Bulgaria

Health system summary 2024

European Observatory on Health Systems and Policies
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This Health System Summary is based on the *Bulgaria: Health System Review* (HiT) published in 2018 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 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: Dimova A, Rohova M, Koeva S, Atanasova E, Koeva-Dimitrova L, Kostadinova T, Spranger A. Bulgaria: Health system review. *Health Systems in Transition*, 2018; 20(4): 1–256.

Health Systems and Policy Monitor (HSPM) – Bulgaria (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?

The Bulgarian health system is highly centralized, with care delivered through a mix of public and private providers

Organization

Bulgaria's health system is highly centralized, operating under a compulsory social health insurance (SHI) scheme. The National Health Insurance Fund (NHIF) with its 28 regional branches (regional health insurance funds; RHIF) is the sole purchaser of health services. For-profit voluntary health insurance (VHI) plays a minimal role.

The National Assembly is responsible for approving relevant budgets, adopting the National Health Strategy and additional health-related policies, and for electing the director of the NHIF. National health policy is guided by the Council of Ministers, while the Ministry of Health oversees the system's governance and functionality (see Box 1).

Public health and district health policies are organized and implemented by regional health inspectorates (RHIs), which are local bodies of the Ministry of Health. Municipalities own a significant portion of healthcare providers. Four national professional organizations represent the rights and interests of their members.

Box 1 Capacity for policy development and implementation

There are limited options outside of the health system's nationally centralized governance structures for priority-setting, planning, organization of service provision and for performance assessment at the regional and local level. Moreover, Bulgaria has been in a period of political uncertainty since 2021, including six parliamentary elections, which has further constrained the capacity for health policy development and stewardship even at the centralized health system level. Since the mid-2000s, no significant health reforms have been implemented, although several smaller measures have been, primarily targeting coverage and access, and financial resource planning (see *What reforms are being pursued? Box 5*).

Although the Partnership for Health was created as a consultative body in 2015 to enhance the policy process by coordinating and partnering with the Council of Ministers on health policy development, its activity decreased after 2017. Today, the policy development process is aided by the Council of Ministers web portal for public consultations.

Planning

The Ministry of Health oversees strategic planning, guided by the National Health Strategy. The National Health Strategy 2030, adopted in April 2024, defines the long-term vision, goals and policies for the health sector. The Council of Ministers coordinates the implementation of the National Health Strategy across ministries, guided by Ministry of Health action plans, of which there are currently two: for 2023–2026 and 2027–2030.

The Ministry of Health manages capital investment allocations to state health care providers and the system generally. Municipalities (and private proprietors) invest in their own health care establishments. Subsidies are provided for the acquisition of long-term tangible assets, renovations, and information technologies and systems in state and municipal facilities.

Providers

Health care providers are autonomous and self-governing. The private sector delivers most ambulatory care, including primary medical and dental care, specialized outpatient care and some hospital services, as well as pharmaceuticals.

Emergency medical care centres, transfusion haematology centres, psychiatric hospitals, centres for complex services for children with disabilities and chronic diseases are owned exclusively by the state. Other facilities, such as some university hospitals, are owned by the state, while ownership of district hospitals is shared between the state and municipalities in the district. Municipalities own many specialized outpatient care providers and some multi-profile and specialized hospitals.

How much is spent on health services?

Despite recent increases, health spending as a share of the economy remains low, while out-of-pocket payments, driven by pharmaceuticals, are among the highest in Europe

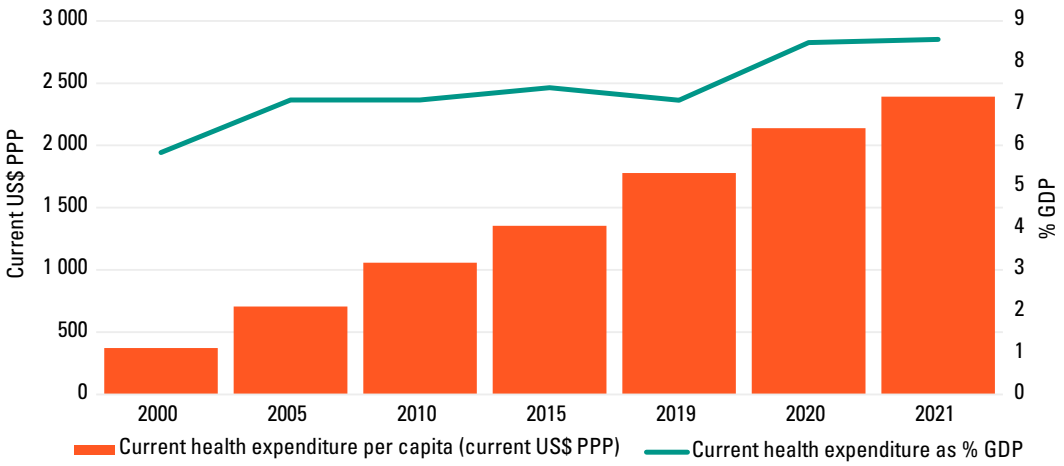
Funding mechanisms

Health care funding comes from a mix of public and private sources. SHI contributions and taxes drive public funding, while out-of-pocket (OOP) payments, VHI premiums, corporate payments and donations drive private funding. EU programmes support structural reform and human resources development.

The compulsory health insurance scheme is financed by the NHIF, mainly through SHI contributions and earmarked funds from the Ministry of Health, and distributed to the 28 RHIFs, based on population information, historical allocations and health needs estimates.

