

# Comparison of the Danish and German healthcare system

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## 1. Summary

This document describes the different German and Danish healthcare systems concerning the following aspects:

- Role of the Government
- Primary care
- Secondary care
- Emergency care
- Long term care and social supports
- Hospitals
- Quality control
- Procurement and pricing

The overview should serve to gain a basic understanding of the two systems and their financial basis. We would like to support all actors across the border who have an interest in a business in the region. Here business is not limited to companies, but we include education, research, innovation and practitioners in the programme region and beyond.

## 2. Overview

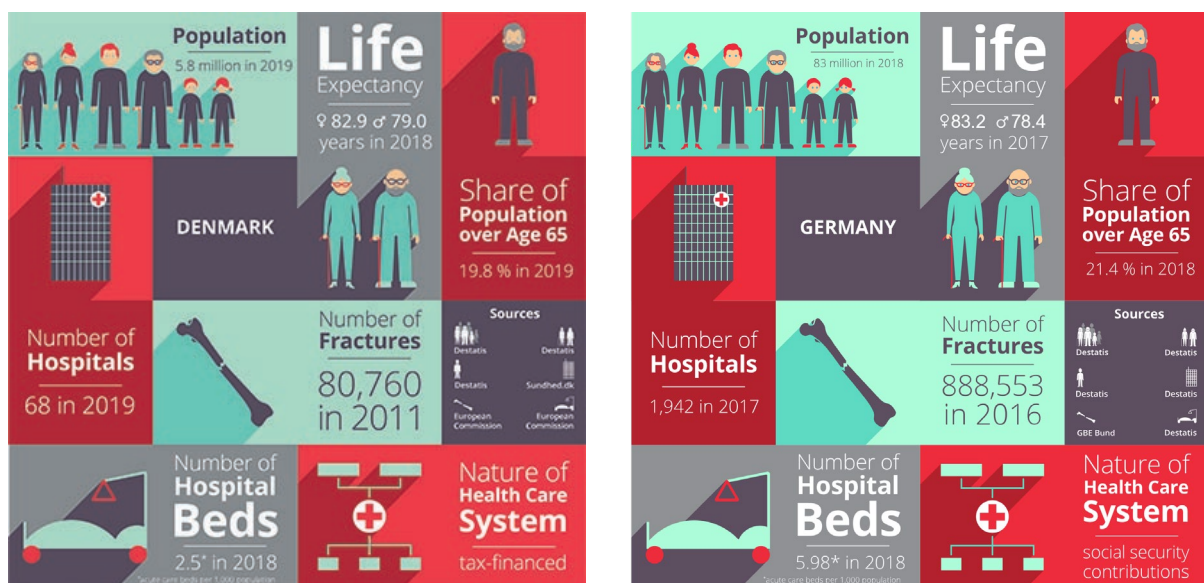


Figure 1 Healthcare systems sketch kindly provided by BFCC Interreg B project, updated as indicated.

## 3. Denmark

### Role of the Government [1]

Healthcare in Denmark is mostly provided by the local governments of the [five regions](#), with coordination and regulation by the [central government](#). At the same time, [nursing homes](#),

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home care, and [school health services](#) are the responsibility of the 98 [municipalities](#). Some specialised hospital services are managed centrally.

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 providing 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 specialised rehabilitation. [1]

There are two insurance groups. More than 99 % of the patients are covered by insurance from group one. They get a practitioner in their district to consult.

Those who have the insurance provided by group two may visit any GP or medical specialist they wish but might have to pay a share on their own at their visit. Citizens with this type of insurance make up less than 1% of the population.

Healthcare is financed mainly through a national health tax on taxable income.

### eHealth records [2]

At all levels in the health system Information technology (IT) is used and 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 the overall implementation of electronic health records in 2014. All citizens in Denmark have a unique electronic personal identifier, appearing 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.

Practitioners use Electronic Medical Records (EMR) and Electronic Prescribing to exchange clinical messages (EDI) using the [MedCom](#)<sup>1</sup> network.

### Primary care [1]

The regions determine the number and location of general practitioners (GP), and their fees and working conditions are negotiated centrally between the physicians' [union](#) and the government. The municipal health services provide [health visitors](#), home nurses and [school healthcare](#). Each GP has an average of 1600 patients in Denmark [1]. Citizens are assigned a specific general practitioner (GP) and may receive aid at no cost, including visiting a medical specialist at the referral of their GP. Every citizen is in contact with the primary healthcare system seven times a year; on average, 10 % of the population do not use primary care

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<sup>1</sup> MedCom is financed and owned by The Ministry of Health, Danish Regions and Local Government Denmark. MedCom's role is to contribute to the development, testing, dissemination and quality assurance of electronic communication and information in the healthcare sector to support excellent continuity of care. MedCom is developing standards and profiles for exchange of healthcare related data throughout the entire Danish healthcare sector.

within a year. The GPs handle the vast majority of medical cases without referral to further examination or specialised treatment. [3]

### Secondary care [2]

The regions own and run hospital care. This is similar to the models in other Scandinavian countries.

