



State of Health in the EU

Romania

Country Health Profile 2019

The Country Health Profile series

The *State of Health in the EU's* Country Health Profiles provide a concise and policy-relevant overview of health and health systems in the EU/European Economic Area. They emphasise the particular characteristics and challenges in each country against a backdrop of cross-country comparisons. The aim is to support policymakers and influencers with a means for mutual learning and voluntary exchange.

The profiles are the joint work of the OECD and the European Observatory on Health Systems and Policies, in cooperation with the European Commission. The team is grateful for the valuable comments and suggestions provided by the Health Systems and Policy Monitor network, the OECD Health Committee and the EU Expert Group on Health Information.

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Data and information sources

The data and information in the Country Health Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated 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. These EU averages do not include Iceland and Norway.

This profile was completed in August 2019, based on data available in July 2019.

To download the Excel spreadsheet matching all the tables and graphs in this profile, just type the following URL into your Internet browser: <http://www.oecd.org/health/Country-Health-Profiles-2019-Romania.xls>

Demographic and socioeconomic context in Romania, 2017

Demographic factors

	Romania	EU
Population size (mid-year estimates)	19 587 000	511 876 000
Share of population over age 65 (%)	17.8	19.4
Fertility rate ¹	1.7	1.6

Socioeconomic factors

	Romania	EU
GDP per capita (EUR PPP ²)	18 800	30 000
Relative poverty rate ³ (%)	23.6	16.9
Unemployment rate (%)	4.9	7.6

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 60 % of median equivalised disposable income.

Source: Eurostat Database.

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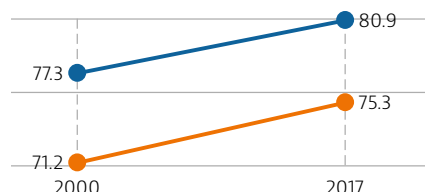
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1 Highlights

Although it has increased, Romania has among the lowest life expectancy in the EU. This reflects unhealthy behaviours, but also socioeconomic inequalities as well as substantial deficiencies in health service delivery. The Social Health Insurance system provides a comprehensive benefit package – however, about 11% of the population remains uninsured and is entitled to only a minimal basket of services. Key challenges for the health system include fixing the imbalance between primary care and hospital care, and tackling the growing shortages of health professionals.

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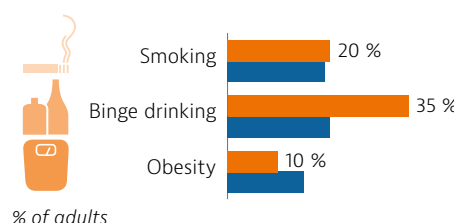


Life expectancy at birth, years

Health status

Life expectancy at birth in Romania has increased by more than four years since 2000 (from 71.2 years to 75.3 years in 2017). However, there are large disparities in life expectancy by gender and education level, particularly for men: the least educated men can expect to live about 10 years less than the most educated. Ischaemic heart disease remains the main cause of death, although cancer mortality is on the rise. Romania also faces challenges in controlling some infectious diseases, with the highest rate of tuberculosis cases in the EU.

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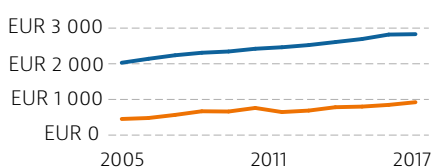


% of adults

Risk factors

Around half of all deaths in Romania are attributable to behavioural risk factors. One in five Romanian adults are daily smokers, with a much higher rate among men (32 %) than women (8 %). Adult obesity rates are among the lowest in the EU (10 %), but overweight and obesity rates in children have increased over the last decade to reach 15 %. Alcohol consumption is a major public health threat, with the binge drinking rate (35 %) far exceeding the EU average of 20 %. In men, this rate is over 50 %.

● RO ● EU



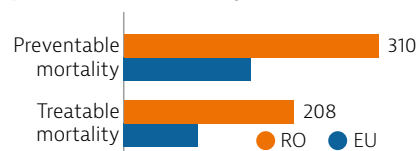
Per capita spending (EUR PPP)

Health system

Health spending in Romania is the lowest in the EU, both on a per capita basis (EUR 1 029, EU average EUR 2 884) and as a proportion of GDP (5 %, EU 9.8 %). The share of publicly financed health spending (79.5 %) is in line with the EU average (79.3 %), and while out-of-pocket payments are generally low, except for outpatient medicines, informal payments are both substantial and widespread. In absolute terms, spending in all sectors is low and the health system is significantly underfunded.

Effectiveness

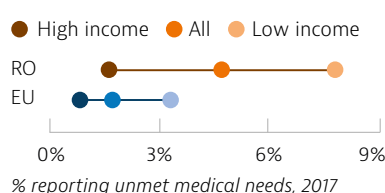
The death rates from preventable and treatable causes are among the highest in the EU. More effective public health and prevention policies, and an enhanced role for primary care and improved access to services, could substantially reduce premature mortality.



Age-standardised mortality rate per 100 000 population, 2016

Accessibility

A substantial proportion of the population reports unmet needs for medical care; moreover, there are significant regional, ethnic and income-related disparities in access. People in rural areas, those from marginalised communities, and lower socioeconomic groups, all face greater barriers to care.



% reporting unmet medical needs, 2017

Resilience

The long-standing over-reliance on inpatient care contributes to an inefficient health system. Primary care is both under-resourced and underused, but there are attempts to reallocate resources towards primary care. Performance assessment of the health system is not generally undertaken, making it difficult to steer improvements.



2 Health in Romania

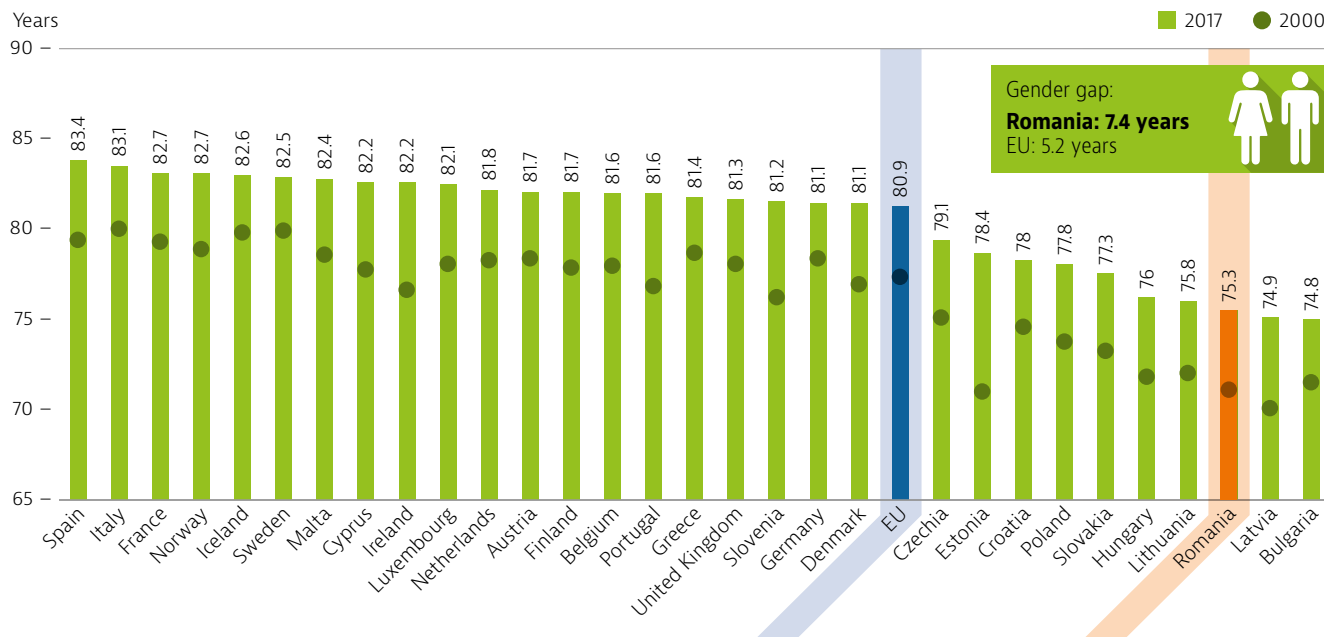
Life expectancy has increased, but lags almost six years behind the EU average

While life expectancy at birth in Romania increased by more than four years between 2000 and 2017 (from 71.2 years to 75.3 years), it remains among the lowest in the EU and almost six years below the EU average (Figure 1). There is also a marked gender gap, with

women living on average seven years longer than men (71.7 years compared to 79.1).

Romania has one of the highest rates of infant mortality in the EU – 6.7 per 1 000 live births compared to the EU average of 3.6 in 2017. Insufficient medical equipment and the shortage of doctors may help to explain this figure (see Section 5.3).

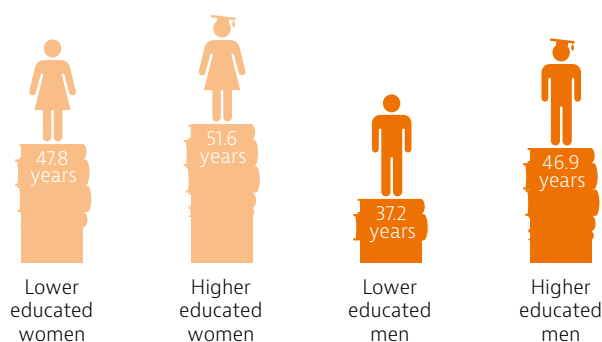
Figure 1. Life expectancy in Romania is among the lowest in the EU



There are stark inequalities in life expectancy by educational level

Differences in life expectancy across educational levels are substantial, particularly for men. As shown in Figure 2, men with low levels of educational attainment at age 30 live on average 10 years less than those with high education, considerably higher than the EU average of 7.6 years. The gap among women is much less pronounced — about four years, which is around the same as across the EU (Figure 2).

Figure 2. Men with low education die 10 years earlier than those who are tertiary educated



Education gap in life expectancy at age 30:

Romania: 3.8 years
EU21: 4.1 years

Romania: 9.7 years
EU21: 7.6 years

Note: Data refer to life expectancy at age 30. High education is defined as people who have completed a tertiary education (ISCED 5–8) whereas low education is defined as people who have not completed their secondary education (ISCED 0–2).

Source: Eurostat Database (data refer to 2016).

Deaths due to cancer have increased, while cardiovascular diseases are the leading cause of death

Ischaemic heart disease and stroke are the leading causes of death, together accounting for more than 550 deaths per 100 000 population in 2016 (Figure 3). The death rate from ischaemic heart disease is almost three times higher in Romania than in the EU as a whole. Despite a marked reduction since 2000, stroke

remains the second leading cause of death at 256 deaths per 100 000 population in 2016, well above the EU average of 80.

