



State of Health in the EU

Slovak Republic

Country Health Profile 2017

The Country Health Profile series

The *State of Health in the EU* profiles provide a concise and policy-relevant overview of health and health systems in the EU Member States, emphasising the particular characteristics and challenges in each country. They are designed to support the efforts of Member States in their evidence-based policy making.

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Contents

1 • HIGHLIGHTS	1
2 • HEALTH IN THE SLOVAK REPUBLIC	2
3 • RISK FACTORS	4
4 • THE HEALTH SYSTEM	6
5 • PERFORMANCE OF THE HEALTH SYSTEM	9
5.1 Effectiveness	9
5.2 Accessibility	11
5.3 Resilience	13
6 • KEY FINDINGS	16

Data and information sources

The data and information in these Country Health Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated in June 2017 to ensure the highest standards of data comparability. The sources and methods underlying these data are available in the Eurostat Database and the OECD health database. Some additional data also come from the Institute for Health Metrics and Evaluation (IHME), the European Centre for Disease Prevention and Control (ECDC), the Health Behaviour in School-Aged Children (HBSC) surveys and the World Health Organization (WHO), as well as other national sources.

The calculated EU averages are weighted averages of the 28 Member States unless otherwise noted.

To download the Excel spreadsheet matching all the tables and graphs in this profile, just type the following StatLinks into your Internet browser:
<http://dx.doi.org/10.1787/888933593798>

Demographic and socioeconomic context in the Slovak Republic, 2015

	Slovak Republic	EU
Demographic factors	Population size (thousands)	5 424
	Share of population over age 65 (%)	18.9
	Fertility rate ¹	1.6
Socioeconomic factors	GDP per capita (EUR PPP ²)	28 900
	Relative poverty rate ³ (%)	10.8
	Unemployment rate (%)	9.4

1. Number of children born per woman aged 15–49.

2. Purchasing power parity (PPP) is defined as the rate of currency conversion that equalises the purchasing power of different currencies by eliminating the differences in price levels between countries.

3. Percentage of persons living with less than 50% of median equivalised disposable income.

Source: Eurostat Database.

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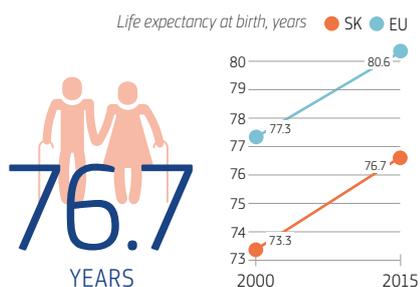
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1 Highlights

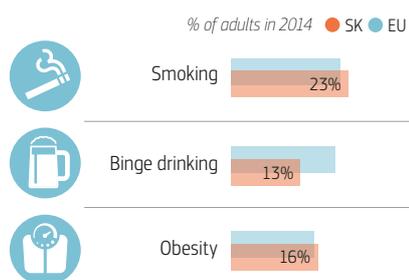
The health status of the Slovak population has improved since 2000 but still lags behind the EU average. Slovak people live longer but persistent disparities in life expectancy exist by gender and socioeconomic group. The Slovak health system provides coverage to the entire population, although access to care is more limited in certain regions, and quality and efficiency can be improved in many areas.

Health status



Life expectancy at birth in 2015 was 76.7 years, up from 73.3 years in 2000, but still almost four years below the EU average. A large gender gap persists, with Slovak men living on average more than seven years less than women (73.1 years compared to 80.2 years). There are also large disparities by socioeconomic group: people with a low level of education live on average 10 years less than those with a university education.

Risk factors



In 2014, 23% of adults were daily smokers, above the EU average. Smoking among men is nearly two times greater than among women, and smoking among people with low education is almost two-thirds higher compared to those with higher education. Overall alcohol consumption per adult has decreased slightly since 2000. One in eight Slovak adults report heavy alcohol consumption on a regular basis, which is less than the EU average. One in six adults are obese, a rate similar to the EU average, and overweight and obesity problems among adolescents are on the rise.

Health system

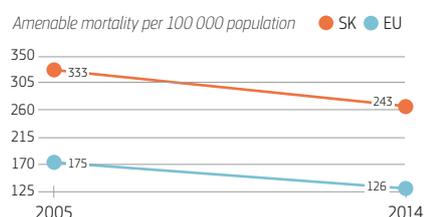


The Slovak Republic spends less on health than most other EU countries, both in absolute terms and as a share of GDP. In 2015, EUR 1 538 per capita was spent on health care, compared to the EU average of EUR 2 797. This amounts to 6.9% of GDP compared to 9.9% across the EU as a whole. Some 80% of health spending in the Slovak Republic is publicly funded, which is close to the EU average.

Health system performance

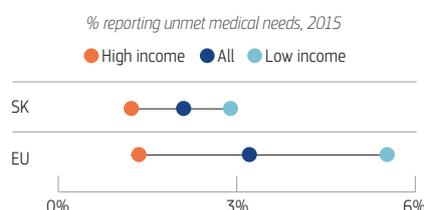
Effectiveness

Despite improvements, amenable mortality in the Slovak Republic remains well above the EU average. Mortality rates following hospital admission for a heart attack or stroke came down over the past decade, signalling improvements in acute care.



Access

Access to health care in the Slovak Republic is generally good, with low numbers reporting unmet needs for medical care and little variation between income groups. However, concerns exist about geographical inequalities in service availability.



Resilience

Public spending on health increased in the Slovak Republic in recent years, but substantial room remains to improve efficiency by strengthening primary care and reducing reliance on the hospital sector. Addressing human resource shortages, especially the low number of General Practitioners (GPs) in rural areas, is another important challenge.



2 Health in Slovak Republic

Life expectancy is increasing, but remains almost four years below the EU average

Life expectancy at birth in the Slovak Republic has increased by more than three years since 2000 to reach 76.7 years in 2015 (Figure 1). Yet the life expectancy of the Slovak people is still almost four years less than the EU average.

A substantial gap persists in life expectancy between men and women: life expectancy at birth for Slovak men (73.1 years) is more than seven years less than that of women (80.2 years). This gender gap is greater than the EU average (5.4 years). Furthermore, there is a large gap in life expectancy by socioeconomic status: life expectancy at birth for Slovaks with a university education is 10 years longer than

for those who have not completed their secondary education. This is one of the largest gaps in the EU.

Most of the gains in life expectancy in the Slovak Republic since 2000 have been driven by reductions in mortality rates after the age of 65. The life expectancy of Slovak women at age 65 reached 18.8 in 2015 (up from 16.7 years in 2000) and that of men reached 15.0 years (up from 12.9 years in 2000). However, not all of these additional years of life are lived in good health. At age 65, Slovak women and men can expect to live about four years of their remaining years free of disability, which represents only about 20% of the remaining years of life for women and 30% for men.¹

1. These are based on the indicator of 'healthy life years', which measures the number of years that people can expect to live free of disability at different ages.

Figure 1. Life expectancy increased by more than three years since 2000, but is still below the EU average

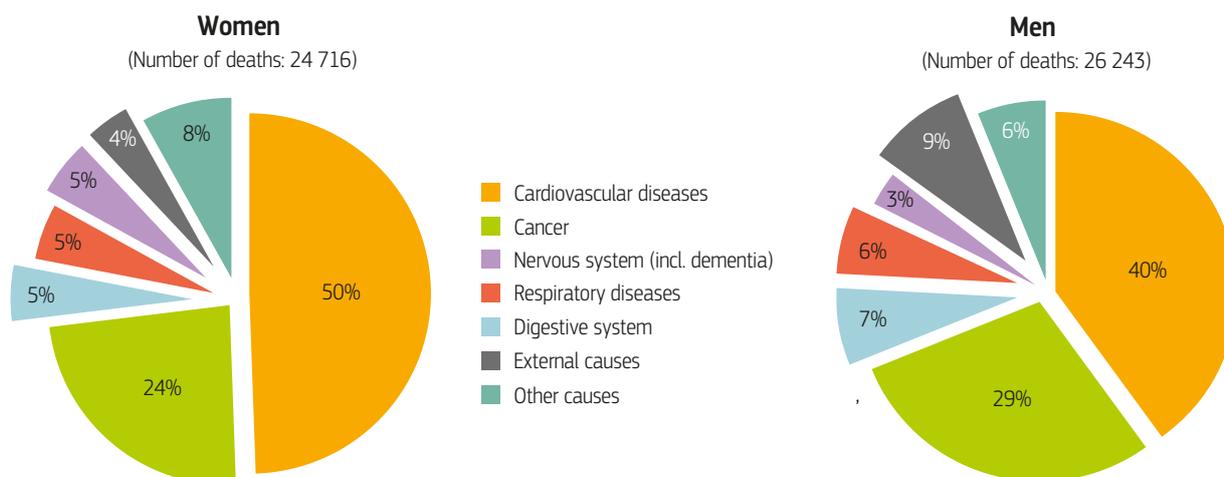


Source: Eurostat Database.