### Emergency Medical Services

Emergency Medical Technicians (EMTs) and paramedics will often provide help, traditionally considered as 'hospital treatment'. Data analysis, telemedicine and point-of-care technologies have become an integrated part of ambulance treatment. In case of a life-threatening emergency, a physician-staffed Mobile Critical Care Unit (MCCU) will usually be dispatched.

### Long-term care and social support [4]

All municipalities offer their elderly citizens preventive home visits. The city can decide that preventive efforts should focus on specific themes, for example, loneliness, fall prevention, security, nutrition, physical activity, etc.

The federal government establishes a budgetary limit for each district and municipality, while local leaders formulate policies and services within those constraints according to the individual needs of the community.

Nursing homes tend to be council-run, with even private institutions inspected by local authorities and subsidised to bring prices in line with state institutions.

If an older person reaches a point at which they cannot remain at home, the city will offer one of several residential options in senior care.

### Home care services [5]

The target group for home care services are older people who live at home but are unable to manage everyday life on their own. Home care falls in two categories: practical help (e.g. cleaning and laundering) and personal care (e.g. bathing and shaving). The municipality provides these services free of charge. Older people may also receive food services based on an assessment of individual need. In 2015, around 12 % of all elderly over 65 received home care services.

All municipalities must establish Senior Citizens' Councils to promote user influence. The councils are on duty for four-year terms, and all citizens over 60 have the right to vote or run for the board. The municipality must consult the Senior Citizens Council in any issue relevant to the local elderly population.

### Danish hospitals [4]

Hospitals need to consider means to increase efficiency and productivity to be able to treat more patients without increasing costs. In Denmark, the aim is to reduce patients' length of stay in a hospital.

There are considerable investments in automation processes and digital help. A cornerstone in the Danish hospital structure is 16 hospital construction projects, the *Super Hospital Programme*, where several small hospitals merge into fewer, highly specialised hospitals. The

overall aim is a 2 % annual increase in total hospital productivity. From the Super Hospitals, the regions demand efficiency gains of up to 8 %.

The expectation for 2020 is an average length of stay in Danish hospitals of less than three days, and the number of outpatient treatments should increase by 50 % since 2007.

### Available data

A national website ([esundhed.dk](http://esundhed.dk)) provides access to benchmarking data related to service, quality and number of treatments performed. The site also provides access to data from several Danish health registries (see below) and information about developments in pharmaceutical prices and reimbursement levels. Patients have access to several personal services like information about the clinical and organisational quality of a hospital as well as studies of the patient experience. [6]

On the webpage, citizens can access many personal services and data such as patient records from hospitals (e-journals) as well as general information on health, diseases and patient rights.

### Patient Safety Authority

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

### Control of costs [2]

A budget law (*budgetlov*) outlines the overall framework for controlling healthcare expenditures. It sets budgets for regions and municipalities and specifies automatic sanctions if exceeded. Annual agreements among regions, municipalities, and the government supplement the budget law to coordinate policy initiatives aimed at limiting spending, including direct controls of supply.

Block grants for the regions are conditional on annual increases in productivity of 2 % based on diagnosis-related groups. Even though the activity-based portion is small, it makes up regions' marginal income and presents a strong incentive. Furthermore, regions are under pressure to deliver good performance, as they risk reforms if they do not provide.

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

### Procurement and medicine pricing [4]

In Denmark, pharmaceutical companies are free to set the official prices of medicine. However, members of the Danish Association of the Pharmaceutical Industry are subject to a price-cap agreement between the Association, the Ministry of Health and the Danish Regions. The procurement and pricing procedures differ between the hospital sector and the primary healthcare sector.

#### The hospital sector In Denmark

Amgros purchases 99 % of all medicines used at public hospitals. The five regions own Amgros, a pharmaceutical procurement service, that carries out tendering procedures and

purchases medicines for all public hospitals. The regions pay for hospital medicines, and all treatments in public hospitals, including medication. Patients do not have to pay for anything.

### The primary healthcare sector

The actual pricing of medicines for the primary healthcare sector varies depending on whether there are directly competing products. 14-day auctions set the prices of directly competing medicines from the generic industry. Following each tender, the pharmaceutical companies will report their prices for the following two weeks to the Danish Medicines Agency. All pharmacies are informed about the costs to make sure that they are the same throughout Denmark. The system guarantees price transparency and market competition. Included in the price-cap agreement between the Danish Association of the Pharmaceutical Industry, the Danish Regions and the Ministry of Health Medicines are all products with no direct competitors but granted reimbursement by the Danish Medicines Agency.

## 4. Germany

### Role of the Government [7]

Germany has a statutory health insurance system (SHI), with 109 [8] competing but not-for-profit insurance agencies financed by taxes. High-income people (above 60,750 €/year, 2019) and freelancers can opt-out for private health insurance which also covers civil servants. About 10 % of people have private insurance (PHI). About 50 companies compete on the market. [9]

The state holds most university hospitals, while municipalities play a role in public health activities and hold about half of all hospital beds. However, the various levels of government have virtually no part in the direct financing or delivery of healthcare. Self-governing associations within sickness funds and provider associations are in charge of regulation. They are represented by the most important body, the Federal Joint Committee.<sup>2</sup>

Patients health insurance covers costs that are directly associated with the treatment in the hospital. The federal state in which the hospital is located finances so-called 'investment costs' such as diagnostic machinery, ambulance vehicles, and building maintenance.