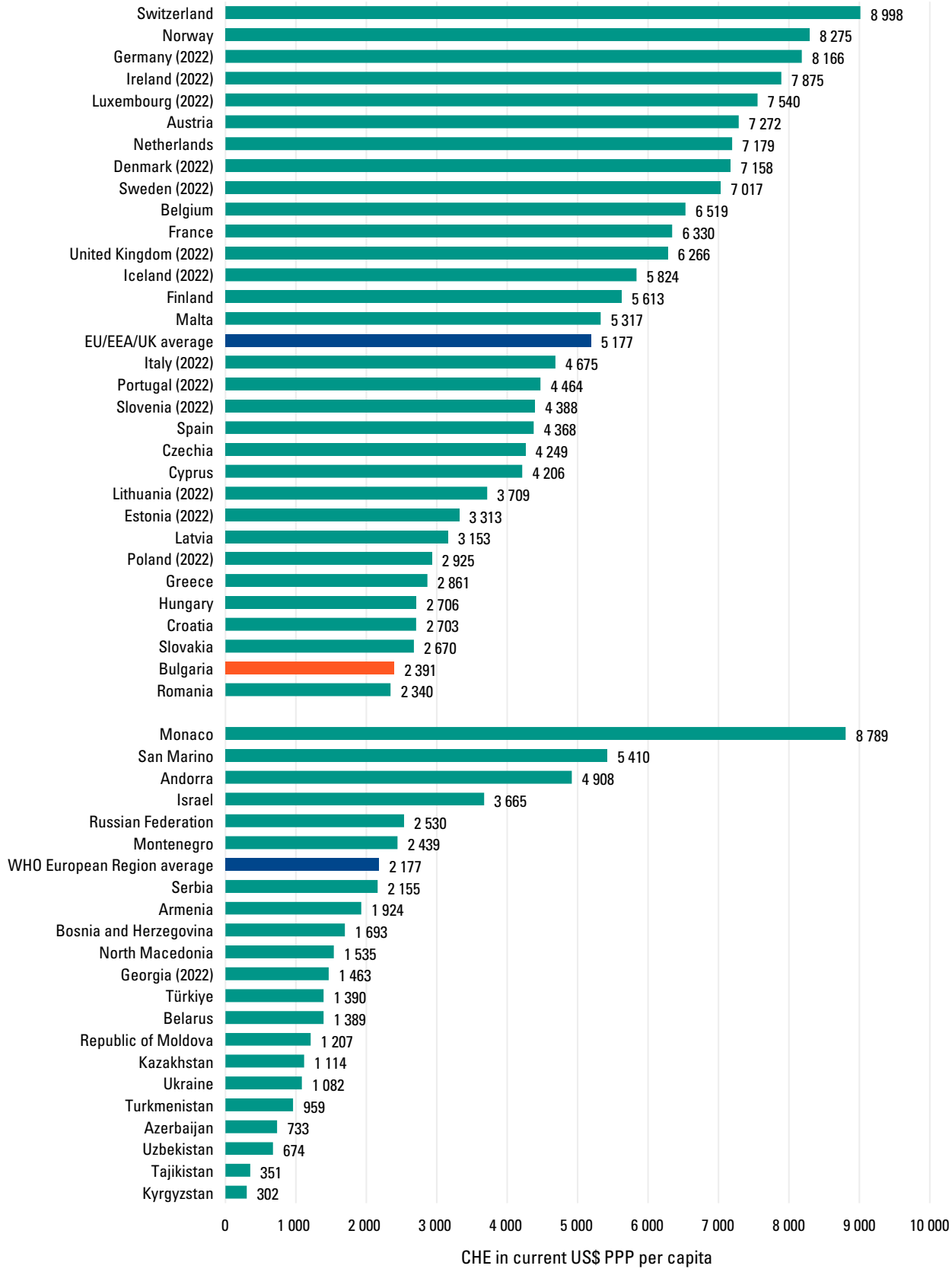
Municipalities receive funding from the state's central budget and use local taxes for health services. The Ministry of Health's budget includes unearmarked revenue from the central budget and additional revenue of RHIs and national agencies.

Fig. 1 Trends in health expenditure in Bulgaria, 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.

Source: WHO, 2024.

Health expenditure

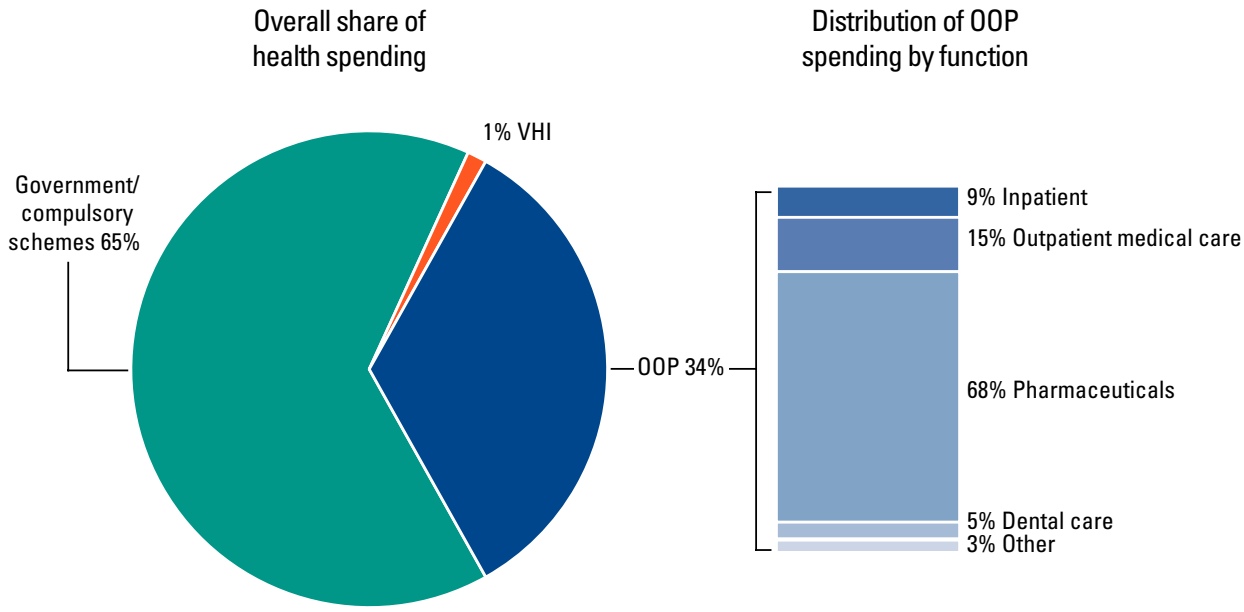
At 8.6% of GDP in 2021 (Fig. 1), health expenditure is on par with the World Health Organization (WHO) European regional average (8.7%) for the first time, representing a significant increase since 2019, when health expenditure was 7.1% of GDP. Despite growth, per capita spending remains relatively low. In 2021, it was the second lowest among European Union (EU) countries at US$ PPP 2391 (Fig. 2).

In 2021, public sources accounted for 65.0% of current health expenditure (CHE), below the EU average (81.1%). Private health expenditure reached 35.0%, driven overwhelmingly by OOP spending (33.7%).

Out-of-pocket payments

In 2021, OOP spending in Bulgaria remained the highest in the EU at 34% of CHE (EU average: 15%), despite decreasing from 38% of CHE in 2019. OOP spending is a result of cost-sharing for most statutory services and direct payments for services and medicines. Pharmaceuticals accounted for more than two thirds of all OOP spending in 2021 (68%) (Fig. 3), with negative ramifications for access. Direct payments occur for services and goods not included in the basic package at prices set by individual providers, for services and goods that are included but where patients go outside the standard public patient pathway, and for uninsured individuals.

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



Notes: OOP: out-of-pocket; VHI: voluntary health insurance.
Sources: OECD, 2024.

Coverage

All Bulgarian citizens, permanent residents and individuals with humanitarian status are compulsorily insured by SHI. The state covers contributions for pensioners, children and students, and unemployed individuals who are entitled to compensation. Despite these entitlements, between 11% and 12% of the population remains uninsured, depending on the national data source (Republic of Bulgaria, National Health Insurance Fund, 2022; (Republic of Bulgaria, Ministry of Finance, 2021).

The statutory benefits package covers a range of primary, secondary and tertiary level health services and goods; however, user fees are common, driving OOP spending. Certain services and goods are fully financed by the state budget (Box 2).

Box 2 What are the key gaps in coverage?

Around 11–12% of the population is uninsured. This includes citizens living abroad, long-term unemployed people and individuals who choose not to pay into the SHI system. Those without a valid identity card, including the Roma population, homeless people and undocumented migrants, face particular challenges, as this is a requirement for SHI registration. The National Strategy for People with Disabilities 2021–2030 and the National Strategy for Roma Integration 2020 attempts to address these gaps.

