FOCUS

Bulgaria's Key Challenge

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Parliamentary representative Democratic Republic with a multiparty system and free elections.

GDP (2018), USD
65.13
billions

GDP per capita (2018),
USD
9,272

Bulgarian lev pegged to the euro, although not part of the Eurozone

Since its entry into the EU, notable progress in living standards and health indicators have been made. However, numerous issues are yet to be solved. The economic instability and underfunding of the healthcare system contribute to unsatisfactory population health; Bulgaria requires substantial changes and solutions which can happen only with political will and public support.

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Highest at-risk-of-poverty or social exclusion rate in the EU – 40.4% of the population – followed by Romania (38.8%) and Greece (35.6%)

Low corporate and personal income tax rate of 10%, one of several competitive advantages Bulgaria offers

Since joining the EU in 2007 Bulgaria is member of the EU Customs Union, where EU products enter free of tariffs

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Bulgaria is a comparatively small European country of the Balkan peninsula in the south-eastern part of the continent, along the Black Sea. Situated in the western part of the country, the capital, Sofia, is the country's largest city and lies almost at the geographical center of the Balkan peninsula. Its population of around 1.3 million is almost four times as large as the population in each of the next biggest cities, Plovdiv and Varna. **Demographic development continues to be a major challenge as Bulgaria is projected to have the fastest-shrinking population in the world with negative population growth and negative net international migration, leading to a steady and continuous population decline and steep drop of the working-age population.** In 1989, almost nine million people lived in Bulgaria. Now, it is little over seven million (7.1). By 2050, that number is projected to be less than 5.5 million. The government is introducing several measures to try to tackle depopulation by increasing the birth rate: offering help with the costs of fertility treatment, giving childcare and mortgage support. A large share of native Bulgarian emigrants is young (68% younger than 40), seeking better working and social living conditions abroad or migrating for study purposes. Even if at the beginning economic contraction and high unemployment were partly responsible for the emigration, the trend has continued even after the economic environment stabilized.

In parallel, the country has undergone a significant transformation over the past decades, changing from a highly centralized, planned economy to an open, market-based, upper-middle-income economy securely anchored in the European Union (EU) since 2007. The advancement of structural reforms starting in the late 1990s, the introduction of the currency board and expectations of EU accession unleashed a decade of exceptionally high economic growth and improved living standards. Yet, many legacies from the past, the global economic crisis of 2008 and a period of political instability in 2013–14 undid some of those gains. Now, in its pursuit of boosting growth and shared prosperity, Bulgaria is moving to address these issues. Economic performance has recently recovered with positive macroeconomic prospects for 2020 and a projected economic growth above 3%. Higher productivity growth is critical to accelerating convergence as Bulgaria's income per capita is still the lowest in the EU. Productivity will need to grow by at least 4% per year over the next 25 years if Bulgaria is to catch up to average EU income levels and boost shared prosperity. **Hence, regardless of the comparatively stronger economic performance, Bulgaria is still facing serious economic and social challenges, with worryingly high levels of poverty and significant regional variances in all related indicators.** The labor force and employment sector exhibit serious structural weaknesses, due to the noticeable shortage of skilled labor in key sectors such as industry, education, health and tourism, which are holding back economic growth. The lack of political stability has greatly undermined reform efforts in many fields, including healthcare. There has been progress in certain demographic indicators such as life expectancy (75 years in 2018), as well as in some mortality and morbidity indicators such as infant mortality. Nevertheless, Bulgaria is behind almost all other EU Member States and shows unsteady improvement patterns.

