medical Research*, Nov. 2012 136(5):868–76, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3573611/>.
13. O. C. Kurian, S. Wagle, and P. Raymus, Mapping the Flow of User Fees in a Public Hospital (Centre for Enquiry into Health and Allied Themes, 2011), <http://www.cehat.org/go/uploads/Publications/R82 UserFee.pdf>.
14. Ministry of Health and Family Welfare, *National Health Policy 2015 (draft)*, Dec. 2014, <http://www.mohfw.nic.in/showfile.php?lid=3014>; accessed Oct. 13, 2016.
15. Ministry of Health and Family Welfare, National Health Mission, *Indian Public Health Standards*, 2013, <http://nrhm.gov.in/nhm/nrhm/guidelines/indian-public-health-standards.html>; accessed Oct. 13, 2016.
16. Ministry of Health and Family Welfare, *National Health Policy 2015 (draft)*, Dec. 2014, <http://www.mohfw.nic.in/showfile.php?lid=3014>; accessed Oct. 13, 2016.
17. Ministry of Health and Family Welfare, *Annual Report, Chapter 1: Organization and Infrastructure*, 2015, <http://www.mohfw.nic.in/WriteReadData/c08032016/5632147896325635.pdf>; accessed Oct. 13, 2016.
18. Central Bureau of Health Intelligence, *National Health Profile (NHP) of India, 2013*, <http://cbhidghs.nic.in/index2.asp?slid=1284&sublinkid=1166>; accessed Oct. 13, 2016.
19. Parliament of India, Rajya Sabha, *The Functioning of Medical Council of India (Ministry of Health and Family Welfare)*, Report No. 92, March 8, 2016, <http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee on Health and Family Welfare/92.pdf>; accessed Oct. 13, 2016.
20. Office of the Registrar General & Census Commissioner, India, *Census 2011*, http://www.censusindia.gov.in/2011-common/census_2011.html; accessed Oct. 13, 2016.

21. Ministry of Health and Family Welfare, National Health Mission, *Indian Public Health Standards*, 2013, <http://nrhm.gov.in/nhm/nrhm/guidelines/indian-public-health-standards.html>; accessed Oct. 13, 2016.
22. I. Gupta and S. Chowdhury, "Urban Concerns and Their Impact on Health in India," in K. Eggleston (ed.), *Policy Challenges from Demographic Change in China and India* (Shorenstein Asia-Pacific Research Center, 2016).
23. Ministry of Health and Family Welfare, *National Urban Health Mission: Framework for Implementation*, May 2013, http://nrhm.gov.in/images/pdf/NUHM/Implementation_Framework_NUHM.pdf; accessed Oct. 13, 2016.
24. Ministry of Health and Family Welfare, *National Health Policy 2015* (draft), Dec. 2014, <http://www.mohfw.nic.in/showfile.php?lid=3014>; accessed Oct. 13, 2016.
25. A. Gudwani, P. Mitra, A. Puri et al., *India Healthcare: Inspiring Possibilities, Challenging Journey* (McKinsey and Co., Jan. 2012), <http://www.mckinsey.com/global-themes/india/india-healthcare-inspiring-possibilities-challenging-journey>.
26. Ministry of Health and Family Welfare, *National Health Policy 2015* (draft), Dec. 2014, <http://www.mohfw.nic.in/showfile.php?lid=3014>; accessed Oct. 13, 2016.
27. Ibid.
28. H. Chhapiyal, "Now, Equal Pay for Private and State-Run Hospital Nurses, Recommends Committee Set Up by the Indian Nursing Council," *Times of India*, Sept. 23, 2016, <http://timesofindia.indiatimes.com/city/mumbai/Now-equal-pay-for-private-and-state-run-hospital-nurses-recommends-committee-set-up-by-the-Indian-Nursing-Council/articleshow/54471610.cms>.
29. Ministry of Health and Family Welfare (2015). *The Clinical Establishments (Registration and Regulation) Act, 2010*, 2015, <http://clinicaestablishments.nic.in/cms/Home.aspx>; accessed Oct. 13, 2016.
30. Y. Balarajan, S. Selvaraj, and S. V. Subramanian, "Health Care and Equity in India," *Lancet*, Feb. 5, 2011 377(9764):505–15, [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(10\)61894-6/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)61894-6/abstract).
31. National Accreditation Board for Hospitals and Healthcare Providers, NABH Standards for Small Healthcare Organisations (SHCO), 2006, <http://nabh.co/shco-standard.aspx>; accessed Oct. 13, 2016.
32. G. Gyani, "India," in J. Braithwaite, Y. Matsuyama, R. Mannion et al. (eds.), *Healthcare Reform, Quality and Safety: Perspectives, Participants, Partnerships, and Prospects in 30 Countries* (Ashgate Publishing Limited, 2015).
33. P. Wennerholm, A. M. Schuetz, Y. Zaveri-Roy et al., *India's Healthcare System—Overview and Quality Improvements* (Swedish Agency for Growth Policy Analysis, 2013).
34. Ministry of Health and Family Welfare, *Annual Report, 2015*.
35. Ministry of Health and Family Welfare, "Notification: Clinical Establishment Act," May 23, 2012, <http://clinicaestablishments.nic.in/WriteReadData/386.pdf>; accessed Oct. 13, 2016.
36. Ministry of Health and Family Welfare, *National Health Policy 2015* (draft), Dec. 2014, <http://www.mohfw.nic.in/showfile.php?lid=3014>; accessed Oct. 13, 2016.
37. Ibid.
38. A. Gudwani, P. Mitra, A. Puri et al., *India Healthcare: Inspiring Possibilities, Challenging Journey* (McKinsey and Co., Jan. 2012), <http://www.mckinsey.com/global-themes/india/india-healthcare-inspiring-possibilities-challenging-journey>.
39. P. Wennerholm, A. M. Schuetz, Y. Zaveri-Roy et al., *India's Healthcare System—Overview and Quality Improvements* (Swedish Agency for Growth Policy Analysis, 2013).
40. K. S. Reddy, V. Patel, P. Jha et al., "Towards Achievement of Universal Health Care in India by 2020: A Call to Action," *Lancet*, Feb. 26–March 4, 2011 377(9767):760–68, <http://www.sciencedirect.com/science/article/pii/S0140673610619605>.
41. S. Nandraj, "Unregulated and Unaccountable: Private Health Providers," *Economic and Political Weekly*, Jan. 28, 2012 46(4):12–15, https://www.researchgate.net/publication/270887691_Unregulated_and_Unaccountable_Private_Health_Providers.
42. R. V. Baru, "Challenges for Regulating the Private Health Services in India for Achieving Universal Health Care," *Indian Journal of Public Health*, Oct.–Dec. 2013 57(4):208–11, <http://www.ijph.in/article.asp?issn=0019-557X;year=2013;volume=57;issue=4;page=208;epage=211;aulast=Baru>.
43. A. Phadke, "Regulation of Doctors and Private Hospitals in India," *Economic & Political Weekly*, Feb. 6, 2016 51(6), <http://www.epw.in/journal/2016/6/special-articles/regulation-doctors-and-private-hospitals-india.html>.
44. National Institute of Public Cooperation and Child Development, *An Analysis of Levels and Trends in Infant and Child Mortality Rates in India*, 2014, <http://nipccd.nic.in/reports/imr.pdf>; accessed Oct. 13, 2016.
45. A. Gudwani, P. Mitra, A. Puri et al., *India Healthcare: Inspiring Possibilities, Challenging Journey* (McKinsey and Co., Jan. 2012), <http://www.mckinsey.com/global-themes/india/india-healthcare-inspiring-possibilities-challenging-journey>.
46. Y. Balarajan, S. Selvaraj, and S. V. Subramanian, "Health Care and Equity in India," *Lancet*, Feb. 5, 2011 377(9764):505–15, [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(10\)61894-6/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)61894-6/abstract).
47. Planning Commission of India, *High Level Expert Group Report on Universal Health Coverage for India*, Nov. 2011, http://planningcommission.nic.in/reports/genrep/rep_uhc0812.pdf.

48. D. Acharya, G. Vaidyanathan, V. R. Muraleedharan et al., *Do the Poor Benefit from Public Spending on Healthcare in India? Results from Benefit (Utilisation) Incidence Analysis in Tamil Nadu and Orissa* (Consortium for Research on Equitable Health Systems [CREHS], April 2011), http://www.crehs.ishm.ac.uk/India_BUIA.pdf; accessed Oct. 13, 2016.
49. A. Mahal, J. Singh, F. Afridi et al., *Who Benefits from Public Health Spending in India?* (World Bank, Aug. 2001), <http://documents.worldbank.org/curated/en/930041468285004372/pdf/563710WP0publi10Box349502B01PUBLIC1.pdf>; accessed Oct. 13, 2016.
50. R. Jain, S. Desai, and R. Vanneman, *Janani Suraksha Yojana and Declining Socioeconomic Inequalities in Maternal Healthcare in Rural India*, Sept. 29, 2016, <http://ihds.info/sites/default/files/Final edit.pdf>.
51. National Health Portal of India, <http://www.nhp.gov.in/>; accessed Oct. 13, 2016.
52. Open Government Data (OGP) Platform India, Health Management Information System, <https://data.gov.in/keywords/health-management-information-system/>.
53. Ministry of Health and Family Welfare, National e Health Authority (NeHA) (Concept Note). Government of India, March 16, 2015, <http://mohfw.nic.in/showfile.php?lid=3099>; accessed Oct. 13, 2016.
54. N. S. Tigga and U. S. Mishra, "On Measuring Technical Efficiency of the Health System in India. An Application of Data Envelopment Analysis," *Journal of Health Management*, Sept. 2015 17(3):285–98.
55. T. R. Jat and M. San Sebastian, "Technical Efficiency of Public District Hospitals in Madhya Pradesh, India: A Data Envelopment Analysis," *Global Health Action*, Sept. 2013 6(1), <http://www.tandfonline.com/doi/full/10.3402/gha.v6i0.21742>; accessed Oct. 13, 2016.
56. M. Chokshi, H. Farooqui, S. Selvaraj et al., "A Cross-Sectional Survey of the Models in Bihar and Tamil Nadu, India for Pooled Procurement of Medicines," *WHO South-East Asia Journal of Public Health*, Jan.–June 2015 4(1).
57. World Health Organization (WHO), *Universal Access to Medicines in India. A Baseline Evaluation of the Rajasthan Free Medicines Scheme*, 2014, http://www.searo.who.int/india/publications/rajasthan_report_2015_part1.pdf?ua=1; accessed Oct. 13, 2016.
58. Department of Pharmaceuticals, *Jan Aushadhi: A Campaign to Ensure Access to Medicines for All*, <http://janaushadhi.gov.in/data/4FoldBrochure.pdf>; accessed Oct. 13, 2016.
59. Ministry of Chemicals and Fertilizers, National Pharmaceutical Pricing Authority, <http://www.nppaindia.nic.in/>; accessed Oct. 13, 2016.
60. Ministry of Health and Family Welfare, *National Health Policy 2015* (draft), Dec. 2014, <http://www.mohfw.nic.in/showfile.php?lid=3014>; accessed Oct. 13, 2016.
61. Pradhan Mantri Yojana Schemes, <http://www.pradhanmantriyojana.co.in/national-health-protection-scheme-insurance-cover-rs-1-lakh-poor-bpl/>; accessed Oct. 13, 2016.
62. A. Glassman and A. Mukherjee, *Getting Centre-State Relations Right for Health in India*, Ideas for India, April 2015, http://www.ideasforindia.in/article.aspx?article_id=1432.
63. National Institution for Transforming India, *Report of the Sub-Group of Chief Ministers on Rationalisation of Centrally Sponsored Schemes*, Oct. 2015, <http://niti.gov.in/writereaddata/files/Final Report of the Sub-Group submitter to PM.pdf>; accessed Oct. 13, 2016.

The Israeli Health Care System

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What is the role of government?

Government, through the Ministry of Health, is responsible for population health and the overall functioning of the health care system (including the regulation of health care insurers and providers). It also owns and operates a large network of maternal and child health centers, about half of the nation's acute-care bed capacity, and about 80 percent of its psychiatric bed capacity.¹

In 1995, Israel passed a national health insurance (NHI) law, which provides for universal coverage. In addition to financing insurance, government provides financing for the public health service and is active in areas such as the control of communicable diseases, screening, health promotion and education, and environmental health, as well as the direct provision of various other services. It is also actively involved in the financial and quality regulation of key health system actors, including health plans, hospitals, and health care professionals.



Who is covered and how is insurance financed?

In 2015, national health expenditures accounted for 7.5 percent of GDP, a figure that has remained stable during the last two decades. In 2015, 62 percent of health expenditures were publicly financed, a share that is one of the lowest among Organisation for Economic Co-Operation and Development (OECD) countries. (The Israeli figure is down from 63.5% in 2010 and 68% in 1995.)

Publicly financed health insurance: Israel's NHI system automatically covers all citizens and permanent residents (aside from soldiers, who receive health care directly from the army). It is funded primarily through a special income-related health tax in combination with general government revenues, which in turn are funded primarily through progressive income-related sources such as income tax.

Employers are required to enroll any foreign workers (whether documented or undocumented) in private insurance programs, whose range of benefits is similar to that of NHI. Private insurance is also available, on an optional basis, for tourists and business travelers. Nevertheless, there are people living in Israel who do not have health insurance, including undocumented migrants who are not working. Several services are made available to all individuals irrespective of their legal or insured status. These include emergency care, preventive mother and child health services, and treatment of tuberculosis, HIV/AIDS, and other sexually transmitted infections.

Within the NHI framework, residents can choose among four competing nonprofit health plans. Government distributes the NHI budget among the plans primarily through a capitation formula that takes into account sex, age, and geographic distribution. The health plans are then responsible for ensuring that their members have access to the NHI benefit package, as determined by government.

Private health insurance: Private voluntary health insurance (VHI) includes health plan VHI (HP-VHI), offered by each health plan to its members, and commercial VHI (C-VHI), offered by for-profit insurance companies to individuals or groups. In 2014, 87 percent of Israel's adult population had HP-VHI, and 53 percent had C-VHI.² HP-VHI premiums are age-related and cross-subsidized, and health plans cannot reject applicants. C-VHI premiums are risk-related, and coverage is tailored to consumers. C-VHI packages tend to be more comprehensive and more expensive than HP-VHI packages. While C-VHI coverage is found among all population groups, coverage rates are highly correlated with income.

Together, these two types of private VHI financed 14 percent of national health expenditures in 2014. The Ministry of Health regulates HP-VHI programs, while the Commissioner of Insurance, who is part of the Ministry of Finance, regulates

C-VHI programs. The focus of C-VHI regulation is actuarial solvency, with secondary attention to consumer protection; in HP-VHI regulation, there is more attention to equity considerations and potential impacts on the health care system.³

Israelis purchase VHI to secure coverage of services not included in the NHI package (e.g., dental care, certain lifesaving medications, institutional long-term care, and treatments abroad), care in private hospitals, or a premium level of service for services covered by NHI (e.g., choice of surgeon and reduction of waiting time). VHI is also supplementary to NHI, as it extends coverage of services in the health basket such as more physiotherapy or psychotherapy sessions. However, it does not cover user charges. VHI coverage is also purchased as a result of a general lack of confidence in the NHI system's capacity to fully fund and deliver all services needed in cases of severe illness.



What is covered?

The mandated benefit package includes hospital, primary, and specialty care, prescription drugs, certain preventive services, mental health care, dental care for children, and other services. Dental care for adults, optometry, and home care are generally excluded, although the National Insurance Institute does provide some funding for home care, dependent on need. Limited palliative and hospice services are included in the NHI benefit package as well.⁴

Israel has a well-developed system for prioritizing coverage of new technologies within an annual overall budget set by the Cabinet (which includes Parliament members from the ruling parties).⁵ Proposals for additions are solicited and received from pharmaceutical companies, medical specialty societies, and others. The Ministry of Health then assesses the costs and benefits of the proposed additions, and a public commission combines the technical input with broader considerations to prepare a set of recommendations. These are usually adopted by the Ministry and subsequently by the Cabinet.

Cost-sharing and out-of-pocket spending: In 2014, out-of-pocket spending accounted for 23 percent of national health expenditures. Some of this was for services not part of the NHI benefit package, including dental care for adults, optical care, institutional long-term care (for those not eligible for means-tested assistance), certain medications, and medical equipment. The other major component was copayments (user charges) for NHI services, such as pharmaceuticals, visits to specialists, and certain diagnostic tests. Dental care and pharmaceuticals are the two largest out-of-pocket components.

There are no copayments for primary care visits or for hospital admissions. There are also no quarterly or annual deductibles with NHI coverage. Within the NHI system, physicians are not allowed to balance-bill.

Safety net: There are a variety of safety-net mechanisms in place. For pharmaceuticals there is a quarterly ceiling for the chronically ill and discounts for the elderly based on age, income, and health status. Holocaust survivors are exempt from copayments for pharmaceuticals. With regard to specialist visits, there are exemptions for elderly welfare recipients, children receiving disability payments, and people afflicted with certain severe diseases. There is a quarterly ceiling per household on total copayments for these visits, which is 50 percent lower for elderly people. In addition, people earning less than 60 percent of average wages pay a reduced health tax of 3 percent of income, instead of 5 percent.



How is the delivery system organized and financed?

Primary care: Nearly all Israeli primary care physicians provide care through only one of the four competing nonprofit health plans, which vary markedly in how they organize care. (In this profile, we refer to primary care physicians as general practitioners, or GPs, although they also include board-certified family physicians.)

In Clalit, the largest health plan, most primary care is provided in clinics owned and operated by the plan, and GPs are salaried employees. The typical clinic has three to six GPs and several nurses, pharmacists, and other professionals. Clalit also contracts with independent physicians; although these doctors tend to work in solo practices with limited on-site support from non-physicians, they have access to various administrative and nursing services at Clalit district clinics.

The other three health plans also use a mix of clinics and independent primary care practices, with the mix varying across plans. In Maccabi (the second-largest plan) and Meuhedet, almost all of the primary care is provided by independent physicians, while in Leumit the clinic model predominates (though not to the same extent as in Clalit).

Members of all plans can generally choose their GP from among those on the plan's list and can switch freely. In practice, nearly all patients remain with the same GP for extended periods.

In Clalit, each patient is registered with a GP who has responsibility for coordinating care and who acts as a gatekeeper to secondary care, with the exception of five common specialties. In Leumit, patients are registered with a clinic rather than with a GP, and in the other two plans there is no registration. However, in all plans there is a movement under way to associate each member with a physician for purposes of quality assurance and accountability. Clalit is the only plan that requires referral to secondary care.

Independent physicians in all plans are paid on a capitation basis, with Clalit and Leumit using "passive capitation" (a quarterly, per-member payment made irrespective of whether the member visited the GP in the relevant quarter) and Maccabi and Meuhedet using "active capitation" (where the payment is made only for members who visited their GP at least once during the quarter). Independent physicians also receive limited fee-for-service payments for certain procedures.

Plans monitor the care provided by their GPs and work closely with them to improve quality.⁶ However, quality-related financial incentives are generally not used.

The salaries of Clalit clinic physicians are set via a collective bargaining agreement with the Israel Medical Association. The capitation rates of independent physicians, in all the health plans, are set by the plans in consultation with their physicians' associations.

In 2012–2014, Israel had an average of approximately 27,700 employed physicians. As of 2011, approximately 7,000 of them worked with or for the health plans as GPs.

Outpatient specialty care: Outpatient specialty care is provided predominantly in community settings, either in health plan clinics (the dominant mode in Clalit) or in physicians' offices (the predominant mode in the other health plans). The former tend to be integrated multispecialty clinics, while the latter tend to be single-specialty. Most specialists are paid on an active capitation basis, plus fee-for-service for certain procedures. Rates are set by the health plans and, within the NHI system, specialists may not balance-bill; patients pay the quarterly copayment only. Patients can choose from a list of specialists provided by their health plans. Specialists who work for the plans may also see private patients.

Administrative mechanisms for direct patient payments to providers: As noted above, the only direct payments to NHI providers are copayments. Patients can usually use their health plan membership cards instead of making cash payments; the provider receives the full fee from the health plans, which then collect the copayments from enrollees.

After-hours care: After-hours care is available via hospital emergency departments (EDs), freestanding walk-in "emergencies," and companies that provide physician home visits. Physicians providing care in EDs and emergency centers come from a range of disciplines, including primary care, internal medicine, general surgery, orthopedics, and, increasingly, emergency medicine. Nurses play a significant role in triage. They are typically salaried, while physicians working for home-visit companies are typically paid per visit.

Primary care physicians are not required to provide after-hours care. They receive reports from the after-hours providers, and increasingly this information is conveyed electronically.

All the health plans operate national telephone advice lines for their members, staffed by nurses with physician backup.

Hospitals: Acute-care bed capacity is divided approximately as follows: government, 50 percent; Clalit, 30 percent; other nonprofits, 15 percent; for-profits, 5 percent.⁷ However, the for-profits account for a much larger share of admissions and an even larger share of surgical operations.⁸

Hospital outpatient care is reimbursed on a fee-for-service basis, and inpatient care is reimbursed using a mix of per-diem and activity-based diagnosis-related group (DRG) arrangements, with approximately two-thirds of revenue coming from

per-diem payments.⁹ Maximum rates are set by government, but health plans negotiate discounts. There are also revenue caps set by government, which limit the extent to which each hospital's total revenues can grow from year to year. Generally speaking, hospital payments include the cost of the physicians working for the hospitals.

In government and nonprofit hospitals, physicians are predominantly salaried employees, with limited arrangements for supplemental fee-for-service in some hospitals. Fee-for-service is the predominant payment mode in private hospitals.

Mental health care: Responsibility for the provision of mental health care was transferred in mid-2015 from the Ministry of Health to the health plans, which provide care through a mix of salaried professionals, contracted independent professionals, and services purchased from organizations (including the ministry's mental health clinics). The benefit package is broad and includes psychotherapy, medications, and inpatient and outpatient care. Integration with primary care is currently limited but is expected to improve because of the transfer of responsibility to the health plans.

Long-term care and social supports: The financing of institutional long-term care is considered a responsibility of patients and their families, to the extent that they can afford it. An extensive range of needs-based, graduated subsidies is available from the Ministry of Health. These are generally paid directly to providers, although recently a change was made to the law to make it easier for families to receive cash subsidies to be used in paying providers.

The health plans are responsible for medical care of the disabled elderly living in the community. In recent years, they have increased access to clinicians (particularly for the homebound elderly) via home care teams and telemedicine.

The National Insurance Institute finances personal care and housekeeping services for the community-dwelling seniors with disabilities.¹⁰ Additional supports include an extensive network of daycare centers and a growing network of supportive neighborhoods. An emergency call service, physician home visits, and social activities are offered. Additionally, in every community a facilitator coordinates social supports and apartment repairs.

For nursing homes, home medical care, and home aids, eligibility is based on the degree of inability to carry out activities of daily living. In addition, there are means tests for government assistance for nursing home and home aids, but not for medical home care provided by the health plans or for any services provided through private insurance.

Private, for-profit providers deliver about two-thirds of nursing home care, virtually no medical home care (which is delivered by the private, nonprofit health plans), and nearly all home aids.

Although the government maintains that hospice care is included in the NHI benefit package that the health plans are supposed to provide, the plans dispute this. Some hospice care is available (particularly home hospice), though much less than is needed. Approximately half of the adult population has private long-term care insurance. There is no direct financial support for informal or family caregivers.

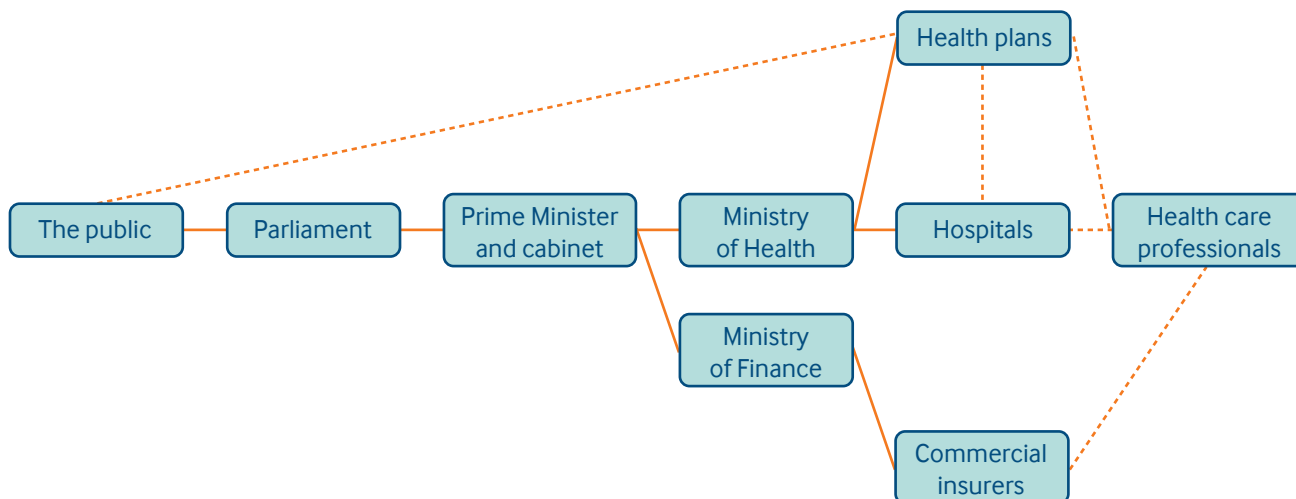


What are the key entities for health system governance?

Parliament (the Knesset) adopts and amends legislation pertaining to the health system. The Cabinet, comprising a selection of Knesset members from the ruling parties, has executive responsibility for the government as a whole, including the Ministry of Health (MoH). The MoH has overall responsibility for population health and the effective functioning of the health care system. It includes:

- The minister, an elected member of the Knesset and typically a member of the Cabinet. The minister has full authority and responsibility for the functioning of the MoH.
- The director-general, the MoH's top professional, who is appointed by the minister to run the operations of the MoH.
- A large number of departments, including those responsible for quality and safety, assessment of cost-effectiveness, fee-setting, public information, and health information technology.
- Various advisory bodies, including the National Health Council, a public advisory; the benefits package committee, which advises on prioritization of new technologies for inclusion in the NHI benefit package; and national councils in such areas as trauma care, mental health, and women's health.

Organization of the Health System in Israel



Source: B. Rosen, Myers-JDC-Brookdale Institute, 2015.

The Ministry of Health has an ombudsman's office to help citizens realize their rights under the NHI law. In addition, there are various nongovernmental patient advocacy organizations, many of which focus on particular diseases.

The Budget Division of the Ministry of Finance prepares the budgets of all ministries, including the MoH, for consideration by the Cabinet and then the Knesset. It also plays a major role in promoting and shaping major structural reforms to the health system and partners with the MoH on interministerial committees, such as those that set maximum hospital prices and the capitation formula. The Ministry of Finance's Insurance and Capital Markets Division regulates commercial health insurers. The government also has an antitrust unit responsible for promoting competition, but it is not very active in the health area.

The Scientific Council of the Israel Medical Association is responsible for the specialty certification programs and examinations, in coordination with the MoH. The Council for Higher Education is responsible for the authorization, certification, and funding of all university degree programs, including those for training health care professionals.



What are the major strategies to ensure quality of care?

For over a decade, Israel has had a well-developed system for monitoring the quality of primary care. Comparative quality data for individual health plans has been made public since 2014.¹¹ While the published data relate to the health plans as a whole, the plans also maintain internal data on regions, clinics, and individual physicians. The plans and their clinicians have made intensive use of these data to bring about substantial improvements in quality.^{12,13}

The MoH publishes comparative data on the quality of hospital care. This data system is much newer than the system for primary care quality and is currently limited to a relatively small number of indicators. However, it is expected to develop rapidly over the coming years. In addition, a new effort is under way to develop and implement quality indicators for continuity of care between hospital and community settings.

The MoH is in the process of launching a national initiative to reduce waiting times for surgical procedures, and there are several other initiatives focused on the care of particular diseases, such as dementia. The ministry also collects and

publishes data on individual hospitals' waiting times for elective procedures. The health plans are increasingly active in implementing programs for the chronically ill, including disease management.

Hospitals and clinics require a license from the MoH, granted only as long as basic quality standards are met. Hospitals are also increasingly seeking, and securing, accreditation from Joint Commission International.

An independent research institute carries out biannual surveys of the general population regarding the service level provided by the health plans and the level of satisfaction with the health system. The MoH recently launched an annual survey of hospitalized patients, publishing results for individual hospitals.

There are currently no explicit financial incentives for hospitals and health plans to improve quality. However, owing to the competitive environment, public dissemination of quality data may be providing an indirect incentive. Consideration is being given to introducing a limited number of pay-for-performance incentives in the years ahead.

National registries are maintained by the MoH for certain expensive medical devices and for a broad range of diseases and conditions, including cancer, low birth weight, trauma, and occupational diseases.

To receive a medical license from the MoH, persons who studied in an Israeli medical school must successfully complete a one-year internship. Those who studied abroad are usually also required to pass an examination. Specialty recognition requires training in an accredited specialty program and passing an exam. There are no re-licensure exams for physicians.



What is being done to reduce disparities?

The MoH is leading a major national effort to reduce disparities, in cooperation with the health plans and hospitals.¹⁴ Key initiatives include:

- Reducing financial barriers to care, particularly for those with low incomes and other vulnerable populations. Most prominently, mental health care and dental care for children have been added to the NHI benefit package, thereby reducing the substantial financial barriers that existed when these services were provided privately.¹⁵
- Enhancing the availability of services and professionals in peripheral regions by increasing the supply of beds and advanced equipment in those regions and providing financial incentives for physicians to work there. In addition, in 2010, a new risk adjustment related to place of residence in the peripheral regions was added to the capitation formula.
- Addressing the unique needs of cultural and linguistic minorities through the adoption of cultural responsiveness requirements for all providers, establishment of a national translation call center, and targeted interventions for the Bedouin and other high-risk groups.
- Designating particular professionals within the hospitals and the health plans to be the leaders in their institutions for promoting equity and cultural responsiveness, along with government-sponsored training programs for them and for additional professionals.
- Promoting greater poverty awareness at all levels of the health system.
- Implementing intersectoral efforts to address the social determinants of health and promote healthy lifestyles.
- Compiling, analyzing, and publicly disseminating information about health care disparities, including periodic reporting of variations in health and health care access and instituting an annual conference showcasing initiatives to reduce disparities.

What is being done to promote delivery system integration and care coordination?

The health plans, which are both insurers and providers, are essentially the sole source of primary care and the main source of specialty care. This structural integration of services provides a foundation for the provision of relatively seamless care for all the insured, including complex and chronically ill patients. The plans' health information systems link primary and specialty care providers, and a new national health information exchange is linking the health plans and the hospitals. These systems are increasingly providing access to electronic medical information at the point of care.

In addition, the health plans have put forth several targeted management programs that aim to provide comprehensive integrated care for complex patients with chronic conditions. These make extensive use of the plans' sophisticated information systems, videoconferencing, and other innovative techniques.¹⁶

Generally speaking, there is still only limited integration among the various components of the long-term care system and between long-term care and other components of the health care system. However, integration may be expanded in the future if long-term care becomes a responsibility of the health plans (see below).

What is the status of electronic health records?

All health plans have electronic health record (EHR) systems that link all community-based providers—primary care physicians, specialists, laboratories, and pharmacies. All GPs work with an EHR. Hospitals are also computerized but are not fully integrated with the health plan EHRs. The MoH is leading a major national health information exchange project to create a system for sharing relevant information across all hospitals and health plans.

Each citizen has an identification number that functions as a unique patient ID. Patients have the right to get copies of their medical records from hospitals and health plans, and patients can access some components of their EHR online, but full records are not generally available. Efforts are under way to set up secure messaging systems linking patients and their GPs.

How are costs contained?

Among high-income countries, Israel is one of the most successful at containing costs, with health expenditures remaining below 8 percent of GDP. Strategies include:

- Channeling the bulk of funding through a single, tightly controlled government source.
- Maintaining tight controls on key supply factors, such as hospital beds and expensive medical equipment.
- Requiring the health plans—which function as the building blocks of the health system—to provide care competitively, within budgets that are largely determined prospectively.
- Maintaining a well-developed system of community-based services to reduce reliance on high-cost hospital care.
- Using electronic health records effectively, particularly in the community.
- Purchasing pharmaceuticals in bulk and relying heavily on generics.
- Setting maximum hospital reimbursement rates (government), negotiating discounts (health plans), and instituting global revenue caps for hospitals.
- Explicitly prioritizing public funding for new technologies included in the NHI benefit package.
- Aligning organizational and financial incentives between clinicians and the hospitals or health plans for which they work (see below).

Although clinicians are rarely given explicit financial incentives to contain costs, reliance on salary and capitation (rather than fee-for-service) may reduce incentives to overtreat. Moreover, the health plans have various internal processes for discouraging care that provides poor value.

Of concern to some experts, however, is the recent growth of private medical care and private financing, which is seen as potentially jeopardizing Israel's success in containing cost growth.

Other growing concerns are the rapid increase in expenditures on pharmaceuticals, particularly those related to cancer care,¹⁷ and the future cost impact of the expanding field of biologic therapies and personalized medicines.¹⁸



What major innovations and reforms have been introduced?

Voluntary health insurance: In 2016, the government introduced several changes to the regulation of VHI, with an eye toward restraining growth in this coverage and providing consumers with greater value for the premiums they pay. Key components include the standardization of commercial insurance coverage for surgical operations and the requirement that VHI payments to surgeons be channeled through the hospitals in which they work.

Mental health: In July 2015, mental health care was added to the set of services that the health plans must provide within the NHI framework, making access a legally guaranteed right rather than a government-supplied service whose availability is subject to budget constraints. The main objectives of the reform are to improve the linkage between physical and mental care, increase the availability of mental health services, and increase efficiency.¹⁹

Comparative data on hospital performance: In 2015, the MoH began publishing comparative data on hospital quality, and the indicator set is rapidly being expanded. In 2014, the ministry published the results of nationwide surveys of hospitalized patients regarding their care experience, and a similar survey has been carried out in 2016. The ministry has also assembled a database of waiting times for surgical operations, with the intention of publishing updated comparative data in the near future. The objectives of all these efforts are to provide hospitals with information to help identify problem areas, to enhance consumer choice of hospitals, and to provide hospitals with incentives to improve performance.

Reducing surgical waiting times: Long waiting times are perceived as one of the major causes of the recent growth in private financing and care provision. Motivated by a desire to raise public confidence in the publicly financed health care system and to improve quality of care, the MoH is planning a major initiative to reduce surgical waiting times. This will involve additional funding to expand the hours of operation for surgical theaters, as well as a series of organizational changes to improve efficiency.

Improving service levels in hospital EDs: As part of a broader effort to improve patient-centered care and service levels, the MoH is launching a major effort to reduce waiting times between patient arrival and the first contact with a health care professional. Strategies are to include enhanced staffing of physicians and nurses, the introduction of physician assistants into the EDs, and the engagement of operations management experts to improve workflow.

Long-term care insurance: Israel's long-term care (LTC) system is seriously fragmented, with service gaps, duplication of care, inefficient incentives, and inadequate investment in prevention and rehabilitation. The government is working on a plan to add institutional LTC to the set of NHI benefits for which the health plans are responsible, with the plans also serving as the LTC budget holders.

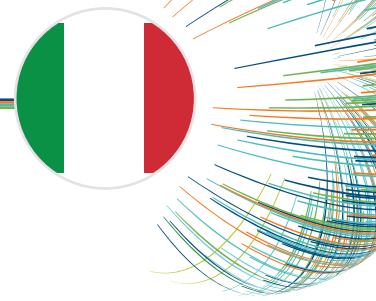
Full-timer program: In mid-2016, the MoH launched an initiative in which voluntarily selected physicians in public (i.e., government and nonprofit) hospitals will receive significantly enhanced pay in return for 1) working additional hours in a public hospital and 2) agreeing not to work in the private sector. The overall objective of the full-timer initiative is to strengthen Israel's publicly financed health care system by improving its availability, quality, and safety.

This profile draws on "Israel: Health System Review," by Bruce Rosen, Ruth Waitzberg, and Sherry Merkur, published in Health Systems in Transition, Vol. 17, No. 6 (2015), by the European Observatory on Health Systems and Policies. It also benefited from valuable input from Martin Wenzl of the London School of Economics and Political Science.

Notes

1. B. Rosen, R. Waitzberg, and S. Merkur, "Israel: Health System Review," *Health Systems in Transition*, 2015 17(6):1–212, http://www.euro.who.int/__data/assets/pdf_file/0009/302967/Israel-HiT.pdf?ua=1; accessed Sept. 25, 2016.
2. S. Brammli-Greenberg and T. Medina-Artom, *Public Opinion on the Level of Service and Performance of the Healthcare System in 2014* (Myers-JDC-Brookdale Institute, 2015).
3. S. Brammli-Greenberg, R. Waitzberg, and R. Gross, "Integrating Private Insurance into the Israeli Health System: An Attempt to Reconcile Conflicting Values," in S. Thomson, E. Mossialos (eds.), *Private Health Insurance and Medical Savings Accounts: History, Politics, Performance* (Cambridge University Press, 2016).
4. N. Bentur, L. L. Emanuel, and N. Cherney, "Progress in Palliative Care in Israel: Comparative Mapping and Next Steps," *Israel Journal of Health Policy Research*, Feb. 20, 2012 1(1):9.
5. D. Greenberg, M. I. Siebzeher, and J. S. Pliskin, "The Process of Updating the National List of Health Services in Israel: Is It Legitimate? Is It Fair?" *International Journal of Technology Assessment in Health Care*, July 2009 25(3):255–61.
6. B. Rosen, L. G. Pawlson, R. Nissenholtz et al., "What the United States Could Learn from Israel About Improving the Quality of Health Care," *Health Affairs*, April 2011 30(4):764–72.
7. Z. Haklai, *Inpatient Institutions and Day Care Units in Israel—2013* (Ministry of Health, 2015).
8. S. Brammli-Greenberg and T. Medina-Artom, *Public Opinion on the Level of Service and Performance of the Healthcare System in 2014* (Myers-JDC-Brookdale Institute, 2015).
9. S. Brammli-Greenberg, R. Waitzberg, V. Perman et al., "Why and How Did Israel Adopt Activity-Based Hospital Payment? The Procedure-Related Group Incremental Reform," *Health Policy*, Oct. 2016, 120(10):1171–76.
10. S. Asiskovitch, "The Long-Term Care Insurance Program in Israel: Solidarity with the Elderly in a Changing Society," *Israel Journal of Health Policy Research*, Jan. 23, 2013 2(1):3.
11. D. H. Jaffe, A. Shmueli, A. Ben-Yehuda et al., "Community Healthcare in Israel: Quality Indicators 2007–2009," *Israel Journal of Health Policy Research*, Jan. 30, 2012 1(1):3.
12. B. Rosen, L. G. Pawlson, R. Nissenholtz et al., "What the United States Could Learn from Israel About Improving the Quality of Health Care," *Health Affairs*, April 2011 30(4):764–72.
13. R. D. Balicer, M. Hoshen, C. Cohen-Stavi et al., "Sustained Reduction in Health Disparities Achieved Through Targeted Quality Improvement: One-Year Follow-Up on a Three-Year Intervention," *Health Services Research*, Dec. 2015 50(6):1891–909 (e-pub March 19, 2015).
14. T. Horev and H. Avni, "Strengthening the Capacities of a National Health Authority in the Effort to Mitigate Health Inequity—The Israeli Model," *Israel Journal of Health Policy Research*, Aug. 15, 2016 5(19).
15. B. Rosen, "Inclusion of Dental Care for Children in NHI," Health Systems and Policies Platform.ha (2016).
16. Intel Health & Life Sciences, *Improving Health Outcomes and Reducing Costs with Video Conferencing Technology* (case study), 2015.
17. Y. Lomnicky, D. Kurnik, R. Loebstein et al., "Trends in Annual Drug Expenditure—A 16-Year Perspective of a Public Healthcare Maintenance Organization," *Israel Journal of Health Policy Research*, Sept. 15, 2016 5(37).
18. D. A. Goldstein, S. M. Stemmer, and N. Gordon, "The Cost and Value of Cancer Drugs—Are New Innovations Outpacing Our Ability to Pay?" *Israel Journal of Health Policy Research*, Sept. 22, 2016 5(40).
19. B. Rosen, N. Nirel, R. Gross et al., "The Israeli Mental Health Insurance Reform," *Journal of Mental Health Policy and Economics*, Dec. 2008 11(4):201–08.

