

The Netherlands

Health system summary

2024

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This Health System Summary refers to the *Netherlands: Health System Review (HiT)* published in 2016 but is significantly updated, including data, policy developments and relevant reforms as highlighted by the Health Systems and Policies Monitor (HSPM) (www.hspm.org). For this edition of the Health System Summary, key data have been updated to those available in September 2024 unless otherwise stated. Health System Summaries use a concise format to communicate central features of country health systems and analyse available evidence on the organization, financing and delivery of health care. They also provide insights into key reforms and the varied challenges testing the performance of the health system.

Main sources:

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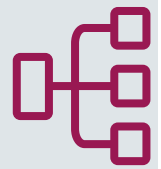
Health Systems and Policy Monitor (HSPM) – Netherlands (2024). European Observatory on Health Systems and Policies (<https://eurohealthobservatory.who.int/monitors/health-systems-monitor>).

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How is the health system organized?



A decentralized health system with private insurers and private providers delivers a wide range of services to the Dutch population.

Organization

The Netherlands has a hybrid health system serving its population of 17.7 million. In 2006, a major reform introduced managed competition to the Dutch health system, changing the government's role from direct control of volumes and prices to rule setting and oversight. Health care is delivered by private providers and operated by private health insurers. Each individual in the Netherlands can choose their health care insurer (although the largest four insurers cover over 80% of the market) and health care plan. Long-term care is operated as a single payer social insurance system

run by the regionally dominant health care insurer. Social care is handled by municipalities. The Ministry of Health, Welfare and Sport (MoH) oversees the stewardship, planning and regulation of the health system, although it does not have a hierarchical relationship with payers or providers and has limited ability to act autonomously. The Netherlands typically approaches policy development through cross-sector initiatives, bringing together stakeholders from different areas, including the MoH, health workers, and patient organizations (Box 1).

Box 1 Capacity for policy development and implementation

The Netherlands has a tradition of managing the health system via self-regulation among private actors. Therefore, most policies are developed and implemented through a multistakeholder decision-making process. This has advantages such as gathering inputs from multiple actors in the health system prior to policy implementation but disadvantages such as limited abilities to take rapid policy action. This was seen during the COVID-19 pandemic, where the MoH needed to take quick unilateral action as part of its response but did not have the formal authority to issue needed directives, for example with testing and tracing individuals, which falls under local government jurisdiction. However, the flexibility and independence in negotiations between payers and providers offers opportunities for experimentation in policy development and implementation. For example, insurers are experimenting with longer-term contracts that can focus on providing value-based care through defined quality indicators.

Planning

The MoH holds the primary responsibility for high-level planning of health and health care, although the municipalities also share responsibility especially for social care and mental health care for children. The Dutch government sets the benefits package and budget, but planning for health services largely operates at the individual provider and payer level.

Negotiations between providers and health insurers determine the price, volume and quality of services available to patients, within the boundaries of the nationally set regulations and benefits package. Providers are responsible for infrastructure investments and both payers and providers maintain financial reserves.

Providers

Most Dutch providers are private, and patients can freely choose their provider. Solo general practitioner (GP) practices are becoming less common and the share of GP partnerships, group practices, and multidisciplinary health centres is increasing. Patients require referrals from their GP to access most specialist care.

Most hospitals are non-profit-making foundations. Medical specialists working in hospitals are either self-employed practitioners contracting with hospitals (around 60%) or formally employed by the hospital, especially in university hospitals.

How much is spent on health services?



The Netherlands spends a relatively high level of resources on health care but also emphasises spending on long-term care.

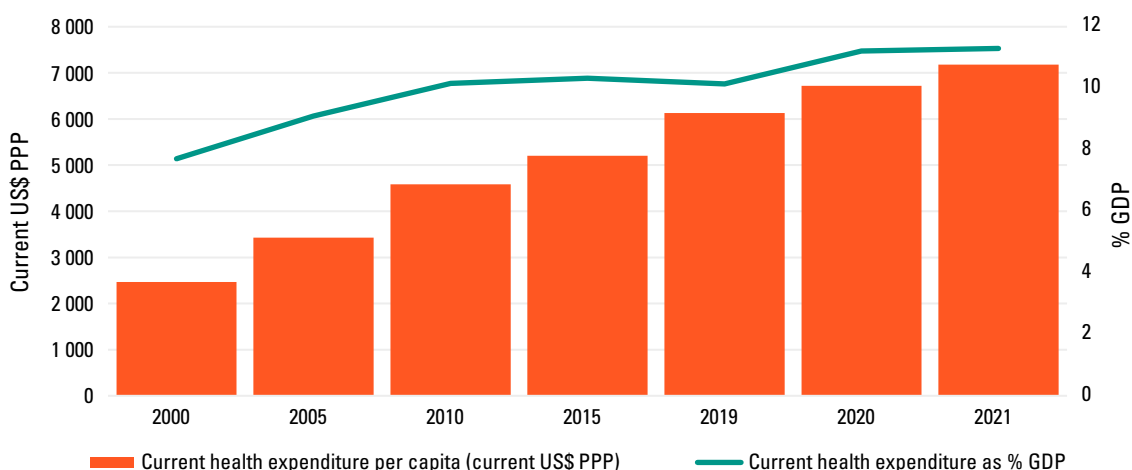
Health expenditure

The Netherlands dedicated 11.3% of its GDP to health in 2021 (Fig. 1). Per person, this was equivalent to US\$ 7179 (adjusted for differences in purchasing power), which is one of the highest levels within the European Union and the WHO European Region (Fig. 2).

In 2021, the largest share of health expenditure went to long-term care at 27.7%, the highest in the EU (average: 16.0%), followed by outpatient care (24.7%),

which is also higher than the EU average (22.7%). In contrast, both inpatient care (16.8%) and the share of expenditures on outpatient pharmaceuticals (10%) were lower than the EU average (24.7% and 18%, respectively). The share of health spending on prevention increased from 3.3% of health expenditure in 2019 to 8.7% in 2021, although over two thirds of this expenditure went towards COVID-19 testing, tracing and vaccines.

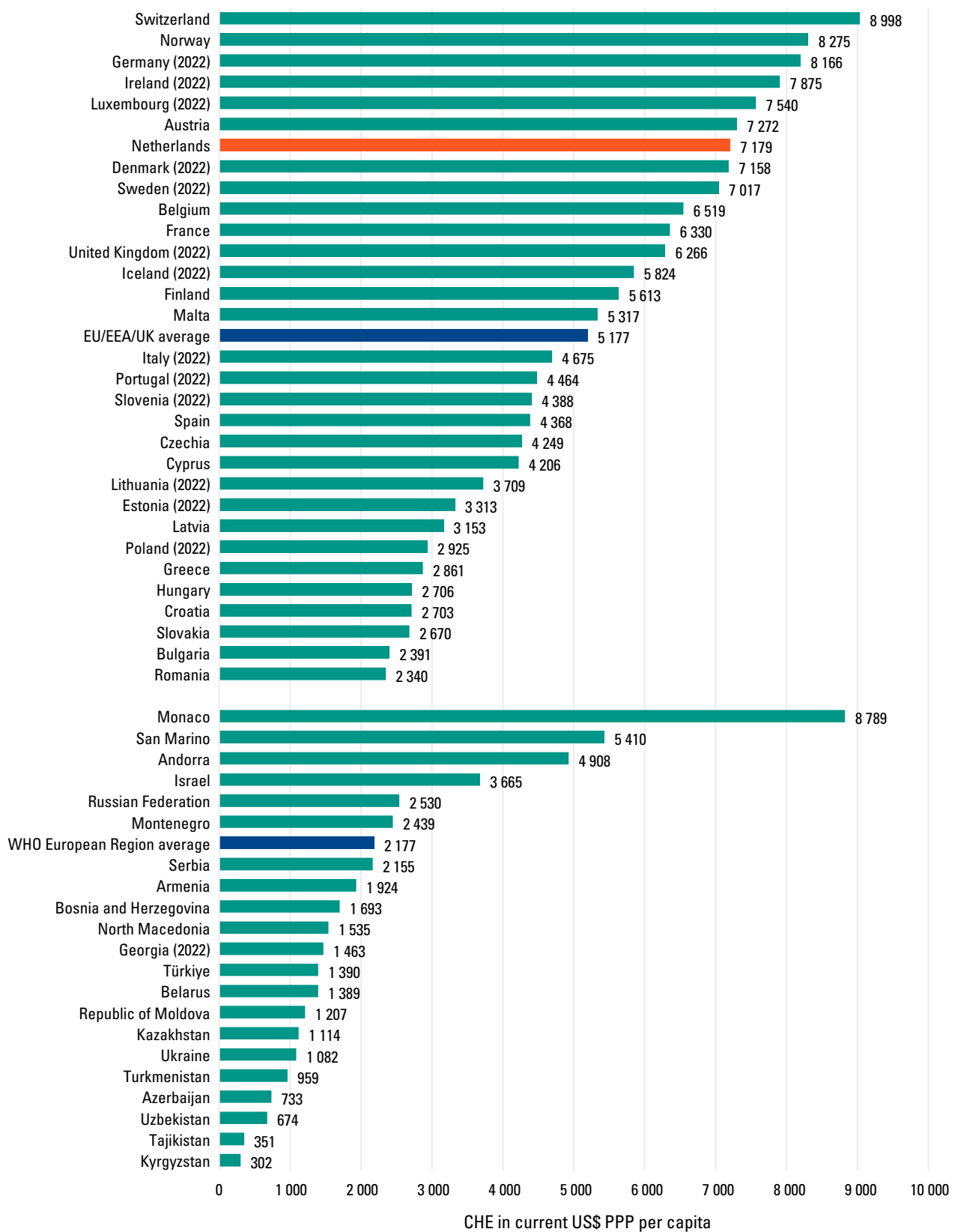
Fig. 1 Trends in health expenditure, 2000–2021 (selected years)



