

State of Health in the EU

Czech 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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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/10.1787/888933593456>

Demographic and socioeconomic context in the Czech Republic, 2015

	Czech Republic	EU
Demographic factors	Population size (thousands)	10 546
	Share of population over age 65 (%)	18.3
	Fertility rate ¹	1.6
Socioeconomic factors	GDP per capita (EUR PPP ²)	25 200
	Relative poverty rate ³ (%)	5.3
	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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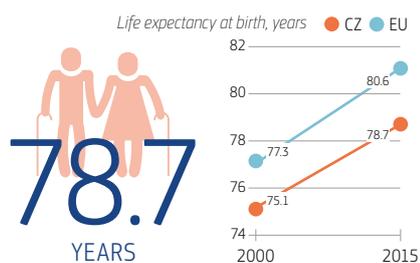
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1 Highlights

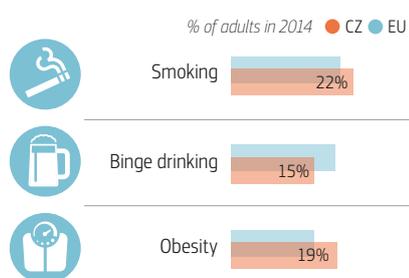
Health status in the Czech Republic has improved significantly over recent years with marked improvements in life expectancy and amenable mortality, both getting closer to the European average. The health system is based on a Social Health Insurance (SHI) scheme with universal coverage, a generous benefit package, and a strong regulatory role for the Ministry of Health.

Health status



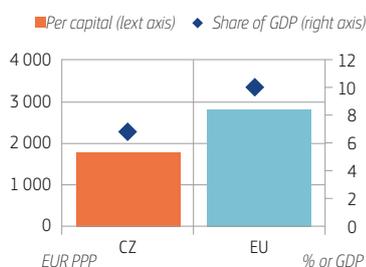
Life expectancy has improved steadily and increased by nearly 4 years between 2000 and 2015 to 78.7 years, almost 2 years below the EU average. Steady improvements in preventing premature deaths, for example from cardiovascular diseases (CVD), have helped. Nonetheless, CVD mortality remains the leading cause of death and is double the EU average. Rising mortality from diabetes, cancers, dementia and other mental disorders are cause for concern.

Risk factors



There is a persistently high prevalence of risk factors in the Czech Republic. In 2014, Czech adults smoked more than the EU average. Moreover, adults consumed 11.9 litres of alcohol per capita in 2014, nearly 2 litres more than the EU average. More positively, a smaller proportion of the population engages in binge drinking than in the EU. Obesity rates are above the EU average and rising fast, posing a growing public health concern.

Health system

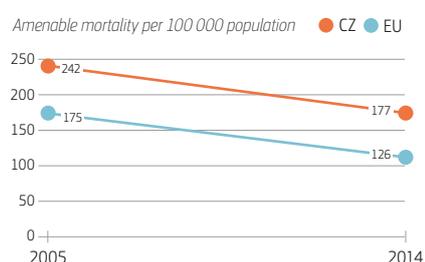


Per capita health spending in the Czech Republic is about a third lower than the EU average, although it has increased since 2005. In 2015, the Czech Republic spent EUR 1 841 per head on health care, or 7.3% of GDP. A comparatively high share (82.4%) of total health spending is financed from public sources while the share of private sources has remained roughly stable in recent years, contributing to a high level of financial protection.

Health system performance

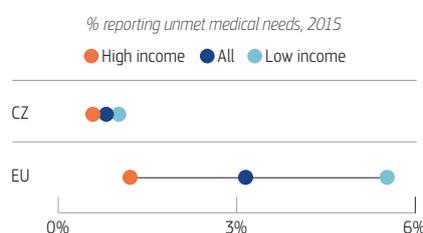
Effectiveness

Overall amenable mortality is declining steeply and on a trajectory to catch up with the EU average. There is nevertheless substantial room to improve health services, not least primary and integrated care and public health.



Access

The share of Czech respondents indicating unmet needs for medical care is relatively low, with very little difference across income quintiles. However, shortages in the health workforce are likely to pose challenges in access to some services or in more disadvantaged areas.



Resilience

There are well recognised challenges around the fiscal sustainability of the health system and the need to broaden the revenue base. However, there is no political consensus on how to tackle this problem, or other long-term strategic issues.



2 Health in the Czech Republic

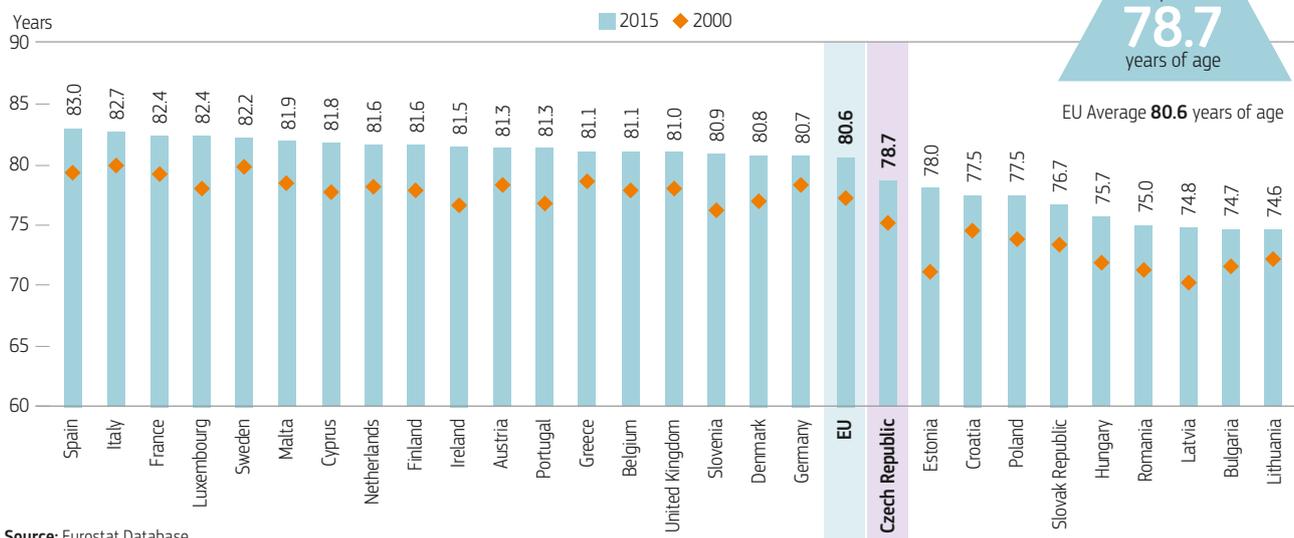
Life expectancy is rising quickly, but remains below the EU average

Life expectancy at birth in the Czech Republic increased by nearly 4 years between 2000 and 2015 to 78.7 years (Figure 1). While this is higher than in many neighbouring countries, Czech life expectancy remains almost two years below the EU average. A substantial gender gap persists between men and women: life expectancy at

birth for men is almost 6 years lower than that of women, at 75.7 years and 81.6 years respectively. Furthermore, life expectancy among Czechs with university education is nearly 5.5 years higher than for those with no more than a lower secondary education.¹

1. Lower education levels refer to people with less than primary, primary or lower secondary education (ISCED levels 0–2) while higher education levels refer to people with tertiary education (ISCED levels 5–8).

Figure 1. Life expectancy has improved to just below the EU average



Source: Eurostat Database.

There have been gains in life expectancy and improvements in infant and maternal mortality

Most gains in life expectancy in the Czech Republic since 2000 have been after the age of 65, with the life expectancy of a Czech woman at age 65 reaching 19.4 years in 2015 (up from 17.2 years in 2000) and that of men reaching 15.9 years (up from 13.7 years in 2000). At age 65, Czech women can expect to live slightly less than half (44%) of their remaining years free of disability, while men can expect to live exactly half (50%) of their remaining years without disability.²

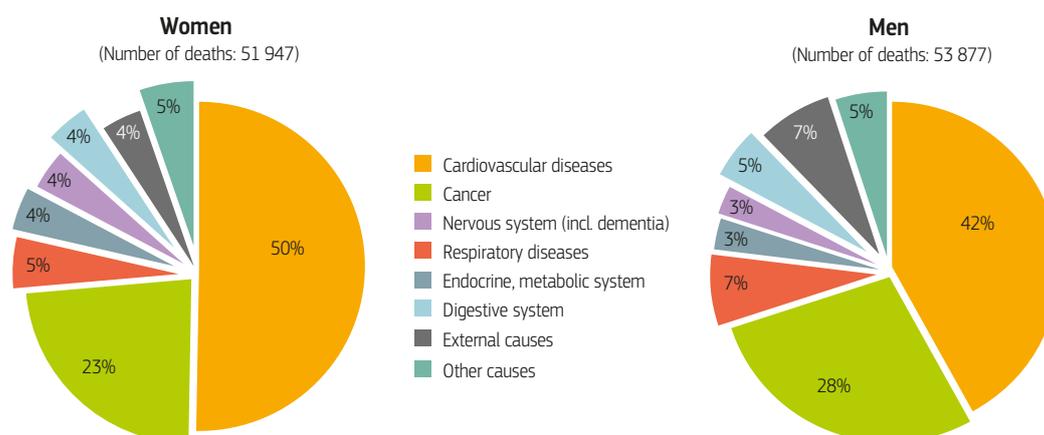
Infant mortality rates are among the lowest in the world at 2.5 infant deaths per 1 000 live births in 2015. Indeed, both infant and maternal mortality have decreased continuously in recent years, with infant mortality falling by almost 70% from 1995 to 2015.