Cardiovascular diseases and cancer are the largest contributors to mortality

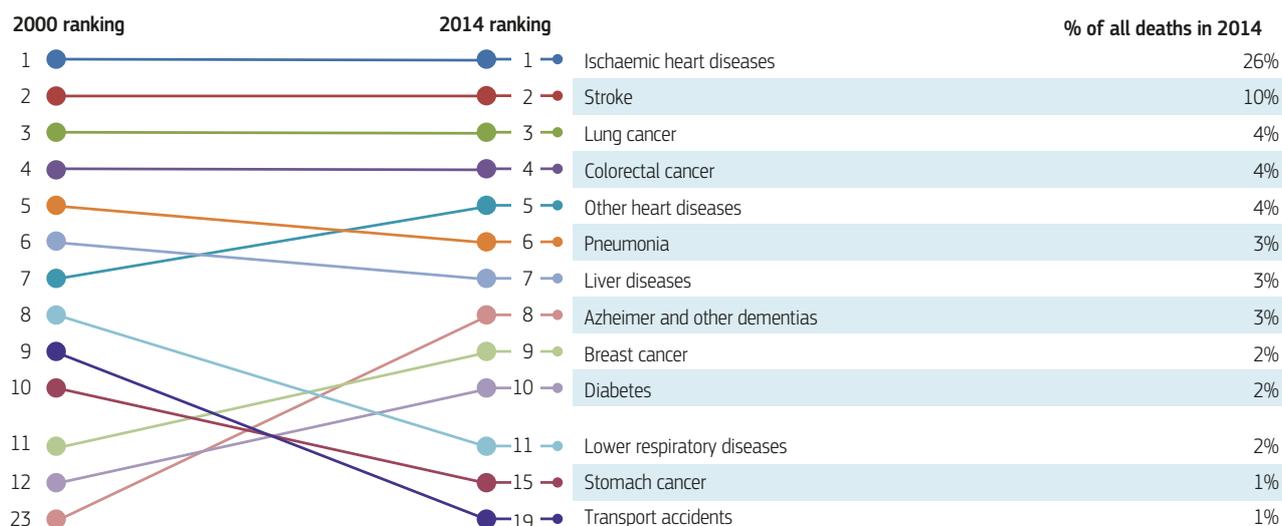
Cardiovascular diseases are by far the leading cause of death for both women and men in the Slovak Republic, followed by cancer (Figure 2). In 2014, some 23 000 people died from cardiovascular diseases (accounting for 50% of all deaths among women and 40% of all deaths among men), and 13 600 died from cancer (accounting for 24% of all deaths among women and 29% of all deaths among men).

Looking at trends in more specific causes of death, the top four in the Slovak Republic have stayed the same since 2000: heart diseases, stroke, lung cancer and colorectal cancer (Figure 3). Deaths from Alzheimer's disease and other dementias almost doubled between 2000 and 2014 due to population ageing, but also to better diagnosis, lack of effective treatments and changes in registration practices.

Figure 2. Cardiovascular diseases and cancer account for almost three-quarters of deaths in the Slovak Republic

Note: The data are presented by broad ICD chapter. Dementia was added to the nervous system diseases' chapter to include it with Alzheimer's disease (the main form of dementia).

Source: Eurostat Database (data refer to 2014).

Figure 3. Heart diseases and stroke are the leading causes of death, followed by lung and colorectal cancers

Source: Eurostat Database.

Musculoskeletal problems and depression are among the leading causes of poor health

In addition to the burden of disease caused by fatal conditions, musculoskeletal problems (including low back and neck pain) and major depressive disorders are among the main causes of poor health as measured by disability-adjusted life years (DALYs)² lost in the Slovak Republic (IHME, 2016). Even if not fatal, these conditions have serious life-limiting consequences.

2. DALY is an indicator used to estimate the total number of years lost due to specific diseases and risk factors. One DALY equals one year of healthy life lost (IHME).

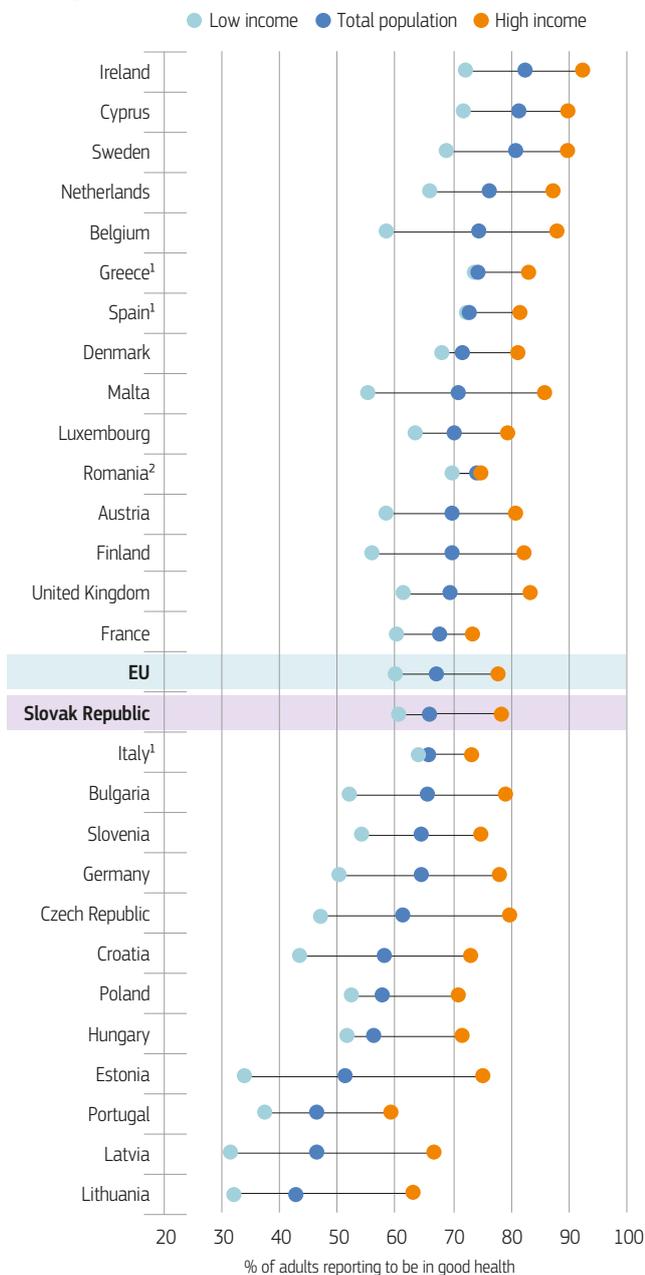
Self-reported data from the European Health Interview Survey (EHIS) indicate that more than one in four people in the Slovak Republic live with hypertension, one in fourteen live with diabetes, and one in twenty-six live with asthma. People with the lowest level of education are four times more likely to live with diabetes and more than one-and-a-half times more likely to live with asthma than those with the highest level of education.³

3. Inequalities by education may partially be attributed to the higher proportion of older people with lower educational levels; however, this alone does not account for all socioeconomic disparities.

Most Slovaks report to be in good health but disparities exist by income group

About two-thirds (66%) of the Slovak population reports being in good health, similar to the EU average, but higher than in most neighbouring countries (Figure 4). However, there are disparities in self-rated health by socioeconomic status: more than three-quarters (78%) of Slovak people in the highest income group report being in good health, compared with less than two-thirds (61%) of those in the lowest income quintile.

Figure 4. The share of people reporting to be in good health, and the gap by income, is similar to the EU average



1. The shares for the total population and the low-income population are roughly the same.
2. The shares for the total population and the high-income population are roughly the same.

Source: Eurostat Database, based on EU-SILC (data refer to 2015).

3 Risk factors

Behavioural risk factors are major public health issues in the Slovak Republic

Based on IHME estimates, more than 35% of the overall burden of disease in the Slovak Republic in 2015, as measured by DALYs, can be attributed to behavioural risk factors. These include smoking and alcohol consumption, as well as dietary risks and low physical activity contributing to high body mass index and other health risks (IHME, 2016).

Smoking rates are high, and binge drinking among adolescents remains a problem

Almost one-quarter (23%) of adults in the Slovak Republic still smoke daily, which is higher than in most EU countries (Figure 5). The smoking rate among Slovak men (30%) is nearly two times greater than among women (16%), and higher than the EU average for men (26%). A higher proportion of 15-year-old Slovak boys (16%) and girls (18%) smoke than the EU average (14% for both boys and girls). Tobacco control policies are less comprehensive than in many other EU countries (see Section 5.1).