Notes: GDP: gross domestic product; PPP: purchasing power parity.

Source: WHO, 2024.

Fig. 2 Current health expenditure (US\$ PPP) per capita in WHO European Region countries, 2021 or latest available year



Notes: CHE: current health expenditure; EEA: European Economic Area; EU: European Union; PPP: purchasing power parity; UK: United Kingdom.

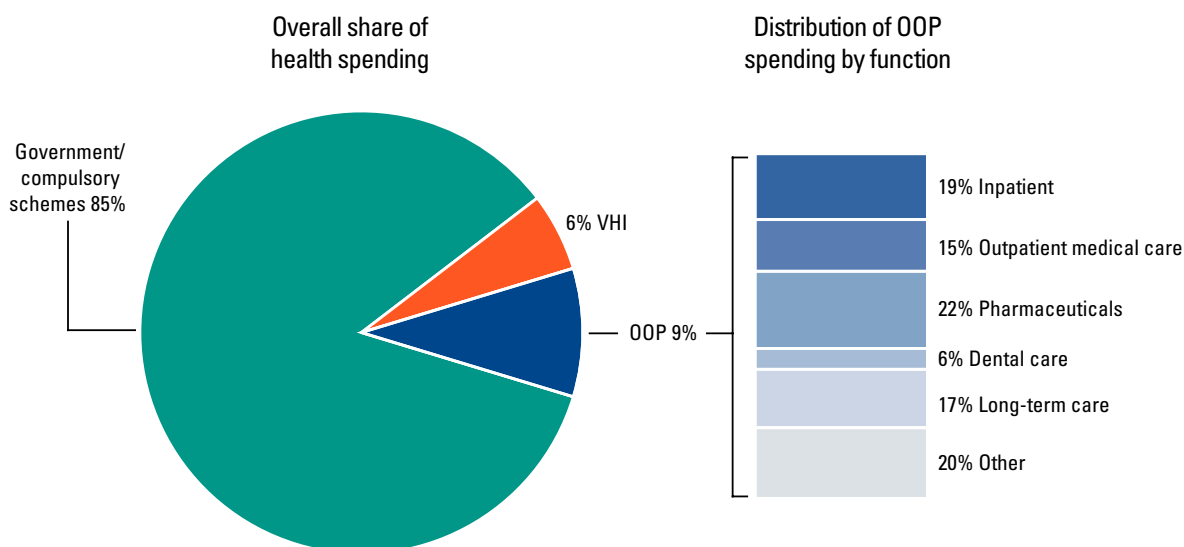
Source: WHO, 2024.

Out-of-pocket payments

Out-of-pocket (OOP) spending in the Netherlands is roughly two thirds of the EU average, at 9.3% of total health spending in 2021. Most OOP payments go towards cost sharing for inpatient and outpatient services, and pharmaceuticals. Health insurers may

offer voluntary health insurance (VHI) plans to finance services not covered by the benefits package such as adult dental care or physiotherapy. Nearly 6% of health expenditure went towards VHI in 2021 (Fig. 3).

Fig. 3 Composition of out-of-pocket payments, 2021



Notes: OOP: out-of-pocket; VHI: voluntary health insurance.

Source: OECD, 2024.

Funding mechanisms

Funding mechanisms in the Netherlands differ based on type of care. For curative care, Dutch residents purchase health insurance from their insurer of choice. Individuals pay 50% according to a community-rated premium directly to the insurer; the other 50% is paid by the employer via an income-dependent premium. The income-dependent premium is collected by the tax office and pooled in the Health Insurance Fund. For

children under the age of 18, the government pays a contribution into the Health Insurance Fund. The first €385 of eligible curative care expenses in a calendar year are paid out-of-pocket as a mandatory deductible. In long-term care, funding comes from income-dependent contributions. Preventative care is funded through general taxation. Government and compulsory insurance funded 85% of health expenditure in 2021.

Coverage

Nearly the entire Dutch population (99.9%) has health insurance coverage for a wide range of services, including primary care, outpatient specialist care, hospital care, maternal services, mental health services and more. The central government

determines the content of the benefits package, which does have some gaps (Box 2). While dental care is not covered in the benefits package, most individuals purchase supplementary VHI to cover these services, and only 0.1% of the population

reported unmet needs for dental care in 2022. Most insurers also offer free complementary VHI for children together with the parents' complementary VHI policy. All Dutch residents are compulsorily

insured for long-term care requiring 24 hours per day supervision; individuals who need care for less time are covered by health insurance and/or social support.

Box 2 What are the key gaps in coverage?

Although purchasing a health insurance plan is mandatory, some residents are uninsured or do not make their payments (defaulters). The government has procedures in both cases to contact these individuals and ensure population coverage, such as sending reminder letters, instituting fines and registering for insurance on their behalf. The uninsured include persons who refuse to insure themselves on religious or philosophical grounds, and undocumented migrants. For these groups, there are special measures to finance their health care.

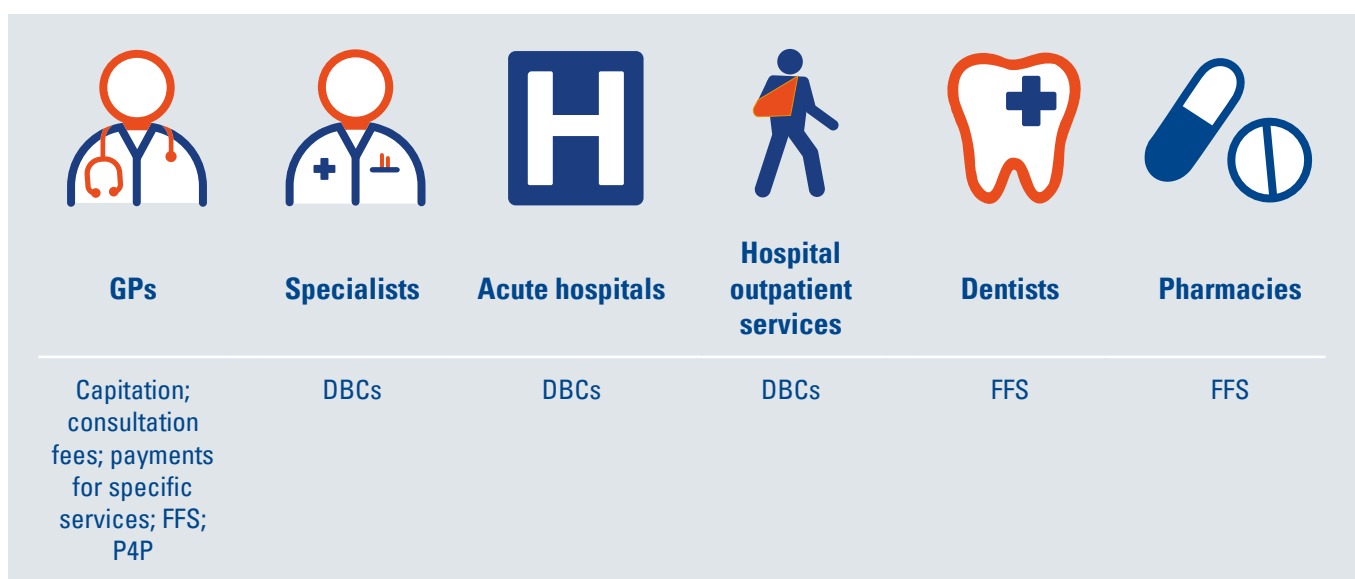
The central government determines the services covered, and there is restricted access to certain expensive pharmaceuticals for rare diseases. While the Netherlands does have a mandatory deductible of €385 a year to access health services, there are collective insurance packages through municipalities through which individuals with low incomes (minimum wage) do not pay a mandatory deductible. Overall, gaps in coverage in the Netherlands are low.