Even if at the beginning economic contraction and high unemployment were partly responsible for the emigration, the trend has continued even after the economic environment stabilized

Healthcare in Bulgaria is based on mandatory health insurance, governed by the 1998 Health Insurance Act, also encompassing voluntary health insurance. It is therefore compulsory for all Bulgarian citizens to be insured under the health system. Compulsory Social health insurance (SHI) is administered by a single payer, the National Health Insurance Fund (NHIF). T**he NHIF finances medical and dental services included in the benefit package and medications listed in the Positive Drug List (PDL). The benefit package and prices of services are negotiated between the NHIF and professional associations of physicians and dentists annually.** Voluntary health insurance (VHI) is provided by for-profit joint-stock insurance companies for general and life insurance, which directly contract both insured individuals and healthcare providers. While the insurance system (both SHI and VHI) covers diagnostic, treatment and rehabilitation services as well as medications for the insured individuals, the Ministry of Health (MoH) is responsible for providing and funding public health services, emergency care, transplantations, transfusion hematology, tuberculosis treatment and inpatient mental healthcare.

Although new principles, such as autonomy, contractual relations and market regulation were introduced in the late 1990s, in practice, the decision-making process in the Bulgarian health systems remains highly centralized with the main national actors being the National Assembly, the Council of Ministers and

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the Ministry of Health. The Bulgarian Ministry of Health is responsible for the overall supervision of the healthcare system, drafting health legislation, developing national health policy and implementing programs aimed at improving the health of the population, budget and financial control as well as planning and ensuring physical and human resources for the health system. The NHIF was established as an autonomous public institution independent from the executive power (the government) and acts as the main purchaser of health services (since 1998). Its organization includes one central office located in Sofia, 28 branches – one in each district, called Regional Health Insurance Funds (RHIFs) and municipal offices of the RHIFs. The supreme governing body of the NHIF includes representatives of the government, employers, syndicates and patient representatives.

The mandatory health insurance system is de-

Health Indicators	1990	2005	2015	EU 28 average (2015)
Life expectancy at birth, total (years)	71.2	72.5	74.7	80.6
Mortality rate SDR per 100 000 population	n/a	1861	1660	1036
Infant mortality rate (0-1 year per 1000 live births) a	14.8	10.4	9.3	3.6
Under-5-year mortality rate (per 1000 live births) b	22.1	15.9	8.2 7.1 (2018)	4.2
Estimated maternal mortality ratio (per 100 000 live births) a	25.0	15.0	11.0	8.0

Source: Eurostat, 2018; WHO HFA 2017, World Bank 2020.
Notes: n/a = not available; SDR = standardized death rate. NCPHA, 2016; a = WHO Regional Office for Europe, 2018; b = World Bank, 2017.
Taken from: HiT-Bulgaria-2018-web.pdf

Productivity will need to grow by at least 4% per year over the next 25 years if Bulgariais to catch up to average EU income levels and boost shared prosperity.

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signed as a state monopoly. It has the exclusive right to grant mandatory health insurance and to guarantee the observance of the insurance rights in respect of all nationals, following a public contract model. A National Framework Contract (NFC) is in fact signed every year between the NHIF on one side, and the Bulgarian Medical and Dental Associations – on the other. The Contract, intended to regulate the formal and operational procedures of the compulsory health insurance system, comes into force upon sanction by the Minister of Health. **The benefit package, financed by the NHIF, includes primary and specialized outpatient medical care, outpatient diagnostic services, dental care and inpatient services that are regulated by clinical pathways and procedures. Public health services, emergency care and state psychiatric hospitals are funded by global budgets of the Ministry of Health.** The RHIFs contract all public or private healthcare providers operating in their territory that meet criteria stipulated in the NFC. In accordance with the 1999 Health Care Establishments Act, healthcare providers are autonomous self-governing market players and private healthcare providers can sign contracts with the NHIF on the same terms as public providers.

As of 2018, the private sector encompasses primary care, much of the specialized outpatient (or ambulatory) medical and dental care, pharmacies and some hospitals. The state owns university hospitals and national centers, specialized hospitals at national level, centers for emergency medical care, psychiatric hospitals, centers for transfusion hematology and dialysis, as well as 51% of the capital of district hospitals.

The GP is the central figure in primary care and acts as a gatekeeper for specialized ambulatory and hospital care. The number of GPs in Bulgaria has been declining and access to primary care in rural and remote areas is still a challenge. Ambulatory care is also provided by specialized outpatient facilities, including individual and group practices, medical and medico-dental centers, diagnostic-consultative centers and stand-alone medico-diagnostic or medico-technical laboratories. Most outpatient facilities are privately owned. The distribution of specialists across the country is characterized by large regional imbalances.