Overall alcohol consumption in the Slovak Republic is close to the EU average, at 10.2 litres per adult in 2015. The consumption level has dropped slightly from 11 litres in 2000. The percentage of adults who report heavy alcohol consumption on a regular basis is lower than the EU average, with 13% of Slovak adults reporting such binge drinking,⁴ compared with an EU average of almost 20%. However, the proportion of adolescents who report having been drunk more than once in their life is higher than the EU average, with 26% of 15-year-old girls and 29% of 15-year-old boys reporting having been drunk at least twice (compared with an EU average of 24% for girls and 27% for boys).

Rising rates of overweight and obesity in children present a growing challenge

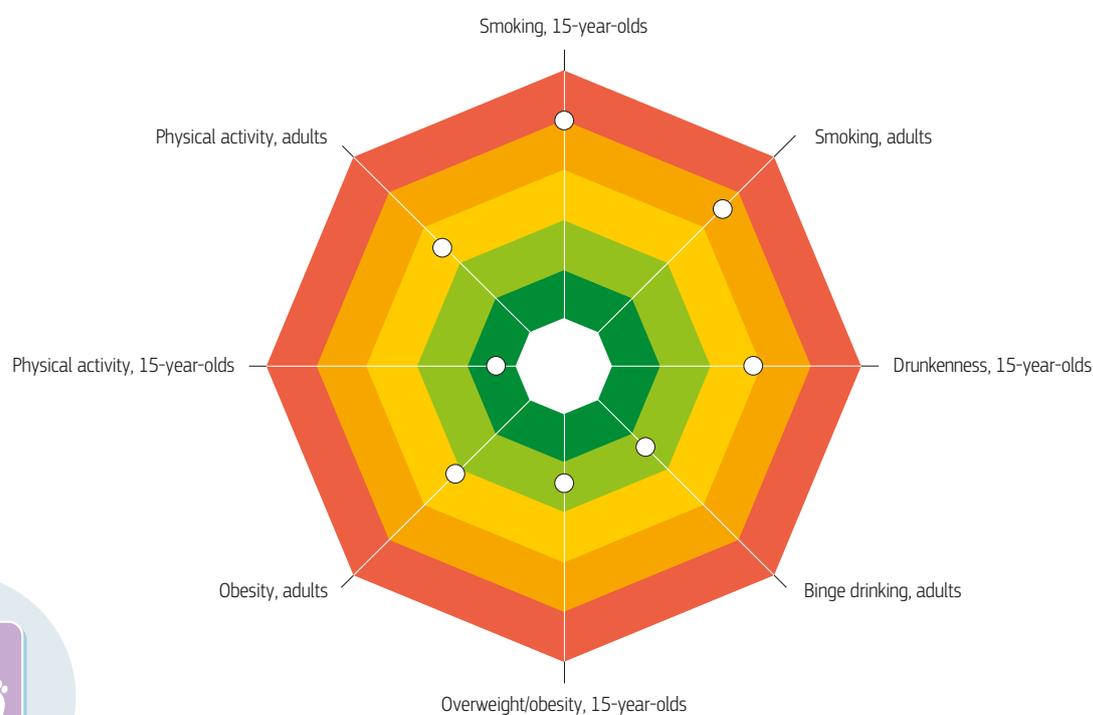
One in six (16%) adults in the Slovak Republic are obese, which is equal to the EU average. While the prevalence of overweight and obesity among 15-year-olds remains below the EU average,

it almost doubled (from 8% to 15%) between 2005–06 and 2013–14. This is a cause for concern given that being overweight or obese during childhood or adolescence is a strong predictor of becoming overweight or obese as an adult.

Behavioural risk factors are more prevalent among disadvantaged populations

Many behavioural risk factors in the Slovak Republic are more common among populations with low levels of education or income. The prevalence of regular smoking is almost two-thirds higher among the lowest-educated population compared with the highest-educated. Obesity is nearly three times more common among the lowest-educated population (22%) than the highly educated (8%). A higher prevalence of risk factors among disadvantaged groups contributes greatly to health inequalities.

Figure 5. High levels of physical inactivity and obesity are important public health issues



Note: The closer the dot is to the centre the better the country performs compared to other EU countries. No country is in the white 'target area' as there is room for progress in all countries in all areas.

Source: OECD calculations based on Eurostat Database (EHIS in or around 2014), OECD Health Statistics and HBSC survey in 2013–14. (Chart design: Laboratorio MeS).

4. Binge drinking behaviour is defined as consuming six or more alcoholic drinks on a single occasion, at least once a month over the past year.

4 The health system

The Slovak Republic's health system is based on compulsory insurance with selective contracting of providers

The Slovak health system is based on statutory health insurance, a basic benefit package and universal population coverage. A competitive insurance model with insurers selectively contracting health care providers, and flexible pricing of health services, was introduced in the early 2000s (see Box 1). Health insurance companies (HICs) are legally obliged to ensure health care for their insured population and compete on quality and prices. HICs are free to contract with providers and negotiate quality, prices and volumes individually. To guarantee accessibility of providers, a minimum network requirement (including for example a minimum number of doctors by specialty) is set by the government. Due to several mergers, the health insurance market is shared by one publicly owned HIC, which dominates the market, and two smaller private companies. The Health Care Surveillance Authority monitors the three HICs.

BOX 1. AN AMBITIOUS REFORM UNDERTAKEN 15 YEARS AGO RELIED ON MARKET PRINCIPLES BUT IS STILL CONTROVERSIAL

The Slovak Republic reintroduced a social health insurance-type health system in the 1990s, with a majority of health providers owned by the state and regulatory power centralised at the Ministry of Health. Motivated by poor health outcomes, deeply indebted hospitals and several corruption scandals, the system underwent a 'shock-type'-reform between 2002 and 2004. This reform installed market principles for the health insurance and health provision market, where HICs compete for the insured and providers compete for contracts. Several key characteristics of this reform, such as user fees and the transformation of providers and health insurers into joint stock companies, are subject to constant change. The debate around the 2004 reform has probably drawn attention away from several other long-awaited areas of reform, such as developing primary care and scaling up long-term care capacity.

The Slovak Ministry of Health plays a central role in the governance of the system. It defines the benefit package and maximum waiting lists, and mandates the HICs to contract providers, which is seen as crucial in guaranteeing accessibility of health services. Furthermore, it owns about 40% of total inpatient facilities, including university hospitals and highly specialised institutions, and is the only shareholder in the largest HIC. Efforts to shape the health system in the Slovak Republic have focused mainly on finding a structure in which the market is competitive but satisfactorily regulated.

Several reforms have been implemented to contain costs in the health system

In 2015, the Slovak Republic spent EUR 1 538 per capita on health (adjusted for differences in purchasing power; Figure 6), which is low compared to the EU average but comparable to other European countries with similar levels of economic development. Health spending accounted for 6.9% of the Slovak GDP in 2015, a much lower share than the EU average (9.9%), but comparable with neighbouring countries. Public sources account for 80% of total health expenditures, which is on par with the EU average (79%) (Figure 7).

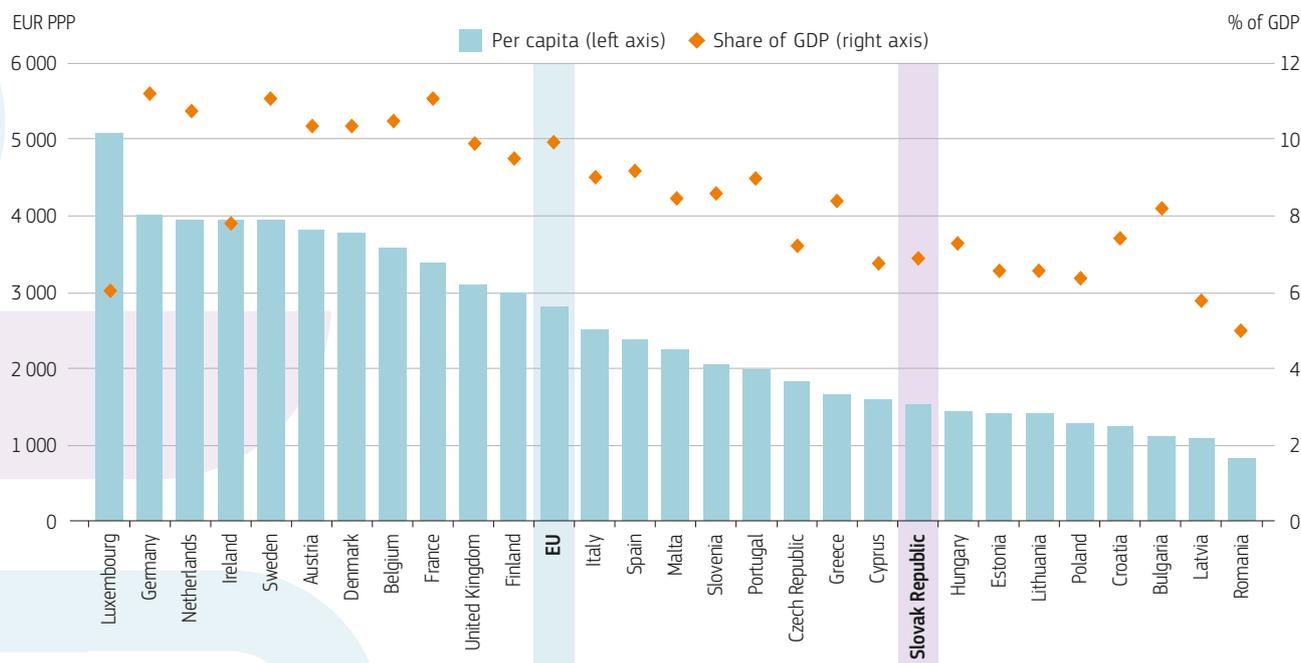
The main sources of public revenues for health spending are contributions from employees and employers, the self-employed, as well as state contributions for economically inactive persons. Some special programmes also exist for the 10% Roma minority, who experience poorer health status and living conditions than the general population. Private expenditures, mainly consisting of out-of-pocket payments, are a subject of ongoing debate, with frequent changes in the cost-sharing arrangements.

