



Country profile: **Bulgaria**



At a turning point: Healthcare systems in Central and Eastern Europe

About this supplement

This country profile is a supplement to *At a turning point: Healthcare systems in Central and Eastern Europe*, a report produced by Economist Impact and supported by the American Chamber of Commerce to the EU. It features detailed data and analysis on the dynamics at play in Bulgaria.

The main report presents a broad view of health system and funding dynamics in 13 European countries, including eight countries in central and eastern Europe (CEE)—Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia—and five countries in western Europe—Austria, Germany, France, Portugal and the UK. This report aims to highlight key differences and commonalities in healthcare financing and policy approaches as governments rise to the challenge of managing the interlinked dynamics of population health and economic uncertainty following the covid-19 pandemic.

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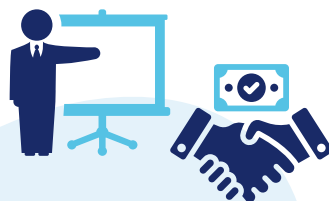
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Key priorities for Bulgaria



Improve infrastructure for digital health

While Bulgaria has invested in upgrading and improving digital health infrastructure and telehealth - the country ranks low in connectivity and integration according to the DESI Index. Investments should be targeted toward improving access to digital systems in remote areas and enabling the integration of health data between system levels.



Increase provision of training and wages for workers

While all CEE countries are facing workforce challenges, Bulgaria needs to pay attention to wages and ensure they are in line with other CEE countries while also introducing incentives to encourage young people to take places in Bulgaria's medical schools.



Invest in R&D and clinical trial infrastructure

Bulgaria ranks top 20 in the world in clinical trials and offers great potential for Contract Research Organizations (CRO). This clinical trial infrastructure could help attract further investment. However, spending on R&D in Bulgaria is the lowest among countries in the study at 0.76% of GDP.¹

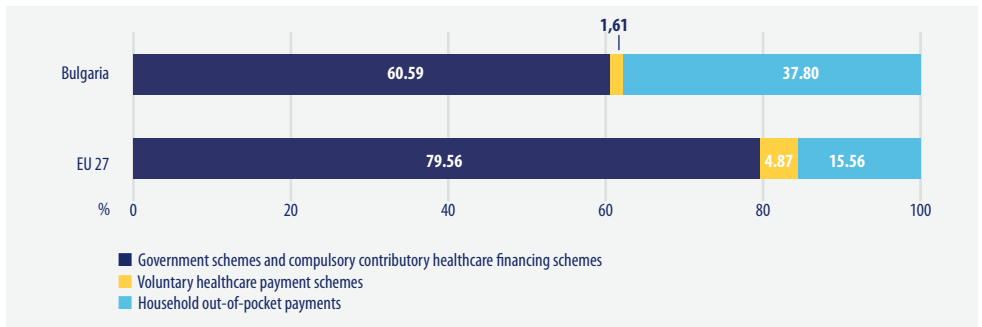
1. Healthcare financing

As a proportion of GDP, Bulgaria's healthcare spending, at 7.09% in 2019, is higher than that of regional peers such as Hungary, Romania and Poland.² Healthcare spending at €626 per head (€1,314 per head in PPS terms) is the lowest among all countries in this study.³ Lower GDP in Bulgaria means that funding remains tight, given the demands of the country's universal healthcare system.