User fees and cost-sharing apply for most services and goods in the basic benefits package, including dental care, outpatient visits, laboratory tests and hospital stays. These user charges as well as direct payments for services outside the benefits package and by the uninsured contribute to the high OOP spending in Bulgaria.

Some services, including occupational health care, elective cosmetic surgery, elective termination of pregnancy and contraception, are not covered at all. Others are fully covered by the state budget, including emergency care, inpatient mental health care, transfusion haematology, in vitro fertilization and transplantations, and public health services. As of April 2024, the reimbursement level for medicines for many cardiovascular diseases is 100% (see *What reforms are being pursued?*), in line with the NHIF's long-term strategy to make treatment for major chronic conditions more affordable.

Paying providers

Figure 4 summarizes the payment mechanisms used for the suppliers of health services in Bulgaria. Ambulatory physicians, including general practitioners (GP) and dentists are largely self-employed. GPs earn income from NHIF payments based mainly on capitation and fee-for-service (for services such as preventive screening and immunizations). Outpatient specialists and dentists are paid fee-for-service. GPs and specialists also earn from user fees and direct payments. Some contracted physicians in public or private centres receive salaries plus bonuses tied to work volume.

Hospital physicians are salaried usually with bonuses tied to work volume. Other health workers in the public system are also salaried. Many specialists split their time between private outpatient practice and public inpatient facilities.

Fig. 4 Provider payment mechanisms in Bulgaria






GPs	Specialists	Acute hospitals	Hospital outpatient services	Dentists	Pharmacies
Capitation user fees, and fee-for-service (FFS) for specific services and those within designated programmes (Child Health, Maternal Health); lump sum for working in remote, hard-to-reach areas, or for the only provider of the respective services in a municipality	FFS; user fees; lump sum for working in remote, hard-to reach areas, or for the only provider of the respective service in a municipality	Case-based payments based on clinical pathways, clinical and ambulatory procedures; user fees; FFS for those not covered by NHIF; lump sum for working in remote, hard-to reach areas, or for the only provider of the respective services in a municipality	Case-based payments based on ambulatory procedures	FFS; user fees; lump sum (additional 30% of the FFS income) for working in remote, hard-to reach areas, or for the only provider of the respective services in a municipality	Mostly direct payments

What resources are available for the health system?

While overall physician density is higher than the EU average, extremely low levels of nurses and shortages of general practitioners threaten future health system sustainability

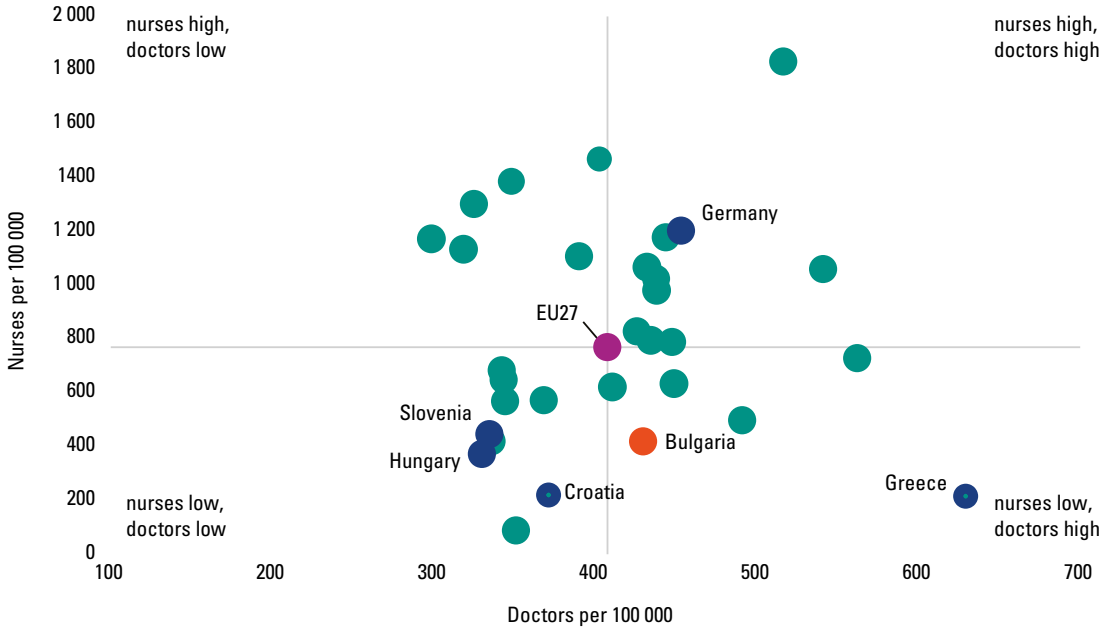
Health professionals

Bulgaria has 430 physicians per 100 000 population in 2021 (EU average: 407; Fig. 5). Levels have been rising since 1990, yet despite this relatively high density, some specialities still experience shortages, including GPs, communicable disease physicians and allergists. Thirteen percent of physicians are generalists, compared to 27% on average in the EU.

With 419 nurses per 100 000 population, Bulgaria has the fourth-lowest density of nurses for the EU (average: 770). In 2019, after protests for better pay and improved working conditions, increased minimum starting salaries for nurses working in state hospitals were negotiated nationally.

However, dissatisfaction with salaries and working conditions still make it hard to attract and retain nurses. Emigration, ageing and uneven regional distribution are key challenges for the entire Bulgarian health workforce, particularly in primary care (see Box 3).

Fig. 5 Practising nurses and physicians per 100 000 population, 2021 or latest available year



Note: Nurse numbers are for practicing nurses (with EU recognized qualification).
Source: Eurostat, 2024.

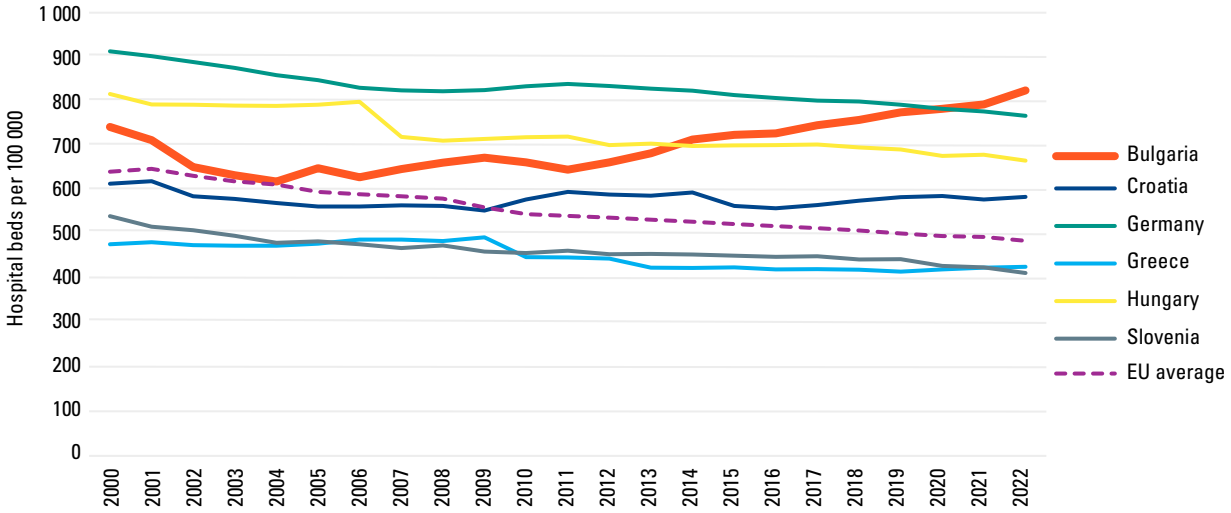
Health infrastructure

In 2022, there were 319 hospitals, of which 116 were private (up from 88 in 2010), and 2172 outpatient health facilities (up from 2029 in 2016). The number of inpatient long-term care and psychiatric facilities has remained stable since 2011 (Republic of Bulgaria, National Statistical Institute, 2023).