Lung cancer is the most frequent cause of cancer deaths, with a mortality rate that has increased by nearly 14 % since 2000, due mainly to high smoking rates. Mortality rates for other cancer types have also increased in recent years, particularly for colorectal and breast cancers (Section 5.1).

Figure 3. Cardiovascular disease takes the largest toll on mortality but cancer deaths are increasing



Note: The size of the bubbles is proportional to the mortality rates in 2016.
Source: Eurostat Database.

Most Romanians report being in good health, but the proportion declines with age more than in the EU as a whole

Despite the high levels of unmet needs for medical care (Section 5.2), three quarters of Romanians report being in good health (71 % in 2017), slightly more than the EU average. As in other countries, the proportion of individuals reporting being good health declines sharply with age: from 94 % of Romanians aged 16 to 44, to 69 % of 45- to 64-year-olds and 23 % of those aged 65 and over. This decline is steeper than the EU average, from 87.5 % for those aged 16 to 44, to 66.8 % of 45- to 64-year-olds and 41.4 % of those aged 65 and over in the EU as a whole. It is not possible to quantify gaps in self-reported health by ethnicity as the collection of statistics by ethnic group is prohibited and data are reported for the general population only. As a result, no data are available on the health status of the Roma population, or of any other ethnic group in Romania, although there are known to be issues in access to care (Section 5.2).

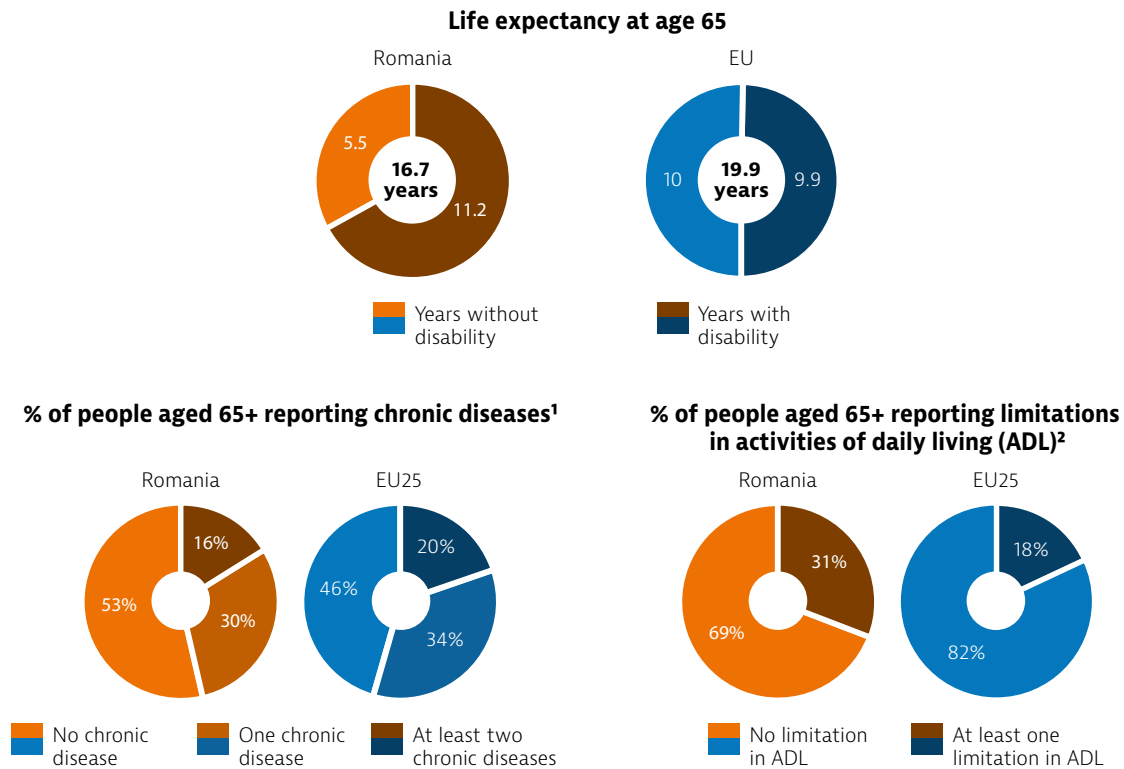
Chronic disease or disability after age 65 affect women more than men

Romanians aged 65 could expect to live an additional 16.7 years in 2017, an increase of almost two years from 2000. However, several years of life after age 65 are spent with some chronic disease or disability, above the EU average (Figure 4). While the gender gap in life expectancy at age 65 remains substantial (with Romanian men living about three and a half years less than women), the gap is in line with the EU average. Regarding healthy life years¹, on average, women live only slightly longer in good health than men (5.1 years for men compared to 5.9 per women in 2017).

While only 46 % of Romanians over 65 report having one or more chronic disease (compared to 54 % in the EU), most are able to continue to live independently into old age. However, 31 % of Romanians over 65 report some limitations in their activities of daily living (ADL) such as dressing and eating, which is well above the EU average.

1: 'Healthy life years' measures the number of years that people can expect to live free of disability at different ages.

Figure 4. Just under half of those aged 65 or over have a chronic condition



Notes: 1. Chronic diseases include heart attacks, high blood pressure, high blood cholesterol, strokes, diabetes, Parkinson disease, Alzheimer's disease, rheumatoid arthritis and osteoarthritis. 2. Basic activities of daily living include dressing, walking across a room, bathing or showering, eating, getting in or out of bed and using the toilet.

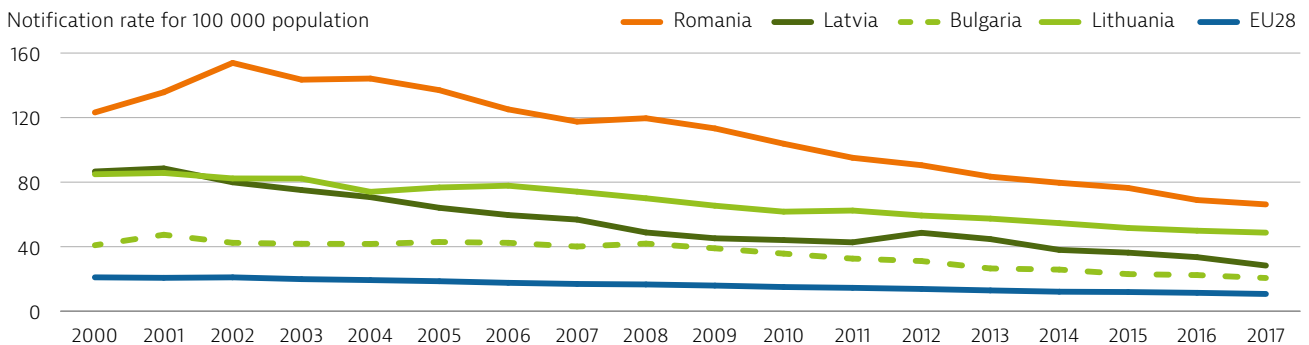
Sources: Eurostat Database for life expectancy and healthy life years (data refer to 2017); SHARE survey for other indicators (data refer to 2017).

Tuberculosis remains an important public health issue in Romania

The control of certain infectious diseases, such as tuberculosis (TB) and measles, continues to be an important public health issue in Romania. The number of TB cases has declined over the past decade, but is still the highest in the EU (around 13 000 cases

in 2017). The notification rates for all TB cases are also falling but remain well above the EU/EEA average (66.2 compared to 10.7 per 100 000 in 2017) (Figure 5). Measles is also a persistent public health issue in Romania, with one of the highest notification rates in the EU (102.1 per million in 2018, compared with 26.2 in the EU as a whole). This trend is linked to low immunisation coverage (Section 5.1).

Figure 5. Although improving, the number of TB cases in Romania is still the highest in the EU



Source: ECDC Surveillance Data, Tuberculosis.

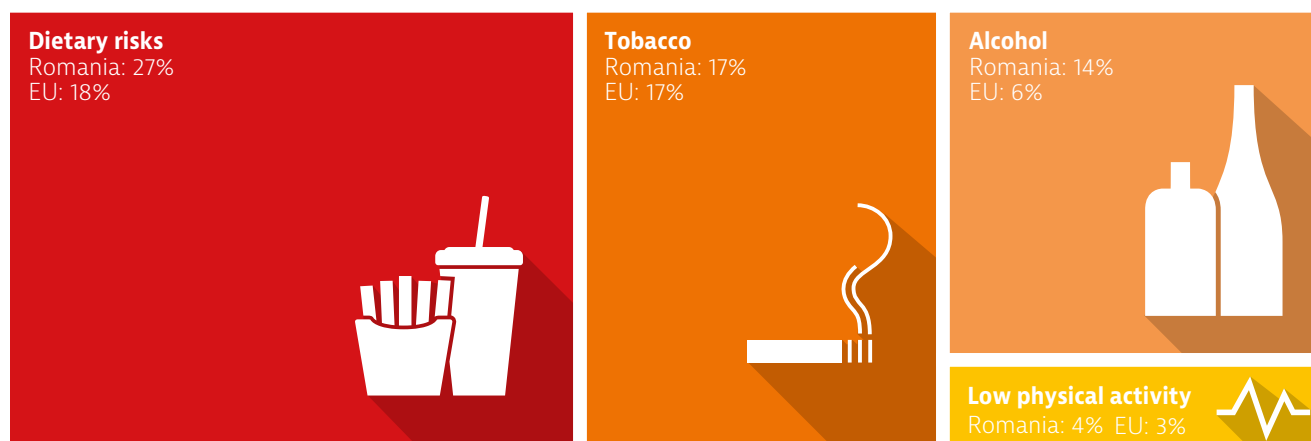
3 Risk factors

Behavioural risk factors account for more than half of all deaths

More than half of all deaths in Romania can be attributed to a selection of behavioural risk factors, including poor diet, tobacco use, alcohol consumption, and low physical activity (62 %), well above the EU average (44 %) (Figure 6). Dietary risks (27 %) include

insufficient fruit and vegetable intake, and excessive consumption of sugar and salt. Tobacco use (including direct and second-hand smoking) is responsible for an estimated 17 % of all deaths, while 14 % can be attributed to alcohol consumption, more than double the proportion seen across the EU (6 %). A further 4 % of deaths are related to low levels of physical activity.

Figure 6. Behavioural risk factors are implicated in a significant number of deaths



Note: The overall number of deaths related to these risk factors (135 000) is lower than the sum of each taken individually (165 000) because the same death can be attributed to more than one factor. Dietary risks include 14 components, such as low fruit and vegetable consumption and high sugar-sweetened beverage and salt consumption.

Source: IHME (2018), Global Health Data Exchange (estimates refer to 2017).

