The Danish Health Care System, 2012

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What is the role of government?

The Danish national government sets the regulatory framework and does general planning and supervision of health services. Five regions own, manage, and finance hospitals. They also finance general practitioners (GPs), specialists, physiotherapists, dentists, and pharmaceuticals. The 98 municipalities are responsible for nursing homes, home nurses, health visitors, municipal dentists (children's dentists and home dental services for physically and/or mentally disabled people), school health services, home help, and the treatment of alcoholics and drug addicts.

Who is covered?

Coverage is universal. All those registered as residents in Denmark are entitled to publicly financed health care that is largely free at the point of use. In principle, undocumented immigrants or visitors (estimated to number below 2,000) are not covered, but a national voluntary and privately funded initiative by Danish doctors provides access to health care for this population. The Doctors' Association, the Danish Red Cross, and Danish Refugee Aid also support these clinics. Complementary private voluntary health insurance (VHI), provided by not-for-profit organizations, covers cost-sharing for pharmaceuticals, dental care, physiotherapy, and corrective lenses. Various supplementary VHI plans, typically offered by employers, provide access to private treatment facilities and provide lump sums in case of critical illness.

What is covered?

Services: The publicly financed health system covers all primary and specialist (hospital) services based on medical assessment of need. Preventive services, mental health services, and long-term care are also fully covered. Dental services are fully covered for children under 18. There is subsidized coverage of outpatient prescription drugs, dental care, and optometry services. Decisions about service level and the introduction of new treatments are made by the regional authorities (health care), municipal authorities (social care, care for older people, prevention, and some rehabilitation), and the national government based on regulations and national guidelines. There is no defined benefits package.

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 the cost of treatment), outpatient prescriptions, and corrective lenses. An individual's annual outpatient drug expenditure is reimbursed at the following levels: below DKK865 (US$148), no reimbursement (60% reimbursement for minors); DKK865–DKK1,410 (US$148–$242), 50 percent reimbursement (60% reimbursement for minors); DKK1,410–DKK3,045 (US$242–$522), 75 percent reimbursement; above DKK3,045 (US$522), 85 percent reimbursement (MISSOC 2011). Private specialists, hospitals, and dentists are free to set their own fees for private patients.

Safety net: There are maximum cost-sharing limits for children, and municipalities provide means-tested social assistance to pensioners (85% of all prescription drug costs are covered if personal wealth is DKK77,500 [US$13,294] or below). Chronically ill people with high prescription drug usage and costs can apply for full reimbursement of drug expenditure above an annual out-of-pocket ceiling of DKK3,410 (US$585). Those who are terminally ill can apply for full coverage of prescriptions. Municipalities may grant financial assistance to persons who are otherwise unable to pay for needed medicine after individual evaluation.

How is the health system organized and financed?

Publicly financed health care: Public expenditure accounted for around 85 percent of total health expenditure in 2010 (OECD 2012). A major administrative reform in 2007 gave the central government responsibility for financing health care. Health care is now financed mainly through a centrally collected, earmarked tax set at 8 percent of taxable income. The central government allocates around 80 percent of this revenue to the regions and 20 percent to the municipalities via targeted grants or general grants based on risk-adjusted capitation.

Privately financed health care: The total share of private expenditure for health care was 14.9 percent in 2010 (OECD 2012). Private expenditure for outpatient drugs, glasses and hearing aids, and doctor and dentist treatments accounted for 4.2 percent, 2.4 percent, and 6.0 percent of total health expenditure, respectively. Complementary VHI covering the costs of statutory copayments (mainly for pharmaceuticals and dental care) and services not fully covered by the state (some physiotherapy, etc.) has been common since the 1970s and is provided exclusively by the not-for-profit organization Danmark. Danmark covered around 2 million people in 2007 (36% of the population).