Since 2008, several reforms have aimed at controlling cost and improving efficiency. The reallocation of public funds among HICs according to risk was improved in 2012 by including pharmaceutical cost in the redistribution formula.

Another objective of the 2012 reform was to reduce the high share of pharmaceutical spending by HICs (which accounted for close to or over 30% of total expenditure before 2012). In 2012, changes to the positive list as well as the introduction of price referencing and regressive margins led to a drop in the proportion of spending.

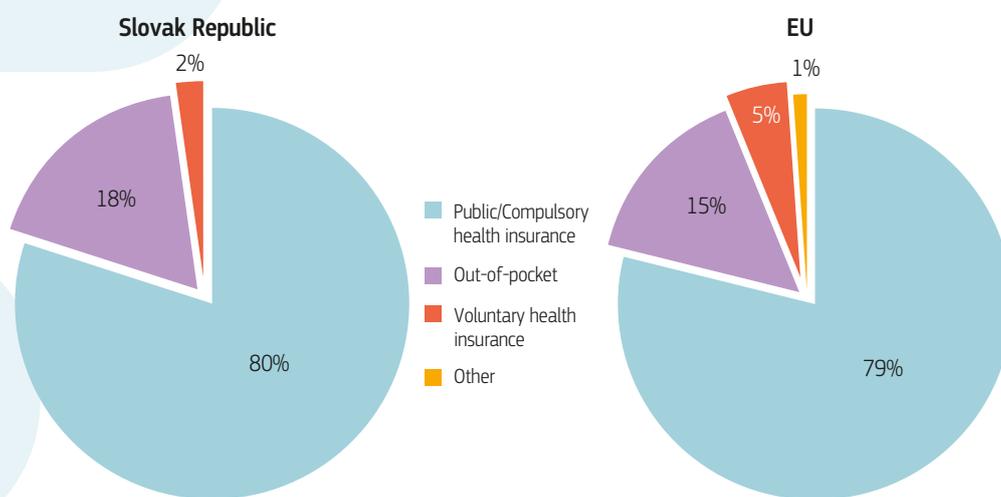
In 2016, a series of other cost-saving measures were introduced, such as price referencing of health care materials, reduction of acute beds in hospital and centralised procurement (OECD, 2017).

Figure 6. The Slovak Republic spends less on health than most other EU countries



Source: OECD Health Statistics, Eurostat Database, WHO Global Health Expenditure Database (data refer to 2015).

Figure 7. The public share of health spending is close to the EU average



Source: OECD Health Statistics 2017, Eurostat Database.

The number of beds has reduced, but hospitals struggle to fund investments

The number of curative care beds in hospital fell to 4.9 beds per 1 000 population in 2015 (down from 6.4 in 2000), but still remains higher than the EU average (4.2 per 1 000 population). Despite this decrease, bed occupancy rates have not increased due to reductions in average length of stay and a shift to more day surgeries.

HICs can steer overall bed capacity by negotiating the volume and prices of health services (the state-owned HIC did this during 2010–11 by not contracting some selected departments in hospitals). Providers are, in theory, responsible for their own capital investments, using funds from the remuneration of hospital services. Although this autonomy has advantages, in reality, providers do not seem to be able to manage this responsibility, since investment levels remain low (see Section 5.3). In practice, regional governments and EU structural funds frequently fill some of the investment gaps.

The Slovak Republic has a low nurse-to-physician ratio

While there does not seem to be a general shortage of physicians in the Slovak Republic, the falling number of nurses per capita is of concern. The number of practicing physicians per capita has increased slightly since 2000 and was, in 2015, close to the EU average (Figure 8). By contrast, the Slovak Republic is one of the few EU countries where the number of nurses per capita declined over the past 15 years. Whereas the number of nurses per capita in the Slovak Republic was greater than the EU average in 2000, it is now substantially lower, and the ageing of this workforce is expected to lead to further reductions in the years ahead unless efforts are made to recruit and retain nurses.

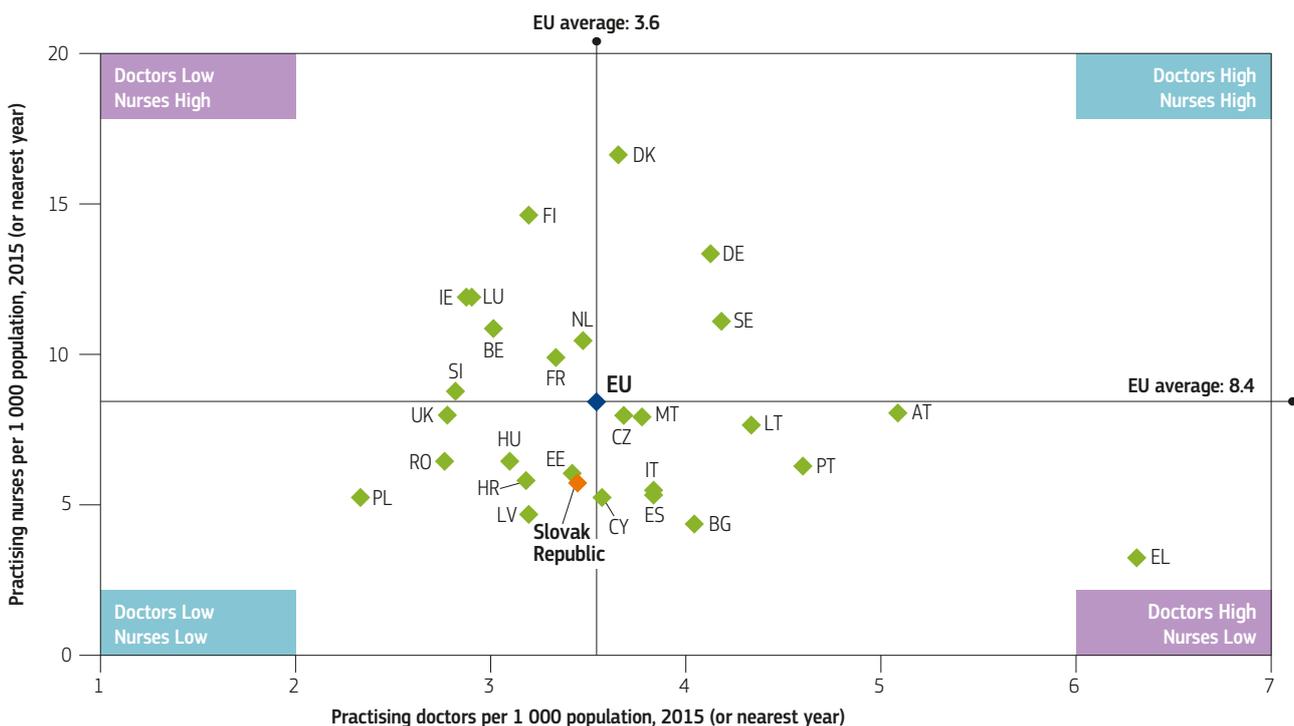
There are large variations in the supply of doctors and nurses across different regions. In the capital region of Bratislava,

the medical workforce is nearly twice as large relative to the population compared to the national average. By contrast, many rural areas suffer from a limited availability of medical personnel (see Section 5.3).