The Italian Health Care System



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What is the role of government?

The Italian National Health Service (*Servizio Sanitario Nazionale*) was set up in 1978, with universal coverage, solidarity, human dignity, and health needs as its guiding principles. It is regionally based and organized at the national, regional, and local levels. Under the Italian constitution, the central government controls the distribution of tax revenue for publicly financed health care and defines a national statutory benefits package to be offered to all residents in every region—the “essential levels of care” (*livelli essenziali di assistenza*, or *LEA*). The 19 regions and two autonomous provinces have the responsibility to organize and deliver health services through local health units. Regions enjoy significant autonomy in determining the macro structure of their health systems. Local health units are managed by a general manager appointed by the governor of the region, and deliver primary care, hospital care, outpatient specialist care, public health care, and health care related to social care.



Who is covered and how is insurance financed?

Publicly financed health care: The National Health Service (NHS) covers all citizens and legal foreign residents. Coverage is automatic and universal. Since 1998, undocumented immigrants have access to urgent and essential services. Temporary visitors receive health services by paying for the costs of treatment.

Public financing accounted for 75.8 percent of total health spending in 2014, with total expenditure standing at 9.1 percent of GDP.¹ The public system is financed primarily through a corporate tax (approximately 35.6% of the overall funding in 2012) pooled nationally and allocated back to regions, typically in proportion to their contributions (there are large interregional gaps in the corporate tax base, leading to financing inequalities), and a fixed proportion of national value-added tax revenue (approximately 47.3% of the total in 2012) collected by the central government and redistributed to regions whose resources are insufficient to provide essential levels of care.²

The regions are allowed to generate their own additional revenue, leading to further interregional financing differences. Every year, the Standing Conference on Relations between the State, Regions, and Autonomous Provinces (with the presidents of the regions and representatives from central government as its members) sets the criteria (usually population size and age demographics) to allocate funding to regions. Local health units are funded mainly through capitated budgets.

Since the National Health Service does not allow people to opt out of the system and seek only private care, substitutive insurance does not exist, but complementary and supplementary private health insurance are available (see below).

Privately financed health care: Private health insurance plays a limited role in the health system, accounting for roughly 1 percent of total spending in 2014. Around 6 million people are covered by some form of voluntary health insurance (VHI), which generally covers services excluded under the LEA, offering a higher standard of comfort and privacy in hospital facilities and wider choice among public and private providers. Some private health insurance policies also cover copayments for privately provided services or a daily rate of compensation during hospitalization.³ Tax benefits favor complementary over supplementary voluntary insurance.

There are two types of private health insurance: corporate, for which companies cover employees and sometimes their families, and noncorporate, with individuals buying insurance for themselves or their families. Policies, either collective or individual, are supplied by for-profit and nonprofit organizations. The market is characterized by three types of nonprofit organizations: voluntary mutual insurance organizations and corporate and collective funds organized by employers or professional associations for their employees or members. There is no information on the number of policies sold by each type of VHI provider, but nonprofit insurers cover the majority of the insured.⁴

In 2010, around 5.5 percent of the population had individual VHI coverage (1.33 million families), while around 2.5 million people had group coverage.⁵



What is covered?

Services: Primary and inpatient care are free at the point of use. Positive and negative lists are defined using criteria related to medical necessity, effectiveness, human dignity, appropriateness, and efficiency in delivery. Positive lists identify services offered to all residents; examples include pharmaceuticals, inpatient care, preventive medicine, outpatient specialist care, home care, primary care, and hospice care. Negative lists identify services not offered to patients, such as cosmetic surgery; services covered only on a case-by-case basis, such as orthodontics and laser eye surgery; and services for which hospital admissions are likely to be inappropriate, such as cataract surgery. Regions can offer services not included at the essential levels of care but must finance them themselves.

Prescription drugs are divided into three tiers according to clinical effectiveness and, in part, cost-effectiveness. The first tier (*classe A*) includes lifesaving drugs and treatments for chronic conditions and is covered in all cases; the second (*classe C*) contains all other drugs and is not covered by the NHS. There is an additional tier (*classe H*) comprising drugs that can be delivered only in a hospital setting. The three tiers are updated regularly by the National Pharmaceutical Agency based on new clinical evidence. For some categories of drugs, therapeutic plans are mandated, and prescriptions must follow clinical guidelines.

Dental care is generally not covered, except for children up to 16 years old, vulnerable populations, and people in economic and emergency need.

Cost-sharing and out-of-pocket spending: Procedures and specialist visits can be prescribed either by a general practitioner (GP) or by a specialist. While there are no user charges for GP consultations and hospital admission stays, patients pay a copayment for each prescribed procedure or specialist visit up to a ceiling determined by law—currently at EUR36.15 (USD48.00).⁶ Therefore, a patient who receives two separate prescriptions (e.g., for an MRI scan and for a consultation with a gastroenterologist) pays EUR36.15 (USD48.00) for each prescription.

To address rising public debt, in July 2011 the government introduced, along with other economic initiatives, an additional EUR10 (USD13) copayment for each prescription. Copayments have also been applied to outpatient drugs at the regional level, and a EUR25 (USD33) copayment has been introduced for “unnecessary” use of emergency services (although some regions have not enforced this copayment). No other forms of deductibles exist. Public and private providers under a contractual agreement with the National Health Service are not allowed to charge above the scheduled fees.

All individuals with out-of-pocket payments over EUR129 (USD172) in a given year are eligible for a tax credit equal to roughly one-fifth of their spending, but there are no caps.

In 2015, 22 percent of total health spending was paid out-of-pocket, mainly for drugs not covered by the public system and for dental care.⁷ Out-of-pocket payments can be used to access specialist care and, to a lesser extent, inpatient care delivered in private and public facilities to paying patients.

Safety net: Exemptions from cost-sharing are applied to people under age 6 and over age 65 who live in households with a gross income below a nationally defined threshold (approximately EUR36,000, or USD48,000); people with severe disabilities, as well as prisoners, are exempt from any cost-sharing. People with chronic or rare diseases, people who are HIV-positive, and pregnant women are exempt from cost-sharing for treatment related to their condition. Most screening services are provided free of charge.



How is the delivery system organized and financed?

Primary care: Primary care is provided by self-employed and independent physicians, general practitioners, and pediatricians, under contract and paid a capitation fee based on the number of people on their list.⁸ Local health units also can pay additional allowances for the delivery of planned care to specific patients (e.g., home care to chronically ill patients), for reaching performance targets (e.g., to reward effective cost containment for prescribed pharmaceuticals, laboratory tests, and therapeutic treatments), or for delivering additional treatments (e.g., medications, flu vaccinations). Capitation is adjusted for age and accounts for approximately 70 percent of overall payment. The variable portion comprises fee-for-service payment for specific treatments, including minor surgery, home care, preventive activities, and care of chronically ill patients. On average, the gross income of a GP ranges between EUR80,000 (USD107,000) and EUR120,000 (USD160,000), depending on list size.

The payment levels, duties, and responsibilities of GPs are determined in a collective agreement signed every three years by consultation between central government and the GPs' trade unions. In addition, regions and local health units can sign contracts covering additional services.

In 2012, there were approximately 53,000 GPs and pediatricians (33.6% of all practitioners working for the NHS) and 104,600 hospital clinicians (66.4%).⁹ Patients are required to register with a gatekeeping GP, who has incentives to prescribe and refer only as appropriate: in most cases, incentives are awarded only to those GPs and pediatricians who fall below a predetermined spending maximum or consumption target. People may choose any physician whose list has not reached the maximum number of patients allowed (1,500 for GPs and 800 for pediatricians) and may switch at any time.

In recent years, the solo practice model has been progressively modified toward group practice, particularly in the northern part of the country. Legislation encourages GPs and pediatricians to work in three ways: base group practice, in which 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 and pediatricians to access the same patient electronic health record system; and advanced group practice, in which GPs and pediatricians share the same office and patient health record system and are able to provide care to patients beyond individual catchment areas. In 2012, approximately 70.3 percent of GPs and 61.2 percent of pediatricians were working in a team.¹⁰ Group practices typically range from three to eight GPs.

General practitioners working in base group practices receive an additional EUR2.58 (USD3.70) for each patient registered in their list, while GPs in a network practice receive EUR4.70 (USD6.30) (the payment for pediatricians is EUR8.00, or USD11.00). Lastly, GPs working in a group practice receive EUR7.00 (USD10.00) and pediatricians EUR9.00 (USD12.00). General practitioners or pediatricians receive an additional payment of EUR4.00 (USD6.70) for employing a nurse and EUR3.50 (USD4.70) for a secretary.

Some regions are promoting care coordination by asking their GPs to work in groups comprising specialists, nurses, and social workers. The aim is for each group to be in charge of all the health needs of its assigned population. This arrangement is encouraged by additional payments to GPs per patient and by supplying teams with personnel.

Outpatient specialist care: Outpatient specialist care is generally provided by local health units or by public and private accredited hospitals under contract with them. Once referred, patients are given a choice of any public or private accredited hospital but are not given a choice of specialist. Outpatient specialist visits are generally provided by self-employed specialists working under contract with the National Health Service. They are paid an hourly fee contracted nationally between the government and the trade unions; the current rate is approximately EUR32 (USD43). Outpatient specialists can see private patients without any limitations, whereas specialists employed by local health units and public hospitals cannot. Multispecialty groups are more common in northern regions of the country.

Administrative mechanisms for paying primary care doctors and specialists: Patient copayment is limited to outpatient specialist visits and diagnostic testing, while primary care visits are provided free of charge. Copayments are usually paid by the patient before the visit or test.

After-hours care: In the case of after-hours emergency care, or when a consultation with a GP is not possible, service is provided by the emergency medical service (*guardia medica*), staffed by “continuous-care physicians” (*medici di continuità assistenziale*). The hourly rate, negotiated between the GP trade unions and the government, is approximately EUR25 (USD33). Following examination and initial treatment, the doctor can prescribe medications, issue employees’ medical certificates, and recommend hospital admission. The service normally operates at night and on weekends.

Information on a patient’s visit is not routinely sent to the patient’s GP. To improve accessibility, government and GP associations are trying to promote a model whereby GPs, specialists, and nurses coordinate to ensure 24-hour access and avoid unnecessary use of hospital emergency departments. Implementation is uneven across regions.

Hospitals: Depending on the region, public funds are allocated by local health units to public and accredited private hospitals. In 2012, there were approximately 187,000 beds in public hospitals and 45,500 in private accredited hospitals.¹¹ Public hospitals either are managed directly by the local health units or operate as semi-independent public enterprises. A diagnosis-related group–based prospective payment system operates across the country and accounts for most hospital revenue but is generally not applied to hospitals run directly by local health units, where global budgets are common. Rates include all hospital costs, including those of physicians. Teaching hospitals receive additional payments (typically 8% to 10% of overall revenue) to cover extra costs related to teaching. There are considerable interregional variations in the prospective payment system, such as how fees are set, which services are excluded, and what tools are employed to influence patterns of care. However, all regions have mechanisms for cutting fees once a spending threshold is reached, in order to contain costs and as an incentive to increase admissions.

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 programs).

Hospital-based physicians are salaried employees. Public-hospital physicians are prohibited from treating patients in private hospitals; all public physicians who see private patients in public hospitals pay a portion of their extra income to the hospital.

Mental health care: Mental health care is provided by the National Health Service in a variety of community-based, publicly funded settings, including community mental health centers, community psychiatric diagnostic centers, general hospital inpatient wards, and residential and semiresidential facilities. In 2012, there were 1,938 residential facilities and 819 semiresidential facilities, providing care to approximately 69,000 patients.¹² The promotion and coordination of mental illness prevention, care, and rehabilitation are the responsibility of specific mental health departments in local health units. These are based on a multidisciplinary team, including psychiatrists, psychologists, nurses, social workers, educators, occupational therapists, people with training in psychosocial rehabilitation, and secretarial staff. In most cases, primary care does not play a role in the provision of mental health care; a few regions have experimented with assigning the responsibility of low-complexity cases (mild depression) to general practitioners.¹³

Long-term care and social supports: Patients are generally treated in residential (approximately 180,000 beds in 2012) or semiresidential (14,000 beds) facilities or in home care (approximately 634,000 cases). Residential and semiresidential services provide nurses, physicians, specialist care, rehabilitation services, medical therapies, and devices. Patients must be referred to receive residential care. Cost-sharing for residential services varies widely according to region but is generally determined by patients’ income.

Community home care is funded publicly, whereas residential facilities are managed by a mixture of public and private, for-profit and nonprofit organizations. Community home care is designed not to provide physical or mental care services but to provide additional assistance during a 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 as compared with other European countries.

Financial assistance for patients can take two forms:

- *Accompanying allowance:* Awarded by the National Pension Institute to all Italian citizens who need continuous assistance. The allowance, which is related to need but not to income or age, amounts to approximately EUR500 (USD714) per month.

- *Care vouchers*: Awarded by municipalities on the basis of income, need, and clinical severity only to residents of those municipalities offering the service. The amount ranges between EUR300 and EUR600 (USD426 to USD857) per month.

Voluntary organizations still play a crucial role in the delivery of palliative care. A national policy on palliative care has been in place since the late 1990s and has contributed to an increase in services such as hospices, day care centers, and palliative care units within hospitals. In 2012, there were 176 hospices, with approximately 1,800 beds. But much still needs to be done to ensure the diffusion of palliative care services because disparities persist: northern regions cared, on average, for 54 patients per 100,000 residents, while in central and southern regions the rate fell to 27 patients.

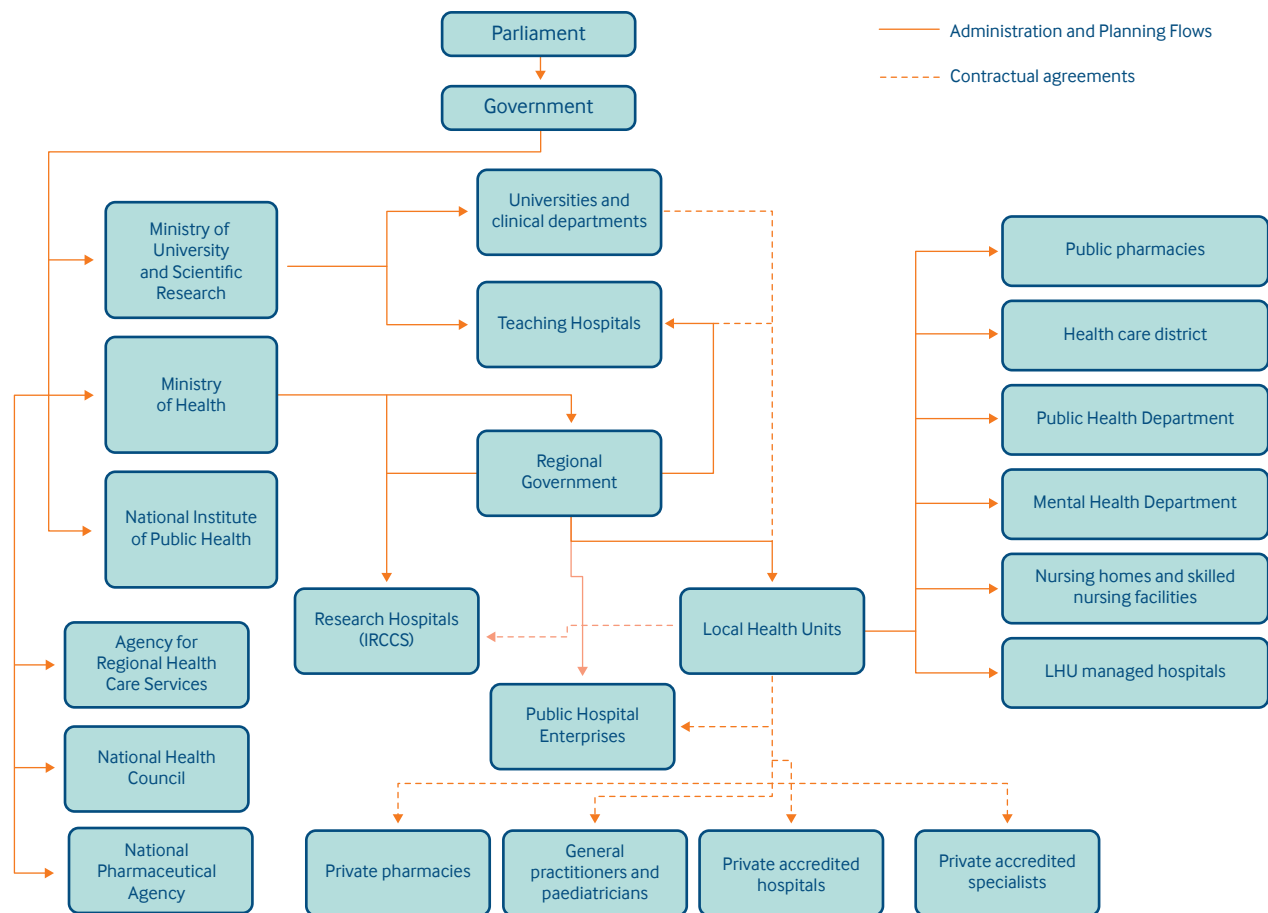


What are the key entities for health system governance?

The Ministry of Health is currently divided into 12 directorates that oversee specific areas of health care (health care planning; essential levels of care and health system ethics; human resources and health professionals; information systems; pharmaceuticals and medical devices) or supervise the main institutions related to the Ministry of Health (e.g., the National Health Council, the National Institute of Health).

Key nongovernmental entities supporting the Ministry of Health include the National Health Council (which provides support for national health planning, hygiene and public health, pharmacology and pharmaco-epidemiology, continuing medical education for health care professionals, and information systems) and the National Institute of Public Health (which provides recommendations and control in the area of public health).

Organization of the Health System in Italy



Source: A. Donatini, Emilia-Romagna Regional Health Authority, 2014.

The National Committee for Medical Devices develops cost-benefit analyses and determines reference prices for medical devices. The Agency for Regional Health Services is the sole institution responsible for conducting comparative-effectiveness analysis and is accountable to the regions and to the Ministry of Health.

The National Pharmaceutical Agency is responsible for all matters related to the pharmaceutical industry, including prescription drug pricing and reimbursement policies. It is accountable to the Ministry of Health and the Ministry of Economy and Finance.¹⁴

Payment rates for hospital and outpatient specialist care are determined by each region, with national rates (determined by the Ministry of Health) as a reference.

Some regional governments have established agencies to evaluate and monitor health care quality and to provide comparative-effectiveness assessments and scientific support for regional health departments (see below). Regional governments periodically sign “Pacts for Health” (*Patto per la Salute*) with the national government linking additional resources to the achievement of health care planning and expenditure goals (see below).

The safeguarding of patients’ rights has not been uniform and has depended on the level of effort of individual regions. Regions have implemented different models of empowerment: some through standing committees, which include members from citizens’ associations as an institutional means of patient involvement, others by emphasizing systematic patient satisfaction surveys.

Each public institution has an office for public relations (*Ufficio Relazioni con il Pubblico*) providing information to citizens and, in many cases, monitoring the quality of services from the citizen’s point of view.



What are the major strategies to ensure quality of care?

Government at both the national and regional levels are responsible for upholding quality and ensuring that services included in the essential levels of care are provided and that waiting times are monitored. Several regions have introduced programs for prioritizing delivery of care on the basis of clinical appropriateness of services prescribed and patient severity.¹⁵ All doctors under contract with the National Health Service must be certified, and all National Health Service staff participate in compulsory continuing education. The National Commission for Accreditation and Quality of Care is responsible for outlining the criteria used to select providers and for evaluating regional accreditation models (including private hospitals), which vary considerably across the system. These models do not usually include periodic reaccreditation.

Legislation passed during the 1990s covers three main components of quality: input (quality of infrastructure and human resources); process (appropriateness and timeliness of interventions); and outcome (health status and patient satisfaction).¹⁶

National legislation requires all public health care providers to issue a “health service chart” with information on service performance, quality indicators, waiting times, quality assurance strategies, and the process for patient complaints. These charts have also been adopted by the private sector for its accreditation process and must be published annually, although dissemination methods are decided regionally. Most providers disseminate data through leaflets and the Internet. Nurses and other medical staff are offered financial performance incentives (linked to manager evaluations but not to publicly reported data).

The National Plan for Clinical Guidelines (*Piano Nazionale Linee Guida*) has been implemented in recent years and has produced guidelines on topics ranging from cardiology to cancer prevention and from appropriate use of antibiotics to cesarean delivery.

Some regions have introduced disease management programs, are experimenting with chronic care models (refer to the section on coordination), and are maintaining registries, mainly for cancer patients and diabetes. No national registries exist. Patient surveys are not used for quality control.



What is being done to reduce disparities?

Interregional inequity is a long-standing concern. The less affluent south trails the north in the number of beds and availability of advanced medical equipment, has proportionally fewer public versus private facilities, and has less-developed community care services; this gap in availability is increasing. Income-related disparities in self-reported health status are significant, though similar to those in the Netherlands, Germany, and other European countries.¹⁷

The regions receive a proportion of funding from an equalization fund (*Fondo Perequativo Nazionale*), which aims to reduce inequalities. Aggregate funding for the regions is set by the Ministry of the Economy and Finance, and the resource allocation mechanism is based on capitation adjusted for demographic characteristics and use of health services by age and sex.

There is no systematic public reporting of health and health access variation, although several public and private institutions publish reports with analysis of health care variation (e.g., ISTAT, Ministry of Health, Catholic University of Rome).



What is being done to promote delivery system integration and care coordination?

Integration of health and social care services has recently improved, with a significant shift of long-term care from institutions to the communities and an emphasis on home care. Community home care establishes a home care network that integrates the competencies of nurses, GPs, and specialist physicians with the needs and involvement of the family. General practitioners oversee the home care network, liaise with social workers and other sectors of care, and take responsibility for patient outcomes.

The regions have chronic care management programs, dealing mainly with high-prevalence conditions such as diabetes, congestive heart failure, and respiratory conditions. All programs involve different competencies. Some regions are also trying to set up disease management programs based on the chronic care model, although the degree of organization varies across regions.

The most recent Pact for Health, signed in July 2014, is a significant step toward care integration (see below): all regions must establish Primary Care Complex Units (*Unità Complesse di Cure Primarie*) involving GPs, specialists, nurses, and social workers.

Given that, traditionally, Italian GPs work in solo practice, shifting to this new organizational arrangement will require considerable effort. To further promote integration and adoption of multidisciplinary teams, medical homes are being encouraged in some regions, such as Tuscany and Emilia-Romagna, where there are collectively 81 medical homes currently providing multispecialty care to approximately 1.7 million people.



What is the status of electronic health records?

The New Health Information System (*Nuovo Sistema Informativo Sanitario*) has been implemented incrementally since 2002, with the goal of establishing a universal system of electronic records connecting every level of care. It provides information on services, resource use, and costs, but does not encompass all areas of health care; in particular, primary care is not included, while hospital, emergency, outpatient specialist, residential, and palliative care, as well as pharmaceuticals, are. It currently registers administrative information on care delivered, but medical information appears to be more difficult to gather. No unique patient identifier exists at the national level.

A core component of the New Health Information System is the nationwide clinical coding program known as “bricks,” (*mattoni*) one of the most mature elements of Italy’s developing electronic health program. It aims to define a common language for classifying and codifying concepts; 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.

Some regions have developed computerized networks to facilitate communication between physicians, pediatricians, hospitals, and territorial services and to improve continuity of care. These networks allow the automatic transfer of patient registers and of information on services provided, prescriptions for specialist visits and diagnostics, and laboratory and radiology test outcomes. A few regions have also developed a personal electronic health record, accessible by the patient, that contains all of his or her medical information, such as outpatient specialty care results, medical prescriptions, and hospital discharge instructions. Personal electronic health records are meant to provide support to patients and clinicians across the whole process of care, but diffusion is still limited.

There is also a slow shift under way from paper to electronic prescriptions. By the end of 2014, 80 percent of all prescriptions (drugs and specialist care) were to be issued electronically, but only five regions declared that they had reached the goal on time.



How are costs contained?

Containing health care costs is a core concern of the central government, as Italy's public debt is among the highest of the industrialized nations. Fiscal capacity varies greatly across regions. To meet cost-containment objectives, the central government can impose recovery plans on regions with health care expenditure deficits. These identify tools and measures needed to achieve economic balance: revision of hospital and diagnostic fees, reduction of the number of beds, increased copayments for pharmaceuticals, and reduction of human resources through limited turnover.

The Agency for Regional Health Services, in collaboration with the Ministry of Health, has the authority to conduct health technology assessments and apply its findings at the regional level, but the assessments are not yet formalized or undertaken systematically. Few regional health technology assessment agencies currently exist, and their primary function is to evaluate individual technologies. Assessments are not mandatory for innovative procedures and devices. However, reference prices for medical devices and pharmaceuticals are set according to cost-effectiveness studies carried out by the National Committee for Medical Devices and the National Drugs Agency. Furthermore, the National Pharmaceutical Formulary bases coverage decisions in part on clinical effectiveness and cost-effectiveness. Prices for reimbursable drugs are set in negotiations between government and the manufacturer according to the following criteria: cost-effectiveness where no effective alternative therapies exist; comparison of prices of alternative therapies for the same condition; costs per day compared with those of products of the same effectiveness; financial impact on the health system; estimated market share of the new drug; and average prices and consumption data from other European countries. Prices for nonreimbursable drugs are set by the market.



What major innovations and reforms have been introduced?

Because of the regionalization of the health system, most innovations in the delivery of care take place at the regional rather than the national level, with some regions viewed as leaders in innovation.

In April 2015, the Ministry of Health approved a decree for the reorganization of hospital care. The decree classifies public hospitals into three groups:

- Base hospitals (for populations of 80,000–150,000 residents), with emergency wards, internal medicine, general surgery, orthopedics, and on-call availability of radiology, laboratory testing, and blood bank
- First-level hospitals (150,000–300,000 residents), with the same wards as base hospitals and, in addition: obstetrics (based on the number of deliveries per year), pediatrics, cardiology with intensive care unit, neurology, psychiatrics, oncology, ophthalmology, otolaryngology, and urology
- Second-level hospitals (600,000–1,200,000 residents), with advanced emergency wards and facilities for treating highly complex patients (or conditions)

In addition, the decree introduces, for a few procedures, minimum levels of activity and quality thresholds. Examples include at least 75 surgical interventions per year for femoral fractures in second-level hospitals, and the requirement that

at least 60 percent of patients age 65 and older admitted for femoral fractures must be operated on within 48 hours. Many of the law's provisions are in the process of being implemented, and the effects have not yet been evaluated.

In January 2017, the government approved an updated version of the “essential levels of care.” The new document introduces significant public health changes: vaccination programs; outpatient specialist care, with a substantial revision of the treatments that can be delivered by the National Health Service; and hospital care, with a further shift of treatments to outpatient settings. The government estimates an additional expenditure of EUR 800 million (USD 860 million) per year.

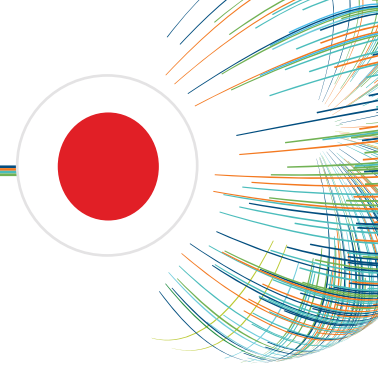
The author would like to acknowledge Sarah Jane Reed and David Squires as contributing authors to earlier versions of this profile.

Notes

1. Organisation for Economic Co-operation and Development (OECD), OECD Health Statistics, 2016, <http://www.oecd.org/els/health-systems/health-data.htm>.
2. Ministero dell'Economia e delle Finanze, *Relazione Generale Sulla Situazione Economica Del Paese 2012* (2012).
3. A. Sagan and S. Thompson, *Voluntary Health Insurance in Europe—Country Experience*, no. 42 (European Observatory on Health Systems and Policies, 2016), <http://www.euro.who.int/en/about-us/partners/observatory>.
4. Ibid.
5. Ibid.
6. Please note that, throughout this profile, all figures in USD were converted from EUR at a rate of about EURO.75 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2016) for Italy.
7. OECD, OECD Health Statistics.
8. A. Lo Scalzo, A. Donatini, L. Orzella et al., *Italy: Health System Review* (European Observatory on Health Systems and Policies, 2016).
9. ISTAT, *Health for all Italy*. OECD Health Statistics. <http://www.istat.it/it/archivio/14562>.
10. Ministero della Salute, *Annuario statistico del Servizio Sanitario Nazionale* (Roma, 2015).
11. Ministero della Salute, *Annuario statistico del Servizio Sanitario Nazionale*, 2015.
12. Ministero della Salute, *Annuario statistico del Servizio Sanitario Nazionale*, 2015.
13. A. Lo Scalzo, *Italy: Health System Review*, 2016.
14. A. Lo Scalzo, *Italy: Health System Review*, 2016.
15. G. France, F. Taroni, A. Donatini, “The Italian Health-Care System,” *Health Economics*, Sept. 2005 14(Supp1):S187–202.
16. A. Lo Scalzo, *Italy: Health System Review*, 2016.
17. E. Van Doorslaer and X. Koolman, “Explaining the Differences in Income Related Health Inequalities Across European Countries,” *Health Economics*, July 2004 13(7):609–28.

The Japanese Health Care System

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What is the role of government?

Government regulates nearly all aspects of the universal Statutory Health Insurance System (SHIS). The national and local governments are required by law to ensure a system that efficiently provides good-quality medical care. National government sets the SHIS fee schedule and gives subsidies to local governments, insurers, and providers. It also establishes and enforces detailed regulations for insurers and providers. Japan's 47 prefectures (regions) implement those regulations and develop regional health care delivery with their own budgets and funds allocated by the national government. More than 1,700 municipalities operate components of the SHIS and organize health promotion activities for their residents.¹



Who is covered and how is insurance financed?

Publicly financed health insurance: The SHIS, comprising more than 3,400 insurers, provides universal primary coverage.² In 2013, estimated total health expenditure amounted to approximately 11 percent of GDP, 84.3 percent of which was publicly financed, mainly through the SHIS.³ Taxes, premiums, and user charges accounted for about 42 percent, 42 percent, and 13 percent of the current health expenditures, respectively.⁴

Citizens are mandated to enroll in one of the SHIS plans based on age, employment status, and/or place of residence as are resident non-citizens; undocumented immigrants and visitors are not covered. Insurance premiums vary between types of insurance funds and municipalities. Government employees are covered by their own insurers (known as Mutual Aid Societies) as are some groups of professionals (e.g., doctors in private practice). Those who fail to keep up their enrollment must pay up to two years' worth of premiums when they reenter the system. Means-tested public assistance covers health care for its recipients. Citizens and resident non-citizens enrolled in the SHIS age 40 and over are mandatorily enrolled in long-term care insurance.

Private health insurance: Although the majority of the population holds some form of private health insurance, it plays only a supplementary or complementary role. It developed historically as a supplement to life insurance and provides additional income in case of sickness, mainly in the form of lump-sum payments when insured persons are hospitalized or diagnosed with cancer or another specified chronic disease, or through payment of daily amounts during hospitalization over a defined period. Since the early 2000s, the number of standalone medical insurance policies has increased.⁵

Part of an individual's life insurance premium and medical and long-term care insurance premiums can be deducted from taxable income.⁶ Small discounts can be applied to those employees whose employers have collective contracts with insurance companies. Both for-profit and nonprofit organizations operate private health insurance.

The provision of privately funded health care has been limited to services such as orthodontics. Treatment of traffic accident injuries is not covered by the SHIS, but by compulsory and, usually, voluntary automobile insurance.



What is covered?

Services: All SHIS plans provide the same benefits package, which is determined by the national government, usually following a decision by the Central Social Insurance Medical Council, a governmental body. The package covers hospital, primary, specialty, and mental health care as well as approved prescription drugs, home care services by medical institutions, hospice care, physiotherapy, and most dental care. It does not cover corrective lenses unless recommended by physicians for children under age 9, or optometry services provided by non-physicians. Home care services by nonmedical

institutions are covered by long-term care insurance. Preventive measures, including screening, health education, and counseling, are covered by health insurance plans, while cancer screenings are delivered by municipalities.

Cost-sharing and out-of-pocket spending: All enrollees have to pay a 30 percent coinsurance for services and goods received, except for children up to around age 6 (20%), adults ages 70 to 74 with lower incomes (20%), and those age 75 and older with lower incomes (10%). There are no deductibles. Copayments for children's health care are often subsidized by local governments. Annual expenditures on health services and goods can be deducted from taxable income, including copayments and payments between JPY100,000 (USD952) and JPY2 million (USD19,000) for balance billing and over-the-counter drugs.⁷ In 2013, out-of-pocket payments for cost-sharing accounted for 13 percent of current health expenditures.⁸ Providers are prohibited from charging extra fees except for some services specified by the Ministry of Health, Labor and Welfare (MHLW), including amenity beds, experimental treatments, the outpatient services of large multispecialty hospitals, after-hours services, and hospitalizations of 180 days or more.

Safety net: Catastrophic coverage stipulates a monthly out-of-pocket threshold, which varies according to enrollee age and income—for example, JPY80,100 (USD763) for people under age 70 with a modest income; above this threshold, a 1 percent coinsurance rate applies. There is a ceiling for low-income people, who do not pay more than JPY35,400 (USD337) a month. Subsidies (mostly restricted to low-income households) reduce the burden of cost-sharing for people with disabilities, mental illnesses, and specified chronic conditions. There is an annual household health and long-term care out-of-pocket payments ceiling, which varies between JPY340,000 (USD3,238) and JPY2.12 million (USD20,190) per enrollee according to income and age, above which such payments can be reimbursed. Enrollees with employer-based insurance who are on parental leave are exempt from payment of premiums. Enrollees in Citizens Health Insurance (for the unemployed, the self-employed, and retirees) who have low incomes, and those with moderate incomes who face sharp, unexpected income reductions, are eligible for reduced premium payments. Reduced coinsurance rates apply to patients with 306 designated long-term diseases, varying by income, when using designated health care providers. Some providers are allowed to reduce coinsurance for low-income people through the Free/Lower Medical Care Program. Means-tested public assistance covers health services for their beneficiaries.⁹



How is the delivery system organized and financed?

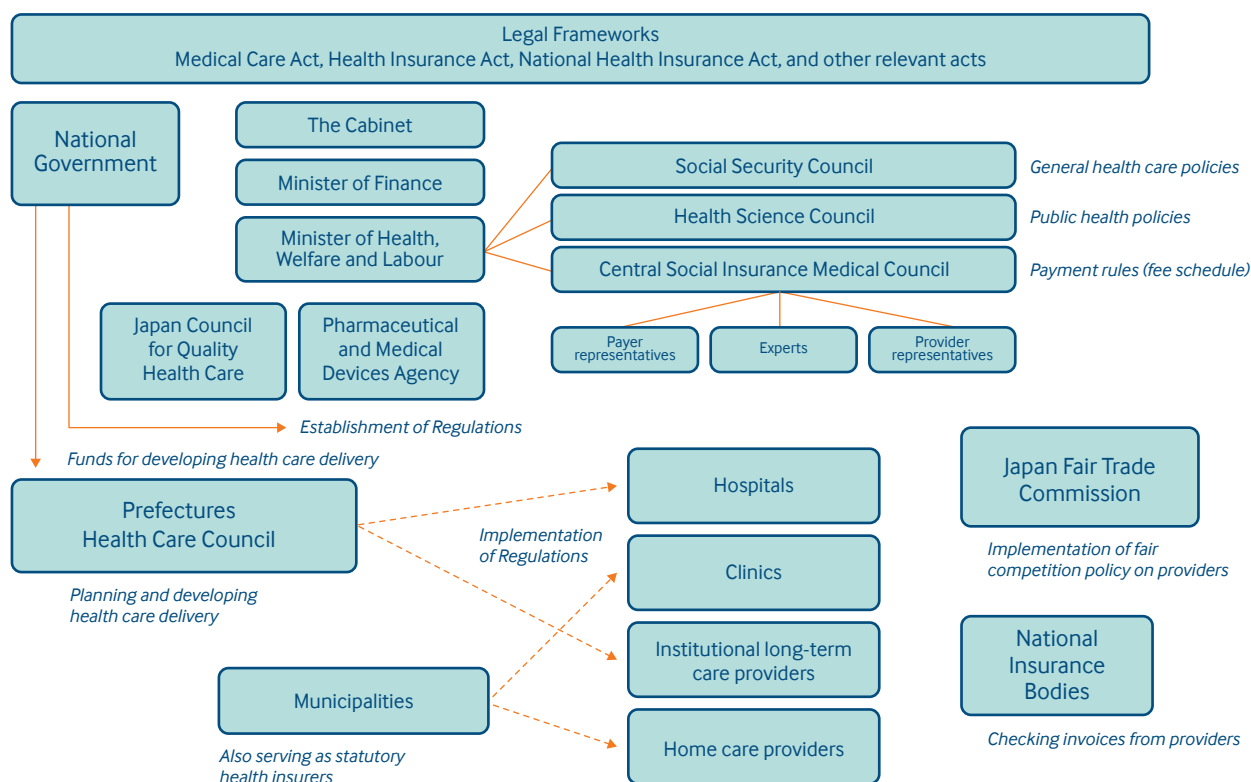
Primary care: Primary care is provided at most clinics and some hospital outpatient departments. Approximately one-third of physicians are salaried employees of clinics, and nearly all others are self-employed. Clinics are often owned by physicians or by medical corporations (special legal entities for health care management, usually controlled by physicians, that own medical institutions), but sometimes by local governments or public agencies.

Primary care practices typically include teams with a physician and a few employed nurses. In 2014, the average clinic had 6.8 full-time-equivalent workers, including 1.3 physicians, 2.0 nurses, and 1.8 clerks.¹⁰ Clinics can dispense medication (which doctors can provide directly to patients). Use of pharmacists, however, has been growing: 67 percent of prescriptions were filled at pharmacies in 2013.¹¹ Patients are not required to register with a practice, and there is no strict gatekeeping, although government encourages patients to choose their preferred doctors, and there are patient disincentives for self-referral including extra charges for initial consultations at large hospitals with many specialties. Patients can choose and drop in at any clinic, except those requiring reservations. An entity managing many clinics can share their resources. A scheme for cross-entity resource sharing will start in 2017 as described below.