2. 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.

Cardiovascular diseases and cancer remain the largest contributors to mortality

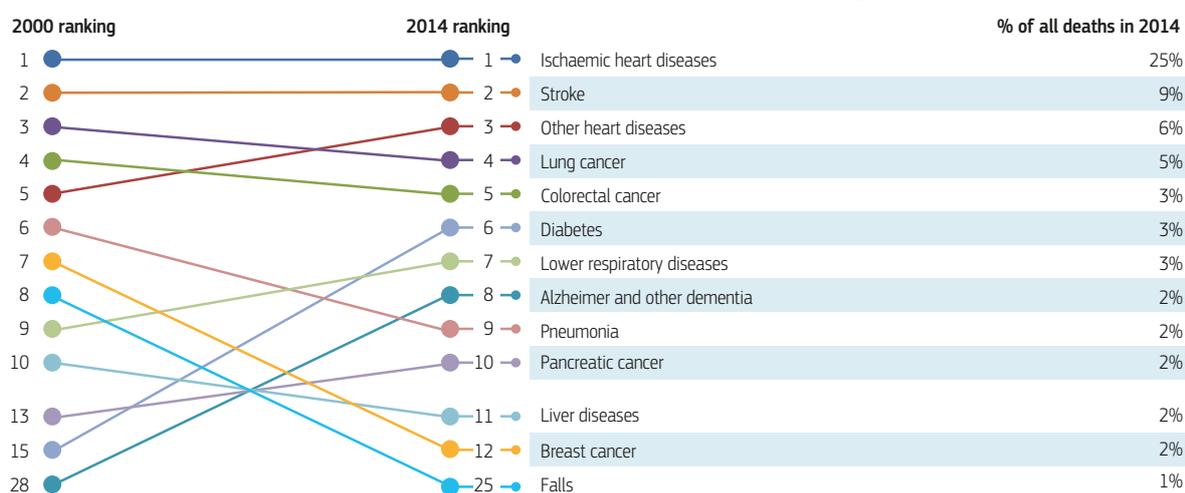
CVDs are the leading cause of death among both women (50% of total deaths) and men (42%), with an age-standardised mortality rate that is 60% higher than the EU average (2014). Cancer is the second leading cause of death, accounting for 23% of all deaths among women and 28% of all deaths among men (Figure 2). Diseases of the digestive system and diseases of the endocrine system are also prevalent, especially so for diabetes, when compared to the EU average.

On the other hand, deaths from respiratory diseases and from mental and behavioural disorders (such as dementia) are below the corresponding EU average. Overall, deaths from coronary heart diseases have reduced considerably since 1991, and are slowly closing the gap with the best performing countries in the EU. The drop is attributed to changes in therapy (43%) and risk factors (52%) (Bruthans, et al., 2014; Vandenheede et al., 2014).

Figure 2. The majority of all deaths are caused by cardiovascular diseases and cancer

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. Mortality from diabetes, Alzheimer's and other dementias is increasing

Source: Eurostat Database.

The top three of causes of death are cardiovascular diseases, lung cancers and colorectal cancers

In terms of more specific causes of death, ischaemic heart diseases, stroke and other heart diseases ranked as the three leading causes of deaths in 2014. Despite recent decreases these causes remain higher than the EU average. In 2014, deaths from lung cancer were below the EU average, but remain the leading cause among cancers. Deaths from diabetes are nearly double the EU average and have increased since 2000, now ranking as the sixth leading cause of death (Figure 3). Deaths from Alzheimer's and other dementias have also increased, which is caused by population ageing but also improved awareness of the disease and the lack of effective treatments following diagnosis. This increase is also partly due to more accurate coding practices since 2011. Since 2000, deaths from external causes, such as falls, were reduced substantially, although they are still higher than the EU average in 2014.

Chronic diseases and depression are among the chief determinants of disability-adjusted life years

In addition to the burden of disease caused by CVDs and lung cancer, musculoskeletal problems (including low back and neck pain) and depressive disorders are some of the leading determinants of disability-adjusted life years³ (DALYs) (IHME, 2016). Many of these health problems will not prove fatal but have serious life-limiting effects.

Based on self-reported data from the European Health Interview Survey (EHIS), nearly 1 in 4 people in the Czech Republic report is living with hypertension, 1 in 13 with diabetes, and 1 in 22 with asthma. On the other hand, self-reported chronic depression remains below levels reported in most other EU states. Wide disparities exist in the

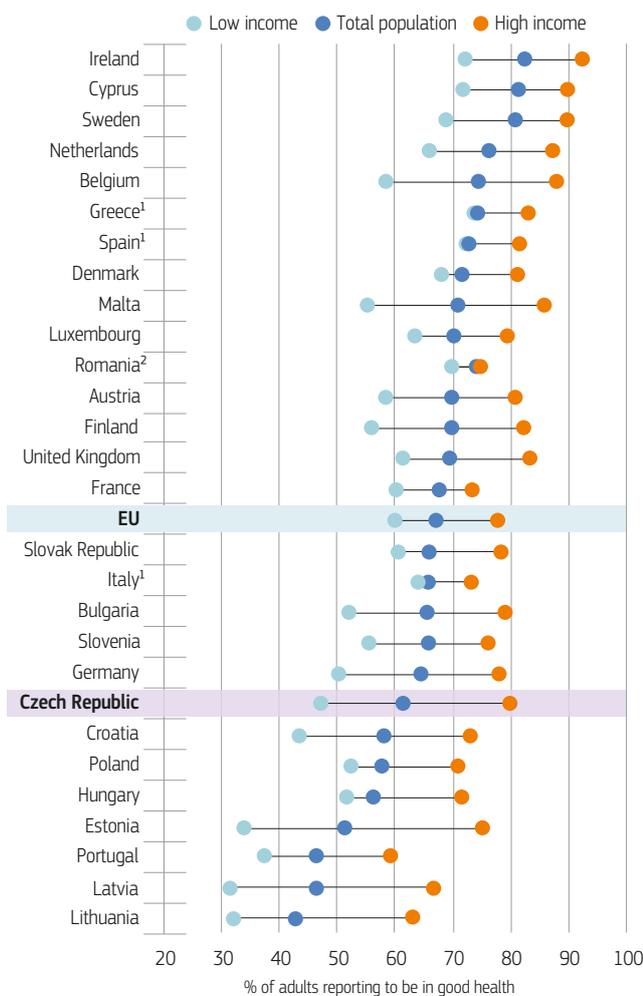
3. DALY is an indicator used to estimate the total number of years lost due to specific diseases and risk factors. One DALY equals one year of healthy life lost (IHME).

prevalence of these chronic diseases by education level. People with the lowest level of education are three times more likely to report having diabetes and more than twice as likely to live with asthma compared to those with the highest level of education.⁴

The Czechs are less likely to feel they are in good health than most other Europeans

Overall, a lower proportion of the population in the Czech Republic consider themselves to be in good health (61%) compared to the EU average (67%). As in other EU countries, there are large disparities in self-rated health by socioeconomic status: 80% of people in the highest income quintile population report being in good health compared with 48% of the population in the lowest income quintile (Figure 4).

Figure 4. Disparities persist in self-rated health status among income quintiles



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).

4. 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 socio-economic disparities.

3 Risk factors

Behavioural risk factors are major causes for public health concern

The relatively poorer health status of the Czech population and persistently large health inequalities are linked to a number of health determinants. These include the living and working conditions of people, the physical environment in which people live, and a range of behavioural risk factors. In fact, more than 35% of the overall burden of disease in the Czech Republic in 2015 (measured in terms of DALYs) could be attributed to behavioural risk factors, including dietary risks (contributing 18%), smoking (1.3%), alcohol use (4%) and physical inactivity (3%) (IHME, 2016).