The past decade has seen a rapid growth in the number of people covered by supplementary VHI, typically provided through employers as a fringe benefit. Supplementary policies rose from 130,000 in 2002 to almost 1 million in 2008. A further 2.2 million policies provide a lump sum in case of critical illness. The market for supplementary VHI is dominated by seven for-profit insurers. A conscious goal of the liberal-conservative government (2002–2011) was to facilitate a stronger role for private actors in health care, e.g., by exempting supplementary VHI provided by employers from taxation.

How are health services organized and financed?

Primary care: All general practitioners are self-employed and are paid via a combination of capitation (30%) and fee-for-service (70%). Practice structure is gradually shifting from solo to group practice. Registration with a primary care doctor is required for anyone who chooses the Group 1 coverage option (98% of the population) in which GPs act as gatekeepers to secondary care. People can register with any available local GP. The alternative is Group 2 coverage, which provides free choice of GP and access to practicing specialists without a referral but requires a copayment. Access to hospitals requires referral for both groups.

Outpatient specialist care: Outpatient specialist care is delivered through hospital based ambulatory clinics (fully integrated and funded as other public hospital services), or provided by self-employed specialists in privately owned facilities. Services in the private sector are paid fee-for-service for referred public patients according to general agreements with the regions, and are paid negotiated individual rates for VHI and out-of-pocket services. Denmark has been at the forefront of transforming services from inpatient to ambulatory care, leading to a rapid reduction in average bed days per patient.

After-hours care: After-hours care is organized by the regions and delivered by GPs. Individual primary care practitioners (GPs) also participate on a voluntary basis and receive a higher rate of payment for after-hours than for normal care. After-hours services are mostly provided at clinics that are often co-located with hospital emergency departments. Home visits are carried out for acute cases and patients that are not mobile. Information on patient visits is sent routinely to primary care doctors. There is no national telephone advice line, but each region administers phone services for after-hours consultation, which can refer to home visits or after-hour services. The Greater Copenhagen Region staffs this service with nurses, as opposed to doctors in the other regions.

Hospitals: Almost all hospitals are publicly owned (approximately 97% of hospital beds are public). The regions decide on budgeting mechanisms for hospitals and generally use a combination of fixed-budget and activity-based funding

based on diagnosis-related groups (DRGs). Consequently, hospitals operate on a target level for activity, which is increased annually according to expected productivity gains. Hospital physicians are employed by the regions and paid a salary. Patients have a choice of public hospital upon referral by a GP, and the payment follows the patient to the receiving hospital if the hospital is located in another region. For all procedures, a waiting time guarantee extends choice to private facilities in cases where expected waiting times exceed one month from referral to treatment. Physicians at public hospitals are not allowed to see private patients. Health care professionals in hospitals and in most municipal health services are paid a salary.

Mental health care: Specialized psychiatric care is organized regionally as part of the hospital system and is funded by DRGs. There is no cost-sharing for psychiatric care, but there is some cost-sharing for psychologists in private practice. Social psychiatry and care is a responsibility of the municipalities, which can choose to contract with a combination of private and public service providers, but most are public and work on a salary basis.

Long-term care: Responsibility for chronic care is shared between regional hospitals, GPs, and 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 organized and funded by the municipalities based on needs assessment. Most municipal long-term care takes place in citizens' own homes, while the importance of institutionalized care (nursing homes, "protected housing," etc.) has been reduced over the past three decades because of conscious policy efforts to allow citizens "to stay in their own home" as long as possible. Home nursing (*hjemmesygepleje*) is fully funded after medical referral. Permanent home care (*hjemmehjælp*) is free of charge, while temporary home care can qualify for cost-sharing if income is above DKK138,600 (US$23,776) for singles and DKK208,200 (US$35,715) for couples. The municipalities are obliged to organize markets with open access for both public and private providers of home care in order to accommodate free choice of home care services. A few municipalities have also contracted with private institutions for care of older people, but more than 90 percent of residential care institutions ("nursing homes") remain public. Citizens pay 10% of their income (20% of income above DKK145,600 [US$24,976]) plus heating and electricity charges for staying in residential care institutions.