While the number of hospital beds is decreasing in many European countries, Bulgaria has seen a steady rise in the number of hospital beds (Fig. 6). In 2022, there were 823 available hospital beds per 100 000, the highest in the EU (average: 516); of these, 83% were acute care beds. The average bed occupancy rate, which fell from 67% in 2016 to 56.1% in 2021, rose to 66% in 2022.

Bulgaria had 1.19 magnetic resonance imaging (MRI) units per 100 000 population in 2022 (Fig. 7) and the number of computed tomography (CT) scanners (4.74 per 100 000 population) is one of the highest among EU countries.

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



Source: Eurostat, 2024.

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

	MRI scanners per 100 000 population	CT scanners per 100 000 population
Bulgaria	1.19	4.74
Lowest and Highest in EU (range)	0.56 (Hungary) - 3.73 (Greece)	1.07 (Hungary) - 4.88 (Greece)

Source: Eurostat, 2024.

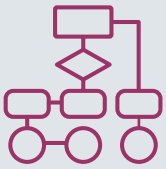
Distribution of health resources

Districts with medical universities have the highest number of physicians, with ramifications for access, especially in rural areas. In 2022, the number of insured persons per GP ranged from 1102 in Pleven to 2274 in Kardzhali, despite similar population densities, due to Pleven having a medical university.

There is also considerable regional variation in the number of hospitals and beds. The southwest region, including Sofia, has about one third of all hospitals (101 of 319), and 30% of Bulgaria's population. This concentration is driven not just by demographics, but also by economic factors, as some districts with a comparable population have far fewer hospitals.

Bulgaria has introduced several measures to address geographic maldistribution of care (see *What reforms are being pursued?*).

How are health services delivered?



General practitioners act as gatekeepers, operating in individual or group practices, but referral quotas enable patients to circumvent primary care

Public health

Public health services are provided by the state, organized and supervised by the Ministry of Health, and mainly implemented by the RHIs, several national centres and by municipalities.

The Principal State Health Inspector is the main supervisor of the public health monitoring system, overseeing health promotion and disease prevention activities, and epidemic preparedness activities. Several Ministry of Health-owned national centres are also engaged in public health protection and promotion, providing expertise and advisory assistance to RHIs or health care establishments, including the National Centre of Infectious and Parasitic Diseases, the National Centre of Radiobiology and Radiation Protection, the National Centre of Drug Addictions and the National Centre of Public Health and Analyses.

While the Ministry of Health determines which communicable diseases are subject to notification, registration and reporting based on the 2004 Health Act, the RHIs are responsible for communicable disease surveillance. The Ministry of Health decides on targets and procedures for carrying out immunizations.

Primary and ambulatory care

Patients can freely choose their primary and specialist health care providers. GPs are independent under the NHIF and own their own practices, operating in individual or group practices. As gatekeepers, they provide referrals to diagnostic testing and outpatient specialized care. Children and pregnant women have direct access to paediatricians and gynaecologists.

Quarterly quotas control the volume of services by limiting the number of referrals that physicians may write. When a quota is reached, patients must wait, choose to go directly to hospital emergency departments, or pay out-of-pocket to access services without referral (Box 3).

Outpatient specialist care is delivered mainly by a network of private practices (individual or group) specializing in one area, multi-professional medical and medico-dental centres, diagnostic-consultative centres, diagnostic laboratories, centres for dermatology and sexually transmitted infections, comprehensive cancer centres, mental health centres and centres providing comprehensive services for children with disabilities and chronic diseases. Efforts to develop integrated care are ongoing (Box 4).

Hospital care

Patients have free choice of hospitals (public or private). Public hospitals are owned by the state (20%) and municipalities (more than 40%); for others, ownership is shared. There are also private, for-profit multi-profile and specialized hospitals.

Public hospitals are multi-profile (with at least two specialized wards) or specialized (usually gynaecological, surgical, orthopaedic, ophthalmological, paediatric or psychiatric). Each district has a big multi-profile hospital, co-owned by the state and the district municipalities, which provides a wide range of medical specialties, has 24-hour emergency wards, and clinical pathology. Additionally, some hospitals have university hospital status granted by the Council of Ministers.

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

Key strengths of primary care are free choice of provider and the ability to change GPs twice annually. GPs act as gatekeepers, helping to reduce over-consumption, although there is also direct primary level access to paediatricians and gynaecologists for children and pregnant women. The statutory benefits package offers a wide scope of primary care services and medicines, including preventive screening and chronic disease monitoring.

Despite these features, Bulgaria's health system remains hospital centric. Primary care is underdeveloped and under-resourced, characterized by a lack of incentives for teamwork, limited recognition, and a weak connection with secondary care. The quarterly referral quotas imposed on GPs hamper access to specialized outpatient care and undermine the ability of GPs to fulfil a real gatekeeping and coordination role.

Access remains challenging. There are GP and nurse shortages across Bulgaria, where working conditions and salaries are inadequate. Poor and geographically sparse infrastructure mean that remote, rural areas are especially affected.

Recent efforts to strengthen primary care include higher prices for GP services, higher payments for GPs who reach targets for preventive services, and additional payments for working in remote, hard-to-reach or underserved areas. A national map of long-term health needs aims to address regional disparities in access (see Box 5). Currently, limited publicly available data exist on the quality of primary and preventive care to systematize improvements.

Box 4 Are efforts to improve integration of care working?

From the 1950s until 2010, integrated health care was applied through a well-developed system of dispensaries aimed at comprehensive care for people with oncological, dermatological and sexually transmitted infections, mental and pulmonary diseases. Dispensaries provided diagnostic, therapeutic outpatient and inpatient services, and follow-up procedures, as well as rehabilitation care for people with certain chronic diseases. They also maintained patient registers. In 2010, dispensaries were transformed into comprehensive centres designed to provide integrated care to patients with specific health needs (e.g. related to cancer, mental health care, and dermatological and sexually transmitted infections).

Despite the government's efforts, other health care structures and processes in Bulgaria lack proper coordination between health care levels and between health and social functions, including health promotion, disease prevention, health care management and rehabilitation (Republic of Bulgaria, Ministry of Health, 2015). In 2015, integrated care was named for the first time in legislation, and subsequent changes to the Health Care Establishments Act have led to the creation of 10 new centres designed to provide comprehensive integrated health and social care services for children with disabilities and chronic diseases.

