



# State of Health in the EU HUNGARY Country Health Profile 2021





### 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 crosscountry 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 Systems Performance Assessment (HSPA).

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

This profile was completed in September 2021, based on data available at the end of August 2021.

#### Demographic and socioeconomic context in Hungary, 2020

Demographic factors	Hungary	EU
Population size (mid-year estimates)	9 769 526	447 319 916
Share of population over age 65 (%)	19.9	20.6
Fertility rate <sup>1</sup> (2019)	1.6	1.5
Socioeconomic factors		
GDP per capita (EUR PPP²)	22 103	29 801
Relative poverty rate <sup>3</sup> (%, 2019)	12.3	16.5
Unemployment rate (%)	4.3	7.1

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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# 1 Highlights

Life expectancy in Hungary increased fairly steadily before the COVID-19 pandemic, yet it remains almost five years below the EU average. Between 2019 and 2020, life expectancy fell temporarily by nearly 10 months because of the COVID-19 pandemic, a reduction similar to the EU average. To maintain care continuity throughout the pandemic, new regulations on telehealth were introduced; nevertheless, levels of unmet medical needs rose. In response to persistent workforce shortages, in 2020, the government announced a new public sector employment contract, including a 120 % pay increase for doctors by 2023.



#### ● HU ● EU ◆ Lowest Highest Drunkenness % of 15-vear-olds 0 10 20 30 40 50 Alcohol consumption Litres per adult 0 5 10 15 Obesity % of adults 0 30 10 20

#### **Health Status**

Life expectancy in Hungary grew by nearly two years between 2010 and 2019, before temporarily falling by 10 months in 2020 as a result of the COVID-19 pandemic, roughly the same reduction as in the EU overall. In 2020, the average person in Hungary lived nearly five years less than the EU average.

### **Risk factors**

Behavioural risk factors account for approximately 50 % of all deaths in Hungary. Compared to other EU countries, Hungary has relatively high levels of excessive alcohol consumption among both adolescents and adults. The proportion of adults who are obese is also greater than the EU average.



Per capita spending (EUR PPP)

### Effectiveness

Mortality rates from preventable causes in Hungary were the highest of any EU country before the pandemic, highlighting the need to reduce behavioural and other risk factors. Deaths from treatable causes were also far above the EU average, reflecting issues with the quality of health services.



Age-standardised mortality rate per 100 000 population, 2018

### Health system

Health spending in Hungary increased at a moderate rate in the years before the pandemic, but remains below the EU average both in terms of spending per capita and as a percentage of GDP. Public funding accounts for two thirds of all health care spending, which is below the EU average of 80 %, leading to high levels of out-of-pocket spending. During the pandemic, the government introduced substantial wage increases to stem the outflow of health professionals from the public sector.

### Accessibility

Levels of unmet medical needs are low in Hungary but rose temporarily in 2020: within the first 12 months of the pandemic, one in three people recorded unmet needs compared to one in five across the EU as a whole. Telemedicine facilitated access to care during the pandemic, with 45 % of people attending a consultation online compared to 39 % for the EU average.



### Resilience

The number of workers and hospital beds increased to cope with pandemic demands. Simultaneously, the country introduced polices to free up existing resources, such as reserving a proportion of hospital beds for COVID-19 patients, resulting in delayed care for some non-COVID patients. Vaccination rates were relatively high at the beginning of the rollout but slowed afterwards.



# **2** Health in Hungary

#### Life expectancy at birth in Hungary is among the lowest in the EU

Life expectancy at birth in Hungary grew from 71.9 to 75.7 years between 2000 and 2020. Despite this, in 2020 life expectancy at birth remained almost five years below the EU as a whole (Figure 1), and lower than in Czechia, Poland and Slovakia. As a result of the COVID-19 pandemic, life expectancy fell temporarily by under 10 months between 2019 and

2020, which is in line with the EU average and the lowest among the Visegrád Four countries<sup>1</sup>.

On average, Hungarian women live almost seven years longer than men – 79.1 years compared to 72.3 years. This gender gap is greater than that across the EU as a whole; this is largely due to greater exposure to risk factors among men – particularly smoking and excessive alcohol consumption (see Section 3).



### Figure 1. Life expectancy at birth in Hungary is almost five years lower than the EU average

Note: The EU average is weighted. Data for Ireland refer to 2019. Source: Eurostat Database.

### While the gap is closing, inequalities in life expectancy by level of education remain pronounced

Inequalities in life expectancy by gender and level of education are significant in Hungary. At the age of 30, men with the lowest level of education will live on average almost 11 years less than those with tertiary education. Although this gap has seen a declining trend in recent years, it is still almost four years larger than the EU average. For women, the gap in life expectancy is much smaller, at 3.1 years in Hungary compared to 3.4 years across the EU (Figure 2). These gaps are partly explained by greater exposure to risk factors, such as smoking, among people with lower levels of education (see Section 3).