There has been very little progress in reducing smoking rates and alcohol consumption

The proportion of adults who smoke has only marginally declined since 2000 (from about 24% to 22% by 2014), although recent data suggest a substantial decrease to 18% in 2015 (Sovinová and Csémy, 2016). While the adult daily smoking rate was actually below the EU average in 2000, rates in other EU countries declined



much faster, so that the adult daily smoking rate is now above the EU average. Men are more likely to smoke regularly (26% in 2014) compared to women (18.5%), although the gap is less pronounced than in some neighbouring countries. Encouragingly, in early 2017, the Czech government finally succeeded in passing more comprehensive tobacco control legislation (see Section 5.1).

There has been no real progress in reducing alcohol consumption in the Czech Republic, with adults consuming 11.9 litres of alcohol per capita in 2014, slightly up from 11.8 litres in 2000, and about 2 litres more than the EU average (10 litres). Some 29% of 15-year-old girls and 32% of boys at the same age report being drunk at least twice in their life, again higher than the EU averages (which are 24% for girls and 27% for boys) in 2013–14. However, a smaller proportion of the adult population engages in regular binge drinking⁵ (15%) than the European average (20%).

Fast rising rates of obesity present a challenge for adults and children

Poor diet and lack of physical activity can lead to high blood pressure, high body-mass index, high cholesterol, and other risk factors for CVD, diabetes, and some cancers. Between 2002 and 2014, the prevalence of adult obesity rose by more than one

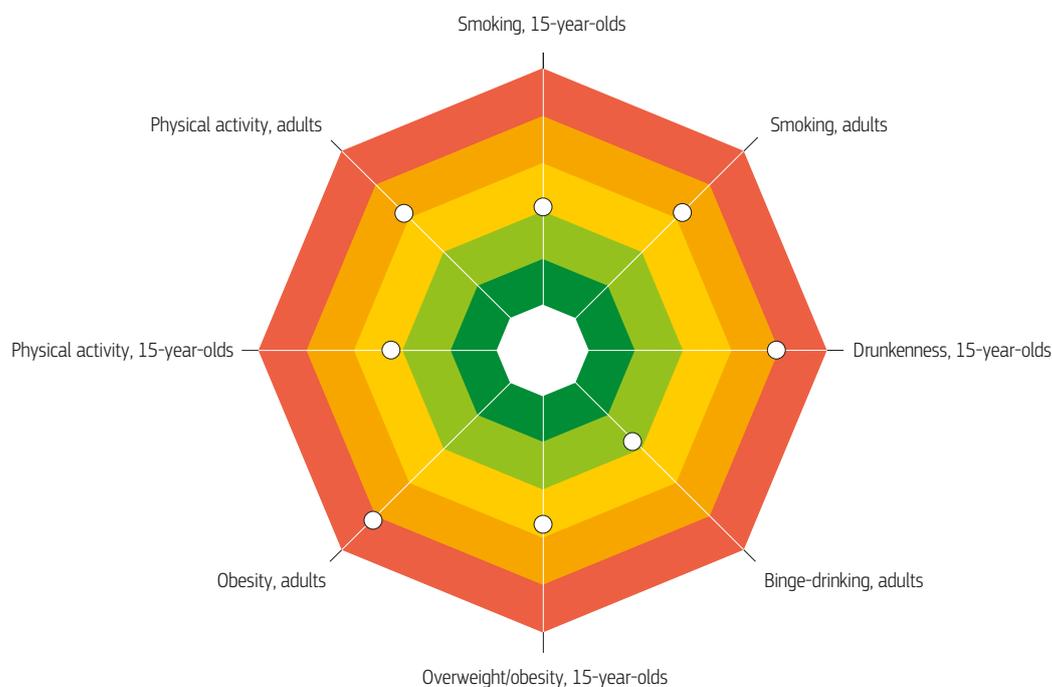
quarter in the Czech Republic. Based on self-reported data, nearly one in five (19%) adults are now obese, a higher level than in most EU countries (See also Figure 5).

While the proportion of 15-year olds who are overweight or obese remains close to the EU average, it doubled from 9% to 18% between 2001–02 and 2013–14. This is of particular concern given that being overweight or obese during childhood or adolescence is a strong predictor of weight issues in adulthood. The Czech Republic has initiated several national action plans on nutrition, preventing and treating obesity, and promoting physical activity.

Risky behaviours are more common among disadvantaged populations

Populations with a lower socioeconomic status or education have a higher prevalence of behavioural risk factors. For example, the population with the lowest level of education is more than twice as likely to smoke on a daily basis and nearly twice as likely to be obese as the highest-educated population. A higher prevalence of risk factors among disadvantaged groups contributes to differences in health status between socioeconomic groups and regions.

Figure 5. The Czech Republic has a mixed record on behavioural risk factors compared with other EU countries



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).

5. Binge drinking 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

There is a stable Social Health Insurance scheme

The Czech health system is based on SHI and provides universal coverage with a generous benefit basket. The core institutional features have remained stable since its inception in the 1990s. The Ministry of Health serves as the main administrative and regulatory body while self-governing health insurance funds administer the collection of contributions and provide benefits-in-kind to the insured. The Ministry of Health also owns some providers, specifically all university hospitals and some psychiatric institutions. However, since 2003, regional authorities have taken ownership of (several) hospitals, including ambulatory (outpatient) care providers.

Implementation of reforms has been slow

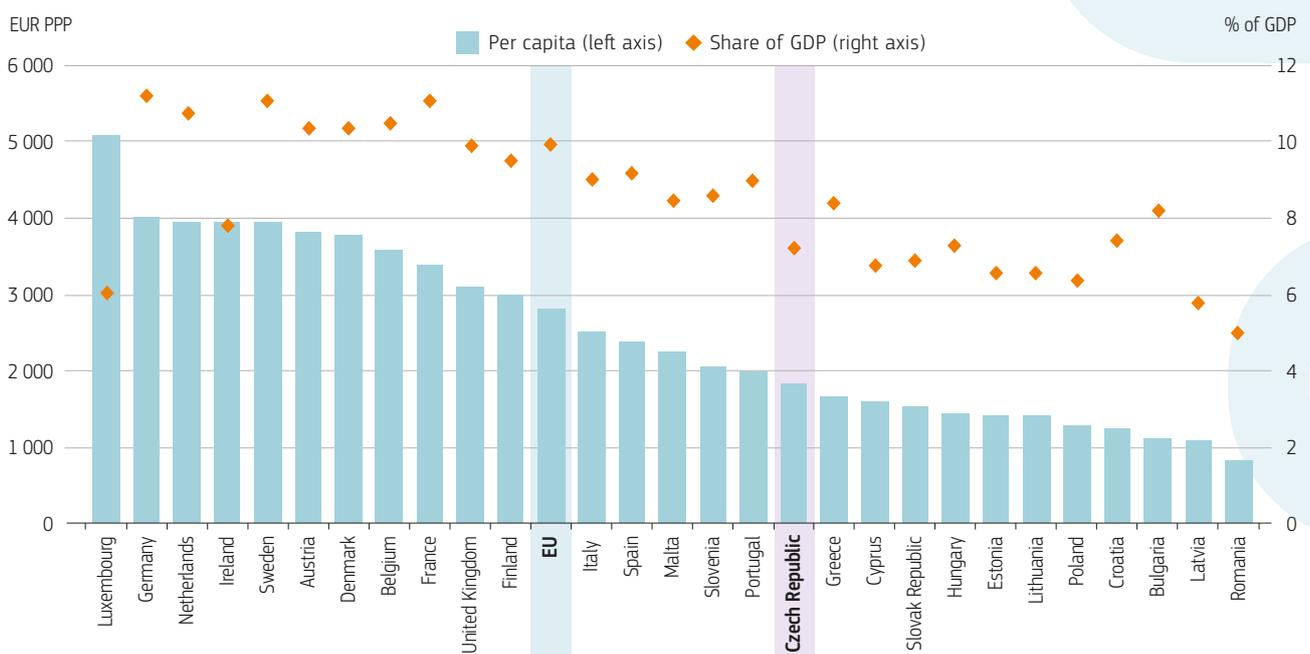
Reforms in the last decade have aimed to increase the efficiency and transparency of health service provision, improve data systems, and contain costs. There has been a mix of reform measures but generally implementation has been delayed and many implementation processes are still ongoing. Diagnosis

Related Groups (DRGs) for example, were introduced as early as 2007, with 70% of acute inpatient hospital payments based on DRGs in 2012. However, in 2015 the authorities had to launch a 'DRG re-start' programme, with the aim of full implementation by 2019. Legislative changes are required, as it will be necessary to implement newly recalculated DRG tariffs into reimbursement mechanisms. Long term care and rehabilitation (as well as outpatient hospitals consultations) are reimbursed on a capped fee for service basis. Similarly, the redistribution scheme, which addresses financial imbalances between health insurance funds, has long been recognised as key to an efficient financing system. Yet it is only now that the system will be improved by adding pharmaceutical cost groups (planned for 2018).