Payments for primary care are based principally on a complex national fee-for-service schedule, which includes financial incentives for coordinating the care of patients with chronic diseases, and for team ambulatory and home care. The schedule, set by the government (described below), includes both primary and specialist services, which have common prices for defined services such as consultations, examinations, laboratory tests, imaging tests, and defined chronic disease management. Per-case payments can be chosen by providers in select cases, such as daily payments for pediatrics care and monthly payments for treating patients with diabetes. Bundled payments are not used. Providers can charge for designated services as exceptions to the rule of prohibiting balance billing.

Outpatient specialist care: Most outpatient specialist care is provided in hospital outpatient departments, but some is also available at clinics, where patients can visit without referral. Fees are determined by the same schedule that applies to primary care, as they do not usually vary by provider type, although some services must be provided by specialists in order

Organization of the Health System in Japan



Note: This chart illustrates a very simplified structure of the complex health care governance in Japan.

Source: R. Matsuda, College of Social Sciences, Ritsumeikan University, 2015.

to be covered by the SHIS. There are no collective regulations on payments for specialists. At hospitals, specialists are usually salaried, with additional payments such as night duty allowance. Those working at public hospitals can work at other health care institutions and privately with the approval of their employers, but in such cases they usually provide services covered by the public system. The employment status of specialists at clinics varies similarly to that of primary care physicians.

Administrative mechanisms for paying primary care doctors and specialists: Legal entities managing clinics and hospitals send insurance claims, mostly online, to financing bodies in the SHIS, which pay a major part of the fees directly to providers; patients pay liable copayments at the point of service. Using the payments they receive for services, self-employed, clinic-based primary care physicians and specialists pay for employees and other inputs, allocate funds for investments, and retain surpluses. There are no direct payments from the SHIS financing bodies to salaried physicians.

After-hours care: After-hours care is provided by hospital outpatient departments, where on-call physicians are available, and by some regular clinics and after-hours care clinics owned by local governments and staffed by physicians and nurses that local medical societies provide. Hospitals and clinics are paid “top-up” fees for after-hours care, including fees for telephone consultations. There is no strict formal requirement for clinics to provide such services, although physicians have a general obligation to consult with patients when requested. Patients can walk in at most hospitals and clinics. The national government gives subsidies to local governments for these clinics. Patient information from after-hours clinics is provided to family physicians if necessary (such information is often handed to patients to show to family physicians). There is a national pediatric medical advice telephone line available after hours.

Hospitals: As of 2014, 15 percent of hospitals are owned by national or local governments or closely related agencies; most of the rest are private and nonprofit, some of which receive subsidies because they are designated as having partly

public roles.¹² More than 20 percent of all beds are in government hospitals; the rest are mostly in nonprofit hospitals. Some of them are designated as public-interest medical institutions.¹³ The private sector has not been allowed to manage a hospital, except in the case of existing hospitals established by for-profit companies for their own employees (e.g., Toyota). Payments to hospitals from the SHIS include costs for physicians' salaries.

Consultation fees for large hospitals and academic medical centers are lower than those for small hospitals and clinics. More than half of all acute-care hospital beds are paid for using the Diagnosis Procedure Combination (DPC) system, a case-mix classification similar to diagnosis-related groups.¹⁴ The rest are paid for solely on a fee-for-service basis. Hospitals choose whether to receive the DPC payments or to remain under traditional fee-for-service. The DPC payment consists of a fee-for-service and a DPC component in the form of a per diem payment determined by the DPC grouping, which includes basic hospital services and less expensive treatments; the fee-for-service component includes surgical procedures, rehabilitative services, and other specified expensive services.¹⁵ Episode-based payments involving both inpatient and outpatient care are not used.

Mental health care: Mental health care is provided in outpatient, inpatient, and home care settings, with patients charged the standard 30 percent coinsurance (although there is reduced cost-sharing and other financial protections for patients in the community). Covered services include psychological tests and therapies, pharmaceuticals, and rehabilitative activities. Specialized mental clinics and hospitals exist, but services for depression, dementia, and other common conditions are also provided by primary care. Most psychiatric beds are in private hospitals owned by medical corporations.

Long-term care and social supports: National compulsory long-term care insurance (LTCI), administered by municipalities, covers those age 65 and older and some disabled people ages 40 to 64. It covers home care, respite care, domiciliary care, disability equipment, assistive devices, and home modification. Palliative care and hospice care in hospitals and medical services provided in home palliative care are covered by the SHIS, while nursing services and home help services are covered by the LTCI. Long-term home care services can be considered a part of home hospice services as dying patients become eligible.

Roughly half of long-term care financing comes through taxation and half through premiums. Citizens age 40 and over pay income-related premiums along with SHIS premiums. Employers and employees each contribute 50 percent of the premium. Premiums for those age 65 and older are also income-based (including pensions) and set by municipalities based on estimated expenditures; they are paid only by the beneficiaries. A 20 percent coinsurance rate applies to all covered services, up to an income-related ceiling. For low-income people age 65 and older, the coinsurance rate is reduced to 10 percent. There is an additional copayment for bed and board in institutional care, but it is waived or reduced for those with low income (all costs for those with means-tested social assistance are paid from local and national tax revenue).

Eligible people are entitled to use long-term services up to needs-based ceilings (called "care levels") set by local LTCI boards, according to assessment of physical and mental conditions. People are not allowed to buy unlisted services with the budget provided, but they can purchase such services with their own money. Care management—covered by the LTCI and offered by public, nonprofit, and for-profit providers—is available to help people arrange long-term care services.

The majority of LTCI home care providers are private. In 2014, 64 percent of home help providers, 40 percent of home nursing providers, and 58 percent of elderly day care service providers were for-profit, while most of the rest were nonprofit. Meanwhile, LTCI nursing homes, whose services are nearly fully covered, are either public or nonprofit. Costs for long-term care services in non-LTCI private nursing homes and group homes are partly covered by LTCI.¹⁶

Family care leave benefits (part of employment insurance) are paid for up to three months when employees take leave to care for their families. Additionally, more than half of the municipalities have established marginal financial supports, mostly limited to those with lower incomes, with their own financial capacities and legislations.¹⁷



What are the key entities for health system governance?

The Social Security Council, a statutory body within the MHLW, is in charge of developing national strategies on quality, safety, and cost control, and sets guidelines for determining provider fees. Within the ministry, the Central Social Insurance Medical Council defines the benefit package and fee schedule. National government and prefectures devise cost-control plans (described below).

Pharmaceuticals and medical devices are reviewed for quality, efficacy, and safety by the Pharmaceutical and Medical Devices Agency, a governmental regulatory agency. The Central Social Insurance Medical Council sets the SHIS Drug Price List, which is a list of pharmaceuticals and their prices covered by the SHIS.¹⁸ The criteria for coverage include clinical effectiveness but not costs. Recently the agency has been implementing trials to use comparative cost-effectiveness studies in its decision-making.

Nonprofit organizations work toward public engagement and patient advocacy, and every prefecture establishes a health care council to discuss the local health care plan. Under the Medical Care Law, these councils must have members representing patients.

The Japan Fair Trade Commission, an independent governmental administrative commission, promotes fair competition in health care as well as other sectors.



What are the major strategies to ensure quality of care?

By law, prefectures are responsible for making health care delivery “visions,” which include detailed plans on cancer, stroke, acute myocardial infarction, diabetes mellitus, psychiatric disease, pediatric, and home care as well as emergency, prenatal, rural, and disaster medicine. These plans include structural, process, and outcome indicators, as well as strategies for effective and high-quality delivery. Prefectures promote collaboration between providers to achieve them, with or without subsidies as financial incentives.

Waiting times are generally not monitored by government. Although there are structural health care delivery regulations, relatively few apply to process and outcomes. Some fees are paid on the conditions that physicians in charge have certification of stipulated trainings.

Prefectures are in charge of the annual inspection of hospitals. Sanctions include reduced reimbursement rates if staffing per bed falls below a certain ratio. Hospital accreditation is voluntary; as of 2015, 26.7 percent of hospitals were accredited by the Japan Council for Quality Health Care, a nonprofit organization.¹⁹ However, there is no disclosure of names of hospitals that fail the accreditation process. Public reporting on performance is not obligatory, but the MHLW organizes and financially promotes a voluntary benchmarking project in which hospitals report quality indicators on their websites.

To practice, physicians are required to obtain a license by passing a national exam, but they are not subject to revalidation. However, specialist societies have introduced revalidation for qualified specialists. Clinical audits are voluntary. Public reporting on performance has not been mandatorily conducted but voluntarily.

Every prefecture has a medical safety support center for handling complaints and promoting safety. Since 2004, advanced academic and public hospitals have been required to report adverse events to the Japan Council for Quality Health Care. The council works to improve quality throughout the health system and develops clinical guidelines, although it does not have any regulatory power to penalize poorly performing providers.

The Japanese Medical Specialty Board, a physician-led nonprofit body, is developing a new framework for standards and requirements of medical specialty certification. The system is to be implemented in the coming years.

The government promotes the development of disease and medical device registries mostly for research and development. Surveys of hospital patients’ experiences are conducted every three years.



What is being done to reduce disparities?

Reducing health disparities between population groups has been a goal of the national health promotion strategy since 2012. The strategy sets two objectives: the reduction of disparities in healthy life expectancies between prefectures and the increase in the number of local governments organizing activities to reduce health disparities.²⁰ Health disparities between regions are regularly reported by government; disparities between socioeconomic groups and in health care access are occasionally measured and reported by researchers.

What is being done to promote delivery system integration and care coordination?

National government prioritizes care coordination and develops financial incentives for providers, particularly in cancer, stroke, cardiac, and palliative care. For example, hospitals admitting stroke victims or patients with hip fractures can receive additional fees if they use post-discharge protocols and have contracts with clinic physicians to provide effective follow-up care after discharge (the clinic physicians also receive additional fees). The government also provides subsidies to leading providers in the community to facilitate care coordination. Highly specialized large-scale hospitals with 500 beds or more have an obligation to promote care coordination between providers in the community, as well as to charge additional fees to patients who have no referral for outpatient consultations.

There are more than 4,000 “community comprehensive support centers” to coordinate services, particularly for those with long-term conditions. Funded by the LTCL, they employ care managers, social workers, and long-term care support specialists. Currently, there is no pooled funding between the SHIS and the LTCL.

Regional and large-city governments are required to establish councils to promote integration of care and support for patients with 306 designated long-term diseases..

What is the status of electronic health records?

Electronic health record networks have been developed only as experiments in selected areas. Interoperability between providers has not been generally established. Currently, experiments are under way to make personal health information available to patients and providers via cloud computing. The Social Security and Tax Number System, a system of unique identifiers implemented in 2016, will be phased-in for health care services, including medical records, starting in 2018.

How are costs contained?

Patients pay 30 percent for most services, as described above. But price regulation for all services under the SHIS is a critical cost-containment mechanism. The fee schedule is revised every other year by the government, following formal and informal stakeholder negotiations. The revision involves three levels of decision-making: the overall rate of increase or decrease of benefit prices, drug and device prices, and prices of services on an item-by-item basis.²¹

For medical, dental, and pharmacy services, the Central Social Insurance Medical Council revises fees on an item-by-item basis to meet overall spending targets set by the cabinet. Highly profitable categories usually see larger reductions.

The revisions of prices of pharmaceuticals and medical devices are determined based on a market survey of actual current prices (which are usually less than the listed prices). Drug prices can be revised downward for new drugs selling in greater volume than expected and for brand-name drugs when generic equivalents hit the market. Prices of medical devices in other countries are also considered in the revision. Prices of generic drugs have been gradually decreased.

A trial cost-effectiveness evaluation for coverage of selected pharmaceuticals and medical devices was conducted in fiscal year 2016. Price reduction for highly expensive pharmaceuticals with large markets has been discussed.

The fee schedule includes financial incentives to improve clinical decision-making. For example, if a physician prescribes more than six drugs to a patient on a regular basis, fees for writing the prescription are reduced. Insurers’ peer review committees monitor claims and may deny payment for services deemed inappropriate.

Prefectures develop their strategic plans and health care delivery plans for regulating the number of hospital beds with consideration to national guidelines. The national medical student capacity, which has been increasing since 2007 owing to physician shortages, is also regulated by the government.

The government’s Cost-Containment Plan for Health Care is intended to control costs by promoting healthy behavior, shortening hospital stays through care coordination and home care development, and prevailing efficient usage of pharmaceuticals. Prefectures also make middle-term cost containment plans, including health expenditure targets in coming years with planned policy measures in accordance with national guidelines.



What major innovations and reforms have been introduced?

The Social Security Council set priorities on the following four objectives for the 2016 revision of the fee schedule:

- developing an efficient comprehensive community care system;
- improving the quality and safety of patient care;
- developing high-priority services (e.g., cancer and dementia care); and
- making the health care system more efficient and sustainable.²²

The government has been promoting the idea of “preferred physicians” for the purpose of improving care coordination and continuity. The 2014 revision of the fee schedule introduced Continuous Care Fees (CCFs), which are monthly payments for providing continuous care (including referrals to other providers, if necessary) to outpatients with chronic diseases. A provider and a patient can opt for the CCF for services provided if they agree with the providers’ preferred status. A top-up to the CCF in the case of patients with dementia was introduced by the 2016 revision.

With the 2015 amendment of the Medical Care Law, providers will be able to establish umbrella organizations to promote collaboration, for example, through partnership agreements, copurchasing of pharmaceuticals and medical devices, or sharing of resources.

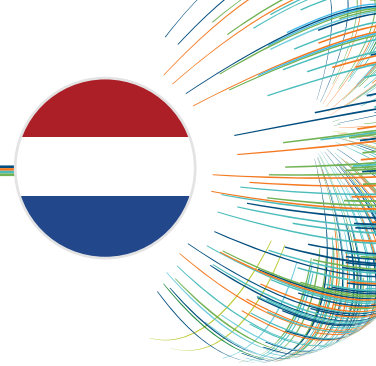
The author would like to acknowledge David Squires as a contributing author to earlier versions of this profile.

Notes

1. K. Tatara, and E. Okamoto, "Japan: Health system review," *Health Systems in Transition*, 2009 11(5).
2. National Institute of Population and Social Security Research, *Social Security in Japan 2014* (Tokyo: NIPSSR), <http://www.ipss.go.jp/s-info/e/ssj2014/index.asp>; accessed Aug. 20, 2014.
3. OECD, OECD.Stat (database). DOI: 10.1787/data-00285-en; accessed Sept. 3, 2016.
4. Ibid.
5. See Japan Institute of Life Insurance, *FY2013 Survey on Life Protection*. FY2013 Survey on Life Protection (Quick Report Version) (Tokyo: JILI, 2013), ([http://www.jili.or.jp/research/report/pdf/FY2013_Survey_on_Life_Protection_\(Quick_Report_Version\).pdf](http://www.jili.or.jp/research/report/pdf/FY2013_Survey_on_Life_Protection_(Quick_Report_Version).pdf)) and *Life Insurance Association of Japan, Life Insurance Fact Book 2014* (Tokyo: LIA, 2014), <http://www.seiho.or.jp/english/statistics/trend/pdf/2014.pdf>.
6. The rule for deduction explained here is applied for contracts after 2012.
7. Please note that, throughout this profile, all figures in USD were converted from JPY at a rate of about JPY105 per USD, the purchasing power parity conversion rate for GDP in 2015 for Japan, reported by OECD, "Prices: Purchasing Power Parities for GDP and Related Indicators," *Main Economic Indicators (database)*. DOI: <http://dx.doi.org/10.1787/data-00608-en>; accessed Sept. 3, 2016.
8. OECD, OECD.Stat (database). DOI: 10.1787/data-00285-en; accessed Sep. 3, 2016.
9. R. Matsuda, "Public/Private Health Care Delivery in Japan: And Some Gaps in 'Universal' Coverage," *Global Social Welfare*, 2016 3: 201–12.
10. The figures are calculated from statistics of the Ministry of Health, Labour and Welfare, *2014 Survey of Medical Institutions* (MHLW, 2016).
11. Japan Pharmaceutical Association, *Annual Report of JPA* (Tokyo: JPA, 2014). http://www.nichiyaku.or.jp/e/data/annual_report2014e.pdf; accessed Sept. 3, 2016.
12. The figure is calculated from statistics of the MHLW, *2014 Survey of Medical Institutions, 2016*.
13. R. Matsuda, "Public/Private Health Care Delivery in Japan," 2016.
14. S. Matsuda, K. B. Ishikawa, K. Kuwabara et al., "Development and Use of the Japanese Case-Mix System," *Eurohealth*, 2008 14(3):25–30.
15. OECD, "Health-Care Reform in Japan: Controlling Costs, Improving Quality and Ensuring Equity," *OECD Economic Surveys: Japan 2009* (OECD Publishing, 2009).
16. MHLW, "What the Health and Welfare Bureau for the Elderly Bureau Do," (in Japanese), <http://www.mlit.go.jp/common/001083368.pdf>; accessed Aug. 26, 2016.
17. S. Kwon, *Research on Income Security of In-Home Caregivers*. Unpublished thesis (in Japanese) (Ryukoku University, 2014).
18. Regulatory Information Task Force, Japan Pharmaceutical Manufacturers Association, *Pharmaceutical Administration and Regulations in Japan* (JPMA, 2015), <http://www.jpma.or.jp/english/parj/pdf/2015.pdf>; accessed Oct. 8, 2016.
19. Japan Council for Quality Health Care, *Hospital Accreditation Data Book FY2014*, (JCQHC, 2016), http://jcqhc.or.jp/pdf/research/databook_h26.pdf; accessed Oct.17, 2016.
20. MHLW, "A Basic Direction for Comprehensive Implementation of National Health Promotion" (Ministerial Notification no. 430) (tentative English translation), <http://www.mhlw.go.jp/file/06-Seisakujouhou-10900000-Kenkoukyoku/0000047330.pdf>; accessed Oct. 15, 2014.
21. N. Ikegami and G. F. Anderson, "In Japan, All-Payer Rate Setting Under Tight Government Control Has Proved to Be an Effective Approach to Containing Costs," *Health Affairs* 2012 31(5):1049–56.
22. Committee on Health Insurance and Committee on Health Care of the Social Security Council, *Principles for the 2016 Revision of the Fee Schedule* (CHI and CHC, 2015).

The Dutch Health Care System

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What is the role of government?

In the Netherlands, the national government has overall responsibility for setting health care priorities, introducing legislative changes when necessary, and monitoring access, quality, and costs. It also partly finances social health insurance (a comprehensive system with universal coverage) for the basic benefit package (through subsidies from general taxation and reallocation of payroll levies among insurers via a risk adjustment system) and the compulsory social health insurance system for long-term care. Prevention and social support are not part of social health insurance but are financed through general taxation. Municipalities and health insurers are responsible for most outpatient long-term services and all youth care under a provision-based approach (with a high level of freedom at the local level).



Who is covered and how is insurance financed?

Publicly financed health insurance: In 2015, the Netherlands spent 10.8 percent of GDP on health care, and 77 percent (2014 estimate) of curative health care services were publicly financed. All residents (and nonresidents who pay Dutch income tax) are mandated to purchase statutory health insurance from private insurers. At the end of 2014, 30,000 people (less than 0.2% of the population) were uninsured. People who conscientiously object to insurance, as well as active members of the armed forces (who are covered by the ministry of defense), are exempt. Insurers are required to accept all applicants, and enrollees have the right to change their insurer each year.

Apart from acute care, long-term care, and obstetric care, undocumented immigrants have to pay for most health care themselves (they cannot take out health insurance). However, some mechanisms are in place to reimburse costs that undocumented immigrants are unable to pay. For asylum seekers, a separate set of policies has been developed. Permanent residents (for more than three months) are obliged to purchase private insurance coverage. Visitors are required to purchase insurance for the duration of their visit if they are not covered through their home country.

Statutory health insurance is financed under the Health Insurance Act, through a nationally defined, income-related contribution, a government grant for the insured below age 18, and community-rated premiums set by each insurer (everyone with the same insurer pays the same premium, regardless of age or health status). Contributions are collected centrally and issued among insurers in accordance with a risk-adjusted capitation formula that considers age, gender, labor force status, region, and health risk (based mostly on past drug and hospital utilization).

Insurers are expected to engage in strategic purchasing, and contracted providers are expected to compete on both quality and cost. The insurance market is dominated by the four largest insurance conglomerates, which account for 90 percent of all enrollees. Currently, there is a ban on the distribution of profits to shareholders.

Private (voluntary) health insurance: In addition to statutory coverage, most of the population (84%) purchases a mixture of complementary voluntary insurance covering benefits such as dental care, alternative medicine, physiotherapy, eyeglasses and lenses, contraceptives, and the full cost of copayments for medicines (excess costs above the limit for equivalent drugs—an incentive for using generics). Premiums for voluntary insurance are not regulated; insurers are allowed to screen applicants based on risk factors. Nearly all of the insured purchase their voluntary benefits from the same (mostly nonprofit) insurer that provides their statutory health insurance. People with voluntary coverage do not receive faster access to any type of care, nor do they have increased choice of specialists or hospitals. In 2014, voluntary insurance accounted for 7.9 percent of total health spending.



What is covered?

Services: In defining the statutory benefits package, government relies on advice from the National Health Care Institute. Health insurers are legally required to provide a standard benefits package including, among other things, care provided by general practitioners (GPs), hospitals, and specialists; dental care through age 18 (coverage after that age is confined to specialist dental care and dentures); prescription drugs; physiotherapy through age 18; home nursing care; basic ambulatory mental health care for mild-to-moderate mental disorders; and specialized outpatient and inpatient mental care for complicated and severe mental disorders. In case the duration exceeds three years, the last of these is financed under the Long-Term Care Act (see below).

Some treatments, such as general physiotherapy and pelvic physiotherapy for urinary incontinence, are only partially covered for some people with specific chronic conditions, as are the first three attempts at in vitro fertilization. Some elective procedures, such as cosmetic plastic surgery without a medical indication, dental care above age 18, and optometry, are excluded. A limited number of effective health improvement programs (e.g., smoking cessation) are covered, and weight management advice is limited to three hours per year.

As of 2015, home care is a shared responsibility of the national government, municipalities (day care, household services), and insurers (nursing care at home) and is financed through the Health Insurance Act. Hospice care is financed through the Long-Term Care Act. Prevention is not covered by social health insurance but falls under the responsibility of municipalities.

Cost-sharing and out-of-pocket spending: As of 2016, every insured person over age 18 must pay an annual deductible of EUR385 (USD465)¹ for health care costs, including costs of hospital admission and prescription drugs but excluding some services, such as GP visits. Apart from the overall deductible, patients are required to share some of the costs of selected services, such as medical transportation or medical devices, via copayments, coinsurance, or direct payments for goods or services that are reimbursed up to a limit, such as drugs in equivalent-drug groups. Providers are not allowed to balance-bill above the fee schedule. Patients with an in-kind insurance policy may be required to share costs of care from a provider that is not contracted by the insurance company. Out-of-pocket expenses represented 14.7 percent of health care spending in 2014 (author's calculation).

Safety net: GP care and children's health care are exempt from cost-sharing. Government also pays for children's coverage up to the age of 18 and provides subsidies (health care allowances), subject to asset testing and income ceilings, to cover community-rated premiums for low-income families: singles with annual income less than EUR27,012 (USD32,662) and households with income less than EUR33,765 (USD40,828). Approximately 4.42 million people, or about a quarter of the total population, receive allowances set on a sliding scale, ranging from EUR2.00 (USD2.40) to EUR83.00 (USD 100.00) per month for singles and from EUR10.00 (USD 12.00) to EUR 158.00 (USD191.00) for households, depending on income.



How is the delivery system organized and financed?

Primary care: There were more than 11,600 practicing primary care doctors (GPs) in 2015, and more than 22,585 specialists in 2013. Thirty-nine percent of practicing GPs worked in group practices of three to seven, 40 percent worked in two-person practices, and 22 percent worked solo (2015). Most GPs work independently or in a self-employed partnership; only 16 percent are employed in a practice owned by another GP.

The GP is the central figure in Dutch primary care. Although registration with a GP is not formally required, most citizens are registered with one they have chosen, and patients can switch GPs without formal restriction. Referrals from a GP are required for hospital and specialist care.

Many GPs employ nurses and primary care psychologists on salary. Reimbursement for the nurse is received by the GP, so any productivity gains that result from substituting a nurse for a doctor accrue to the GP. Care groups are legal entities (mostly GP networks) that assume clinical and financial responsibility for the chronic disease patients who are enrolled; the groups purchase services from multiple providers. To incentivize care coordination, bundled payments are provided for certain chronic diseases, such as diabetes, cardiovascular conditions, and chronic obstructive pulmonary disease (COPD).

In 2015, the government introduced a new GP funding model comprising three segments. Segment 1 (representing ≈75% of spending) funds core primary care services and consists of a capitation fee per registered patient, a consultation fee for GPs (including phone consultation), and consultation fees for ambulatory mental health care at the GP practice. The Dutch Health Care Authority (*Nederlandse Zorgautoriteit*) determines national provider fees for this segment. Segment 2 (≈15% of spending) consists of funding for programmatic multidisciplinary care for diabetes, asthma, and COPD, as well as for cardiovascular risk management; prices are negotiated with insurers. Segment 3 (≈10% of spending) provides GPs and insurers with the opportunity to negotiate additional contracts—including prices and volumes—for pay-for-performance and innovation. Self-employed GPs earned average gross annual income of EUR97,500 (USD117,900) in 2012, while salaried GPs earned EUR80,000 (USD97,000).

Outpatient specialist care: Nearly all specialists are hospital-based and either in group practice (in 2015, 54% of full-time-equivalent specialists, paid under fee-for-service) or on salary (46%, mostly in university clinics). As of 2015, specialist fees are freely negotiable as a part of hospital payment. This so-called “integral funding” dramatically changed the relationship between medical specialists and hospitals. Hospitals now have the responsibility of allocating their financial resources among their specialists.

There is a nascent trend toward working outside of hospitals—for example, in growing numbers of (mostly multidisciplinary) ambulatory centers—but this shift is marginal, and most ambulatory centers remain tied to hospitals. Specialists in ambulatory centers tend to work most of the time in academic or general hospitals. Only a small minority of doctors working in hospitals choose to work part-time in ambulatory centers. Ambulatory care center specialists are paid fee-for-service, and the fee schedule is negotiated with insurers. Medical specialists are not allowed to charge above the fee schedule. Patients are free to choose their provider (following referral), but insurers may set different conditions (e.g., cost-sharing) for different choices within their policies.²

Administrative mechanisms for paying primary care doctors and specialists: The annual deductible (see above) is paid to the insurer. The insured have the option of paying the deductible before or after receiving health care and may choose to pay all at once or in installments. Other copayments—those for drugs or transportation, for example—have to be paid directly to the provider.

After-hours care: After-hours care is organized at the municipal level in GP “posts,” which are centers, typically run by a nearby hospital, that provide primary care between 5 p.m. and 8 a.m. Nearly all GPs work for a GP post. Specially trained assistants answer the phone and perform triage; GPs decide whether patients need to be referred to a hospital. Doctors are compensated at hourly rates for after-hours care and must provide at least 50 hours of after-hours care annually to maintain their registration as general practitioner. The GP post sends the information regarding a patient’s visit to the patient’s regular GP. There is no national medical telephone hotline.

Hospitals: In 2015, there were 89 hospital organizations, including eight university medical centers. Practically all organizations were private and nonprofit. In 2015, there were 231 independent private and nonprofit treatment centers whose services were limited to same-day admissions for nonacute, elective care (e.g., eye clinics, orthopedic surgery centers) covered by statutory insurance.

Hospital payment rates, through which doctors are paid, are determined through negotiations between each insurer and each hospital over price, quality, and volume. The great majority of payments take place through the case-based diagnosis treatment combination system, and the rates for approximately 70 percent of hospital services are freely negotiable; the remaining 30 percent are set nationally. The number of diagnosis treatment combinations was reduced from 30,000 to 4,400 in 2012. Diagnosis treatment combinations cover both outpatient and inpatient as well as specialist costs, strengthening the integration of specialist care within the hospital organization.

Mental health care: Mental health care is provided in basic ambulatory care settings, such as GP offices, for mild-to-moderate mental disorders. In cases of complicated and severe mental disorders, GPs will often refer patients to basic mental health care (e.g., a psychologist or an independent psychotherapist) or to a specialized mental health care institution. The delivery of preventive mental health care is the responsibility of municipalities and is governed by the Social Support Act.

A policy of further integration of general practice and mental health was agreed on in 2012, with the goals of ensuring that patients receive timely care from the right source and reducing the need for specialized care. For several years, policymakers have been aiming to substitute outpatient care for inpatient care, as reflected in the steady increase in the number of GPs who employ primary care psychologists.

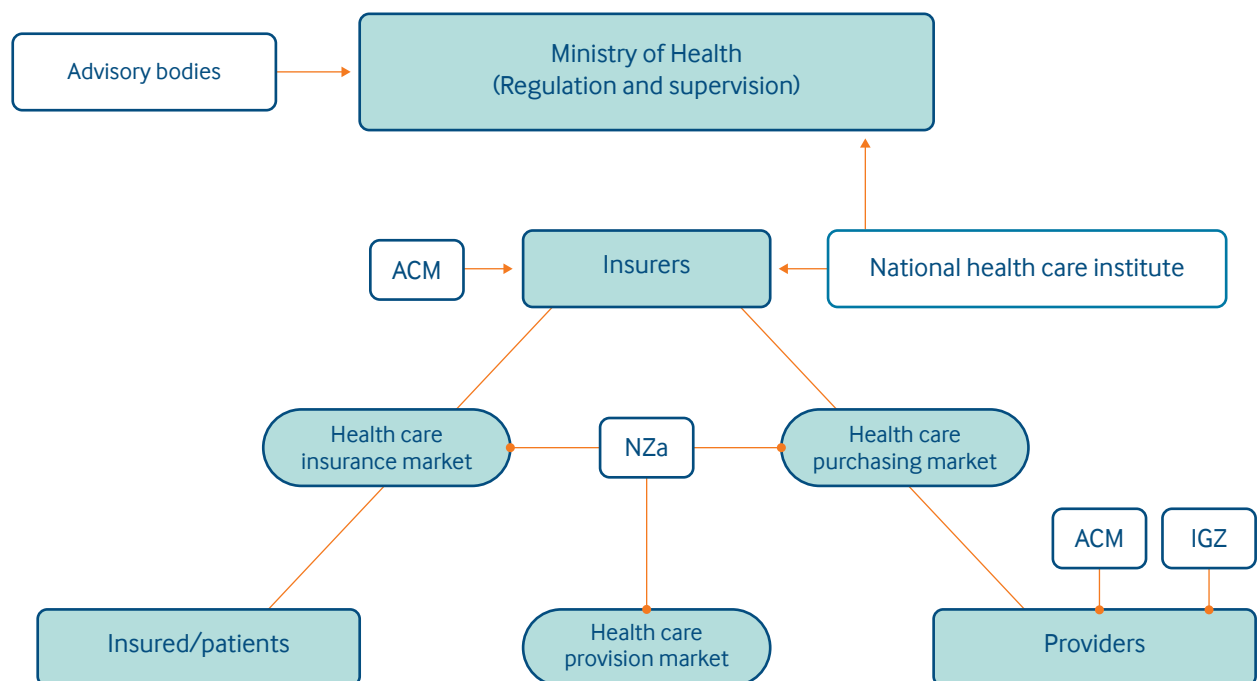
Long-term care and social supports: A substantial proportion of long-term care is financed through the Long-Term Care Act (*Wet langdurige zorg*), a statutory social insurance scheme for long-term care and uninsurable medical risks and cost that cannot be reasonably borne by individuals. It operates nationally, and taxpayers pay a contribution based on taxable income. The remainder of services are financed through the Social Support Act. Long-term care encompasses residential care; personal care, supervision, and nursing; medical aids; medical treatment; and transport services. Cost-sharing depends on size of household, annual income, indication, assets, age, and duration of care. In 2015, copayments covered 8.7 percent of total spending in the compulsory long-term care scheme.

With funding provided through a block grant from the national government, municipalities are responsible for household services, medical aids, home modifications, services for informal caregivers, preventive mental health care, transport facilities, and other assistance, in accordance with the Social Support Act (*Wet maatschappelijke ondersteuning*). Municipalities have a great deal of freedom in how they organize services, including needs assessments, and in how they support caregivers (e.g., through the provision of respite care or a small allowance).

Long-term care is mostly provided by private, nonprofit organizations, including home care organizations, residential homes, and nursing homes. Most palliative care is integrated into the health system and delivered by general practitioners, home care providers, nursing homes, specialists, and volunteer workers.

Under the Health Insurance Act, the Social Support Act and the Long-Term Care Act, personal budgets are provided for patients to buy and organize their own (long-term) care. Under the Health Insurance Act and the Social Support Act, health insurers and municipalities are free to set “sufficient” budget rates (typically about 70% of in-kind rates), whereas under the Long-Term Care Act, budget rates are set nationally. Municipalities have a great deal of freedom in how to support caregivers, for example, through respite care or a small allowance.

Organization of the Health System in the Netherlands



Source: J. Wammes, P. Jeurissen, and G. Westert, Radboud University Medical Center, 2014.



What are the key entities for health system governance?

Since 2006, the Ministry of Health's role has been to safeguard health care from a distance rather than managing it directly. It is responsible for the preconditions pertaining to access, quality, and cost in the health system, has overall responsibility for setting priorities, and may, when necessary, introduce legislation to set strategic priorities.

A number of arm's-length agencies are responsible for setting operational priorities. At the national level, the Health Council advises government on evidence-based medicine, health care, public health, and environmental protection. The National Health Care Institute advises government on the components of the statutory benefits package and has various tasks relating to quality of care, professions and training, and the insurance system (e.g., risk adjustment). The Medicines Evaluation Board oversees the efficacy, safety, and quality of medicines. Decisions about the benefits package rest with the health minister. The Dutch Health Care Authority (*Nederlandse Zorgautoriteit*) has primary responsibility for ensuring that the health insurance, health care purchasing, and care delivery markets all function appropriately—for example, by designing and managing the diagnosis treatment combination system and setting prices for 30 percent of diagnosis treatment combinations. Meanwhile, the Dutch Competition Authority (*Autoriteit Consument en Markt*) enforces antitrust laws among both insurers and providers. The Health Care Inspectorate supervises the quality, safety, and accessibility of care. Self-regulation by medical doctors is also an important aspect of the Dutch system.³ Private insurers are tasked with increasing health system efficiency and cost control through prudent purchasing of health services.

The patient movement consists of a wide range of organizations, some for specific diseases and some functioning as umbrella organizations. The patient umbrella organization *Nederlandse Patiënten Consumenten Federatie* conducts a range of activities to promote transparency. Health information technology is not centralized in one body. The Union of Providers for Health Care Communication (*De Vereniging van Zorgaanbieders voor Zorgcommunicatie*) is responsible for the exchange of data via an information technology (IT) infrastructure.



What are the major strategies to ensure quality of care?

At the system level, quality is ensured through legislation governing professional performance, quality in health care institutions, patient rights, and health technologies. In 2014, the National Health Care Institute was established to further accelerate the process of quality improvement and evidence-based practice. The Dutch Health Care Inspectorate is responsible for monitoring quality and safety. Most quality assurance is carried out by providers, sometimes in close cooperation with patient and consumer organizations and insurers. There are ongoing experiments with disease management and integrated care programs for the chronically ill.

In the past few years, many parties have been working on quality registries. Most prominent among these are several cancer registries and surgical and orthopedic (implant) registries. Mechanisms to ensure the quality of care provided by individual professionals include reregistration of specialists contingent upon compulsory continuous medical education; regular on-site peer assessments by professional bodies; and professional 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. Furthermore, quality of care is supposed to be enhanced by selective contracting (e.g., volume standards for breast cancer treatment).

In 2014, a few population management pilot programs (initiatives that aim to rearrange health services and promote intersectoral collaboration at the regional level to improve population health and quality of care and to control health care costs) featuring quality targets were initiated but, as yet, specifics about the programs' effects are unknown. Pay-for-performance constitutes a small portion of GP funding. Patient experiences are also systematically assessed and, since 2007, a national center has been working with approved measurement instruments in an approach comparable to that of the Consumer Assessment of Healthcare Providers and Systems in the United States. Although progress has been made, public reporting on quality of care and provider performance is still in its infancy in the Netherlands.



What is being done to reduce disparities?

Health disparities are considerable in the Netherlands, with up to seven years' difference in life expectancy between the highest and lowest socioeconomic groups. Smoking is still a leading cause of death. The current government does not have a specific policy to overcome health disparities. In 2013, government decided to include diet advice and smoking cessation programs in the statutory benefits package. Every four years, variations in health accessibility are measured and published in the *Dutch Health Care Performance Reports*.



What is being done to promote delivery system integration and care coordination?

A bundled-payment approach to integrated chronic care is applied nationwide for diabetes, COPD, and cardiovascular risk management. Under this system, insurers pay a single fee to a principal contracting entity—the care group (see above)—to cover a full range of chronic disease services for a fixed period. The bundled-payment approach supersedes traditional health care purchasing for the condition and divides the market into two segments—one in which health insurers contract care from care groups, and another in which care groups contract services from individual providers, each with freely negotiable fees.⁴ To head off potential additional coordination problems and better reach vulnerable populations, the role of district nurses is currently being strengthened.



What is the status of electronic health records?

Authorities are working to establish a central health information technology network to enable providers to exchange information. All Dutch patients have a unique identification number (*burgerservicenummer*). Virtually all general practitioners have a degree of electronic information capacity—for example, they use an electronic health record and can order prescriptions and receive lab results electronically. At present, all hospitals have an electronic health record.

Electronic records for the most part are not nationally standardized or interoperable between domains of care. In 2011, hospitals, pharmacies, after-hours general practice cooperatives, and organizations representing general practitioners set up the Union of Providers for Health Care Communication (*De Vereniging van Zorgaanbieders voor Zorgcommunicatie*), responsible for the exchange of data via an IT infrastructure named AORTA; data are not stored centrally. Patients must approve their participation in this exchange and have the right to withdraw; access to their own files is granted by providers upon request.



How are costs contained?

The main approach to controlling costs relies on market forces while regulating competition and improving efficiency of care. In addition, provider payment reforms, including a shift from a budget-oriented reimbursement system to a performance- and outcome-driven approach, have been implemented.

Cost containment was one of the most significant subjects of public debate surrounding the 2012 elections. The most recent figures indicate that expenditure growth has fallen significantly, to 0.8 percent as of 2015.

The pharmaceutical sector is generally considered to have contributed significantly to the decrease in spending growth. Average prices for prescription drugs declined in 2014, although less than in previous years, with reimbursement caps for the lowest-price generic contributing to the decrease in average price. Reimbursement for expensive drugs has to be negotiated between hospital and insurer; there is some concern, however, that this and other factors may limit access to expensive drugs in the near future.

Health technology assessment is gaining in importance and is used mainly for decisions concerning the benefit package and the appropriate use of medical devices. The Dutch health minister has formulated an ambitious policy proposal aiming in part to limit the pharmaceutical industry's power over drug pricing. During the Dutch European Union presidency, the topic was successfully put on the European Union agenda but the effectiveness of the proposed policies remains to be seen.

The annual deductible, which accounts for the majority of patient cost-sharing, more than doubled between 2008 and 2016, from EUR170 (USD206) to EUR385 (USD465). There are some worries that this increase has led to greater numbers of people abstaining from or postponing needed medical care.

In 2013, an agreement signed by the minister of health, all health care providers, and insurers set a voluntary ceiling for the annual growth of spending on hospital and mental care. When overall costs exceed that limit, the government has the ability to control spending via generic budget cuts. The agreement included an extra 1 percent spending growth allowance for primary care practices in 2014 and 1.5 percent in 2015–2017, provided they demonstrate that their services are a substitute for hospital care. These agreements will expire at the end of 2017, and it is unclear what future cost containment policies will replace them.