Paying providers

Health insurers negotiate and contract with providers directly. GPs generally agree on a contract with one health insurer and usually the other insurers will comply with that contract. GPs are paid through a combination of methods, including capitation fees, consultation fees, out-of-hours care payments and fee-for-service for prevention and non-medical services. Pay-for-performance

and bundled payments for integrated care are also possible to negotiate in the contracts. Some unplanned or complex hospital care is covered by a fixed budget, but most hospital care is freely negotiable. Diagnosis treatment combinations (DBC), a variation on the concept of DRGs (diagnosis-related groups), form the basis of specialized medical care. Hospitals must provide an

Fig. 4 Provider payment mechanisms in the Netherlands



Notes: DBC: diagnosis treatment combinations; FFS: fee-for-service; P4P: Pay-for-Performance.

overview of the total costs of each treatment from the first consultation until the final follow up after treatment,

which the Dutch Healthcare Authority uses to adjust the DBC system.

What resources are available for the health system?



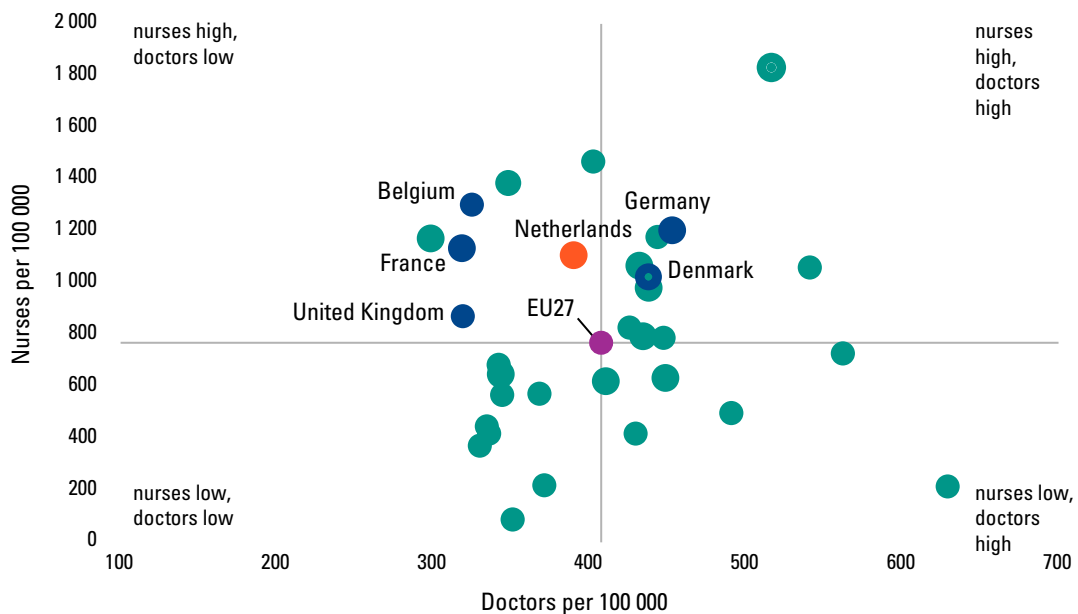
The Netherlands has a smaller physical infrastructure but more nurses than most EU countries.

Health professionals

The Netherlands had 390 physicians per 100 000 population in 2021, slightly below the EU average of 407 physicians per 100 000 population. A higher share of physicians practice as GPs in the Netherlands (25%) compared to the EU average (20%), but there are growing shortages of GPs as well as physicians in certain specialties like psychiatry, paediatrics and

geriatrics. The density of nurses per 100 000 population is higher than the EU average, at 1108 in the Netherlands in 2021 compared to 770 in the EU, but nursing shortages exist in some areas such as hospitals. Nurses increasingly have advanced nursing roles that support taking over tasks from physicians and encourage career progression.

Fig. 5 Practising nurses and physicians per 100 000 population, 2021



Note: Nurse numbers are for practicing nurses (with EU-recognized qualification).

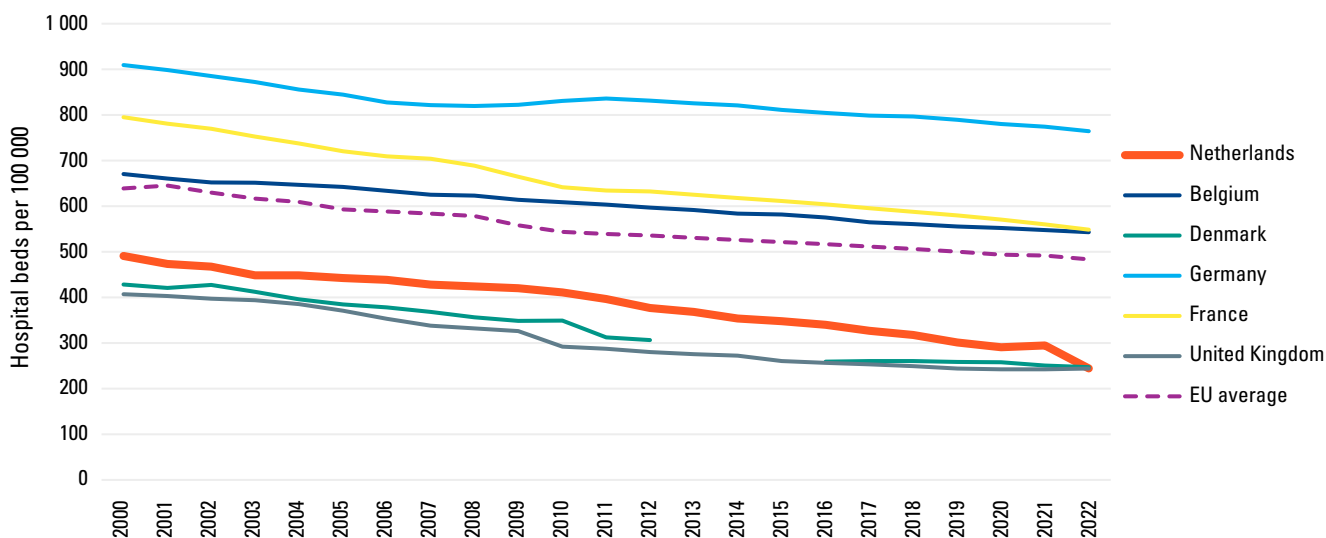
Sources: Eurostat, 2024; OECD, 2024 for United Kingdom.