The Slovak Republic has few GPs and their gatekeeping role is weak

General Practitioners (GPs) in the Slovak Republic play only a minor gatekeeping role and the proportion of GPs compared to specialists is small. Because of the low numbers of GPs and their limited formal rights to prescribe medicines and manage chronic patients, 80% of GP consultations end with a referral to a hospital specialist. Furthermore, there are still ways to bypass this referral system, even though this has been a requirement since 2013. This rather weak gatekeeping function is reflected in the above-EU average number of hospital discharges and outpatient (or ambulatory) contacts.

Figure 8. The Slovak Republic has average numbers of physicians but low numbers of nurses



Note: In Portugal and Greece, data refer to all doctors licensed to practice, resulting in a large overestimation of the number of practicing doctors (e.g. of around 30% in Portugal). In Austria and Greece, the number of nurses is underestimated as it only includes those working in hospital.

Source: Eurostat Database.

5 Assessment of the health system

5.1 EFFECTIVENESS

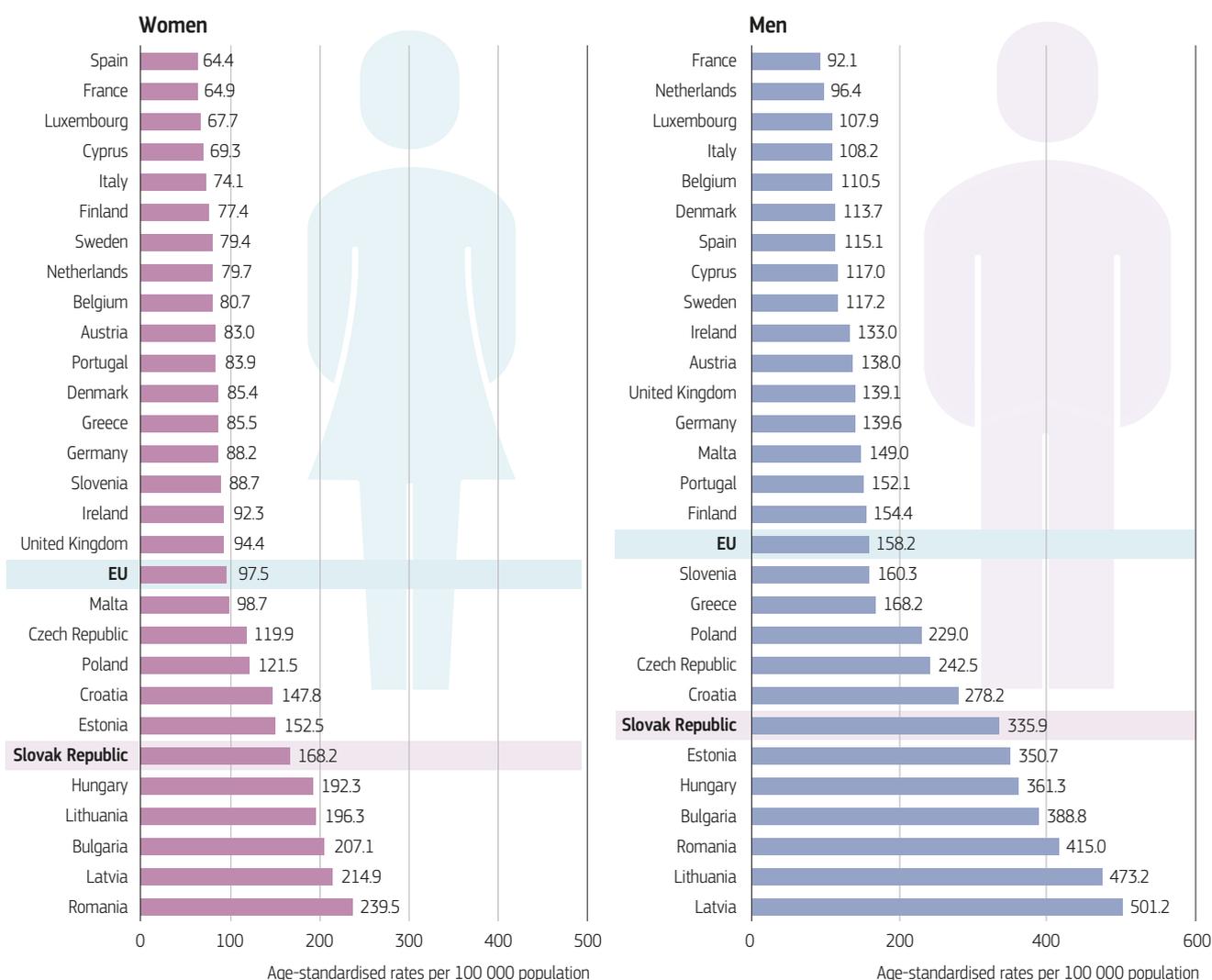
The Slovak Republic has relatively high amenable mortality rates

Amenable mortality, which includes deaths due to conditions that are largely treatable in a modern health care system, is relatively high for both men and women in the Slovak Republic (Figure 9). This is due mainly to the Slovak Republic's higher rates of mortality from cardiovascular diseases, such as stroke and ischaemic heart disease, which are among the highest in the EU.

Acute care for cardiovascular diseases has improved in Slovak hospitals

On a positive note, the quality of acute care in hospital for life-threatening conditions such as acute myocardial infarction (AMI or heart attack) and stroke improved over the past decade in the Slovak Republic. The percentage of patients dying within 30 days following hospital admission for an AMI reduced by almost half (with the standardised rate coming down from 11.8% in 2007 to 6.4% in 2015), and there has also been a substantial reduction in the number of patients dying after being admitted for stroke (down from 13.4% in 2007 to 9.2% in 2015).

Figure 9. Amenable mortality rates in the Slovak Republic are high



Source: Eurostat Database (data refer to 2014).

Cancer survival and screening rates remain below the EU average

According to CONCORD Programme data, survival after a diagnosis of breast cancer, cervical cancer and colon cancer has not improved substantially in the Slovak Republic over the past decade, and the gap widened with many other EU countries.

This relatively low survival for different types of cancer is partly related to low screening rates, which means that a high proportion of cancers are detected at a later stage. Less than one-fourth (23%) of women in the target age group had a mammography screening over the past two years in 2015, and less than half (48%) had a cervical cancer screening over the past three years.⁵ Further public awareness campaigns of the benefits of regular screening by the government or nongovernmental organisations (NGOs) might help increase these screening rates.

More generally, the Slovak Republic has not yet developed any national cancer plan, a tool used in other countries to mobilise efforts to promote greater prevention, early detection and better treatment for people with cancer.

The primary care sector can be strengthened

Potentially avoidable hospitalisations for chronic conditions that can and should be managed in primary care settings is a common indicator of how effective the first line of services is. Potentially avoidable admissions for conditions such as asthma, chronic obstructive pulmonary disease (COPD), diabetes, congestive heart failure (CHF) and hypertension are higher in the Slovak Republic than the EU average (Figure 10).

As described in Sections 4 and 5.2, the Slovak Republic has a shortage of GPs and accessibility to primary care services in parts of the country is a problem.

5. Self-reported data from the 2014 European Health Interview Survey in the Slovak Republic show higher rates: 54% for breast cancer screening and 69% for cervical cancer screening in 2014.

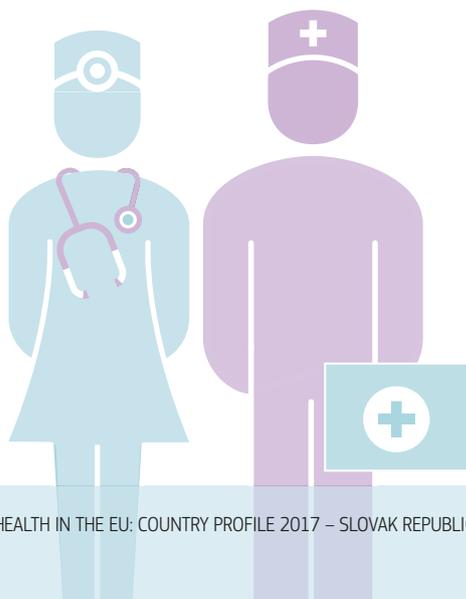
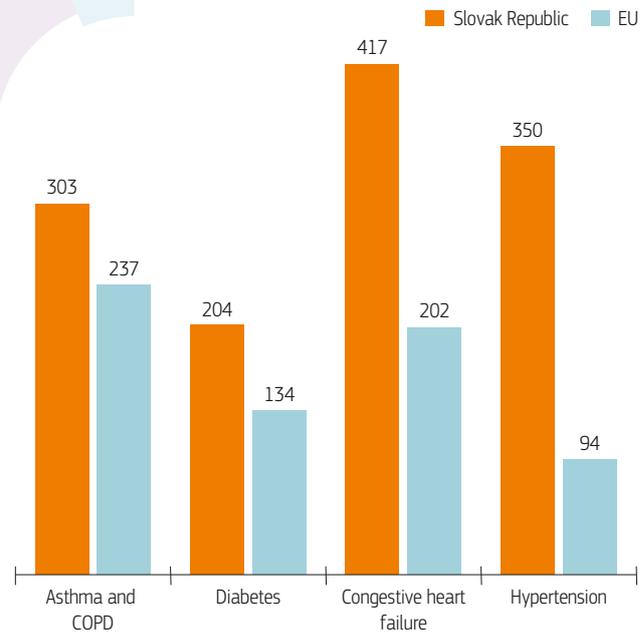


Figure 10. A stronger primary care sector could prevent frequent admissions to hospitals



Note: Data refer to age-sex standardised hospital admission rates per 100 000 population.