Pharmaceutical care

The NHIF's Supervisory Board issues a list of the conditions for which the NHIF covers medicines, medical and nutritional products, based on a Ministry of Health ordinance.

Some pharmaceuticals are fully covered and others require a co-payment. In 2021, Bulgaria spent 31.8% of CHE on medical goods (prescribed and over the counter (OTC)), among the highest in the EU (average: 17.9%). Additionally, OOP payments make up over two thirds of spending on outpatient medicine (Dimova & García-Ramírez, 2022).

Most pharmacies are owned by independent businesses, although hospitals and other health care establishments may operate pharmacies for their own needs. Prescription medicines are sold exclusively in pharmacies, while OTC products are available at both pharmacies and drugstores. The number of pharmacies has been decreasing over the last decade. In 2015, there were 4200, dropping to 3200 in 2024. There are also over 900 drugstores and 130 online pharmacies (neither category is allowed to sell prescription drugs) in 2024; around 2360 were under contract with NHIF.

Relative to population, Bulgaria has a high density of pharmacies and comparable level of practising pharmacists in Europe. The majority of EU Member States reported between 68 and 112 pharmacists per 100 000 population in 2021; Bulgaria has 89 per 100 000 (Eurostat, 2024).

Mental health care

Inpatient mental health care is provided by state-owned psychiatric hospitals and psychiatric wards in multi-profile hospitals, often far from individuals' homes. Individual or group psychiatric practices, and psychiatrists in diagnostic-consultative centres and medical centres provide outpatient specialist mental health care. Additionally, a network of 12 mental health centres, mostly located in urban areas, delivers comprehensive preventive, primary, outpatient and inpatient treatment, and some social services. Municipalities and the Ministry of Labour and Social Policy manage psychosocial rehabilitation and material and social support in communities. Since the late 1990s, NGOs offer treatment for substance abuse.

Despite this spectrum of services, mental health care in Bulgaria remains highly institutionalized and does not provide adequate community-oriented, psychosocial support to meet population needs. A concentration of services in district centres and insufficient continuity and coordination of care also undermine the provision of care.

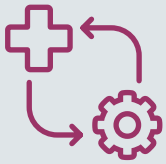
Dental care

Dental care is mainly delivered by outpatient facilities, including primary-level individual or group practices, medico-dental and dental centres for specialized dental care, and dental-diagnostic and orthodontist laboratories. Medico-dental centres have at least three physicians and/or dentists with different specialties; dental centres have at least three dentists with different specialties. Inpatient dental treatment is available in specialized surgical hospital and medico-dental centres.

Bulgaria has a high and growing number of dentists due to the development of the private sector and high co-payments. Dentists are concentrated in urban areas.

The NHIF fully covers dental services for special categories such as children and adults with mental health conditions and residents in medico-social institutions. All children are entitled to more fully covered dental services than adults and receive lower co-payments for services, which are partially paid by the NHIF.

What reforms are being pursued?



Recent reform measures have focused on workforce shortages and on improving coverage and access, especially for chronic care and in underserved and remote areas

In the last 5 years, efforts to address systemic challenges, such as effectiveness, efficiency, financial sustainability, population coverage and equity, have faced resistance. However, the COVID-19 pandemic acted as a catalyst for change in some respects: a centralized governance system for COVID-19 was established in 2020, and e-referrals and e-prescriptions were introduced in 2021. Reforms were also

made to attract and retain new physician graduates in certain specialties, and to formally allow stand-alone nursing and midwifery practices. Since 2022, several measures have aimed to improve coverage and access (Box 5). Based on a proposal by the NHIF, the National Council of Price and Reimbursement of Medicinal Products has eliminated co-payments for 400 cardiovascular medicines in 51 international nonproprietary name (INN) groups as of April 2024, aligning with the long-term strategy to improve financial support for major chronic conditions.

Other measures have expanded coverage of preventive services. The Ministry of Health extended NHIF benefits to cover obstetric care for uninsured women and has expanded both the range of preventive services and age-specific population groups entitled to certain preventive services, including screening for breast and prostate cancers.

Further efforts to improve allocative efficiency, improve care access, and ensure equitable, sustainable regional services are ongoing. In 2022, a new methodology for financing healthcare establishments was proposed to address labour shortages in remote areas. A map of long-term needs, developed in 2023, assesses health service provision and long-term regional needs, and aims to guide planning and investments based on population needs and existing infrastructure. A pilot project called Doctors in Small and Remote Settlements also began in 2023, with specialists from district hospitals providing services to underserved communities. The aim is to expand this initiative under Bulgaria's EU-funded National Recovery and Resilience Plan, through establishing outpatient facilities in small communities staffed by a physician and a nurse.

Box 5 Key health system reforms over the past 10 years

- **Health Technology Assessment (HTA) governance (2015, 2019, 2021):** introduced in 2015 for the inclusion of new medicines on the positive drug list. In 2019, governance was transferred to the National Council of Price and Reimbursement of Medicinal Products; in 2021, changes were made to the terms and conditions for listing medical devices and determining their reimbursement value.
- **Liberalisation of medical specialization conditions (2020):** medical specialization graduates financed by the state have more flexibility when choosing employment after graduation.
- **Amendments to Health Care Establishments Act (2020):** changes permit physicians' assistants, nurses, midwives, or rehabilitation therapists, with the required experience, to practice independently (and in groups) and perform certain nursing care, health promotion services and diseases prevention activities, including at patients' homes.
- **National Strategy for Mental Health 2021–2030 (2021) and the National Council on Mental Health to the Council of Ministers (2022):** the strategy, implemented by the Council, envisions (1) a network of community-based, comprehensive services to treat severe mental illness and (2) centres for treatment of eating disorders. Child-adolescent and old age psychiatry, forensic psychiatry, mental health professionals' development, and quality of mental health care are other priorities.
- **National Health Information System (HIS; ongoing since 2020):** sequential introduction of elements of an integrated information system, including e-referral for inpatient and outpatient care, e-prescription, electronic patient records, registers for vaccinations, and mobile applications for physicians and citizens.
- **Measures to improve access in remote and underserved areas (2022, 2023):** in 2022, the Council of Ministers adopted the National Map of Long-Term Health Needs, identifying regional and district service provision needs, including primary care facilities in underserved areas, improved capacity for diagnostics and treatment of cerebrovascular diseases and highly specialized stroke facilities throughout the country. In 2023, the Health Insurance Act was amended to include a new methodology for financing healthcare establishments to address workforce shortages. An additional map outlining the accessibility of pharmaceutical care is underway.
- **Expanded coverage of preventive services (2022, 2024):** in 2022, the Ministry of Health extended the NHIF benefits list to improve early diagnosis for children, adults, and pregnant women, and increased the number of obstetric check-ups for uninsured women. In 2024, the Ministry amended eligibility criteria (and frequency) for early cancer diagnosis. Now women aged 45–49 can have mammograms every 2 years, and men aged 45–49 are eligible for annual prostate screenings.

How is the health system performing?