Health infrastructure

The Netherlands has steadily reduced its number of acute hospital beds and had a total of 245 hospital beds per 100 000 population in 2022, close to half of the EU average of 485 beds per 100 000 population (Fig. 6). The relatively low number of hospital beds is supported by factors such as higher rates of day surgeries and care delivered at home. In 2022, the

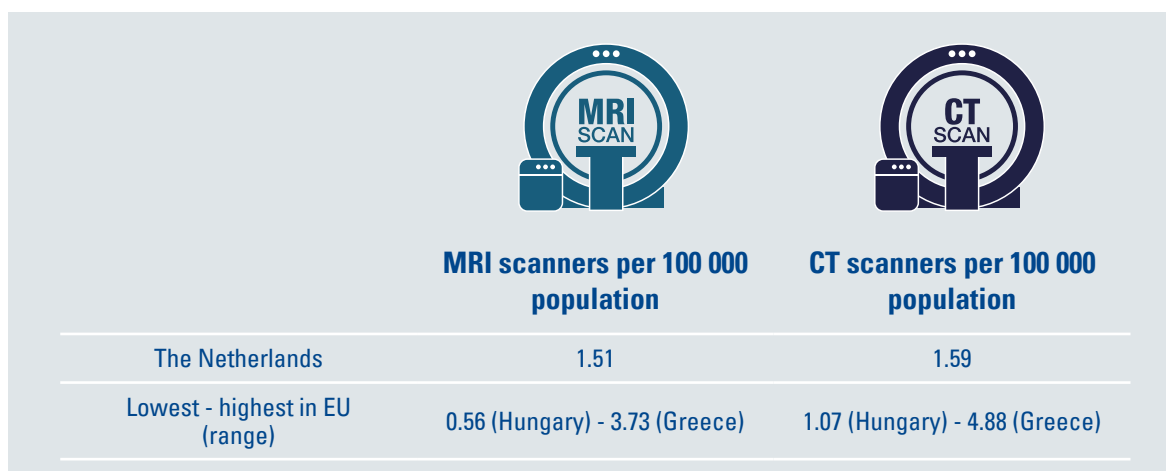
Netherlands had 1.51 MRI scanners and 1.59 CT scanners per 100 000 population, on the lower end of the range available in EU countries, and 0.49 PET scanners per 100 000 population, the highest of any EU country aside from Denmark (Fig. 7). Purchases of new equipment are the responsibility of individual health care institutions.

Fig. 6 Hospital beds per 100 000 population in the Netherlands and selected countries, 2000–2022



Sources: Eurostat, 2024; OECD, 2024 for United Kingdom.

Fig. 7 Magnetic resonance imaging (MRI) and computed tomography (CT) scanners in the Netherlands, per 100 000 population, 2022



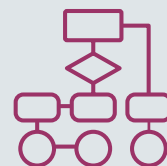
Source: Eurostat, 2024.

Distribution of health resources

As a small country, geographical inequalities in health resources are relatively minor in the Netherlands. However, certain specialties and settings experience shortages, for example, in mental health. The nursing workforce in hospitals is also strained, and the pressure on personnel was exacerbated during

the COVID-19 pandemic, prompting hospitals to hire freelance nurses to offset staffing shortages. This has led to calls by health insurers to improve working conditions in hospitals and reduce reliance on freelancers to control costs and maintain quality.

How are health services delivered?



There is a strong emphasis on primary health care through a GP gatekeeper system; in parallel, several policies promote the delivery of integrated care.

Public health

Municipalities hold most responsibility for providing public health services. The Public Health Act, in force since 2008, specifies the services covered, which include preventive health care for children, screenings and vaccinations. Children up to 4 years of age receive preventive care and vaccinations at municipal child health centres staffed by specialized physicians and nurses. These child health centres also provide medical and parenting advice, and refer children to other primary health care providers, mostly GPs, when treatment is needed. Older children receive preventive check ups from school doctors. Every child has an appointment at the age of 5, 10 and 13 years. Most municipalities have created youth care teams

that coordinate and provide community-based care. Vaccinations for children over the age of 4 years are provided by the public health services.

Five regional screening organizations organize population-based screening programmes for breast cancer, colon cancer and cervical cancer. The screening organizations perform breast cancer and colon cancer screenings, and GPs perform cervical cancer screenings. In the case of colon cancer, everyone between 55 and 75 years old receives self-sampling test kits every 2 years. Individuals with a positive result receive an invitation for a follow-up examination. All adults aged 60 and over can receive an influenza vaccination provided by GPs free of charge.

Primary and ambulatory care

A range of providers operate at the primary care level, including physiotherapists, dentists, midwives, remedial therapists and primary care psychologists. However, GPs are the main point of contact and central figures in the Dutch health care system, acting as gatekeepers to most secondary care (Box 3). Citizens choose their GP, who is usually nearby, but are allowed to switch freely. However, GPs can refuse to take on patients and in practice it may be difficult to switch

because of a shortage of GPs.

Most GPs are independent or work in partnerships, with 82.5% in group practices and 17.5% in solo practices in 2022 (NIVEL, 2024). A few are employed by other GPs. Most GPs are members of the Dutch College of General Practitioners (NHG), which has developed guidelines for over 90 health procedures, including anamnesis, examination, treatment, prescription, and referral. These are updated regularly.

Within primary care, several tasks have shifted to other providers over the last 30 years. Practice nurses handle patients with chronic conditions: diabetes, COPD and cardiovascular diseases. Moreover, patients have direct access to dentists, midwives, physiotherapists and remedial therapists. Occupational doctors can refer patients to secondary care. In contrast, since 2014, a larger share of mental

health care has fallen to GPs, who refer patients to specialists only when a DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, IV edition) diagnosis is suspected. Home nursing care is provided by district nurses, who assess and coordinate care between clients, informal carers, GPs and other professionals. Specialized ambulatory care is mostly provided in hospitals.

Box 3 What are the key strengths and weaknesses of primary care?

Dutch GPs have broad service profiles compared to GPs in many other countries. The primary care system prioritizes skill mix and expanding nurses' roles. GP practices are the first contact for patients and treat minor problems, referring severe cases to specialized care. They coordinate care for chronic conditions like diabetes, COPD, asthma, cardiovascular risk management and mental health.

With this background, key strengths of Dutch primary care include accessibility and quality. Quick access is ensured, with GP care excluded from the compulsory deductible in health insurance schemes. GP appointments can usually be obtained within 2 days, and almost 100% of the population can reach a GP within 15 minutes of travel. Out-of-hours care is provided by larger GP cooperatives. Low rates of avoidable hospitalizations in 2019, nearly 29% lower than the EU average for conditions like diabetes and COPD, reflect high-quality outpatient care (OECD/European Observatory on Health Systems and Policies, 2023). Patient satisfaction with GP care, communication, and decision-making is high.

There are several concerns about the system's ability to cover future population health needs. Although geographical inequalities are currently small, regional differences in demographic development have an impact on the demand for health services to which the workforce must adapt. Moreover, despite the Netherlands having a higher percentage of doctors working as GPs compared to the EU average, there is a shortage of GPs, which is projected to intensify in the coming years (OECD/European Observatory on Health Systems and Policies, 2023). Other challenges include further integrating technological innovation and enhancing data management.

Hospital care

Hospitals have both inpatient and outpatient departments, as well as 24-hour emergency wards. Secondary care (care that is only accessible upon referral from a primary care health provider) is mainly provided by hospitals and mental health care providers.

There are six types of institutions that provide hospital or medical specialist care. These include general hospitals, academic (university) hospitals, specialized hospitals, independent treatment centres,

so-called top clinical centres (topklinische) and trauma centres. Specialized hospitals provide care for one type of condition only, such as cancer hospitals, eye hospitals and rehabilitation centres. Independent treatment centres provide day care only while top clinical centres provide both general hospital care and complex care. Several policies over the past two decades have promoted the development of integrated care (Box 4).

Pharmaceutical care

Patients can access prescription pharmaceuticals only at pharmacists and in some rural areas, dispensing GPs. Physicians, dentists, midwives and specialized nurses are able to write prescriptions.

Over-the-counter medications are available more broadly, depending on the category of the medication. Most pharmacies are owned by private entrepreneurs and nearly half are part of a pharmacy

Box 4 Are efforts to improve integration of care working?

Care integration is a core principle of the Dutch health care system, supported by changes in financing. From 2008 to 2016, the Netherlands introduced experimental financial and delivery models of integrated care for older people. In 2010, a bundled payment system for diabetes type II, COPD, asthma and cardiovascular risk was implemented. Additionally, in 2013, a new GP payment system to promote integrated care and cooperation was introduced.

