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. For the first time since the series began, the 2023 edition of the Country Health Profiles introduces a special section dedicated to mental health.

The profiles are the joint work of the OECD and the European Observatory on Health Systems and Policies, in co-operation 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 Systems Performance Assessment (HSPA).

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 27 Member States unless otherwise noted. These EU averages do not include Iceland and Norway.

This profile was finalised in September 2023, based on data that were accessible as of the first half of September 2023.

Demographic and socioeconomic context in Romania, 2022

Demographic factors

<table>
<thead>
<tr>
<th></th>
<th>Romania</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population size</td>
<td>19,042,455</td>
<td>446,735,291</td>
</tr>
<tr>
<td>Share of population over age 65 (%)</td>
<td>19.5</td>
<td>21.1</td>
</tr>
<tr>
<td>Fertility rate¹ (2021)</td>
<td>1.8</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Socioeconomic factors

<table>
<thead>
<tr>
<th></th>
<th>Romania</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita (EUR PPP²)</td>
<td>27,073</td>
<td>35,219</td>
</tr>
<tr>
<td>Relative poverty rate³ (%)</td>
<td>21.2</td>
<td>16.5</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>5.6</td>
<td>6.2</td>
</tr>
</tbody>
</table>

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.

Disclaimers:

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Member countries of the OECD. The views and opinions expressed in European Observatory on Health Systems and Policies publications do not necessarily represent the official policy of the Participating Organizations.

This work was produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

The names and representation of countries and territories used in this joint publication follow the practice of WHO.

Territorial disclaimers applicable to the OECD: This document, as well as any data and map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Additional specific disclaimers are available here.

Territorial disclaimers applicable to the WHO: The designations employed and the presentation of this material do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

© OECD and World Health Organization (acting as the host organisation for, and secretariat of, the European Observatory on Health Systems and Policies) 2023.
1 Highlights

Health Status
In 2022, average life expectancy at birth in Romania was 75.3 years (71.5 years for men and 79.3 years for women). Life expectancy grew slightly more quickly than the EU average between 2010 and 2019. The COVID-19 pandemic caused life expectancy to drop by 0.3 years overall, between 2019 and 2022 – a level that is half the EU average.

Risk Factors
Daily smoking rates for Romanian adults are on a par with the EU average: about one in five people were regular smokers in 2019. However, some 35 % of the population reported heavy drinking at least once per month in 2019, which is nearly double the EU average. At 11 %, obesity levels among adults are the lowest in the EU.

Health System
At EUR 1 663, total per capita health spending in Romania was less than half the EU average in 2021. Current health expenditure accounted for 6.5 % of GDP in Romania, nearly 80 % of which was from public sources. Private sources of health spending are dominated by out-of-pocket payments, predominantly for outpatient pharmaceuticals and dental care.

Effectiveness
Both treatable and preventable mortality rates in Romania are well above the EU averages. Mortality from treatable causes is driven by ischaemic heart disease, pneumonia and stroke. Preventable mortality rates increased with the categorisation of COVID-19 deaths as preventable in 2020 but is also driven by ischaemic heart disease and alcohol-related diseases.

Accessibility
According to EU-SILC data, unmet medical care needs in Romania (4.9 % of the population) are more than double the EU average (2.2 %). A high share of Romanians on low incomes report unmet needs, at nearly three times the rate of low-income households across the EU. The main driver of unmet needs is costs, although workforce shortages also reduce the availability of care.

Mental Health
Despite having one of the lowest prevalence rates in the EU, mental health issues may be more common than reported in Romania due to under-diagnosis, stigma and other barriers to accessing mental healthcare services. The two most frequently diagnosed mental health conditions are anxiety and depressive disorders. During the COVID-19 pandemic, Romanians living in households that reported financial difficulties were at double the risk of depression compared to those who did not report such difficulties.
2 Health in Romania

Life expectancy declined significantly due to COVID-19, and is far below the EU average

Life expectancy at birth in Romania was increasing rapidly until 2019, more quickly than the EU average between 2010 and 2019. The pandemic resulted in a steep drop of 2.8 years (to 72.8 years) between 2019 and 2021. In 2022, life expectancy at birth recovered in Romania and was just 0.3 years lower than its pre-pandemic level, at 75.3 years. This compares with an overall, average loss of life expectancy of 0.6 years across the EU during the pandemic years. Nevertheless, life expectancy at birth in Romania was the third lowest among Member States in 2022, and 5.4 years below the EU average (Figure 1).

![Figure 1. Life expectancy in Romania was the third lowest in the EU in 2022](image)

Notes: The EU average is weighted. The 2022 data are provisional estimates from Eurostat that may be different from national data and may be subject to revision. Data for Ireland refer to 2021.
Source: Eurostat Database.

In 2022, life expectancy at birth in Romania was 71.5 years for men and 79.3 years for women – a gender gap greater than the EU average (men live 7.8 years less than women, compared to an EU gender gap of 5.4 years). This is associated with greater exposure to risk factors among men, such as smoking and heavy drinking (see Section 3).

More than half of all deaths in Romania in 2020 were from cardiovascular diseases

Ischaemic heart disease was the leading cause of mortality in Romania in 2020, accounting for about 19% of all deaths, while mortality from stroke accounted for about 14% of all deaths (Figure 2). Mortality from all types of cancer accounted for one in six deaths (16.7%). Among deaths attributed to cancer, lung cancer is the most frequent cause of death, followed by colorectal and breast cancer. In the first year of the pandemic, Romania reported over 18 000 confirmed deaths due to COVID-19, amounting to 5.8 % of all deaths. Three quarters of these deaths occurred among people aged 65 and over.

Excess mortality provides a more comprehensive account of the pandemic’s mortality impact. Just over 119 000 excess deaths occurred in Romania between 2020 and 2022, accounting for 15.3 % of deaths above their historic baseline. This is higher than the 12.6 % excess mortality rate observed on average across EU countries over the period. Like most other central-eastern EU countries, Romania experienced a large increase in excess mortality during 2021, largely due to a peak in COVID-19 deaths.