### One in three deaths in Hungary are caused by ischaemic heart disease or stroke

Ischaemic heart disease and stroke are the leading causes of death, accounting for a third of all registered deaths in Hungary in 2018. Among cancers,

1. Czechia, Hungary, Poland and Slovakia.

Figure 2. The education gap in life expectancy is almost 11 years for men and over 3 years for women



Hungary:	3.1 years	Hung
EU18:	3.4 years	EU18:

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

6.9 years

Source: Eurostat Database (data refer to 2017).

lung cancer is the most frequent cause of death, followed by colorectal, pancreatic and breast cancer (Figure 3).

In 2020, COVID-19 accounted for almost 10 000 deaths in Hungary (7 % of all deaths). By the end of June 2021 this figure had tripled to approximately 30 000 cumulative deaths, which corresponds to more than 3 000 deaths per million population. This figure is the highest in the EU. Excess mortality – a measure defined as the number of deaths from all causes above what would normally be expected based on the baseline from previous years – indicates that the real direct and indirect death toll of COVID-19 is likely to be even higher. Although higher, excess mortality data on a population basis puts the COVID-19 mortality data in Hungary in a more positive light – for example, excess deaths per million population is the second lowest among the Visegrád Four countries.

#### Figure 3. Cardiovascular diseases are the main cause of death, but COVID-19 led to many deaths in 2020



Note: The number and share of COVID-19 deaths refer to 2020, while the number and share of other causes refer to 2018. The size of the COVID-19 box is proportional to the size of the other main causes of death in 2018.

Sources: Eurostat (for causes of death in 2018); ECDC (for COVID-19 deaths in 2020, up to week 53).

### Fewer Hungarians report being in good health compared to other EU countries

Fewer than 60 % of adults reported being in good health in 2019, which is below the EU average of approximately 70 %. In Hungary, and across the EU, people with higher incomes are more likely to report being in good health: 73 % of Hungarian people in the highest income quintile reported being in good health in 2019 compared to 47 % of those in the lowest (Figure 4). The average figures for EU countries are higher at 79 % for the highest income quintile and 58 % for the lowest.



### Figure 4. Inequalities in self-reported health by income level are substantial in Hungary



Note: 1. The shares for the total population and the population on low incomes are roughly the same. Source: Eurostat Database, based on EU-SILC (data refer to 2019) Nearly 40 % of adults reported having at least one chronic condition in 2019 – a share higher than the EU as a whole at 36 %. As with self-reported health, there is a substantial gap in the prevalence of chronic conditions by income group: 46 % of Hungarian adults in the lowest income group report having at least one chronic condition compared with 30 % of those in the highest. Both of these figures broadly align with the EU averages.

### The burden of cancer in Hungary is higher than in most EU countries

According to estimates from the Joint Research Centre, Hungary was expected to record over 62 000 new cases of cancer in 2020. This translates into an estimated 623 cancer cases per 100 000 people, a figure 10 % higher than the EU average. Hungary's mortality rate from cancer is also expected to be high in 2020, at 330 deaths per 100 000 people compared to 263 per 100 000 across the EU. Relatively high estimates of incidence and mortality from cancer may in part reflect risky health behaviours among the population, such as smoking and alcohol consumption (see Section 3).

Figure 5 shows that in Hungary the leading cancer diagnosis is expected to be breast cancer for women and prostate cancer for men. For both men and women, it is estimated that lung cancer will comprise the second and colorectal cancer the third leading type.



### Figure 5. Hungary will have an estimated 62 000 new cancer cases in 2020



Age-standardised rate (all cancer) HU: 761 per 100 000 population EU: 686 per 100 000 population

Age-standardised rate (all cancer)

HU: 540 per 100 000 population EU: 484 per 100 000 population

Note: Uterus cancer does not include cancer of the cervix; non-melanoma skin cancer is excluded. Source: ECIS – European Cancer Information System.

# **3** Risk factors

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

Approximately half of all deaths in Hungary are attributable to behavioural risk factors (Figure 6). One quarter of all deaths in 2019 could be attributed to dietary risks, which is above the EU average (17 %). Tobacco consumption, including direct and second-hand smoking, caused a further 21 % of all deaths, with around 7 % attributable to alcohol consumption and 2 % to low physical activity. Air pollution in the form of fine particulate matter ( $PM_{2.5}$ ) and ozone exposure alone accounted for an estimated 7 % of all deaths in 2019, a proportion markedly higher than the EU average (4 %). Deaths from air pollution are related in most cases to circulatory diseases, respiratory diseases and certain types of cancer.

#### Figure 6. Poor diet and tobacco smoking drive mortality rates in Hungary



Low physical activity – Hungary: 2% EU: 2%

Note: 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<sub>25</sub> and ozone. Sources: IHME (2020), Global Health Data Exchange (estimates refer to 2019).