Unhealthy diet and low physical activity do not seem to have an impact on adult obesity

Nearly three fifths of Romanian adults (59 %) report that they do not eat at least one piece of fruit daily, and a similar proportion do not consume vegetables, despite recent healthy eating campaigns (Section 5.1). These figures are much higher than in most EU countries (Figure 7). At 38 %, the number of Romanian adults reporting engaging in at least moderate physical activity every week is the lowest in the EU. Despite the prevalence of unhealthy diets and low physical activity, the adult obesity rate in Romania is the lowest in the EU (only one in ten adults was obese in 2017 while the EU average was 15 %). Being overweight or obese is becoming increasingly prevalent in children, however, with one in six adolescents being overweight or obese in 2013-14.

One in five Romanian adults smokes on a daily basis

Tobacco consumption is a major public health challenge in Romania. Despite a slight reduction in smoking rates since 2008, one in five adults still smoked daily in 2014, in line with the EU average (Figure 7). There is a large gender gap in smoking, with smoking rates among men (32 %) four times higher than among women (8 %). Regular tobacco consumption in adolescents is also a matter of concern, with nearly one third of 15- and 16-year-olds reporting having smoked during the preceding month in 2015, among the highest rates in the EU. The effects of the 2016 Law on Prevention and Control of Tobacco (see Section 5.1) are yet to be seen.

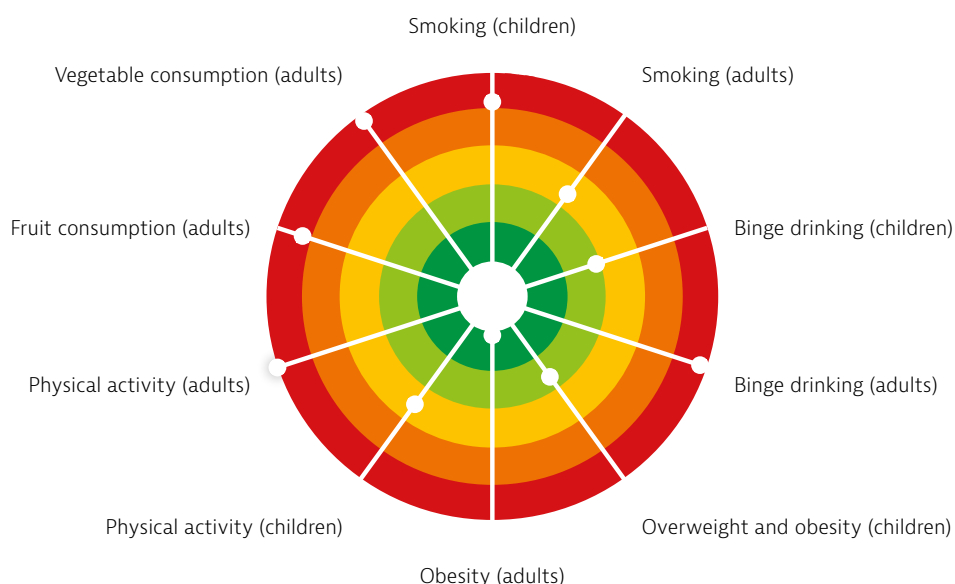
Excessive alcohol consumption is a major problem, particularly among Romanian men

On average, more than one third of adults in Romania reported engaging in episodic heavy alcohol consumption (binge drinking)² at least once a month, the second highest rate in the EU (35 % compared to 20 % on average in the EU). Moreover, this figure belies a strong gender difference, with more than 50 % of men reporting having engaged in heavy drinking. Two in every five 15- and 16-year-old adolescents in Romania reported at least one episode of heavy drinking during the preceding month in 2015. This is also above the EU average, and is of particular concern given the association between heavy alcohol consumption and accidental injuries, particularly in adolescents.

Obesity, unlike many other risk behaviours, is strongly linked to education

People with lower education or income generally are more likely to have behavioural risk factors; however, only obesity shows striking inequalities in Romania. For example, nearly 11 % of people with a lower level of education were obese in 2017, compared to 7.5 % among those with higher education. For smoking the results are reversed, with nearly 13.5 % of people in the lower education groups being regular smokers compared to nearly 21 % in the highest education groups. However, the smoking rate was similar for both high- and low-income groups (18-20 %).

Figure 7. All behavioural risk factors, apart from obesity, are highly prevalent



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 ESPAD survey 2015 and HBSC survey 2013-14 for children indicators; and EU-SILC 2017, EHIS 2014 and OECD Health Statistics 2019 for adults' indicators.



²: Binge drinking is defined as consuming six or more alcoholic drinks on a single occasion for adults, and five or more alcoholic drinks for children.

4 The health system

Romania has a highly centralised Social Health Insurance system

Romania's health system is based on a Social Health Insurance (SHI) model, with the state having a large presence. The Ministry of Health is responsible for overall governance, while the National Health Insurance House (NHIH) administers and regulates the system. Both the Ministry of Health and NHIH have local level representation, through district public health authorities (DPHAs) and district health insurance houses (DHIHs). Health care services are delivered in 41 districts (judet) and Bucharest in line with centrally determined rules. DHIHs buy services from health care providers (general practitioners (GPs), specialist practices, laboratories, hospitals, home care providers, etc.) at local level; moreover, health care providers might be paid by the Ministry of Health under national Health Programmes.

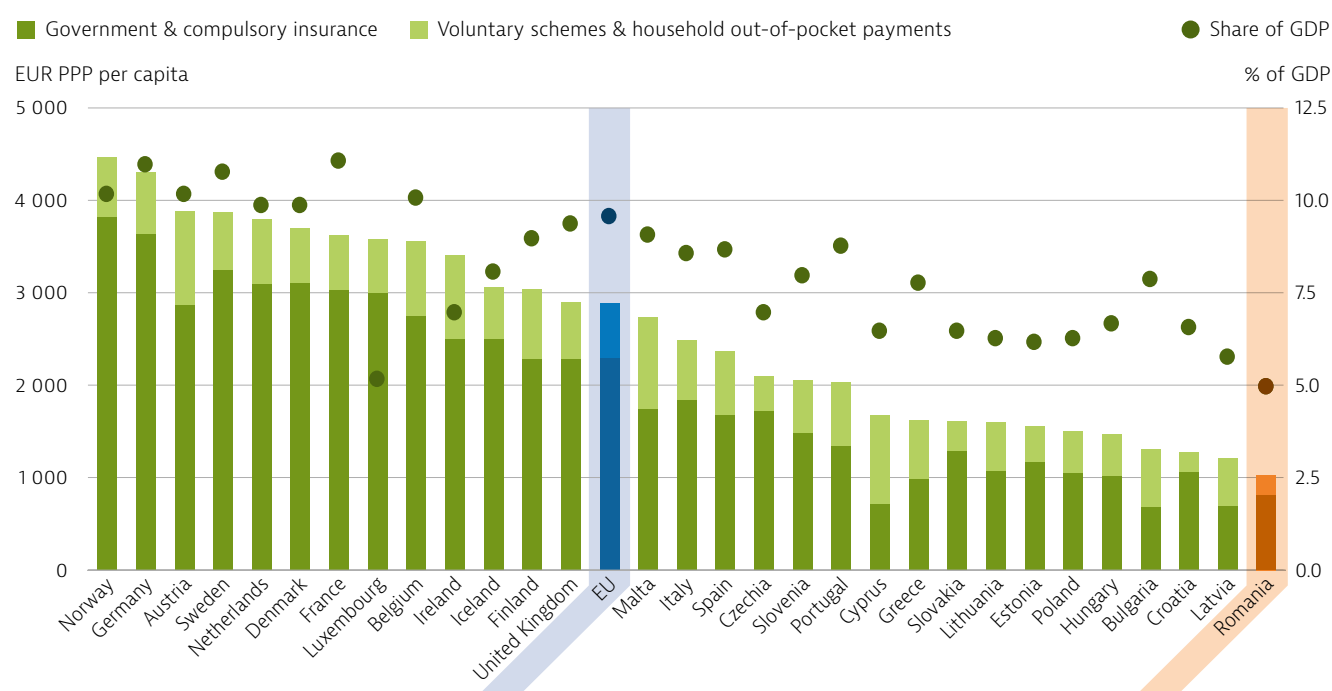
Employers do not directly contribute to the SHI scheme in Romania. Until 2017, employers transferred their share of SHI contributions to the NHIH on behalf of employees – however, employers consistently failed to pay. Following new legislation, employees therefore became responsible for paying the full premium, and at the same time, salaries increased to include the amount employers were expected to cover. There are also a number of exemptions from contributions operating in the system. For some vulnerable groups

(such as the unemployed, retired people on low value pensions and people on social benefits) the state budget pays a SHI contribution to the NHIH on their behalf to guarantee their health service coverage. The health services used by other groups (such as children and students under 26, pregnant women, people with disabilities and chronically ill patients) are financed from the SHI contributions of the working population. Overall, the low number of people contributing to SHI results in chronic underfunding of the health system (Section 5.3).

Most health spending is from public sources but overall expenditure is very low

Romania spends less on health than any other EU country, both in per capita terms and as a share of GDP. Although, health expenditure has systematically increased in recent years, in 2017 Romania spent EUR 1 029 per person on health (adjusted for differences in purchasing power), less than half the EU average of EUR 2 884 (Figure 8), or 5 % of GDP (compared to the EU average of 9.8 %). More than three quarters of health spending is publicly funded (79.5 % in 2017), in line with the EU average of 79.3 %. The second largest source of revenue is out-of-pocket (OOP) payments, which accounted for 20.5 % of health spending in 2017 (Section 5.2). Informal payments are thought to be substantial, although their full extent is unknown.

Figure 8. Health spending is lower in Romania than in any other EU country



Source: OECD Health Statistics 2019 (data refer to 2017).