The number of excess deaths in Romania in 2020 and 2021 was significantly higher than reported COVID-19 deaths (Figure 3). This suggests that there may have been underreporting of COVID-19...
Nearly three quarters of Romanians consider themselves to be in good health

In 2022, 73.3 % of Romanians reported their self-perceived health as very good or good, which is much higher than the EU average (68.0 %). While self-perceived good health in Romania follows the same trends as elsewhere in the EU – the rate is higher among men (77.7 %) than women (69.3 %), and among higher-income (80.4 %) than lower income (66.9 %) households – in Romania self-perceived health is consistently higher than the EU averages for both men and women, and across income groups.

Older people in Romania have shorter lifespans and fewer healthy life years than the EU average

As in other EU countries, Romania has experienced a demographic shift towards an older population over the past two decades, with the proportion of people aged 65 and over rising from 13 % of the total population in 2000 to 19 % in 2020. This share is projected to stand at 31 % of the population in 2050.

In 2020, Romanian women at age 65 could expect to live another 17.7 years (over 3 years below the EU average), while men could expect to live another 13.4 years (4 years below the EU average). The gaps in healthy life years at age 65 (defined as disability-free life expectancy) are also pronounced, particularly for women, because Romanian women tend to live a smaller share of

---

**Figure 2. Cardiovascular diseases are the main cause of mortality, but COVID-19 accounted for a large number of deaths in 2020**

Note: COPD refers to chronic obstructive pulmonary disease.
Source: Eurostat Database (data refer to 2020).

Deaths, increased risk of dying from other causes following infection with the virus (including after the end of physical distancing measures) or delayed care due to disruptions in health services (i.e. diagnostics and therapeutic pathways) in 2020 and 2021 (Vlădescu, Ciutan & Rafila, 2022). COVID-19 vaccination rates in Romania were also among the lowest in the EU (see Section 5.3).

**Figure 3. Excess mortality in Romania exceeded COVID-19 mortality, suggesting under-diagnosis**

Note: Excess mortality is defined as the number of deaths from all causes above the average annual number of deaths over the previous five years before the pandemic (2015-19).
Sources: ECDC (for COVID-19 mortality) and OECD Health Statistics based on Eurostat data (for excess mortality).
their remaining years of life free from activity limitations compared to the EU average (Figure 4). While the proportion of Romanian women aged 65 and over who report having multiple chronic conditions is about the same as the EU average, a greater proportion report limitations in daily activities such as dressing and showering (36% in Romania compared to 30% across the EU).

**Figure 4. Healthy life expectancy at age 65 in Romania is much shorter than the EU average**

The burden of cancer is considerable

According to estimates from the Joint Research Centre based on incidence trends from previous years, more than 100,000 new cancer cases were expected in Romania in 2022. Cancer incidence rates were expected to be lower than the EU averages for both men and women. The main cancer sites expected among men were prostate (20%), lung (15%) and colorectal (15%) cancer, while among women breast cancer was expected to be the leading cancer site (28%), followed by colorectal (12%) and cervical (8%) cancer (Figure 5).

**Proportion of people aged 65 and over with multiple chronic conditions**

**Limitations in daily activities among people aged 65 and over**

*Sources: Eurostat Database (for life expectancy and healthy life years) and SHARE survey wave 8 (for multiple chronic conditions and limitations in daily activities). All the data refer to 2020.*
**3 Risk factors**

**Behavioural and environmental risk factors account for more than half of all deaths**

Around 46% of all deaths recorded in Romania in 2019 could be attributed to behavioural risk factors such as tobacco smoking, dietary risks, alcohol consumption and low physical activity. Dietary risks, including high levels of sugar and salt consumption along with low fruit and vegetable consumption, were connected to 25% of all deaths in 2019 – the third highest proportion in the EU (Figure 6). Tobacco use (including second-hand smoking) led to an estimated 17% of deaths; 7% were connected to alcohol consumption and some 2% related to low levels of physical activity. All of these are on a par with averages for the EU. However, air pollution – in the form of ozone and fine particulate matter (PM$_{2.5}$) exposure – contributed to roughly 7% of deaths in 2019 (over 17,000 deaths), which is much higher than the EU average (4%).

**Figure 6. Poor diet, tobacco smoking and air pollution are major contributors to mortality in Romania**

---

Notes: The overall number of deaths related to these risk factors is lower than the sum of each one taken individually, because the same death can be attributed to more than one risk factor. Dietary risks include 14 components such as low fruit and vegetable intake, and high sugar-sweetened beverages consumption. Air pollution refers to exposure to PM$_{2.5}$ and ozone. Source: IHME (2020), Global Health Data Exchange (estimates refer to 2019).
Smoking is a concern for both adults and adolescents

Despite a slight reduction in smoking rates since 2008, roughly one in five adults still smoked daily in 2019 – a proportion on a par with the EU average (Figure 7). However, there is a large gender gap in smoking: smoking rates among men (30.6 %) are nearly four times higher than those among women (7.5 %). Tobacco consumption among adolescents is a major concern, with 25 % of 15-year-olds reporting that they had smoked during the past month in 2022 – higher than the EU average (18 %). Adolescent smoking rates have remained unchanged since 2014 and, unlike adults, there is little measured difference between boys and girls. Moreover, ESPAD survey data from 2019 found that 40 % of Romanian 15-16-year-olds had smoked cigarettes or used e-cigarettes in the past 30 days, which was the highest among EU countries.

Figure 7. Romania fares worse than most EU countries on many risk factors

Excessive alcohol consumption is a major problem among Romanian men

Adult annual alcohol consumption in Romania is high, at 10 litres per capita in 2019. Moreover, on average, more than one third of adults in Romania reported engaging in heavy drinking at least once a month in 2019 – the second highest rate in the EU after Denmark (35.0 % compared to the EU average of 18.5 %). Notably, there is a strong gender gap in heavy drinking, with more than half of men (53.1 %) but fewer than one in five women (18.0 %) reporting this behaviour in 2019. In contrast, rates of repeated drunkenness among adolescents are relatively low in Romania, at 17 % compared to an EU average of 18 %.