#### Despite reductions in the past decade, Hungarians are among the heaviest smokers in the EU

Approximately one in four Hungarian adults reported smoking daily in 2019 – the third highest rate in the EU<sup>2</sup> after Bulgaria and Croatia (Figure 7). Tobacco consumption has declined at a slower rate in Hungary than in most EU countries over the last two decades. Smoking rates in Hungary show a large gender gap: almost one in three Hungarian men reported that they smoked daily in 2019, compared to approximately one in five women. Smoking rates among adolescents are also high: 23 % of 15-year-olds reported having smoked tobacco in the past month in 2018, which is above the EU average of 18 %.

High rates of smoking may in part reflect low excise duties on tobacco products. For many years, Hungary failed to meet the minimum excise duty on cigarettes set by EU Regulations<sup>3</sup>. Consequently, in 2019, the European Commission sent Hungary to the Court of Justice of the European Union, which led the government to introduce two price hikes in 2021: 7.3 % in January followed by 4.8 % in April. By the end of 2021, the government will also make plain packaging compulsory for all cigarettes and roll-your-own tobacco products.

### High alcohol consumption among adults and adolescents is a significant concern

In 2019, the average Hungarian citizen, aged 15 and over drank 11.4 litres of pure alcohol a year – a figure 5 % lower than in 2000 but still 13 % higher than the EU average. Excessive alcohol consumption is a concern among adolescents, with nearly one third of 15-year-olds in 2018 reporting being drunk more than once in their life. The EU average is lower, at approximately one in five 15-year-olds.

### Overweight and obesity are growing public health issues in Hungary

Poor nutritional habits partly explain the increasing prevalence of obesity in Hungary. In 2019, 45 % of adults reported not consuming any fruit on a daily basis, and 55 % said they did not eat vegetables daily – a higher proportion than in most EU countries (see Figure 7). Nearly one in four Hungarian adults (24 %) were obese in 2019, compared to 16 % on average across the EU.

Overweight and obesity rates are also a major problem among Hungarian children and adolescents. Almost one in four 15-year-olds were overweight or obese in 2018 – the second highest rate in the EU after Malta. Recent government initiatives – such as the Public Health Product Tax – have aimed to tackle childhood obesity (see Section 5.1).

<sup>2.</sup> Based on another source – the Eurobarometer survey – the proportion of current smokers in Hungary was 28 % in 2020, which is higher than the EU average (25 %), but the rate in several countries was higher than in Hungary.

<sup>3.</sup> Council Directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco.

#### Figure 7. Hungary has higher rates of risky health behaviours than most other EU countries



Note: The closer the dot is to the centre, the better the country performs compared to other EU countries. No country is in the white "target area" as there is room for progress in all countries in all areas. Sources: OECD calculations based on HBSC survey 2017-18 for adolescents indicators; and OECD Health Statistics, EHIS 2014 and 2019 for adults indicators.

### Socioeconomic inequalities contribute to health risks

Several behavioural risk factors are more common among people with lower education or income levels. In 2014, 30 % of Hungarian adults who had not completed secondary education smoked daily, compared with 13 % among those with a tertiary education – a gap more than double that in the EU as a whole. Similarly, 25 % of Hungarians without secondary education self-reported as obese in 2019, compared to 17 % of those with higher education levels. The higher prevalence of risk factors among socially disadvantaged groups contributes to socioeconomic inequalities in health and life expectancy.

# 4 The health system

#### The Hungarian health care system has a single health insurance fund and is highly centralised

A single health insurance fund provides health care coverage for nearly all residents. The fund is administered by the National Institute of Health Insurance Fund Management (NEAK), which has operated under the direct control of the Ministry of Human Capacities since 2017. The Ministry has exclusive power for setting strategic direction, controlling financing, determining the benefits package and issuing and enforcing regulations. In addition to health, the Ministry is responsible for overseeing culture, education, social affairs and sport. Until the end of 2020, the Ministry of Human Capacities administered the health care system through the National Healthcare Service Centre. Late in 2020, the Centre was absorbed by the newly established National Directorate-General for Hospitals under the Ministry of the Interior. Its responsibilities include monitoring the public health care system, implementing strategic government decisions, monitoring hospital operations and contributing to the development of a new national health management system. As part of this change, local county hospitals are responsible for planning and managing inpatient care at the county level, under the supervision of National Directorate-General for Hospitals.

At the beginning of 2020, the government established an Operative Corps to guide the country's response to the COVID-19 pandemic (Box 1).

#### Box 1. The Ministries of the Interior and Human Capacities jointly led Hungary's COVID-19 response

In January 2020, the Hungarian government established an 11-member Operative Corps led by the Interior Minister and the Minister of Human Capacities. Other members include the Chief Medical Officer of the National Public Health Centre and the Director-General of the National Ambulance Service.

The Operative Corps is responsible for organising the medical and epidemiological measures taken in response to the COVID-19 pandemic – such as testing and allocating physical and human resources.