Organizationally, GPs are responsible for coordination of care for common chronic conditions, and mental health care. Similarly, medical specialists and hospitals have become more integrated. Integration is also used in competition among insurers, who can compete by offering attractive (for example, integrated) care arrangements.

From 2022 to 2023, the Dutch health system introduced the cross-sectoral Integrated Care Agreement (Integraal ZorgAkkoord, IZA) to keep health and social care accessible, affordable and of high quality for the future (see section on *Reforms*). It shifts from a disease perspective to one of health, emphasizing prevention, support for vulnerable people and intersectoral responses to care requests, for example, evaluating when a medical response or other form of care (such as social care) is more appropriate. By promoting innovative integrated care pathways involving primary care, public health, social care and mental health, this agreement aims to further embed integration into the health system.

chain, many of which are owned by pharmaceutical wholesalers. Health insurers negotiate volume and price of pharmaceutical care with the pharmacies, which has enabled the Netherlands to control pharmaceutical costs and encourage the use of generics. There is a positive list for outpatient prescribed

medicines, with maximum prices set by the government. Hospitals are responsible for inpatient medicines and there is no positive or negative list, except for very expensive medicines that are subject to health technology assessment (HTA). If these medicines are not approved, they cannot be prescribed.

Mental health care

For most patients with mental health care needs, GPs serve as the initial point of contact and first level of mental health services for adults. For children, mental health care is organized by the municipalities (following the Youth Care Act (Jeugdwet)). The second level of mental health care is provided by psychologists and psychotherapists who work at their own practices, or in GP practices, where community psychiatric nurses and nurse specialists normally work. The third level of mental health care is conducted by highly specialized professionals, often operating in a multidisciplinary

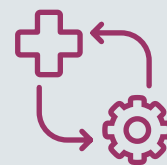
team in a mental health care institute. Waiting times, especially for child mental health services, have become an issue due to shortages of mental health professionals. In 2022, the Netherlands introduced the Good Mental Health for All action plan, recognizing a need to strengthen mental health services in the aftermath of the COVID-19 pandemic. The action plan highlights five areas to focus on to improve mental well-being, including society, local communities, educational institutions, workplaces and online, and has objectives within each of these areas.

Dental care

Dental care is provided in primary care by dentists and dental hygienists. Most citizens register with a dentist. Preventive tasks and relatively simple dental care are increasingly being shifted to dental hygienists. Dental care for children under 18 years is part of the basic benefits package.

In secondary care, there are two specialist medical professions: dental surgeons and orthodontists. Most dental surgeons work in hospitals, and their care is covered by the basic benefits package. Most orthodontists work in ambulatory settings outside hospitals, and their care is not part of this package, but can be insured via VHI.

What reforms are being pursued?



The Dutch health system is pursuing reforms that improve accessibility and coverage, often linked to financing reforms.

Both the mental health and long-term care systems in the Netherlands have undergone major reforms, illustrating the shifting principles of the health system. These include a shift away from specialized care, and a growing emphasis on care integration, often linked to financing.

In long-term care, since 2015, major parts of the system have been reorganized and decentralized (Box 5). In the area of mental health care, which was previously financed separately from health services, in 2008, this sector became financed by three sources: curative care, long-term care and public mental health care. Moreover, since 2014, mental health care has been provided at three levels to reduce unnecessary specialist care: GPs, secondary specialist care with GP referral for suspected DSM-IV conditions, and specialized care for complex disorders (see section on Mental health care), with financing via patient profiles, diagnosis-treatment combinations (DBC's), and care packages, respectively. As of 1 January 2022, an integrated financing system characterized as fee-for-service is in place to streamline financing and contain costs for adult mental health care: providers can only get consultations and inpatient days reimbursed, with the Dutch Healthcare Authority setting the maximum price of the reimbursable units.

In 2012, sectoral agreements were introduced to control health care expenditure, targeting financial and care-related matters in various sectors (Box 5). In 2022–23, a new cross-sectoral Integrated Care Agreement (Integraal Zorg Akkoord; IZA) was reached involving stakeholders from the care and social sectors (Box 4). Operationally, it details around 400 agreements, including appropriate care, regional cooperation, strengthening of primary care, collaboration between social care, primary care and mental health care, prevention and health promotion, workforce and contracting, and digitalization, among others.

Quality of care and prevention of errors and fraud are persistent topics on the reform agenda. Quality is often part of negotiations between health care providers and health insurers. Prevention of fraud, such as upcoding or billing non-provided care by health care providers, was addressed by new legislation in 2023, introducing more options for regulating care providers.

More recent reforms in 2024 have focused on affordability and expanded coverage, such as extended postnatal care, fall-prevention measures, and improved access to abortion services. Future reforms will address workforce shortages, dental care coverage, care quality, and the health system's financial sustainability and resilience.

Box 5 Key health system reforms over the past 20 years

Health Insurance Act (Zvw) and the Health Care Market Regulation Act (2006): introduced managed competition among actors as a new driving mechanism in the Dutch health care system.

Sectoral agreements (2012–2021): multi-year agreements between the government and key stakeholders within the health care sector, which promote collaboration and align goals to address challenges like cost containment, improving quality of care and increasing efficiency. Typically, they cover a broad spectrum of health care sectors.

Reform of non-acute care (2015): introduction of the Long-term Care Act for inpatient nursing care, the Youth Act for Mental Care for Children and Help with Parenting, and the Social Support Act. Aims included to reduce inpatient nursing care and stimulate people to live in their own homes for longer, with a focus on municipal support. This reform was accompanied by a significant reduction of the total budget.

Box 5 (Continued)

Changes in GP reimbursement (2018): several changes to the GP reimbursement system included an increase in funding, better compensation for longer and more complex consultations, and expanded reimbursement for digital and after-hours care. GPs were also given additional support for managing chronic illnesses and mental health, and for coordinating elderly care. The reforms aimed to relieve workload pressures and promote innovative care models while simplifying administrative processes.

Quality of care initiatives in long-term care and youth care (2019): several measures have been taken to improve quality of youth care and long-term care, including in nursing homes, reducing waiting lists in youth care and strengthening collaboration in care (both medical and social) to keep elderly people living at home for as long as possible.

Sectoral Care Agreement (IKA) (2022–2024): this agreement targets sustainability, accessibility and quality of health care. It emphasizes preventive care and integrated care, shifting more services from hospitals to primary care and encouraging collaboration among health care providers. The agreement also addresses workforce shortages by improving working conditions and reducing administrative burdens. A key focus is on financial sustainability, setting limits on health care spending growth while promoting efficiency and digitalization, such as telemedicine and e-health solutions.

Mental health financing (2022–2024): new health care performance payment model for mental care and new financing system for curative mental care for adults.

Changes in the Public Health Act (2023): options included to introduce collective measures in the case of a pandemic disease.

Healthcare Provider Admission Act (2023): regulates registration and licencing of care providers that deliver care covered under the Health Insurance Act or the Long-term Care Act.

How is the health system performing?



Metrics on health outcomes and unmet needs demonstrate the relatively good quality and accessibility of the Dutch health system.

Health system performance monitoring and information systems

Health care providers are responsible for the quality of care provided, and the Dutch Minister of Health is primarily responsible for the proper functioning of the system as a whole. The Ministry of Health regularly releases reports about the state of health of the population. The Netherlands began developing a performance framework for the system back in 2002 and published the last Dutch Health Care Performance Report in 2014. Health system performance figures are available online at <https://www.staatvenz.nl/>.