Adult obesity rates are the lowest in the EU

Romania has the lowest proportion of adults consuming the recommended five servings of fruit and vegetables daily in the EU: only 2.4 % reported this in 2019 (down from 3.5 % in 2014).

Similarly, only 8 % of Romanian adults reported engaging in at least 2.5 hours of weekly physical activity as recommended by WHO, which is also the lowest percentage among all EU countries. The Eurobarometer survey found that in 2022 only one in five Romanian adults (20 %) exercise with at least some regularity; the EU average was 38 %. Nevertheless, Romania’s adult obesity rate (based on self-reported height and weight) is the lowest in the EU: only 10.5 % of adults were obese in 2019 compared to an EU average of 16 %. In contrast, the rate of overweight in adolescents has grown steadily over the last two decades, with one in four 15-year-olds self-reporting being overweight in 2022, which is above the EU average. There is also a gender gap in this metric: one in three 15-year-old boys reported being overweight compared to one in five girls.

1 Heavy drinking is defined as consuming six or more alcoholic drinks on a single occasion for adults.
## 4 The health system

### Romania’s social health insurance is funded by payroll contributions, with exemptions for non-working groups

Romania has a compulsory social health insurance (SHI) system governed by the Ministry of Health. SHI payroll contributions are paid by working residents, while unemployed people, pensioners and those receiving social benefits, among others, are exempt from making contributions. Pregnant women, people with disabilities or chronic conditions, children and students younger than 26, and several other categories are also exempt from making contributions: cover is financed from the SHI contributions of the working population. In 2020, only about 36% of those covered paid contributions (Scîntee, Mosca & Vlădescu, 2022). The 41 districts and the capital (Bucharest) are responsible for providing and paying for most care, although some hospitals are directly supervised by the Ministry of Health.

While 12% of the population were estimated to be uninsured in 2020 (see Section 5.2), currently they are entitled to a minimum benefits package that covers life-threatening emergencies, treatment for infectious diseases and care during pregnancy. Coverage for some primary care services was recently added. The costs of treating uninsured people are covered from the state budget.

### Healthcare financing increased during the COVID-19 pandemic

Romania spent EUR 1,663 per capita (adjusted for differences in purchasing power) on health in 2021 – less than half the EU average (EUR 4,030), and the lowest rate in the EU (Figure 8). This translates to 6.5% of GDP. Current health expenditure experienced sustained increases in both 2020 (6.5%) and 2021 (10.2%) due to the costs of dealing with the COVID-19 pandemic.

The public share of health spending remained high (78% in 2021), but out-of-pocket (OOP) spending as a share of total health expenditure was 21% (well above the EU average of 15%), reflecting the significant level of cost sharing for health services (see Section 5.2). In 2022, 18% of Romanians reported having to give an extra payment or a valuable gift to a nurse or a doctor, or having to donate to the hospital (not including official fees) when visiting a public healthcare setting; this was the highest rate in the EU, where the average was 4% (EU, 2022).

---

**Figure 8. Health spending per capita in Romania remains the lowest among EU countries**

EUR PPP per capita

- Government and compulsory schemes
- Voluntary schemes and household out-of-pocket

![Graph showing health spending per capita in Romania](image)

**Note:** The EU average is weighted.

**Source:** OECD Health Statistics 2023 (data refer to 2021, except Malta (2020)).
Relatively high spending on inpatient care comes at the detriment of other functions – particularly outpatient care

Inpatient care accounts for the largest share of health spending in Romania in 2021 (44%); this is the highest proportion among EU countries, and the EU average was 28% (Figure 9). This high spending on inpatient care contrasts with relatively low spending on other functions: the proportion of financing dedicated to outpatient care (18%) is the lowest in the EU and far below the average of 29%, even though strengthening primary care has been on the policy agenda since the 1990s. Furthermore, a quarter of health spending goes towards pharmaceuticals, which are predominantly paid for out of pocket.

Figure 9. Romania spends less than the EU average in all areas

Notes: 1. Includes curative-rehabilitative care in hospital and other settings; 2. Includes only the outpatient market; 3. Includes home care and ancillary services (e.g. patient transportation); 4. Includes only the health component; 5. Includes health system governance and administration and other spending; 6. Includes only spending for organised prevention programmes. The EU average is weighted.
Source: OECD Health Statistics 2023 (data refer to 2021, except Malta (2020)).

Migration of healthcare professionals to other countries has resulted in health workforce shortages

Despite increases in the health workforce over the last decade, the numbers of doctors and nurses per 1,000 population remain below the EU averages (Figure 10). In 2021, there were 3.5 practising doctors per 1,000 population – a rate among the lowest in the EU (the EU average was 4.1 per 1,000). In the same year, the numbers of nurses (8.0 per 1,000 population) was also slightly below the EU average (8.5 per 1,000). Many health workers emigrate, and shortages in Romania have led to an overburdened workforce and limited the availability of care (see Section 5.2).

Patients tend to seek hospital care directly, bypassing primary care

In 2021, general practitioners (GPs) comprised 18.5% of physicians in Romania – slightly below the EU average of 20.4%. GPs are gatekeepers to specialist care, and provide primary care mainly in (private) solo practices contracted by the district health insurance funds. For less complex services, they are often only able to issue a referral and are not permitted to provide treatment themselves, while for certain conditions patients can access specialists directly. Thus, it is also common for patients to seek care directly at a hospital, even for non-urgent conditions, as this is widely viewed as the quickest and/or easiest way to access specialist care. Overall, primary care continues to be underutilised, while there is overutilisation of hospital services (see Section 5.3). The health system remains very hospital-centric, with relatively high spending on hospitals and very high bed numbers (7.2 per 1,000 population in 2021) compared to the EU average (4.8 per 1,000).