The Czech Republic is a low spender on health, but the share of public spending is high

The Czech Republic spent a third less than the EU average on health care in 2015 (EUR 1 841 versus EUR 2 797), but more than most other newer Member States. Overall, total health expenditures stood at 7.3% of GDP in 2015, which is significantly

Figure 6. The Czech Republic spends less on health than the EU average



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

below the EU average (Figure 6). That said, it has the fourth highest share of funding from public sources (82.4%) after Germany, Denmark and Sweden (with the highest share at 84.5%). Private health spending therefore plays only a relatively minor role, accounting for 14.8% of total health spending, and mostly consists of out-of-pocket payments for over-the-counter pharmaceuticals, medicinal products and other services outside the benefit package (see Section 5.2).

The number of acute beds has been reduced but there may still be overcapacity

The Czech Republic operates a dense hospital network and has made efforts to reduce the overall number of acute care beds. As of 2015, the proportion of acute beds is only slightly above the EU average, but looking at total bed numbers, the Czech Republic is well above the EU average. However, there are disparities in the overall availability of beds across regions, especially so for long-term care. With 206 discharges per 1 000 people versus 173 in the EU, the discharge rate is the sixth highest, signalling some overcapacity and also raising questions about the effectiveness of the primary care system.

Many health care facilities are in need of modernisation

In addition to overcapacity, there are issues around quality of infrastructure. Many psychiatric institutions, long-term care and nursing facilities, and small rural hospitals are in need of modernisation. This is also targeted by the 2014–20 European Structural and Investment Funds programme, which aims at health infrastructure, capacity building in data collection and processing, as well as human resource development. However, at the hospital management level there is often only limited expertise with capital investment and financing of new technologies (see also Section 5.3).

An ageing workforce and doctor preferences may pose increasing challenges to service provision

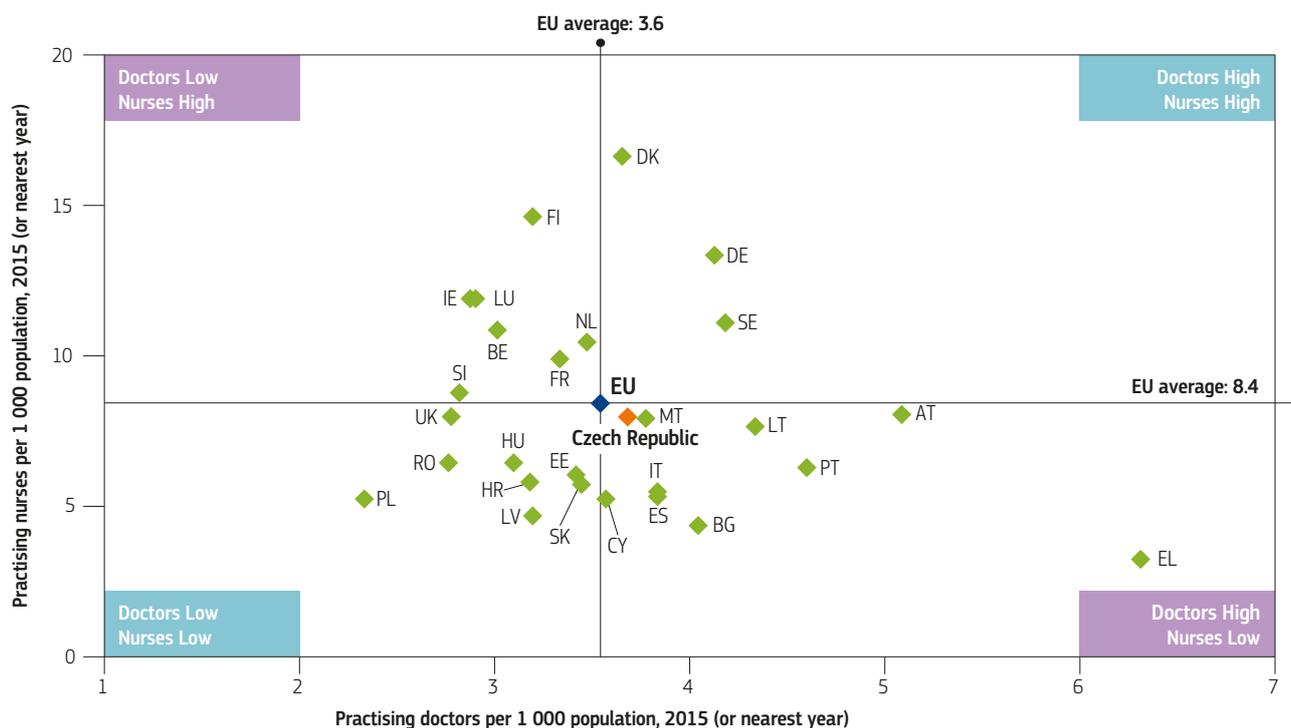
Although aggregate workforce numbers look comparatively good and are close to the EU averages (Figure 7), there seems to be a growing mismatch in the age structure, education and expectations of health professionals. First, the physician workforce is ageing. Significant numbers of doctors were already 60 or older in 2016 – specifically, more than 30% of general practitioners (GPs) and 40% of paediatricians, with some areas more affected than others (ČLS-JEP, 2017). Second, doctors are increasingly expressing a preference for larger hospitals in urban areas, which means that smaller and district-level hospitals are already experiencing difficulties in attracting staff for every speciality. Third, health professionals perceive working conditions abroad to be better. This could lead to shortages, particularly in rural and less favoured areas.

General practitioners do not act as gatekeepers and patients value free access to specialists

Primary care physicians do not play a gatekeeping role in the Czech Republic. Patients are free to see any specialist without referral and value this freedom highly. This is both reflected in the high number of outpatient contacts per year (11.1 in 2013 compared with 7.5 in the EU) and the comparatively high discharge rates in hospitals (as mentioned above). The main legal framework for primary care provision was revised in the Health Services Act in 2011, but did not change the overarching principles.



Figure 7. Despite average numbers of physicians and nurses, ageing may threaten future accessibility

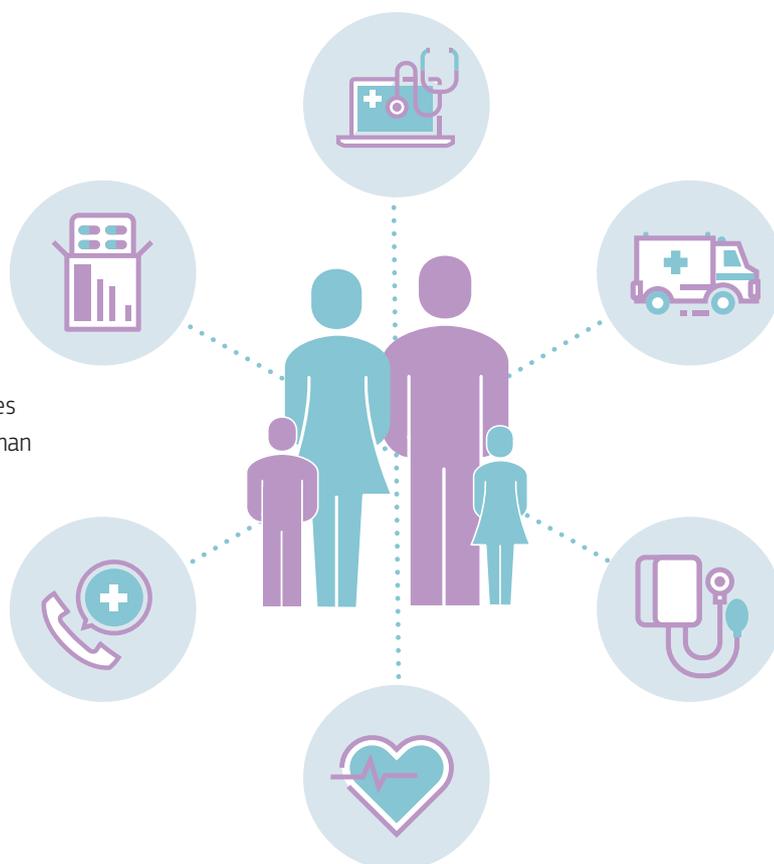


Note: In Portugal and Greece, data refer to all doctors licensed to practise, resulting in a large overestimation of the number of practising doctors (e.g. of around 30% in Portugal). In Austria and Greece, the number of nurses is underestimated as it only includes those working in hospital.

Source: Eurostat Database.

Differences in payment for long-term and social care promote inefficient use of hospital services

Care delivery for chronically ill and elderly patients is poorly coordinated. It is also highly inefficient because long-term care is split between the health and social care sectors. While user fees for health care services were abolished in 2013 following a decision by the Constitutional Court (see Section 5.2), they continue in social care. This creates incentives to seek long-term care in (high-cost) medical settings rather than in social care. Patients are thus encouraged to stay in hospital beyond the point where it is medically necessary. Overcoming this issue is especially urgent given the rapidly ageing population, and the inevitable growth in numbers of people with (multiple) chronic diseases.