Source: OECD Health Statistics (data refer to 2015 or nearest year).

The Slovak Republic can do more to improve prevention and public health

The Slovak Republic lags behind other EU countries in preventive services. Historically, vaccination rates against a range of communicable diseases were high, reaching close to 100% in all the main childhood vaccination programmes, but these vaccination rates have been falling since 2012.

Influenza vaccination among elderly people also decreased, from already low levels. The percentage of people aged 65 and over vaccinated against influenza came down from 36% in 2008 to only 14% in 2015. This moved the Slovak Republic farther away from achieving the target of 75% vaccination coverage of this population group set by both WHO and a 2009 EU Council Recommendation.

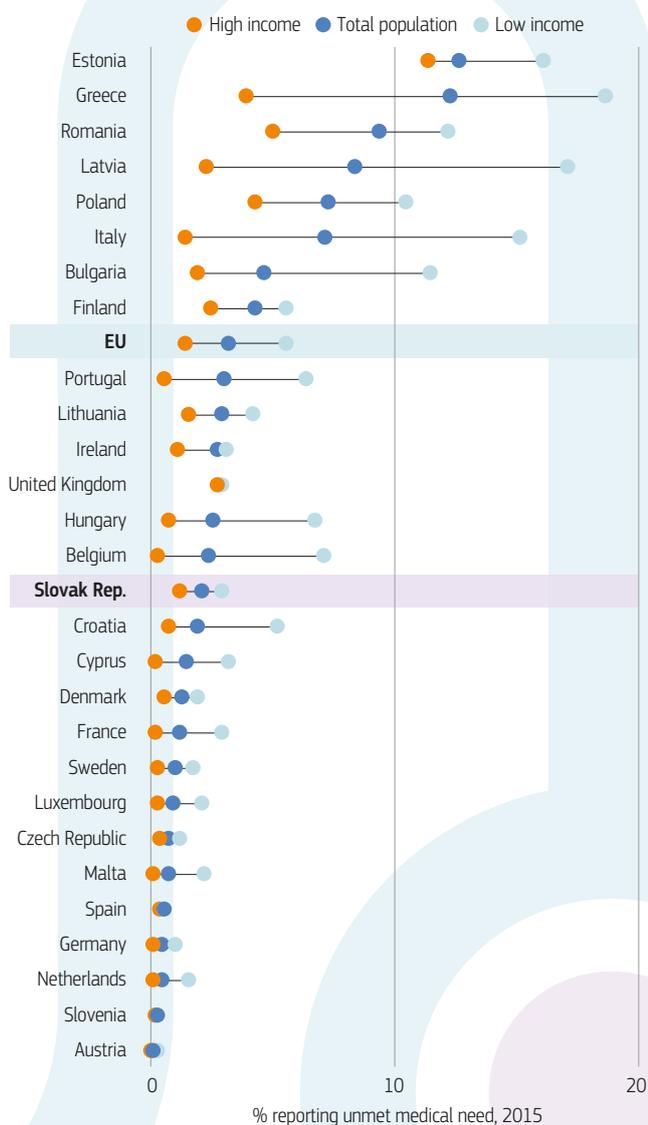
The National Health Promotion Programme, adopted in 2014, includes some measures to reduce smoking (for example, smoking cessation programmes) and other behavioural risk factors, with a stated objective to target socially disadvantaged communities and groups (Smatana et al., 2016). However, efforts to promote a healthy lifestyle and reduce risk factors in the Slovak Republic so far have been dependent on the engagement of NGOs and the private sector because the public health system does not seem to have put sufficient priority on prevention yet. For example, health promotion counselling centres, which are funded by the central government, seem to have had a limited outreach to date, with only about 10 000 clients supported in 2015.

5.2 ACCESSIBILITY

Unmet needs for some health services are relatively low

According to the EU-SILC survey, a relatively low share of the Slovak population reports unmet needs for medical examination and treatment for financial reasons, distance or waiting times. In addition, the difference in unmet needs for care between high- and low-income groups is small (Figure 11).

Figure 11. Slovak residents report low unmet needs for medical care



Note: The data refer to unmet needs for a medical examination or treatment due to costs, distance to travel or waiting times. Caution is required in comparing the data across countries as there are some variations in the survey instrument used.

Source: Eurostat Database, based on EU-SILC (data refer to 2015).

Participation and contracting rules support equitable funding and provision

The Slovak social health insurance system formally covers all residents (including asylum seekers and resident students) and has a benefit package that all insurance companies have to provide for their insured. A redistribution formula including age, sex, economic activity and pharmaceutical consumption partly mitigates risk differences across the three insurance companies currently in the market. The system guarantees equal access by stipulating the same benefits to all insured. The insurance companies are not allowed to limit participation based on patients' medical history or other risk. They are also mandated to maintain contracts with a minimum set of providers by type of service and speciality in each region.

In theory, the insurance system is thus designed to provide everybody with the same benefit package, regardless of health status, ability to pay and place of residence. In practice, coverage varies across the country, mainly because the supply of human resources is not adequate in all regions and districts, and sometimes providers are simply not available to contract. If they are, they also tend to cluster in regional capitals.

Service coverage is broad and leads to risk for implicit rationing

The Slovak Republic has a broad definition of what is included in the benefit package funded by the health insurance. With the health care reform from 2002 to 2004, the Slovak Republic made an attempt to define a narrower benefit package, which would better match entitlements with available public funds, to avoid implicit rationing of services. This was translated into legislation but never implemented.

However, some of the guiding principles apply, with a distinction made between free-of-charge and cost-sharing services. Some explicit exclusions require full cost coverage by the patient, for example patient-requested anaesthesia, paternity tests, specialist visits without referral, treatment caused by substance abuse and most dentistry. Efforts have been made to be transparent about these rules (for example, providers are obliged to publish price lists). In practice, cost-sharing rules and exemptions are not strictly followed and new legislation in 2017 imposed penalties for providers not following these rules.

Regulation is in place to limit the adverse effects on access from out-of-pocket payments

About 18% of health expenditure in the Slovak Republic is funded directly from households' out-of-pocket payments according to official data, a figure above the EU average (15%) but below that of most neighbouring countries.⁶ These payments can be separated into four categories: direct fees for services and medical products not included in the benefit package (for example, specialist visits without referral); co-payments for pharmaceuticals and medical durables; above-standard or preferential care for which people can opt to pay extra; and standard cost-sharing user fees, which are small for single-time users.

Policies implemented to contain direct payments have been specifically targeted towards vulnerable groups, for example by setting payment ceilings for prescribed pharmaceuticals and ambulance transport for people with chronic conditions. In 2015, the government also tightened the rules for what providers can charge extra, since there were attempts to increase margins outside the publicly funded benefit package.

Waiting times are not negligible but efforts are made to increase patient choice

Competition with a multiple set of insurers and providers from which people can choose should, in theory, have a positive effect on access and reduce waiting times. However, waiting times for some elective surgeries in the Slovak Republic are long, sometimes more than a year for hip or knee replacement. They also vary across hospitals. In addition, the reimbursement system is a cause of waiting times for outpatient specialist appointments. Monthly budget ceilings for fee-for-service payments result in providers putting appointments on hold when quotas are filled, leaving patients with the choice of waiting or paying themselves.

Several attempts have been made to increase patients' ability to choose among different providers based on information about access, responsiveness and quality. All insurance companies must publish waiting times for selected surgeries since 2010. But the current information is rather limited and simple. Patients still rely on finding information from many sources, including personal enquires with individual providers. Increasing the compliance across HICs with information on access and quality would make patient choices more informed and increase pressure on providers.

6. Out-of-pocket payments could still be underreported. Informal payments in particular are difficult to capture, but non-reimbursed hospital services might also be a cause of underestimation of the true level of household payments in the Slovak Republic, because services fully covered by the patient are not necessarily reported.