#### The rate of health expenditure growth in Hungary is increasing, but remains below the EU average

In recent years, Hungary has seen an increase in the rate of health expenditure growth: in 2013-19, the average annual growth rate in health spending per capita was 2.9 % compared to negative growth of -0.5 % in 2008-13.

Despite this recent growth, health expenditure per capita is less than half the EU average after adjusting for differences in purchasing power (Figure 8). Health spending as a proportion of GDP is also relatively low, at 6.4 % compared to 9.9 % across the EU as a whole. This result may, however, be explained in part by Hungary's relatively high rate of GDP growth in recent years.



#### Figure 8. Hungary spends less on health care than most other EU countries

Note: The EU average is weighted.

Source: OECD Health Statistics 2021 (data refer to 2019, except for Malta 2018).

Government transfers and compulsory contributions from employers and employees account for 68.3 % of all health spending in Hungary, which is lower than the EU average of 79.8 %. Contributions from employers are part of a larger social contribution tax, which also covers the pension fund. The increasing share of direct government transfers into the health insurance fund allowed the government to set its priorities freely and exert greater control over expenditure. This did not resolve the inherit instability of health care system funding, which was characterised by long periods of austerity and short periods of overspending, usually in election years (Szigeti et al., 2019). On the other hand, during the COVID-19 pandemic, this system enabled the government to inject additional funds into the health care system. On 4 April 2020, the government announced a Pandemic Protection

Fund of HUF 663 billion (EUR 1.8 billion) to support the health care system. Financing for this fund largely came from budget reallocations from other ministries. The fund covered COVID-19-related costs, including a one-time bonus for health care workers of HUF 500 000 (EUR 1 362).

### New measures encouraged primary care group practices and enhanced the role of general practitioners

In primary care, general practitioners (GPs) are paid on a capitation basis, with an amount assigned for each person enrolled, whether or not they seek care, albeit with some adjustments. Until recently, this accounted for approximately 70 % of practice income; the remaining 30 % was based on practice location and performance-based payments. As part of the reforms initiated by the government during the COVID-19 pandemic, the government introduced additional funding for wages for GPs who established group practices. Fixed budgetary transfers are therefore the dominant form of payment for family doctor services. Group practices that co-operate closely receive greater amounts of funding in exchange for preparing a competency map and development plan for skills and equipment, for example, as well as extra services such as screening. Health professionals are free to choose which type of group practice they sign up for or to remain in a solo practice, in which case the funding for wage increases is lower.

The government also plans to introduce measures to capitalise on specialist qualifications held by GPs – specifically by removing certain limitations on referrals and prescriptions.

### Performance-based budget allocations were introduced in an effort to improve efficiency

Outpatient specialist providers are paid on a fee-forservice basis, where each procedure has a certain number of points, and providers claim payment for their points directly from the health insurance fund. With the exception of a few specific interventions, the health insurance fund pays for hospital inpatient services according to diagnosis-related groups for acute care. Chronic inpatient care uses per diem payments, adjusted for case complexity.

Through the NEAK, the government controls the budget for each health service provider based on data from previous years. However, the health sector struggles to operate within the established budget constraints, so debt accumulation and payment arrears are an issue. The chronic human resource shortage, together with financing and volume controls, has worsened both access to and quality of care.

During the COVID-19 pandemic, these payment methods were temporarily suspended and replaced with fixed budgetary transfers. Following the third wave of the pandemic, performance-based payment techniques were restored; however, the previous system of output volume limits was replaced by a more flexible planned annual budget. Under this budget, the volume limits of health care providers are defined based on their performance in the preceding year, which is revised annually. While this measure does not remove the overall budgetary constraints and volume limits, the performance-based allocation formula aims to improve efficiency and reduce debt accumulation.

### Hungary's social health insurance system provides near universal health coverage

The Hungarian constitution states that all Hungarian citizens have the right to access care. Citizens and foreigners working in the country are required to join the national social health insurance (SHI) system: opting out is not permitted. SHI coverage is therefore high but not universal: around 5 % of the population have unclarified SHI status, which includes citizens working abroad and people without a permanent address.

The benefits package covered by the health insurance fund is decided at the central level through a positive list for pharmaceuticals and a negative list for medical procedures. While most hospital spending is publicly funded, public coverage for outpatient (ambulatory) medical care, outpatient pharmaceuticals, medical devices and dental care is much narrower. This partly explains relatively high levels of out-of-pocket (OOP) expenditure for these items (see Section 5.2).

### Pharmaceuticals and medical devices make up a relatively high share of expenditure

In 2019, Hungary used 30.5 % of health care spending for inpatient care, 29.5 % for outpatient care, and 30.2 % for pharmaceuticals and medical devices. The proportions of spending on inpatient and outpatient care broadly align with the EU averages, but spending on pharmaceuticals and medical devices is over 10 percentage points higher. This relatively high level of spending reflects low overall spending on health (see Figure 8). Conversely, spending on long-term care (LTC) in Hungary, as well as other Visegrád Four countries, is significantly below the EU average (Figure 9).