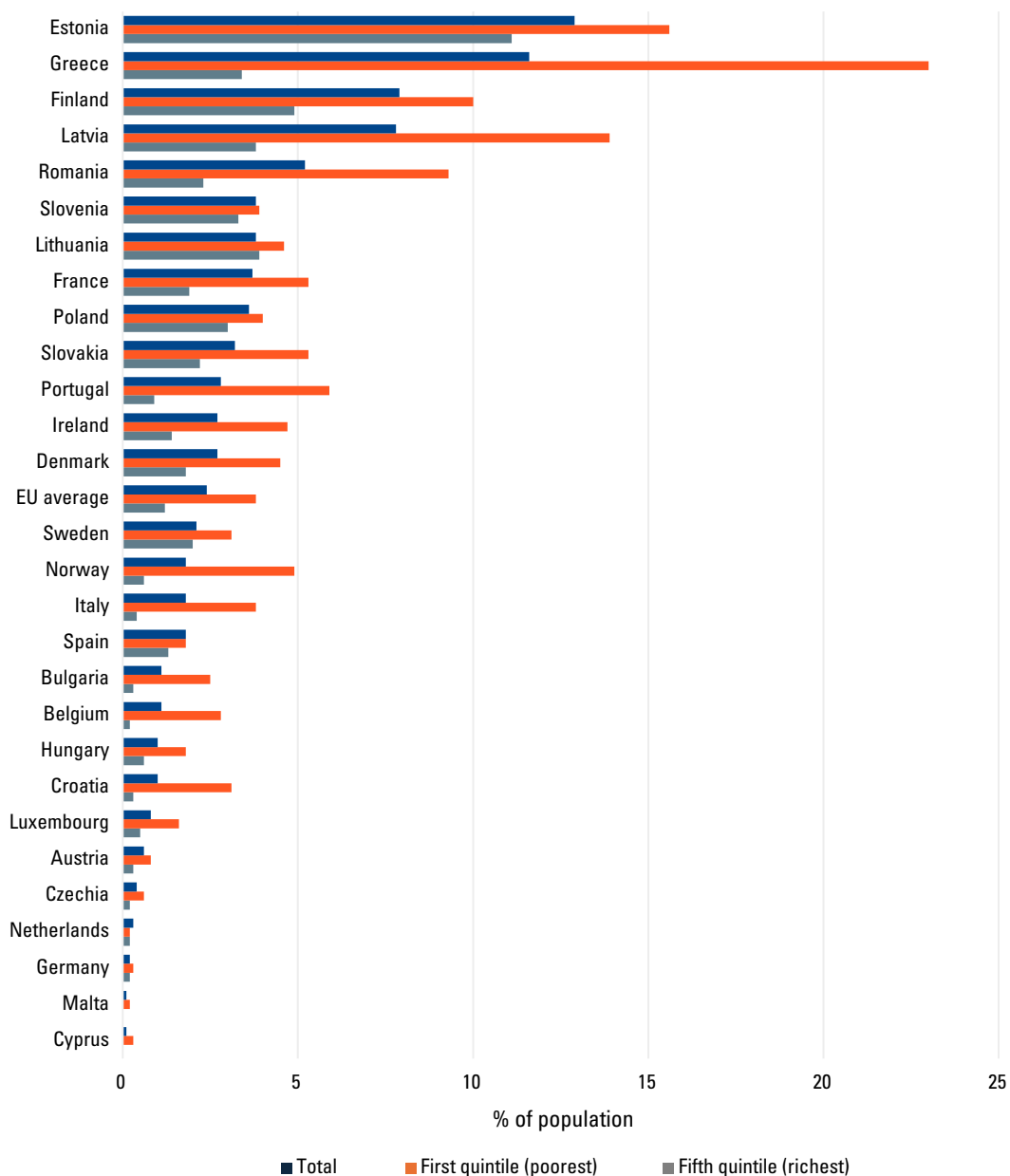
All GPs use an electronic information system to record patient medical data, which are integrated into the electronic prescription system. Individual providers have their own electronic health records system, which may lack interoperability. Patients have a right to view their medical records and receive an electronic copy. Several websites allow individuals to compare health care providers with written reviews to help them choose their provider, but these websites are not used very often (Springvloet et al, 2021).

Accessibility and financial protection

The Netherlands has among the lowest unmet needs in the EU, with only 0.3% of the population reporting unmet needs for medical care due to cost, travel distance or waiting times in 2023 (Fig. 8). Financial protection is also strong, with a relatively low share of OOP expenditure due to widespread adoption of VHI for supplemental services. The Netherlands has

among the lowest rate of catastrophic health spending in the EU. Individuals can choose their health insurance plan and accordingly, how high their annual health insurance premium is. Generally, more expensive plans offer greater freedom in choosing health care providers, whereas less expensive plans have a more limited choice of providers.

Fig. 8 Unmet needs for a medical examination (due to cost, waiting time, or travel distance), by income quintile, EU/EEA countries, 2023



Notes: EEA: European Economic Area; EU: European Union.

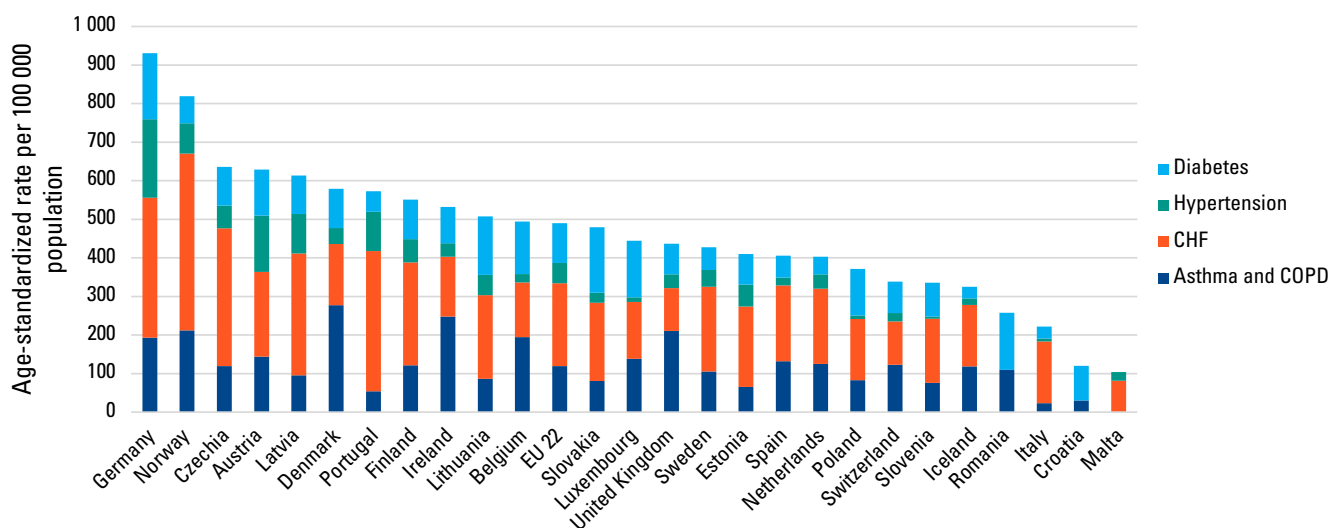
Source: Eurostat, 2024.

Health care quality

The Netherlands had lower avoidable hospital admission rates for asthma and COPD, congestive heart failure, hypertension and diabetes than the EU average in 2021 (Fig. 9). This indicates that primary care and outpatient secondary care prevent more serious

complications from developing. In terms of quality in secondary care, in-hospital mortality rates for admissions following acute myocardial infarction dropped substantially between 2011 and 2021 and fall below most EU countries (Fig. 10).