Cost containment is most severe in long-term care. People with lower care needs are no longer entitled to residential care. In addition, the devolution of services to the municipalities was accompanied by substantial cuts to the available budgets (on average almost 10%).

The Federation of University Medical Centers has recently started a program aimed at reducing lower-value services. In addition, the Dutch Federation of Medical Specialists launched the “Dutch Choosing Wisely” campaign, which is also aimed at reducing lower-value services.



What major innovations and reforms have been introduced?

After years of rapid spending growth, in January 2015 long-term care was fundamentally reformed. The reform program’s main goals were to guarantee fiscal sustainability and universal access in the future and to stimulate greater individual and social responsibility. The new structure seems to be up and running, but its effects are as yet unknown. In 2015–2016, some mitigating policies have been adopted, and future amendments are expected to alleviate fiscal stress in nursing homes.⁵

In curative health care, market reform and regulated competition remain somewhat controversial. The government, determined to continue stimulating competition between insurers and providers, undertook some measures to that effect, such as requiring insurers and providers to assume greater financial risk. In December 2014, however, the Dutch senate rejected a new policy proposal restricting free provider choice in specific insurance policies. Affordability and the accessibility of expensive drugs have rapidly become prominent issues.⁶

As of the date of this report, the Health Insurance Act has undergone two evaluations. The latest evaluation pointed to an imbalance of power, with providers having an advantage over insurers.

Notes

1. Organisation for Economic Co-operation and Development (OECD), OECD.Stat., https://stats.oecd.org/Index.aspx?DataSetCode=SNA_TABLE4, accessed Sept. 6, 2016. Please note that, throughout this profile, all figures in USD were converted from euros at a rate of about 0.827 euros per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2016) for the Netherlands.
2. W. Schäfer, M. Kroneman, W. Boerma et al., “The Netherlands: Health System Review,” in *Health Systems in Transition* (European Observatory on Health Systems and Policies, 2010).
3. P. C. Smith, A. Anell, R. Busse et al., “Leadership and Governance in Seven Developed Health Systems,” *Health Policy*, June 2011 106(1):37–49.
4. J. N. Struijs and C. A. Baan, “Integrating Care Through Bundled Payments—Lessons from the Netherlands,” *New England Journal of Medicine*, March 17, 2011 364(11):990–91.
5. J. A. Maarse and P. P. Jeurissen, “The Policy and Politics of the 2015 Long-Term Care Reform in the Netherlands,” *Health Policy*, March 2016 120(3):241–45.
6. H. Maarse, P. P. Jeurissen, D. Ruwaard, “Results of the Market-Oriented Reform in the Netherlands: A Review,” *Health Economics, Policy and Law*, April 2016 11(2):161–78.

The New Zealand Health Care System



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What is the role of government?

Beginning with passage of the Social Security Act in 1938, a consensus has developed in New Zealand that government has a fundamental role in providing for the population's health care needs. At the same time, there is continued public support for a private sector role as well. Through the New Zealand Health Strategy, government plays a central role in setting the policy agenda and service requirements and in determining the publicly funded annual health budget.

Responsibility for planning, purchasing, and providing health services, as well as disability support for those over age 65, lies with 20 geographically defined district health boards (DHBs), each of which comprises seven locally elected members and up to four members appointed by the Minister of Health.¹ These boards pursue government objectives, targets, and service requirements while operating government-owned hospitals and health centers, providing community services, and purchasing services from nongovernment and private providers.



Who is covered and how is insurance financed?

Publicly financed health care: All permanent residents have access to a broad range of services, which are largely publicly financed through general taxes. Nonresidents, including tourists, are charged the full cost of services by public health care providers, unless treatment is related to an accident, in which case they are covered by a no-fault accident compensation scheme.

Total health spending was 9.4 percent of GDP in 2015.² Public spending, generated through general taxes, accounted for 79.8 percent of total spending.

Privately financed health care: Private health insurance is offered by a variety of organizations, from nonprofits and "Friendly Societies" to for-profit companies, and accounts for about 5 percent of total health expenditure. It is used mostly to cover cost-sharing requirements, elective surgery in private hospitals, and private outpatient specialist consultations; private coverage also can ensure faster access to nonurgent treatment. About one-third of the population has some form of private insurance, purchased predominantly by individuals.



What is covered?

Services: The publicly funded system covers preventive care; inpatient and outpatient hospital services; primary care via private providers (excluding services such as optometry, adult dental services, orthodontics, and physiotherapy); inpatient and outpatient prescription drugs included in the national formulary (see below); mental health care; dental care for schoolchildren; long-term care; home help; hospice care; and disability support services. Government sets an annual overall budget and benefit package, based largely on political priorities and health need. It also sets national requirements for publicly funded services, to be implemented by the 20 DHBs. Rationing and prioritization are applied largely to nonurgent services and vary by DHB.

Cost-sharing and out-of-pocket spending: Out-of-pocket payments, including both cost-sharing and other costs paid directly by private households, accounted for approximately 12.6 percent of total health expenditures in 2014, with the largest portion going to outpatient services.³ There are no deductibles in the public sector, although copayments are required for general practitioner (GP) services and many nursing services provided in GP clinics. The average adult copayment for a GP consultation ranges from NZD15 to NZD45 (USD10–USD31), but GP copayments vary significantly, as they have no limits. An exception applies to the one-third of New Zealanders residing in low-income areas, where a higher

annual per-patient capitation rate is paid and, in return, patient copayments are capped at NZD17.50 (USD12.00) per visit.⁴ GP copayments fell during the period 2002–2008, when there were significant increases in government funding for primary care, but copayments have been increasing since then.

For drugs prescribed by GPs and private specialists, copayments are required for the first 20 prescriptions per family per year (NZD5.00, or USD3.40, per item), after which there are none. Residents receive treatment free of charge in public hospitals, although there are some user charges, such as for crutches and other aids supplied upon discharge. There are various means-tested subsidies, resulting in some copayments for long-term care (discussed below).

Safety net: Primary care is mostly free for children age 13 and under and is subsidized for the 98 percent of the population enrolled in the networks of self-employed providers known as primary health organizations (PHOs). PHOs include general practitioners, practice nurses, and allied practitioners. Additional PHO funding and services are available for treating people with chronic conditions and for improving access to care for groups with greater health needs. A “high-use health card” is also available, upon application, to patients who have had more than 12 GP visits in a year. Subsequent capitation payments for those patients are set at a higher level to reflect this high-utilization pattern, although patients continue to make copayments.



How is the delivery system organized and financed?

Primary care: The ratio of GPs to specialists is about 2:3. GPs, who act as gatekeepers to specialist care, are usually independent and self-employed. Accounting for about half their income is a capitated government-determined subsidy, paid through PHOs; patient copayments, set by individual GPs, account for their remaining compensation. An average of 3.48 GPs work together in each practice, assisted by practice nurses. Nurses are salaried and paid by GPs and have a significant role in the management of long-term conditions (e.g., diabetes), incentivized by specific government funding for chronic care management. Patient registration is not mandatory, but GPs and PHOs must have a formally registered patient list to be eligible for government subsidies. Patients enroll with a GP of their choice; in smaller communities, choice is often limited.

PHOs receive additional per-capita funding to improve access, especially for those who can least afford primary care, and to aid in promoting health, coordinating care, and providing additional services for people with chronic conditions. In some cases, this support has led to the development of multidisciplinary care teams that may include specialists, such as nutritionists or podiatrists. PHOs also receive up to 3 percent additional funding, which is handed on to GPs who reach targets for cancer, diabetes, and cardiovascular disease screening and follow-up, as well as for vaccinations. Most GPs belong to an organized network that provides management and other clinical support services. The larger networks represent several hundred GPs each.

Outpatient specialist care: Most specialists are employed by DHBs and salaried for working in a public hospital. However, they are also able to work privately in their own clinics or treat patients in private hospitals, where they are paid on a fee-for-service basis. The impact of this “dual practice” on the public sector remains under-researched.⁵ Many specialists are based in multispecialty clinics but work independently, renting their office from the clinic. Private specialists are concentrated in larger urban centers and set their own fees, which vary considerably; insurance companies have little, if any, control over those fees, although insurers will pay only up to a maximum amount, meaning that patients pay any difference. In public hospitals, patients generally have limited choice of a specialist.

Administrative mechanisms for paying primary care doctors and specialists: As noted above, GPs’ income is derived from government subsidies, which include payments from the Accident Compensation Corporation and copayments from patients. Some patients subscribing to private insurance may be eligible to claim for a copayment. Patients pay the full cost of private specialist visits up front, unless the service is funded by the Accident Compensation Corporation or by private insurance. In the latter case, patients may seek reimbursement from their insurer, or there may be no direct patient charge if a specialist or private hospital holds a contract with the insurer.

After-hours care: GPs are required in their funding contracts to provide after-hours care or to arrange for its provision, and they receive a separate government subsidy for doing so, which is higher per patient than the general capitation rate. In rural areas and small towns, GPs work on call; in some of these areas, a nurse practitioner with prescribing rights may provide first-contact care. In cities, GPs tend to provide after-hours service on a roster at purpose-built, privately owned clinics in which they are shareholders. These facilities employ their own support staff, such as nurses, but patients usually see a GP in the first instance. Patient charges at these clinics are higher than those for services during the day (although 95% of children under age 13 can have access to free after-hours GP services; the remainder are charged for services). Consequently, some patients will visit a hospital emergency department instead or avoid after-hours service altogether. A patient's usual GP routinely receives information on after-hours encounters. The public also has access to the 24-hour, seven-day-a-week phone-based "Healthline," staffed by nurses who provide advice in response to general health questions. "Plunketline" provides a similar service for child and parenting problems.

Hospitals: New Zealand has a mix of public and private hospitals, but public hospitals constitute the majority, providing all emergency and intensive care. Public hospitals receive a budget from their owners, the DHBs, based on historic utilization patterns, population needs projections, and government goals in areas such as elective surgery. The budget includes the costs of health professionals and other staff, all of whom are salaried. Within a DHB hospital, the budget tends to be allocated to the various inpatient services using a case-mix funding system. A proportion of DHB funding for elective surgery is held by the Ministry of Health, and payments are made upon delivery of surgery. Certain areas of funding, such as mental health, are "ring-fenced"—the DHB must spend the money on a specified range of services.

Private-hospital patients with complications are often admitted to public hospitals, in which case the costs are absorbed by the public sector. Public-hospital services are provided largely by consultant specialists, specialist registrars, and house surgeons.

Mental health care: Most people get access to mental health care through primary mental health services in the community, often through their GP, who will then coordinate any referred services, but also through school-based health services and community services provided by nongovernmental agencies, which are all publicly funded. DHBs deliver a range of mental health services (including secondary services), such as forensic, acute inpatient, and community-based services, and provide support to primary care providers; they also fund nongovernment providers of community-based services. Private provision is limited.

Long-term care and social supports: DHBs fund long-term care for patients based on needs assessment, age, and means-testing. They fund services for those over age 65 and those "close in age and interest" (e.g., people with early-onset dementia or a severe age-related physical disability). Those eligible receive comprehensive services including medical care; many older or disabled people receive home care. Respite care is available for informal or family caregivers, and in some circumstances ongoing financial support is provided. Residential facilities, mostly private, provide long-term care. DHBs also provide hospital- and community-based palliative care.

Disability support services for those under age 65 are purchased directly by the Ministry of Health. Some disabled people opt for individualized funding, which enables disabled people to directly manage their disability supports.

End-of-life care in New Zealand is provided in a range of settings, including hospitals, a network of hospices, aged residential care, and the individual's home. DHBs either fully fund or contribute to these settings, according to population needs. Hospices also rely on fundraising for support.

Long-term care subsidies for older people are means-tested. Individuals with assets over a given national threshold pay the cost of their care up to a maximum contribution. Those with assets under the allowable threshold contribute all their income, except for a small personal allowance. DHBs cover the difference between a person's payments and the contract price for residential care. For people in their own homes, household management (e.g., cleaning), which accounts for less than one-third of home support funding, is income-tested. Personal care (e.g., showering) is provided free of charge. Home care services are all provided by nongovernment agencies.



What are the key entities for health system governance?

As the health system is primarily public, government-funded and government-appointed entities dominate governance structures. Some, like the Health and Disability Commissioner (whose function is to champion consumers' rights in the health sector), operate at arm's length from the central government. Others are "crown agents," with their own boards, and are required to follow government policy. Key national arrangements are:

- The Ministry of Health, which has overall responsibility for the health and disability system, acts as the Minister of Health's principal adviser on health policy and maintains a role as funder, monitor, purchaser, and regulator of health and disability services. While it sets capitation rates paid to GPs, it has no role in regulating patients' copayments.
- The ministry has two subcommittees: the Capital Investment Committee, which advises on matters relating to capital investment in the public health sector, in line with the government's service plans; and the National Health IT Board, which advises on the implementation and use of information technology systems.
- Health Workforce New Zealand leads and supports health and disability workforce training and development.
- NZ Health Partnerships, supported and owned by New Zealand's 20 DHBs, is tasked with enabling those DHBs to collectively maximize shared services opportunities.
- The Pharmaceutical Management Agency of New Zealand, PHARMAC, assesses the effectiveness of drugs, distributes prescribing guidelines, and determines inclusion of drugs on the national formulary (with relative cost-effectiveness being one of nine criteria for inclusion). In addition, certain medical devices have been added to its schedule.⁶ Since late 2015, a new set of "factors for consideration" has been used to underpin decisions: need; health benefit; costs and savings; and suitability.
- The Health Quality and Safety Commission is working toward what is known as the New Zealand "triple aim"—improved quality, safety, and experience of care; improved health and equity for all populations; and better value for public health system resources.
- The Health Promotion Agency develops and enables health-promoting policy, initiatives, and environments.
- The Health Research Council invests in a broad range of research on issues important to New Zealand.



What are the major strategies to ensure quality of care?

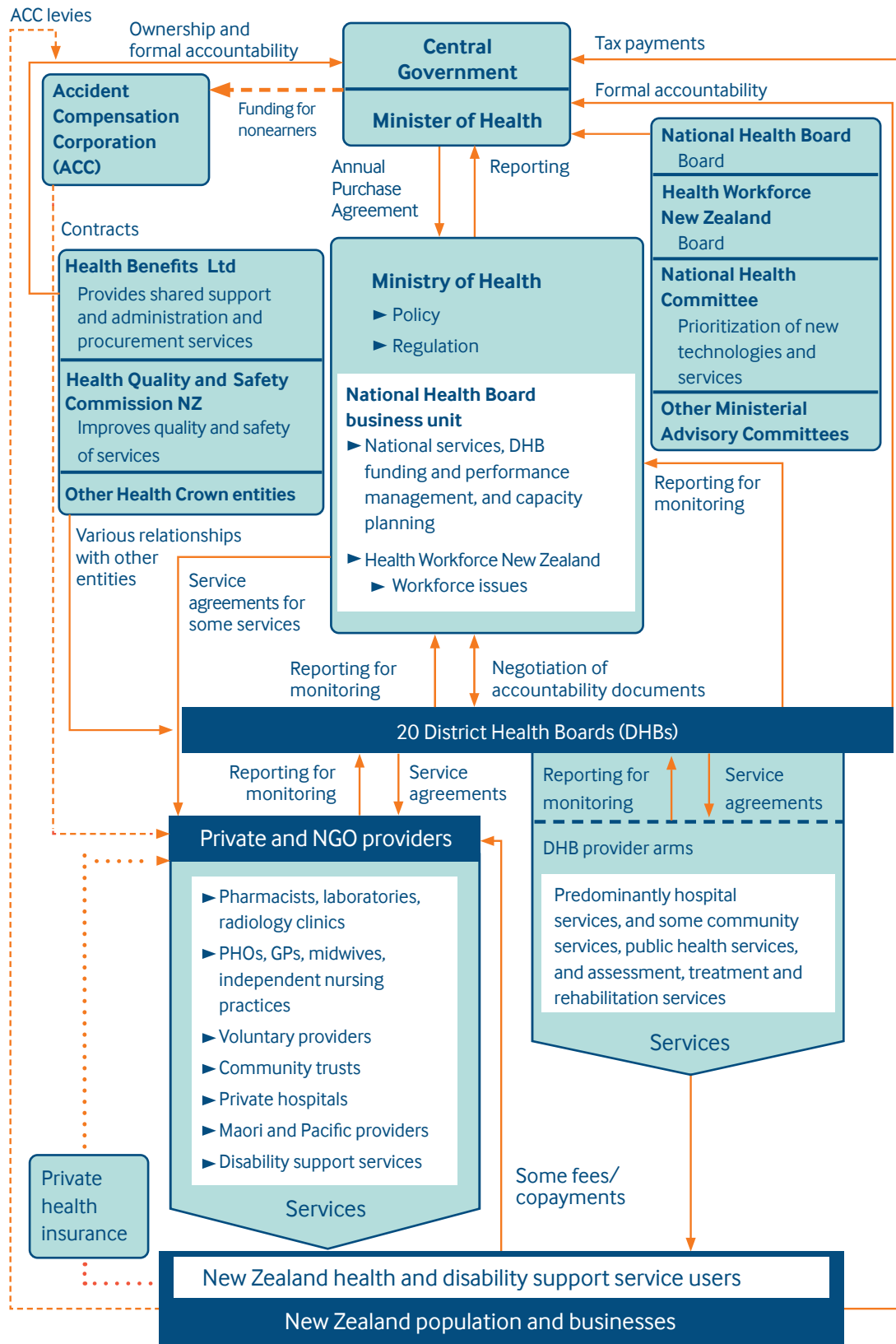
The health and disability commissioner investigates patients' complaints, reports directly to Parliament, and has been active in promoting quality and patient safety.

DHBs are held formally accountable to government for delivering efficient, high-quality care in hospitals, as measured by the achievement of targets across a range of indicators. These include six "health targets," published quarterly, that aim to stimulate competition among DHBs. In addition, DHB performance on waiting times, access to primary care, and mental health outcomes is publicly disclosed. Also publicly reported are performance data on PHOs, including screening rates for chronic disease. Data on individual doctors' performance, however, are not routinely made available. As noted above, PHOs and GPs receive performance payments for achieving various targets.

DHBs and individual GP clinics and networks run various chronic disease management programs. There are national registries for some diseases, including diabetes, cardiovascular disease, and cancers. Since 2014, public hospitals have been required to conduct "Patient Experience" surveys of randomly selected patients. The Health Quality and Safety Commission publishes the findings.

Certification by the Ministry of Health is mandatory for hospitals, nursing homes, and assisted-living facilities. All practicing health professionals must be certified annually by the relevant registration authority (e.g., for doctors, the Medical Council of New Zealand), which has ongoing responsibility for ensuring professional standards and providing accreditation. Registration authorities supervise individual professionals where appropriate.

Organization of the Health System in New Zealand



Source: New Zealand Ministry of Health, 2015.

The Ministry of Health is also working on quality improvement in DHBs. “Clinical governance” has been implemented in most DHBs, meaning that management and health professionals are assuming joint accountability for quality, patient safety, and financial performance.⁷

The Health Quality and Safety Commission aims to increase the focus on quality and coordinate DHB activities, such as those aimed at improving the patient journey, safer medication management, reducing rates of health care–associated infection, and standardizing national incident reporting. Other initiatives include the ongoing development of the “Atlas of Healthcare Variation” (an online tool aimed at highlighting variations in the provision and use of services by geographic area); a series of standard quality and safety indicators for DHBs based on routinely collected data; a program for consumer involvement in service design; and advice for DHBs on how to prepare annual “Quality Accounts,” required since 2012–2013. These Quality Accounts report on how a DHB approaches quality improvement, including descriptions of key initiatives and their results. In 2013, the commission launched a national patient safety campaign, “Open for Better Care,” focused on reducing harm associated with falls, surgery, health care–associated infections, and medications. Since 2015, it has collated routine data in an annual report aimed at providing a “window” on the quality of New Zealand health care.⁸



What is being done to reduce disparities?

Health disparities are a concern in New Zealand. Maori and Pacific Island people have shorter life expectancies than other New Zealanders (by seven and five years, respectively) and experience greater difficulty in gaining access to health services. Reducing disparities is a policy priority, with data describing disparities routinely collected and publicly reported.⁹

Through much of the 2000s, a multisector policy approach saw investments in housing, education, and health, as DHBs and primary health organizations were required to develop strategies for reducing disparities. Many PHOs were created especially for Maori or Pacific populations.

The post-2008 government has focused on specific initiatives such as “Whānau Ora,” a policy designed to integrate health and social services. The aim has been to develop coordinated, multiagency approaches to service provision and to foster joint responsibility for outcomes.



What is being done to promote delivery system integration and care coordination?

District-level alliances (partnerships between DHBs and PHOs) are driving stronger system integration by changing service models. While alliance performance varies, the leaders have multiple members, including, but not limited to, DHB, PHO, pharmacy, ambulance, district nursing, allied health, local government, and Maori providers. District alliances are developing services based on locality-specific needs. Some alliances have begun to form partnerships with local social agencies.

The primary care sector has begun exploring for the most appropriate model of general practice and enhanced primary care that will meet future demand. The “health care home” model is being implemented in several districts, with support and resourcing shared between DHBs and PHOs.

While DHBs are held accountable for driving integration through their annual plans, variability still exists. There is an ongoing effort to drive improvement by other means, including new funding models and contracting for outcomes.

Four system-level performance measures were implemented in 2016. These assess performance at the system level, and success is dependent on the contributions of individual providers or organizations. This reliance on multiple contributions drives the integration of services and providers and requires an effective alliance.



What is the status of electronic health records?

The ability to access and share accurate clinical information is central to the New Zealand Health Strategy, with increasing emphasis on investing in regional hospital systems that support and enable integrated care.

In 2015, the Ministry of Health announced the Digital Health Work Programme 2020. The program aims to ensure appropriate access to health and wellness information facilitated by a single electronic health record. The electronic record will collect and present existing core health information in a single view, accessible by consumers and clinicians. Data will also be able to be shared with social-sector professionals.

Current levels of interoperability between health information systems are limited. However, the ability to provide services such as structured electronic transfer of information is increasing. Primary care providers can transfer patients' records securely between practices, send electronic referrals, and receive electronic hospital discharge summaries.

Well over a third of primary care practices have implemented a patient portal, and more than 140,000 patients have registered to access their information through the portal. This advancement supports the Health Strategy's goal of enabling health care consumers to have an active role in managing their own health, to engage more conveniently with the system, and to move services closer to home.

A recent survey found that 359 of 992 general practices have implemented provider portals, giving after-hours facilities and some hospital emergency departments access to primary care information.¹⁰ Providers in community, hospital, and specialist settings in one of New Zealand's four regions can now access a shared view of clinical information, and the other three regions are reviewing their information systems to enable information-sharing. Implementation of electronic prescribing is under way in primary care and in hospitals. The use of telehealth to deliver services remotely is also increasing.

The Health Information Standards Organisation promotes the development and use of standards to ensure interoperability between systems, and SNOMED CT (Systematized Nomenclature of Medicine—Clinical Terms) has been endorsed as a national standard for clinical terminology in New Zealand. Every person who uses health and disability support services has a unique national health number, facilitating the process of building interoperable systems.



How are costs contained?

The financial sustainability of publicly funded health care is a top government priority. To support this goal, government has implemented a range of measures, including four-year planning to align expenditure with priorities over a longer period and improving regional collaboration to drive efficiencies. All new proposals must be integral to a four-year plan and demonstrate their fit with the strategic direction of the health sector.

Cost control in DHBs has been closely monitored by the Ministry of Health, with a significant reduction in deficits over the last six years, from NZD154.8 million (USD105.3 million) in 2008–2009 to NZD65.8 million (USD44.8 million) in 2014–2015.¹¹ These reductions are achieved largely through efficiency gains and cuts in spending on staff, services, and equipment. As public hospitals are essentially free of charge, there is no mechanism to shift costs to patients.

The Ministry of Health has recently taken on the functions of the former National Health Committee. To assist with implementing the New Zealand Health Strategy, it is developing an integrated approach to prioritizing health technologies.

The Pharmaceutical Management Agency uses mechanisms such as reference pricing and tendering to set prices for publicly subsidized drugs dispensed through community pharmacies and hospitals.¹² If a patient prefers an unsubsidized drug, they must pay the full cost. Such strategies have helped to drive down pharmaceutical costs and to keep drug expenditure per capita the fourth-lowest in the Organisation for Economic Co-Operation and Development (OECD) in 2012.¹³



What major innovations and reforms have been introduced?

The updated New Zealand Health Strategy, launched in 2016, consists of two parts: the Future Direction, and the Roadmap of Actions 2016.¹⁴ The former lays out some of the challenges and opportunities the system faces and describes the desired future, including the underpinning culture and values. In addition, it identifies five strategic themes for driving change: 1) improving patient literacy and empowerment; 2) emphasizing prevention, early intervention, and community care; 3) improving system performance; 4) integrated and collaborative health care delivery; and 5) technological innovation.

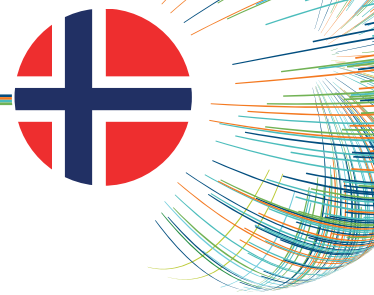
The Roadmap of Actions 2016 identifies 27 areas for action over five years to implement the Health Strategy. These actions, organized under the five themes listed above, will ultimately contribute to the stated goal that “all New Zealanders live well, stay well, get well, in a system that is people-powered, provides services closer to home, is designed for value and high performance, and works as one team.”¹⁵

The author would like to acknowledge the New Zealand Ministry of Health for its comments and for providing updated information for this profile.

Notes

1. The government replaced the governing board in one DHB with an appointed commissioner in mid-2015 owing to ongoing concerns about its financial situation.
2. Organisation for Economic Co-operation and Development (OECD), *OECD Health Statistics, 2015*, <http://www.oecd.org/els/health-systems/health-data.htm>.
3. Ibid.
4. Please note that, throughout this profile, all figures in USD were converted from NZD at a rate of about NZD1.47 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2016) for New Zealand.
5. R. Gauld, “Questions About New Zealand’s Health System in 2013, Its 75th Anniversary Year,” *New Zealand Medical Journal*, Aug. 16, 2013 126(1380):1–7.
6. R. Gauld, “Ahead of Its Time? Reflecting on New Zealand’s PHARMAC Following Its 20th Anniversary,” *Pharmacoeconomics*, Oct. 2014 32(10):937–42.
7. R. Gauld and S. Horsburgh, *Clinical Governance Assessment Project: Final Report on a National Health Professional Survey and Site Visits to 19 New Zealand DHBs* (Centre for Health Systems, University of Otago, 2012).
8. Health Quality and Safety Commission, *A Window on the Quality of New Zealand’s Health Care 2016*. (Health Quality and Safety Commission, 2016).
9. Ministry of Health, *Annual Report for the Year Ended 30 June 2015* (Ministry of Health, 2016).
10. Ministry of Health, personal communication.
11. Ibid.
12. R. Gauld, “Ahead of Its Time? Reflecting on New Zealand’s PHARMAC Following Its 20th Anniversary,” *Pharmacoeconomics*, Oct. 2014 32:937–42.
13. Organisation for Economic Co-operation and Development (OECD), *OECD Health Statistics, 2014*, <http://www.oecd.org/els/health-systems/health-data.htm>.
14. Minister of Health, *New Zealand Health Strategy: Future Direction* (Ministry of Health, 2016).
15. Minister of Health, *New Zealand Health Strategy: Roadmap of Actions 2016* (Ministry of Health, 2016).

The Norwegian Health Care System



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What is the role of government?

Government is responsible for providing health care to the population, in accordance with the stated goal of equal access to health care regardless of age, race, gender, income, or area of residence. Primary health and social care is the responsibility of the municipalities, with Norway's ministry of health playing an indirect role through legislation and funding mechanisms. In specialist care, the ministry also plays a direct role through its ownership of hospitals and its provision of directives to the boards of regional health care authorities (RHAs).



Who is covered and how is insurance financed?

Publicly financed health care: Health expenditure represented 9.9 percent of GDP in 2015, slightly above the average of 8.9 percent for countries in the Organisation for Economic Co-operation and Development (OECD). Norway ranks among the highest in the OECD in terms of absolute expenditure per capita (NOK60 000, or USD6,122,¹ in 2015). Public financing accounts for 85 percent of this spending.

Coverage is universal and automatic for all residents. It is financed through national and municipal taxes. Social security contributions finance public retirement funds, sick leave payment, and, for some patient groups, reimbursement of extra health care costs.

For acute hospitalization, there is no private alternative.

Through common agreements, European Union residents have the same access to health services as in their home country. Other visitors are charged in full. Undocumented adult immigrants have access only to emergency acute care, while undocumented children receive the same care as citizens.

Private health insurance: Private health insurance is provided by for-profit insurers and purchased for quicker access and greater choice of private providers. It covers less than 5 percent of elective services; it does not cover acute services. About 9 percent of the population, or nearly 15 percent of the workforce, has some kind of private insurance. About 91 percent of policies are paid for by an employer.²



What is covered?

Services: Parliament determines what is covered, although there is no defined benefit package other than for new and costly treatments and technologies (see below). In practice, national health care covers planned and acute primary, hospital, and ambulatory care, rehabilitation, and outpatient prescription drugs on the formulary (the "blue list"). It also covers dental care services for children up to 18 years of age and other prioritized groups, such as people with some chronic diseases, patients with chronic mental disabilities, and patients in nursing homes. Dental care for 19-to-20-year-olds and dental orthopedics (braces) for children are partially covered. Regular glasses and contact lenses are not covered unless the vision is very limited. Cosmetic surgery is not covered.

Primary, preventive, and nursing care are organized at the local level by municipalities. The municipality, often in cooperation with the county, decides on public health initiatives or campaigns to promote healthy lifestyles and reduce social health disparities. Preventive services for mental health are directed toward children and adolescents through the school system. Psychological care for children under the age of 18 is fully covered. Primary care for mental health is provided by general practitioners (GPs) and municipal psychologists. Long-term care, including palliative end-of-life care, is provided on the basis of need, either at home or in nursing homes. There are few designated hospice facilities. The substantial government funding for municipalities is generally not earmarked, and budgets are set locally, but provision of some services is statutory, particularly those related to pediatric and long-term care.

Cost-sharing: GP and specialist visits, including outpatient hospital care and same-day surgery, require copayments (NOK152 [USD15.5] and NOK345 [USD35] per visit in 2015, respectively), as do physiotherapy visits (in varying amounts), covered prescription drugs (up to NOK520 [USD53] per prescription), and radiology and laboratory tests (NOK245 [USD25] and NOK50 [USD5], respectively). Public providers cannot charge patients more than these amounts, other than for bandages and other supplies. Consultations for children under 16 years, for antenatal and postnatal follow-up of mother and child, for prevention and treatment of some transmittable diseases, and for treatment of sexually transmitted diseases are also exempt from copayments. Hospital admissions and inpatient treatment are free. Out-of-pocket payments finance about 14 percent of total expenditure.

Home-based care and institutional care for older or disabled people require means-tested, high cost-sharing of up to 85 percent of personal income.

Safety net: The major safety net mechanisms are annual caps, set by Parliament, for out-of-pocket expenditure, above which fees are waived. For 2016, the cost-sharing ceiling for most services is NOK2,185 (USD223). A second ceiling, for services such as physiotherapy and certain dental services, is set at NOK2,670 (USD272). Long-term care and prescription drugs outside the blue list do not apply toward these ceilings.

Residents eligible for the minimum retirement or disability pensions, which amount to about NOK162,000 (USD16,530) per year, receive free essential drugs and nursing care. Individuals with specified communicable diseases, including HIV/AIDS, and patients with work-related injuries receive free medical treatment and medication. Taxpayers with high expenses (above NOK9,180, or USD937) as a result of permanent illness receive a tax deduction. “Basic benefits” (NOK670–NOK3,346, or USD68–USD341 per month) may be provided, upon application, to patients who regularly incur additional expenses because of permanent illness, injury, or disability.



How is the delivery system organized and financed?

Primary care: The municipalities provide primary care in accordance with current legislation, government directives, and quality requirements set by the Directorate for Health.

The “regular GP scheme,” whereby people register with one general practitioner, covers 99.6 percent of the population. There was an average of 1,127 patients per GP in 2015.³ Patients may change their GP twice a year. GPs function as gatekeepers, as referral by a GP is required for coverage of specialist treatment.

There are 2.4 specialists in hospitals or ambulatory care for every practicing primary care physician.⁴ Financial incentives encourage physicians to certify as a specialized GP and to see many patients per day.

Municipalities contract with individual GPs, who receive a combination of capitation from the municipalities (35% of income), fee-for-service from the Norwegian Health Economics Administration (Helfo) (35%), and out-of-pocket payments from patients (30%). GP financing is determined nationally by negotiation between the Ministry of Health and the Norwegian Medical Association. In the fee-for-service scheme, there are fees provided for medication reconciliation, for taking part in coordination of care, and for coordinating the creation and follow-up of individual plans for patients with complex needs, but these are relatively low. Most GPs are self-employed; only 5 percent are salaried municipal employees.⁵

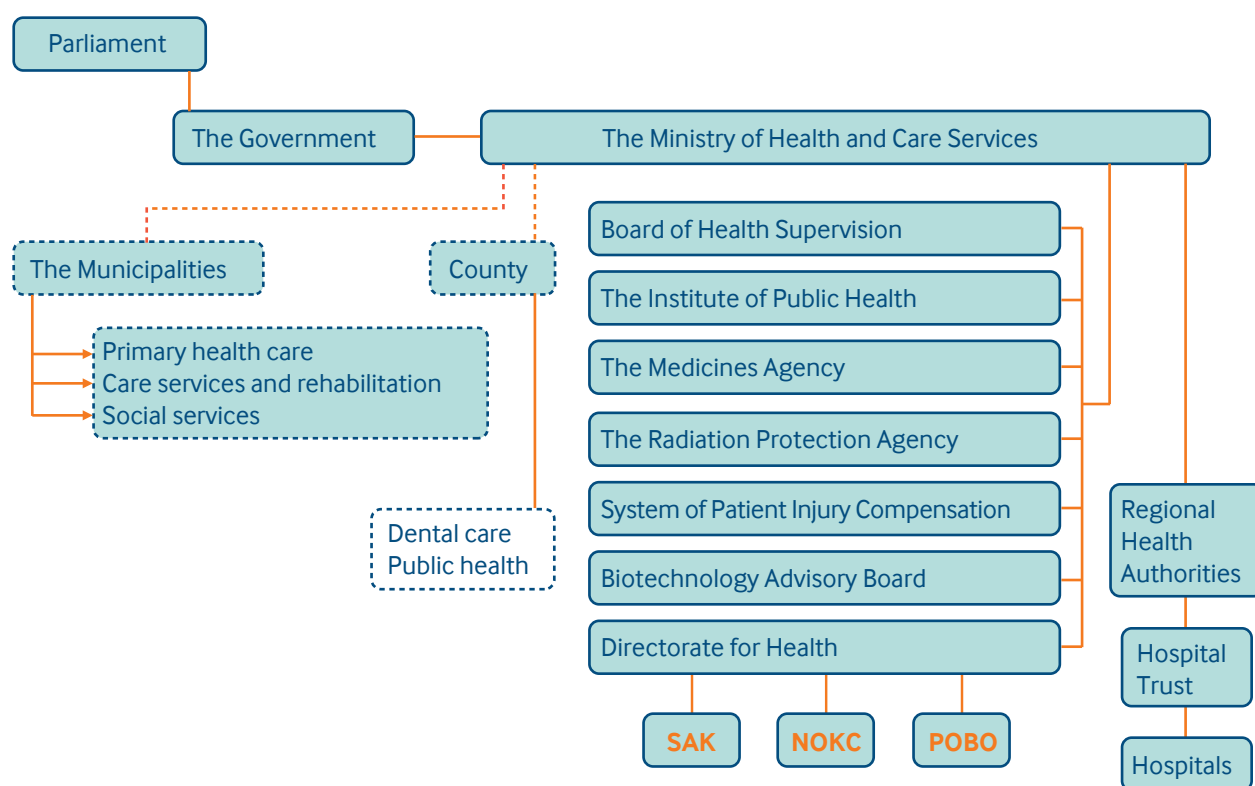
The average salary is estimated to be NOK750,000 (USD76,530), but can be substantially higher for full-time practitioners. GP practices typically comprise one to six physicians and employ nurses, lab technicians, and secretaries, but networks for shared resources are not common. Many municipalities have multidisciplinary mental health outreach teams.

Specialist care: The four RHAs, which are state-owned corporations that report to the Ministry of Health, are responsible for supervising specialist inpatient somatic and psychiatric care, as well as treatment for alcohol and substance abuse. The ministry provides the RHAs’ budgets and issues an annual document instructing the RHAs as to aims and priorities.

Outpatient specialist care is provided both by hospitals and by self-employed specialists. Hospital-based specialists are salaried. Privately practicing specialists contracted by an RHA are paid a combination of annual lump sums, based on the type of practice and number of patients on the list (35%); fee-for-service payments (35%); and patients’ copayments (30%). The annual lump sum and the out-of-pocket fees are set by government, and the fee-for-service payment scheme is negotiated between government and the Norwegian Medical Association. Specialists with an RHA contract can charge patients only the specified out-of-pocket fee. Those who do not receive public financing are neither regulated nor subject to the out-of-pocket expenditure caps.

In principle, patients have a choice of specialist, although in practice specialist availability varies by geographic location. In the more densely populated areas, clinics with multidisciplinary specialists have emerged during the last few years and seem to be increasing in number. Hospital-employed specialists cannot see private patients at the hospital, but may practice privately after hours, on their own time.

Organization of the Health System in Norway



SAK: Norwegian registration authority for health personnel
 NOKC: Norwegian Knowledge Centre for the Health Services
 POBO: Health and care services ombudsmen

Source: A. K. Lindahl, Norwegian Knowledge Centre for Health Services, 2015.

Patient out-of-pocket payments: Patients pay their out-of-pocket fee directly to the provider. If they reach the first safety net ceiling, it is automatically registered and copayments are made directly to the provider by Helfo. For the second ceiling, patients need to submit an application with proof of payment of the out-of-pocket costs.

After-hours care: After-hours emergency primary care services are the responsibility of the municipalities, whose contracts with GPs include after-hours emergency services on rotation. The municipalities provide offices, equipment, and assistance and pay the GPs a small fee. Other payments are provided by the national fee-for-service system and out-of-pocket payments from patients. The more densely populated municipalities have walk-in centers where nurses triage patients and answer calls, with several doctors seeing patients all through the day and night. In smaller municipalities, patients call an after-hours phone number and speak with a nurse, who calls the GP if the patient needs to be seen. There is a common national phone number for primary care after-hours services (*legevakt*), through which calls are directed to the caller's local service. In larger cities, there are also a few privately owned and run after-hours clinics where patients pay in full.

There is variation as to whether information from emergency visits is shared with patients' regular GPs. There is an emergency phone number that patients can call for urgent ambulance services, but no national medical advice line. Patient out-of-pocket fees are higher for after-hours emergency services (about NOK100 [USD10] higher per consultation).

Acute-care hospital services are the responsibility of RHAs. Patients need an acute-care referral to these services by a primary care physician or, in specific cases (accidents, suspected heart attack, stroke, etc.), can access them directly via ambulance.