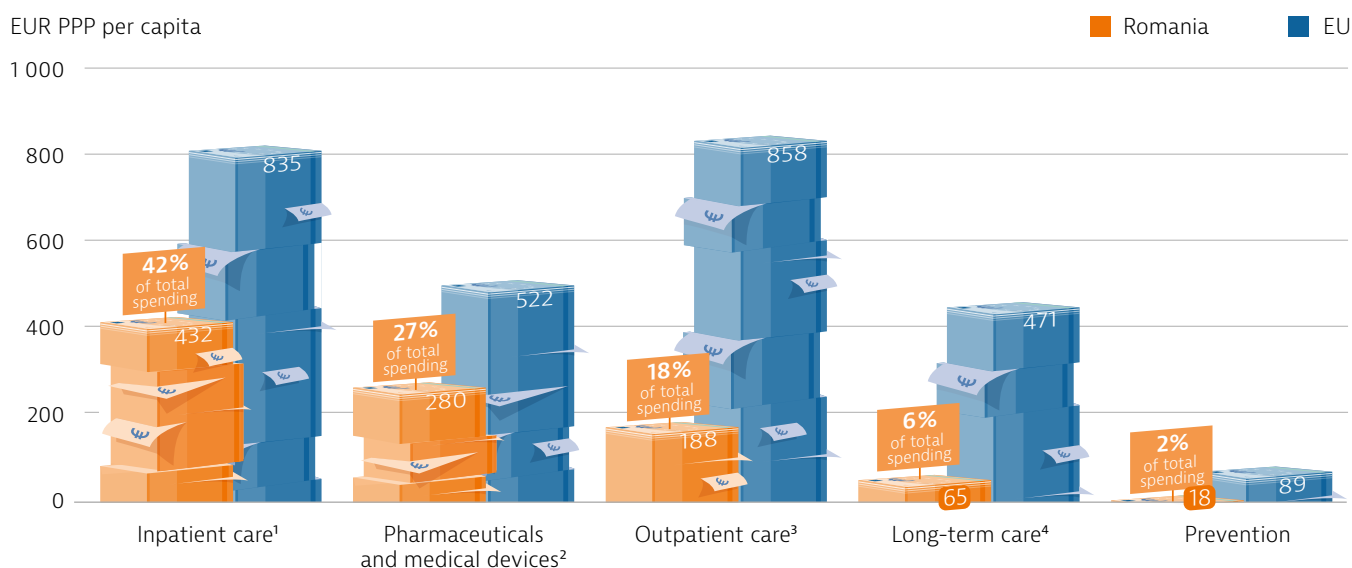
Spending on hospitals dominates while policy efforts seek to strengthen primary care

The shift to outpatient care is at an early stage, with more than 42 % of health spending still directed to inpatient care (compared to the EU average of 29 %), although the overall amount per capita remains low in absolute terms, totalling around half of what is spent across the EU as a whole (European Commission, 2019a). Another 27 % is spent on pharmaceuticals and medical goods. This is particularly high compared to other countries, and the third highest proportion in the EU after Bulgaria

and Slovakia. Again, however, the absolute value of per capita spending on pharmaceuticals (EUR 280) remains relatively low, with Romania spending only a little over half the EU average (EUR 522) (Figure 9).

Notwithstanding efforts to strengthen primary and community care, underpinned by the National Health Strategy 2014-2020, the proportion of health spending devoted to primary and ambulatory care remains the second lowest in the EU (18 %, compared to the 30 % EU average). Romania also spends very little on prevention, only EUR 18 per person in 2017, or 1.7 % of total health spending, compared to 3.1 % across the EU.

Figure 9. Health care financing is skewed towards inpatient care



Notes: Administration costs are not included. 1. Includes curative-rehabilitative care in hospital and other settings; 2. Includes only the outpatient market; 3. Includes home care; 4. Includes only the health component.

Sources: OECD Health Statistics 2019; Eurostat Database (data refer to 2017).

The benefits package is broad, but universal coverage is yet to be achieved

SHI enables insured individuals to access a comprehensive benefit package, while the uninsured are entitled to only a minimum set of services. In practice, only around 89 % of the Romanian population was covered by SHI in 2017. There are coverage gaps for workers in the informal economy, the unregistered unemployed and Roma people without identity cards who are not registered and do not pay SHI contributions (Section 5.2).

While there are no co-payments for ambulatory care and relatively low payments for hospital admission, more significant co-payments are applied to outpatient prescription medicines, particularly where these are branded or above a certain price threshold. Furthermore, 60 % of the population are exempted

from user charges for hospital care, including children under 18 and young people up to 26 years of age if they are enrolled in any form of education; patients covered by the national health programmes; pregnant women without income; and all pensioners (since 2018).

Romania has fewer doctors and nurses per capita than most EU countries

Despite increases in the size of the health workforce over the course of the last decade, the Romanian health system is still suffering from shortages of doctors and nurses. In 2017, there were 2.9 practising doctors per 1 000 population, the third lowest figure in the EU (EU average 3.6), and 6.7 nurses per 1 000 population (EU average 8.5). Migration outflows of medical staff seeking better career and remuneration prospects abroad have contributed to

the development of a domestic shortage of health professionals, with negative consequences on care accessibility (see Section 5.2). In response to this issue, the government has taken measures to try to improve retention and make employment in the health care sector more attractive (Box 1).

Box 1. Recent reforms have targeted chronic health workforce shortages

For some time, Romania has seen significant outward-migration of health professionals, particularly since EU accession in 2007, and substantial numbers have left the public health sector because of poor remuneration and working conditions. In recent years there have also been numerous protests and strikes. In response, the government awarded substantial salary increases to medical staff in 2018, with more modest pay raises scheduled over the next three years. However, improving other aspects of working life is a substantial challenge, given the tight budgetary constraints, though some preliminary steps have been taken towards investment in improving infrastructure within facilities (Section 5.3).

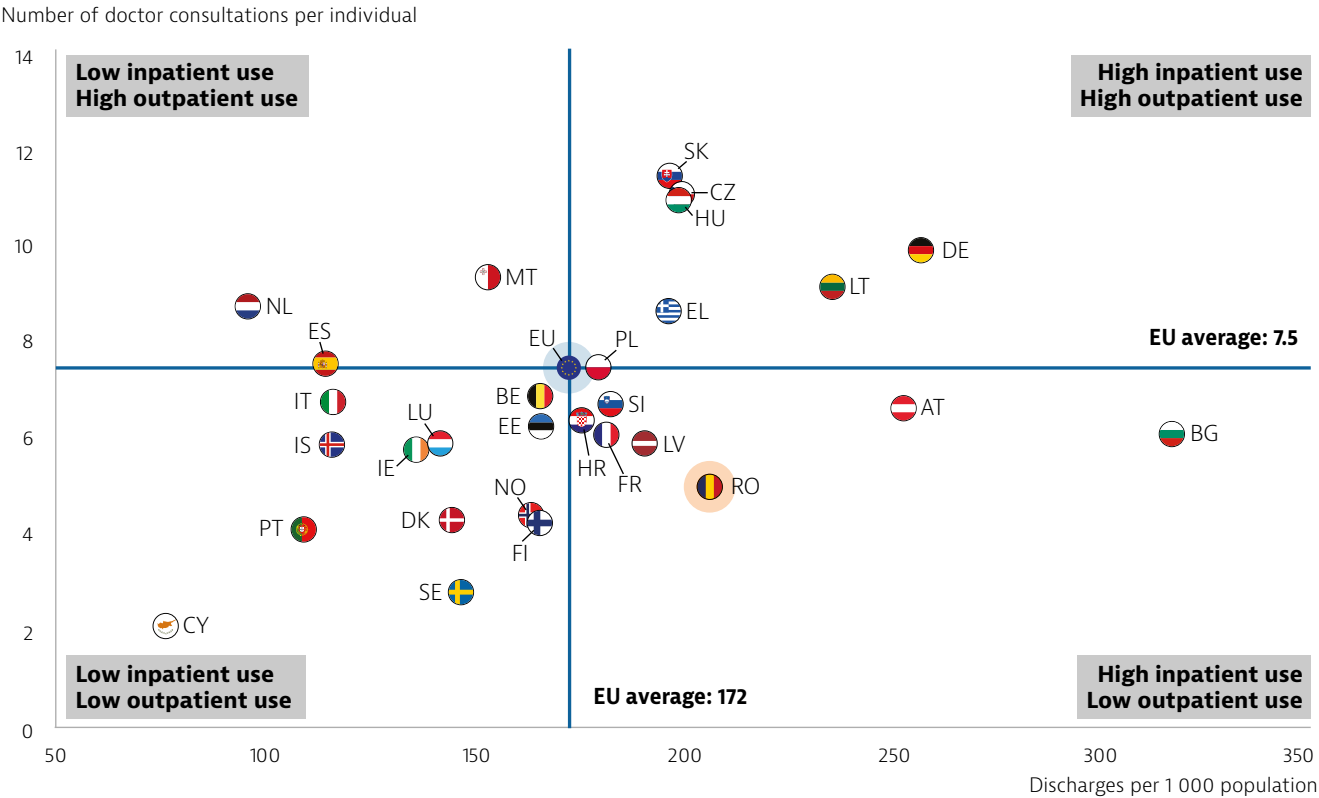
A shift towards integrated community care is hampered by low general practitioner numbers and overuse of hospitals

GPs provide primary care mainly in (private) solo practices contracted by the DHIHs. They have a gatekeeping role, although patients with specific conditions can access specialists directly. GPs made up only 22 % of the doctor workforce in 2016, which is in line with the EU average but down from 29 % in 2010. The decreasing trend poses real challenges for ongoing efforts to strengthen the role of primary care.

Primary care continues to be under-used, while there is over-utilisation of hospital services, as demonstrated by the very high hospital discharge rates (Figure 10 and Section 5.3). In 2016, the average Romanian consulted a primary care or specialist (ambulatory) doctor only five times, compared to the EU average of 7.5 consultations. Patients often rely on hospital emergency departments if they need medical assistance, including non-urgent care.

Another characteristic of the health system is the lack of integration between different sectors, namely public health, primary and hospital care. This leads to poor continuity of care for patients. Legislation passed in July 2017 approved a Collaboration Protocol, a tool for implementing integrated community care across institutions. The Protocol embeds health care within wider population needs and combines social, health, education, employment, and housing services to lift individuals out of poverty and promote their wider social and economic integration.

Figure 10. Outpatient care remains under-utilised in Romania



Note: Data for doctor consultations are estimated for Greece and Malta.
Source: Eurostat Database; OECD Health Statistics (data refer to 2016 or the nearest year).