Bulgaria has worked to reduce unmet needs for care and to improve access and coverage, but several challenges persist, particularly with regard to health care outcomes and the effectiveness of care

Health system performance monitoring and information systems

Bulgaria does not have a quality management system built on reliable indicators and monitoring mechanisms. Previous attempts to introduce quality and patient safety indicators have not been successful. Additionally, there is no medical error reporting system. Analysis of health care quality is based solely on process indicators such as vaccination rates, rates of preventable and amenable mortality and select hospital admissions.

In 2017, a National Health Information System (NHIS), funded by the EU, was announced and endorsed by the National Health Strategy 2020 and Bulgaria's e-government strategy (2014–2020). The NHIS has been significantly developed since 2020, including an e-prescription and e-referral system (2020); e-dossier and e-consultation modules (2021, 2022); connectivity system in hospitals and emergency care centres (2022); and e-health mobile application (2022), with new functionalities (2023, 2024) (see Box 5). Bulgaria's Recovery and Resilience Plan supports the implementation of the NHIS and the development of a platform for medical diagnostics.

Accessibility and financial protection

Approximately 11–12% of the population in Bulgaria was uninsured in 2022. Meanwhile, access to care, particularly in remote rural areas and smaller towns, is limited, in part due to maldistribution of physical and human resources (see Boxes 2 & 3).

Lack of financial protection pushes poor households towards or further into poverty. OOP spending on health constitutes a significant portion of household consumption, with a large share due to the uninsured and from patients who run up against the quarterly referral quotas imposed on GPs and outpatient specialists and must pay out of pocket for services or forgo care for some time. Consequently, approximately 19% of households in Bulgaria in 2018 experienced catastrophic spending due to medical expenses, the highest rate in the WHO European Region. Of these, two thirds are concentrated among the poorest households (Dimova & García-Ramírez, 2022).

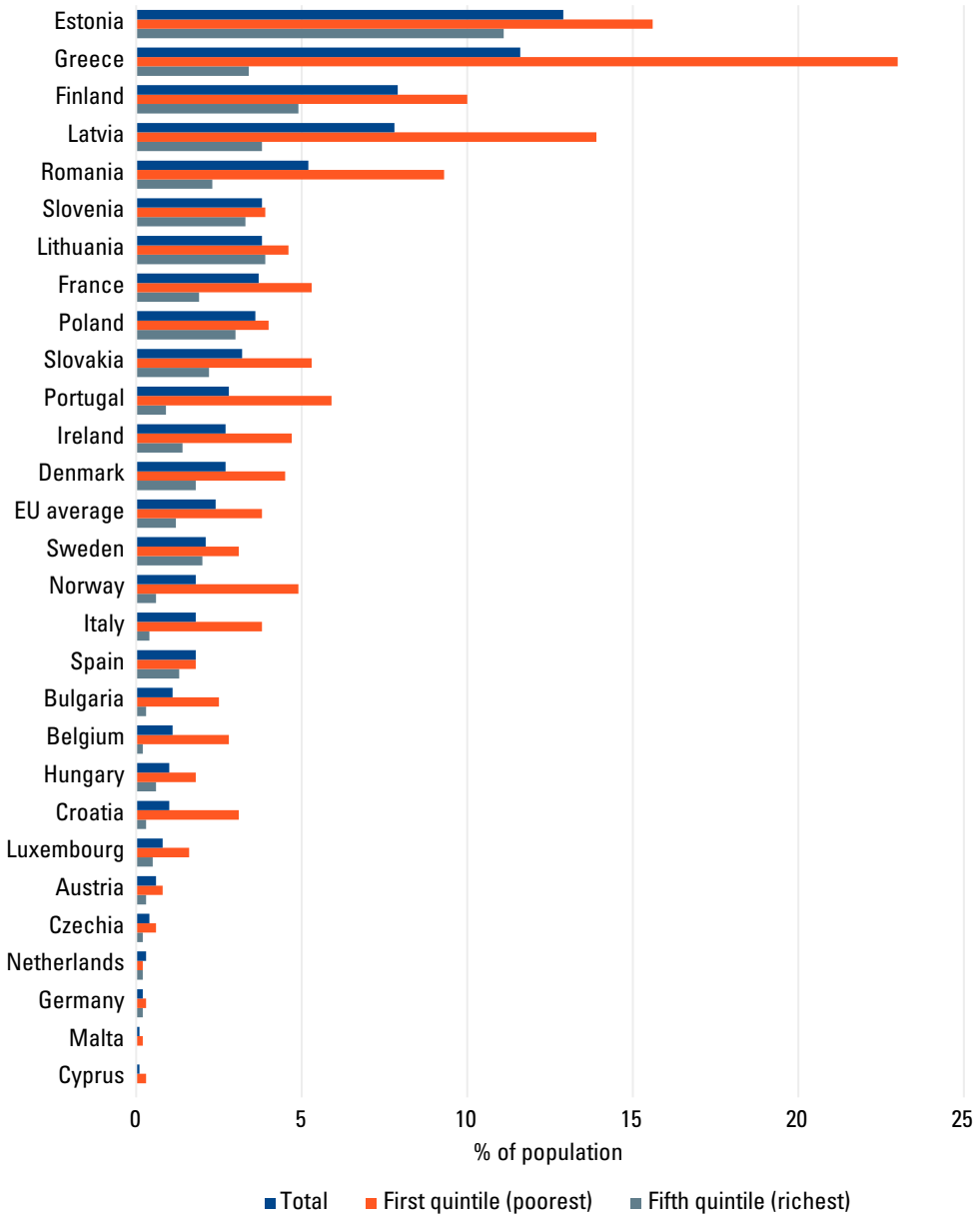
Before COVID-19, self-reported unmet needs for a medical examination due to cost, distance and waiting times dropped considerably, from the 10.3% in 2009 (highest in the EU) to 1.4% in 2020 (below the EU average of 1.8%). As elsewhere, unmet needs in Bulgaria rose during the pandemic, but have since levelled out to 1.1% in 2023, below the EU average. There are significant differences across income groups (Fig. 8).

Health care quality

There are several challenges to quality and quality assurance for the Bulgarian health system, with significant regional differences and multiple factors that hamper patient safety, negatively impacting patient satisfaction (see Box 6).

Key indicators on the quality of primary care, such as avoidable hospital admissions for chronic conditions including chronic obstructive pulmonary disease (COPD), congestive heart failure, diabetes and asthma, which are available for other EU countries, are not

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



Source: Eurostat, 2024.

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

Bulgaria does not undertake routine national surveys on public perception or patient satisfaction with the health system, and there is no medical error reporting or risk management system. This indicates insufficient competence related to patient safety, which may influence patient perceptions and satisfaction with health care.

Recent national polls have found dissatisfaction with the health system generally and with quality, especially. In 2018, the Ministry of Health initiated a national poll on the health insurance model (Republic of Bulgaria, Ministry of Health, 2018), finding broad discontent due to low quality of care, difficult access, and high OOP spending. Additionally, respondents reported that the grounding principles of the health system, including solidarity, have been compromised.