FIGURE 1: HEALTH SYSTEM AND FUNDING SOURCES

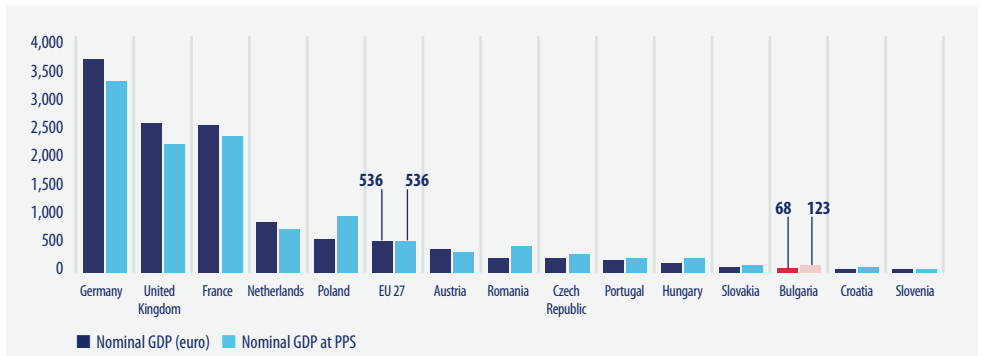
Healthcare system	Bismarck model - SHI system based on a universal health insurance fund
Coverage and enrolment	Most public health spending comes from Bulgaria's compulsory National Health Insurance Fund (NHIF). The NHIF is the only universal health insurance fund in Bulgaria. It is a public non-profit-making organisation that contracts with public and private providers. Two-thirds of NHIF funding is derived from contributions of 8% of an individual's gross wages (4.8% for the employer and 3.2% for the employee). The remaining third comes from state budget transfers. ⁴
Core services covered	All citizens are required to have NHIF insurance, which covers a package of services, including outpatient care, limited dental care, laboratory services and hospital treatment. Despite the promise of universal coverage, the Ministry of Finance estimated that 850,000 people (about 12% of the population) lacked insurance in 2020. ⁵
Co-payment and user charges	Bulgaria has the highest out-of-pocket (OOP) expenditure as a share of total health spending in the EU, at 37.8% in 2019. This share is more than double the EU average. Patients make co-payments in the form of fixed fees for visits to physicians and dentists and for hospital stays, although certain groups are exempt from these fees. Patients also cover part of the cost of prescription drugs, and many patients report giving informal payments or gifts in exchange for care. ^{5, 6}

FIGURE 2: FINANCING SOURCES (% OF CURRENT HEALTH EXPENDITURE)



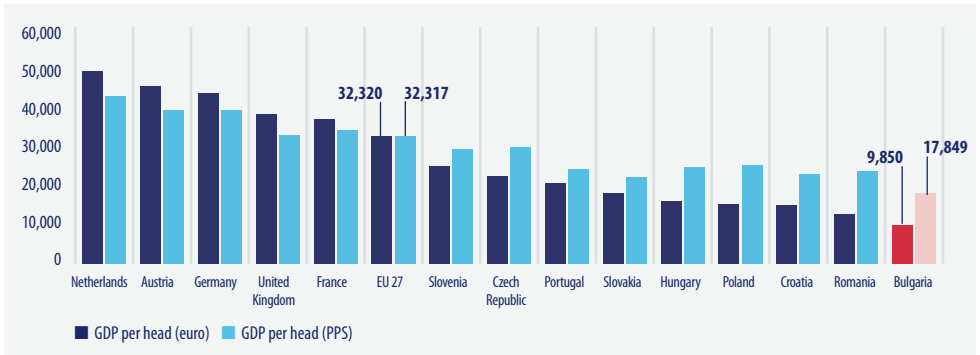
Source: Eurostat. Health care expenditure by financing scheme, 2019. EU 27 data from 2018 (latest available year)

FIGURE 3: NOMINAL GDP, 2021



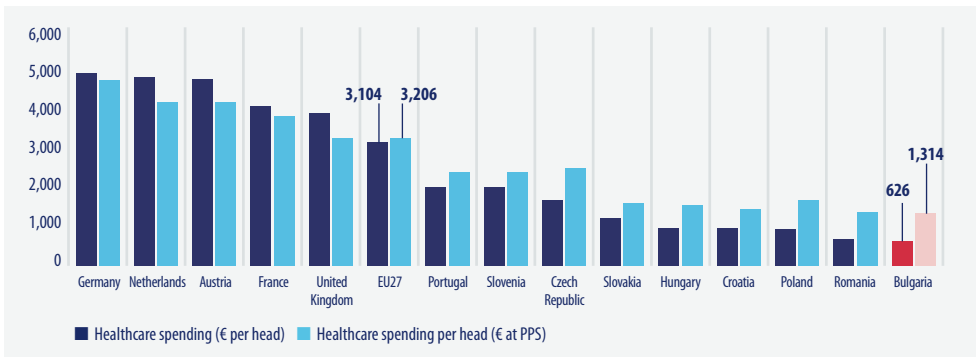
Source: Eurostat. Gross domestic product (GDP) at current market prices in € bn and Purchasing Power Standard (PPS), 2021