5 Performance of the health system

5.1 EFFECTIVENESS

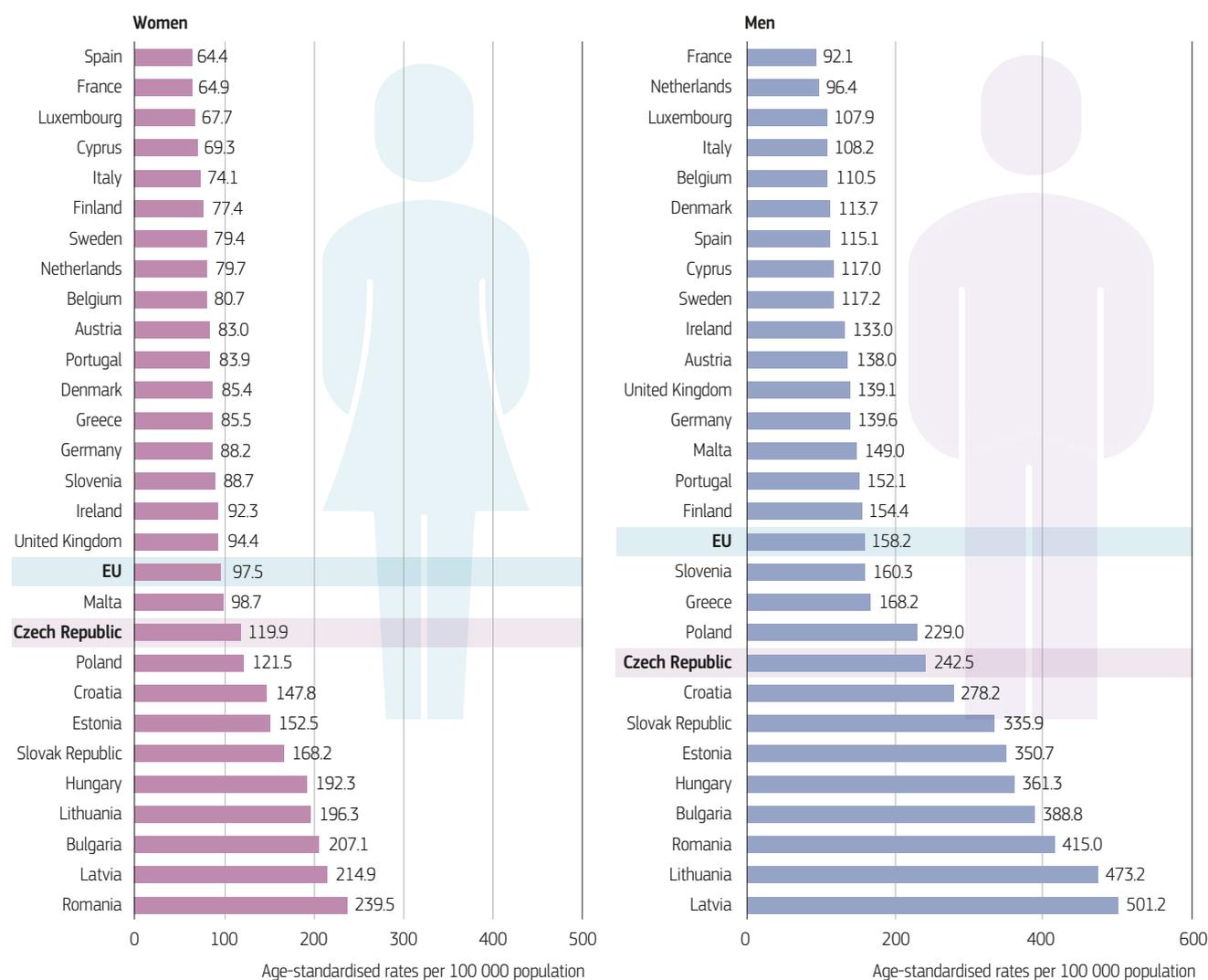
Amenable mortality points to positive health care impacts

The health care system has made major contributions to the health of the Czech population as reflected in the overall decline in levels of amenable mortality⁶ since 2005. In 2013, amenable mortality in the Czech Republic was higher than the EU average,

6. Amenable mortality is defined as premature deaths that could have been avoided through timely and effective health care.

but the gap was closing, and the level was much better than in most newer Member States (Figure 8). Although the Czech health system achieves average results in reducing amenable deaths from most diseases, for some communicable diseases such as HIV and tuberculosis, the Czech health system performs remarkably well. Similar successes have been achieved for non-communicable diseases like asthma and cerebrovascular diseases. These point to steady improvements in the access to and quality of health care overall.

Figure 8. Amenable mortality has declined steeply but is still above the EU average



Source: Eurostat Database (data refer to 2014).

The system has shown real capacity to tackle treatable conditions

In 2014, amenable deaths caused 16% of overall mortality, which is above the EU average of 11% but lower than in the Slovak Republic and only slightly higher than in Poland. Mortality from cancers is an area that is particularly open to improvement. According to CONCORD programme data the survival rates from colon cancer, for example, are around 56%, which is almost 9 percentage points lower than in Germany for the period 2010–14. On the other hand, breast cancer survival rates have increased steadily and are now at 81% in 2010–14, albeit this rate is still below that of the best performing countries (85% and higher). This suggests the system is capable of rapid improvement, perhaps by addressing the comparatively low screening uptake under the national screening programmes for cervical, breast and colorectal cancer.

Deaths from diabetes, liver diseases and traffic accidents could be prevented

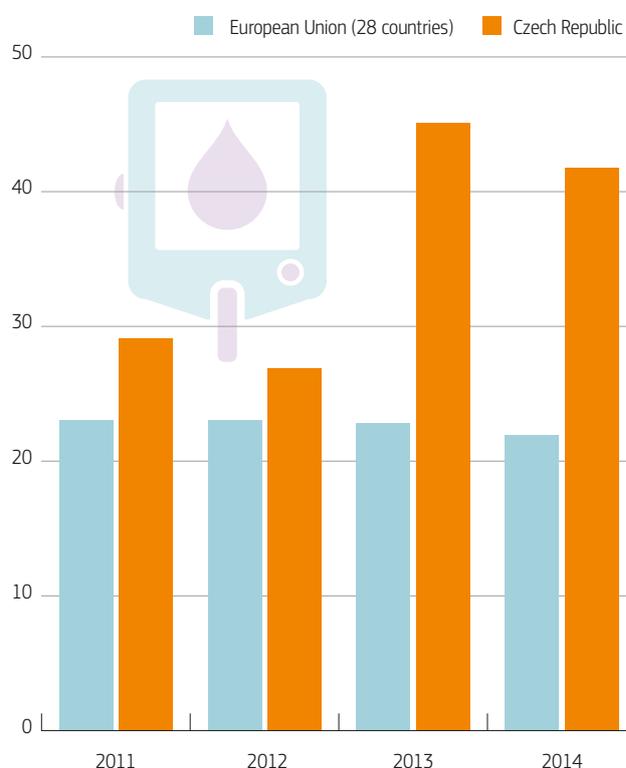
Several largely preventable diseases pose a parallel challenge to the health system. For instance, mortality rates from diabetes were double the EU average in 2013 (Figure 9), from chronic liver disease 24% higher than the EU average and from traffic accidents 29% higher than the EU average. Although rates have been falling, other countries have succeeded in reducing mortality from these causes faster, suggesting that the Czech Republic could do more. An exception is mortality from lung cancer, which was reduced to a level comparable to that of the EU average as of 2014.

Generally, the Czech Republic has struggled to implement health promotion programmes and to tackle risk behaviours associated with non-communicable disease. There are several policies in place to address behavioural and social health determinants, and health promotion has gained more importance over the last few years. Despite this, important interdependencies between environmental, health and social factors have only recently been investigated. The delays in strengthening tobacco control legislation (finally agreed in early 2017) exemplify the challenges (see also Section 3).

Attempts to widen the scope of public health strategies have been implemented slowly

The public health system was reorganised as part of fiscal consolidation, with deep budget cuts of 42% between 2002 and 2011 and personnel losses of more than 40%. Notwithstanding, the Strategic Document on Public Health (2012) set long-term goals to expand traditional public health to include non-communicable diseases. However, it is the conventional elements, such as communicable disease prevention, that continue to dominate.

Figure 9. Mortality from diabetes is a fast-growing concern, and is at odds with the trend in the EU



Note: Rates are Standardised Death Rates per 100 000 population. Coding practice was changed in the Czech Republic for 2013, which may have contributed to the sharp increase in diabetes-related mortality in that year.

Source: Eurostat Database, 2017.