5 Performance of the health system

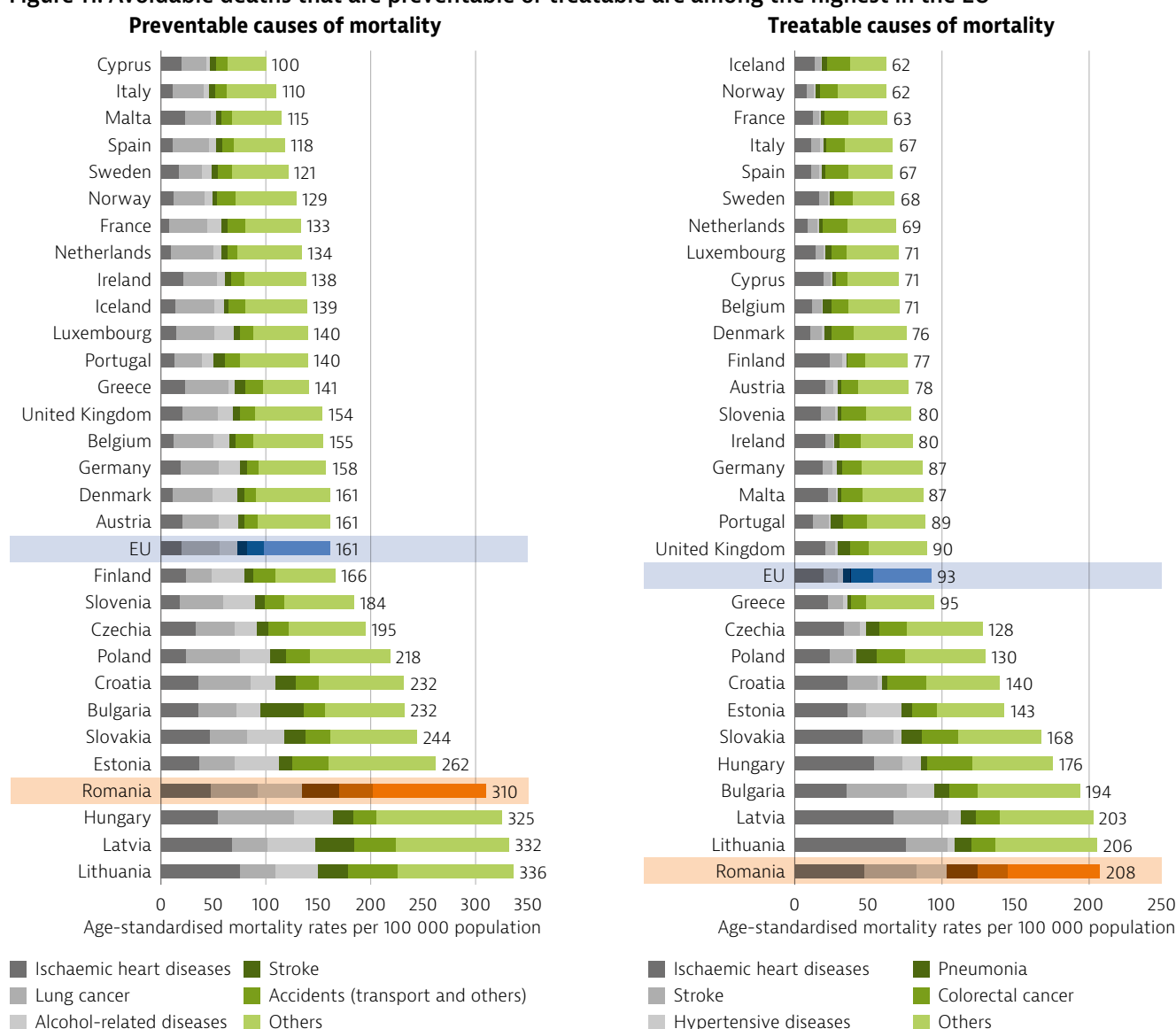
5.1. Effectiveness

Many deaths could be averted with better prevention and treatment

Mortality from both preventable and treatable causes is very high in Romania. The preventable mortality rate was the fourth highest in Europe (Figure 11) in 2016, highlighting the need for effective public health and prevention interventions. The main causes of

preventable mortality are ischaemic heart disease, lung cancer, alcohol-related deaths and accidents. The rate for mortality from treatable causes was the highest in the EU and was also driven by ischaemic heart disease (which is considered to be both preventable and treatable), stroke, pneumonia and colorectal cancer. This result reflects the considerable challenges the health system faces in providing appropriate and timely treatment.

Figure 11. Avoidable deaths that are preventable or treatable are among the highest in the EU



Note: Preventable mortality is defined as death that can be mainly avoided through public health and primary prevention interventions. Mortality from treatable (or amenable) causes is defined as death that can be mainly avoided through health care interventions, including screening and treatment. Both indicators refer to premature mortality (under age 75). The data are based on the revised OECD/Eurostat lists.

Source: Eurostat Database (data refer to 2016).

Efforts to improve prevention have had limited success

The main risk factors affecting the health of Romanians are unhealthy dietary habits, smoking, alcohol consumption and low levels of physical activity (Section 3). Despite recent efforts aimed at modifying diet through healthy eating campaigns, there is no evidence of a decrease in the already high levels of consumption of animal fats and calorie-dense foods with excessive sugar and salt content.

In 2015, the government established a National Council to coordinate policies and actions to tackle excessive alcohol consumption. However, no concrete measures have been adopted to date to address this major public health challenge. Some efforts to reduce tobacco smoking have been made, with a revised version of the Law on Prevention and Control of Tobacco Use in 2016, which banned smoking in all public indoor spaces, except in designated places with appropriate ventilation.

In 2018, the Ministry of Health announced a new programme to screen for cardiovascular disease-related risk factors, with an allocation of EUR 25 million over five years. The programme will be implemented by GPs, who will receive additional payments, in collaboration with cardiologists.

Measures are being taken to improve relatively low and declining immunisation rates

As testified by the fact that Romania experienced several measles outbreaks in recent years, children's immunisation rates are among the lowest in the EU (Box 2 and Figure 12). A draft vaccination law was presented for public debate in 2017 to regulate the organisation and financing of immunisation (although it has not yet been passed). It foresees a variety of measures to increase vaccination rates, including strategies to raise public awareness and clarify the responsibilities of all actors involved in immunisation. The legislation also foreshadows the establishment of a Technical Group for the Coordination of Immunisation Activities, to advise the Ministry of Health.

Box 2. Vaccination rates have declined dramatically

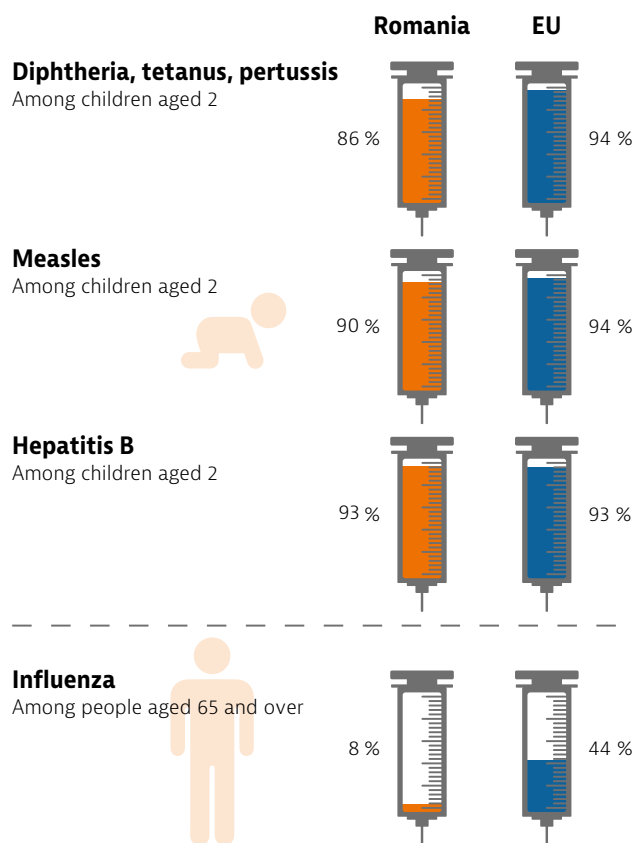
Romania has a recommended vaccination schedule for children, but immunisation is not compulsory, and vaccination rates are below both European averages and WHO recommended targets of 95 % (Figure 12). Low immunisation coverage has given rise to several measles outbreaks since 2016 (UNICEF, 2019) with, for example, 3 071 cases of measles reported in the six-month period between September 2016 and February 2017. New national measures have been approved to respond to these outbreaks and to growing vaccine hesitancy, including lowering the age for administering the first vaccine dose from 12 to 9 months and recommending that all children up to 9 years of age now be vaccinated (Rechel, Richardson & McKee, 2018).

Following the serious measles outbreak in early 2017, Romania opted to temporarily suspend exports of vaccines in order to ensure adequate supplies and increase the vaccination rate. Pharmaceuticals in Romania tend to be less expensive than in other EU countries (except for some new medicines), which encourages parallel export and increases the likelihood of domestic shortages.³ In 2018, the European Commission accepted the measure and ended infringement procedures against Romania. At the same time Romania agreed to seek other ways to increase vaccination rates, including through training and increasing awareness, which are supported by EU funding.

The influenza vaccination rate among older people is also low (Figure 12) and has decreased markedly from 54 % in 2007 to 8 % in 2017 (the WHO target is 75 %). Reasons include insufficient information on entitlement to free vaccination reaching the older population, and vaccine supplies not reaching mobile communities such as the Roma.

³: Parallel trade in medicinal products is permitted within the EU Single Market, but in certain cases Member States may restrict it, as long as the measures protect a legitimate public interest and are justified, reasonable and proportionate.

Figure 12. Vaccination rates are well below the EU average



Note: Data refer to the third dose for diphtheria, tetanus, pertussis and hepatitis B, and the first dose for measles.

Source: WHO/UNICEF Global Health Observatory Data Repository for children (data refer to 2018); OECD Health Statistics 2019 and Eurostat Database for people aged 65 and over (data refer to 2017 or the nearest year).

Spending on prevention is low and access to prevention services is patchy

In 2017, spending on prevention represented only 1.8 % of health expenditure in Romania (the EU average is 3.2 %). When measuring expenditure on prevention per person, Romania spent the least on prevention in the EU after Slovakia. The prevention component in most national health policy programmes, e.g. those addressing cancer or maternal and child health, is low and the focus is predominantly on curative care. Moreover, the population does not have equitable access to health promotion and education resources, with the most vulnerable groups, such as the Roma and the homeless, experiencing significant access barriers. Some new measures to improve access to preventive interventions (and indeed to health care more broadly) for excluded communities are now in place (see Section 5.2 and Box 3 on the Roma health mediator programme).

Cancer outcomes remain relatively poor, but new initiatives seek to improve screening, diagnostics and treatment

Five-year survival rates from treatable cancers such as breast, prostate and cervical are well below EU averages (Figure 13), and particularly so for cancers that are preventable through minimising risk factors, that is, lung (11 %), stomach (3 %) and liver (13 %) cancers. These poor outcomes suggest a need to increase the timeliness and effectiveness of treatment. Recognising this, the government is implementing the 2016-20 National Integrated Multiannual Plan for Cancer Control, in an attempt to improve the diagnosis and treatment of the most common cancers.

There is also a lack of systematic screening, low participation, and sub-optimal quality of screening practices. In 2014, only one quarter of women aged 20-69 reported having been screened for cervical cancer over the preceding two years (compared to the EU average of 66 %). Only 6 % of Romanian women aged 50-69 reported accessing breast cancer screening over the same period (EU average: 60 %), and only 5 % of those aged 50-74 had been screened for colorectal cancer (EU average: 47 %). In 2018-19, nationwide screening programmes for breast, cervical and colorectal cancers were introduced with support from the EU Structural Funds and the World Bank.

Figure 13. Five-year cancer survival rates in Romania lag behind those in the EU



Note: Data refer to people diagnosed between 2010 and 2014.

Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

There is a paucity of data available regarding quality of care

In general, information on the quality of care in Romania appears to be poor. Patient safety indicators are not routinely collected by health care providers, and there is a lack of internationally comparable data on quality indicators for hospital care, such as avoidable hospitalisations, or mortality following hospital admissions for acute conditions. This is largely because quality assurance in health care is still under development, with data either unavailable or deemed too unreliable for decision-making.