Dental care is delivered in outpatient and inpatient facilities. The regulations for outpatient dental care facilities are similar to those for primary and specialized medical care. Most dental practices are concentrated in the big cities. Only selected dental care services are fully covered by SHI, whereas most procedures are paid for by the patient.

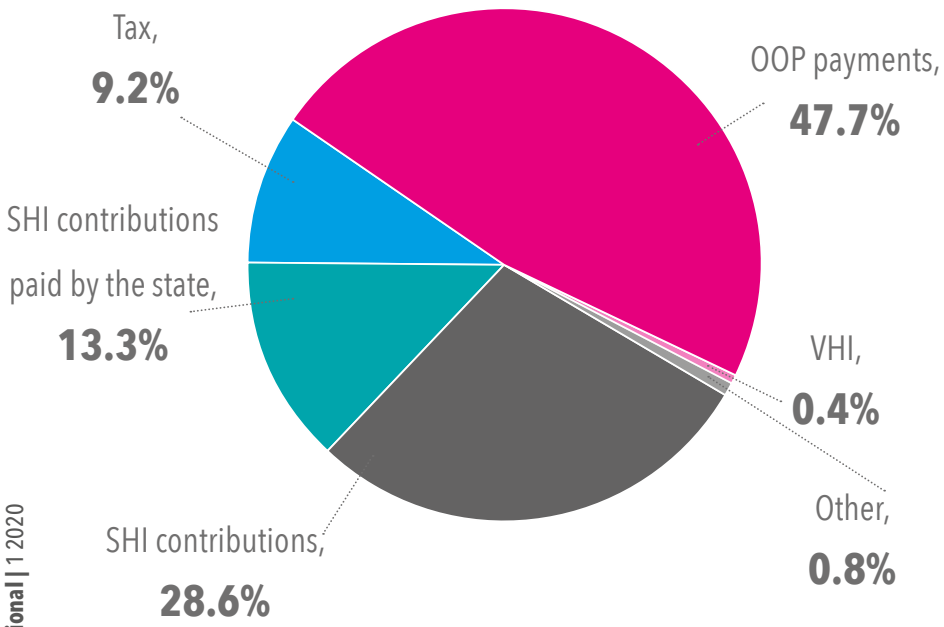
Inpatient care is delivered mainly through a network of public and private hospitals, divided into multi-profile and specialized. Bulgaria has a relatively high hospitalization rate, reflecting the underutilization of ambulatory care services and the lack of integration and coordination of different levels of care. Although strengthening of primary care has been on the policy agenda of almost all governments since 1990, these remain underused. Acute hospitals prevail and are the third highest within the EU, whereas capacity for long-term care is insufficient.

Pharmaceutical care is part of the state health policy and under the responsibility of the Minister of Health. The Bulgarian pharmaceutical market is one of the smallest in the EU, but it is nevertheless among the fastest growing sectors of the Bulgarian economy. In 2018 it grew by 5.9 % compared to 2017 reaching USD 2 billion and outpacing other fast-growing markets in the Central and Eastern Europe region. Nevertheless, this was the first registered decrease in growth, which has been in double digits for the last ten years.

Healthcare Funding - Bulgaria's healthcare sector is funded principally through the compulsory social health insurance system operated by the Bulgarian National Health Insurance Fund (NHIF). **Nearly 99% of the NHIF's total revenue is formed by SHI contributions. Contributions paid by employers and em-**

Government healthcare spending in 2018 rose by 4.8% to USD 2.60 billion, whereas private healthcare spending was upped by 7.2% to USD 2.62 billion.