Compulsory vaccination programmes for children remain comprehensive and have a very high coverage rate of around 97% to 99% for diphtheria, tetanus and pertussis, measles and Hepatitis B. They tackle a wide range of infectious diseases, with vaccination schedules updated routinely. Influenza vaccination among the elderly, however, is at a very low level and well below the EU average.

Improved quality of acute care remains critical to further reduce the avoidable disease burden

Amenable deaths from acute myocardial infarction (AMI) and stroke, have improved substantially, after designated CVD-specialised centres were established in the late 2000s. Indeed, the 30-day mortality from AMI recorded one of the steepest decreases in the EU and stood at the very low level of 6.9 per 100 patients in 2015. This is lower than Germany (7.7), Austria (7.4) and the United Kingdom (7.2) (Figure 10). However, 30-day mortality from stroke is average compared to other countries, and could be improved further, particularly given that neighbouring countries Germany and Austria achieve markedly lower rates.

Moreover, despite high mortality rates for diabetes, there have been some improvements with avoidable hospital admissions for these patients. Admissions have declined significantly since 2009 (although they are still above EU averages). Furthermore, patients suffering from asthma or chronic obstructive pulmonary disease have relatively low avoidable admission rates to hospitals.

While the improvements have tended to revolve around the hospital sector, primary care has not proved to be effective in avoiding preventable hospital admissions for people with congestive heart failure and hypertension, with avoidable admission rates well above those in most other Member States. Renewed medical guidelines are in preparation and have the potential to improve primary care effectiveness.

Lack of meaningful data on quality poses problems for holding health providers accountable

Legislation defines the minimal technical equipment and personnel requirements in hospitals, but there are no immediate sanctions when providers do not meet these. Further, the Czech Republic requires only minimal reporting of outcomes on quality of care across the different providers. This means that health insurance funds cannot use quality data for purchasing and that patients are exercising their free choice without access to important information.

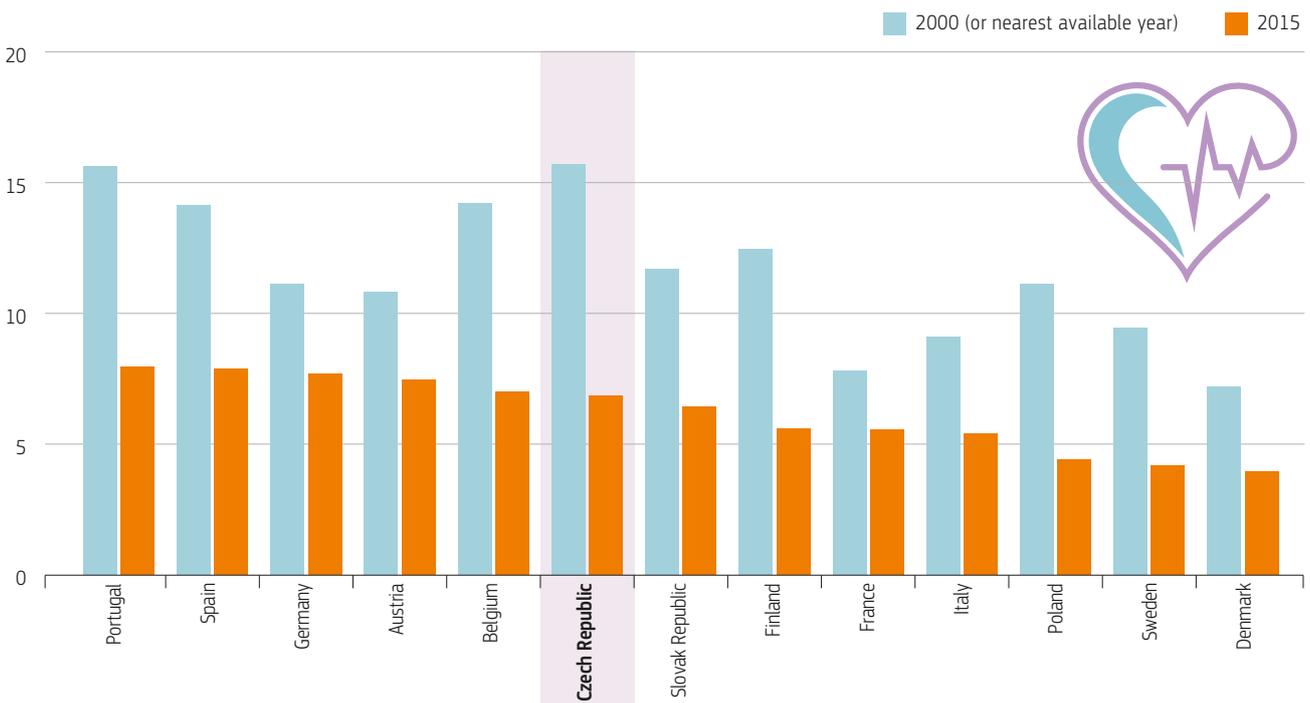
Safety legislation in 2011 did foster a wave of provider accreditation for institutions meeting minimal technical requirements, patient care standards, human resources management, quality and safety management, and process assessment requirements. There have also been some more recent advances with projects in the area of quality and safety assurance, such as the adverse event reporting system and the introduction of sectoral safety targets for all health care providers. Nonetheless, without improved transparency these are unlikely to achieve maximum impact. The introduction of a national eHealth programme is intended to address this and aims to tackle the lack of interoperability between health-related data systems; the absence of systematic (quality) performance monitoring; and the link between these and strategic planning.

5.2. ACCESSIBILITY

The state covers economically inactive individuals to guarantee universal coverage

The Czech health system provides virtually universal coverage with the state paying the contribution on behalf of almost 60% of the total population (the so-called 'state-insured'). This group is mostly economically inactive and includes children, students, people on parental leave, pensioners, the unemployed, prisoners and asylum seekers. The contributions that the state makes on their behalf are financed through general taxation but amount to only a quarter of all SHI funds.

Figure 10. The Czech Republic has substantially reduced mortality from acute myocardial infarction



Note: Based on admission data.

Source: OECD Health Statistics, 2017.

Unmet needs for medical care are very low, with little variation across income groups

In 2015, the share of Czech respondents indicating unmet need for a medical examination or treatment due to cost, travel distances or waiting times was among the lowest in the EU (Figure 11). Moreover, variation across income quintiles was much smaller than in most other countries.

There are very low thresholds allowing easy access to a broad benefits package

The benefit package is broad and generous, and there are low thresholds for accessing GPs and specialists (no co-payments, no gatekeeping), which makes health care very accessible. In 2017, benefits include inpatient and outpatient care, prescription pharmaceuticals, rehabilitation, home nursing care and personal care, basic dental care, medical aids and devices, vaccinations and screenings, maternity care and spa treatment.

The breadth of the package, absence of gatekeeping and out-of-pocket payments is seen by some as driving an unsustainably high number of outpatient contacts (see Section 4), although it is likely that cultural factors and supplier-induced demand also contribute to this. The debate has become increasingly politicised and the government has taken steps to rationalise resources and strengthen cost control (see Box 1).

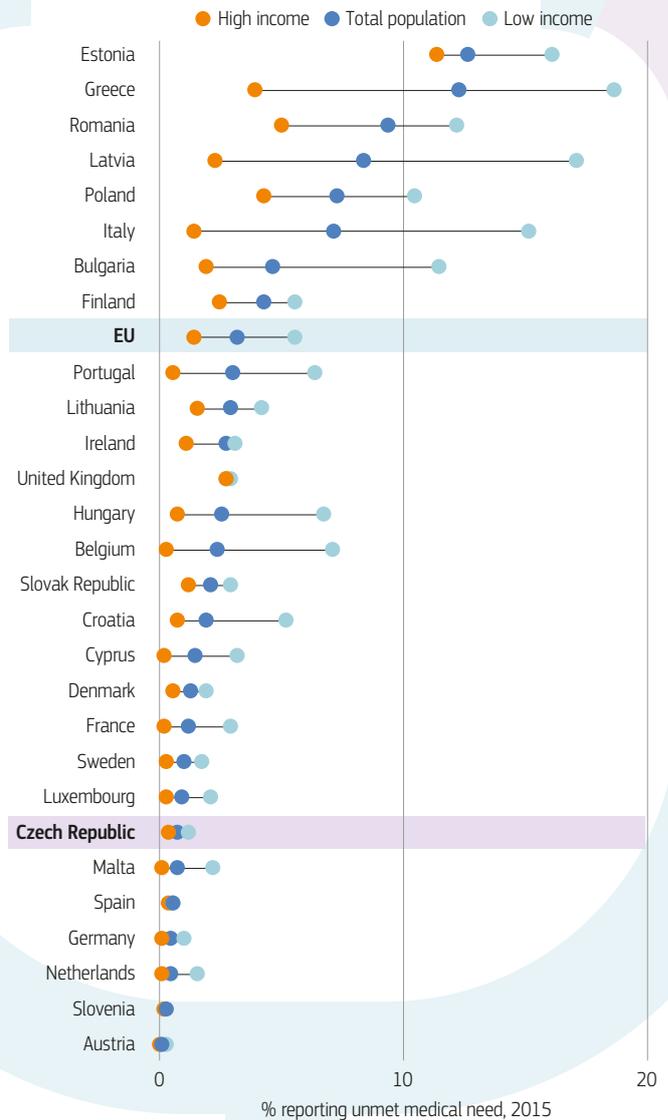
Low out-of-pocket payments contribute to good overall financial protection

As mentioned in Section 4, out-of-pocket payments are low (14.8% of total health spending) with co-payments for pharmaceuticals making up the most significant share (50% of out-of-pocket spending in 2015). There are ceilings to protect vulnerable groups and, in 2015, out-of-pocket spending was below the EU average and represented only 2% of final household consumption, giving a high level of financial protection. There was a short-lived experiment between 2008 and 2013, introducing low co-payments of EUR 1 per doctor visit and EUR 3 per hospital day, but the policy caused considerable political and public backlash and was eventually rolled back.