Hospitals: Public hospital trusts are state-owned, formally registered legal entities with an executive board and are governed as publicly owned corporations. A few hospitals are privately owned, and those owned by nonprofit humanitarian organizations provide publicly funded services as part of RHAs' plans for providing acute care. The for-profit hospital sector is small, providing less than 0.2 percent of somatic hospital stays and 7 percent of daytime stays, mostly outpatient surgery.⁶ For-profit hospitals do not provide a full range of services and do not offer acute care. Some of their services may be publicly funded, but the proportion varies, from almost none to 85 percent.

Patients are free to choose a hospital for elective services, but not for emergency care. Public hospitals are financed through RHAs. While mental health is funded 100 percent by block grants to the RHAs, somatic services are financed only 50 percent by block grants, with the rest activity-based (based on diagnosis-related groups, or DRGs). The RHAs are free to decide how the hospitals are paid, but all four have chosen the same funding mechanism for somatic services: 50 percent as block grant and 50 percent based on DRGs. All health personnel are salaried, including doctors, and all payments, public and private, include all services.

Mental health: Mental health care is provided by GPs and by other providers (psychologists, psychiatric nurses, social care workers) in municipalities. For specialized care, GPs refer patients to private psychologists or psychiatrists, or to a low-threshold hospital (district psychiatric center). These hospitals are dispersed throughout the country and often include psychiatric outreach teams. More advanced specialized services are organized in the inpatient psychiatric wards of general hospitals or in mental health hospitals. Hospital treatment is provided free of charge, and outpatient services are subject to the same cost-sharing as described above. Psychiatric services in the larger hospitals as well as in the district psychiatric centers are funded by government block grants through RHAs. Private mental hospitals account for about 12 percent of mental health care, including services for eating disorders, nursing home care for older psychiatric patients, and some psychiatrist and psychologist outpatient practices, mostly contracted by RHAs. The role of private treatment centers for addiction (mainly drugs and alcohol) is more prominent (38%) and funded mostly through contracts with RHAs.⁷

Long-term care: The municipalities are responsible for providing long-term care and contract also to some extent with private providers. Cost-sharing for institutionalized care is income-based and set at 75 percent to 85 percent of patients' income. The levels of care at home or in a nursing home are determined by the municipality. Only about 3 percent of nursing homes are private, and for home nursing care the proportion is even lower. Patients may purchase home nursing care and other services from private providers as a supplement to services by public home care. In some densely populated areas, patients themselves have a choice of home care provider or nursing home. People under 67 with permanently

reduced functioning who live at home have a right to a personal assistant who will aid them according to their preferences. Very few patients pay individually for full-time private nursing home care. End-of-life care for terminal patients is often provided in specific wards within dedicated nursing homes. There is a system in place for informal caregivers to apply for financial support from the municipalities.



What are the key entities for health system governance?

The Ministry of Health and Care Services is politically led by the minister of health, who translates political decisions into practice through legislation, economic measures, and documents instructing the RHAs and the Directorate for Health and other underlying agencies regarding activities and priorities. The political values conveyed by the annual national budget and the instructions in an annual letter of allocation from the ministry are determinative and specify provider fees, out-of-pocket payments, and ceilings.

The Directorate for Health is an executive agency and authority subordinate to the ministry. It issues clinical guidelines, maintains the National System for the Introduction of New Health Technologies, coordinates 18 patient ombudsmen, and is responsible for the national quality indicator system. From 2014 to 2018, the directorate is in charge of the secretariat for the National Patient Safety Program, and from 2016 also administers a reporting and learning system for adverse events in hospitals. The Directorate for Health is responsible for fee-setting in the DRG system and also for a five-year project on quality-based financing (see “What are the major strategies to ensure quality of care?” below). There is no single authority overseeing fee-setting for providers other than hospitals.

The new Directorate of eHealth, established January 1, 2016, is responsible for the overall setting of standards and for leading the development and application of health information technology in health care. It provides public information on health and health care through the website www.helsenorge.no.

The Medicines Agency determines which medications to reimburse for outpatients. For new drugs, the agency determines whether a prescription drug should be covered (on the blue list) by evaluating its cost-effectiveness in comparison with that of existing treatments. The agency decides the maximum price of drugs.

The Norwegian Institute of Public Health is a center for research on and surveillance of the health status of the population. It provides the Ministry of Health with advice on public health and is the main authority regarding infection control and infectious disease surveillance. It provides community health profiles regarding prevalence of disease and holds several of the large health registries, including the prescription registry. The institute also assists the prosecuting authorities and the judiciary regarding forensic medicine. As of the beginning of January 2016, the Norwegian Knowledge Center for the Health Services merged with the Norwegian Institute of Public Health. It produces comparative-effectiveness studies, systematic reviews, and health technology assessments and performs comparative health services and systems analyses, including patient-experience surveys. Its health technology assessments are used by the Norwegian Council for Priority Setting in Health Care and the National System for the Introduction of New Health Technologies.

The National Board of Health Supervision audits the different areas of the health care system, either systematically on a national level or individually. An alert system ensures that hospitals inform the board of serious adverse events, and the board may then decide to investigate particular incidents. The board can issue fines to institutions and warnings to health personnel and can revoke authorization for health care personnel who engage in misconduct. Local audits are performed by the county governors.

Patient advocacy is ensured through statutory “user boards” at all hospital trusts and regional health authorities and also through the offices of the patient ombudsmen in all counties.

Public information on the performance of the health services is made available partly through the website www.helsenorge.no, where national quality indicators are published, along with information on patients’ rights, economic support, and ability

to change their regular GP. There is secure entry via this website to patients' core medical records, as well as to a separate website for all patients' prescriptions.

For public and stakeholder engagement, there is a tradition of public hearing of white papers before their discussion and approval in Parliament, as was the case with the National Health and Hospital Plan (2016–2019).⁸



What are the major strategies to ensure quality of care?

The National Strategy for Quality Improvement in Health and Social Services (2005–2015) focused on efficacy, safety, efficiency, patient-centered care, care coordination, and continuity and equality in access to health care.⁹ National evidence-based guidelines are being developed for a number of diseases. For cancer, there is a disease management program introducing defined “packages” to be delivered to patients, and a project to implement similar service packages is under way for mental health and addiction treatment. A five-year (2014–2018) national program aims to improve patient safety, and there is a national reporting and learning system for adverse events in hospitals. A total of 54 national clinical registries have been established for specific diseases, in addition to 15 national health registries. There is no registry for technical devices.

The Directorate for Health is in charge of a national program for health care quality indicators. The program includes results from national patient experience surveys, as well as quality indicators for criteria such as survival rates, infection rates, and waiting times, and also indicators specific to the different medical areas. No information is gathered or disseminated regarding results or quality of individual health care professionals' performance.

The Registration Authority for Health Personnel, in the Directorate for Health, licenses and authorizes all health care professionals and can grant full and permanent approval to those meeting educational and professional criteria. There is no system for reevaluation or reauthorization. The authority issues certificates of specialization to medical doctors, in accordance with specific and transparent requirements. Only the specialization of GPs requires recertification. The Norwegian Board of Health carries out audits of all levels of the health system, including the health care workforce.

RHAs, hospitals, municipal providers, and private practitioners are themselves responsible for ensuring the quality of their services. There is no requirement for accreditation or reaccreditation, although some hospitals or hospital departments are accredited.

A five-year developmental program (2013–2017) is under way for quality-based financing of RHAs, based on performance and improvement as measured by a set of indicators—29 indicators in 2014, 33 indicators in 2015, and 32 in 2016—with patient experiences constituting about 30 percent of the reporting. Quality-based financing amounts to only about 0.5 percent of the total of the RHAs' budgets. An evaluation in 2015 did not identify particular downsides to this quality-based financing, but did identify improvement areas.¹⁰

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



What is being done to reduce disparities?

Eliminating socioeconomic inequalities in health is a priority of the Directorate for Health. A national strategy for addressing inequalities in health and health care includes various ways of increasing knowledge and awareness.¹¹ There have been some initiatives for children, including vaccination programs and kindergarten- and school-based programs; initiatives for people with disabilities to be included in the workplace; price and tax policies; initiatives for care integration; general information campaigns regarding smoking cessation, alcohol, and diet; and specific programs for populations considered at risk.

There is increasing focus on immigrants' health and their underutilization of health care. Research on pregnancy among immigrants has been informative, as there are significantly more complications for newborns and mothers among immigrants than among native Norwegians.¹² There has been a resulting emphasis on the need for adequate information to be provided in immigrants' native languages.

Health outcomes vary by geography, not only because of differences in the prevalence of diseases but also as a result of variations in the availability and quality of health care. Recruitment of health personnel, notably doctors and specialized nurses, is more difficult in rural areas.

What is being done to promote delivery system integration and care coordination?

The care coordination reform of 2012 put more emphasis on municipalities' responsibility for 24-hour and post-discharge care, including individual treatment plans for patients with chronic diseases. Hospitals and municipalities must establish formal agreements on the care of patients with complex needs.¹³

For hospitals, incentives for care coordination are provided by mandatory agreements with municipalities. Financing remains poorly aligned between the hospitals, which are state-funded, and primary care, which is municipality-funded. The municipalities are fined per day for patients who stay in hospitals after they are ready for discharge.

What is the status of electronic health records?

A national strategy for health information technology (HIT) was initiated in 2016 and is the responsibility of the Directorate of eHealth. Every resident is allotted a unique personal identification number, which is used in primary care and for hospitals' medical records. GPs use secure messaging to request prescriptions or to address patients' questions. Some GP and specialist outpatient offices have electronic booking, while most hospitals do not. All patients have the right to see or get a copy of their complete record, including doctors' notes, but there is as yet no electronic method for doing so. An ongoing project on patient access currently gives 3.1 million inhabitants access to their core medical record.

The National Health Network, a state enterprise, is charged with providing efficient and secure electronic exchange of patient information between all relevant parties within the health and social services sector. It provides secure telecommunication for GPs, hospitals, nursing homes, pharmacists, dentists, and others.

HIT in primary care is fragmented, and some areas of service lack resources and equipment for its implementation. Still, virtually all GPs use electronic patient records and transmit prescriptions electronically to pharmacies. HIT is also used for referrals, for communication with laboratories and radiology services, and for sick leave. Most GPs receive electronic discharge letters from hospitals. Where after-hours emergency care is organized within the same patient record network as primary care, patient histories remain available, and primary care providers are able to access information regarding emergency visits. All hospitals use electronic records.

The lack of standardized, structured electronic records in primary and secondary care precludes automatic data extraction, hence there is still insufficient data for quality improvement at local and national levels.

How are costs contained?

Central government sets an overall health budget annually, and municipalities and RHAs are responsible for maintaining their budgets. The drug pricing scheme aims to encourage the use of generic drugs. Cost-effectiveness is a criterion for getting on the blue list of drugs eligible for reimbursement, and there is a defined maximum price for drugs, linked to reference prices set at the average of the three lowest market prices for the drug in a defined group of Scandinavian and

Western European countries. The Drug Procurement Cooperation has been effective in negotiating drug purchases and delivery jointly for the four RHAs.

GP gatekeeping for specialized services helps contain costs. There is very little competition regarding pricing within the health services. A small proportion of specialized care is privately provided by RHAs and contracted through tenders, for which price is one of several criteria.

The National System for the Introduction of New Health Technologies, established in 2014, makes decisions on whether to approve new, costly drugs or treatments, mainly on the basis of health technology assessments that address cost-effectiveness.

Norway's number of hospital beds—four per 1,000 inhabitants in 2012—is low by comparison with the OECD-Europe mean of five.¹⁴ The low number can be attributed to policy: efforts to drive services toward outpatient and daycare settings and to make municipalities accountable for reducing the need for specialized hospital care. There is an ongoing debate about overdiagnosing and the use of procedures that are not evidence-based. Clinical guidelines and a published atlas of variation in frequency of some daytime surgical procedures (www.helseatlas.no) are the only measures taken to date to reduce “low-value” care. Although the Council on Priorities in Health Care has debated, for instance, about levels of end-of-life care and the use of intensive-care beds, no focused initiatives have resulted from the debates.



What major innovations and reforms have been introduced?

Municipality cofinancing of hospital care was abolished in 2015, as it was concluded that it did not have the intended effect of keeping patients out of the hospital.

The new Agency for Hospital Construction (Sykehusbygg HF) was established in November 2014. Owned by the RHAs, it will serve as a national center of competence for hospital planning and construction for all hospital trusts. There is no plan for evaluation.

The restructuring of the governmental health bureaucracy in 2016, with the integration of smaller agencies into the Institute for Public Health and the Directorate for Health, as well as the development of the new Directorate of eHealth, will continue in 2017 with the establishing of common information technology services for the governmental health bureaucracy through the National Health Network.

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Notes

1. Please note that, throughout this profile, all figures in USD were converted from NOK at a rate of about NOK9.8 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2016) for Norway.
2. "Norske kunder kjøper helseforsikring for 300 millioner mer enn i 2013," *Dagens medisin*, Feb. 24, 2016, <http://www.dagensmedisin.no/artikler/2016/02/24/norske-kunder-kjoper-helseforsikring-for-270-millioner-kroner-mer-enn-i-2013/>.
3. Helsedirektoratet, Fastlegestatistikken, 2016, <https://helsedirektoratet.no/statistikk-og-analyse/fastlegestatistikk#fastlegestatistikk-2015>.
4. Den norske legeforening, Legestatistikk, 2015, <http://legeforeningen.no/Emner/Andre-emner/Legestatistikk/>; accessed Nov. 19, 2015.
5. Helsedirektoratet, Fastlegestatistikken, 2016, https://helsedirektoratet.no/Documents/Statistikk%20og%20analyse/Fastlegestatistikk/Fastlegedata%202015/Oppsummering%20av%20hovedtallene%20for%20landet%20med%20kommentar%202015_4.pdf.
6. Helsedirektoratet, Private aktører i spesialisthelsetjenesten, 2016, <https://helsedirektoratet.no/Lists/Publikasjoner/Attachments/1159/Private%20aktører%20i%20spesialisthelsetjenesten.%20Omfang%20og%20utvikling%202010-2014.%20IS-2450.pdf>.
7. Helsedirektoratet, Private aktører i spesialisthelsetjenesten, 2016, <https://helsedirektoratet.no/Lists/Publikasjoner/Attachments/1159/Private%20aktører%20i%20spesialisthelsetjenesten.%20Omfang%20og%20utvikling%202010-2014.%20IS-2450.pdf>.
8. Stortingsmelding 11 (2015–2016); Nasjonal helse- og sykehusplan (2016–2019), <https://www.regjeringen.no/no/dokumenter/meld.-st.-11-20152016/id2462047/>.
9. "Og bedre skal det bli—Nasjonal strategi for kvalitetsforbedring i sosial- og helsetjenesten 2005–2015," <https://helsedirektoratet.no/publikasjoner/og-betere-skal-det-bli-nasjonal-strategi-for-kvalitetsforbedring-i-sosial-og-helsetjenesten-20052015>.
10. Sirona Health Solutions, Evaluering av kvalitetsbasert finansiering (KBF), 2015, https://helsedirektoratet.no/Documents/Finansieringsordninger/KBF/Evaluering%20av%20KBF_Sirona.pdf.
11. Ministry of Health and Care Services, *National Strategy to Reduce Social Inequalities in Health*, Report No. 20 (Ministry of Health and Care Services, 2007).
12. N. Ahlberg and S. Vangen, "Pregnancy and Birth in Multicultural Norway," *Tidsskr Nor Legefor* 125(5):586–88.
13. Ministry of Health and Care Services, *The Coordination Reform: Proper Treatment at the Right Place and Time*, Report No. 47 (Ministry of Health and Care Services, 2009); Ministry of Health and Care Services, Helse- og omsorgstjenesteloven (New Law for Health and Care Services), 2011.
14. Organisation for Economic Co-operation and Development, *Health at a Glance Europe 2014*, http://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-europe-2014_health_glance_eur-2014-en; accessed Nov. 19, 2015.

The Singaporean Health Care System

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What is the role of government?

The government of Singapore planned, built, and continues to develop and maintain the nation's public health care system. It regulates both public and private health insurance in the country. The health care system is administered by the Ministry of Health, which has responsibility for assessing health needs and for planning and delivering services through networks of health and hospital facilities, day care centers, and nursing homes. The ministry manages, plans for, and maintains staffing throughout the system and is responsible for the financing policies and governance of the public health care system.



Who is covered and how is insurance financed?

Publicly financed health care: Singapore offers universal health care coverage to citizens, with a financing system anchored in the twin philosophies of individual responsibility and affordable health care for all. Coverage is funded through a combination of government subsidies (from general tax revenue), multilayered health care financing schemes, and private individual savings, all administered at the national level. National capital expenditures are set in the government's annual budget.

The first tier of protection comprises government subsidies of up to 80 percent of the total cost of care provided in public hospitals and primary care polyclinics. This is supported by a group of savings and insurance programs known as the "3Ms" system—for Medisave, MediShield, and Medifund—which plays a critical role in maintaining the public's health and welfare.

Medisave is a mandatory medical savings program that requires workers to contribute a percentage of their wages to a personal account, with a matching contribution from employers. Individual contributions to and withdrawals from the accounts are tax-exempt. Funds in the account are used, under strict guidelines, to pay for health services such as hospitalization, day surgery and certain outpatient expenses, and health insurance for the account holder, as well as for family members.

MediShield is a low-cost catastrophic health insurance scheme to help policyholders meet the medical expenses from major or prolonged illnesses that their Medisave balance would not be sufficient to cover. MediShield operates on a copayment and deductible system. The premiums for MediShield are payable by the insured through Medisave. Singaporeans are automatically enrolled in the program. Permanent residents are covered by MediShield, but undocumented immigrants and visitors are not covered.

Medifund is the government endowment fund set up to aid the indigent. The fund covers citizens who have received treatment from a Medifund-approved institution and have difficulties affording their medical expenses despite government subsidies, Medisave, and MediShield coverage.

Private health insurance: A range of private insurance plans are available from for-profit insurers to supplement MediShield coverage. Called Integrated Shield Plans, they are funded from individuals' Medisave accounts. Singaporeans also have the option of purchasing other types of private insurance, although premiums for these cannot be paid for with Medisave funds. Employers also may provide insurance to employees as a benefit.¹



What is covered?

Services: Subsidies are available in public hospitals and polyclinics, as well as from government-funded intermediate and long-term care providers. MediShield provides low-cost insurance coverage for treatments in the subsidized wards of public hospitals and for certain outpatient care, including kidney dialysis and cancer treatment. As a catastrophic insurance

program, MediShield generally does not cover primary care, prescription drugs, preventive services, mental health care, dental care, or optometry. Home hospice service is free of charge, while in-patient and day hospice services are subsidized based on means-testing. Governmental-funded home-based services, such as home medical and home nursing, home help, and senior home care, are also subsidized.

Cost-sharing and out-of-pocket spending: The government subsidizes a portion of the cost of patient care, based on ability to pay. Copayments after subsidy can be covered by MediShield insurance or paid for using Medisave savings. After subsidy, MediShield pays between 80 percent and 90 percent of the claimable amount that exceeds the deductible for selected outpatient treatment charges claimable under MediShield; this includes, for example, kidney dialysis, chemotherapy, and erythropoietin for chronic kidney failure. Other outpatient services are fully paid from private funds or, in some cases, employer benefits. Deductibles do not apply to outpatient treatments; instead, 20 percent coinsurance is imposed. There is no annual cap on out-of-pocket spending.

Individuals are ultimately responsible for their own health and are required to share in the cost of the health care services they use. In 2013, private spending accounted for 69 percent of total health expenditures, of which 88 percent represented out-of-pocket spending, including that covered and reimbursed by employer health insurance benefits.²

Safety net: Medifund, established in 1993, is the government-funded health care safety net for the poor. Money from the fund is disbursed each year to approved institutions, and a committee at each institution evaluates and approves financial assistance to patients. Government-funded providers can tap Medifund assistance for their patients. Medifund generally covers necessary medical treatment, including drugs, services, and tests. Medical social workers assist patients with the application process required before aid is granted. The amount of aid is determined by the patient's and the family's income, the social circumstances of the patient, the medical condition, and treatment costs. More than 90 percent of approved patients receive 100 percent coverage for the outstanding portion of subsidized bills they are unable to pay. MediShield premium subsidies are available for lower- and middle-income Singaporeans, with the subsidized percentage based on income and age. In 2013, Medifund's capital endowment was more than SGD4 billion (USD4.7 billion).³

In 2013, the government set up Medifund Junior for needy children and extended Medifund to primary care, dental services, prenatal care, and delivery services.⁴

The ElderCare fund subsidizes care for low- and middle-income patients in intermediate and long-term care facilities. The fund's endowment stands at SGD3 billion (USD3.5 billion).⁵



How is the delivery system organized and financed?

Primary care: Primary care is administered mostly by private providers, with 1,400 private clinics offering primary care.⁶ Eighteen public polyclinics (multidoctor primary care clinics) provide subsidized outpatient care, immunizations, health screenings, pharmacy services, and sometimes dental care. Although accessible to all Singaporeans, these clinics generally serve the lower-income population; the bulk of primary care is delivered by private general practitioner (GP) clinics.

Patients can choose their primary care doctor, with registration not required. Private primary care doctors make referrals but generally do not function as gatekeepers. They are usually paid on a fee-for-service basis.

The Singaporean health care system is strengthening its ties to private GP networks. The Community Health Assist Scheme, introduced in 2012, provides portable subsidies to Singaporeans from lower- to middle-income households. The scheme subsidizes visits to participating private clinics for acute conditions, specified chronic illnesses, specified dental procedures, and recommended health screening. There are about 720 participating medical clinics and about 460 dental clinics.

Outpatient specialist care: There are numerous specialty care centers, including ones focused on cancer, oral care, cardiovascular disease, diseases of the nervous system, and skin diseases. The National Heart Centre, for example, offers a full range of treatment, from prevention to rehabilitation; it is the national and regional referral center for any cardiovascular complications. Research, teaching, and training are also conducted there. Specialists who work in the public system are salaried and also may see nonsubsidized patients.

Administrative mechanisms for paying primary care doctors and specialists: The government pays subsidies directly to provider institutions, reimbursing them for a portion of treatment costs. Patients receive subsidy benefits for outpatient care provided in public clinics and public hospitals; for emergency care at public hospitals; for intermediate- and long-term care at facilities managed by voluntary welfare organizations; and, through means-testing, for care in private nursing homes. Eligible lower- and middle-income patients may receive subsidies for outpatient treatment from private primary care providers for chronic or acute conditions, as well as certain dental procedures.

After-hours care: Numerous public and private hospitals offer round-the-clock emergency care, and approximately 30 clinics throughout the country provide 24-hour care. Many other clinics have late-night hours, with lists of these posted online. A 24-hour emergency hotline can be used for contacting ambulances operated by the Singapore Civil Defence Force. A mobile 24-hour house call medical service is available as well. Information on patient visits is not routinely sent to primary care doctors.

Hospitals: General care is delivered at regional hospitals. In 2010, there were more than 11,000 beds (public and private sector) in 30 hospitals (15 public and 15 private, including specialty centers, community hospitals, and chronic care hospitals). In 2010, there were 4 million public hospital outpatient visits, two-thirds of them subsidized.⁷

Public hospitals are funded from a block budget. Part of the budget is based on the Casemix system, which classifies medical conditions using diagnosis-related groups. Hospitals can reallocate budget savings to other aspects of public health care services. The block budgets are reviewed every three to five years to ensure that subvention models keep up with changes in models of care and hospital operations. Additional government funds are available for personnel training and research.

Wards in Singapore's public hospitals are tiered in four main classes according to level of amenities. A-class wards comprise one or two-bedded rooms and have the highest level of amenities. Patients there are seen by doctors assigned by the hospital; because they are treated as private patients, their bills are not subsidized. Patients in the other wards receive means-tested subsidies that vary according to choice of ward.

The private sector provides about 20 percent of the secondary and tertiary levels of care. Private hospitals generally offer faster service and more amenities and are more involved in medical tourism than are public facilities.

Mental health care: The Institute of Mental Health is Singapore's acute tertiary psychiatric hospital. It provides psychiatric, rehabilitative, and counseling services for children, adolescents, adults, and the elderly, as well as long-term care and forensic services. Patients with addictions can be treated in the institute's National Addictions Management Services unit. Many public hospitals also offer general and specialized services for eating and sleep disorders, addiction, and geriatric psychiatric conditions.

Health care and social agencies involved in mental health are guided by the National Mental Health Blueprint of 2007. They provide integrated services such as education and prevention, early detection, and treatment for at-risk individuals and those facing emotional difficulties. The blueprint has laid the groundwork for a network of care and support systems intended to eventually enable integrated community living. To improve accessibility of services, the government is establishing multidisciplinary shared-care teams that provide treatment and care to the mentally ill through service networks in the community. It is also providing support for caregivers, building community safety networks for people with dementia and depression, and providing training and support to GPs in managing and caring for people with mental illness in their communities. There are targeted community-based mental health programs for youth, adults, and the elderly as well.

The Institute of Mental Health and voluntary welfare organizations handle most cases requiring residential care or a transition period with close supervision.

Long-term care and social supports: Voluntary welfare organizations and private operators manage long-term care services for the elderly. Services are financed in several ways, including direct payment by individuals and families; direct government subsidy to patients through providers; and capital and recurrent funding for intermediate and long-term care providers to provide means-tested subsidized care. ElderShield, a long-term care insurance program regulated by the government and run through designated private insurers, provides monthly direct cash payouts for those who can no

longer take care of themselves. Depending on which type of care and setting best suits their needs, seniors and their families can choose nursing facilities or home-based health care providers, including hospice care.

Financial support is available for informal and family caregivers. The Caregivers Training Grant, administered by the Agency for Integrated Care, provides an annual SGD200 (USD235) subsidy for caregivers to attend approved training courses in taking care of the elderly or persons with disabilities. The Foreign Domestic Worker Grant provides SGD120 (USD141) monthly for hiring a foreign domestic worker to care for the frail elderly or for an individual with at least moderate disability.

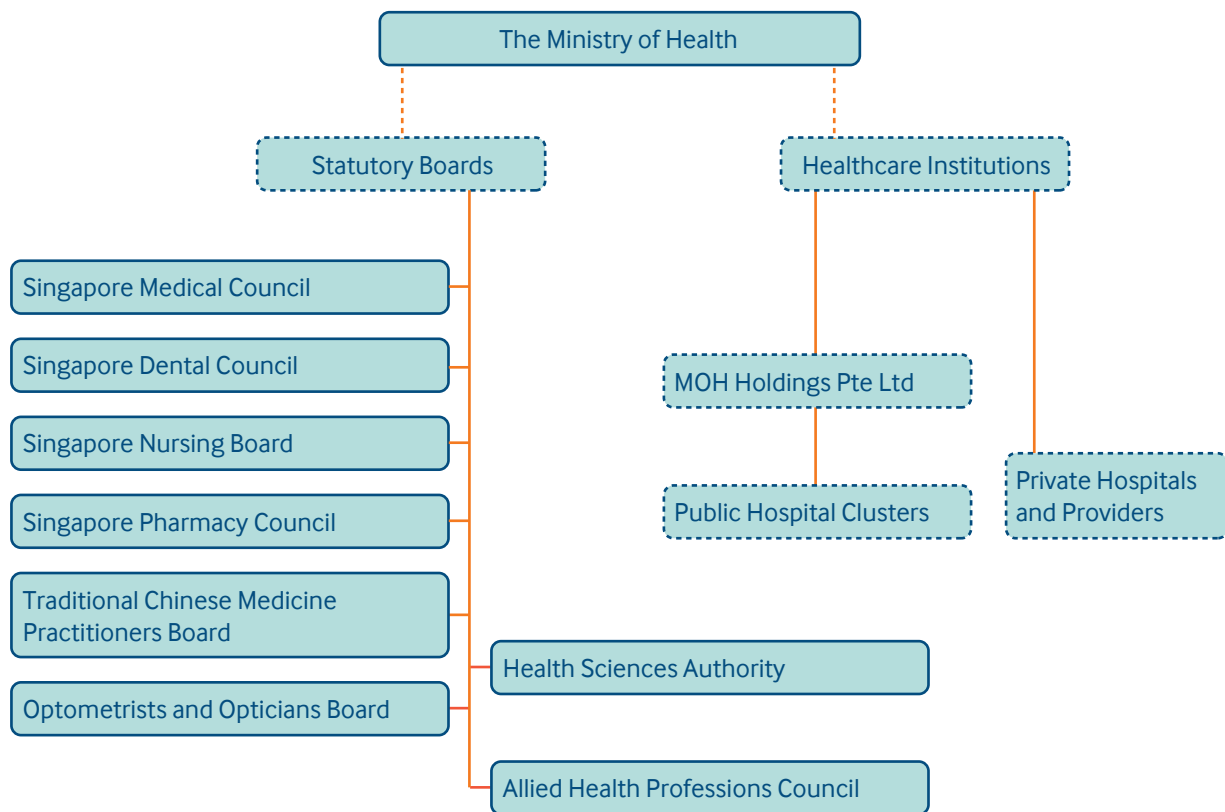
What are the key entities for health system governance?

Singapore’s Ministry of Health has overall responsibility for health care, setting policy direction, managing the public health care system, and ensuring quality of care and responsiveness of the health system to residents’ needs. Its purview includes: needs assessment, services planning, personnel planning, system governance and financing, provider fee-setting, cost control, and health information technology.

The Ministry of Health regulates the health care system through legislation and enforcement. Among its core regulatory functions are licensing health care institutions under the Private Hospitals and Medical Clinics Act and conducting regular inspections and audits. Advertising is subject to monitoring and analysis for potential problems, which can lead to compliance audits and eventual prosecution. Marketing by licensed facilities is also regulated to safeguard the public against false or unsubstantiated claims and to prevent inducement to use nonessential services, such as cosmetic procedures.

Professional bodies, including the Singapore Medical Council, Singapore Dental Council, Singapore Nursing Board, and Singapore Pharmacy Council, regulate professionals through practice guidelines and codes of ethics and conduct. The

Organization of the Health System in Singapore



Source: Adapted from Singapore Ministry of Health website.

ministry also engages these bodies to explain policy rationale and garner support for initiatives. The Health Sciences Authority regulates the manufacture, import, supply, presentation, and advertisement of health products—including conventional drugs, complementary medicines (traditional medicines and health supplements), cosmetic products, medical devices, tobacco products, and medicinal products for clinical trials. Its mission is to ensure that all meet internationally benchmarked standards of safety, quality, and efficacy. The insurance industry is regulated by the Monetary Authority of Singapore as part of its financial regulatory role.

The government consults health system stakeholders, including patients, before enacting policies to ensure that public sentiment, concerns, and feedback are taken into account; that diverse views inform the testing and refinement of ideas; and that public understanding and support are cultivated to facilitate implementation.

What are the major strategies to ensure quality of care?

Singapore's Ministry of Health conducts an annual patient satisfaction survey to gauge patient satisfaction levels and expectations regarding public health care institutions. The survey assesses waiting times, care coordination, and other health service attributes.

Public and private hospitals, clinics, laboratories, and nursing homes are required to submit applications to the ministry for licensure. Physicians wishing to practice in Singapore must secure a position with a health care institution and register with the Singapore Medical Council, which maintains the official Register of Medical Practitioners. Physicians are required to fulfill continuing medical education requirements administered by the Medical Council. For institutions, prelicensing inspections are conducted to ensure standards.

The National Health System Scorecard uses internationally established indicators to compare performance. The Public Acute Hospital Scorecard measures institution-level performance, and similar scorecards for providers are being rolled out in primary care facilities and community hospitals. Public health care institutions are monitored to ensure compliance with the standards of service and key deliverables defined by the scorecards.

In 2008, Singapore introduced national standards for health care to set priorities for improvement efforts and promote a culture of continuous quality improvement. The national standards, which focus on ensuring that public institutions provide appropriate care to satisfy patients' needs, are implemented through the network of Healthcare Performance Offices, each chaired by a senior clinical leader who reports directly to the institution's chief executive officer or medical board chairman.

What is being done to reduce disparities?

The Community Health Assist Scheme provides subsidies to Singaporeans from lower- to middle-income households to obtain treatment at private primary care providers. The subsidies cover acute conditions, 15 chronic conditions, and a range of dental procedures. Subsidies are also available for recommended screenings for obesity, diabetes, hypertension, lipid disorders, colorectal cancer, and cervical cancer.

The Central Provident Fund is the umbrella account under which Singaporeans save for retirement, housing costs, and medical care (through the "3Ms"). There have been periodic increases in both employee and employer matching contribution rates in recent years, including an increase in the Medisave employer contribution rate in 2015. Increases are intended to encourage low-wage workers to save more for their retirement and medical needs and to have better access to care, in addition to the government's additional contributions to Medisave accounts; the latter are also provided to the elderly.

What is being done to promote delivery system integration and care coordination?

Singapore's Agency for Integrated Care was created in 2009 to bring about a patient-focused integration of primary care with intermediate- and long-term care. The agency, which operates at the patient, provider, and system levels, advises patients and families on appropriate health care services and helps them navigate the health system. A primary focus is

follow-up treatment for chronic-disease patients after discharge from the hospital. Another is the expansion and improvement of health care capabilities at the community level. Currently, all six public hospital clusters in Singapore are undergoing a systemwide transformation to a regional health care system model to better integrate all care services. Hospitals will work closely with other providers in their region, such as community hospitals, nursing homes, general practitioners, and home care providers.

Another significant role for the Agency for Integrated Care is that of ensuring integration of health and social services for elderly and disabled populations. The agency coordinates and facilitates placement of individuals with nursing homes, community providers, day rehabilitation centers, and long-term care facilities; facilitates treatment at home by managing referral of patients to home care services; and assists people with applying for available financial assistance.



What is the status of electronic health records?

Singapore is building a sophisticated national electronic health record system. The system collects, reports, and analyzes information to aid in formulation of policy, monitoring of implementation, and sharing of patient records. The long-term goal is to allow medical professionals to access clinical data on patient treatment and safety.⁸

When fully developed, the system will allow data to be accessed and viewed in appropriate formats by medical professionals, patients, and researchers. Data will come from public hospitals' and polyclinics' electronic medical record systems, among other sources. There are plans to enable patients to view and possibly contribute to their personal health records in the near future.



How are costs contained?

Singapore spends 4.7 percent of its gross domestic product on health care.⁹ Costs are controlled first and foremost by fostering and controlling market competition: the government directly regulates the market when it fails to keep costs down. It also can regulate prices for services provided in the public hospitals, as well as the number of public hospitals and beds. Within this environment, private-sector providers must be careful not to price themselves out of the market.

At the same time, the government sets subsidy and cost-recovery targets for each hospital ward class, thereby indirectly keeping public-sector hospitals from producing "excess profits." Hospitals are also given annual budgets for patient subsidies, so they know in advance the level of reimbursement they will receive for patient care. They are required to break even within this budget.

The government has numerous ways of keeping the health care "demand" in check, including copayments, deductibles, and restrictions on the uses of Medisave and MediShield for consultations, treatments, and procedures. These controls discourage unnecessary doctor visits, tests, and treatments.

The Ministry of Health makes available on its website hospitals' bills for common illnesses, treatments, and ward classes. Patients can look up the costs of specific surgeries and tests, the number of cases treated in each hospital, and more.

The Group Purchasing Office consolidates drug purchases at the national level. One goal of this system is to keep drug prices affordable by containing the costs of pharmaceutical-related expenditure. The Group Purchasing Office also purchases medical supplies, equipment, and informational technology services for the health care system.



What major innovations and reforms have been introduced?

Medisave use has been expanded gradually to cover chronic conditions such as diabetes and high blood pressure, as well as health screenings and vaccinations for selected groups. The Medisave Contribution Ceiling was increased in 2016, and there is no longer a Medisave Minimum Sum.¹⁰

Changes initiated in November 2015 to MediShield Life aim to address the growing need for chronic disease care and long-term care. Coverage is now universal and compulsory and includes individuals with preexisting conditions. Previously ending at age 90, coverage is now for life. The lifetime cap on benefits has been removed, and the annual limit increased to

SGD100,000 (USD118,000). Another recent change provides better protection from large hospital bills by reducing coinsurance payments below 10 percent for the portion of the bill exceeding SGD5,000 (USD5,882). Less than 1 percent of Singaporeans will need to pay additional premiums.¹¹

In 2015, the Ministerial Committee on Ageing unveiled new features of an SGD3 billion (USD3.53 billion) national plan to help Singaporeans age with confidence, lead active lives, and maintain strong bonds with family and community. The plan encompasses about 60 initiatives covering 12 areas: health and wellness, learning, volunteerism, employment, housing, transport, public spaces, respect and social inclusion, retirement adequacy, health care and aged care, protection for vulnerable seniors, and research.

Notes

1. Figures for the percentage of the population covered by private insurance are not readily available.
2. World Health Organization, "Part III. Global Health Indicators," in *World Health Statistics 2013* (WHO, 2013), pp. 138–39, http://www.who.int/gho/publications/world_health_statistics/2013/en/.
3. Please note that throughout this profile, all figures in USD were converted from SGD at a rate of about SGD0.85 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by the World Bank (2016) for Singapore.
4. Singapore Ministry of Finance, *Budget 2015*, http://www.singaporebudget.gov.sg/budget_2015/home.aspx.
5. Ibid.
6. Ibid.
7. W. A. Haseltine, *Affordable Excellence: The Singapore Healthcare Story* (Brookings Institution Press, 2013).
8. Accenture, *Singapore's Journey to Build a National Electronic Health Record System* (2012), <http://www.accenture.com/SiteCollectionDocuments/PDF/Accenture-Singapore-Journey-to-Build-National-Electronic-Health-Record-System.pdf#zoom=50>.
9. World Bank, *World DataBank* (2014), <http://databank.worldbank.org>; accessed Oct. 14, 2014.
10. Singapore Ministry of Health, "All Singapore Residents to Enjoy Universal Coverage Under MediShield Life, with No Exclusions," press release, Sept. 21, 2015, https://www.moh.gov.sg/content/moh_web/home/pressRoom/pressRoomItemRelease/2015/all-singapore-residents-to-enjoy-universal-coverage-under-medish0.html.
11. Singapore Ministry of Health, *Better Health, Better Future for All, Ministry of Health Initiatives for 2015* (2015), https://www.moh.gov.sg/content/dam/moh_web/PressRoom/Resources/MOH%20Factsheet.pdf.

The Swedish Health Care System



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What is the role of government?

All three levels of Swedish government are involved in the health care system. At the national level, the Ministry of Health and Social Affairs is responsible for overall health and health care policy, working in concert with eight national government agencies. At the regional level, 12 county councils and nine regional bodies are responsible for financing and delivering health services to citizens. At the local level, 290 municipalities are responsible for care of the elderly and the disabled. The local and regional authorities are represented by the Swedish Association of Local Authorities and Regions (SALAR).

Three basic principles apply to all health care in Sweden:

1. *Human dignity*: All human beings have an equal entitlement to dignity and have the same rights regardless of their status in the community.
2. *Need and solidarity*: Those in greatest need take precedence in being treated.
3. *Cost-effectiveness*: When a choice has to be made, there should be a reasonable balance between costs and benefits, with cost measured in relation to improvement in health and quality of life.



Who is covered and how is insurance financed?