Geographical distribution of health professionals is a concern

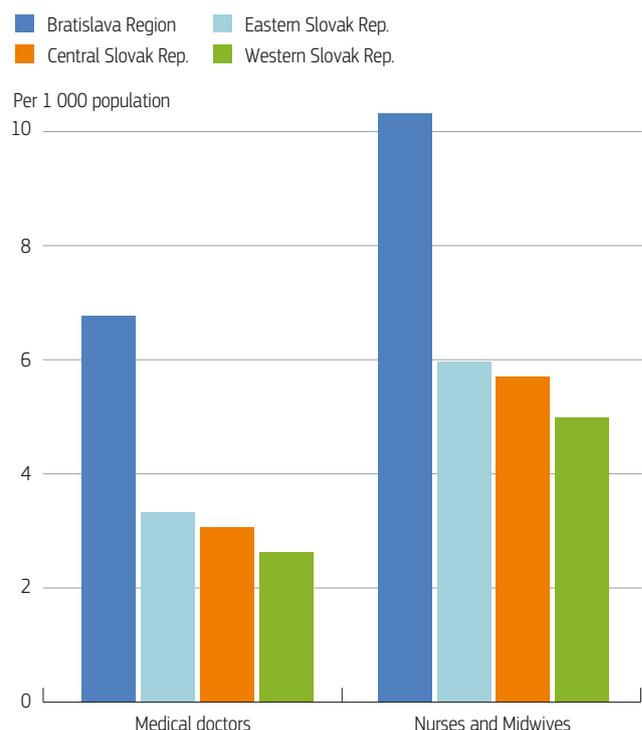
The Slovak Republic has one of the largest disparities in doctor supply between urban and rural areas among EU countries. While the number of doctors is high in the capital Bratislava, with 6.8 physicians per 1 000 population, the other regions have between 2.6 and 3.3 physicians per 1 000 population (Figure 12). In addition, there are large variations in the availability of specialists and GPs in each region. Deprived areas tend to have fewer doctors and other health professionals, especially areas with a large Roma population, a group that suffers from poorer health status and more limited access to care.

Few medical graduates specialise in general practice

While the overall number of physicians in the Slovak Republic is close to the EU average, the country has one of the lowest shares of GPs in the EU. This is exacerbated by the unequal geographical distribution, with the density of GPs varying between 0.1 to 2.0 GPs per 1 000 population across the country.

The reimbursement system of primary health care is based on capitation, which encourages GPs to also promote prevention and assume a role of community responsibility. But with few GPs, there is no competition for patients and little time to provide individual care.

Figure 12. Large differences in staff supply exist between the capital region and the rest of the country



Source: Eurostat (data refer to 2014).

An increase in the overall number of doctors on its own will not be sufficient to address this problem. Over the last 15 years, the number of admissions to medical school increased, but only 9% of medical graduates specialise in general practice (OECD, 2017). Efforts have been initiated to mitigate this problem by attracting more new doctors in general practice and encouraging them to establish their practice in rural areas (see below).

5.3 RESILIENCE⁷

Fiscal sustainability in the health sector is very dependent on the labour market

Since the Slovak health system is largely funded out of payroll contributions, the funding is directly dependent on high labour market participation and rising earnings, even though the government also contributes on behalf of the economically inactive. This dependency on labour market performance requires contingency planning to safeguard the health sector when the labour market weakens. In the long run, another challenge is that the old-age dependency ratio (that is, the ratio of people aged over 65 relative to the working-age population) is expected to grow from currently one of the lowest in the EU to one of the highest by 2060, mainly because of low birth rates and increases in life expectancy (European Commission and European Policy Committee, 2015).

Needed investments can partly be funded by efficiency gains

In the Slovak Republic, several areas need investments for the system to increase efficiency. The Slovak Republic has relatively low levels of capital formation compared to other EU countries, with approximately half the level of GDP spent on capital investments in the health sector (0.26% of GDP compared to 0.51% in the EU). The government is planning a modernisation of the hospital sector, which will be costly not only to implement, but also to maintain in the future.

The Slovak Republic still allocates a relatively large share of its health expenditure to pharmaceutical drugs and other medical goods, although this share decreased slightly in recent years following the implementation of several cost-containment policies (such as reference pricing and regressive margins of prescribed drugs); this curbed prices but consumption volumes are still high.



Private spending on pharmaceuticals is still increasing though, raising concerns about cost-effectiveness and equity in access to pharmaceuticals.

The lack of a comprehensive health information system also contributes to inefficiencies in the health system. The Slovak Republic lags behind many other member countries in implementing unified information standards and health information technologies. As a consequence, diagnostic and treatment procedures are not adequately shared between providers, and the collection of quality and performance data from providers is limited. A new law on a national eHealth information system was adopted in 2013, but implementation is lagging behind, although HICs and private providers are developing their own systems to improve information management.

In 2016, a review supported by the European Commission called Value for Money was conducted by the Ministry of Finance in collaboration with the Ministry of Health. This report identified several areas of inefficiencies where public spending could be reduced in procurement of pharmaceuticals and devices, service delivery and administration (Cernenko et al., 2016). The key findings and recommendations from this review are currently being implemented.

7. Resilience refers to health systems' capacity to adapt effectively to changing environments, sudden shocks or crises.

The use of hospital resources can improve

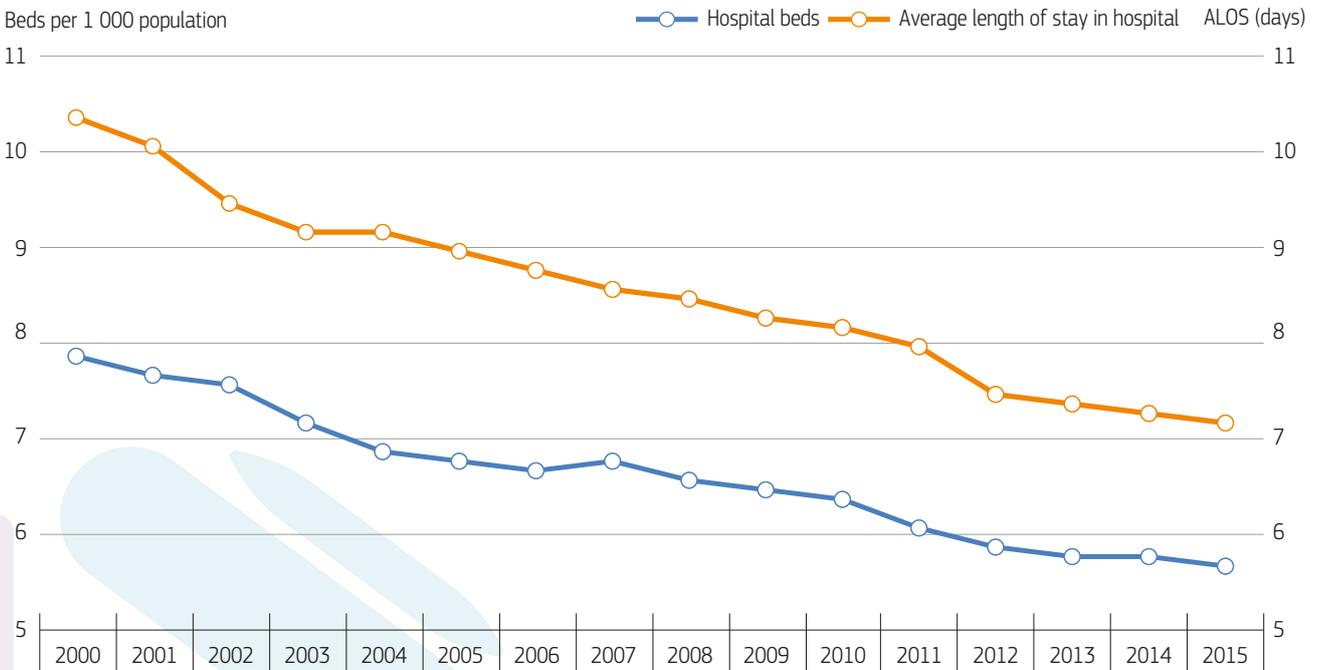
The Slovak Republic has been identified as one of the EU countries with the greatest potential to achieve gains in health outcomes if resources were allocated differently and services provided more effectively (European Commission, 2015).

The Slovak Republic managed to downsize its hospital sector over the last two decades through a reduction in the number of hospital beds, which was accompanied by a reduction in average length of stay (Figure 13). However, the bed occupancy rate is relatively low (less than 70%), which indicates that many resources are still not used. Hospital discharge rates in the Slovak Republic have increased in recent years, in contrast with most other EU countries where it has decreased, suggesting room for reducing avoidable hospitalisations.