Hospices are organized by the regions, and may be public or private.

What are the key entities for health system governance?

General regulation, planning, and supervision of health services takes place at the national level through the Ministry for the Interior and Health and the National Board of Health. The National Board of Health is responsible for general supervision of health personnel, and also has important tasks in developing quality management in terms of national clinical guidelines, standards for the national quality program, etc. This usually takes place in close collaboration with representatives from the medical societies. The National Board of Health also has important roles in planning the location of specialist services, approving regional hospital plans, and mandatory "health agreements" between regions and municipalities to coordinate service delivery. Hospital productivity comparisons are published on a regular basis by the National Board of Health, allowing regions and hospital managers to benchmark performance of individual hospital departments.

Regions are in charge of defining and running hospital services and for supervision and payment to (private) GPs and practicing specialists. Municipalities have important roles in regard to prevention, health promotion, and long-term care.

In addition to government, semi-independent organizations play a governance role. The Danish Healthcare Quality Programme consists primarily of medical professionals, and works to develop extensive accreditation standards that influence quality across all health care sectors. It is developed, planned, and managed by the Danish Institute for

Quality and Accreditation in Healthcare (IKAS), a board that comprises representatives from the National Board of Health, the Danish regions, and the Ministry of Health. The International Society for Quality in Healthcare (ISQua) in turn oversees both the Danish Healthcare Quality Programme and IKAS.

What is being done to ensure quality of care?

The Danish Healthcare Quality Programme has now been implemented in all hospitals and is in the process of being introduced in primary care and pharmacies. The program aims to include all health care delivery organizations, and applies both organizational and clinical standards. Organizations are assessed on their ability to satisfy standards in processes and outcomes. The core of the program is a system of regular accreditation based on annual self-assessment and external evaluation (every third year) by a professional accreditation body. The self-assessment involves reporting of performance against national input, process, and outcome standards, which allows comparison over time and between organizations. The external evaluation proceeds from the self-assessment to evaluate the status of providers' overall quality improvement activities and opportunities. Quality data for a number of treatment areas are captured in clinical databases and published on the Web. The data are used for a variety of purposes, including patient choice of hospitals and management of hospital quality.

The Quality Programme's standards enforce the use of national clinical guidelines, where available. A national unit within the National Board of Health is gradually developing such guidelines for all major disease types. The regions develop more specific practice guidelines for their hospitals and other health organizations based on the general national recommendations. Standard treatment packages (patient pathway descriptions) have been established, e.g., for cancer treatment (see below).

Health technology assessments are made locally, regionally, and nationally. They are facilitated and financially supported by a national unit within the National Board of Health and provide important input to decision-making in health policy at all levels.

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

In 2007, the Danish government, regions, and municipalities committed to developing and implementing national care pathways for all types of cancer based on national clinical guidelines, with the aim of ensuring that all cancer patients receive fast-tracked care through all stages of care. At the end of 2008, pathways for 34 cancers had been finalized and implemented, covering almost all cancer patients. A national agency also monitors the pathways and the speed at which patients are diagnosed and treated. There is also an emphasis on targeting chronic diseases with prevention and follow-up interventions.

What is being done to improve care coordination?

More and more practices employ specialized nurses, and several municipalities and regions have provided financial support to set up multispecialty facilities, commonly called health houses. The models vary across the country, but often include GPs, practicing specialists, physiotherapists, etc. GPs participate in various formal and informal network

structures. They are formally included in the health service agreements made between the regions and the municipalities to facilitate cooperation and improve patient pathways. Medical homes are encouraged in the sense that GPs are intended to function as coordinators of care for patients, and to develop a comprehensive view of their individual patients' needs in terms of both prevention and care. This principle is commonly accepted, and is supported by the general national-level agreements between GPs and the regions. All general practitioners are linked to electronic information systems that provide discharge letters and can be used for electronic referrals and pharmacy prescriptions.

What is being done to address health disparities?