The Programme for Government 2021-24 commits to enhancing primary and outpatient healthcare provision by adding new services that GPs are allowed to provide, and incentivising them to offer more preventive and home care services. It is also expected that GPs’ gatekeeping role will be strengthened.
5 Performance of the health system

5.1 Effectiveness

In 2020, both preventable and treatable mortality rates in Romania were the highest in the EU

The rates of both preventable and treatable mortality increased sharply in Romania in 2020, coinciding with the outbreak of the COVID-19 pandemic, after a decade-long trend of slow but gradual improvements. Preventable mortality is seen as an indicator of the effectiveness of public health and prevention policies, while mortality due to treatable causes is considered an indicator of the effectiveness of the health system. In 2020, there were 358 preventable deaths per 100 000 population, which was almost double the EU average (180 per 100 000). The main causes were COVID-19, as well as ischaemic heart disease and alcohol-related diseases, which drove preventable mortality before the pandemic. Deaths due to treatable causes stood at 235 per 100 000 population, which is 2.5 times the EU average of 92 per 100 000 (Figure 11). The main causes of treatable death in Romania were ischaemic heart disease, pneumonia and stroke.

Cancer mortality is above the EU average, and screening services are not comprehensive

Lung and colorectal cancers are the two leading causes of preventable cancer deaths in Romania. Mortality rates for bladder, pancreatic, prostate, breast, liver and colorectal cancers increased between 2011 and 2019, while a slight decrease was seen for the lung cancer death rate (OECD, 2023). Data on cancer care overall, including its quality, are lacking in Romania – most of the active cancer registries in the country do not collect data on a regular basis, making it difficult to identify screening coverage gaps and inequalities among population groups, and to collect quality and safety metrics. Funding from the national Recovery and Resilience Plan will be used to help digitalise the health sector in Romania (and the public sector in general); this should help boost the future effectiveness of cancer data gathering and analysis (see Section 5.3).
Figure 11. Ischaemic heart disease and cancers are leading causes of avoidable death in Romania

Preventable causes of mortality

<table>
<thead>
<tr>
<th>Cause</th>
<th>Rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischaemic heart diseases</td>
<td>15%</td>
</tr>
<tr>
<td>COVID-19</td>
<td>15%</td>
</tr>
<tr>
<td>Alcohol-related</td>
<td>12%</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>9%</td>
</tr>
<tr>
<td>Others</td>
<td>28%</td>
</tr>
</tbody>
</table>

Treatable causes of mortality

<table>
<thead>
<tr>
<th>Cause</th>
<th>Rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonia</td>
<td>16%</td>
</tr>
<tr>
<td>Stroke</td>
<td>14%</td>
</tr>
<tr>
<td>Hypertensive diseases</td>
<td>11%</td>
</tr>
<tr>
<td>Others</td>
<td>28%</td>
</tr>
<tr>
<td>Ischaemic heart diseases</td>
<td>22%</td>
</tr>
</tbody>
</table>

Notes: Preventable mortality is defined as death that can be mainly avoided through public health and primary prevention interventions. Treatable (or amenable) mortality is defined as death that can be mainly avoided through healthcare interventions, including screening and treatment. Both indicators refer to premature mortality (under age 75). The lists attribute half of all deaths from some diseases (e.g. ischaemic heart disease, stroke, diabetes and hypertension) to the preventable mortality list and the other half to treatable causes, so there is no double-counting of the same death.

Source: Eurostat Database (data refer to 2020).

Data points from the European Health Interview Survey (EHIS) in 2019 show that only 9.2% of women aged 50-69 in Romania reported attending breast cancer screening over the previous two years, while the EU average was 65.9%. Similarly, 25.3% of women aged 20-69 in Romania reported being screened for cervical cancer in the previous 24 months – below the EU average of 59.9% – while 4.3% of the Romanian population aged 50-74 reported screening for colorectal cancer, compared to the EU average of 33.4%. Romanians on higher incomes are much more likely to access cancer screening than those on lower incomes, particularly for cervical cancer screening (Figure 12).

New cancer plans are under development and aim to boost early detection

Adopted in November 2022, the National Plan for Beating Cancer aims to guarantee an integrated and multidisciplinary approach to cancer treatment, including a redesign of the patient pathway. It includes a health innovation fund to offer integrated support services (including psychological, palliative and nutrition counselling) and develop new cancer prevention strategies. The Plan's implementation norms are being developed and it is due to be actioned between 2023 and 2026.

The effectiveness of treatment for stroke and heart attack in Romania appears high

In 2022, despite being a leading cause of preventable and treatable mortality in Romania, 30-day mortality following hospital admission for stroke stood at 5.4 per 100 patients aged 45 and over. This was a relatively low rate among countries with available data, and was well below the most recent EU average of 14.6 per 100 patients. Similarly, for heart attack (acute myocardial infarction), the 30-day mortality rate...
is lower in Romania (6.4 per 100 patients) than the EU average of countries with available data (10.1 per 100 patients). Thus, the high levels of treatable mortality from stroke and heart attacks may be linked to problems with accessing care (particularly outpatient care and outpatient pharmaceuticals) rather than shortcomings in the quality of care delivered in hospital.

Influenza vaccination coverage has increased, but remain below the EU average

In 2021, 34.8% of the population aged 65 and over received an influenza vaccination. This was still well below the EU average of 50.8%, but it was more than double the Romanian coverage rate for the target population in 2018 (15.9%). As of October 2022, to improve access, community pharmacists in Romania are now permitted to administer influenza vaccines. Prior to this, GPs were the only practitioners able to immunise in Romania. Comparable data on diphtheria, tetanus and pertussis and on human papillomavirus vaccinations are not available for Romania.

Hospital admissions for chronic conditions dropped sharply during the COVID-19 pandemic

Romania has among the highest avoidable hospital admission rates for diabetes in the EU, at 169.6 admissions per 100,000 population aged 15 and over in 2021. This is well above the average of 106.6 per 100,000 for the EU countries with available data, although the gap closed significantly during the COVID-19 pandemic, mainly due to disruptions to hospitals’ capacities to provide acute care during this period and changes to patient healthcare-seeking behaviour.