Publicly financed health care: Health expenditures represented 11 percent of GDP in 2014. About 83 percent of this spending was publicly financed, with county councils' expenditures amounting to almost 57 percent, municipalities' to 25 percent, and the central government's to almost 2 percent.¹ The county councils and the municipalities levy proportional income taxes on their populations to help cover health care services. In 2015, 69 percent of the county councils' total revenues came from local taxes and 17 percent from subsidies and national government grants financed by national income taxes and indirect taxes.² General government grants are designed to redistribute resources among municipalities and county councils based on need. Targeted government grants finance specific initiatives, such as reducing waiting times. In 2015, 89 percent of county councils' total spending was on health care.³

Coverage is universal and automatic. The 1982 Health and Medical Services Act states that the health system must cover all legal residents. Emergency coverage is provided to all patients from European Union/European Economic Area countries and to patients from nine other countries with which Sweden has bilateral agreements. Asylum-seeking and undocumented children have the right to health care services, as do children who are permanent residents. Adult asylum seekers and undocumented adults have the right to receive care that cannot be deferred (e.g., maternity care).

Private health insurance: Private health insurance, in the form of supplementary coverage, accounts for less than 1 percent of expenditures. Associated mainly with occupational health services, it is purchased primarily to ensure quick access to an ambulatory care specialist and to avoid waiting lists for elective treatment. Insurers are for-profit. In 2016, 635,000 individuals had private insurance, representing roughly 10 percent of all employed individuals aged 15 to 74 years.⁴



What is covered?

Services: There is no defined benefit package. The publicly financed health system covers public health and preventive services; primary care; inpatient and outpatient specialized care; emergency care; inpatient and outpatient prescription drugs; mental health care; rehabilitation services; disability support services; patient transport support services; home care and long-term care, including nursing home care and hospice care; dental care and optometry for children and young

people; and, with limited subsidies, adult dental care. As the responsibility for organizing and financing health care rests with the county councils and municipalities, services vary throughout the country.

Cost-sharing and out-of-pocket spending: In 2014, about 16 percent of all health expenditures were private; of these, 97 percent were out of pocket.⁵ Most out-of-pocket spending is for drugs.

The county councils set copayment rates, leading to variation across the country (see table below). Providers cannot charge above the scheduled fee.

Service	Fee Range (2016)	
	Swedish Kroner	U.S. Dollars
Primary care physician visit	150–300	17–33
Hospital physician consultation	200–350	22–38
Hospitalization per day	50–100	5.5–11

Source: SALAR (Swedish Association of Local Authorities and Regions), *Patientavgifter i hälso- och sjukvården*, 2016.

Nationally, annual out-of-pocket payments for health care visits are capped at SEK1,100 (USD120) per individual.⁶ In all county councils, people under age 18—and in most county councils, people under 20—are exempt from user charges for visits.

Dental care: Dental and pharmaceutical benefits are determined at the national level. People under 20 have free access to all dental care. People 20 or older receive a fixed annual subsidy of SEK150–SEK300 (USD17–USD34), depending on age, for preventive dental care. For other dental services, within a 12-month period patients 20 or older pay the full cost of services up to SEK3,000 (USD330), 50 percent of the cost for services between SEK3,000 and SEK15,000 (USD330 and USD1,643), and 15 percent of costs above SEK15,000 (USD1,643). There is no cap on user charges for dental care.

Prescription drugs: Individuals pay the full cost of prescribed medications up to SEK1,100 (USD120) annually, after which the subsidy gradually increases to 100 percent. The annual ceiling for out-of-pocket payments for prescriptions is SEK2,200 (USD240) for adults. A separate annual out-of-pocket maximum of SEK2,200 (USD 240) applies collectively to all children belonging to the same family. For certain prescription drugs not on the National Drug Benefits Scheme and not subject to reimbursement, patients must pay the full price.

Safety net: In general, all social groups are entitled to the same benefits. The ceilings on out-of-pocket spending apply to everyone, and the overall cap on user charges is not adjusted for income. Some targeted groups, such as children, adolescents, pregnant women, and the elderly, are exempt from user charges or receive subsidies for certain services, like maternity care or vaccinations.



How is the delivery system organized and financed?

The health system is highly integrated. An important policy initiative driving structural changes since the 1990s has been the shifting of inpatient care to outpatient and primary care and the concentration of highly specialized care in academic medical centers. All provider fees are set by county councils, leading to variation across the country. Public and private physicians (including hospital specialists), nurses, and other categories of health care staff at all levels of care are predominantly salaried employees. The average monthly salary for a physician with a specialist degree (including specialists in general medicine) was SEK63,000 (USD6,900) in 2015.⁷ There is no regulation prohibiting physicians (including specialists) and other staff who work in public hospitals or primary care practices from also seeing private patients outside the public hospital or primary care practice. Employers of health care professionals, however, may establish such rules for their employees.

Primary care: Primary care accounts for about 20 percent of all expenditures on health,⁸ and about 16 percent of all physicians work in this setting.⁹ There is no formal gatekeeping function. Team-based primary care, comprising general practitioners (GPs), nurses, midwives, physiotherapists, psychologists, and gynecologists, is the main form of practice. There are, on average, four GPs in a primary care practice. GPs or district nurses are usually the first point of contact for patients. District nurses employed by municipalities also participate in home care and regularly make home visits, especially to the elderly; they have limited prescribing authority.

People may register with any public or private provider accredited by the local county council; most individuals register with a practice instead of with a physician. Registration is not required to visit a practice. There are about 1,200 primary care practices, of which 40 percent are privately owned. Providers (public and private) are paid a combination of fixed capitation for their registered individuals (80%–95% of total payment), fee-for-service (5%–18%), and often performance-related payment (0%–3%) for achieving quality targets in such areas as patient satisfaction, care coordination, continuity, enrollment in national registers, and compliance with evidence-based guidelines.

Outpatient specialist care: Outpatient specialist care is provided at university and county council hospitals and in private clinics. Patients have a choice of specialist. Public and private providers are paid through the same fixed, prospective, per-case payments (based on diagnosis-related groups [DRGs]), complemented by price or volume ceilings and quality components.

Administrative mechanisms for direct patient payments to providers: Patients normally pay the provider fee up front for primary care and other outpatient visits. In most cases, it is also possible for patients to pay later.

After-hours care: Primary care providers are required to provide after-hours care. Practices in proximity to each other (normally three to five practices) collaborate on after-hours arrangements. Through their websites and phone services, providers advise their registered patients where to go for care. Staff providing after-hours primary care services normally include GPs and nurses. There is no special arrangement for provider payment, and the same copayments apply as those during regular hours. Information regarding after-hours patient visits is routinely sent to the practice where the patient is registered. In addition, seven university hospitals and about 50 county council hospitals provide full emergency services 24 hours a day.

All county councils and regional bodies provide information on how and where to seek care through their websites and a national phone line (1177), with medical staff available all day to give treatment advice. Moreover, all county councils and their regional counterparts collaborate to provide information online (at 1177.se) about pharmaceuticals, medical conditions, and pathways for seeking care.

Hospitals: There are seven university hospitals and about 70 hospitals at the county council level. Six of them are private, and three of those are not-for-profit. The rest are public. Counties are grouped into six health care regions to facilitate cooperation and to maintain a high level of advanced medical care. Highly specialized care, often requiring the most advanced technical equipment, is concentrated in university hospitals to achieve higher quality and greater efficiency and to create opportunities for development and research. Acute-care hospitals (seven university hospitals and two-thirds of the 70 county council hospitals) provide full emergency services. Global budgets or a mix of global budgets, DRGs, and performance-based methods are used to reimburse hospitals. Two-thirds or more of total payment is usually in the form of budgets, and about 30 percent is based on DRGs. Performance-based payment related to attainment of quality targets constitutes less than 5 percent of total payment. Payments are traditionally based on historical (full) costs.

Mental health care: Mental health care is an integrated part of the health care system and is subject to the same legislation and user fees as other health care services. People with minor mental health problems are usually attended to in primary care settings, either by a GP or by a psychologist or psychotherapist; patients with severe mental health problems are referred to specialized psychiatric care in hospitals. Specialized inpatient and outpatient psychiatric care, including that related to substance use disorders, is available to adults, children, and adolescents.

Long-term care and social supports: Responsibility for the financing and organization of long-term care for the elderly and for the support of people with disabilities lies with the municipalities, but the county councils are responsible for those patients' routine health care. Older adults and disabled people incur a separate maximum copayment for services commissioned by the municipalities (SEK1,772 [USD194] per month in 2016). The Social Services Act specifies that adults at all later stages of life have the right to receive public services and assistance, e.g., home care aids, home help, and meal deliveries. Also included is end-of-life care, either in the individual's home or in a nursing home or hospice. The Health and Medical Services Act and the Social Services Act regulate how the county councils and the municipalities manage palliative care. The organization and quality of palliative care vary widely both between and within county councils. Palliative care units are located in hospitals and hospices. An alternative to palliative care in a hospital or hospice is advanced palliative home care.

There are both public and private nursing homes and home care providers. About 30 percent of all nursing home and home care was privately provided in 2014,¹⁰ although the percentage varies significantly among municipalities. Payment to private providers is usually contract-based, following a public tendering process. Eligibility for nursing home care is based on need, which is determined collaboratively by the client and staff from the municipality; often a relative participates as well. National policy promotes home assistance and home care over institutionalized care, with older people entitled to live in their homes for as long as possible. Municipalities can also reimburse informal caregivers, either directly (“relative-care benefits”) or by employing the informal caregiver (“relative-care employment”).



What are the key entities for health system governance?

The county councils are responsible for the funding and organization of health care, while the municipalities are responsible for meeting the routine care and housing needs of the elderly and people with disabilities.¹¹

In primary care, there is competition among providers (public and private) to register patients, although they cannot compete through pricing, since the county councils set fees. County councils control the establishment of new private practices by regulating opening hours, clinical competencies, and other organizational aspects and by regulating financial conditions for accreditation and payment. The right to establish a practice and be publicly reimbursed applies to all public and private providers fulfilling the conditions for accreditation.

The central government, through the Ministry of Health and Social Affairs, is responsible for overall health care policies. There are eight government agencies directly involved in the areas of medical care and public health.

The National Board of Health and Welfare supervises all health care personnel, disseminates information, develops norms and standards for medical care, and, through data collection and analysis, ensures that those norms and standards are met. The board is the licensing authority for health care staff. (Health care personnel are not required to reapply for their licenses.) The agency also maintains health data registries and official statistics.

The Swedish eHealth Agency promotes information-sharing among health and social care professionals and decision-makers. It stores and transfers electronic prescriptions issued in Sweden and is responsible for transferring electronic prescriptions abroad. The agency is also responsible for statistics on drugs and pharmaceutical sales.

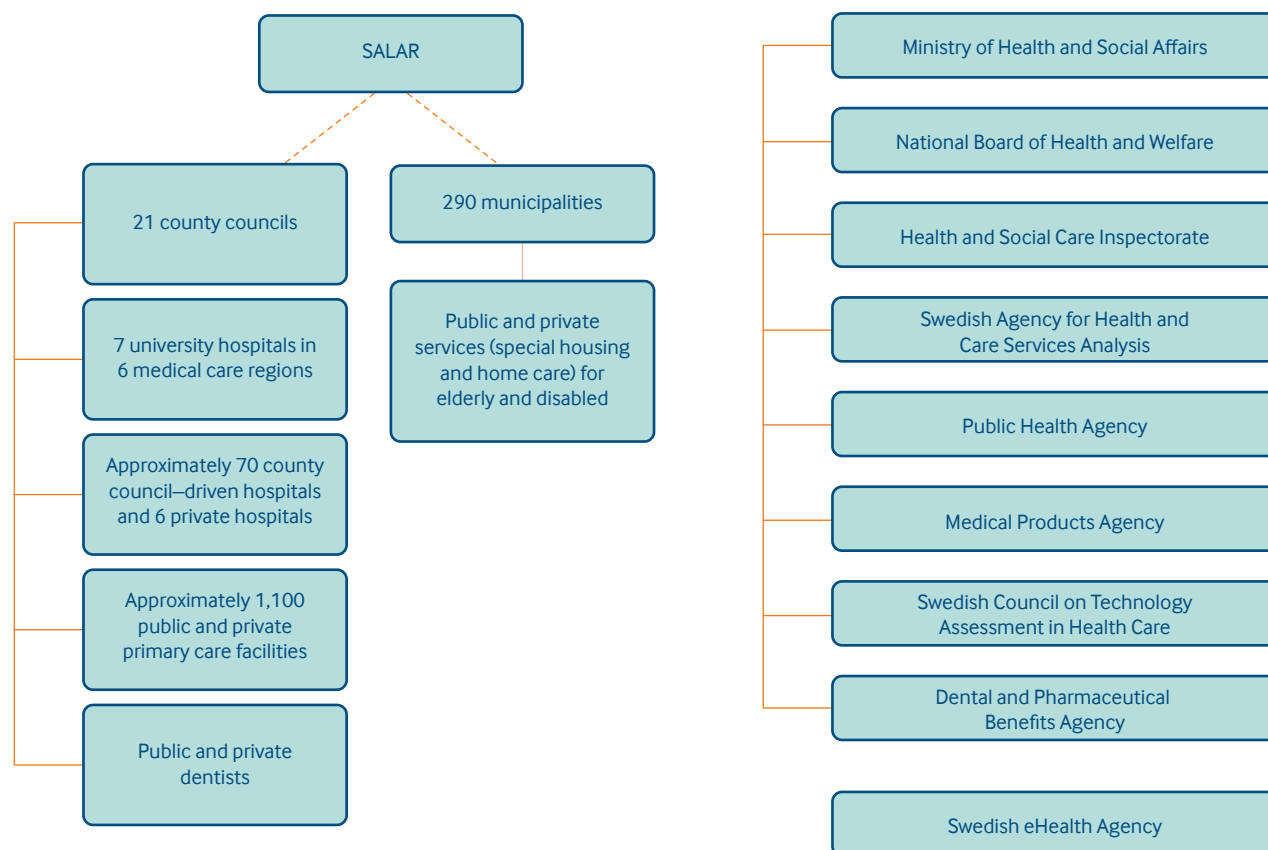
The Health and Social Care Inspectorate is responsible for supervising health care, social services, and activities concerning support and services for people with disabilities. It is also responsible for issuing permits in those areas.

The Swedish Agency for Health and Care Services Analysis analyzes and evaluates health policy and the availability of health care information to citizens and patients. The results of such analyses are published.

The Public Health Agency provides the national government, government agencies, municipalities, and county councils with evidence-based knowledge regarding infectious disease control and public health, including health technology assessment. The Swedish Council on Technology Assessment in Health Care promotes the use of cost-effective health care technologies. The council reviews and evaluates new treatments from medical, economic, ethical, and social points of view. Information from the reviews is disseminated to central and local governments and medical staff for decision-making purposes.

The principal agency for assessing pharmaceuticals is the Dental and Pharmaceutical Benefits Agency. Since 2002, it has had a mandate to decide whether particular drugs should be included in the National Drug Benefit Scheme; prescription drugs are priced in part on the basis of their value. The agency’s mandate also includes dental care. The Medical Products Agency, meanwhile, is the Swedish national authority responsible for the regulation and surveillance of the development, manufacture, and sale of drugs and other medicinal products.

Organization of the Health System in Sweden



What are the major strategies to ensure quality of care?

County councils are responsible for ensuring that health care providers deliver services of high quality. Their governance of providers includes assessing whether quality targets—those associated with a pay-for-performance scheme or tied to requirements for accreditation and its continuance—have been achieved. Providers are evaluated based on information from patient registries and national quality registries, surveys related to patient satisfaction, and dialogue meetings between providers and county councils.

Concern for patient safety has increased during the past decade, and patient safety indicators are compared regionally (see below). Eight priority target areas for preventing adverse events have been specified: health care–associated urinary tract infections; central line infections; surgical site infections; falls and fall injuries; pressure ulcers; malnutrition; medication errors in health care transitions; and drug-related complications.¹²

The National Board of Health and Social Welfare, together with the National Institute for Public Health and the Dental and Pharmaceutical Benefits Agency, conducts systematic reviews of evidence and develops guidance for establishing priorities in support of disease management programs developed at the county council level. International guidelines and specialists are also central to the development of these local programs. To reduce unnecessary variation in clinical practice, there has been a trend toward development of regional guidelines to inform priority-setting. For example, the National Cancer Strategy was established in 2009, and six Regional Cancer Centers (RCCs) were formed in 2011. The RCCs' role is to contribute to more equitable, safe, and effective cancer care through regional and national collaboration.

The more than 100 national quality registries are used for monitoring and evaluating quality among providers and for assessing treatment options and clinical practice. Registries store individualized data on diagnosis, treatment, and

treatment outcomes. They are funded by the central government and by county councils, managed by specialist organizations, and monitored annually by an executive committee.

Since 2006, the government has published annual performance comparisons and rankings of the county councils' health care services, using data from the national quality registers, the National Health Care Barometer Survey, the National Waiting Time Survey, and the National Patient Surveys. The 2015 publication included 350 indicators, organized into various categories such as prevention, patient satisfaction, waiting times, trust, access, surgical treatment, and drug treatment. Some 100 indicators are shown also for hospitals, but without rankings. Statistics on patient experiences and waiting times in primary care are also made available through the Internet (www.skl.se) to help guide people in their choice of provider.



What is being done to reduce disparities?

The 1982 Health and Medical Services Act emphasizes equal access to services according to need and a vision of equal health for all. International comparisons indicate that health disparities are relatively low in Sweden. The National Board of Health and Welfare and the Public Health Agency compile and disseminate comparative information about indicators on public health. Disparity-reduction approaches include programs to support behavioral changes and programs targeting outpatient preventive services to vulnerable groups. To prevent primary care providers from avoiding patients who have extensive needs, most county councils allocate funds based on a formula that takes into account both overall illness (based on diagnosis) and registered individuals' socioeconomic conditions.



What is being done to promote delivery system integration and care coordination?

The division of responsibilities between county councils (for medical treatment) and municipalities (for nursing and rehabilitation) requires coordination. Efforts to improve collaboration and develop more integrated and accessible services are supported by targeted government grants. In 2005, the "0–7–90–90 rule" was introduced to improve and ensure the equality of access across the country, namely: instant contact (zero delay) with the health system for advice; seeing a general practitioner within seven days; seeing a specialist within 90 days; and waiting no more than 90 days to receive treatment after being diagnosed. Between 2008 and 2014, county councils where 70 percent of all patients received care within the stipulated times were eligible for the grant targeted at accessibility.

Since 2015, the targeted grants have focused more on care coordination; they support action plans for improving coordination and collaboration at the county council level. At the provider level, performance-related payment is commonly linked to quality targets related to care coordination and compliance with evidence-based clinical guidelines, particularly for care provided to elderly patients with multiple diagnoses.



What is the status of electronic health records?

Both the quality of information technology (IT) systems and their level of use are high in hospitals and in primary care, although the type of systems used vary by care setting and by county council. Nearly all Swedish prescriptions are e-prescriptions. Patients increasingly can access their electronic medical records to schedule appointments or view personal health data, although this access varies among county councils.



How are costs contained?

County councils and municipalities are required by law to set and balance annual budgets for their activities. For prescription drugs, the central government and the county councils form agreements, lasting a period of years, on the levels of subsidy paid by the government to the councils. The central government's Dental and Pharmaceutical Benefits Agency also employs value-based pricing for prescription drugs, determining reimbursement based on an assessment of health needs and cost-effectiveness. In some county councils, there are local models for value-based pricing for specialized care such as knee replacements.

Because county councils and municipalities own or finance most health care providers, they can undertake a variety of cost-control measures. For example, contracts between county councils and private specialists are usually based on a tendering process in which costs constitute one of the variables used to evaluate providers. The funding of health services through global budgets, volume caps, capitation formulas, and contracts also contributes to cost control, as providers retain responsibility for meeting costs with funds received through those prospective payment mechanisms. In several counties, providers are also financially responsible for prescription costs.



What major innovations and reforms have been introduced?

Important policy areas that have been under scrutiny at both the local and the national level during the last two years include the quality and equity of care, coordination of care, patients' rights, and investment in e-health.

Studies following Sweden's 2010 market reform in primary care show that objectives related to accessibility have been achieved. The reform's effects on quality, equity, and efficiency, however, are unclear. Accurate reporting and monitoring to measure these criteria remain important challenges in Swedish primary care and are a concern for policymakers.

In the area of specialized care, there have been recent efforts to foster greater equity. The government has committed to providing SEK500 million (USD55 million) per year from 2015 to 2018 to reduce waiting times in cancer care and to reduce regional disparities. This effort is to be built on work previously undertaken within the framework of the National Cancer Strategy and the six Regional Cancer Centers (RCCs). In addition, a commission on equitable health, established in 2015, is to submit a report (due by the end of May 2017) detailing proposals for reducing health inequalities in society.

To improve continuity and coordination of care, in 2014 the government launched a four-year national initiative for people with chronic diseases. Its three areas of focus are patient-centered care, evidence-based care, and prevention and early detection of disease.

In 2015, a new law took effect that strengthens the rights of patients and encourages shared decision-making. The law clarifies and expands providers' responsibility in conveying information to patients, guarantees patients the right to a second opinion, and ensures choice of provider in outpatient specialist care. The government has commissioned the Swedish Agency for Health and Care Services Analysis to monitor implementation of the new law until 2017.

Finally, in 2016, the government set out a vision of Sweden as world leader in e-health by 2025. The strategy involves: 1) coordination and communication among health care stakeholders; 2) development of common concepts in the field; 3) implementation of standards for health information exchange; and 4) creation of national drug lists that assist health care professionals in efforts to improve patient safety.

Notes

1. Statistics Sweden, *Systems of Health Accounts (SHA) 2001–2014*, www.scb.se; accessed July 12, 2016.
2. Swedish Association of Local Authorities and Regions (SALAR), *Statistik inom hälso- och sjukvård samt regional utveckling: Verksamhet och ekonomi i landsting och regioner 2015* (SALAR, 2016).
3. Swedish Association of Local Authorities and Regions (SALAR), *Statistik inom hälso- och sjukvård samt regional utveckling: Verksamhet och ekonomi i landsting och regioner 2015* (SALAR, 2016).
4. Swedish Insurance Federation, <http://www.svenskforsakring.se>; accessed July 13, 2016.
5. Statistics Sweden, *Systems of Health Accounts (SHA) 2001–2014*, www.scb.se; accessed July 12, 2016.
6. Please note that, throughout this profile, all figures in USD were converted from SEK at a rate of about SEK9.13 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD (2015) for Sweden.
7. Statistics Sweden, *Lönedatabasen*, www.scb.se; accessed July 13, 2016.
8. Statistics Sweden, *Systems of Health Accounts (SHA) 2001–2014*, www.scb.se; accessed July 12, 2016.
9. Swedish Medical Association, *Läkarförbundets undersökning av primärvårdens läkarbemanning* (Sveriges läkarförbund).
10. National Board of Health and Welfare, *Äldre och personer med funktionsnedsättning—regiform år 2014* (National Board of Health and Welfare).
11. A. Anell, A. H. Glenngård, and S. Merkur, "Sweden: Health System Review," *Health Systems in Transition* 2012 14(5):1–161.
12. Swedish Association of Local Authorities and Regions (SALAR), *National Initiative for Improved Patient Safety* (SALAR, 2011).

The Swiss Health Care System

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What is the role of government?

Duties and responsibilities in the Swiss health care system are divided among the federal, cantonal, and municipal levels of government. The system can be considered highly decentralized, as the cantons play a critical role. Each of the 26 cantons (including six half-cantons) has its own constitution and is responsible for licensing providers, coordinating hospital services, and subsidizing institutions and individual premiums. The federal government plays an important role in regulating the financing of the system, which is effected through mandatory health insurance (MHI) and other social insurance; ensuring the quality and safety of pharmaceuticals and medical devices; overseeing public health initiatives; and promoting research and training. The municipalities, in turn, are responsible mainly for long-term care (nursing homes and home care services) and other social support services for vulnerable groups.

The introduction of the new Federal Health Insurance Law in 1996 had three main objectives: 1) to strengthen equality by introducing universal coverage and subsidies for low-income households; 2) to expand the benefit basket and ensure high standards of health services; and 3) to contain the growing costs of the health system.¹



Who is covered and how is insurance financed?

Publicly financed health insurance: There are three streams of public funding:

1. Direct financing for health care providers through tax-financed budgets for the Swiss Confederation, cantons, and municipalities. The largest portion of this spending is given as cantonal subsidies to hospitals providing inpatient acute care.
2. Mandatory health insurance (MHI) premiums.
3. Social insurance contributions from health-related coverage of accident insurance, old-age insurance, disability insurance, and military insurance.

All government expenditures on health are financed by general taxation. In 2014, direct spending by government accounted for 20.1 percent of total health expenditures (CHF71.2 billion, or USD55.8 billion), while income-based MHI subsidies accounted for an additional 5.6 percent.² Including MHI premiums (31.0% of total health expenditure, excluding statutory subsidies), other social insurance schemes (6.3%), and old-age and disability benefits (4.4%), publicly financed health care accounted for 67.4 percent of all spending.³

Mandatory MHI coverage is universal. Residents are legally required to purchase MHI within three months of arrival in Switzerland, and it then applies retroactively to the arrival date. Insurance policies typically apply to the individual, are not sponsored by employers, and must be purchased separately for dependents. There are virtually no uninsured residents. Temporary nonresident visitors pay for care up front and must claim expenses from any coverage they may hold in their home country. The absence of MHI for undocumented immigrants remains an unsolved problem acknowledged by the Swiss Federal Council (SFC), the highest governing and executive authority.

MHI is offered by competing nonprofit insurers supervised by the Federal Office of Public Health (FOPH), which sets floors for premiums calculated to cover past, current, and estimated future costs for insured individuals in a given region. Cantonal average annual premiums in 2016 for adults with the minimum deductible (CHF300, or USD235), the standard insurance model, and accident coverage range from CHF3,920 (USD3,074), for Appenzell Innerrhoden, to CHF6,547 (USD5,134), for Basel-Stadt.⁴ Funds are redistributed among insurers by a central fund, in accordance with a risk equalization

scheme adjusted for canton, age, gender, and hospital or nursing home stays of more than three consecutive days in the previous year.

Insurers offer premiums for defined geographical “premium regions” limited to three per canton. Within every region, the criteria for variation in premiums are limited to age group, level of deductible, and alternative insurance plans (so-called managed care plans with the main characteristic of giving up free choice of first medical contact), but variations in premiums among insurers can be significant. In 2014, 63.0 percent of residents opted for basic coverage with a health maintenance organization, an independent practice association, or a fee-for-service plan with gatekeeping provisions.⁵

Private health insurance: Private expenditure accounted for 32.6 percent of total health expenditure in 2014, which is high by comparison with other OECD countries.⁶ There is complementary voluntary health insurance (VHI, 7.2% of total expenditure) for services not covered in the basic basket of MHI and supplementary coverage for free choice of hospital doctor or for a higher level of hospital accommodation. No data are available on the number of people covered by these plans.

VHI is regulated by the Swiss Financial Market Supervisory Authority (FINMA). Insurers can vary benefit baskets and premiums and can refuse applicants based on medical history. Service prices are usually negotiated directly between insurers and providers. Unlike statutory insurers, voluntary insurers are for-profit; an insurer will often have a nonprofit branch offering MHI and a for-profit branch offering VHI. It is illegal for voluntary insurers to base voluntary insurance subscription decisions on health information obtained via basic health coverage, but this rule is not easily enforced.



What is covered?

Services: The Federal Department of Home Affairs (FDHA) defines the MHI benefit basket by evaluating whether services are effective, appropriate, and cost-effective. It is supported in this task by the FOPH and by Swissmedic, the agency for authorization and supervision of therapeutic products.

MHI covers most general practitioner (GP) and specialist services, as well as an extensive list of pharmaceuticals and medical devices; home care services (called Spitex); physiotherapy (if prescribed); and some preventive measures, including the costs of selected vaccinations, selected general health examinations, and screenings for early detection of disease among certain risk groups (e.g., one mammogram per year for women with a family history of breast cancer).

Hospital services are also covered by MHI, but are highly subsidized by the cantons. Care for mental illness is covered if provided by certified physicians. The services of nonphysician professionals (e.g., psychotherapy by psychologists) are covered only if prescribed by a qualified medical doctor and provided in his or her practice. MHI covers only “medically necessary” services in long-term care. The FOPH and Swiss Conference of Cantonal Health Ministers aim to eliminate gaps that exist in the financing of hospice care. Dental care is largely excluded from MHI, as are glasses and contact lenses for adults (unless medically necessary), but these are covered for children up to age 18.

Cost-sharing and out-of-pocket spending: Under MHI, insurers are required to offer a minimum annual deductible of CHF300 (USD235) for adults and a zero deductible for children up to the age of 18, although insured persons may opt for a higher deductible (up to CHF2,500 [USD1,960] for adults and CHF600 [USD470] for children) and a lower premium. In 2014, 22.3 percent of all insured persons opted for the standard CHF300/0 deductible, 14.7 percent had a higher deductible, and 63.0 percent chose another model with a gatekeeping element.

Insured persons pay 10 percent coinsurance above deductibles for all services (including GP consultations), but it is capped at CHF700 (USD549) for adults and CHF350 (USD274) for children up to 18 in a given year. For brand-name drugs with a generic alternative, 20 percent instead of 10 percent coinsurance is charged. For hospital stays, there is an additional charge of CHF15 (USD12) per inpatient day. Cost-sharing in MHI and VHI accounted for 5.6 percent and 0.1 percent of total health expenditure in 2014.

Out-of-pocket payments for services not covered by insurance (and in addition to cost-sharing) accounted for 18.6 percent of total health expenditure. Most of these direct out-of-pocket payments were spent on dentistry and long-term care. Providers under MHI are not allowed to charge above the fee schedule.

Safety net: Maternity care and some preventive services are fully covered and thus exempt from deductibles, coinsurance, and copayments. Children or young adults in school (up to the age of 25) do not pay copayments for inpatient care. Federal government and the cantons provide income-based subsidies to individuals or households to cover MHI premiums; income thresholds vary widely by canton.⁷ Overall, 26.9 percent of residents in 2014 benefited from individual premium subsidies.⁸ Municipalities or cantons cover the health insurance expenses of social assistance beneficiaries and recipients of supplementary old age and disability benefits.



How is the delivery system organized and financed?

Primary care: As registering with a GP is not required, people not enrolled in managed care plans generally have free choice among self-employed GPs. In 2015, 38.2 percent of doctors in the outpatient sector were classified as GPs. There are no specific financial incentives for GPs to take care of chronically ill patients, and no concrete reforming efforts are under way to engage GPs in “bundled payments” for chronic patients (e.g., diabetics). Primary (and specialist) care tends to be physician-centered, with nurses and other health professionals playing a relatively small role. In 2015, 56.1 percent of physicians were in solo practice.⁹

Apart from some managed care plans in which physician groups are paid through capitation, ambulatory physicians (including GPs and specialists) are paid according to a national fee-for-service scale (TARMED). Billing above the fee schedule is not permitted. The introduction of TARMED in 2004 aimed to improve reimbursement for GP services by giving greater weight to nontechnical services than to technical services and by incentivizing less resource-intensive forms of care. These incentives, however, are criticized by GPs as insufficient to render desirable services like home visits, after-hours care, and coordination and communication with chronically ill patients. In response, the SFC decided to slightly increase remuneration for consultations in primary care as of October 2014, while remuneration for some more technical services (such as computer tomography) has been slightly reduced. The median income of primary care doctors was CHF190,150 (USD149,109) in 2009.¹⁰

Outpatient specialist care: In the outpatient sector, 61.8 percent of doctors were classified as specialists in 2015.¹¹ Residents have free access (without referral) to specialists unless enrolled in a gatekeeping managed care plan. Specialist practices tend to be concentrated in urban areas and within proximity of acute-care hospitals. The public health system allows specialists to see MHI patients as well as private patients.

Administrative mechanisms for direct patient payments to providers: MHI allows different methods of payment among insurers, patients, and providers. Providers can invoice the patient, who pays up front and claims reimbursement from the insurer, or the patient can forward the invoice to the insurer for payment. Alternatively, providers can directly bill the insurer, who makes payment and bills any balance to the patient.

After-hours care: The cantons are responsible for after-hours care. They delegate those services (with fees set by TARMED) to cantonal doctors’ associations, which organize urgent-care networks in collaboration with their affiliated doctors. The networks can include ambulance and rescue services, hospital emergency services, walk-in clinics, and telephone advice lines run or contracted by insurers. There is no institutionalized exchange of information between these services and GPs’ offices, as people are not required to register.

Hospitals: In 2014, there were 289 hospitals (108 general and 181 specialized hospitals), with a total of 37,540 beds.¹² Hospital care represented one-third (36.4%) of total health expenditures in 2014. For services covered by MHI and billed through a national diagnosis-related group (DRG) payment system, hospitals receive around half (45%–55%) of their funding from insurers.^{13,14} The other half is covered by cantons and municipalities, or, in case of additional services, by private health insurance.

The cantons are responsible for hospital planning and funding and are legally bound to coordinate plans with other cantons. In 2012, in parallel to the introduction of the DRG system, free movement of patients between cantons was allowed, reducing cantonal fragmentation. Remuneration mechanisms depend on insurance contracts; consequently, fee-for-service for inpatient services not covered under MHI is still possible. Hospital-based physicians are normally paid a salary, and public-hospital physicians can receive extra payments for seeing privately insured patients.

Mental health care: Psychiatric practices are generally private, and psychiatric clinics and hospital departments are a mix of public, private with state subsidies, and fully private. There is also a wide range of socio-psychiatric facilities and daycare institutions that are mainly state-run and state-funded.

Psychiatric hospitals or clinics normally provide a full range of medical services such as psychiatric diagnostics and treatment, psychotherapy, pharmaceutical treatment, and forensic services. Often, the socio-psychiatric facilities and daycare institutions offer the same medical services as the clinics, but normally treat patients with less acute illnesses or symptoms. The main field of activity of mental health practices is psychotherapy; psychiatrists are allowed to prescribe medication. The provision of psychiatric care is not systematically integrated into primary care. Prices for outpatient psychiatric services are calculated using TARMED, while psychiatric inpatient care prices are usually calculated as a daily rate.

Long-term care and social supports: Services are provided for inpatient care in nursing homes and institutions for disabled and chronically ill persons and for outpatient care through Spitex. In some cases, admission is possible only through a hospital or by approval from an admission authority. Palliative care provided in hospitals, in nursing homes, in hospices, or at home is not regulated separately in MHI, so coverage of services is similar to acute services in the respective provider setting. There is no provision of individual or personal budgets for patients to organize their own services.

Inpatient long-term somatic and mental services are covered by MHI but are highly subsidized by the cantons. For services in nursing homes and institutions for disabled and chronically ill persons, MHI pays a fixed contribution to cover care-related inpatient long-term care costs; the patient pays at most 20 percent of care-related costs that are not covered, and the remaining care-related costs are financed by the canton or the municipality. Long-term inpatient care costs totaled CHF12.3 billion (USD9.7 billion) in 2014, representing 17.3 percent of total health expenditures. Around one-third of these costs (31.3%) were paid by private households, one-quarter (24.1%) by old age and disability benefits, one-fifth (19.1%) by MHI and other social insurances, and the rest by government subsidies (25.4%). Of the 1,575 nursing homes in operation in 2014, 29.2 percent were state-operated and state-funded, 30.5 percent were privately operated with public subsidies, and 40.3 percent were exclusively private.¹⁵

Almost half (47.1%) of the total Spitex expenditure of CHF2.0 billion (USD1.6 billion), as of 2014, is financed by government subsidies. MHI and the other social insurances covering the cost of medically necessary health care at home made up roughly one-third (34.9%). The rest (18.0%), devoted mainly to support and household services, was paid out-of-pocket, by old age and disability benefits, by VHI, or by other private funds.¹⁶ In 2014, one-third of Spitex organizations were subsidized nonprofit organizations (36.6%), 13.6 percent were nonsubsidized for-profit companies, and almost half (49.8%) of Spitex organizations were individual health care workers.¹⁷ At the national level, there is no legal basis for financial support for informal help or family caregivers.

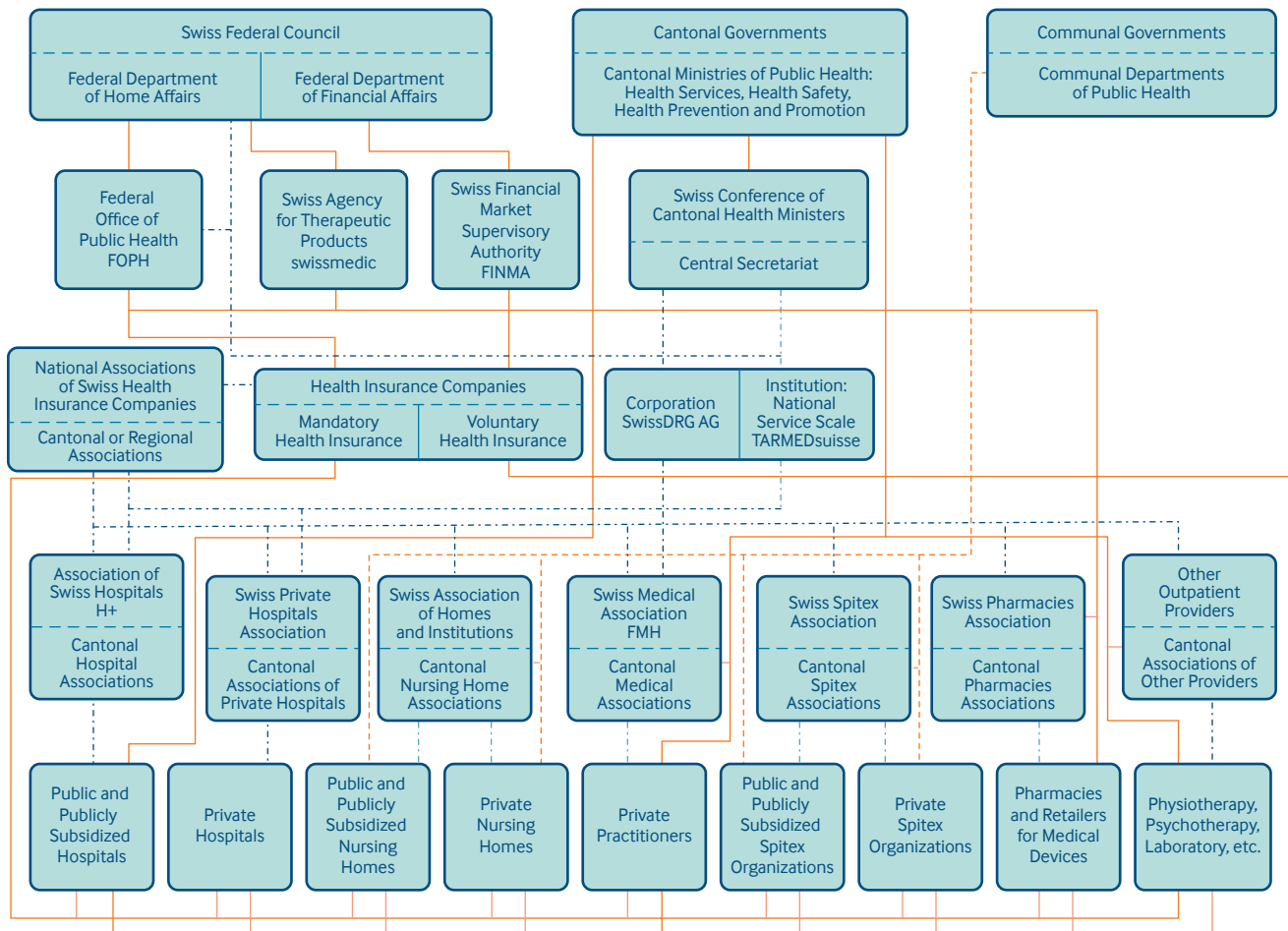
What are the key entities for health system governance?