Percentage of Total Expenditure on Health According to Source of Revenue, 2015



Sources: Eurostat, 2018; Bulgarian National Audit Office, 2016. Taken from: HiT-Bulgaria-2018-web.pdf

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ployees traditionally account for the largest share of the total contribution revenue, which have increased to 61.2% in 2016. SHI contributions paid by the state represent approximately one third of the total contribution revenue even if they cover the largest share (around 60%) of insured individuals, those exempt, most of which are pensioners, children, the unemployed and dependents (even if these funds are defined as SHI contributions by type of revenue, they in fact originate from general non-earmarked taxation). By law, all Bulgarian citizens must be insured with the NHIF; however, a significant share of the population (up to 12%) is de facto uninsured.

The role of public financing decreased steadily since the transition period to a SHI system. In 2018, Bulgaria's total healthcare expenditure amounted to USD 5.3 billion, equaling a per capita healthcare expenditure of USD 743. Government healthcare spending in 2018 rose by 4.8% to USD 2.60 billion, whereas private healthcare spending was upped by 7.2% to USD 2.62 billion.

Total health expenditure as a percentage of gross domestic product (GDP) increased steadily in the years and stands at around 8.2%. Even if below the EU15 average, Bulgaria spends more on health as a percentage of GDP than all new EU Member States, except for Slovenia. **Although both public and private health expenditure contributed to the increase of total health expenditures, the growth rate of private expenditure outpaced that of public spending.** Private expenditure on health – mainly OOP – has grown from 39.1% in 2000 to 48.9% of total expenditure in 2015, second highest value in the EU after Cyprus and constitutes the largest source of financing in Bulgaria, posing a financial burden on the population, especially for pharmaceutical care, which accounts for approximately two thirds of overall OOP expenditures. Corporate payments are ranked second in private health expenditures, whereas VHI only plays a marginal role contributing less than 1% to Bulgarian health financing. The trend of private (mainly OOP) expenditure increasing might be the result of a shortage or inefficient use of public resources for healthcare, also considering that public expenditure per capita tripled from 2000 (223 $) to 2015 (743$). OOP payments include cost-sharing and direct payments for services not covered by the NHIF. In addition, the incapability of the SHI system to assure access to, and quality of, health services means that many make direct payments for services that are in fact covered by the NHIF.

Overall OOP spending on health increased more than threefold between 2003 and 2015, representing the highest health expenditure share of the final household consumption among all EU Member States. The high and growing percentage of OOP payments also shows the inadequate financial protection that the SHI system provides to citizens. Inevitably, this has adverse implications for the accessibility of healthcare and puts many disadvantaged groups at a high risk of impoverishment and forgone care. **Citizens as well as medical professionals are dissatisfied with the performance of the health system and the quality of care, for which a national monitoring system or standardized data are lacking.**

Human and Physical Resources - Even though there is no overall shortage of physicians, the current composition of human resources in the health system is unbalanced. Rapid ageing and an outflow of young physicians result in large re-

Out-of-pocket (OOP) Household spending on health by type of service in million units and as % of total OOP expenditure

TYPES OF SERVICES	2003	2015
Pharmaceuticals and other goods	€381.9 million	€1299.0 million
% of OOP	74.4%	75.7%
Growth Index	1	3.4
Outpatient care	€92.9 million	€257.4 million
% of OOP	18.1%	15.0%
Growth Index	1	2.8
Inpatient care	€38.5 million	€160.1 million
% of OOP	7.5%	9.3%
Growth Index	1	4.2
TOTAL **Growth Index**	**€ 513.2** **1**	**€1716.4** **3.3**

Source: NSI, 2018g. Taken from: HiT-Bulgaria-2018-web.pdf

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gional discrepancies and insufficient coverage in some fields. **The hospital sector has traditionally been marked by overcapacity and yet it is subject to further growth.** According to OECD data, the number of hospital beds per population has decreased in all EU Member States since 2000, except for Bulgaria. In 2016, there were 321 hospitals with a total of just below 50,000 beds. The increase in both the number of hospitals and the number of beds is mainly driven by the private sector, whereas the number of public hospitals (under state and municipal ownership) has been decreasing, following the government strategy for restructuring the hospital sector. There are considerable regional variations for inpatient facilities in favor of more urban settlements. Unlike most of the private hospitals, public hospitals in Bulgaria are characterized by a chronic poor state of facilities due to underfunding and inefficient use of available resources, there is pressing need for upgrading and renewal of medical equipment. The number of health facilities for outpatient care (medical, dental, diagnostic and consulting centers, and laboratories) has also risen to 2,029 in 2016.