Antimicrobial resistance has been recognised as a major concern

Levels of antimicrobial resistance (AMR) remain high in Romania. In 2017, 22.5 % of *Klebsiella pneumoniae* isolates tested resistant to carbapenems, a potent last-line class of antibiotics. This is the third highest percentage in the EU, though it has decreased since 2016 (31.4 %) (ECDC, 2018). Since November 2018, steps have been taken on AMR, including establishing the Multisectoral National Committee for Limiting Antimicrobial Resistance to monitor the implementation of a national strategy to fight it. AMR was also selected as one of the priorities of the Romanian Presidency of the EU Council in the first half of 2019. This culminated in the adoption of Conclusions on the Next Steps towards Making the EU a Best Practice Region at the Employment, Social Policy, Health and Consumer Affairs Council (EPSCO) in June 2019.

Urgent reorganisation of the blood service is needed

Safe blood supplies are essential for the organisation of surgery, emergency care, intensive care and cancer care. However, a 2017 audit identified many shortcomings that put the safety and quality of Romania's blood supply at risk. Issues cover a variety of aspects including organisation, ICT, investment, training, as well as political and legal mandates. The Romanian authorities are therefore bringing together key decision makers, as well as international experts from other EU Member States with similar experiences to develop, within the next 2-3 years, a concrete and endorsed plan of action to reorganise the blood service.

5.2. Accessibility

The number of Romanians without coverage is significant

The Romanian SHI system aims to provide universal health insurance coverage, and participation in SHI is mandatory for those not covered by exemptions. In practice, SHI covered only 89 % of the population in 2017, with coverage gaps for workers in the informal economy, people without an identity card and several other groups who are not registered and do not pay SHI contributions (Section 4). The number of Romanians without coverage is, however, difficult to quantify (Box 3) because of the significant numbers of Romanians working abroad who are still counted as residents (around 3 - 4 million) and thus appear in the statistics as having no insurance. Romanians not covered by SHI have access to a minimum benefit package only, which is restricted to emergency care, communicable diseases treatment and ante-natal care.

The benefit package is comprehensive, although dental care is not covered by default

Every insured person in Romania is given access to a comprehensive benefit package, which includes prevention, outpatient primary and specialist care, as well as hospital care. The key coverage gap is dental care: only certain groups, such as children or those with chronic conditions, are entitled to public coverage, and even for them, coverage is only for a selection of procedures (European Commission, 2018). As a result, Romanians report experiencing the fifth highest level of unmet needs for dental care in the EU (5.4 % in 2017), twice the EU average (2.7 %) (see Figure 15).

Box 3. Vulnerable groups experience barriers to access

Individuals without an identity document, mostly Roma and homeless people, are excluded from statutory coverage, as they cannot register in the system. Other groups, mainly people without formal income who do not contribute to SHI, are also not covered. This includes people working in small-scale agriculture, those employed 'unofficially' in the private sector, and the unemployed, who are not registered (or cannot register) for benefits

and therefore experience significant barriers to access for many services. These barriers have long been recognised. In 2002, a Roma health mediator programme was instituted to facilitate access to health care and prevention services. Health mediators provide information and act as liaisons between health care professionals and Roma communities, especially to promote access to public health interventions.

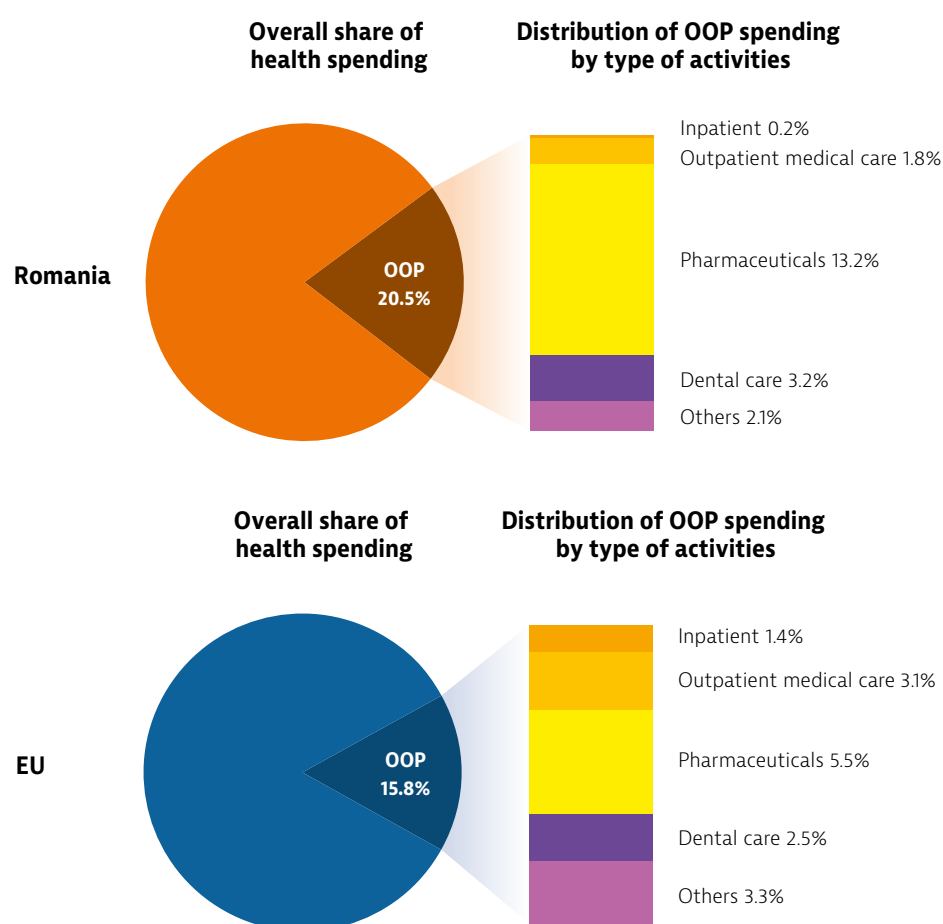
The Ministry of Health and NHIH share responsibility for agreeing on the definition of services and goods included in the statutory benefit package. No clear-cut criteria for the selection of goods and services are established ex ante, but consultations with different actors inform decision making. For medicines, the National Agency for Medicines and Medical Devices generates a positive list with input from its health technology assessment (HTA) unit. However, the institutionalisation of HTA in the decision-making process has stalled somewhat due to a lack of technical capacity.

Out-of-pocket payments, mostly for outpatient medicines, pose a challenge to access

OOP spending accounts for about one fifth of current Romanian health expenditure (20.5 % in 2017 compared to 15.8 % in the EU; Figure 14)⁴. Of this share of OOP spending, over two thirds are used to pay for medicines purchased outside hospitals. Co-payments for these outpatient medicines range

from 10 % of the retail price for generics to as much as 80 % for novel prescription medicines and may obstruct access to needed medicines. However, Romania has made some progress in improving access to expensive medicines. For example, access to direct-acting antivirals for hepatitis C has been extended since 2016 (from about 6 000 patients in 2016 to 13 000 in 2018) and the number of contracted providers has also been increased. Parallel exports and the resulting shortages of medicines and vaccines constitute another access barrier. Measures introduced by the government in 2017 aim to tackle some of these shortages (see Box 2).

Figure 14. Most formal out-of-pocket spending is on pharmaceuticals



Sources: OECD Health Statistics 2019 (data refer to 2017).

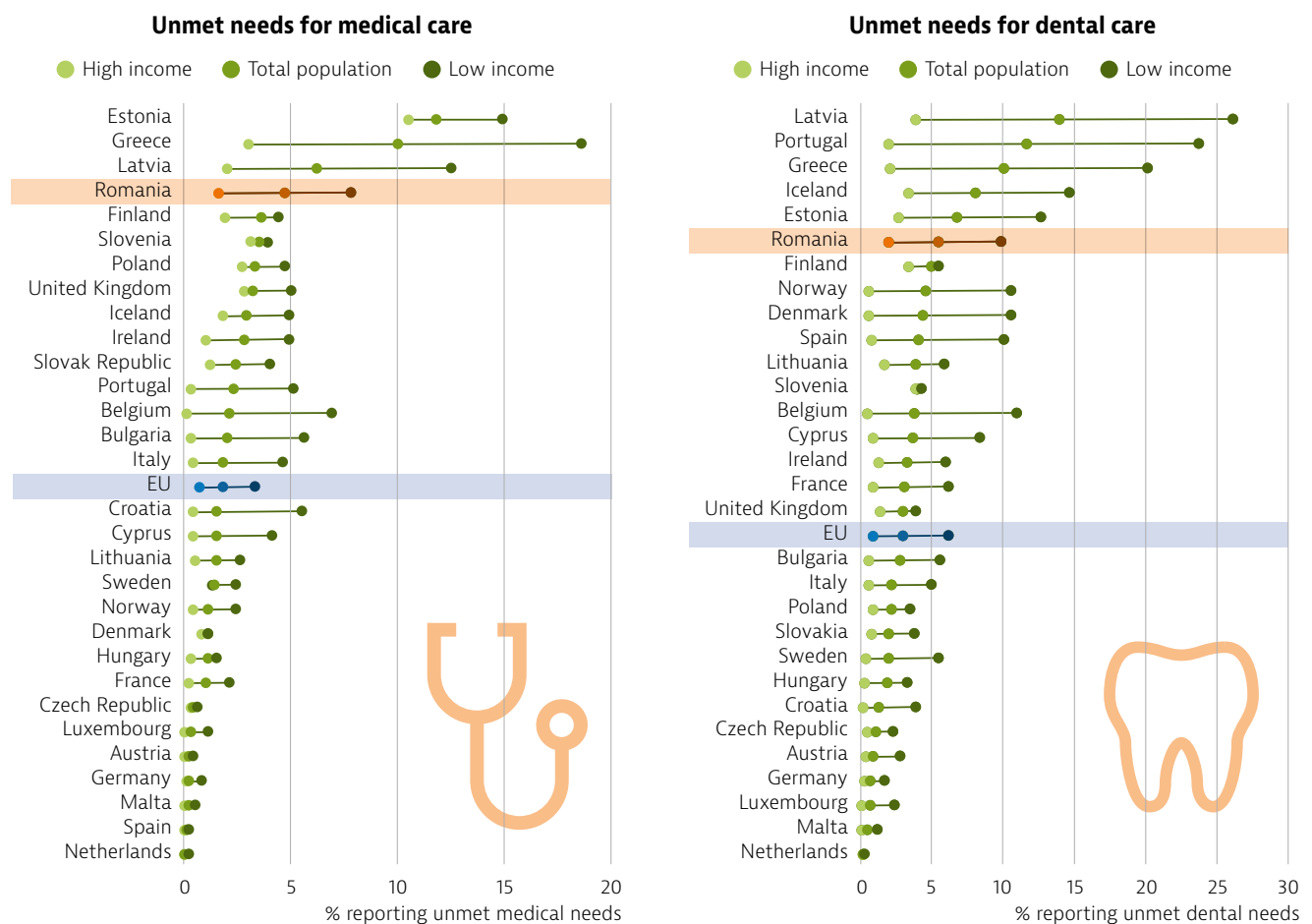
4: However, the real magnitude of OOP spending is difficult to assess accurately because of widespread informal payments (mainly in hospital care) and because private providers under-report income. In 2014 penalties for providers accepting money 'under the table' were expanded and may have reduced the practice.