Despite lack of unmet need, the distribution of services may give cause for concern

Although only low geographical barriers to care – compared to the EU average – are reported, medical professionals are unevenly spread over the country. Prague has more than twice as many specialists per 1 000 inhabitants compared to rural areas. Similarly, waiting times, which are not reported as giving rise to unmet need, do feature, and, in 2012, maximum waiting times

Figure 11. The Czech Republic is among the most equitable in terms of unmet needs



Note: The data refer to unmet needs for a medical examination 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).

were established for several procedures. There is little waiting time information, however, and it is not typically available to patients when they choose a hospital – although some health insurance funds offer information on contract volumes and hospital capacity.

Patient mobility may counterbalance some of the quality and waiting time concerns of patients. Indeed, there is considerable movement between regions (*kraj*), most typically with the capital Prague as a primary destination. Some other regions such as Liberecký (bordering Germany) have a significant share of hospitalisation in other regions (MZCR, 2016a). This may indicate a shortage of high-quality services locally, but it is not possible to assess this adequately with the limited data available.

BOX 1. MECHANISMS TO CONTROL HEALTH CARE COSTS

The Czech Republic is seeking ways to keep costs low given the very broad benefit basket and the comparatively high numbers of outpatient contacts and hospital cases. These include efforts to rationalise benefits through the:

Exclusion of 'non-essential' services: From 1997, a range of procedures and services has been excluded either implicitly or explicitly, such as cosmetic surgery, acupuncture or elective abortion. Certain pharmaceuticals and medical aids may also be excluded although on a year-by-year basis.

Annual negotiation of reimbursement conditions and prices for health care: Health insurance funds and health care providers

negotiate annually, although the process is very ineffectual and agreement is hardly ever reached. In this case, the Ministry of Health steps in and issues a *Reimbursement Directive* setting prices and sometimes limiting the volume of services providers may offer (which offers a measure of cost control although it may put providers in difficult financial circumstances).

List of Health Services: this acts as a positive list and notional mechanism to ration benefits. In 2013, it included more than 3 800 items. Services that are not specified in it may still be reimbursed in the event of individual need.

5.3. RESILIENCE⁷**Health system financing is challenged by an ageing society and vulnerability to economic shocks**

The Czech financial system remains vulnerable in the long term, as concluded in the 2017 Country Report by the European Commission. This is mainly due to the projected impact of age-related public spending (health care and pensions). However, the financial system is also vulnerable to workforce fluctuations and the relatively narrow revenue base. This has caused solvency problems in the past, particularly in the aftermath of the 2008 financial crisis. The loss of revenue from employee contributions was such that the government issued loans to the health insurance funds (including an extra loan to the largest fund, VZP) and increased per capita state contributions on behalf of the uninsured. Crucially, the state-insured covered directly by these state contributions make up nearly two thirds of the total population covered by SHI. However, the state contributions on their behalf make up only about 20-25% of total SHI revenues. Despite the loans, tax-financed state support was not sufficient to fully offset lost income and the insurance funds were obliged to use their reserves to protect spending.

There is no political consensus on how to tackle long-term sustainability

Sustainable health financing is (perhaps the most) significant challenge to the Czech health system, especially as the population is ageing rapidly, creating an expected growth rate in demand for long-term care. As mentioned, those covered directly by state

contributions make up nearly two thirds of the total population covered by SHI. However, the state contributions on their behalf make up only about 20-25% of total SHI revenues. Despite the loans, there is marked political disagreement over how to tackle this, with some parties advocating increased private health expenditures and others vehemently against them. The 2008-13 experiments with user charges were modest and out-of-pocket spending remained low but the initiative proved very unpopular. Divisions remain and there are no explicit alternative proposals on how to mobilise additional resources.

The resilience of the workforce needs to be strengthened

Generally, the government lacks planning tools for human resources. No effective mechanisms are in place to deal with the ageing of the workforce, professional migration or shortages in rural areas. Although, the Ministry of Health (and regional governments) operates a training programme and scholarship initiatives, and maintains a list of GP vacancies, positions in (mostly) rural areas remain unfilled and professionals continue to gravitate to urban areas (MZCR, 2016b; see also Section 4).

Capital investment is not sufficient to maintain an effective infrastructure

Gross fixed capital formation in the Czech Republic was below the EU average in 2014 and the need for urgent investments was felt to be significant, particularly for long-term care facilities. Barriers to investment in long-term care are exacerbated by the sharing of responsibilities between the health and social care sectors, which hampers decision making, but in general management expertise with capital investment is limited. Providers are expected to take responsibility for capital investments but are poorly placed

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

to do so, particularly as revenues from reimbursement in many cases do not allow adequate reserves to be built up. Although publicly owned hospitals can apply for investment subsidies and there are EU initiatives in this area, it is not clear if and how the opportunities to tackle outdated facilities will be taken up.

There is scope to make major improvements in efficiency

There are several ways to look at the technical efficiency of the Czech health system, many of which suggest room for improvement. As a starting point, if health spending is related to amenable mortality (Figure 12) and compared with countries spending a similar amount per capita like Portugal and Slovenia, the Czech system does poorly, with the others achieving much better amenable mortality rates for the same money (albeit with the proviso that health behaviours as well as health system factors influence the level of amenable mortality).

Similarly, when looking at the inpatient care sector (which accounts for 26.3% of total spending compared to 29.5% in the EU) (2015), it is clear that there are efficiency gains to be made. The average length of stay in hospitals at 9.3 days (2015) remains well above the EU average (of 8 days) and numbers of hospital beds (total and acute) are also above average (although both have

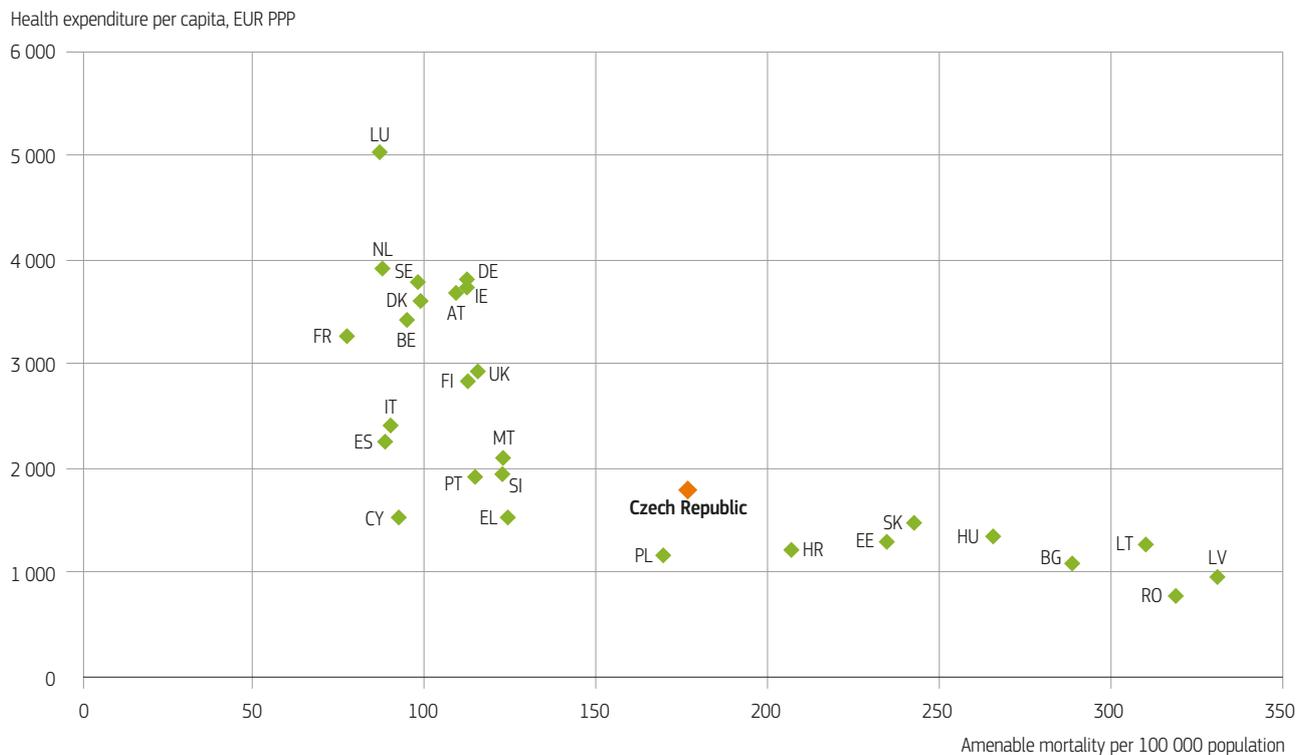
fallen in recent years), while the bed occupancy rate is slightly below the EU average.