FIGURE 4: GDP PER HEAD, 2021



Source: Eurostat. Gross domestic product (GDP) at current market prices per head in € and Purchasing Power Standard (PPS, EU 27 from 2020). 2021

FIGURE 5: HEALTHCARE SPENDING PER HEAD, 2019



Source Eurostat. Healthcare spending per head in € and PPP. Healthcare spending as a % of GDP, 2019

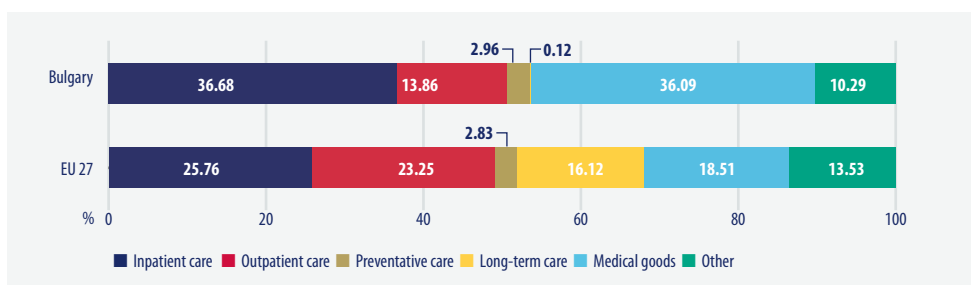
2. Healthcare resources

2.1. Healthcare expenditure by function

Among the study counties, Bulgaria spends the highest on inpatient care, at 36.68% of current healthcare expenditure (CHE), and is among the lowest spenders on outpatient care at 13.86% of CHE. Spending on preventative care is slightly higher than the EU average, while spending on long-term care is minuscule at 0.12% of CHE.⁷

Initiatives are in place to shift more care to primary and ambulatory services with additional funding going to national primary health prevention and health promotion programmes. In order to access specialist care, diagnostic tests and hospital care, patients need to receive referrals from GPs, however there are monthly quotas in place which somewhat restrict quick access to the above services (particularly for GPs with high numbers of registered patients).⁸

FIGURE 6: HEALTHCARE EXPENDITURE BY FUNCTION (% OF CURRENT HEALTH EXPENDITURE)



Source: Eurostat. Healthcare expenditure by function. 2019. EU 27 data from 2018.

2.2. Human capital

Bulgaria has a high density of doctors, with 4.28 per 1,000 population in 2020.⁹ However, regional disparities are high, and GPs are scarce. A recent agreement between the Ministry of Health and Federation of Trade Unions in Healthcare will see a rise in wages for both doctors and nurses, with the hope that the improved remuneration will slow migration and attract young people to the sector.¹⁰

2.3. Healthcare infrastructure

Bulgaria has a large number of hospital beds relative to the population at 7.7 per 1,000 population in 2019.¹¹ Bulgaria also has the highest hospital admission rate in the EU and inpatient care continues to grow, largely driven by private-sector expansion. From 2000 to 2018 the number of private hospitals increased six fold, and the number of hospital beds in the private sector increased by 40%.¹²

3. Access to medicines

While Bulgaria spends the highest on medical goods as a proportion of CHE (36% and almost double the EU 27 average), spending on medical goods, which includes prescribed and over-the-counter pharmaceuticals and medicines, other medicinal non-durable goods and therapeutic appliances, is relatively low in euro terms at €1.5bn in 2019, a fraction of the EU 27 average of €9.1bn.¹³

Bulgaria's comparatively high pharmaceutical sales partly reflect demand from parallel trade, whereby drugs are purchased cheaply in Bulgaria and are re-exported to other EU states, sometimes creating deficits on the local market. The government is trying to limit this practice, which accounts for an estimated 10% of sales.¹⁴