Prior to the pandemic in 2019, there were 351.6 admissions for diabetes per 100,000 population in Romania – the highest rate in the EU and more than double the EU average (Figure 13). The decrease in avoidable admissions for patients with asthma and chronic obstructive pulmonary disease (COPD) was very steep Romania, falling below the EU average in 2019 for the first time in recent years. Given the pandemic’s impact on hospital activity, declines in hospital admissions for chronic conditions during the COVID-19 pandemic cannot be interpreted as signs of improved accessibility or quality of care in outpatient settings.

Before the pandemic, high avoidable hospital admission rates were partly explained by weak gatekeeping in primary care (see Section 4), but also by the shortage of GPs, which limits access to primary care. As of 2019, 1,098 localities in Romania had an insufficient number of GPs, while 424 localities had none. To reduce avoidable admissions, since 2022, GPs with a main practice in a district where physical infrastructure or human resources limitations are reducing access to primary care have been permitted to open additional branch healthcare facilities.
5.2 Accessibility

More than one in ten Romanians lack social health insurance cover

Despite the SHI system being compulsory, approximately 12% of the population remained uninsured in 2020 – particularly those in rural areas (Scîntee, Mosca & Viâdescu, 2022). Uninsured people include those working and living abroad, those working informally, unemployed people who are not registered for social welfare, and those lacking personal identification cards (an issue more prominent among marginalised groups, such as Roma citizens). Estimating the real coverage rate is difficult because Romanians working and living abroad (who also have personal identification cards) are officially still counted as permanent residents, but they are officially uninsured because they do not make SHI contributions (Rebeleanu & Toma, 2017).

Reported unmet needs in Romania are more than double the EU average

According to the annual EU-SILC survey, in 2022, 4.9% of Romanians reported having unmet medical care needs due to costs, distance to travel or waiting times, with three quarters of these respondents citing cost as the main factor. The rate was just over double the EU average of 2.2% (Figure 14). However, there are wide differences by income, as just 1.8% of Romanians in the highest income quintile experienced unmet needs compared to 9.1% in the lowest quintile. A similar pattern can be seen in unmet needs for dental care, which fell from 10.9% in 2012 to 5.2% in 2022, although again with stark differences according to income.

Data from two waves of Eurofound² surveys conducted specifically during the COVID-19 pandemic show that, although rates were high, unmet needs fell between 2021 (25%) and 2022 (20%) (Eurofound, 2021; 2022). However, it is likely that the system may still need to cope with a delayed backlog of unmet needs.

The insured population in Romania are entitled to a broad package of benefits

Under the SHI system, the benefits package is comprehensive and guaranteed for the entire insured population, including those fleeing the war against Ukraine (European Commission, 2022). It includes health services (inpatient, outpatient, specialist and preventive care), pharmaceuticals and medical devices and aids.

---

² The data from the Eurofound survey are not comparable to those from the EU-SILC survey because of differences in methodologies.
While inpatient and outpatient services are publicly financed, dental care is nearly fully financed privately

Public financing covered 99 % of inpatient care expenditure in Romania in 2021, while the EU average was 91 % (Figure 15). However, 75 % of outpatient medical care was funded from public sources, while the EU average was 78 %, and under half (45 %) of pharmaceutical spending in Romania was from public sources in 2021 – below the EU average of 59 %. Dental care has very little public financing in Romania, as the benefits package only fully covers children, veterans and those with chronic conditions: 5 % of dental care was publicly funded in 2021 compared to the EU average of 34 %. As unmet needs for dental care are highest among those on lower incomes, the burden of dental care costs is felt the hardest by this group.

**Figure 15. Levels of public financing of services are high except for dental care**

![Figure 15](image)

Notes: Outpatient medical services mainly refer to services provided by generalists and specialists in the outpatient sector. Pharmaceuticals include prescribed and over-the-counter medicines and medical non-durables. Therapeutic appliances refer to vision products, hearing aids, wheelchairs and other medical devices.


Out-of-pocket payments are above the EU average, but have been stable over time

OOP payments by households represented 21 % of current health expenditure in 2021, compared to 15 % across the EU. Nearly two thirds of OOP spending in 2021 was on pharmaceuticals (Figure 16). While many medicines are fully covered by SHI according to a positive list of medicines included in the scheme, the rest are only covered in part. For these, patients make copayments of 10 % of the cost price for generics, 50 % for expensive generics and branded medicines, and 80 % for medicines with a low health technology score.

In 2023, the government increased the income threshold at which pensioners make lower copayments for medicines, meaning that pensioners only pay 10 % of the cost price of expensive generics and branded medicines, while the state budget via the Ministry of Health, covers another 40 %. In 2017, this applied to any pensioner with an income of up to EUR 200 per month, but the threshold has gradually been raised, and in 2023 it applies to those with monthly incomes of up to EUR 321. The threshold is not indexed; rather, each rise is decided and approved independently by the government.

**Figure 16. Out-of-pocket spending in Romania is dominated by pharmaceuticals**

![Figure 16](image)

Notes: VHI refers to voluntary health insurance, which also includes other voluntary prepayment schemes. The EU average is weighted.

Sources: OECD Health Statistics 2023; Eurostat Database (data refer to 2021).
Expanding coverage of all medical services and goods in Romania – but particularly outpatient pharmaceuticals – is important to protect the lowest-income households from catastrophic spending. According to the most recent data available from the WHO Barcelona Office for Health Systems Financing, in 2015, 12.5% of Romanian households experienced catastrophic health expenditure, and this was concentrated among the poorest households.

**Teleconsultations improved access to primary care during the COVID-19 pandemic**

The low availability of GPs and other healthcare workers, along with more limited infrastructure in rural parts of Romania, affects access to primary care services for much of the population (see Section 4). In some cases, this is further compounded by poor transport infrastructure. Teleconsultations offer one solution for guaranteeing access for underserved populations. Indeed, the percentage of adults who reported having had a teleconsultation since the beginning of the pandemic rose by roughly a quarter between summer 2020 and winter 2021, according to Eurofound (2021; 2022) survey data (Figure 17).