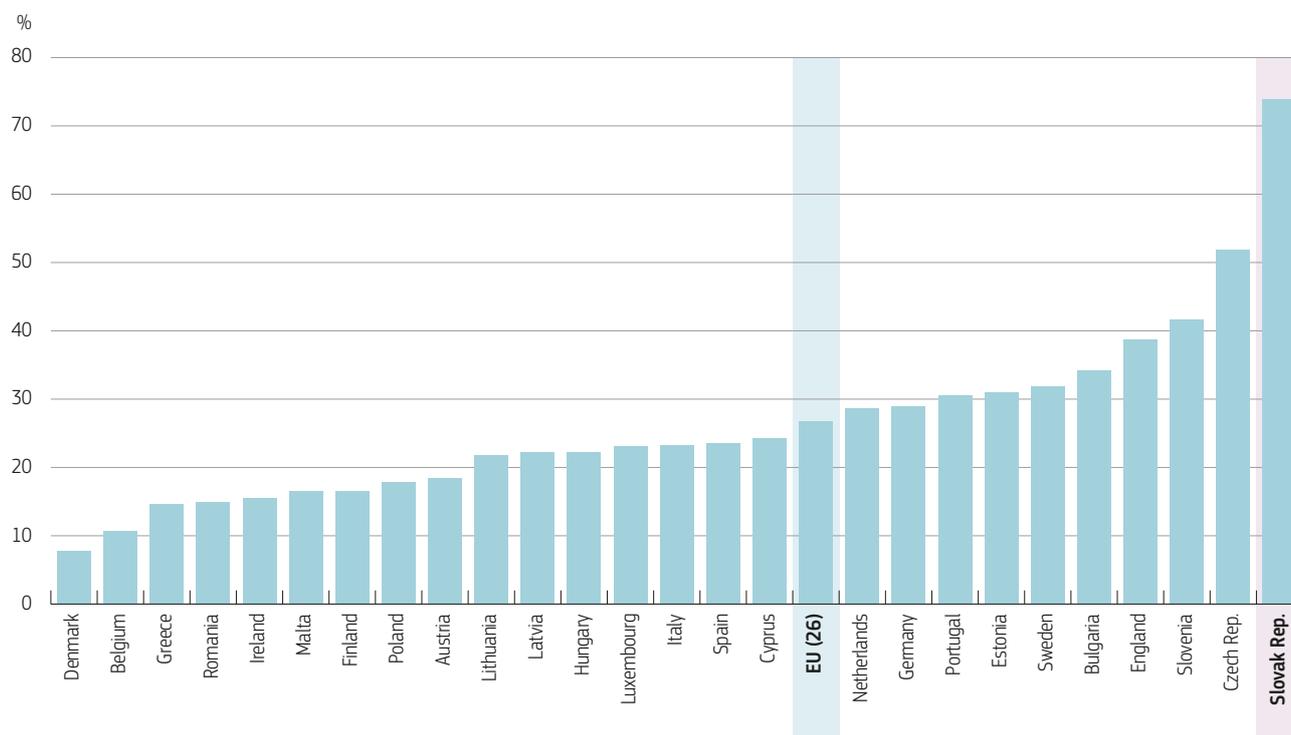
Nurses are few and poorly paid

Increasing the number and use of nurses can increase health system efficiency. The number of nurses per population in the Slovak Republic fell over the last 10 years and is now one of the lowest in the EU. Retaining nurses as well as other health professionals is a challenge in the Slovak Republic because of its geographical position. Many nurses can find better-paid jobs in neighbouring countries. But Slovak nurses have among the lowest wages relative to the national average wage across EU countries, and work opportunities can improve to support the development of the nursing profession.

Figure 13. The number of beds and ALOS decreased steadily in the Slovak Republic



Source: Eurostat Database.

Figure 14. A very high share of patients visited an emergency department because primary care was not available

Source: van den Berg, van Loenen, and Westert, 2016 (data refer to 2011–13).

Strengthening primary care is key to further reducing reliance on expensive hospital services

An effective primary health care sector can increase the overall efficiency of the health system. The current problem of high rates of hospitalisation for chronic diseases can be mitigated by strengthening access to GPs and other primary care providers. Self-management and empowering patients to play a greater role in their care can also reduce unnecessary hospitalisations. The Slovak Republic has the highest proportion (74%) of patients reporting that they visited an emergency department because primary care was not available (Figure 14).

While the average use of health care services is generally high in the Slovak Republic, the distribution of services across the country is unequal. This problem is widespread, but is felt even more among Roma communities, where medical needs are higher.

Expanding the role of GPs can make primary care more effective and attractive for doctors

As noted in Section 4, a very large proportion of GP consultations in the Slovak Republic result in a referral to a hospital specialist. Given the small number of GPs, they have no time to take a broader responsibility for patients, to ensure effective prevention and continuity of care. Since referred specialist visits are free and relatively available, there are also no incentives on either the doctor or patient side to expand the scope of services in primary care. The role of GPs is further limited in what they are allowed to prescribe. Many drugs that currently have to be prescribed by specialists in the Slovak Republic are managed by GPs in other countries. Several steps have been taken to increase the number and role of GPs. The programme for residents (physicians in training) was redesigned in 2014 to include more practical elements and a stronger focus on chronic disease management and health promotion. Doctors' salaries also increased generally, but more measures can be taken.

6 Key findings

- The health status of the Slovak population has improved since 2000, but life expectancy at birth is still almost four years below the EU average. Life expectancy for men is more than seven years lower than for women, and a large gap also exists by socioeconomic status: Slovak people who have not completed their secondary education can expect to live 10 years less than those with a university education.
- The lower life expectancy in the Slovak Republic is to a large extent due to higher mortality rates from cardiovascular diseases. Mortality rates from ischaemic heart diseases are the fourth highest among EU countries, and death rates from stroke are also well above the EU average. The implementation of a more comprehensive tobacco control policy may help achieve further reductions in tobacco smoking among adolescents and adults, the largest avoidable risk factor for cardiovascular diseases.
- Progress was achieved over the past decade in reducing mortality rates for people admitted to hospital for a heart attack or stroke. On the other hand, cancer survival did not improve significantly over the past decade, and the gap widened with many other EU countries in survival following a diagnosis of breast, cervical or colon cancer. This lack of progress is partly due to low screening rates. The Slovak Republic has not yet developed any national cancer plan, a tool used in other countries to achieve progress in prevention, early detection and treatment for people with cancer.
- The statutory health insurance system is designed to provide the whole population with the same benefit package, regardless of health status, ability to pay and place of residence. Insurance companies are mandated to maintain contracts with a minimum set of providers by type of service and speciality in each region. In practice, however, coverage still varies across the country, mainly because the supply of health professionals is uneven across regions and districts. The capital region has the highest number of doctors per population and providers tend to cluster in regional capitals, limiting access for the rural population.
- The Slovak Republic has successfully downsized hospitals and allocated resources to outpatient services. The hospital sector reduced substantially over the last two decades, as illustrated by the reduction in hospital beds and average length of stay. Nonetheless, the overall consumption of hospital services remains high, with hospital discharge rates above the EU average and rising in recent years. Further efficiency gains may be achieved by reducing avoidable hospitalisations through better self-care and primary care.
- The Slovak Republic has a general lack of GPs, with few medical graduates choosing to specialise in general medicine. The lack of effective primary care is particularly felt in deprived areas, especially those with a large Roma population, a group that suffers from poorer health status and service access. A large proportion of GP consultations also result in referral to a hospital specialist. Expanding the role of GPs and other health professionals (such as nurses and community pharmacists) can make primary care more accessible and effective, and increase the overall efficiency of the system.



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Country abbreviations

Austria	AT	Denmark	DK	Hungary	HU	Malta	MT	Slovenia	SI
Belgium	BE	Estonia	EE	Ireland	IE	Netherlands	NL	Spain	ES
Bulgaria	BG	Finland	FI	Italy	IT	Poland	PL	Sweden	SE
Croatia	HR	France	FR	Latvia	LV	Portugal	PT	United Kingdom	UK
Cyprus	CY	Germany	DE	Lithuania	LT	Romania	RO		
Czech Republic	CZ	Greece	EL	Luxembourg	LU	Slovak Republic	SK		



State of Health in the EU

Country Health Profile 2017

The Country Health Profiles are an important step in the European Commission's two-year *State of Health in the EU* cycle and are the result of joint work between the Organisation for Economic Co-operation and Development (OECD) and the European Observatory on Health Systems and Policies. This series was co-ordinated by the Commission and produced with the financial assistance of the European Union.

The concise, policy relevant profiles are based on a transparent, consistent methodology, using both quantitative and qualitative data, yet flexibly adapted to the context of each EU Member State. The aim is to create a means for mutual learning and voluntary exchange that supports the efforts of Member States in their evidence-based policy making.

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