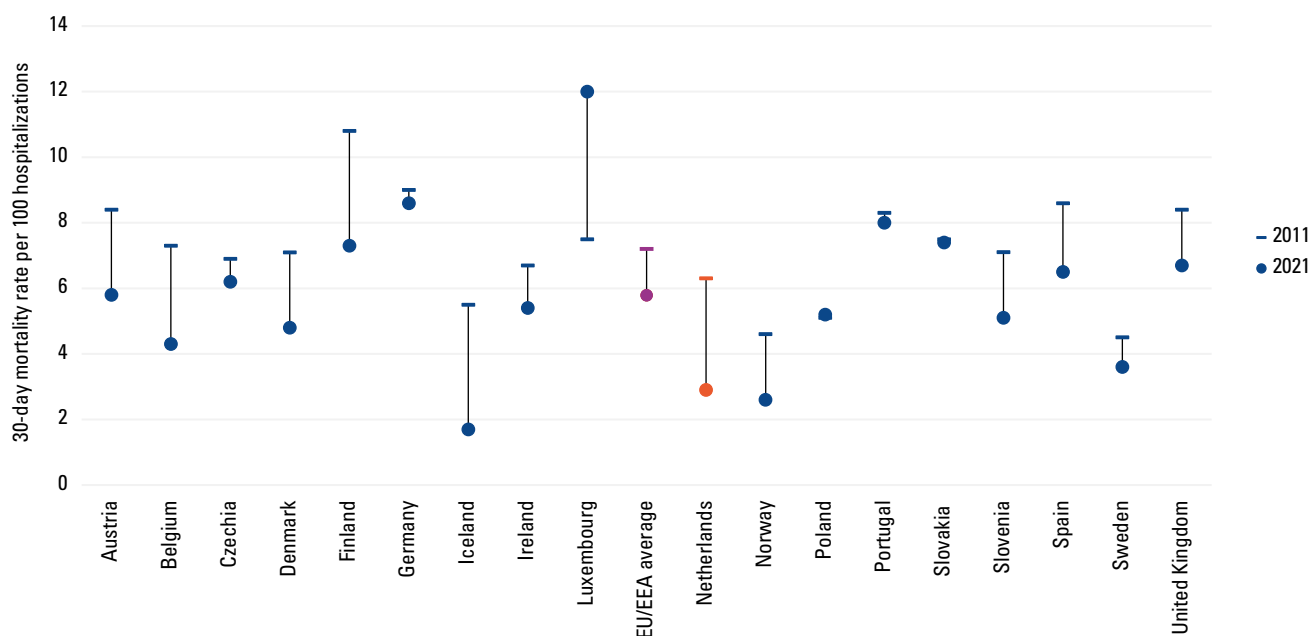
Fig. 9 Avoidable hospital admission rates for asthma and chronic obstructive pulmonary disease, congestive heart failure, hypertension and diabetes, 2021



Notes: CHF: congestive heart failure; COPD: chronic obstructive pulmonary disease. Croatia and Romania: no data for CHF or hypertension; Malta: no data for asthma & COPD or diabetes.

Source: OECD, 2024.

Fig. 10 In-hospital mortality rates (deaths within 30 days of admission) for admissions following acute myocardial infarction, Netherlands and selected countries, 2011 and 2021



Source: OECD, 2024 (data refer to 2021 or nearest year).

Insurers are able to negotiate with health care providers on quality of care, and increasingly offer quality-based incentives, such as pay-for-performance and value-based care. In these cases, specified performance indicators and delivery innovations are tracked, with the possibility of higher payments for certain outcomes. However, most contracts are still based

more on volume and price than quality. The Dutch Healthcare Institute is developing quality indicators and a multi-year care improvement agenda to improve care, shared decision-making, and contracting.

Recent patient surveys indicate that most patients are satisfied with the health services they receive (Box 6).

Box 6 What do patients think of the care they receive?

Dutch patients are generally satisfied with the care they receive, especially related to communication with health care professionals and quality of care (Holst et al. 2023a; Holst et al. 2023b). Most patients feel that their providers effectively meet their needs and expectations, and that the health care system is accessible.

While there are no known national studies on satisfaction with hospital care specifically, care providers in general on average receive an 8 out of 10, with 10 being the best score (patientenfederatie, 2023; Statistics Netherlands, 2019). The most dissatisfied are those who would like to change GPs but are not successful in doing so.

Evidence from the European level also indicates generally high patient satisfaction in the Netherlands. According to the Euro Health Consumer Index, the Netherlands had the second-highest score in Europe behind Switzerland, based on 48 indicators. These include accessibility, outcomes, patient rights and information, pharmaceuticals, prevention, and range and reach of services. The Dutch GP gatekeeper system overall ensures a high level of care continuity in the health care system, although patient satisfaction can vary depending on the individual health care institution.

Health system outcomes

The Netherlands has among the lowest rates of avoidable mortality in the EU (Fig. 11). Avoidable mortality is made up of deaths that could be mainly avoided through public health and primary prevention interventions (preventable mortality) and deaths that could be mainly avoided through timely and effective health care interventions, including screening and treatment (treatable mortality).

During the COVID-19 pandemic, life expectancy in the Netherlands fell by 0.8 years in 2020, stayed consistent at 81.4 years in 2021, and increased to 82.0 years in 2023. Men in the Netherlands have a lower life expectancy at birth than women, although the gender gap in 2021 was 2.5 years smaller than the EU average

due to lower life expectancies for women. Although the difference between men and women is not very large, education does have a strong association with life expectancy. People with the lowest level of education lived on average 6.3 years shorter than higher educated people between 2015 and 2018 (Statistics Netherlands, 2020).

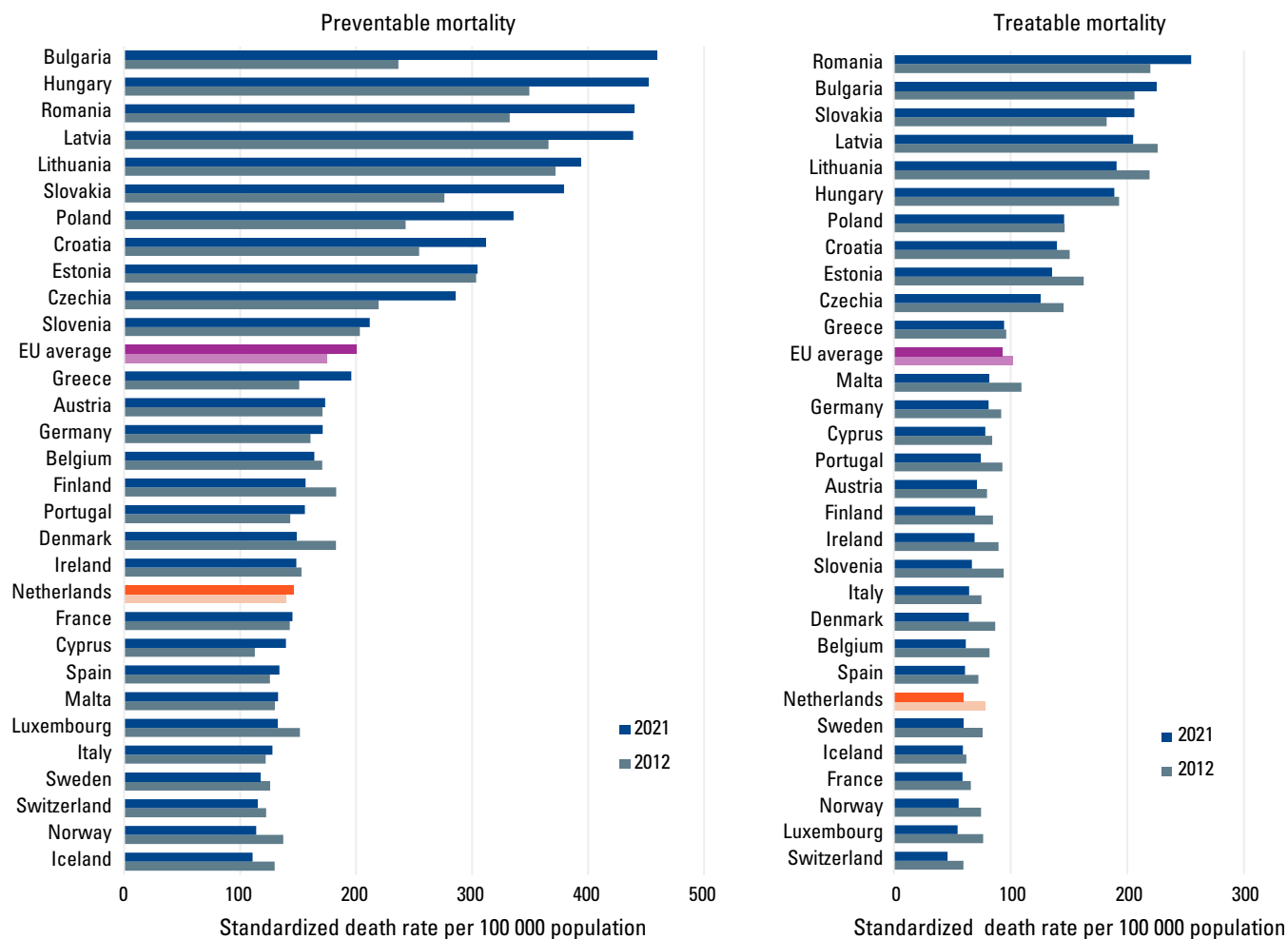
Five-year survival rates for prostate cancer, childhood leukemia, breast, cervical, colon and lung cancer are all higher than the EU average, in part due to the successful roll out of screening programmes (Box 7). However, more than one quarter of all deaths in 2021 were from cancer. Diseases of the circulatory system are responsible for over 20% of deaths.