Since health care is largely decentralized, the key entities for health system governance exist mainly at the cantonal level. Each of the 26 cantons has its own elected minister of public health. Supported by their respective cantonal offices of public health, the ministers are responsible for licensing providers, coordinating hospital services, subsidizing institutions, and promoting health through disease prevention. Their common political body, the Swiss Conference of Cantonal Health Ministers, plays an important coordinating role. At the cantonal and the national level, market pressure, i.e., from competition, is felt most by hospitals and by health insurers.¹⁸

The main national player is the FOPH, which, among other tasks, supervises the legal application of mandatory MHI, authorizes insurance premiums offered by statutory insurers, and governs statutory coverage (including health technology assessment) and the prices of pharmaceuticals. Other cost-control measures are shared with cantonal and municipal governments. The FDHA legally defines the MHI benefit basket. Professional self-regulation has been the traditional approach to quality improvement.

Prices for outpatient services are set using the fee-for-service scale TARMED, which defines the relative cost weights of all services covered by MHI at the national level and is authorized by the Swiss Federal Council. TARMED values can vary among cantons and service groups (e.g., physicians, outpatient hospital services). They are negotiated annually between

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Source: P. Camenzind, Swiss Health Observatory, 2015.

the health insurers' associations and cantonal provider associations or may be set by cantonal government if the parties cannot agree. For inpatient care, the Swiss national DRG system is in use as of 2012. The nonprofit corporation SwissDRG AG is responsible for defining, developing, and adapting the national system of relative cost weights per case.

In addition to the responsibilities of the FOPH and cantonal governments, Health Promotion Switzerland, a nonprofit organization financed by MHI, is legally charged with disease prevention and health promotion programs and provides public information on health. The Association of Swiss Patients and a national ombudsman for health insurance engage in patient advocacy.

What are the major strategies to ensure quality of care?

Providers must be licensed to practice medicine and are required to meet educational and regulatory standards; continuing medical education for doctors is compulsory. Local quality initiatives, often at the provider level, include the development of clinical pathways, medical peer groups, and consensus guidelines. However, there are no explicit financial incentives for providers to meet quality targets.

Increasing the quality of care is a priority of the federal strategy Health2020. The strategy includes the implementation of a national network for quality and of national quality programs in fields like medication safety and hospital infections.¹⁹ In 2008, the Swiss Inpatient Quality Indicators were introduced to monitor and evaluate the quality of care provided by acute-care hospitals. In addition, the National Association for Quality Improvement in Hospitals and Clinics (ANQ) publishes quality indicators for hospital inpatient care based on registries or patient surveys. Some registries are the result of private initiatives, while others, such as the cantonal cancer registries, are organized by the cantons themselves.



What is being done to reduce disparities?

The Swiss Federal Council's national Health2020 strategy²⁰ includes the explicit objective of improving the health opportunities of the most vulnerable population groups, such as children and the young, those on low incomes or with a poor educational background, the elderly, and immigrants. The aim is to prevent vulnerable population groups from being unable to make appropriate use of necessary health care services. Health and health access variations are measured and reported publicly by the Swiss Health Survey every five years.²¹



What is being done to promote delivery system integration and care coordination?

Care coordination is an issue, particularly in light of a projected lack of health professionals in the future and the need to improve efficiency to increase capacity. The task force Dialogue on National Health Policy discusses existing and new approaches to care. The national Health2020 strategy includes a comprehensive projection of the priorities of health care policy until the year 2020. The strategy also addresses care coordination, stating that integrated health care models need to be supported in all areas. The FOPH works on implementing concrete measures to confront these challenges.

Strategies and networks tackling emerging areas of importance, like palliative care, dementia, and mental health, have been created to improve coordination. They start at the conceptual level and design pilot projects, aiming at the practical level to encourage different types of health professionals to work together. *The National Health Report 2015* discusses the growing number of case management programs for chronically ill patients, but pooled funding streams do not yet exist.²² It is also worth noting the efforts in the area of e-health, which should considerably improve care coordination.



What is the status of electronic health records?

In June 2015, a law addressing the national electronic patient record was adopted; it will come into effect in 2017 and should increase care coordination, quality of treatment, patient safety, and efficiency in the health care system. Insured persons are free to opt into such a record and to decide who is allowed to have access to specific details of their treatment-related information. The records are being stored in decentralized form. Providers will have to take part in certified communities (organizational units of health specialists and their institutions) to be able to read the records. Whereas ambulatory providers are not obliged to join such communities, hospitals and long-term care institutions are legally bound to join and to offer their services using an electronic patient record.

For some years, a national e-health coordination service called eHealth Suisse (an administrative unit of the FOPH) has been in place under the joint responsibility of the federal and cantonal governments. The confederation will provide partial funding for the development of networks constituting the infrastructure for the electronic patient record.

GP e-health is still at an early stage,²³ and there are ongoing discussions about incentives for physicians to adopt new technologies. Hospitals are generally more technologically advanced; some have merged their internal clinical systems in recent years and hold interdisciplinary patient files. However, the extent of this integration varies greatly among hospitals and among cantons.



How are costs contained?

Switzerland's health care costs are among the highest in the world. In 2014, total health expenditure represented 11.1 percent of GDP.²⁴ "Regulated competition"²⁵ among nonprofit health insurers and among service providers is aimed at containing costs and guaranteeing high-quality health care and at establishing solidarity among the insured. Such were the objectives of MHI, introduced in 1996. While most of these objectives were achieved, there has been criticism of competition's capacity to control health care costs.²⁶ A global budget, however, has never been regarded as a possible remedy for this problem. Failures are ascribed largely to inadequate risk equalization, the dual funding of hospitals, and pressure on insurers to contract with all certified providers.²⁷ In 2013, the FDHA postulated that the costs of providing mandatory benefits in the health system could be reduced by up to 20 percent.²⁸

An overview of possible cost-reducing measures is part of the Health2020 strategy. The strategy outlines a need for further flat-rate remuneration mechanisms and revision of existing fee schedules to limit incentives for service providers. Also mentioned is the need to concentrate highly specialized medicine in fewer sites to eliminate inefficiency and duplicated infrastructure and to increase the quality of treatments through more-experienced teams of providers. SwissDRG AG was introduced to contain hospital costs. Inpatient capacity is subject to cantonal planning requirements, and there is a "necessity clause" for outpatient providers.

To control pharmaceutical costs, coverage decisions on all new medicines are subject to evaluation of their effectiveness (by Swissmedic) and cost (by the FOPH). Efforts are being made to reassess the prices of one-third of existing drugs every year. Depending on national market volume, generics must be sold for 20 percent to 50 percent less than the original brand. In addition to the aforementioned 20 percent coinsurance consumers pay for brand-name drugs, pharmacists are reimbursed flat amounts for prescriptions, so they have no financial incentive to dispense more-expensive drugs.



What major innovations and reforms have been introduced?

As discussed throughout this profile, the Health2020 strategy outlines important national topics, objectives, and measures for improving the quality of life, promoting equal opportunity and self-responsibility, ensuring and enhancing the quality of care, and creating more transparency, better governance, and closer coordination. In concrete terms, the SFC is pursuing the following 10 priorities in 2016²⁹:

- Adoption of the revised radiation protection regulations
- A decision on how to proceed with the total revision of the Federal Act on the Genetic Testing of Human Beings
- Adoption of the national strategy for the prevention of noncommunicable diseases
- Adoption of the revised regulation of risk adjustment in health insurance
- Consultation on the modification of the federal law on health insurance for the introduction of a reference price system
- Adoption of resources to create a health technology assessment unit
- Consultation on revision of the inclusion of complementary medical services in mandatory health insurance
- A decision on the introduction of the federal law on electronic patient records
- Adoption of the Suicide Prevention Action Plan
- Adoption of the dispatch on the approval and implementation of the Medicrime Convention of the Council of Europe.

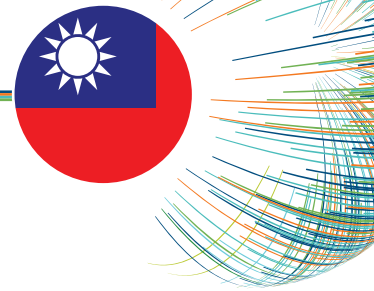
The author would like to acknowledge Paul Camenzind and David Squires as contributing authors to earlier versions of this profile.³⁰

Notes

1. Swiss Federal Council (SFC), *Botschaft über die Revision der Krankenversicherung* (SFC, 1991).
2. Please note that, throughout this profile, all figures in USD were converted from CHF at a rate of CHF1.28 per USD, the purchasing power parity conversion rate for GDP in 2015 reported by OECD for Switzerland: Organisation for Economic Co-operation and Development, *OECD Health Statistics 2016*, <http://www.oecd.org/els/health-systems/health-data.htm>; accessed Aug. 17, 2016.
3. Swiss Federal Statistical Office (FSO), *Costs and Financing of the Health Care System 2014* (FSO, 2016).
4. Swiss Federal Office of Public Health (FOPH), *Statistik der obligatorischen Krankenversicherung 2014* (FOPH, 2016).
5. Ibid.
6. FSO, *Costs and Financing of the Health Care System 2014*, 2016; and Organisation for Economic Co-operation and Development (OECD), *Reviews of Health Systems: Switzerland*, (OECD, 2011).
7. Swiss Conference of Cantonal Health Ministers, http://www.gdk-cds.ch/fileadmin/docs/public/gdk/themen/krankenversicherung/praemienverbilligung/ipv_2016_df_def.pdf; accessed Aug. 17, 2016.
8. FOPH, *Statistik der obligatorischen Krankenversicherung 2014*, 2016.
9. S. Hostettler and E. Kraft, "FMH-Ärztstatistik 2015: Zuwanderung grundlegend für Versorgungssystem," *Schweizerische Ärztezeitung* 2016 93(38):1371–75.
10. K. Künzi and S. Strub, "Einkommen der Ärzteschaft in freier Praxis: Auswertung der Medisuisse-Daten 2009," *Schweizerische Ärztezeitung* 2012 97(12–13):448–53.
11. Hostettler and Kraft, *FMH-Ärztstatistik 2015: Zuwanderung grundlegend für Versorgungssystem*, 2016.
12. Swiss Federal Statistical Office (FSO), *Krankenhausstatistik—Standardtabellen 2014* (FSO, 2016).
13. These include private hospitals that receive public subsidies if the cantonal governments have need of their services to guarantee a sufficient supply for the population.
14. Swiss Conference of Cantonal Health Ministers, <http://www.gdk-cds.ch/index.php?id=942>; accessed Aug. 17, 2016.
15. Swiss Federal Statistical Office (FSO), *Statistik der sozialmedizinischen Institutionen—Standardtabellen 2014* (FSO, 2016).
16. FSO, "Costs and Financing of the Health Care System 2014," 2016.
17. Swiss Federal Statistical Office (FSO), "Statistik der Hilfe und Pflege zu Hause—Spitex-Statistik 2014," Neuchâtel: FSO, 2016.
18. OECD, *Reviews of Health Systems: Switzerland*, 2011.
19. Swiss Federal Council (SFC), "Mehr Patientensicherheit dank nationalen Qualitätsprogrammen," press release, Dec. 7, 2015.
20. Swiss Federal Department of Home Affairs (FDHA), *The Federal Council's Health-Policy Priorities* (FDHA, 2013), <http://www.bag.admin.ch/gesundheit2020/index.html?lang=en>; accessed Aug. 17, 2016.
21. Swiss Federal Statistical Office (FSO), *Schweizerische Gesundheitsbefragung—Standardtabellen 2012* (FSO, 2014).
22. Swiss Health Observatory (Obsan), *National Health Report 2015* (Hogrefe, 2015).
23. C. Merçay, *Médecins de premier recours—Situation en Suisse, tendances récentes et comparaison internationale. Analyse de l'International Health Policy Survey 2015 du Commonwealth Fund sur mandat de l'Office fédéral de la santé publique (OFSP)* (Observatoire suisse de la santé, 2015).
24. FSO, *Costs and Financing of the Health Care System 2014*, 2016.
25. A. C. Enthoven, "The History and Principles of Managed Competition," *Health Affairs* 1993 12(1):24–48.
26. OECD, *Reviews of Health Systems: Switzerland*, 2011.
27. Ibid.
28. FDHA, *The Federal Council's Health-Policy Priorities* (2013).
29. Swiss Federal Council (SFC), "Gesundheit2020: zehn Prioritäten für 2016," press release, May 18, 2016.
30. P. Camenzind, "The Swiss Health Care System, 2015," in E. Mossialos, M. Wenzl, R. Osborn, and D. Sarnak (eds.), *International Profiles of Health Care Systems, 2015* (The Commonwealth Fund, Jan. 2016).

The Taiwanese Health Care System

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What is the role of government?

Article 157 of the constitution of Taiwan, Republic of China, calls for the national government to promote health maintenance and implement the public provision of health care for all citizens. That article is the constitutional platform for the National Health Insurance Act, passed by Taiwan's legislature in 1994.

The act stipulates that national health insurance is compulsory and that the government is to provide health care and medical services to the insured in case of illness, injury, and childbirth. It further stipulates that the government and contracted providers should regularly make public information on the quality of health care.

The National Health Insurance program (NHI) is administered by the National Health Insurance Administration (NHIA) under the Ministry of Health and Welfare (MoHW) through six regional offices supported by a health information infrastructure. Municipal and district governments may offer additional benefits for residents within their jurisdiction, such as subsidies for out-of-pocket costs for poor residents.



Who is covered and how is insurance financed?

Publicly financed health insurance: Enrollment in NHI is mandatory for all citizens and for foreigners residing in Taiwan for longer than six months. As of 2016, 99.9 percent of the population is enrolled.

The NHI is predominantly a premium-based social health insurance system. Sixty-eight percent of revenue is derived from payroll-based premiums; 27 percent from supplementary premiums levied on nonpayroll income (large bonuses, professional fees, wages from second and third jobs, and incomes from dividends, interests, rents); and 5 percent from tobacco tax and lottery gains.¹ Government accounts for 23.3 percent of payroll-based premiums; households account for 38.2 percent; and employers account for 38.6 percent.² In 2016, rates for payroll-based and supplementary premiums are 4.69 percent and 1.91 percent, respectively.³

During most of the period 1998 to 2010, NHI expenditures nearly always exceeded revenues. However, by raising the premium rate from 4.55 percent to 5.17 percent of payroll income in 2010⁴—the second increase in its then 15-year history—the NHIA began to accumulate surpluses starting in 2012.

Premium contributions are calculated on a per capita basis but are limited to a maximum of four members per household (the insured plus three dependents). Any additional members are covered for free. Premiums are paid monthly, with nearly all Taiwanese paying their premiums on time.⁵

Private health insurance: Private health insurance consists of disease-specific cash indemnity policies. Patients can use the cash for private hospital rooms or products, such as drug-eluting stents, not covered by the NHI. Private policies do not cover medical services covered by the NHI, nor do they buy faster access to specialists, diagnostic tests, or choice of specialists. As a component of total health expenditures, however, private coverage is growing, although the exact extent is unknown.



What is covered?

Services: NHI benefits are uniform and comprehensive. They include inpatient and outpatient care (both primary and specialist care), prescription drugs, dental care (excluding orthodontics and prosthodontics), traditional Chinese medicine, child birth care, physical rehabilitation, home care, chronic mental health care, and end-of-life care.

The NHIA determines which services are covered in consultation with a broad spectrum of stakeholders. Coverage decisions are subject to considerations of their budget impact (see below).

Cost-sharing and out-of-pocket spending: The NHIA mandates copayments for physician visits and prescription drugs, and coinsurance for inpatient care, subject to limits and exemptions (discussed below). Copayments for care obtained without referral are higher. Copayments range from NTD80 (USD2.58) to NTD360 (USD12), depending on the level of the hospital visited.

Coinsurance for inpatient care varies by length of stay and type of bed (acute or chronic). For example, the coinsurance rate for an inpatient stay shorter than 30 days is 5 percent for chronic beds and 10 percent for acute beds.⁶ In 2015, the coinsurance limit for an episode of care was USD1,063 (NTD33,000) and USD1,803 (NTD56,000) for an inpatient stay for the same illness or condition.⁷

In 2014, out-of-pocket health care spending, as officially reported, accounted for 34.7 percent of total national health expenditures.⁸ However, this overstates what the Organisation for Economic Co-operation and Development (OECD) counts as out-of-pocket spending, as Taiwan includes spending on items not included in OECD data, such as infant formula, baby diapers, dietary supplements, health foods, Chinese herbal medicine, private hospital rooms, cosmetic surgery, and high-tech surgical procedures. According to a former NHIA administrator, out-of-pocket spending associated with necessary health care, including medical care, dental care, and prescription drugs, amounted to 12.1 percent of Taiwan's national health expenditures in 2012, a figure more in line with the OECD norm.⁹

Safety nets: The NHI provides a generous safety net for disadvantaged populations, including the very sick, that ensures access to needed services. Outpatient copayments for people with physical or mental disability are limited to NTD50 (USD1.671). Copayments are also reduced for elderly adults with chronic disease who are enrolled in the Hospital Patient-Centered Integrated Care Plan (discussed below). In addition, copayment exemptions apply to childbirth and 30 catastrophic diseases and conditions, as well as to residents of remote and mountainous areas and offshore islands, veterans, families of diseased veterans, low-income households, children under age 3, tuberculosis patients, and others.¹⁰ Since 2013, for residents of underresourced areas, copayments were reduced by 20 percent, and copayments for home care were halved, from 10 percent to 5 percent for residents of underserved areas and for those who have difficulty traveling to providers for care.¹¹

Those living in remote and mountainous areas and off-shore islands also have access to needed services through the Integrated Delivery System.

The NHIA also provides insurance premium subsidies. For example, it pays 100 percent of premiums for low-income households, military personnel, veterans, civil servants (including public school teachers), and convicts; 70 percent for dependents of veterans and members of farmer, fishermen, and irrigation associations; and 35 percent for private school teachers.

Finally, to protect the right to care of people with MoHW-recognized rare diseases, the NHIA waives copayments for all drugs necessary to keep them alive.



How is the delivery system organized and financed?

Primary care: Approximately 40 percent of Taiwan's physicians practice in their own private clinics. From 80 percent to 90 percent of clinics are solo practices; the remainder are group practices.¹² Nearly all private clinics (98%) contract with the NHIA to deliver services.

Only about 5 percent of all clinic doctors have received formal training in family medicine.¹³ The rest are specialists. In recent years, there has been a trend toward multispecialty group practices.

There is no requirement to register with a primary care physician, making care coordination difficult. Utilization of physician services has been high: the average number of office visits per person per year was 12.6 in 2012, significantly higher than the median for OECD countries (6.3), though lower than Korea (14.3) and Japan (12.9).¹⁴

Physicians are paid predominantly on a fee-for-service basis, according to national uniform fee schedules set by the NHIA, with stakeholder inputs, under the primary care global budget. To maximize their revenue, physicians compete fiercely for patients, although not on price. Pay-for-performance and capitation-based payment are currently being tried on a pilot basis.

Other sources of physician income are patient registration fees paid at the time of visit, services and goods not covered by the NHI, and copayments.

For most of NHI's history, no balance billing was permitted for either physician or hospital services. In recent years, however, the NHIA has made exceptions for six medical devices (intraocular lens implants, drug-eluting and bioactive stents, artificial ceramic knee joints, metal-on-metal artificial hip joints, bioprosthetic heart valves, and programmable ventriculoperitoneal shunts); patients opting for these devices pay the difference between the NHI fees and the actual price charged.¹⁵

Outpatient specialist care: Patients in Taiwan also have free choice of hospital-based specialists on an outpatient basis, with or without referrals. This has led to overcrowding in hospital outpatient departments, especially at large hospitals and major medical centers. To discourage people from doctor- and hospital-shopping or from accessing tertiary care without referral, the NHIA in recent years established graduated patient registration fee and copayment schedules, whereby patients without referrals pay higher fees and copays.

Hospital-based physicians, including outpatient specialists, are salaried employees. They are eligible for bonuses pegged to productivity—volume of services delivered, papers published, and public lectures given, among other activities.

After-hours care: There are no formal after-hours care provisions. Although the hospital association and the NHIA have an agreement to provide telephone consultation after hours, the future of the arrangement is uncertain, as physician associations mandate that doctors must “rest” on weekends.¹⁶ Telephone consultation is, however, available 24 hours for the 2.5 million people (10.6% of the population) who are enrolled in the Family Physicians Integrated Care Plan.¹⁷

That said, lack of after-hours care is not viewed as a serious problem. Many physician clinics are open until 9:00 p.m. and on Saturdays. Outside these hours, patients visit one of Taiwan's more than 400 hospital emergency departments, where access is generally considered convenient and affordable.¹⁸ In recent years, however, emergency departments have experienced increasing traffic.¹⁹

Hospitals: As of 2014, of the 486 hospitals for Western medicine in Taiwan, 454 are accredited (93.4%), including 78 of 80 public hospitals and 376 of 406 private hospitals.²⁰ All accredited hospitals contract with the NHIA to deliver services, with contracts renewed on three-year intervals upon passing evaluation. By law, hospitals are nonprofit. Hospitals in Taiwan have a closed-staff structure: once patients are admitted, on-staff physicians assume responsibility for their care. Hospital-based physicians see patients in the hospital on both an inpatient and outpatient basis.

Hospitals in Taiwan provide both inpatient and outpatient services and derive revenues from a nationwide global hospital budget set by the NHIA (unlike in many other countries, where hospitals receive individual global budgets for operations). That overall national budget is divided into six regional budgets administered by the NHIA's six regional offices. Under this arrangement, competition for revenues is intense among the hospitals in each region.

Hospitals are paid based on diagnosis-related groups (DRGs) as well as on uniform national fee schedules set by the NHIA with input from stakeholders. As of 2016, there were 401 DRGs, which accounted for 22 percent of all hospital payments. When fully implemented, the battery of 1,062 DRGs will account for 60 percent of total hospital expenditures.²¹

Hospitals also derive revenues from non-NHI-covered services and goods, copayments for outpatient visits and coinsurance for inpatient services, and registration fees collected at the time of service.

Access to care has been generally convenient: 85 percent of patients reach a hospital or clinic in less than 30 minutes, and 83 percent of patients wait 30 minutes or less before being seen by a doctor. There are essentially no waiting lines.²²

Mental health care: Mental health services are a covered benefit. As of 2014, Taiwan had 32 acute mental health beds and 59 chronic mental health beds per 100,000 population, respectively.²³ These represent a 21 percent increase in mental health beds between 2003, when there was an acute shortage, and 2013.^{24,25}

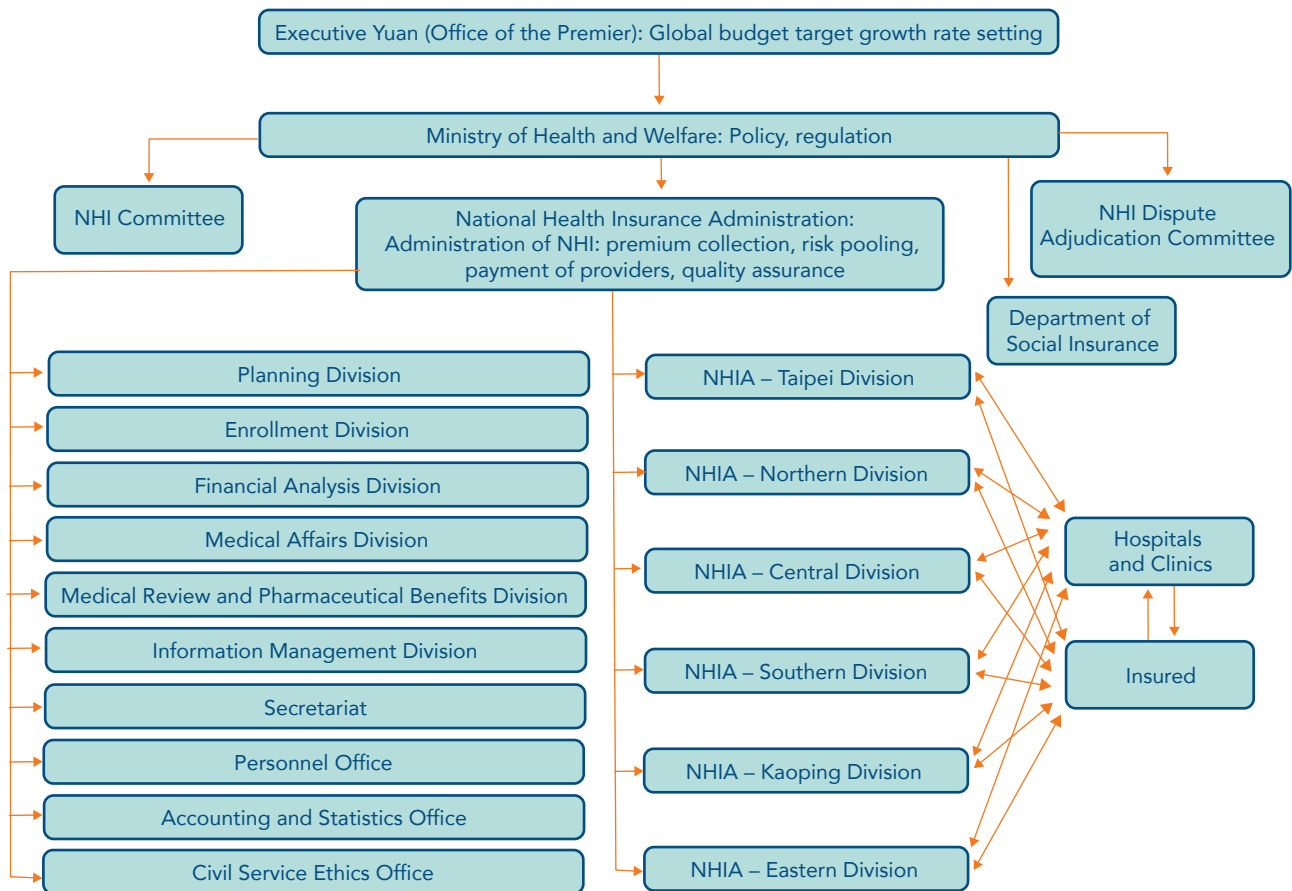
NHI also covers mental health services on an ambulatory basis, at either private clinics or hospital outpatient mental health departments, as well as day care for patients with mental illness.

Long-term care and social supports: Taiwan did not yet have a formal long-term care (LTC) program as of 2016 but needs one urgently to meet the growing needs of a rapidly aging population. As of 2016, 13.2 percent of Taiwan’s population was age 65 or over, a percentage expected to increase to 24.1 percent by 2030 and 36.9 percent by 2050.²⁶ Moreover, the number of people with disabilities reached 3.45 percent of the population in 2016 and continues to grow.

The previous government had hoped to implement an LTC system by 2016, but this did not happen. With the change in government in May 2016, there are unresolved issues related to LTC financing, benefits, eligibility, staffing, and workforce. For example, the current government abandoned the previous administration’s decision to finance LTC via premiums, instead opting for tax-based system of financing. In September 2016, the premier’s office passed the “Long-Term Care Ten-Year Plan 2.0” to promote capacity building and widespread distribution of LTC resources, with the principle objective of establishing an integrated, comprehensive community-based LTC system. As of the end of 2016, LTC in Taiwan remains a work in progress. Lack of LTC workforce, inadequate facilities, service fragmentation, and quality control remain major challenges.

Meanwhile, through its new integrated home care program, the NHI provides home care for the elderly and disabled, including visits by physicians and nurses, community services, and end-of-life care. In the Economist Intelligence Unit’s 2015 “quality of death” rankings of 80 countries, Taiwan came in sixth, and first in Asia.²⁷ (The top 10 countries in 2015 were: the United Kingdom, Australia, New Zealand, Ireland, Belgium, Taiwan, Germany, the Netherlands, the United States, and France.)

Organization of the Health System in Taiwan





What are the key entities for health system governance?

As Taiwan has a single-payer health system, governance is fairly straightforward, with the MoHW responsible for policy and the NHIA for administration of health insurance coverage. NHIA tasks include premium collection, risk-pooling, and provider payment, as well as oversight of utilization, delivery, and quality of NHI services through a powerful information technology (IT) system.

One of the MoHW's most important tasks is to decide by how much the NHI global budget should grow each year. The process is as follows:

January–April: MoHW performs due diligence to come up with a proposed global budget growth rate for the next year.

April–May: MoHW sends to the Office of the Premier a proposed lower and upper ceiling for growth.

May–June: The National Development Council reviews the MoHW's proposal and determines a range for the growth rate and sends it back to the MoHW.

September–December: The MoHW's 35-member multistakeholder National Health Insurance Committee meets to negotiate the specific growth rate for each of the five sectoral global budgets—primary care, hospital, dental, traditional Chinese medicine, and renal dialysis. Once the NHI Committee reaches consensus, the minister approves a fixed growth rate and sends it to the NHIA for implementation.

Two other MoHW agencies play a role in the NHI. The National Health Insurance Mediation Committee oversees claims disputes brought by providers and premium collection disputes brought by individuals and employers. The Department of Social Insurance, meanwhile, helps monitor the NHIA's operations and may make recommendations to the minister on cases referred to the ministry from the NHIA.

In addition to debating and negotiating with the government on new health legislations or their amendment, Parliament plays an important watchdog role regarding the NHI. For any premium rate increases beyond 6 percent, Parliament must pass an amendment to the NHI Act.



What are the major strategies to ensure quality of care?

Major MoHW quality-monitoring systems and the offices governing them include:

- Hospital accreditation and patient safety (Department of Medical Affairs)
- NHI program administration (National Health Insurance Administration)
- Communicable disease control (Centers for Disease Control and Prevention)
- Cancer prevention and control (Health Promotion Administration)

Major NHIA strategies to ensure quality of care fall into three broad categories:

1. *Payment incentives*: A number of programs have specific funding to improve quality, such as extra bonuses for serving patients in remote and mountainous areas or offshore islands (integrated delivery system [IDS] plans) and pay-for-performance schemes for management of chronic conditions, including asthma, diabetes, breast cancer, and schizophrenia.
2. *Claims management and reviews*: Because of the massive volume of claims submitted each day, the review process follows two tracks: a fully automated procedural review utilizing profile analysis based on specific medical criteria and a peer review of randomly selected claims.
3. *Information-sharing and transparency*: Public reporting systems targeting hospitals and pharmaceuticals (see discussion of PharmaCloud below) are in place to improve quality and reduce waste.

The NHIA has developed several hundred quality indicators, some intended for pay-for-performance schemes, some for calculating global budgets, and others for public disclosures and claims review.²⁸ Many of these serve the dual purpose of improving quality and reducing costs. Important national programs for quality assurance and improvement include:

- Integrated delivery system (IDS) plans (discussed earlier)
- Pay-for-performance disease-management programs (discussed above)
- Family Physicians Integrated Care Plan
- Hospital Patient-Centered Integrated Care Plan for outpatients age 65 and older with two or more chronic conditions
- Capitation Pilot Project
- NHI PharmaCloud (see below)
- My Health Bank (see below)
- Post-Acute Care Pilot Project for stroke patients
- Integrated Post-Acute Care program for burn patients
- Artificial Joints Registry System to improve patient safety, reduce amenable mortality from unsafe artificial joints, and quality of care (launched in 2016).

Each July, the NHI Committee meets with scholars and experts to review and grade the five sectoral global budgets for their performance on service delivery, quality, public satisfaction, inappropriate use of resources, and other criteria. There are five grades: exceptional, excellent, good, fair, and bad (the last of which has never been assigned). Each sectoral global budget's funding allocation increase for the following year is based on the grade it receives—a 0.5 percent increase for exceptional, 0.3 percent for excellent, and so on.²⁹



What is being done to reduce disparities?

Taiwan guarantees a right to health care. Everyone receives the same level of care based on the national uniform benefit package, regardless of ability to pay. More than 3 million economically disadvantaged Taiwanese (12.8% of the population) have full access to NHI services, owing to the NHIA's various financial and access assistance measures, including premium subsidies and copayment reductions or exemptions (discussed earlier). In recent years, the government has lowered the income threshold to allow more people to become eligible for these subsidies.

The NHIA also makes interest-free loans and installment plans available to those who cannot pay their premiums on time because they are temporarily unemployed or between jobs.

Other programs to ensure access to care and financial protection, such as IDS plans, are discussed elsewhere in this profile.



What is being done to promote delivery system integration and care coordination?

Improved delivery system integration and care coordination have been on the NHIA's agenda for many years. Many such initiatives are discussed earlier in this profile.



What is the status of electronic health records?

To make it convenient to access care, everyone in Taiwan carries an electronic NHI card with a unique personal health identifier. The card contains personal information, insurance data, the six most recent medical visits, diagnoses, drug prescriptions, drug allergies, major illnesses, organ donation consent, palliative care directives, and public health records (including immunizations). Providers are required to report to the NHIA, on a 24-hour basis, each patient visit and service

delivered, thus enabling the tracking of individual and national aggregate service utilization in nearly real time. This provides the NHIA with a good sense of overall expenditures at any point in time and helps it identify and manage heavy users of NHI services. The card also helps the government identify and track public health threats and infectious disease outbreaks, as it did in the 2003 SARS epidemic.

The NHI card has made administration simpler and more efficient. NHIA administrative costs accounted for just 1.07 percent of total NHI expenditures in 2014.³⁰

Two recent personal health information innovations, both IT-driven, are worthy of note. One is NHI PharmaCloud, a cloud-based, patient-centered drug information system that the NHIA introduced in 2013. Taking advantage of the vast database the NHIA has created since its inception, PharmaCloud enables doctors (during clinic and outpatient visits, house calls, and emergency department care) and pharmacists to know in real time a patient's medication history for the past three months. PharmaCloud also provides prescribers clinical and safe-use information to help prevent drug adverse reactions and reduce waste.

My Health Bank, introduced in 2014, is another cloud-based innovation that provides comprehensive health and medical records for any insured person upon request. Records can be updated at any time. In addition to increasing the transparency of important personal health information, the initiative is intended to assist patients in self-managing their health.

All hospitals and clinics use electronic patient medical records. However, owing to a lack of infrastructure investment, NHI systemwide interoperability does not yet exist and interhospital exchange of patient medical records is limited.³¹



How are costs contained?

Health spending in Taiwan as a percentage of GDP or per capita GDP has been consistently low compared to OECD countries, even though Taiwan's per capita GDP is higher than that of many OECD countries. Total national health expenditures in 2013 represented 5.9 percent of GDP (and 6.2% in 2014), compared to the OECD median of 8.8 percent (2013). Per capita health spending in Taiwan in 2015 was USD2,595, considerably lower than OECD countries with comparable per capita GDP.³³

Cost containment had been a major policy goal of Taiwan's government since the late 1980s, when rates of annual health spending growth were in the double digits. Since the inception of the NHI in 1995, the NHIA has introduced a number of cost-containment strategies on both the supply and demand sides.

On the supply side, the NHI's global budget system has been the most powerful tool for cost containment. NHI expenditure growth rates in the early years following the NHI's implementation had been between 6 percent and 9 percent, significantly higher than NHI revenue growth rates. Between 1998 through 2003, the government phased in five sectoral global budgets: dental (1998), Chinese medicine (2000), primary care clinics (2001), hospitals (2002), and dialysis (2003).

Global budgets have had a significant impact on health spending growth. In the 2004–2015 period, national health expenditure growth was between 2.9 percent and 4.4 percent, or an annual average of 3.87 percent. Meanwhile, GDP growth during this same period ranged between –1.4 percent and 8.9 percent, for an annual average of 3.61 percent.³⁴

Other supply constraints included DRG payment for hospitals and annual drug price adjustments. The latter are based on comparing the actual transaction prices of drugs procured by providers, which providers must report to the NHIA in the fourth quarter of each year, to the NHI fee for the drug. Fee adjustments are made in the first quarter of the following year, according to a formula bringing the NHIA fee closer to the actual transaction prices of drugs.³⁵

Capacity constraints in the delivery system also play a role in cost containment in Taiwan. The physician–population ratio in Taiwan was 1.8 per 1,000 population in 2012, lower than the OECD median of 3.1 per 1,000 population.³⁶ The ratio of computed tomography (CT) scanners per million population in Taiwan is lower than that in many OECD countries; comparable to Canada and France and higher than that in the Netherlands. Taiwan also has fewer magnetic resonance imaging (MRI) machines than many other OECD nations, including Australia, the United States, Japan, and Korea. On the other hand, the acute-bed-to-population ratio in Taiwan, at 3.2 per 1,000 population, was somewhat higher than the OECD median of 3.0 and higher than the United States (2.5), the United Kingdom (2.3), and Canada (1.7).³⁷

The NHIA's pharmaceutical benefit management initiative considers both clinical effectiveness and cost-effectiveness in coverage decisions. The initiative is in the process of building capacity for health technology assessment to evaluate medical services to help the NHIA make coverage decisions and improve quality.

The NHIA's automated IT-supported claims review checks for the overall appropriateness of claims. In addition, it randomly selects a small percentage of claims for individual professional review by clinical experts. These measures help the NHIA monitor utilization and costs on a real-time basis (providers are required to report to the NHIA all services delivered daily, by patient), detect fraud and abuse, and safeguard quality.

There are fewer demand-side constraints in Taiwan's NHI. They include graduated copayment and coinsurance schemes, whereby patients accessing tertiary care without referral pay higher copayment and coinsurance, and utilization monitoring. Ceilings and exemptions from copayments and coinsurance, however, protect access to care. Overall, government provisions to safeguard access to care has rendered patient cost-sharing largely an insignificant factor in cost-containment in Taiwan.

In the long run, however, NHI's generous copayment policy may prove to be unsustainable. Going forward, it may be necessary to institute means-testing for copayment exemptions, both as a cost-containment measure and "to prevent reverse income distribution from the middle class to the rich."³⁸

Administrative costs in Taiwan are very low, as alluded to earlier in this profile. Its IT-driven single-payer system has been characterized by administrative simplicity and low overhead costs, ranging from 1.5 percent in 2005 to 1.07 percent in 2014.³⁹

Eliminating low-value services from the benefit package (delisting), however, has been difficult, owing to political considerations.



What major innovations and reforms have been introduced?

Important innovations and reforms in Taiwan's single-payer health insurance system have been discussed in earlier sections. These include the global budget system, DRG payment for hospitals, pay-for-performance (P4P), NHI card, PharmaCloud, My Health Bank, and various initiatives aimed at quality improvement and cost containment.

A major reform meriting special attention is the Second-Generation NHI Reform, which imposed a supplementary premium on six nonpayroll sources of income: rents, interest, dividends, large bonuses, professional incomes, and income from second and third jobs. Implemented in 2013 at an initial rate of 2 percent and reduced to 1.91 percent in 2016, the supplementary premium broadened the premium base and put the NHI system on sound financial footing (it now has a large surplus). Moreover, the reform improved equity in financing: the previous payroll-based premium system had weighed most heavily on Taiwan's salaried class and thus favored the wealthy.