A government-initiated report in 2011 on the determinants of health disparities led to the formulation of a general action plan. The plan's specific initiatives include: higher taxes on tobacco and unhealthy food; targeted interventions to promote smoking cessation; prohibition of the sale of strong alcohol to young people; establishing antialcohol policies in all educational institutions; further encouragement of municipal prevention activities (e.g., through increased municipal cofinancing of hospital care for residents, which in principle creates economic incentives for municipalities to keep their citizens healthy and out of hospitals); an action plan for improved psychiatric care; and, finally, a mapping of health profiles in all municipalities to be used as a tool for targeting municipal prevention and health promotion activities.

What is the status of electronic health records?

Information technology (IT) is used at all levels of the health system. The national strategy for use of IT in health care is supported by the National Agency for Health IT, *National Sundheds-it* (NSI). Danish GPs were ranked first in a 2008 report by the European Commission on the use of health IT in Europe. A shared, e-based "medical card" with all information on a person's prescriptions and use of drugs is currently being implemented (although with some delays). GPs also have access to an online medical handbook with updated information on diagnosis and treatment recommendations. Another initiative is the gradual implementation of clinical databases to monitor quality in the primary care sector (*DataFangst*). In addition, *Sundhed.dk* is a national IT portal with differentiated access for health staff and the public. The portal 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 and treatments offered, etc. Professionals may also use the system to view records and laboratory test results for their own patients. The portal provides access to the available quality data for primary care clinics. All primary care clinics use IT for electronic records and communication with regions, hospitals, and pharmacies. Each region has developed its own electronic patient record system for hospitals, with adherence to national standards for compatibility. All citizens in Denmark have a unique personal ID, which is used for identification in all public registries including health databases.

How are costs controlled?

Annual negotiations between the central government and the regions and municipalities result in agreements on the economic framework and a national budget cap for the health sector, including overall levels of taxation and expenditure targets. At the regional and municipal levels, management tools used to control expenditure include contracts and agreements between hospitals and the regions, as well as expenditure monitoring. However, the introduction of a one-month general waiting time guarantee (for all services) and predefined treatment "packages" with specified short waiting times between different stages of the treatment path for cancers and other life-threatening diseases has made it more difficult for regions to control expenditures. The one-month guarantee implies that patients can seek access to private treatment facilities at the expense of the home region if they face expected waiting times exceeding one month for any type of treatment.

Policies to control pharmaceutical expenditure include generic substitution by doctors and pharmacists, prescribing guidelines, and systematic assessment of prescribing behavior by the regions. Pharmaceutical companies report prices to the National Board of Health on a monthly basis. The price list is provided to pharmacies, and they are obliged to choose the cheapest alternative with the same active ingredient, unless the prescribing doctor has explicitly stated that he or she prefers a specific drug. Patients may choose more expensive drugs, but have to pay the difference in price. Pharmaceutical expenditure at the hospital level is controlled through coordinated purchasing strategies and guidelines.

What major innovations and reforms have been introduced?

The structural reform of 2007 sought to centralize the administration of hospital care in order to enhance the coordination of service delivery and to improve quality and efficiency. It merged the 14 counties to create five regions and reduced the number of municipalities from 275 to 98. The regions are currently reorganizing their hospital systems, closing or amalgamating small hospitals and building new hospital infrastructure, at a total cost of DKK40 billion (US$6.9 billion). Reorganization of acute care with stronger pre-hospital services and larger specialized emergency departments is an important aspect of this new structure. The National Board of Health has also issued new guidelines for the localization of specialized treatments and departments. The structural reform also introduced municipal cost-sharing for hospital treatment to encourage municipalities to pay more attention to prevention and health promotion. The municipal contribution covers about 20 percent of the cost of treatment. Mandatory agreements between municipalities and regions on patient pathways, chronic care, and care for older people are also intended to promote collaboration. These agreements are formalized at least once in each four-year election term for municipal and regional councils, and must be approved by the National Board of Health.

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