According to a nationally representative study from the National Centre for Parliamentary Studies, citizen perception of quality of care, though improving, remains critical. In 2023, 45% of citizens rated quality as satisfactory and 32.6% as poor; only 17.9% rated health care quality as good. For comparison, in 2019, 43.6% had rated it as satisfactory and 40% as poor (10.9% as good) (Republic of Bulgaria, National Centre for Parliamentary Studies, 2023).

available for Bulgaria. Nevertheless, high hospital discharge rates demonstrate that Bulgaria's health system is hospital centric, with the highest total hospital discharge rates among EU countries in 2021 and 2022. In particular, Bulgaria also has the highest in-patient hospital discharge rates for cardiovascular disease (Eurostat, 2024). In turn, primary and secondary outpatient care are under-resourced. In 2021, 37% of CHE was allocated to hospital care and 13% to outpatient care as compared to 25% and 23%, respectively, across the EU.

Data on preventable mortality suggests significant room for improvement in the quality of public health interventions (Box 7).

Box 7 Are public health interventions making a difference?

Cervical cancer screening rates are low in Bulgaria but improving. In 2019, 45.5% of women aged 20–69 years had been screened in the previous 2 years, a significant improvement from 2017 (13.4%) but still below the EU average (59.9%). Breast cancer screenings occur every two years and the rates are also low at 35.5% of women aged 50–69 years compared to the EU average (65.9%). Bulgaria has the largest income-based disparities in screening rates in the EU, with higher income linked to higher screening rates. There are also differences by location, with most screening activities occurring in urban centres.

Meanwhile, high levels of mortality from stroke, cardiovascular disease and lung cancer are associated with high prevalence of behavioural risk factors, partially due to a lack of preventive programmes. Steps to address these include, renewing the National Programme for Prevention of Chronic Non-communicable Diseases (2014–2020) for 2021–2025 and measures to address tobacco and alcohol consumption, including 1% earmarking of excise duties on tobacco and alcohol products to fund national primary prevention programmes, bans on public smoking and on sales to minors, and restrictions on tobacco advertising. Enforcement of legislation and insufficient information campaigns limit progress, however. Most recently, Bulgaria has also introduced expansions to preventive services and coverage, including for chronic conditions (Box 5).

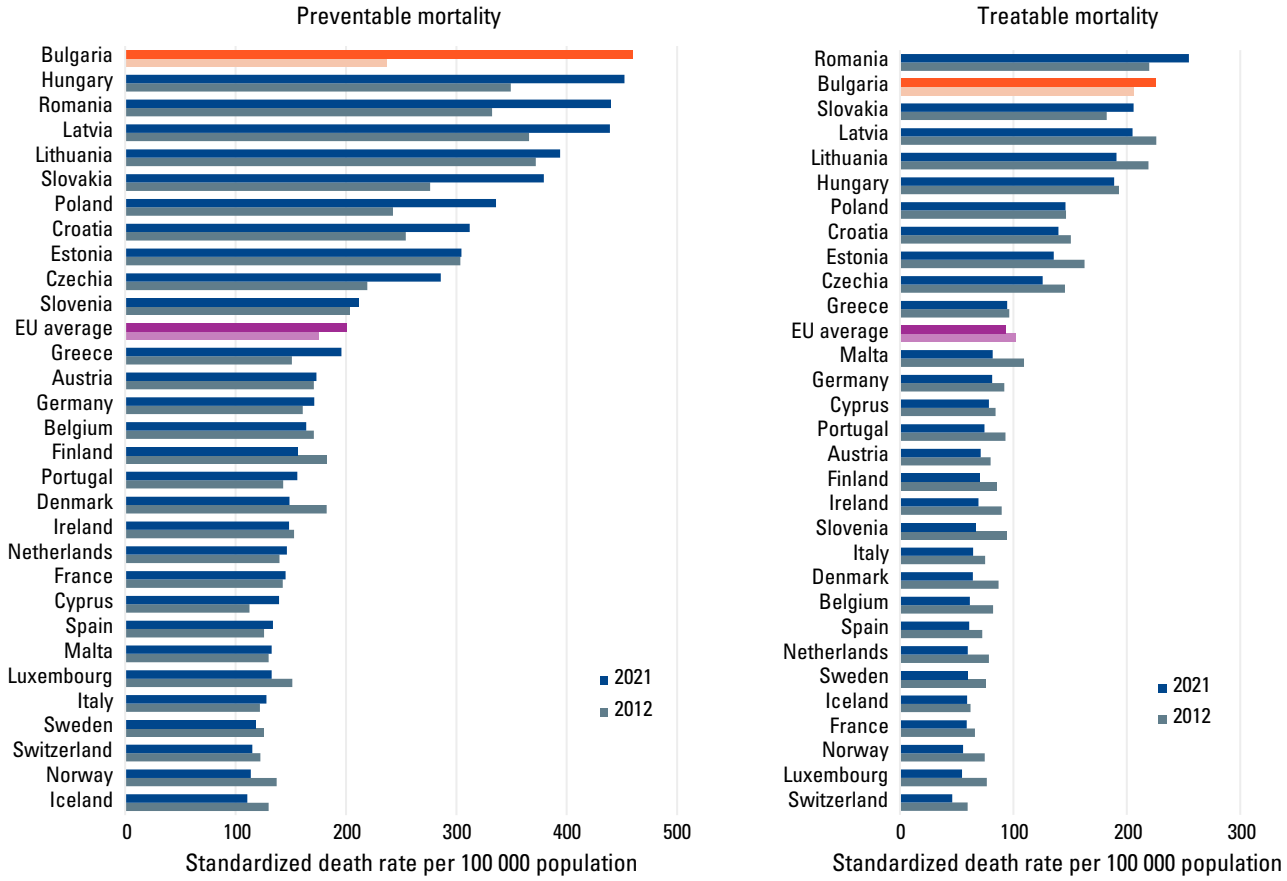
Health system outcomes

Mortality from preventable causes in Bulgaria has remained high and fairly constant since 2012. The rate increased significantly in 2020 and 2021, compared to 2019, partly because COVID-19 deaths were classified as preventable deaths. Preventable mortality (that is, deaths that could have been avoided through public health interventions focusing on the wider determinants of public health, such as behaviour and lifestyle factors, socioeconomic status and environmental factors) reached 460 deaths per 100 000 in 2021, far above the EU average (201 per 100 000) (Fig. 9). Stroke, ischaemic heart disease, lung cancer and COVID-19 are among the main causes of preventable deaths.

Bulgaria is one of three EU states which has seen an increase in mortality from treatable causes (that is, deaths that could have been avoided through timely and effective health care interventions) between 2012 and 2021, growing to 225 per 100 000 population, which is more than twice the EU average (Fig. 9). Premature deaths from stroke and ischaemic heart disease are the predominant causes.

Standardized death rates (SDR) relating to cancer decreased between 2005 and 2015, at a slower rate than in the EU (3% versus 10%). Despite gradual improvements over recent decades, Bulgaria's 5-year survival rates for the most common cancers, including leukaemia and lung, prostate, cervical, colon and breast cancers, remain among the lowest in the EU, partly due to deficiencies in early detection, diagnosis and treatment, and limited resources and inadequate planning (Box 7).