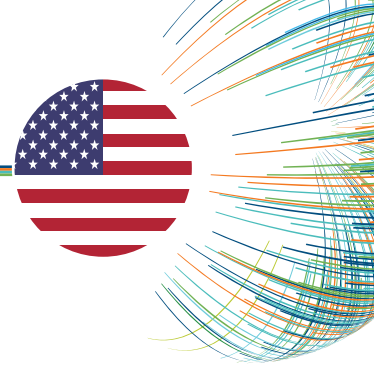
Notes

1. National Health Insurance Administration, Ministry of Health and Welfare, Taiwan's National Health Insurance 2015–2016.
2. Author's personal communication with official at the Planning Division, National Health Insurance Administration, Ministry of Health and Welfare, Nov. 1, 2016.
3. National Health Insurance Administration, Ministry of Health and Welfare, *2015–2016 National Health Insurance Annual Report*.
4. Ibid.
5. Ibid.
6. Ibid.
7. Ibid.
8. Ministry of Health and Welfare, *The Statistics and Trends in Health and Welfare 2014*.
9. T.-M. Cheng, "Reflections on the 20th Anniversary of Taiwan's Single-Payer National Health Insurance System," *Health Affairs*, March 2015 34(3):502–10.
10. National Health Insurance Administration, Ministry of Health and Welfare, *2015–2016 National Health Insurance Annual Report*.

11. Ibid.
12. Author's personal communication with Cheng-hua Lee, Deputy Director-General, National Health Insurance Administration, Ministry of Health and Welfare, Oct. 22, 2016.
13. Ibid.
14. Ministry of Health and Welfare, *The Statistics and Trends in Health and Welfare 2014*.
15. National Health Insurance Administration, Ministry of Health and Welfare, *2015–2016 National Health Insurance Annual Report*.
16. Author's personal communication with Cheng-Hua Lee, Deputy Director-General, National Health Insurance Administration, Ministry of Health and Welfare, Oct. 22, 2016.
17. National Health Insurance Administration, Ministry of Health and Welfare, *2015–2016 National Health Insurance Annual Report*.
18. Ibid.
19. Ibid.
20. Ministry of Health and Welfare, *The Statistics and Trends in Health and Welfare 2014*.
21. Author's personal communication with Cheng-hua Lee, Deputy Director-General, National Health Insurance Administration, Ministry of Health and Welfare, Oct. 23, 2016.
22. T.-M. Cheng, "Lessons from Taiwan's Universal National Health Insurance: A Conversation with Taiwan's Health Minister Ching-Chuan Yeh," *Health Affairs*, July–Aug. 2009 28(4):1035–44.
23. Ministry of Health and Welfare, *The Statistics and Trends in Health and Welfare 2014*.
24. Ibid.
25. T.-M. Cheng, "Taiwan's New National Health Insurance Program: Genesis and Experience So Far," *Health Affairs*, May–June 2003 22(3):61–76.
26. National Development Council, *Republic of China Population Estimates 2014–2061*.
27. Data from The Economist Intelligence Unit 2015 Quality of Death Index, <https://www.eiuperspectives.economist.com/healthcare/2015-quality-death-index>. Cited in R.-Y. Long et al., "Palliative Care in Taiwan: An International Perspective," *National Health Insurance Quarterly*, Oct. 2016.
28. Author's personal communication with Pen-Jen Wang, Senior Executive Officer, Medical Review and Pharmaceutical Benefits Division, National Health Insurance Administration, Ministry of Health and Welfare, Oct. 26, 2016.
29. Ibid.
30. Data from author's personal communication with a National Health Administration official. For more on the administrative costs of Taiwan's NHI, see T.-M. Cheng, "Reflections on the 20th Anniversary of Taiwan's Single-Payer National Health Insurance System," *Health Affairs*, March 2015 34(3):502–10.
31. Author's personal communication with Pen-Jen Wang, Senior Executive Officer, Medical Review and Pharmaceutical Benefits Division, National Health Insurance Administration, Ministry of Health and Welfare, Oct. 26, 2016.
32. Ministry of Health and Welfare, *The Statistics and Trends in Health and Welfare 2014*.
33. Data for Taiwan's per capita health spending from National Health Insurance Administration, Ministry of Health and Welfare. Data for OECD countries from *OECD Health Statistics 2016*, <http://www.oecd.org/els/health-systems/health-data.htm>.
34. Author's calculation based on data from *2016 National Health Insurance Global Budget Payment Consultation Reference Index*, National Health Insurance Committee, Ministry of Health and Welfare.
35. Author's personal communication with Cheng-Hua Lee, Deputy Director-General, National Health Insurance Administration, Ministry of Health and Welfare, Oct. 27, 2016.
36. Ministry of Health and Welfare, *The Statistics and Trends in Health and Welfare 2014*. OECD data based on OECD Health Data 2015.
37. Ministry of Health and Welfare, *The Statistics and Trends in Health and Welfare 2014*.
38. T.-M. Cheng, *Taiwan's Health Care System: The Next 20 Years* (Brookings Institution, 2015), <https://www.brookings.edu/opinions/taiwans-health-care-system-the-next-20-years/>; accessed Oct. 31, 2016.
39. T.-M. Cheng, "Reflections on the 20th Anniversary of Taiwan's Single-Payer National Health Insurance System," *Health Affairs*, March 2015 34(3):502–10.

The U.S. Health Care System

The Commonwealth Fund



What is the role of government?

The Affordable Care Act (ACA), enacted in 2010, established “shared responsibility” between the government, employers, and individuals for ensuring that all Americans have access to affordable and good-quality health insurance. However, health coverage remains fragmented, with numerous private and public sources, as well as wide gaps in insured rates across the U.S. population. The Centers for Medicare and Medicaid Services (CMS) administers Medicare, a federal program for adults 65 and older and some people with disabilities, and works in partnership with state governments to administer both Medicaid and the Children’s Health Insurance Program (CHIP), a conglomeration of federal–state programs for certain low-income populations.

Private insurance is regulated mostly at the state level. In 2014, state and federally administered health insurance marketplaces were established to provide additional access to private insurance coverage, with income-based premium subsidies for low- and middle-income people. In addition, states were given the option of participating in a federally subsidized expansion of Medicaid eligibility.



Who is covered and how is insurance financed?

In 2015, about 67.2 percent of U.S. residents received health coverage through private voluntary health insurance (VHI): 55.7 percent received employer-provided insurance, and 14.6 percent acquired coverage directly. Public programs covered roughly 37.1 percent of residents: Medicare covered 16.3 percent, Medicaid 19.6 percent, direct-purchase 16.3 percent, and military coverage 4.7 percent.¹

In the first quarter of 2016, 27.3 million individuals were uninsured, representing 8.6 percent of the population, down from 9.1 percent in 2015.² The implementation of the ACA’s major coverage expansions in January 2014 has increased the share of the population with insurance. These reforms include: the requirement that most Americans procure health insurance; the opening of the health insurance marketplaces, or exchanges, which offer premium subsidies to lower- and middle-income individuals; and the expansion of Medicaid in many states, which increased coverage for low-income adults. Between 2014 and the start of 2016, the overall rate of health insurance coverage increased for most racial and ethnic groups. Hispanics had the largest increase (6.6 percentage points), followed by Asian Americans (4.8 points), non-Hispanic blacks (3.1 points), and non-Hispanic whites (2.4 points).³ It is projected that the ACA will reduce the number of uninsured by 24 million by 2018.⁴ However, with the likely repeal of the health law by the new Congress and administration, it is unknown how progress in reducing the uninsured population will be affected.

Public programs provide coverage to various, often overlapping, populations. In 2015, more than 10 million Americans were both entitled to Medicare and eligible for Medicaid services (the so-called dual eligibles).⁵ CHIP, which in some states is an extension of Medicaid and in others a separate program, covered more than 8.1 million children in low-income families in 2015.⁶

Undocumented immigrants are generally ineligible for public coverage, and nearly two-thirds are uninsured. Hospitals that accept Medicare funds (which are the vast majority) must provide care to stabilize any patient with an emergency medical condition, and several states allow undocumented immigrants to qualify for emergency Medicaid coverage beyond “stabilization” care. Some state and local governments provide additional coverage, such as coverage for undocumented children or pregnant women.



What is covered?

Services: The ACA requires all health plans offered in the individual insurance market and small-group market (for firms with 50 or fewer employees) to cover services in 10 essential health benefit categories: ambulatory patient services; emergency services; hospitalization; maternity and newborn care; mental health services and substance use disorder treatment; prescription drugs; rehabilitative services and devices; laboratory services; preventive and wellness services and chronic disease management; and pediatric services, including dental and vision care. Each state determines the range and extent of specific services covered in each category by selecting a benchmark plan that covers all 10 categories; most states choose one of the largest small-group plans as the benchmark. Specific covered services vary somewhat by state.

Private insurance plans sometimes use narrow networks of providers, with limited or no coverage if patients receive out-of-network care. Private coverage for dental care and optometry is also available—sometimes through separate policies—as is long-term care insurance. Private health insurance is required to cover certain preventive services (with no cost-sharing if provided in-network).

Medicare provides coverage for hospitalization, physician services, and, through a voluntary supplementary program, prescription drugs. The program also has eliminated cost-sharing for a number of preventive services. Medicare offers a choice between “traditional” Medicare, which is open-network and pays predominately on a fee-for-service basis, and Medicare Advantage, under which the federal government pays a private insurer for a network-based plan. Medicare covers post-acute care but not long-term care, while Medicaid offers more extensive long-term care coverage (see below). In addition, Medicaid covers a broad range of core services, including hospitalization and physician services, with certain optional benefits varying by state.

Cost-sharing and out-of-pocket spending: Cost-sharing provisions in private health insurance plans vary widely, with most requiring copayments for physician visits, hospital services, and prescription drugs. High-deductible health plans—those with a minimum annual deductible of USD1,250 per individual or USD2,500 per family—can be paired with tax-advantaged health savings accounts (i.e., deposited funds are not subject to federal income tax). The ACA includes cost-sharing subsidies for the purchase of plans through the insurance exchanges, with the largest subsidies aimed at people with incomes between 100 percent and 250 percent of the federal poverty level (USD20,090 for a family of three, as of 2015).⁷ In the last open-enrollment season, 57 percent of people who selected plans in the federally facilitated marketplaces had cost-sharing subsidies.⁸

Medicare requires deductibles for hospital stays and ambulatory care and copayments for physician visits and other services, while Medicaid requires minimal cost-sharing. Most public and private insurers prohibit providers from balance billing—charging patients more than the copayment required by their insurance plan—if they have an agreement with the payer to accept their set or negotiated payment amounts. Out-of-pocket spending accounts for 11 percent of total health expenditures in the United States.⁹ Cost-sharing for most private insurance plans is capped at USD6,850 for individuals and USD13,700 for families per year for 2016 and USD7,150 for individuals and USD14,300 for families for 2017.¹⁰

Safety nets: A variable and patchwork mix of organizations and programs deliver care for uninsured, low-income, and vulnerable patients in the United States, including public hospitals, local health departments, free clinics, Medicaid, and CHIP. Under the ACA, 32 states and the District of Columbia expanded Medicaid coverage to cover individuals with incomes up to 138 percent of the poverty level. Premium and cost-sharing subsidies are also available to low- and middle-income individuals through the insurance exchanges or marketplaces, with health plan premium subsidies offered to those at 133 percent to 400 percent of the poverty level and cost-sharing subsidies offered to those at 100 percent to 250 percent of poverty.¹¹ Hospitals that provide care to a high percentage of low-income and uninsured patients receive disproportionate-share hospital payments from Medicare and Medicaid to partially offset their uncompensated care. The federal government also funds community health centers, which are a major source of primary care for underserved and uninsured populations. In addition, private providers are a significant source of charity and uncompensated care.



How is the delivery system organized and financed?

Publicly financed health care: In 2014, public spending accounted for about 49 percent of total health care spending.¹² Medicare is financed through a combination of payroll taxes, premiums, and federal general revenues. Medicaid is tax-funded and administered by the states, which operate the program within broad federal guidelines. States receive matching funds from the federal government for Medicaid at rates that vary based on their per-capita income—in fiscal year 2016, federal matching ranged from 50 percent to 74 percent of states' Medicaid expenditures.¹³ The expansion of Medicaid under the ACA is currently fully funded by the federal government through 2017, after which the government's funding share will be phased down to 90 percent by 2020 (subject to change under the new administration and Congress). Federal premium subsidies on the exchanges are offered in the form of tax credits.

Privately financed health care: In 2014, private health insurance spending accounted for about 39 percent of total health care spending.¹⁴ Private insurers, which can be for-profit or nonprofit, are answerable to state insurance commissioners and subject to varying state (and federal) regulations. Private health insurance can be purchased by individuals but is usually funded by voluntary, tax-exempt premiums, the cost of which is shared by employers and workers on an employer-specific basis, sometimes varying by type of employee. The employer tax exemption is the government's third-largest health care expenditure (after Medicare and Medicaid), reducing tax revenues by USD260 billion per year.¹⁵

Some individuals are covered by both public and private health insurance. For example, many Medicare beneficiaries purchase private supplemental Medigap policies to cover additional services and cost-sharing. Private insurers, in general, pay providers at rates higher than those paid by public programs, particularly Medicaid. This disparity leads to wide variations in provider payment rates and revenues, which depend to a large extent on payer mix and market power.

Medicare's payment rates are typically determined according to a fee schedule, with various adjustments based on cost of living and other local and provider characteristics. Medicaid rates vary by state. Private health insurers typically negotiate payment rates with providers.

Primary care: Primary care physicians account for roughly one-third of all U.S. doctors. The majority operate in small self- or group-owned practices with fewer than five full-time-equivalent physicians, although larger practices are becoming increasingly common. Practices—particularly large ones—often include nurses and other clinical staff, who are usually paid a salary by the practice. Patients generally have free choice of doctor, at least among in-network providers, and are usually not required to register with a primary care practice, depending on their insurance plan. Primary care doctors have no formal gatekeeping function, except within some managed-care plans.

Physicians are paid through a combination of methods, including negotiated fees (private insurance), capitation (private insurance), and administratively set fees (public insurance). Physicians can also be given financial incentives, made available by some private insurers and public programs like Medicare, based on various quality and cost performance criteria. 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 can be reduced or waived.

Outpatient specialist care: Specialists can work in both private practice and hospitals. Some insurance plans (such as health maintenance organizations, or HMOs) require a referral by a primary care doctor to see a specialist and limit patients' choice of specialist, while other plans (such as preferred provider organizations, or PPOs) allow patients broader and direct access. Access to specialists can be particularly difficult for Medicaid beneficiaries and the uninsured, because some specialists refuse to accept Medicaid patients owing to low reimbursement rates, and safety-net programs for specialist care are limited. Like primary care physicians, specialists are paid through negotiated fees, capitation, and administratively set fees and are typically not allowed to bill above the fee schedule for services offered in-network. Multispecialty and single-specialty groups are increasingly common. Specialists can see patients with either public or private insurance.

Administrative mechanisms for paying primary care doctors and specialists: Copayments for doctor visits are typically paid at the time of service or are billed to the patient afterward. Some insurance plans and products (including health savings accounts) require patients to submit claims to receive reimbursement. Providers bill insurers by coding the services rendered; this process can be very time-consuming, as there are thousands of codes.

After-hours care: After-hours access to primary care is limited (39% of primary care doctors in 2015 reported having after-hours care arrangements),¹⁶ with such care often being provided by emergency rooms. As of 2007, there were between 12,000 and 20,000 urgent-care centers in the United States providing walk-in after-hours care. Most urgent-care centers are independently owned by physicians, while about 25 percent are owned by hospitals.¹⁷ Some insurance companies make after-hours telephone advice lines available.

Hospitals: Hospitals can be nonprofit (approximately 70% of beds nationally), for-profit (15% of beds), or public (15% of beds). Public hospitals can serve private patients. Hospitals are paid through a combination of methods, including per-service or per-diem charges, per-case payments, and bundled payments, in which case the hospital may be financially accountable for readmissions and services rendered by other providers following discharge. Some hospital-based physicians are salaried hospital employees, but most are paid on some form of fee-for-service basis—physician payment is not included in Medicare’s diagnosis-related group (DRG) payments. Hospitalists are increasingly common and are now present in a majority of hospitals.

Mental health care: Mental health care is provided by a mix of for-profit and nonprofit providers and professionals—including primary care physicians, psychiatrists, psychologists, social workers, and nurses—and paid for through a range of methods that vary by provider type and payer. Most insurance plans cover inpatient hospitalization, outpatient treatment, emergency care, and prescription drugs; other benefits may include case management and peer support services.

The ACA aimed to improve access to mental health and substance abuse care by establishing it as an essential health benefit (see above), applying federal parity rules to ensure that coverage is comparable, and increasing access to health insurance more generally. As a result of the law, most health plans now cover preventive services and cannot deny coverage because of mental illness. Several ACA mechanisms, such as accountable care organizations and bundled payment (see below), promote the integration of behavioral and primary care.

Long-term care and social supports: Long-term care is provided by a mix of for-profit and nonprofit providers and paid for through methods that vary by provider type and payer. Medicaid, but not Medicare, offers the most extensive coverage of long-term care, although it varies from state to state (within federal eligibility and coverage requirements). Since Medicaid is a means-tested program, patients must often “spend down” their assets to qualify for long-term care assistance. However, hospice care is included as a Medicare benefit, as are skilled short-term nursing services and nursing home stays of up to 100 days. Long-term care insurance that offers comprehensive care is available but rarely purchased. Most certified nursing facilities are for-profit (69%), while 24 percent are nonprofit and 6 percent are government-owned.¹⁸ Caregiver support programs and personal health budgets—such as cash and counseling programs in Medicaid—are available in some states to support caregivers and recipients of home-based care. Some of these programs allow recipients to employ family members. However, most informal and family caregivers do not receive payment or benefits for their work.

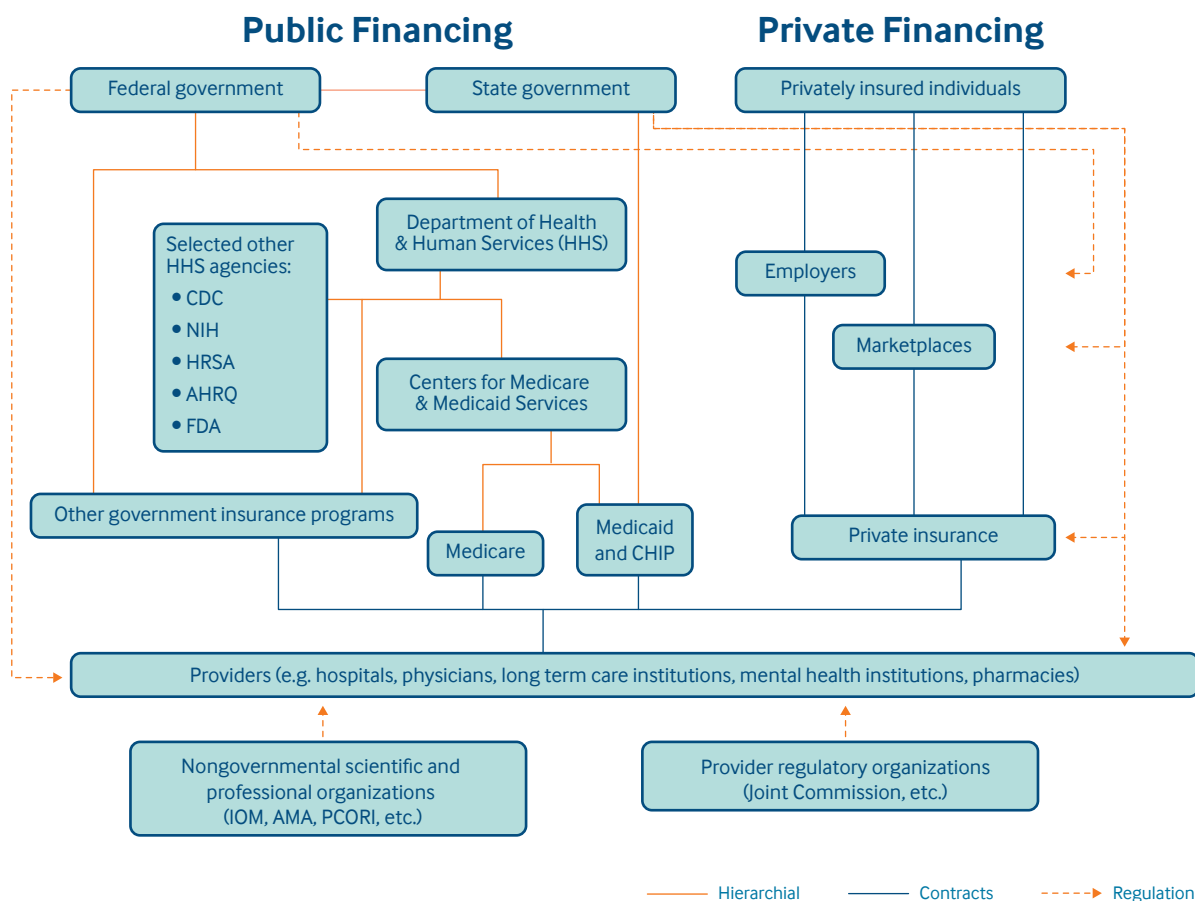


What are the key entities for health system governance?

The U.S. Department of Health and Human Services (HHS) is the federal government’s principal agency involved with health care services. Organizations that fall within the HHS include the:

- Centers for Medicare and Medicaid Services
- Centers for Disease Control and Prevention, which conducts research and programs to protect public health and safety
- National Institutes of Health, which is responsible for biomedical and health-related research
- Health Resources and Services Administration, which supports efforts to improve health care access for people who are uninsured, isolated, or medically vulnerable
- Agency for Healthcare Research and Quality, which conducts evidence-based research on practices, outcomes, effectiveness, clinical guidelines, safety, patient experience, health information technology, and health disparities
- Food and Drug Administration, which is responsible for promoting public health through the regulation of food, tobacco products, pharmaceutical drugs, medical devices, and vaccines, among other products

Organization of the Health System in the United States



Source: Adapted from T. Rice, P. Rosenau, L. Y. Unruh et al., "United States of America: Health System Review," *Health Systems in Transition*, vol. 15, no. 3, 2013, p. 27.

- Center for Medicare and Medicaid Innovation, an agency within CMS that was created by the Affordable Care Act to test and disseminate promising payment and service delivery models designed to reduce spending while preserving or improving quality
- Patient-Centered Outcomes Research Institute, also created by the ACA, which is tasked with setting national clinical comparative-effectiveness research priorities and managing research on a broad array of topics related to illness and injury.

The National Academy of Medicine (formerly 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. Stakeholder associations (e.g., the American Medical Association) comment on and lobby for policies affecting the health system.

The independent, nonprofit Joint Commission accredits more than 20,000 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, the primary accreditor of private health plans, is responsible for accrediting the plans participating in the newly created health insurance marketplaces. The nonprofit National Quality Forum builds consensus on national performance priorities and on standards for performance measurement and public reporting. The American Board of Medical Specialties and the American Board of Internal Medicine provide certification to physicians who meet specified standards of quality.



What are the major strategies to ensure quality of care?

In 2011, the U.S. Department of Health and Human Services released the National Quality Strategy, a component of the ACA that lays out national aims and priorities to guide local, state, and national quality improvement efforts, supported by an array of partnerships with public and private stakeholders. Current initiatives include efforts to reduce hospital-acquired infections and preventable readmissions (see below).

CMS has moved toward increased public reporting of provider performance data in an effort to promote improvement. One such initiative is Hospital Compare, a service that reports on measures of care processes, care outcomes, and patient experience at more than 4,000 hospitals. The release of such information is intended to both increase transparency and improve quality.

States have developed additional public reporting systems and measures, including some that address ambulatory care. Consumer-led groups, such as Consumers Union and the Leapfrog Group, also report on quality and safety.

Incentives to reduce avoidable hospital readmissions among Medicare patients were introduced in October 2012, by way of financial penalties. Since the program's initiation, 30-day readmission rates nationally for conditions subject to penalties have declined from 21 percent to less than 18 percent.¹⁹ Incentives to reduce hospital-acquired conditions, by reducing Medicare payments to the lowest-performing hospitals by 1 percent, were also introduced. Recent data show the first-ever decline in rates of hospital-acquired conditions nationally, with a 17 percent decline over the first three years.²⁰

HHS also set a goal of tying 85 percent of all traditional Medicare payments to quality or value by 2016 and 90 percent by 2018 through these programs and others, such as Hospital Value Based Purchasing.²¹



What is being done to reduce disparities?

There are wide disparities in the accessibility and quality of health care in the United States. Since 2003, the annual *National Healthcare Disparities Report*, released by the Agency for Healthcare Research and Quality, has documented disparities among racial, ethnic, income, and other demographic groups and highlighted priority areas requiring 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, these centers largely provide safety-net services to the uninsured. Medicaid and CHIP provide public health insurance coverage for certain low-income populations. In addition, the ACA has a number of provisions aimed at reducing disparities: subsidies to enable low-income Americans to purchase insurance through the exchanges; efforts to achieve parity for mental health care and substance abuse services; and additional funding to community health centers in underserved communities. There are also a multitude of public and private initiatives at the local and state levels.



What is being done to promote delivery system integration and care coordination?

Government agencies and private insurance companies are leading efforts to move away from the current specialist-focused health system to a system founded on primary care. In particular, the "patient-centered medical home" model, with its emphasis on care continuity and coordination, has aroused interest among U.S. experts and policymakers as a means of strengthening primary care and linking medical services more closely to community services and supports.

Another trend is the proliferation of accountable care organizations (ACOs), networks of providers that assume contractual responsibility for providing a defined population with care that meets quality targets. Providers in ACOs share in the savings that constitute the difference between forecasted and actual health care spending. More than 800 ACOs have been launched by public programs and private insurers, and more than 28 million Americans are enrolled in one.²² Two Medicare-driven ACO programs have been rolled out—the Medicare Shared-Savings Program and the Pioneer ACO Program, which together encompass more than 470 ACOs servicing 17 percent of the Medicare population, or 8.9 million Americans.²³ Patients have reported better care experiences, quality measures have generally improved for the tracked indicators, and there have been modest cost savings.²⁴ CMS has unveiled the new Next Generation ACO program for experienced, high-performing ACOs.

Medicare, Medicaid, and private purchasers, including employer groups, are also experimenting with new payment incentives that reward higher-quality, more efficient care. One strategy is “bundled payments,” whereby a single payment is made for all the services delivered by multiple providers for a single episode of care. About 7,000 hospitals, physician organizations, and postacute care providers participate in bundled payment initiatives.²³

In addition, CMS has supported the development of local programs that aim to better integrate health and social services. Medicaid ACOs are also implementing programs to integrate primary care and behavioral health services. Some ACOs are not only trying to integrate clinical and social services, but also are exploring innovative financing models, such as cross-sectoral shared-savings models.



What is the status of electronic health records?

The 2009 American Recovery and Reinvestment Act led to significant investment (more than USD30 billion) in health information technology. The legislation established financial incentives for physicians and hospitals to adopt electronic health record (EHR) systems, under what is known as the EHR Incentive Program. As of 2015, 84 percent of physicians used some form of EHR system, and three out of four hospitals (76%) had adopted at least a basic EHR system, representing an eightfold increase since 2008.²⁵

The Meaningful Use Incentive Program is designed to gradually raise the threshold for EHR functionality above which providers receive incentives and avoid penalties. The current focus is on information exchange.



How are costs contained?

Annual per capita health expenditures in the United States are the highest in the world (USD9,364 in 2014), despite a recent slowdown in spending from 2008 to the present.¹⁰ Payers have attempted to control cost growth through a combination of selective provider contracting, price negotiations and controls, utilization control practices, risk-sharing payment methods, and managed care. Recently, both public and private payers have focused more attention on value-based purchasing and other models that reward effective and efficient health care delivery. Patent expirations and a movement toward favoring generic drugs over brand-name drugs, meanwhile, have led to a slowdown in pharmaceutical spending in recent years, although growth rebounded in 2014 with the market entry of expensive biologics for conditions such as hepatitis C. Another growing trend is the increase in private insurance plans with high deductibles.

A number of reforms included in the ACA attempt to develop payment methods in the Medicare and Medicaid programs that reward high-quality, efficient care. Some of these use pay-for-performance mechanisms, whereas others rely on bundled payments, shared savings, or global budgets to incentivize integration and coordination among health care providers.

Despite a recent slowdown in health care spending, the latest data, through July 2016, showed that spending had grown 4.9 percent over the previous year.²⁶



What major innovations and reforms have been introduced?

The Affordable Care Act ushered in sweeping insurance and health system reforms aimed at achieving near-universal coverage, greater affordability of coverage and care, higher quality and efficiency, lower costs, more robust primary and preventive care, and a broader array of community resources. As of February 2017, the future of ACA is unknown, though it will most likely be repealed or altered by the new Congress. The exact nature of any replacement program is unknown.

Since implementation of the ACA, the number of uninsured adults has declined by historic proportions.²⁷ Groups that have long been at greatest risk of being uninsured—young adults, Hispanics, blacks, and those with low income—have made the greatest coverage gains, though inequalities remain.²⁸

In 2015, the U.S. Department of Health and Human Services announced a goal to move 50 percent of Medicare payments to alternative payment models, including ACO-based arrangements, by 2018. As of early 2016, HHS had already reached an interim goal of 30 percent.²⁹ Medicare has also begun paying for doctors to coordinate the care of patients with chronic

conditions. To be eligible for an extra USD40 per patient, doctors must draft and help carry out a comprehensive care plan for each patient who signs up for one. Under federal rules, those patients have access to doctors or other health care providers on a doctor's staff 24 hours a day, seven days a week, to deal with "urgent chronic care needs."

In 2015, the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) was passed by Congress to align financial incentives for providers with high-value care. The law overhauls how hundreds of thousands of clinicians are paid by Medicare, through two value-based provider payment pathways under Medicare Part B: Advanced Alternative Payment Models (APMs) and the Merit-Based Incentive Payment System (MIPS).³⁰ The Advanced APM path aims to promote participation in existing APMs such as ACOs, medical homes, and bundled payments for joint replacement and cardiac care. MIPS adjusts traditional fee-for-service provider payment according to several factors: quality, cost, provider efforts to utilize health information technology, and practice improvement. The reforms under MACRA are meant to support the transition of the U.S. health care system from fee-for-service payment to payments based on the value and quality of care delivered; they are intended to generally promote approaches to care delivery focused on better care, efficient spending, and healthier patients.

Notes

1. J. C. Smith and C. Medalia, *Health Insurance Coverage in the United States: 2014—Current Population Reports* (U.S. Census Bureau, Sept. 2015), <http://www.census.gov/content/dam/Census/library/publications/2015/demo/p60-253.pdf>. Note that estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.
2. R. A. Cohen, M. E. Martinez, and E. P. Zammitti, *Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January–March 2016* (Division of Health Interview Statistics, National Center for Health Statistics, Sept. 2016), <http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201609.pdf>; and R. A. Cohen, M. E. Martinez, and E. P. Zammitti, *Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2015* (Division of Health Interview Statistics, National Center for Health Statistics, May 2016), <http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201605.pdf>.
3. R. A. Cohen, M. E. Martinez, and E. P. Zammitti, *Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January–March 2016* (Division of Health Interview Statistics, National Center for Health Statistics, Sept. 2016), <http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201609.pdf>.
4. Congressional Budget Office, *Insurance Coverage Provisions of the Affordable Care Act—CBO's March 2015 Baseline* (CBO, 2015), <https://www.cbo.gov/sites/default/files/cbofiles/attachments/43900-2015-03-ACAtables.pdf>.
5. Centers for Medicare and Medicaid Services, *Analytic Reports and Data Resources* (CMS, 2016), <https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/Analytics.html>.
6. Medicaid.gov, *FY 2015 Number of Children Ever Enrolled in Medicaid and CHIP* (Centers for Medicare and Medicaid Services, 2015), <https://www.medicaid.gov/chip/downloads/fy-2015-childrens-enrollment-report.pdf>.
7. Assistant Secretary for Planning and Evaluation, U.S. *Federal Poverty Guidelines Used to Determine Financial Eligibility for Certain Federal Programs* (ASPE, 2015), <http://aspe.hhs.gov/2015-poverty-guidelines>.
8. Assistant Secretary for Planning and Evaluation, *Addendum to the Health Insurance Marketplaces 2016 Open Enrollment Period: January Enrollment Report* (ASPE, 2016), <https://aspe.hhs.gov/sites/default/files/pdf/167986/MarketPlaceAddendumJan2016.pdf>.
9. Organisation for Economic Co-operation and Development, *OECD Health Statistics 2016* (OECD, 2016), <http://www.oecd.org/els/health-systems/health-data.htm>.
10. *Out-of-Pocket Maximum Limits on Health Plans* (Obamacare Facts, 2016), <http://obamacarefacts.com/health-insurance/out-of-pocket-maximum/>.
11. Kaiser Commission on Medicaid and the Uninsured, *Current Status of State Medicaid Expansion Decisions* (Henry J. Kaiser Family Foundation, Jan. 1, 2017). <http://kff.org/health-reform/slide/current-status-of-the-medicaid-expansion-decision/>.
12. Organisation for Economic Co-operation and Development, *OECD Health Statistics 2016* (OECD, 2016), <http://www.oecd.org/els/health-systems/health-data.htm>.
13. U.S. Department of Health and Human Services, "Federal Financial Participation in State Assistance Expenditures; Federal Matching Shares for Medicaid, the Children's Health Insurance Program, and Aid to Needy Aged, Blind, or Disabled Persons for October 1, 2015 Through September 30, 2016," *Federal Register*, 79(231):71426–28, <https://aspe.hhs.gov/sites/default/files/pdf/106641/fmap16.pdf>.
14. Organisation for Economic Co-operation and Development, *OECD Health Statistics 2016* (OECD, 2016), <http://www.oecd.org/els/health-systems/health-data.htm>.
15. National Bureau of Economic Research, *Tax Breaks for Employer-Sponsored Health Insurance* (NBER, 2014), <http://www.nber.org/bah/2010no1/w15766.html>.

16. R. Osborn, D. B. Moulds, E. C. Schneider, M. M. Doty, D. Squires, and D. O. Sarnak, "Primary Care Physicians in Ten Countries Report Challenges Caring for Patients with Complex Health Needs," *Health Affairs*, Dec. 2015 34(12):2104–12, <http://www.commonwealthfund.org/publications/in-the-literature/2015/dec/primary-care-physicians-in-ten-countries>.
17. T. Rice, P. Rosenau, L. Y. Unruh et al., "United States of America: Health System Review," *Health Systems in Transition*, 2013 15(3): 1–431, http://www.euro.who.int/__data/assets/pdf_file/0019/215155/HiT-United-States-of-America.pdf.
18. State Health Facts, *Distribution of Certified Nursing Facilities by Ownership Type, 2014* (Henry J. Kaiser Family Foundation, 2015), <http://kff.org/other/state-indicator/nursing-facilities-by-ownership-type/>.
19. R. B. Zuckerman, S. H. Sheingold, E. J. Orav et al., "Readmissions, Observation, and the Hospital Readmissions Reduction Program," *New England Journal of Medicine*, April 21, 2016 374(16):1543–51, <http://www.nejm.org/doi/full/10.1056/NEJMsa1513024>.
20. Agency for Healthcare Research and Quality, *2013 Annual Hospital-Acquired Condition Rate and Estimates of Cost Savings and Deaths Averted from 2010 to 2013* (AHRQ, Oct. 2015), <https://www.ahrq.gov/professionals/quality-patient-safety/pfp/hacrate2013.html>; and S. T. Edwards and B. E. Landon, "Medicare's Chronic Care Management Payment—Payment Reform for Primary Care," *New England Journal of Medicine*, Nov. 27, 2014 371(22):2049–51, <http://www.nejm.org/doi/full/10.1056/NEJMp1410790>.
21. U.S. Department of Health and Human Services, "Better, Smarter, Healthier: In Historic Announcement, HHS Sets Clear Goals and Timeline for Shifting Medicare Reimbursements from Volume to Value," news release (HHS, Jan. 26, 2015), <http://www.hhs.gov/about/news/2015/01/26/better-smarter-healthier-in-historic-announcement-hhs-sets-clear-goals-and-timeline-for-shifting-medicare-reimbursements-from-volume-to-value.html>.
22. D. Muhlestein, "Growth and Dispersion of Accountable Care Organizations in 2015," *Health Affairs Blog*, March 31, 2015, <http://healthaffairs.org/blog/2015/03/31/growth-and-dispersion-of-accountable-care-organizations-in-2015-2/>.
23. Centers for Medicare and Medicaid Services, "Physicians and Health Care Providers Continue to Improve Quality of Care, Lower Costs," news release (CMS, Aug. 25, 2016), <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Press-releases/2016-Press-releases-items/2016-08-25.html>; and D. Muhlestein, "Growth and Dispersion of Accountable Care Organizations in 2015," *Health Affairs Blog*, March 31, 2015, <http://healthaffairs.org/blog/2015/03/31/growth-and-dispersion-of-accountable-care-organizations-in-2015-2/>.
24. S. T. Edwards and B. E. Landon, "Medicare's Chronic Care Management Payment—Payment Reform for Primary Care," *New England Journal of Medicine*, Nov. 27, 2014 371(22):2049–51, <http://www.nejm.org/doi/full/10.1056/NEJMp1410790>.
25. R. Osborn, D. B. Moulds, E. C. Schneider, M. M. Doty, D. Squires, and D. O. Sarnak, "Primary Care Physicians in Ten Countries Report Challenges Caring for Patients with Complex Health Needs," *Health Affairs*, Dec. 2015 34(12):2104–12, <http://www.commonwealthfund.org/publications/in-the-literature/2015/dec/primary-care-physicians-in-ten-countries>; and D. Charles, M. Gabriel, and T. Searcy, *Adoption of Electronic Health Record Systems Among U.S. Nonfederal Acute Care Hospitals: 2008–2014*, ONC Data Brief No. 23 (Office of the National Coordinator for Health Information Technology, April 2015), <https://www.healthit.gov/sites/default/files/data-brief/2014HospitalAdoptionDataBrief.pdf>.
26. Altarum Institute, *Health Sector Economic Indicators—Insights from Monthly National Health Spending Data Through July 2016* (Altarum Institute, Sept. 9, 2016), http://altarum.org/sites/default/files/uploaded-related-files/CSHS-Spending-Brief_September_2016.pdf.
27. J. C. Smith and C. Medalia, *Health Insurance Coverage in the United States: 2014—Current Population Reports* (U.S. Census Bureau, Sept. 2015), <http://www.census.gov/content/dam/Census/library/publications/2015/demo/p60-253.pdf>.
28. S. R. Collins, M. Z. Gunja, M. M. Doty, and S. Beutel, *Who Are the Remaining Uninsured and Why Haven't They Signed Up for Coverage? Findings from the Commonwealth Fund Affordable Care Act Tracking Survey, February–April 2016* (The Commonwealth Fund, Aug. 2016), <http://www.commonwealthfund.org/publications/issue-briefs/2016/aug/who-are-the-remaining-uninsured>; and M. M. Doty, M. Z. Gunja, S. R. Collins, and S. Beutel, "Latinos and Blacks Have Made Major Gains Under the Affordable Care Act, But Inequalities Remain," *To the Point*, The Commonwealth Fund, Aug. 18, 2016, <http://www.commonwealthfund.org/publications/blog/2016/aug/latinos-blacks-major-gains-under-aca>.
29. U.S. Department of Health and Human Services, "HHS Reaches Goal of Tying 30 Percent of Medicare Payments to Quality Ahead of Schedule," news release (HHS, March 3, 2016), <http://www.hhs.gov/about/news/2016/03/03/hhs-reaches-goal-tying-30-percent-medicare-payments-quality-ahead-schedule.html>.
30. Centers for Medicare and Medicaid Services, *Medicare Program; Merit-Based Incentive Payment System (MIPS) and Alternative Payment Model (APM) Incentive Under the Physician Fee Schedule, and Criteria for Physician-Focused Payment Models, Final Rule* (CMS, Oct. 14, 2016), https://qpp.cms.gov/docs/QPP_Executive_Summary_of_Final_Rule.pdf.



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