Unmet needs for care have decreased over time but not disappeared

In 2017, 4.7 % of Romanians reported unmet needs for medical care because of cost, distance or waiting time, compared to an average of 1.7 % in the EU (Figure 15). There is also anecdotal evidence that medical staff commonly request informal payments which would create additional barriers. While still higher than the EU average, reported levels of unmet needs for medical care in Romania have improved dramatically over the last six years, having decreased by 7.5 percentage points since 2011.

Access imbalances disproportionately affect certain disadvantaged socioeconomic groups - the unregistered⁵, pensioners, agricultural workers, and the Roma population (Council of the European Union, 2019). As is the case in most EU countries, those with the lowest incomes report the greatest unmet needs. In 2017 around 6.5 % of Romanians from low-income households said that they had foregone medical care for financial reasons, compared to 2.3 % in the EU. However, this was a better than the 14.5 % reported in 2010.

Figure 15. Unmet needs are much higher and more unevenly distributed than EU averages



Note: Data refer to unmet needs 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.

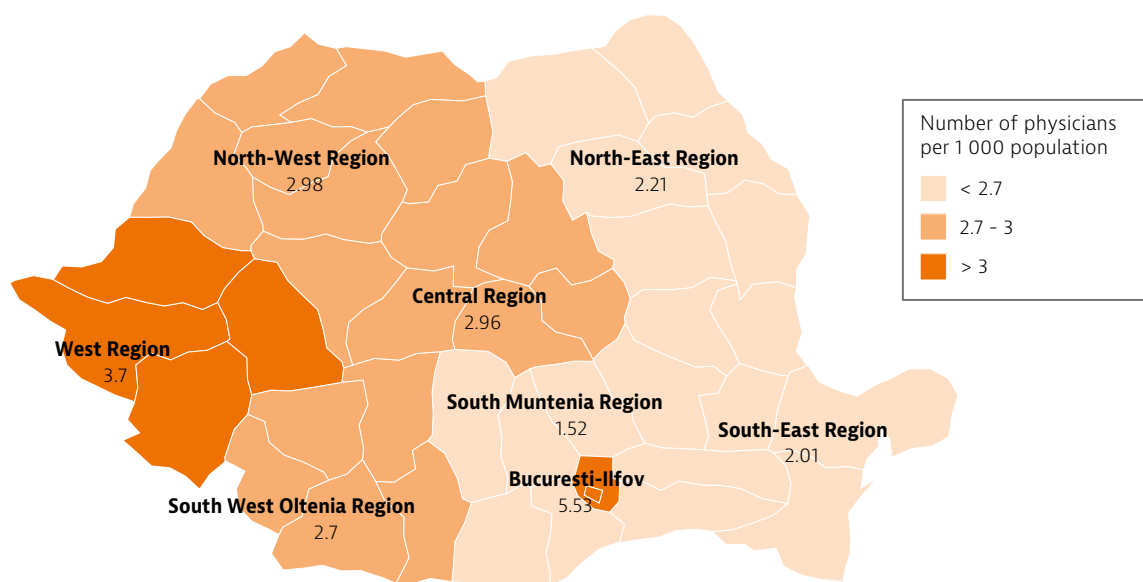
Source: Eurostat Database, based on EU-SILC (data refer to 2017).

The availability of services is unequal across the country. The skewed distribution of health care facilities means that access to both primary and specialist services is poorer in rural areas. This pattern is repeated in the uneven distribution of doctors (Figure 16), with access challenges exacerbated by

poor transport infrastructure. The government sees mobile health units as a tool for increasing access to services in rural and remote areas, and in 2018, eight mobile cervical cancer screening units were provided as part of a project financed by the World Bank.

⁵: People without income who are not registered for social benefits, which would grant them SHI cover.

Figure 16. The uneven distribution of doctors exacerbates access issues



Source: Eurostat Database.

5.3. Resilience⁶

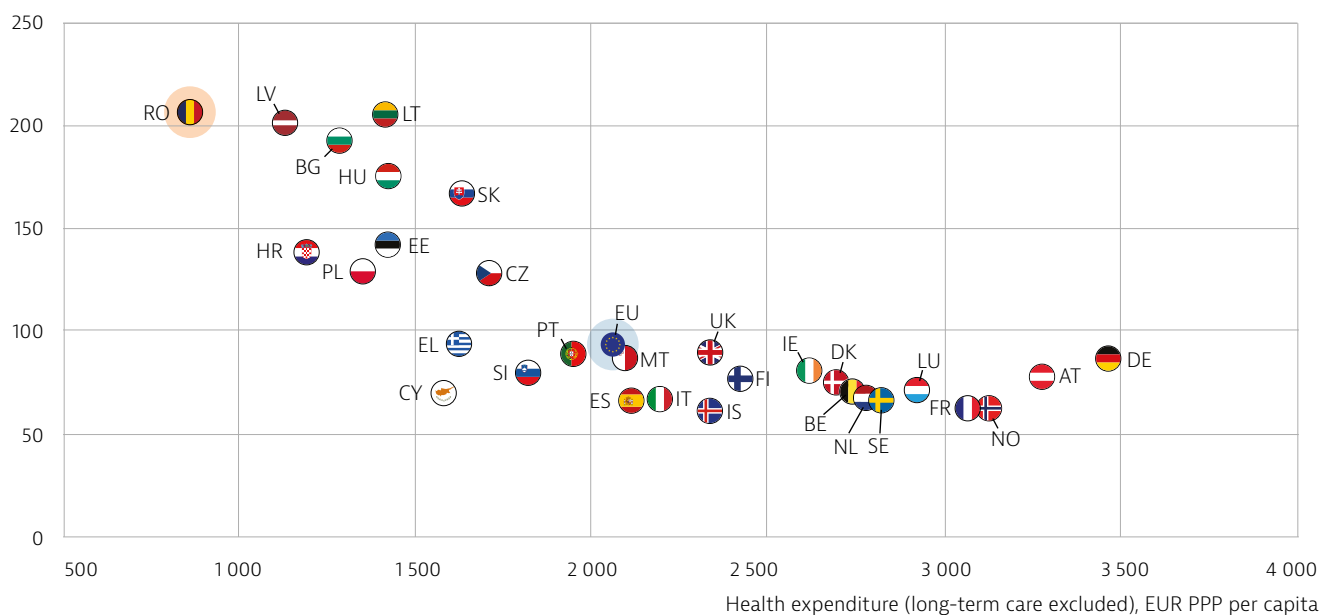
Lack of financial resources and demographic challenges jeopardise health system sustainability

Romania spends less on health than any other country in the EU (Section 4). Increasing health spending, if used efficiently, could improve access to timely and effective care, which could in turn reduce mortality from treatable causes (Figure 17).

SHI contributions are the main source of financing, but a vast range of exemptions means that only a quarter of the total eligible population actually contribute to the scheme (European Commission, 2019b). Addressing this would increase the financing base and strengthen the system. Various measures have been taken over the years to reduce the number of exemptions and increase contribution rates, but the persistently small proportion of the population paying in means that the system is chronically underfunded.

Figure 17. Low health expenditure is associated with avoidable deaths from treatable causes

Treatable mortality per 100 000 population



Source: Eurostat Database; OECD Health Statistics 2019.

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

Other trends jeopardise the long-term sustainability of the system, including the ageing of the population (which increases health care demand and shrinks the resource base) and outward migration of people of working-age (which reduces contributions and further shrinks the resource base). Outward migration is forecast to be very high in the coming years (Iftimoaei & Baci, 2018). These two structural changes both tend to further restrict the already limited resources available to the health system. The total economic dependency ratio, i.e. the relationship between the total inactive population and employment, has increased to 180 % in 2017 compared to 130 % in 2016, and is the highest in the EU. At the same time, public expenditure on health is expected to increase from 4.3 % of GDP in 2016 to 5.2 % in 2020, in line with increases in the EU average (6.8 % to 7.7 %). In addition, public spending on long-term care is expected to increase from only 0.3 % of GDP in 2016 to 0.6 % in 2020, which is low by the EU standards, where it is forecast to grow from 1.6 % to 2.7 % (European Commission-EPC, 2018).

In 2017, the newly elected government increased the health budget by a hefty 23.5 % (although it is not yet visible in public statistics). This is intended to address existing health system challenges, including boosting retention rates for health workers (see below), fully fund national health programmes, and provide better access to medicines (see Section 5.2). These objectives are also aligned with the National Health Strategy 2014-20 goals of increasing the volume of services provided in outpatient (ambulatory) and community care settings, rationalising the use of hospital services, and supporting the long-term sustainability of the system.

In response to the shortage of health professionals salaries are increasing

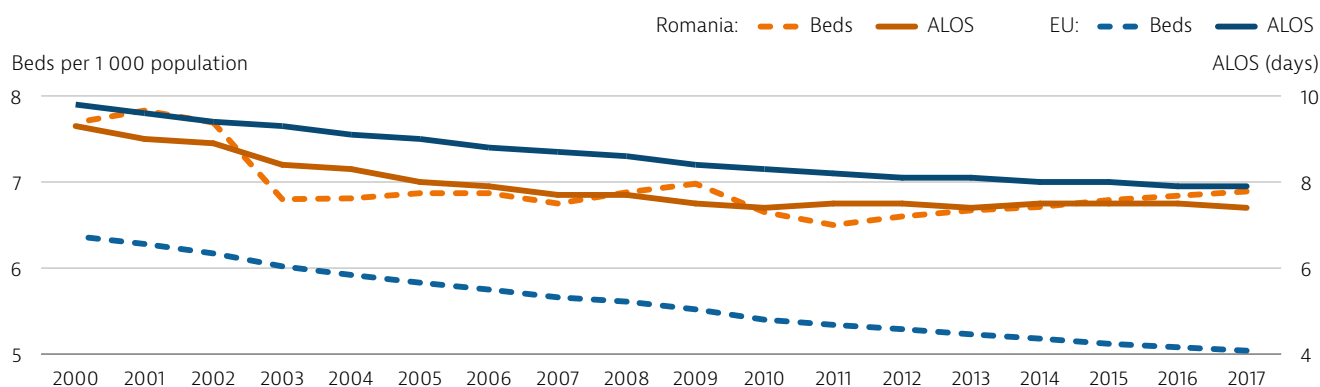
Romania is facing a shortage of health professionals (Section 4). Among doctors, shortages are especially severe for GPs – a phenomenon linked to poor pay and

working conditions, as well as to prevailing negative attitudes within the medical profession towards the role of GPs. Measures have mainly been taken to increase the number of health professionals in public (hospital) facilities, countering emigration and improving retention rates. The government began with modest salary increases in 2015 and 2016, and pledged further incremental improvements in working conditions by 2022. Pressure from strikes in 2017 accelerated doctor salary increases to the level originally planned for 2022. Thus, in March 2018, the net salary for a junior doctor increased by some 160 % (from some EUR 344 to EUR 902 per month) and the net salary of a senior doctor rose by 130 % (from EUR 913 to EUR 2112). However, salary increases only benefited doctors employed in public hospitals while GPs, whose incomes are determined by contracts with the DHIHs and patient charges, were excluded. Other measures to improve working conditions, such as expanding access to modern equipment, are being implemented with support from European Structural and Investment Funds.