# HUNGARY

### Figure 9. Hungary spends significantly less on long-term care than the EU average



Note: The cost of health system administration are not included. 1. Includes curative-rehabilitative care in hospital and other settings; 2. Includes home care and ancillary services (e.g. patient transportation); 3. Includes only the outpatient market; 4. Includes only the health component; 5. Includes only spending for organised prevention programmes. The EU average is weighted. Sources: OECD Health Statistics 2021, Eurostat Database.

### Hungary has a lower number of doctors and nurses compared to the EU average, but figures are improving

Between 2010 and 2020, the number of people obtaining a medical degree from a Hungarian university grew by over 50 %. A rise in the number of graduates explains in part an increase in the number of doctors per capita in the country: as of 2019, there are 3.5 doctors per 1 000 people, a figure 30 % higher than in 2000 but below the EU average of 3.9. Over the same period, the number of nurses grew by 25 % to 6.6 per 1 000 people, which is also below the EU average of 8.4.

Workforce shortages have been a problem in Hungary for many years – one largely attributed to low wages. As a result, it is common for health professionals to emigrate to western Europe – particularly since the country's accession to the EU in 2004.

Certain health professions face more acute shortages, such as nurses and public health physicians. Workforce shortages also differ by region, with less densely populated and economically and socially disadvantaged areas experiencing greater recruitment and retention issues. To alleviate workforce shortages, the government introduced several policies, such as wage increases (see Section 5.2).

### Health care system use in Hungary is high, particularly for hospital-based care

Hungary's health care system has a high number of hospital beds, high hospital discharge rates and the longest average length of stay in the EU in 2019 – 9.6 days compared to the EU average of 7.4. Hungarians also have one of the highest rates of contacts with doctors – 10.7 times on average in 2019, which is the second highest rate in the EU after Slovakia (Figure 10).

The combination of high numbers of hospital beds and centralised oversight of health care services enabled the government to issue health system directives during the COVID-19 pandemic, such as reserving bed capacity for COVID-19 patients (see Section 5.2).



### Figure 10. Hungary has the second highest number of doctor consultations in the EU

Number of doctor consultations per individual



Notes: The EU average is unweighted.

Sources: OECD Health Statistics and Eurostat Database (data refer to 2019 or nearest year).

# **5** Performance of the health system

### 5.1 Effectiveness

### Preventable and treatable causes of death remain very high in Hungary

Hungary continues to record one of the highest rates of preventable mortality in the EU. In 2018, 326 in every 100 000 people died from preventable causes – the highest rate of any EU country (Figure 11). The leading causes of preventable mortality are lung cancer, followed by ischaemic heart disease and alcohol-related diseases. High rates of preventable mortality reflect risky health behaviours, such as smoking, which is common in Hungary (see Section 3). Deaths from treatable causes are also relatively high in Hungary.

### Five national health programmes are shifting the health system towards preventive care

Preventive care has not been a key priority in Hungary: spending on prevention fell from 3.9 % to 3.2 % of total health spending between 2010 and 2019. In an effort to improve preventive care, in 2019, the Minister of Human Capacities introduced five national health programmes for 2019-22 covering child health, circulatory diseases, mental health, musculoskeletal disorders and cancer. Each of the programmes focuses on strengthening preventive care across the lifecycle (Box 2).

Other prominent policies to improve public health and prevention include an expansion of the Public Health Product Tax to items such as alcopops and a planned investment of HUF 83.5 billion (EUR 229 million) in sports facilities.







Others

Treatable causes of mortality





Note: Preventable mortality is defined as death that can be mainly avoided through public health and primary prevention interventions. Treatable mortality is defined as death that can be mainly avoided through health care interventions, including screening and treatment. Half of all deaths for some diseases (e.g. ischaemic heart disease and cerebrovascular disease) are attributed to preventable mortality; the other half are attributed to treatable causes. 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 2018, except for France 2016).

### Box 2. The public health and prevention initiative, Three Generations for Health, aims to improve healthy lifestyle behaviours

Three Generations for Health is a key initiative implemented as part of the national health programmes for 2019-22. It provides GP clusters and practices and municipalities with up to HUF 50 million-90 million (EUR 159 000-286 000) in funding for public health and prevention services. Nearly HUF 6 billion (EUR 16.5 million) has been

Cancer screening rates in Hungary continued to betweer decline during the COVID-19 pandemic in wome

Early detection of cancers can improve a patient's quality and length of life. Despite this, rates of cancer screening have been falling in Hungary. For example, dedicated to the initiative. To date, 143 GP practices have applied for and received funding. Activities funded under the initiative focus on healthy diet, regular physical activity and smoking cessation. For example, during the COVID-19 pandemic, GPs involved in the initiative were encouraged to promote preventive care for diabetic patients.

between 2009 and 2019, screening for breast cancer in women fell from 47 % to 39 %. Conversely, over the same period EU countries saw rates rise from 55 % to 59 % on average (Figure 12). Low levels of screening contribute, in part, to high rates of cancer mortality (see Section 2).