### What is covered

In Germany, patients are free to choose a physician or a hospital - the fund directly pays the costs. In contrast to the SHI, a person has to apply for PHI. In PHI, the insured person can choose the coverage and its amount. The commission paid by a PHI is higher than the one paid by the SHI. [9]

In 2011, patients with public health insurance privately paid about 1.5 Billion Euro for special services, while 82% of physicians offered their patients individual services in their doctor's

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<sup>2</sup> The **Federal Joint Committee** (German: *Gemeinsamer Bundesausschuss*) refers to a group of German public health agencies that were merged in 2004 under an independent chairman. It is authorised to make binding regulations growing out of health reform bills passed by lawmakers, along with routine decisions regarding healthcare in Germany.

Although the Committee is not a subordinate agency and is independent of the Ministry of Health, government officials are responsible for exercising legal supervision over the Committee's decisions and guidelines. As a supreme decision-making body, the Committee exerts a direct influence on the healthcare provisions for millions of people. [8]

offices not being covered by the patient's insurances; the benefits of these services are controversially discussed. [8]

### Administrative mechanisms for direct patient payments to providers [9]

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. Co-payments or payments for services not included in the benefits catalogue are paid directly to the provider. In cases of private health insurance, patients pay upfront and submit claims to the insurance company for reimbursement.

### After-hours care [9]

After-hours care is organised 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 local regulations. In some areas (e.g., Berlin), hospitals take over after-hours care. The patient receives a report after the visit to hand to his or her GP. After-hours care assistance is also available via a nationwide telephone hotline (116 117 - *Ärztlicher Bereitschaftsdienst*). Payment for ambulatory after-hours care bases on the fee schedules mentioned above, again with differences in the amount of reimbursement by SHI and PHI.

### Health system governance [9]

The 16 state governments determine hospital capacity, while ambulatory care capacity is subject to rules set by the Federal Joint Committee. The Federal Joint Committee also introduced minimum-quota defining a minimum amount of nurse and care staff working at any given time.

A system of diagnosis-related groups (DRGs) that is revised annually determines payments for inpatient care. Currently, the system has 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.

### Primary care [9]

Primary care physicians do not traditionally have a gatekeeper function; patients can freely choose and directly access both primary and secondary care providers. There are, on average, 211 patients per practitioner in Germany. [10]

### Secondary care [9]

Specialised care is provided by ambulant working practitioners and by practitioners that are based in hospitals. The 16 state governments determine hospital capacity. There are 650 public, 700 non-profit houses and approximately 600 privately driven hospitals. The average hospital stay is 7,8 days.

### Long-term care and social supports [5]

Long-term care insurance (LTCI) is mandatory and is usually provided by the same insurer as the health insurance and therefore comprises a similar public-private insurance mix. Everybody with a physical or mental illness or disability, who has contributed for at least two years, can apply for benefits. The benefits 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 five levels of care; and 2) limited to specific 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 only cover approximately 50 % of institutional care costs, one advises people to buy supplementary private LTCI. Family caregivers get financial support through payment of up to 50 % of care costs.

LTCI partly covers hospice care if the SHI Medical Review Board has determined a care level. The number of inpatient facilities in hospice care has grown significantly over the past 15 years, to 235 hospices and 304 palliative care wards in spring 2016. [11] The Act to Improve Hospice and Palliative Care passed in 2015, intending to guarantee care in rural areas and link long-term care facilities more strongly to outpatient palliative and hospice care.

### Patient safety

Hospitals have often their own complaints office. Expert and arbitration boards at the medical associations help in case of complaints. A network for patient safety (*Aktionsbündnis Patientensicherheit*) has working groups that identify needs and inform patients and consult healthcare professionals.

### Additional Links to the German system

<https://www.welfaretech.dk/projekter/digital-health-care-40>

The link provides insights into the German healthcare market in form of a video, based on a recording of the network WelfareTech on an event in March 2019.

### Comparison of the two systems [12] [7]

In summary, a hospital in Germany compares to a profit centre, whereas in Denmark it is more a social institution. Germany has over 200 health insurances compared to only one in Denmark. The German healthcare system is notable for two essential characteristics: 1) the sharing of decision-making powers between states, the federal government and self-regulated organisations of payers and providers; and 2) the separation of SHI (including the social LTCI) and PHI (including the private LTCI). SHI and PHI use the same providers. Hospitals and physicians treat both statutorily and privately insured patients, unlike hospitals in many other countries. Private insurances have some influence on the German market, whereas they play a minor role in the Danish market.

The share of ICT in Denmark is a lot higher, which ensures better control of processes and easier monitoring of patients.

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