More than 120,000 people, or roughly 5.5% of all full-time employees, are working in the healthcare sector in Bulgaria. The number of physicians per 1000 population has been steadily growing to 4.16 in 2016, which puts Bulgaria above the EU28 average (3.5 per 1000 population). There are far more medical specialists than general practitioners (GPs), with the latter making up only 16.6% of the total physician workforce, the second lowest ratio in the EU after Greece. Bulgaria also records the lowest nurse per physician ratio of all EU Member States, with 1.1 nurses per physician, less than half the EU Member States ratio of 2.5 nurses per physician. **This is contrasted by the highest density of practicing dentists per 1000 population in the EU in 2016. Contrary to most EU Member States, where the number of practicing dentists per capita remained relatively stable, in Bulgaria this ratio has been consistently growing, reaching a total of 7,547 dentists in 2015, 11.3% more than in 2000, and a ratio dentists per 1000 population of 1.16, recording the largest absolute change across all EU Member States in the density of dentists.** Even in this case there are significant regional disparities with almost half of all dentists (48% in 2016) working in only three districts – Plovdiv, Varna and Sofia city.

Overall, Bulgaria is behind in the process of introducing new professional roles or diversifying and expanding competences of existing professions. Furthermore, the exodus of medical specialists and nurses in OECD countries is developing into a serious problem. The most common reasons for leaving the country include low levels of satisfaction

Cost-sharing was established by the 1998 Health Insurance Act in the form of co-payments (referred to as user fees) for visits to physicians, dentists, laboratories and hospitals for the use of services covered by the NHIF. User fees apply to all patients with some exceptions: children, pregnant women and women up to 45 days after delivery, patients suffering from chronic diseases listed in the NFC, patients with malignant neoplasms, medical professionals, those with income below a certain threshold and some other groups.

User Charges for Health Services, 2018

HEALTH SERVICE	TYPE OF USER CHARGE IN PLACE	PROTECTION
GP visit	Fixed user fee of BGN 2.90 (€1.50)	13 patient groups including children, chronic patients, pregnant women and others are exempt from paying user fees.
Outpatient specialist visit	Fixed user fee of BGN 2.90 (€1.50)	Same as above.
Outpatient laboratory services	Fixed user fee of BGN 2.90 (€1.50)	Same as above if user fees apply.
Inpatient stay	Fixed user fee of BGN 5.80 (€2.96) for each day of stay (up to 10 days per year). Extra billing for luxury hospital services (for example, choice of Physician or team)	Same as for GPs and specialist visits. No exceptions.
Dental care	Co-payment for services included in the NHIF's benefit package	Children pay no or smaller co-payments.
Outpatient pharmaceuticals	Co-payment	No exceptions.

Source: HiT-Bulgaria-2018-web.pdf

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and lack of professional development, low salaries, imbalances in payment by specialties, lack of modern medical equipment and failed health reforms.

Oral Healthcare – About 96% of dentists in Bulgaria work in general (liberal) practices, in the mandatory health insurance system or privately. Thus, dental care facilities are free to contract with the National Health Insurance Fund (NHIF) and provide services covered by the basic benefit package, or privately. Among all Bulgarian dentists, over 5,815 had contracts with the NHIF in 2017, both for primary and specialized dental care.