**Figure 17. Use of teleconsultations in Romania increased during the COVID-19 pandemic**

![Graph showing increased use of teleconsultations in Romania](image)

Notes: The EU average is weighted. Low reliability for 2021 data from Cyprus, Latvia, Luxembourg (and 2020 data) and Malta because of low sample size. Source: Eurofound (2022).

5.3 **Resilience**

The COVID-19 pandemic has proved to be the most significant disruption to health systems in recent decades. It has shed light on the vulnerabilities and challenges within countries’ emergency preparedness strategies and on their ability to provide healthcare services to their populations. In response to the enduring effects of the pandemic – as well as other recent crises, such as cost-of-living pressures and the impact of conflicts like the war against Ukraine – countries are implementing policies to mitigate the ongoing impacts on service delivery, invest in health system recovery and resilience, improve critical areas of the health sector, and fortify their preparedness for future shocks.

Hospital admissions in Romania dropped significantly during the COVID-19 pandemic

The Romanian healthcare system has emphasised hospital care during the last decade and up to the outbreak of the pandemic, had rising bed capacity and hospital discharge rates (Figure 18). Discharge rates in Romania during the COVID-19 pandemic fell by more than the EU average. This sudden drop not only reduced bed occupancy rates – which fell from 65% occupancy in 2019 to 45.3% in 2020 in Romania – but also dramatically disrupted provision of services (INSP, 2021). For example, during the first six months of the pandemic, paediatric emergency admissions dropped three-fold compared to 2019: 7,291 children were admitted in 2020 compared to 20,117 children in 2019. This resulted in unmet needs and undermined quality of care, leading to an increase in major emergencies (Miron et al., 2022).

---

3 Catastrophic expenditure is defined as household OOP spending exceeding 40% of total household spending net of subsistence needs (i.e. food, housing and utilities).

4 In this context, health system resilience has been defined as the ability to prepare for, manage (absorb, adapt and transform) and learn from shocks (EU Expert Group on Health Systems Performance Assessment, 2020).
Limited intensive care capacity and health workforce shortages were bottlenecks in service provision during the pandemic

Despite large numbers of hospital beds in Romania, the number of intensive care beds with ventilators is low: of around 4 000 intensive care beds available prior to the pandemic, only about half were equipped with ventilators. The government invested approximately EUR 44.5 million to increase intensive care unit capacity, doubling the number of beds with ventilators through international procurement, national production and redeployment from the military.

The biggest challenge in responding to the COVID-19 pandemic was securing a sufficient health workforce (see Section 4). Health workers were redeployed from other specialties (Romania hired and trained more staff, creating 2 000 temporary jobs). Funds for bonuses and in-kind benefits were provided to incentivise health professionals. However, shortages that pre-dated the pandemic persisted and resulted in challenges in maintaining adequate staffing levels. Understaffing undermined access to services and quality of care. In some cases, patients sought inpatient procedures in private facilities, as public hospitals postponed care. Moreover, the workload of in- and outpatient physicians, particularly GPs, increased during the pandemic, leading to burnout (Stafei et al., 2021).

Digital tools introduced during the pandemic will be developed by Romania’s Recovery and Resilience Plan to facilitate service delivery

During the pandemic, new electronic information systems were created to improve the management of stretched health resources in Romania. For example, an electronic information system was set up to improve communication between laboratories, district public health authorities, GPs and patients. In inpatient settings, an electronic centralised operational coordinating centre was created by the Ministry of Health to report bed occupancy rates daily, and facilitate resource management. As in other countries, during the COVID-19 pandemic Romania also introduced new tools for provision of virtual health services (see Section 5.2). Health digitalisation has been further prioritised in the national Recovery and Resilience Plan (RRP), which dedicates EUR 470 million (14 % of the Plan) to developing an integrated digital health system, connecting over 25 000 health providers and improving telemedicine systems. Further funding is allocated to improvements from the EU Cohesion Policy programme.

COVID-19 vaccine uptake was very low, resulting in high morbidity and mortality rates throughout 2021

COVID-19 vaccination uptake in Romania was lower than in other EU countries, and during the upsurge of the fourth wave in 2021 only 30 % of the population was immunised. By the end of 2022, the vaccination rate among older adults (aged 60 and over) for the second booster was close to zero, and the lowest in the EU. Reasons for lower vaccination rates include a lack of trust in the government and its recommendations, COVID-19 fatigue, disinformation about the vaccine and the virus, and a lack of engagement with local communities and religious leaders. The result was high COVID-19 morbidity and mortality rates during 2021, despite the availability of the vaccine (Dascalu et al., 2021).
Romania’s public spending on health has sustained positive growth rates over the last decade

Growth rates in public spending on health have fluctuated since 2010, reaching very high rates in 2011 and again in 2017. Since 2015 public expenditure on health in Romania has maintained a positive growth rate, continuing throughout 2020 and 2021 as the country pumped additional funding into its pandemic response. The sustained public expenditure occurred despite a significant decline in GDP during the first year of the pandemic in 2020, compared to the previous year (Figure 19).

**Figure 19. Public spending on health in Romania has been higher than GDP growth since 2015**

![Graph showing public spending on health and GDP growth]  
Source: OECD Health Statistics 2023

Romania’s Recovery and Resilience Plan and funding under EU Cohesion Policy bring significant investments for healthcare

The RRP is a key pillar of the EU’s response to the COVID-19 crisis. In Romania, it will add EUR 14.2 billion in grants and EUR 14.9 billion in loans for investments, of which about 10 % will be dedicated to the health sector. Even though Romania has high hospital capacity, major investment (nearly 70 % of RRP funds) will be dedicated to developing public hospital infrastructure, which is rapidly deteriorating and becoming unsafe (Figure 20). Investments of about EUR 2 billion will aim to modernise hospital infrastructure to ensure patient safety and reduce the risk of care-related infections in hospitals. Other areas of investment include outpatient care infrastructure, digital health and capacity building and human resources.