Shifting care away from hospitals will help to improve efficiency and sustainability

The very high hospital discharge rate and low numbers of doctor consultations outside hospitals are evidence of over-utilisation of specialised inpatient care and under-use of primary and community care (Figure 10 and Section 4). Patients in Romania often bypass the primary care setting and present directly to hospital emergency departments or hospital specialists, even for minor health problems. Initiatives to bolster primary care, combined with hospital bed closures, should help to tackle this source of inefficiency. Although the number of acute care beds has decreased by 10 % over the last two decades, their number is still high, at 6.9 per 1 000 population in 2017 – well above the EU average of 5 per 1 000 population (Figure 18).

Figure 18. Hospital bed numbers have been falling but remain among the highest in the EU



Source: Eurostat Database.

To increase the efficiency of the health system, the use of day surgery for selected procedures in Romania is also being expanded. However, there is scope for greater utilisation for some procedures: while the share of tonsillectomies performed in day surgery in Romania is the same as the EU average, only 32 % of cataract surgeries were performed in an outpatient setting in 2016, one of the lowest percentages in the EU (Figure 19).

Increasing the integration of services has become a policy focus

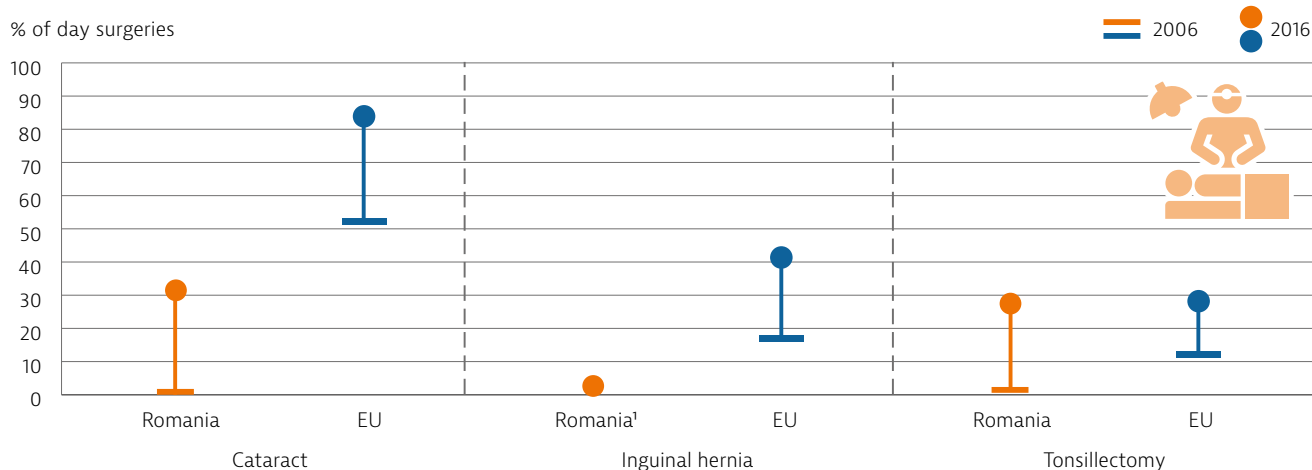
Poor integration is also recognised as hampering efficiency, with most specialised health care services delivered in siloes that are ill-suited to treating multimorbidity or chronic conditions. The lack of integration extends to the links between health and other services. The National Health Strategy 2014-20 seeks to address some of these issues by developing integrated community health centres. The inter-institutional Collaboration Protocol (approved July 2017) is envisaged as a tool that will use systematic population needs assessment to create appropriate integrated service packages (incorporating social, health, education, employment, and housing services). Linking EU Structural Funds to the reorganisation of health care provision has provided an impetus for the implementation of these plans, and the relevant legislation was passed in 2017.

Stability and coordination have been major challenges for the reform process

While plans for reforming health care have been stepped up in recent years, the process has been perceived by patients and health care professionals as fragmented and poorly coordinated. In particular, stakeholders have seen policies implemented as having focused excessively on addressing financial issues, at the expense of long-term performance. Stability in governance has also been a challenge: since 2009, there have been 15 ministers of health and 10 presidents of the NHIH, undermining continuity and leading to fragmentation and reform paralysis.

It is particularly difficult to assess whether government objectives are being met because the health system's performance is not generally evaluated. Current information systems do not allow health priorities to be identified or tracked, nor do they support the rapid evaluation of needs or the provision of feedback to decision makers. International surveys then serve as a proxy for assessment, yet only for some specific performance dimensions.

Figure 19. Day surgery is not common in Romania



Note: 1. No data available for Romania for 2006.

Source: OECD Health Statistics 2018; Eurostat Database (data refer to 2006 and 2016, or nearest year).

6 Key findings

- Life expectancy in Romania is among the lowest in the EU and, although it has increased since 2000, it remains almost six years below the EU average. High preventable mortality and avoidable deaths from treatable causes indicate scope for improvement in tackling risk factors and in the effectiveness of health care services. Life expectancy at birth varies substantially by gender and education. In particular, men with the highest level of education live ten years longer than those with the lowest education.
- Behavioural risk factors are widespread and constitute a serious threat to population health. Poor nutrition and lack of physical activity are major concerns. Although adult obesity rates are among the lowest in the EU, overweight and obesity levels among children have increased significantly in recent years. Over 30 % of men smoke (but only 8 % of women), and regular smoking among teenagers is also high. Alcohol consumption is heavy, with 50 % of men engaging in binge drinking regularly. There have been no recent initiatives on alcohol and it remains to be seen if the new tobacco regulation introduced in 2016 will be effective.
- Health spending is historically low and less than in any other EU country, both in per capita terms and as a proportion of GDP (5.2 % of GDP in 2017 compared with an EU average of 9.8 %). The underfinancing of the system undermines Romania's ability to meet current population needs, which will become increasingly challenging as the population ages and the resource base shrinks.
- The limited spending is skewed towards hospital and inpatient care. This helps to explain why primary and community care remain underdeveloped. Health service inefficiencies, including the oversupply of hospital beds, underdevelopment of day surgery and poor care integration exacerbate the situation. The National Health Strategy 2014-20 and financial incentives from the EU support the delivery of services in the most cost-effective settings and aim to improve links across health care, as well as to other sectors.
- Most health spending is publicly funded (79 %), but the share of out-of-pocket expenditure (around 20 %) can be substantial, particularly for vulnerable people. Most out-of-pocket spending is on pharmaceuticals. Besides cost, the unequal distribution of health facilities and health workers poses barriers to accessing care, especially for those living in rural areas. Current gaps in population coverage for social health insurance also leave certain groups exposed, such as people without an identity card (affecting the Roma population disproportionately), people without income who are not registered for social benefits, or those in the informal economy who do not declare their incomes.
- Health workforce shortages remain critical, with the number of doctors and nurses among the lowest in Europe. In 2018, the government addressed this under an Emergency Ordinance with substantial and rapid increases in pay, which more than doubled junior doctors' salaries in public hospitals. This was a response to protests and it is hoped that improved pay will help to retain medical personnel and reduce emigration.
- Romania's health system is also challenged by governance issues. There is no systematic performance assessment, and transparency is generally lacking. There have been frequent changes in leadership, with more than a dozen health ministers over the last decade, as well as frequent changes in the leadership of the National Health Insurance House. This undermines stability, coordination and the progress of reforms.



Key Sources

Vlădescu C et al. (2016), *Romania: Health System Review. Health Systems in Transition*, 18(4): 1–170.

OECD/EU (2018), *Health at a Glance: Europe 2018 – State of Health in the EU Cycle*, OECD Publishing, Paris, <https://www.oecd.org/health/health-at-a-glance-europe-23056088.htm>

References

Council of the European Union (2019), *Council Recommendation on the 2019 National Reform Programme of Romania*, <http://data.consilium.europa.eu/doc/document/ST-10176-2019-INIT/en/pdf>

ECDC (2018), *Surveillance of antimicrobial resistance in Europe*, Annual Report of the European Antimicrobial Resistance Surveillance Network (EARS-Net) 2017. Stockholm, <https://ecdc.europa.eu/en/publications-data/surveillance-antimicrobial-resistance-europe-2017>

European Commission (2018), *The ESPN Report 'Inequalities in access to health care' Synthesis Report*. Brussels, https://ec.europa.eu/social/main.jsp?pager.offset=25&advSearchKey=ESPNhc_2018&mode=advancedSubmit&catId=22&policyArea=0&policyAreaSub=0&country=0&year=0

European Commission (2019a), *Country Report Romania 2019*. 2019 European Semester. Brussels, https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-romania_en.pdf

European Commission (2019b), *Joint report on health care and long-term care systems and fiscal sustainability – Country documents 2019 update*. Institutional Paper 105. Brussels, https://ec.europa.eu/info/sites/info/files/economy-finance/ip105_en.pdf

European Commission (DG ECFIN)-EPC (AWG) (2018), *The 2018 Ageing Report – Economic and budgetary projections for the EU Member States (2016–2070)*, Institutional Paper 079. May 2018. Brussels.

Iftimoaei C, Baciuc I C (2018), *Statistical analysis of external migration after Romania's accession to the European Union*. Romanian Statistics Review, 12/2018, National Institute of Statistics, Bucharest.

Rechel B, Richardson E, McKee M, eds. (2018), *The organization and delivery of vaccination services in the European Union*. European Observatory on Health Systems and Policies and European Commission, Brussels, http://www.euro.who.int/_data/assets/pdf_file/0008/386684/vaccination-report-eng.pdf?ua=1

Country abbreviations

Austria	AT	Denmark	DK	Hungary	HU	Luxembourg	LU	Romania	RO
Belgium	BE	Estonia	EE	Iceland	IS	Malta	MT	Slovakia	SK
Bulgaria	BG	Finland	FI	Ireland	IE	Netherlands	NL	Slovenia	SI
Croatia	HR	France	FR	Italy	IT	Norway	NO	Spain	ES
Cyprus	CY	Germany	DE	Latvia	LV	Poland	PL	Sweden	SE
Czechia	CZ	Greece	EL	Lithuania	LT	Portugal	PT	United Kingdom	UK

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Country Health Profile 2019

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