The dental procedures in the mandatory health insurance sector are based on co-payments and fee-for-service base. Outpatients pay a user fee of around 2.2 Lev (1.1 Euro) every time they visit their dentist, in addition, when treated within the NHIF, patients make co-payments to dentists up to 40% of the contracted fee. The scope and the extent of co-payment differs for children and adolescents on one hand and adults on the other. In 2017, the number of dental services covered by the NHIF increased. The basic benefit package embraces 17 dental care services: (primary, specialized and surgical) for children up to 18 years of age, 8 services (primary and surgical) for people above 18 years of age and one additional service for children with mental diseases. **The cost included in the basic benefit package is only partially covered for patients above 18 years of age. Co-payments apply for 11 of the 17 dental services provided to children up to 18 years of age.** There is a small co-payment for children for endodontic treatment only – approximately 20%. Orthodontic treatment for children is not covered by the NHIF. Endodontics, removable appliances, crowns and bridges for adolescents are not cov-

Number of dentists*	Between 7,547 - 8,350
Ratio dentists per 1000 population, 2016	1.16
No. of Dental Technicians, 2013	1,235
Ratio technicians per 1000 population, 2016 a	0.22
Dental Assistants	No data available

*according to different, reliable sources
Source: Source: Eurostat, 2018; aNSI, 2018d, Council of European Dentists, EU Manual 2015

Number of Outpatient Dental Care Providers

	2010	2016	% CHANGE 2010-2016
Individual practices for primary dental care	7,768	5,062	-34.8
Group practices for primary dental care	367	372	+1.4
Individual practices for specialized dental care	134	85	-36.6
Group practices for specialized dental care	1	1	0.0
Dental centers	49	50	+2.0
Medico-dental centers	29	50	+72.4

Sources: NCPHA (2011, 2012, 2013, 2014, 2015b, 2016, 2017); NSI, 2017a.
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ered by the NHIF. If a patient needs more than the mentioned annual scope of treatment, then he/she must pay the full dentist's fee. Certain groups of citizens, rather small, are exempt from user fees (such as prisoners, young people up to the age of 18 with mental disorders, children and adults living in specialized institutions) and dental services are fully covered by the NHIF. In all other cases, the NHIF only partially reimburses dental services provided and patients must pay out-of-pocket. If treated privately, patients pay the whole cost of their treatment and prices are set by the market.

Hospital dental care is reimbursed by the NHIF based on clinical pathways. A very small number of dentists work in hospitals as employees, salaried by the Ministry of Health, where they mostly undertake oral surgical treatments. In 2015, the MoH adopted a National Program for the Prevention of Oral Diseases in Children from 0 to 18 years of age which envisages different prophylactic activities including fluoridation and school education programs.

As dental services are mostly paid by patients, there is a clear difference in prevailing usage among higher income groups, which creates financial barriers to their use by people with lower incomes. In 2015, 11.6% of the population reported an unmet need for dental care, out of which 10.4% reported financial reasons. Of these, only 2.3% in the highest income quintile reported an unmet need for financial reasons. Waiting times are among the reasons for unmet needs in the fifth income quintile for both medical and dental examination. In 2016, the average number of dental services in primary dental care per insured person was 0.55.

The NHIF's remuneration to providers of dental outpatient care is specified in the National Framework Contract (NFC) and covers only a defined proportion of the total price of dental services. According to the 2017 NFC, prices vary from BGN 2.50 (€1.30) to BGN 139.7 (€71.40) depending on the type of service and category of the insured individuals. There is a significant ratio discrepancy between the big cities (with an excess of dental practitioners) and the rural areas (where there is a deficiency of dental practitioners). Therefore, under pressure from the Bulgarian Dental Association, the National Framework Contract with NHIF now stipulates special incentives for contractors practicing in remote and deprived areas.

General dentists work in individual and group primary practices, while dentists with further specializations work in individual and group specialized practices, as well as in dental or medico-dental centers. Medico-dental centers must include at least three physicians and/or dentists with different specialties and dental centers must have at least three dentists with different specialties. Dental care is delivered mainly in outpatient facilities; inpatient dental treatment is provided by specialized surgery wards in hospitals. In 2016, there were 50 medico-dental centers and 50 dental centers. As in ambulatory medical care, individual practices prevailed although their number is decreasing. Outpatient facilities are predominantly privately owned.