The capacity building and human resources plan includes reforming health services management; developing human resources for health; and increasing integrity, reducing vulnerabilities and reducing the risk of corruption in the health system. A major initiative is the establishment of a National Institute for Health Services Management, which will be in charge of health management training at all management levels, and implementation of the Multiannual Strategy for Human Resources Development for 2022-30 to improve retention and attractiveness of the profession, and expand skill-mix solutions.

**Figure 20. The Recovery and Resilience Plan prioritises investments in hospital care**

![Diagram showing investments in hospital care]  
**RRP investments will be complemented by the rollout of the EU Cohesion Policy 2021-27 programming.** Through this, Romania is set to invest EUR 5.3 billion in the healthcare system. Over one third (37%) of this amount will be co-financed by the EU. Over EUR 3 billion from the European Regional Development Fund (ERDF) will be used for health infrastructure, while EUR 1.1 billion will be invested in health equipment and EUR 224 million will go towards digitalisation efforts. Furthermore, EUR 736 million from the European Social Fund Plus (ESF+) have been designated to finance various measures to improve the accessibility, quality and resilience of health services in Romania.

**Romania trains medical professionals well above the EU average, but migration remains an issue**

Romania trains a large medical and nurse workforce and has a higher-than-average number of medical and nursing graduates per 100 000 population (Figure 21). In 2021, Romania registered 5 006 medical graduates (26.2 per 100 000 population – above the EU average of 17.5 per 100 000) and 20 763 nursing graduates (108.6 per 100 000 population compared to 44.3 per 100 000 across the EU). Nevertheless, migration of medical staff (both new graduates and experienced workforce) has contributed to the current low numbers of health professionals working in Romania (see Section 4).

**Figure 21. Romania trains a large number of medical professionals**

![Graph showing medical graduates and nursing graduates per 100,000 population for Romania and EU over the years from 2012 to 2021.](image)

**Sources:** OECD Health Statistics 2023; Eurostat Database.

**Very high rates of antibiotic use in Romania have prompted policy action to be considered**

Antimicrobial resistance (AMR) is a major public health concern in the EU, with estimates of about 35 000 deaths due to antibiotic-resistant infections (ECDC, 2022) and healthcare-associated costs of around EUR 1.1 billion per year (OECD/ECDC, 2019). Because antibiotic overprescribing and overuse are major contributors to the development of antibiotic-resistant bacteria, antibiotic consumption data are a useful tool to evaluate the risk of AMR and the efficacy of programmes to promote appropriate use. In 2021, Romania had one of the highest rates of antibiotics use in the community, at 24.2 defined daily doses (DDDs) per 1 000 population, compared to the EU average of 14.4 DDDs (Figure 22). A strategy to prevent and limit healthcare-associated infections and to combat AMR in Romania for 2023-30 is under consideration.

**Figure 22. Romania has one of the highest rates of community use of antibiotics in the EU**

![Graph showing defined daily doses (DDDs) per 1000 population for Romania, Bulgaria, Hungary, and EU over the years from 2012 to 2021.](image)

**Notes:** The EU average is unweighted. Source: ECDC ESAC-Net.

---

5 These EU Cohesion Policy figures reflect the status as of September 2023
6 Spotlight on mental health

The prevalence of mental health conditions in Romania is the lowest among EU countries, but the burden is high

According to estimates from the Institute for Health Metrics and Evaluation (IHME), Romania has the lowest prevalence of mental health disorders among EU countries. Of the 13 % of the population diagnosed with mental health conditions, the two most prevalent are anxiety and depressive disorders – each estimated to affect roughly 4 % of the population (Figure 23). In contrast, the share of adults self-reporting risk of depression is much higher, and stood at 60 % in 2022, which is higher than the EU average of 55 % (OECD/EU, 2022). The COVID-19 pandemic did not change the risk of depression among Romanians, which has remained stable since 2020.

The economic costs of mental ill health are substantial, with direct and indirect costs in 2015 estimated at 2.1 % of GDP in Romania, or EUR 3.4 billion. Direct costs accounted for 1.4 % of GDP, while indirect costs were estimated to account for 0.7 % of GDP in the same year (OECD/EU, 2018).

Figure 23. Anxiety and depression are two of the main mental health conditions in Romania

According to the Eurofound (2021; 2022) surveys, 63 % of people in Romania living in households that reported financial difficulties were considered to be at risk of depression during the pandemic, compared to 34 % of those who did not report financial difficulties. These rates were close to the EU averages.

Suicide rates are on par with or below EU levels

Complex social and cultural factors affect suicidal behaviours and the reporting of suicide deaths. Mental health problems increase the risk of suicide, and the suicide rate for men in Romania was similar to the EU average in 2019, having been higher previously, while for women the suicide rate was consistently lower than the EU average (Figure 25). Suicide rates remained stable during the COVID-19 pandemic for both men and women, representing 3 % of preventable mortality in 2020 (INSP, 2021).
**Romanians reported a low rate of unmet needs for mental healthcare during the COVID-19 pandemic**

As in other areas of healthcare, mental healthcare provision in Romania is hospital-centric. Although policies seeking to shift care into the community and to integrate mental health service provision into primary care have been implemented since 2000, the number of psychiatric beds has been increasing, and the mental health workforce has remained small. As a result, availability of outpatient care is still limited, contributing to unmet needs.

According to a Europe-wide survey carried out in spring 2021 and spring 2022, 22% of Romanians reported unmet needs for healthcare, of which 12% were related to mental healthcare (Figure 26). The share of reported unmet needs for mental healthcare was proportionally smaller than the EU average (22%), indicating low demand for this type of service; however, demand may be hindered by stigma and other barriers (Manescu et al., 2023).