#### Figure 12. Fewer than 40 % of Hungarian women in the target group are screened for breast cancer



Note: The EU average is unweighted. For most countries, the data are based on screening programmes, not surveys. Sources: OECD Health Statistics 2021 and Eurostat Database.

The lockdowns enforced to contain the spread of COVID-19 had a negative impact on cancer screening. During the first wave of the pandemic in mid-March 2020, the government suspended all oncological screening activities. On 28 May 2020, Hungary's Chief Medical Officer announced that screening activities would resume from June. In April 2021, screening activities were again suspended for two weeks in response to a rise in infection rates.

### National and EU level initiatives aim to improve cancer care and outcomes

The high burden of cancer in Hungary led to the introduction of the National Health Programme for Cancer (2019-22). A key focus of the Programme is to improve preventive care – for example, through the HUF 1 billion (EUR 2.7 million) Health Care At Your Doorstep initiative, which offers screening close to people's homes free of charge. Policy efforts to tackle cancer at the national-level are complemented by the European Commission's Europe's Beating Cancer Plan (Box 3).

### In contrast to EU trends, Hungary has seen rates of avoidable hospital admissions rise

Patients with chronic obstructive pulmonary disease (COPD), congestive heart failure or diabetes can effectively manage their condition in an outpatient setting, so hospital admissions for these diseases are considered avoidable. In 2019, Hungary had the highest number of avoidable hospital admissions for asthma and COPD in the EU, with 448 avoidable admissions per 100 000 population<sup>4</sup>. In an effort to reduce hospital stays for COPD patients, Hungary is in the process of creating a new financial and clinical governance model involving bundled payments.

#### Box 3. The Europe's Beating Cancer Plan is a new approach to addressing cancer in the EU

In February 2021, the European Commission announced its Europe's Beating Cancer Plan, which sets out a new EU approach to tackle the entire disease pathway, from prevention and screening to treatment and quality of life of cancer patients and survivors, focusing on actions where the EU can add the most value.

The Plan is structured around four key action areas that will be implemented using the whole range of Commission funding instruments, with a total of EUR 4 billion earmarked for actions on cancer:

• Prevention through actions addressing key risk factors such as tobacco, harmful alcohol

consumption, healthy diets, environmental pollution and hazardous substances

- Early detection of cancer by improving access to and quality of screening
- Diagnosis and treatment through action to ensure better integrated cancer care and addressing unequal access to quality care and medicines
- Improving quality of life of cancer patients and survivors, including rehabilitation and measures to support social integration and re-integration in the workplace

Source: European Commission (2021a).

4. Figures for Hungary between 2012 and 2019 are estimates based on previous trends.

# Efforts to boost influenza vaccine rates are hindered by low public confidence among adults

Influenza vaccination coverage rates among people aged 65 and older have been declining in Hungary since the early 2000s. In 2019, approximately one in four people in this age bracket received an influenza vaccine – a decline from one in three in 2009. The EU as a whole experienced a similar trend, with influenza vaccination rates falling from approximately 50 % to 40 % over the same period.

Low and decreasing vaccination rates reflect high levels of scepticism in the country around immunisation against influenza. For example, in 2020, only 60 % of the Hungarian population reported agreeing with the statement that "influenza vaccines are important" – the lowest proportion across the EU (European Commission, 2020a).

### 5.2 Accessibility

### Hungary has one of the lowest levels of unmet medical needs in Europe, yet gaps remain

In Hungary, 95 % of the population are covered by the country's SHI system. The remaining 5 % predominantly consist of citizens living abroad who have access to health care within their country of residence and those living in Hungary without a permanent address (see Section 4). In addition, recent changes to the SHI payment system risk increasing the number of people without insurance. In 2019, the government introduced the Act on Entitlements to Social Security Benefits and on Funding These Services. Under the Act, non-insured patients must pay for treatment out of pocket or forgo care, with the exception of emergency care. The Act risks increasing the number of uninsured individuals, since non-insured patients previously paid the insurance fee after receiving treatment and therefore subsequently received coverage.

Despite not having achieved universal health care coverage, reported levels of unmet medical needs are low in Hungary: just 1 % of the population reported unmet medical needs in 2019 compared to 1.7 % across the EU as a whole (Figure 13). As in other EU countries, reported levels of unmet medical needs in Hungary are higher among low-income groups. Despite low levels of unmet needs, Hungary reports relatively high levels of OOP payments for certain services.

### Figure 13. Hungary has low levels of unmet medical needs compared to the EU average

### Unmet needs for medical care



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

Source: Eurostat Database, based on EU-SILC (data refer to 2019, except lceland 2018).