The number of dentists has significantly risen during recent years due to the development of the private sector and the prevailing proportion of patient payments. In 2012, 290 new dentists graduated from the three dental schools in Bulgaria (Sofia, Varna and Plovdiv), all of which are publicly funded. There are no private schools. The numbers of annual intake of government funded Bulgarian citizens as students is the same each year. However, data for fee-paying foreign students varies annually. There are no dental auxiliaries apart from dental technicians. Dental technician's laboratories are 100% private and must register with the Ministry of Health. Membership in the Bulgarian Dental Association is mandatory for dental professionals. Its activities include continuous professional education, providing com-

Number of Dental Specialties

Orthodontics	45
Oral Surgery	226
Endo & Restorative	417
Pedodontics	580
Periodontics	36
Prosthodontics	115
Oral Radiology	5
OMFS	45
Dental Public Health	17
Dental Clinical Allergology	7

Source: Council of European Dentists, EU Manual 2015

Health Data

DMFT at age 12	**3.03 (NOHPPC, 2008)**
DMFT zero at age 12	**21% (NOHPPC, 2011)**
Edentulous at age 65	**14% (BgDA, 2013)**

Notes: "DMFT zero at age 12" refers to the number of 12 years old children with a zero DMFT (decay-missing-filled teeth). "Edentulous at age 65" refers to the numbers of over 64s with no natural teeth. NOHPPC = National Oral Health Preventive Programme for Children. BgDA = Bulgarian Dental Association. Source: EU Manual of dental practice 2015.

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Distribution and mean number ± standard deviation (SD) of "decayed," "missing," and "filled" teeth

Groups	Number of subjects	Decayed teeth		Missing teeth		Filled teeth	
		% subjects	Mean (SD)	% subjects	Mean (SD)	% subjects	Mean (SD)
Total sample	2,531	67% 2.2 (2.9)	91% 6.7 (6.4)	87% 4.9 (4.0)	% subjects	% subjects	% subjects

Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3359670/

ments and statements on draft bills, participating in drafting Good Medical Practice guidelines and discussing ethical issues.

As one of the EU's newest members, Bulgaria is an emerging market providing opportunities for foreign companies. It represents one of the smallest medical device markets in the EU, which will register a mid-single-digit local currency compound annual growth rate (CAGR) over the 2019-2023 period. **The market is largely reliant upon imports, with just about 200 dental dealers, which are primarily sourced from other EU member states.** The government's ongoing commitment to increasing health expenditure coupled with real GDP growth, should see medical device imports rise in the near future.

Prevalence of dental caries and edentulism is still high in Bulgaria with the most deprived population groups experiencing the worst dental health. Better health promotion and dental preventive activities are needed especially in improving hygiene habits, use of additional funds for hygiene and more frequent dental visits for the whole population. There is little information about adult oral health in Bulgaria however, the results of a cross–sectional survey on adults aged 20 years and over living in Bulgaria are shown just above. Data for this study were collected between October 2006 and January 2010 and 2,531 subjects were analyzed.

Among main sources:

-Extracts from "Bulgaria Heath Systems Review 2018". The European Observatory on Health Systems and Policies, a partnership hosted by WHO. The Health Systems in Transition (HiT) profile on Bulgaria was produced by the European Observatory on Health Systems and Policies and Medical University – Varna "Prof. Dr P. Stoyanov", which is a member of the Health Systems and Policy Monitor (HSPM) network. For a comprehensive and detailed report on Bulgaria: HiT-Bulgaria-2018-web.pdf

-Extracts from the "EU Manual of Dental Practice 2015" by the Council of European Dentists

-Bulgaria's Outlook for Healthcare & Life Sciences, https://www.export.gov/article?id=Bulgaria-Healthcare-and-Medical – Export.gov helps U.S. companies, plan, develop and execute international sales strategies necessary to succeed in today's global marketplace.

*-Dental Status and Associated Factors in a Dentate Adult Population in Bulgaria: A Cross-Sectional Survey, by Nikola D. Damyanov, 1 Dick J. Witter, 2 Ewald M. Bronkhorst, 3 and Nico H. J. Creugers 2 , *,https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3359670/*

-The World Bank in Bulgaria, https://www.worldbank.org/en/country/bulgaria/overview

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