Bulgaria uses an international reference-pricing system to determine pharmaceutical prices. Drug prices are low, equivalent to about 70% of the EU average. However, patients in Bulgaria pay out-of-pocket for about 50% of medicines—the highest proportion in the EU and, in many cases, end up paying more than other EU citizens.¹⁵

3.1. Access to innovative therapies

According to the EFPIA Patients W.A.I.T Indicator 2021, Bulgaria's rate of availability of access to innovative new therapies approved in the EU is lower than the EU average across all categories. The average time to availability is longer overall at 764 days compared to the EU average of 511 days and across all four categories measured in the EFPIA study, with patients in Bulgaria waiting significantly longer for access to non-oncology orphan medicines and combination therapies.¹⁶

3.2. Digital health

The National e-Health Strategy 2014-2020 aims to modernise the health system through digital health with key focus areas including telemedicine and the upgrade of the national health care portal.¹⁷

Bulgaria ranks 26 out of 27 EU countries on the Digital Economy and Society Index (DESI) 2022. Bulgaria performs among the lowest of all EU countries on integration and human capital measures. While Bulgaria has improved on measures on connectivity, the country has the lowest broadband mobile penetration rate in the EU at 75% and the lowest proportion of households with an internet subscription – this will present a challenge to the scale-up of telemedicine objectives.¹⁸

Bulgaria scores the lowest on the E-health Composite Index, an index measuring the deployment of e-health. Bulgaria performs particularly low on knowledge and use of e-prescription services.¹⁹ However, according to the DESI Index 2022, Bulgaria has made significant progress in the uptake of e-prescriptions, with over 4,800 doctors and 3,550 pharmacists participating and issuing 11m e-prescriptions in 2021.²⁰

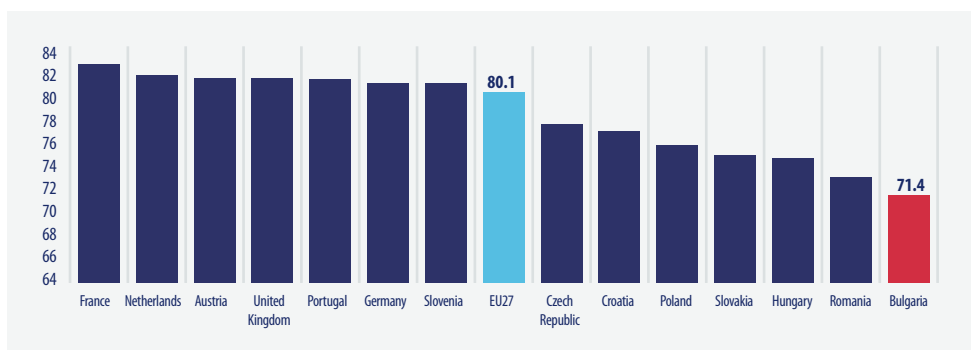
4. Health system assessment

4.1. Population health

Average life expectancy in Bulgaria is the lowest among countries in this study and has declined from 75.1 years in 2019 to 71.4 years in 2021. The decline over the past two years can be partly attributed to covid-19 related deaths which were 5.3 per 1,000 confirmed cases, as of March 2022, the highest of the countries in this study.²¹ Bulgaria's infant mortality rate is among the highest in the EU at 5.6 per 1,000 live births, but has halved in the past 15 years.²²

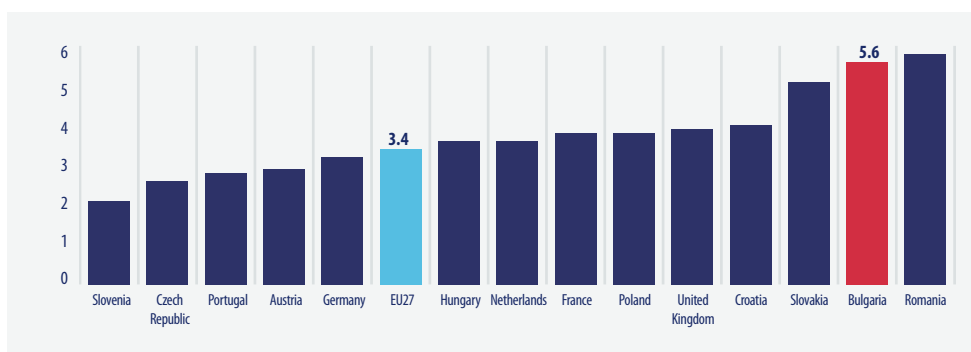
Bulgaria has an older age profile than many of its eastern European counterparts, with an estimated 21.5% of the population aged 65 or over in 2021—up from 14% at the start of the 1990s.²³ This demographic profile is putting pressure on the healthcare system.