Fig. 9 Mortality from preventable and treatable causes, 2012 and 2021



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

Source: Eurostat, 2024.

Health system efficiency

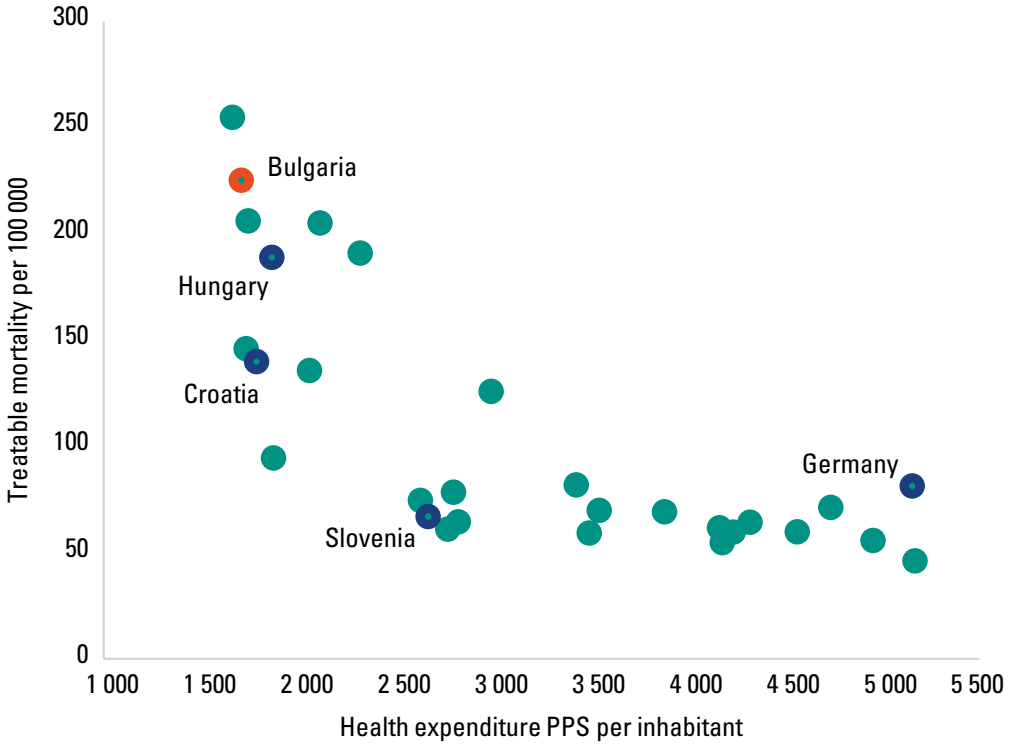
A very cursory way of illustrating how the Bulgarian health system is performing in terms of input costs and outcomes is to plot current expenditure on health against the rate of treatable mortality. On this metric, compared to countries which spend similar levels on health per capita, such as Hungary and Croatia, Bulgaria has worse outcomes, with the second highest treatable mortality rate among EU countries (Fig. 10).

Specific attempts to strengthen allocative efficiency include the introduction of HTA, the shifting of some services from inpatient to outpatient settings and strengthening preventive services and coverage (Box 5). However, despite a stated objective to strengthen outpatient care, Bulgaria has witnessed an expansion of hospital care, partially driven by private sector growth: it has the highest hospital admission rate in the EU at 339.9 per 1000 population in 2022.

Meanwhile, the average length of hospital stay is relatively short (4.9 days in 2022), likely due both to the high prevalence of acute hospital beds and clinical pathways predefining the length of stay. Referral quotas also serve as deterrents to accessing outpatient care.

Important gains in efficiency can also be made in the pharmaceutical sector (Box 8).

Fig. 10 Treatable mortality per 100 000 population versus health expenditure per capita, Bulgaria and selected countries, 2021



Note: PPS: purchasing power standard.

Source: Eurostat, 2024.

Box 8 Is there waste in pharmaceutical spending?

Though the smallest in the EU, the market has grown substantially, and the pharmaceutical industry is one of the fastest growing sectors of the Bulgarian economy, in part due to economic growth and high pharmaceutical prices and spending. Pharmaceutical spending is increasing in absolute value and per capita.

Reference prices are derived from the lowest manufacturer prices registered across 10 countries (Belgium, France, Greece, Italy, Latvia, Lithuania, Romania, Slovakia, Slovenia and Spain). Insured individuals pay the difference between the NHIF reimbursement levels and the reference (retail) price out-of-pocket.

In 2021, pharmaceutical spending accounted for 32% of total health spending, almost double EU average (18%). Notably, the discrepancy between pharmaceutical spending in Bulgaria and the EU has narrowed from 2019 (34% versus 14%). Meanwhile, outpatient medicines accounted for more than two thirds of all OOP spending. In 2017, a draft National Programme for the Rational Use of Antibiotics and Supervision of Antibiotic Resistance (2017–21) was developed but has yet to be updated and adopted. Considering this and the fact that there is no mandatory INN prescribing or prescribing of the lowest-cost medicines, there is considerable scope for improving the efficiency of pharmaceutical spending overall and, subsequently, financial protection in Bulgaria.

Summing up

Challenges that hamper health system performance include low spending, OOP expenditures, high-risk behaviours, and under-resourced primary care. Activities are underway to strengthen mental health care and the health information system and to improve prevention

The Bulgarian statutory health system is centralized with a single payer. Despite gradual growth, health financing as a share of GDP and per capita is below the EU average. It is, however, above the WHO European regional average.

Bulgaria has made progress on some health and health system indicators, but overall improvement lags behind the EU. Preventable and treatable mortality rates remain high, reflecting weak primary prevention and health promotion activities, an under-developed primary health care system and insufficient financial and policy resources to improve diagnosis and treatment. There have been recent improvements to cancer screening rates, though levels remain comparatively low.

Coverage gaps in mandatory SHI and high OOP spending and unmet needs reflect accessibility and financial protection challenges, with particular ramifications across socioeconomic dimensions. There are also geographic disparities, including in health workforce deployment, with high concentrations in urban areas. Availability of physicians is further decreasing due to emigration and retirement.

Despite a political climate that makes systemic reforms difficult, Bulgaria has managed to introduce several changes to make the health system more efficient, including the introduction of HTA, and has recently introduced measures to improve prevention, especially for obstetric care and chronic care management, and urban-rural disparities. Future reforms will continue to focus on these areas as well as strengthening the health information system, primary, mental health and integrated care.

Population health context

Key mortality and health indicators

Life expectancy (years)	2023
Life expectancy at birth, total	75.8
Life expectancy at birth, male	72
Life expectancy at birth, female	79.6
Mortality	**2021**
All causes (SDR per 100 000 population)	2131.88
Circulatory diseases (SDR per 100 000 population)	1210.96
Malignant neoplasms (SDR per 100 000 population)	229.41
Communicable diseases (SDR per 100 000 population)	6.58
External causes (SDR per 100 000 population)	36.72
Infant mortality rate (per 1 000 live births)	5.5
Maternal mortality per 100 000 live births (modelled estimates)*	7.1

Notes: * Maternal mortality data is for 2020.
Source: Eurostat, 2024; WHO Regional Office for Europe, 2024.

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