### As in other EU countries, COVID-19 led to a large increase in unmet medical needs

In response to the pandemic, the government suspended all elective surgeries in November 2020. The suspension was lifted in May 2021 for patients with a COVID-19 immunity certificate or a negative PCR test within 48 hours plus a negative antigen test on the day of surgery. Further, throughout the pandemic, the government instructed hospitals to leave a significant proportion of beds free to treat COVID-19 patients. This proportion ranged from 20 % to 60 % depending on the number of cases, which translates into 15 000 to 40 000 beds. This policy was seen as excessive during the first wave of the pandemic and therefore met with resistance from health care workers. For example, in 2018, before the pandemic, the hospital occupancy rate was 65 %, meaning that a large number of patients were discharged to accommodate this policy intervention.

The suspension of elective surgeries and artificially restricted supply of available hospital beds may explain, at least in part, the increased rates of unmet medical needs reported by Hungarians: according to a Eurofound Survey<sup>5</sup>, between the start of the pandemic and February/March 2021, approximately one in three people stated that they were unable to access a medical examination or treatment. This was the highest rate of any EU country and nearly double (1.7 times) the EU average (Eurofound, 2021).

### Hungary's benefits package is broad, but lacks depth compared to the rest of the EU

Under the country's SHI scheme, citizens can access a broad range of services covering all levels of health care and medicines (see Section 4). Nevertheless, compared to the EU average, the proportion of costs that are publicly covered is relatively low, as reflected in below-average levels of public spending on health – in particular for outpatient medical care and pharmaceuticals (Figure 14).



### Figure 14. Public spending on outpatient care and pharmaceuticals is low in Hungary

Note: Outpatient medical services mainly refer to services provided by generalists and specialists in the outpatient sector. Pharmaceuticals include prescribed and over-the-counter medicines as well as medical non-durables. Therapeutic appliances refer to vision products, hearing aids, wheelchairs and other medical devices. Source: OECD Health Statistics 2021 (data refer to 2019 or nearest year).

Population groups who do not have access to Hungary's SHI scheme – such as non-EU students – can purchase insurance from the NEAK for a fixed premium set at 50 % of the minimum wage for adults, and 30 % for children and full-time students. The benefits package within the country's SHI scheme is somewhat limited compared to that offered to Hungarian citizens as it excludes services such as dental care and cross-border treatment.

### Gaps in public spending led to high levels of out-of-pocket expenditure

OOP expenses comprise over a quarter of all health care spending – a share larger than the average for the EU as a whole (Figure 15). The majority of OOP spending goes on outpatient medical care and outpatient pharmaceuticals. The former reflects the high usage of private health care services because of long waiting times in the public sector, while the latter is a result of high co-payment rates.



### Figure 15. Out-of-pocket expenditure is high and spent mainly on outpatient care and pharmaceuticals

Note: The EU average is weighted. VHI = voluntary health insurance, which also includes other voluntary prepayment schemes. Source: OECD Health Statistics 2021; Eurostat Database (data refer to 2019).

5. The data from the Eurofound survey are not comparable to those from the EU-SILC survey because of differences in methodologies.

### Access to digital health care services increased during the pandemic

In an effort maintain good levels of access to care during the pandemic, Hungary introduced measures to increase the use of digital services. In April 2020, the government issued a decree allowing doctors to provide health care services online. This was intended to maintain levels of patient care while minimising the risk of infection.

Data on the use of telehealth services during the pandemic indicate high levels of uptake – in particular for prescriptions. Between the start of the pandemic and February/March 2021, 71 % of people in Hungary accessed a doctor online or by telephone for prescription purposes, which was higher than the 53 % recorded by the EU as a whole. The number of teleconsultations increased markedly over a similar period, too.

### National and international efforts are under way to improve access to medicines

Hungary's benefits package includes a positive list for pharmaceutical products (see Section 4). Relative to other EU countries, this list is slim.

Policies to boost consumption of generic over branded products aim to reduce costs and improve access to medicines. The two major policies in this area are generic substitution and generic prescribing, both of which are voluntary in Hungary, although policies are in place to incentivise generic use. For example, the NEAK provides pharmacies with financial incentives to substitute originators with their generic equivalent. National policies to improve access to medicines align with pillar one of the European Commission's pharmaceutical strategy for Europe, implemented in November 2020 (European Commission, 2020b). The remaining three pillars aim to support competitiveness, innovation and sustainability; enhance crisis preparedness and response mechanisms; and promote safe, high-quality and efficacious medicines.

### The government aims to address health workforce shortages through a major reform

As outlined in Section 4, Hungary has experienced workforce shortages for many years. Shortages of health care professionals are more pronounced in certain professions – such as nurses – and in less populated areas (Figure 16).

In response, the government has introduced several policies. Since 2011, medical residents can apply for a financial scholarship on the condition that they work in Hungary for 10 years. Health care professionals have also received several wage increases, most recently under the new public sector employment contract, which provides doctors, dentists and pharmacists with a 120 % pay rise by 2023 (Box 4). The latest pay increase will be paid for in part using funds from Europe's Recovery and Resilience Facility.