Health system efficiency

A cursory illustration of the health system's performance in terms of input costs and outcomes can be obtained by plotting current health expenditure against the treatable mortality rate (Fig. 12). Similar to other EU countries, Dutch expenditure on health has risen

over time. At the same time, mortality from treatable causes is very low, although the Netherlands does spend considerably more per person on health than many other EU countries, including some with similar treatable mortality rates.

Fig. 11 Mortality from preventable and treatable causes, 2012 and 2021



Note: After 2020, deaths due to COVID-19 are counted as preventable deaths, resulting in a increase in mortality from preventable causes for most countries.

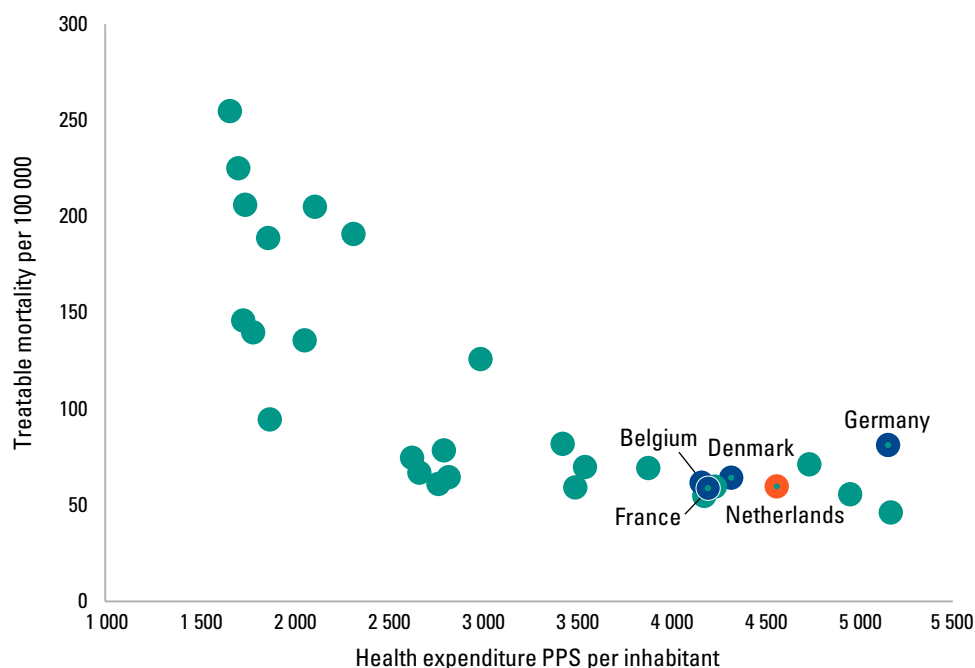
Source: Eurostat, 2024

Box 7 Are public health interventions making a difference?

The Netherlands runs several nationwide screening programmes and a national vaccination programme. These programmes are optional but generally have high participation rates; more individuals are screened for breast and colorectal cancer than on average in the EU. All children up to 13 years old are eligible for vaccinations free of charge for 12 infectious diseases. Public health service delivery is primarily the responsibility of municipalities.

Behavioural risk factors, including smoking, dietary risks, alcohol consumption and low physical activity, account for 35% of deaths in the Netherlands. Smoking is the largest contributor at 21% of deaths, and higher than the EU average at 17%, but smoking has declined from 19% of adults in 2014 to 14.7% in 2021. In 2020 and 2021, the Netherlands adopted measures including increasing taxes on tobacco and introducing plain packaging, which may have contributed to this decrease in smoking rates. Since 1 July 2024 it has been illegal to sell cigarettes and other tobacco products in supermarkets and catering establishments. In the Netherlands, individuals with lower education are more likely to smoke, while individuals with higher education are more likely to report heavy drinking.

Fig. 12 Treatable mortality per 100 000 population versus health expenditure per capita, the Netherlands and selected countries, 2021



Note: PPS: purchasing power standard.

Source: Eurostat, 2024.

In terms of technical efficiency, some instructive indicators show that, from a European standpoint, the Netherlands has fewer hospital beds, more nurses and about the same number of physicians for a share of its population compared to other countries. In 2021, the Netherlands had the lowest average length of stay in hospitals in the EU at 4.3 days, compared with neighboring Belgium at 5.9 days and Germany at 8.9 days (Eurostat, 2024). Several measures are employed in achieving efficiency in pharmaceutical spending (Box 8).

As insurers freely contract with health care providers, the negotiation and competition between purchasers is assumed to stimulate efficiency. However, the preconditions for efficiency in the Dutch system are not entirely met, in part due to the complicated system of risk adjustment among insurers (van Kleef et al, 2013), as well as the difficulty of assessing all potential effects, which more recent studies have corroborated (Varkevisser et al, 2023).

Box 8 Is there waste in pharmaceutical spending?

The Netherlands allocates a smaller share of its health spending to pharmaceuticals than most EU countries, and several Dutch policies emphasise cost control in this sector. The Netherlands uses external reference pricing and according to the Medicine Prices Act, pharmaceutical prices in the Netherlands cannot exceed the average prices in neighbouring countries. Health insurers incentivize the use of generic medicines in their reimbursement agreements, which has resulted in efficiency improvements via lower costs per individual. The downside is a shortage of some medicines, since pharmaceutical companies prefer to deliver their limited supply to countries that pay more (Kleijne, 2024).

Insurers contract with pharmacies on 13 services that they can provide as defined by the Healthcare Authority (such as first-time prescription or pharmaceutical counselling). There are maximum fees for these services and defined prices for prescriptions set at the rate of the lowest price generic medicine. For inpatient pharmaceuticals, hospitals purchase medicines and are reimbursed by insurers, sometimes with a spending ceiling for high-cost innovative medicines. Insurers and more recently the Ministry of Health are involved in negotiating confidential financial agreements with the pharmaceutical industry.

Summing up



The Netherlands has a unique health system with private players, but faces challenges in undertakings that require a more centralized approach.

The Netherlands is a high-income country that dedicates a substantial share of its resources to health. Nearly 28% of this spending went towards long-term care in 2021, demonstrating the importance the Dutch place on long-term care provision. Most health spending (85%) comes from public sources.

Providers and insurers in the Netherlands operate as private entities free to contract with each other in a system of managed competition. This system was set up to encourage efficiency, freedom of choice, and quality, yet it is not clear whether all of these goals have been met. In particular, the COVID-19 pandemic reasserted the need for central management of some health system functions.

Primary care is the foundation of the Dutch health system, and GPs in the Netherlands have a gatekeeping function which requires individuals to receive a referral from their GP to higher levels of care. For its population, the Netherlands has a lower share of physicians and a higher share of nurses than the EU average. However, shortages of GPs and nurses in hospitals have emerged, which will require further investment in order to manage future challenges. The recently introduced Integrated Care Agreement (IZA) emphasizes a shift from disease management to health as well as integration of care, underlining the future priorities of the Dutch health system.

Population health context

Key mortality and health indicators

Life expectancy (years)	2023
Life expectancy at birth, total	82.0
Life expectancy at birth, male	80.5
Life expectancy at birth, female	83.4
Mortality	2021
All causes (SDR per 100 000 population)	1 011.7
Circulatory diseases (SDR per 100 000 population)	219.9
Malignant neoplasms (SDR per 100 000 population)	256.2
Communicable diseases (SDR per 100 000 population)	18.0
External causes (SDR per 100 000 population)	57.0
Infant mortality rate (per 1 000 live births)	3.5
Maternal mortality per 100 000 live births (modelled estimates)*	4.3

Note: *Maternal mortality data is for 2020.

Source: Eurostat, 2024; WHO Regional Office for Europe, 2024

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