**Romania has begun to develop a plan to strengthen mental health and mental healthcare**

Romania developed child and adolescent community mental health services part of the “Open Minds Project” during the pandemic. This included reinforcing the capacity of local youth services, and engaging with communities through parents, teachers, health professionals, educators and social workers to create a safety net for young people at risk (European Education and Culture Executive Agency, 2022).

While Romania does not have an individual mental health strategy or plan, mental health objectives are included in the 2022-30 National Health Strategy, which is awaiting approval. The main high-level national mental health priorities include developing community mental healthcare; creating liaison psychiatric units in general hospitals; developing specialised mental healthcare services for older people, young people, people with addictions and others; ensuring adequate funding; strengthening data collection; and using standardised methods for assessing continuous education and practice. In addition, the Senatorial Chamber of Parliament has been gathering proposals from various stakeholders as part of an initiative to develop a national mental health plan.

---

**Figure 25. Romania’s male suicide rate has decreased and is now similar to the EU average**

![Graph showing Romania’s male suicide rate](image)

Source: Eurostat Database

**Figure 26. Romanians reported higher rates of unmet healthcare needs during the pandemic, but lower rates of unmet mental healthcare needs**

![Graph showing unmet healthcare needs](image)

Note: Survey respondents were asked if they had any current unmet health care needs, and if so, for what type of care, including mental care. Source: Eurofound (2021, 2022), Third and fifth rounds of Living, working and COVID-19 e-survey: living in a new era of uncertainty, survey carried out in Spring 2021 and 2022.
7 Key findings

- Average life expectancy at birth in Romania was 75.3 years in 2022, having dropped by nearly 3 years – to 72.8 years – between 2019 and 2021 due to the impact of the COVID-19 pandemic, before recovering. COVID-19 was the second leading cause of preventable mortality in Romania, and vaccination coverage rates in the country are low.

- In 2022, Romanians reported high levels of self-perceived health as very good or good (73.3 %), which is higher than the EU average (68.0 %). The positive assessment of self-perceived health is high for both men and women, and across income groups.

- There is great scope for public health work to mitigate behavioural and environmental risk factors in Romania. While adult obesity rates are the lowest in the EU, poor diet, tobacco smoking and alcohol consumption are major contributors to mortality. In 2022, life expectancy at birth was 71.5 years for men and 79.3 years for women. This gender gap is largely explained by differences in tobacco and alcohol consumption patterns. In 2019, 30.6 % of Romanian men smoked daily and 53.1 % reported heavy drinking; among Romanian women, 7.5 % smoked daily and 18.0 % reported heavy drinking.

- In 2022, 4.9 % of Romanians reported having unmet medical care needs due to costs, distance to travel or waiting times (over double the EU average of 2.2 %) with three quarters of these citing cost as the main factor. Out-of-pocket spending on health accounted for 21 % of current health expenditure in 2021, which is higher than the EU average of 15 %. The main driver of out-of-pocket spending is outpatient pharmaceuticals, but dental care costs are also significant. Resource constraints also limit access to medical care – particularly health workforce shortages. Romania trains large numbers of doctors and nurses – well above the EU average – but many choose to practise abroad.

- The Romanian health system is hospital-centric, with high bed capacity. Patients seeking timely care often bypass primary care facilities and go directly to hospitals. As a result, nearly half of all health financing in Romania goes towards inpatient care. Bypassing primary care is partly the result of patient preference but also due to the limited availability of GPs, particularly in rural areas. The weakness of primary care has serious implications for reducing avoidable mortality rates, which are the highest in the EU.

- Per capita spending on health in Romania was the lowest in the EU in 2021. The social health insurance system that finances healthcare offers a comprehensive benefits package. Compared to other EU countries, coverage is less generous around outpatient pharmaceuticals and dental care. Despite coverage being compulsory, about 12 % of the population is uninsured. Uninsured people include those working and living abroad, those working informally, unemployed people who are not registered for social welfare and those lacking personal identification cards (an issue more prominent among marginalised groups, such as Roma citizens).

- Romania is using a large share of funds made available through the EU’s Recovery and Resilience Plan as well as EU Cohesion Policy to focus on modernising its hospital infrastructure. The aim is to ensure patient safety and reduce care-related infections, and further investments are planned for digitalisation in healthcare and to improve the accessibility, effectiveness and resilience of the health system.

- Prevalence of mental illness and levels of unmet needs for mental healthcare are formally low in Romania compared to EU levels. However, these findings should be interpreted with caution, as mental ill health-related stigma may disguise the true level of need. Current provision of mental healthcare remains hospital-centric, but ongoing planning aims to develop mental health service provision in the community and to improve access to care.
Key sources


References


Eurofound (2021), Living, working and COVID-19 survey, rounds one, two and three (spring 2020, summer 2020 and spring 2021). Dublin.


Health Behaviour in School-aged Children study (2023), Data browser (findings from the 2021/22 international HBSC survey): https://data-browser.hbsc.org


Country abbreviations

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

Country abbreviations
The Country Health Profiles are a key element of the European Commission’s State of Health in the EU cycle, a knowledge brokering project developed with financial support from the European Union.

These Profiles are the result of a collaborative partnership between the Organisation for Economic Co-operation and Development (OECD) and the European Observatory on Health Systems and Policies, working in tandem with the European Commission. Based on a consistent methodology using both quantitative and qualitative data, the analysis covers the latest health policy challenges and developments in each EU/EEA country.

The 2023 edition of the Country Health Profiles provides a synthesis of various critical aspects, including:

- the current state of health within the country;
- health determinants, with a specific focus on behavioural risk factors;
- the structure and organisation of the health system;
- the effectiveness, accessibility and resilience of the health system;
- For the first time in the series, an account of the state of mental health and related services within the country.

Complementing the key findings of the Country Health Profiles is the Synthesis Report by the European Commission.

For more information, please refer to: ec.europa.eu/health/state

Please cite this publication as:
OECD/European Observatory on Health Systems and Policies (2023), 
Romania: Country Health Profile 2023, State of Health in the EU, 

ISBN 9789264434882 (PDF)
Series: State of Health in the EU
SSN 25227041 (online)