The ambulatory care sector is slightly larger than the EU average (32.7% of total spending compared to 29.8% in the EU) and has high numbers of outpatient contacts, again suggesting that savings could be made. Encouragingly though, there is a steep increase in day care surgery with, for example, 95% of cataract surgeries performed as ambulatory cases, compared with the EU average of 81%.

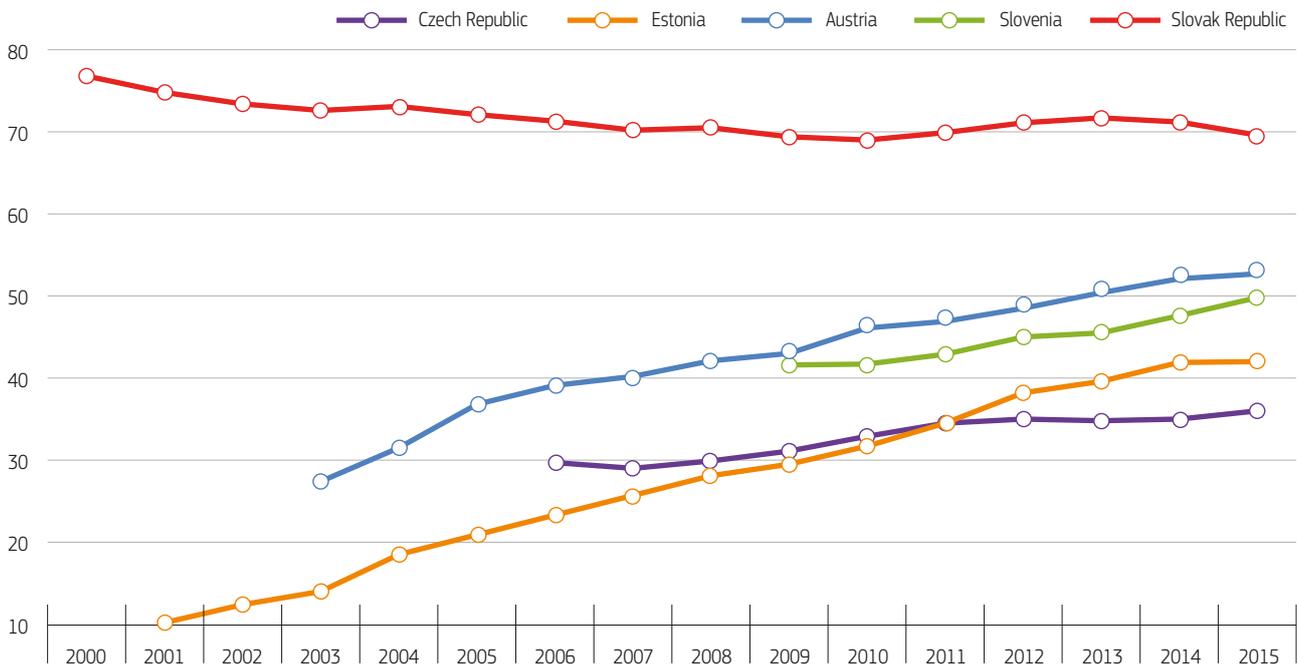
Pharmaceuticals could provide better value for money

Although medical goods account for a share of total health spending that is close to the EU average, the public procurement of drugs could be improved and value for money increased. Though the penetration of generic drugs at 42 % of the total market volume is below the average value for countries with this indicator available (48 % in 2017, see also Figure 13), it does not represent any real burden for public health insurance since funds reimburse the same amount regardless of whether the drug is original or generic. However, establishing a formal Health Technology Assessment system would help determine which pharmaceuticals should be covered.

Figure 12. Even with current spending levels, the Czech Republic could perform better on amenable mortality



Sources: OECD Health Statistics, Eurostat Database, WHO Global Health Expenditure Database (data refer to 2014).

Figure 13. The market volume of generics in the Czech Republic is generally lower than in other countries

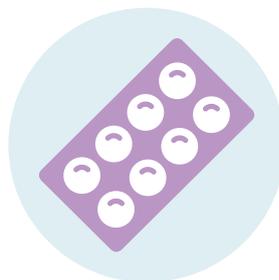
Notes: Data for Czech Republic, Slovak Republic and Estonia refer to the total pharmaceutical market. Data for Austria refer to the reimbursed pharmaceutical market. Data for Slovenia refer to the community pharmacy market.

Source: OECD Health Statistics, 2017.

Addressing key challenges hinges on reaching consensus on a long-term vision

Generally, governance could be more effective, pushing a faster pace of reform implementation and addressing important challenges like revenues, ageing, or workforce more proactively. Several of these challenges have been present since the very inception of the system in the early 1990s. However, there is no overarching political vision that political parties across the spectrum (and different stakeholders in the health system) can subscribe to. There are only partial long-term strategies, such as the Health 2020 (*Zdraví 2020*) strategy for public health-related goals. The Ministry of Health has a strong leadership role in the health system, but governance also involves several affiliated bodies, self-governing regions and independent bodies like the Medical Chamber that do not always pull in the same direction.

What is more, the deep-rooted societal commitment to choice and free access, which are enshrined in the constitution as objectives of the health system, make it difficult to tackle fundamental issues like the gatekeeping role of primary care.



More information would improve accountability and transparency

Developing and sharing quality indicators across sectors would help improve performance but also underpin (better) choices between health care providers and health insurance funds. However, there is still a lack of reliable data on individual providers, their costs and outcomes. The Ministry of Health and its affiliated bodies commission regular reports on population health and health system performance, but more detailed and more transparent evaluation, and the introduction of measurable targets, would strengthen these reports and their impact and enhance accountability.

6 Key findings

- The Czech health system has made major advances in population health. Despite historically high mortality from certain diseases, a majority of health-related indicators are closing the gap with EU averages. Moreover, recent developments in survival rates from cancer and 30-day mortality from cardiovascular diseases are likely to continue this trend. Preventable mortality indicators reveal a more mixed picture. The rising prevalence of diabetes is worrisome, as are the high mortality rates from traffic accidents and liver diseases.
- The public health system has expanded its role over the last five years and now holds responsibility for non-communicable diseases. However, work to tackle the high prevalence of risk factors is still in its infancy. Tobacco control legislation has been strengthened, but programmes targeting alcohol consumption and rising obesity have yet to prove effective.
- The Czech Republic maintains a high level of financial protection with universal coverage, a very generous benefit package and low out-of-pocket spending. There is legislation to protect vulnerable groups, including an annual ceiling on co-payments for low income households. As a result, levels of unmet needs for financial reasons are among the lowest in the EU.
- There are, however, questions about adequacy of the current health financing system, particularly given the narrow revenue base, its vulnerability to shocks and the likely impact of population ageing on the dependency ratio and on levels of contributions to the system.
- There are also concerns about the ageing of the health workforce, the uneven distribution of doctors, migration abroad, GP vacancies in rural areas and travel distances. Numbers of primary care physicians are a particular worry, because it is not perceived as an attractive specialisation. All these factors raise questions about the availability of services in the long term and potential barriers to access. A comprehensive response would focus on training, retention policies and incentive schemes to avoid shortages in the medium and long term.
- The long-term care infrastructure can be characterised by regional disparities and a need for modernisation. There is a need to diversify long-term care delivery to treat people in their communities and at home, as well as to strengthen coordination and integration in health care and social care and across different providers. Currently, there is only a low degree of coordination between providers, which is further hindered by lacking eHealth solutions. Recent legislation to tackle this may be a step in the right direction.
- The Czech Republic performs well in terms of allocating resources efficiently to various care sectors. But there is real scope for technical efficiency improvements. Primary care could be strengthened so that it provides care in the most cost-effective setting and becomes an effective gatekeeper. Hospitals could reduce bed numbers and improve on indicators like average length of stay or occupancy rates. A Health Technology Assessment system could be developed to improve coverage decisions.



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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.

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