FIGURE 7: LIFE EXPECTANCY, AVERAGE (YEARS), MALE AND FEMALE, 2021



Source: Eurostat. Life expectancy. 2021. Available from https://ec.europa.eu/eurostat/databrowser/view/demo_mlexpec/default/table?lang=en

FIGURE 8: INFANT MORTALITY RATE (PER 1,000 LIVE BIRTHS), MALE AND FEMALE, 2019



Source: Eurostat. Infant mortality rates. 2019. Available from https://ec.europa.eu/eurostat/databrowser/view/demo_minfind/default/table?lang=en

4.2. Disease burden and risk factors

Stroke and ischaemic heart disease accounted for over 30% of deaths in Bulgaria in 2018. High blood pressure, smoking rates and high alcohol consumption, combined with dietary risks and rising obesity, are the critical factors affecting the health of the population and disease trends in Bulgaria. Overweight and obesity among children are among the highest in the EU.⁸

Lung cancer is the third leading cause of mortality and the country also records the lowest five year survival rate for lung cancer in this study at 7.7%.²⁴ About 38% of Bulgarians smoked in 2020, according to Eurostat—the second-highest level in the EU (after Greece). Several measures to reduce smoking have been introduced, including excise duties on cigarettes and a ban on smoking in all enclosed public spaces.⁸

FIGURE 9: LEADING CAUSES OF MORTALITY

Cause of mortality	Total number of deaths in 2018	As a % of total deaths for 2018
Stroke	20,687	19.3
Ischaemic heart disease	12,101	11.3
Lung cancer	3,341	3.1
Colorectal cancer	2,470	2.3
Liver disease	1,725	1.6
Diabetes	1,678	1.6
Kidney disease	1,517	1.4
Pneumonia	1,294	1.2
Breast cancer	1,240	1.2

Source: Eurostat, 2018. Extracted from OECD/European Observatory on Health Systems and Policies (2021), Bulgaria: Country Health Profile 2021, State of Health in the EU, OECD Publishing, Paris/European Observatory on Health Systems and Policies, Brussels.

4.3. Quality of care

Bulgaria's general population and medical professionals report dissatisfaction with the performance of the health system and the quality of care. Patients and health professionals report that national monitoring and standardised data are lacking, which coupled with regional imbalances in access to primary care result in an overuse of inpatient care services.²⁵

Mortality from treatable deaths at 188.95 per 100,000 deaths in 2019 is significantly higher than the EU average of 92.1 and the second highest among countries in this study after Romania, indicating a need for further investment in screening and early diagnosis.²⁶

The level of satisfaction with health services is below the EU average (5.7 on a satisfaction scale from 1 to 10 in 2016). Bulgaria ranks lowest on measures of access to and affordability of long-term care and home care, which is reflective of low investment in this area.²⁷

5. Future outlooks

The war in Ukraine has negatively impacted growth prospects in Bulgaria. The country's high energy dependence on Russia is a significant vulnerability and cause of uncertainty- Bulgaria has traditionally relied on Russia for over 90% of the country's gas needs.²⁸

In April 2022, the European Commission endorsed Bulgaria's €6.3bn recovery and resilience plan. Approximately 26% of the funds are allocated to support digital transformation and the development of digital public services. €12m has been allocated towards the development of a national digital platform for medical diagnostics.²⁰ The plan also includes measures to modernise hospitals and medical facilities, develop outpatient units in remote areas and address shortages of healthcare professionals across the country.²⁹

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