### Figure 16. The concentration of practising physicians is higher in populated areas such as Budapest

#### Box 4. New employment contracts were created for health care professionals in the public sector

On 6 October 2020, the Hungarian Parliament passed a law on the new legal status of public health service employees. Under this act, health care professionals must sign a new employment contract to work in the public system. Key changes resulting from the new contract are:

 Health care workers will no longer be able to work in both the public and private sectors, although exceptions may be granted in specific circumstances

Source: Gaal et al. (2021)

### 5.3 Resilience

This section on resilience focuses mainly on the impacts of and responses to the COVID-19 pandemic<sup>6</sup>. Hungary was hit hard by the pandemic, recording just over 3 000 deaths per million people, which was the highest figure of any EU country. When measuring impact using excess deaths, however, the situation is more favourable in Hungary (see Section 2). Measures taken to contain the virus caused economic damage, with GDP falling by 5 %. Although significant, this fall is lower than the 6.2 % drop recorded across the EU as a whole.

### Hungary introduced lockdown measures and states of emergency in response to rising infection rates

The first confirmed case of COVID-19 in Hungary was recorded on 4 March 2020, and the first death less than two weeks later. In response to the first • Doctors, dentists and pharmacists will receive a wage increase of approximately 120 % by 2023

• All forms of informal payments to health professionals will be criminalised, with the exception of small gifts worth less than 5 % of the minimum wage that are gifted after treatment

The new employment contract was met with resistance from various health care workforce organisations; however, only 3-5 % refused to sign the contract by the deadline.

COVID-19 outbreak, the government declared a state of emergency on 11 March, alongside a range of containment measures including school closures (Figure 17). Lockdown restrictions were eased in mid-May, while the state of emergency was formally lifted the following month.

In line with EU trends, from August 2020 the number of cases began to rise, peaking towards the end of the year. To combat the second wave of infections, the government reintroduced a state of emergency and some lockdown measures. Following these, case numbers fell markedly over January 2021, before increasing sharply as a result of the spread of a more contagious variant of the virus. Consequently, existing lockdown measures were tightened in March 2021 before being relaxed in May.

#### Figure 17. Hungary introduced two rounds of lockdown measures to curb infection rates



Notes: The EU average is unweighted (the number of countries used for the average varies depending on the week). Source: ECDC for COVID-19 data and authors for containment measures.

6. 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).

# There is room to improve Hungary's preparedness for a future infectious disease outbreak

Indicators to measure preparedness for handling a pandemic are outlined within the International Health Regulations (IHR) framework<sup>7</sup>. According to its IHR self-assessment, Hungary's preparedness to respond to a pandemic was not comprehensive, although the country performed above the EU average in surveillance, which reflects a country's ability to rapidly detect public health risks. Areas where Hungary performed significantly below the EU average included human resource availability. Points of entry into the country for international arrivals, such as travellers, received attention during the pandemic. Several measures were introduced in order to reduce disease transmission via the country's borders (Box 5).

Despite not being fully prepared for a major infectious disease outbreak, as in all countries, Hungary successfully implemented measures during the very early stages of the pandemic, including establishing the Operative Corps in January 2020 (see Box 1).

#### Box 5. Strict border controls were implemented to reduce disease transmission during the pandemic

In March 2020, Hungary closed its border to all foreign nationals, except under certain circumstances. Borders remained open for Hungarian nationals and non-Hungarian nationals with permanent residency or the right to stay longer than 90 days.

Those arriving in Hungary had to undergo a medical examination to determine whether they were suspected of being infected with COVID-19. If positive, the person was placed in a mandatory quarantine facility; if not, they had to quarantine at their place of residence for 10 days. A person could exit home quarantine if they had two negative

### Rates of testing for COVID-19 in Hungary were consistently below the EU

Timely and rapid tests minimise the spread of a virus by allowing cases to be identified and isolated early, and are indispensable for effective contract tracing. During the early stages of the pandemic, testing rates in Hungary fell significantly below the EU average. This probably reflects low incidence rates during that period – for example, at the end of March 2020, the proportion of positive tests in Hungary was 3.1 % compared to 13 % across the EU.

In response to a surge in cases following summer 2020, the Hungarian government introduced several measures to boost the rate of testing. Key examples include a cap of HUF 19 500 (EUR 54) on OOP costs for a voluntary PCR test and 200 new testing vehicles staffed by graduate medical students to undertake antigen and PCR tests. Despite these efforts, differences in testing rates between Hungary and the EU widened over time (Figure 18). PCR tests taken two days apart. An individual did not have to quarantine if they had an immunity certificate indicating either that they were vaccinated (with two doses, or equivalent) or that they had recently recovered from COVID-19.

To assist police with monitoring people in home quarantine, the government introduced a monitoring application called "Home quarantine system". This provided police with the location of users to check whether they were complying with home quarantine rules.



7. Since 2005, the IHR have provided an overarching legal framework that defines countries' rights and obligations in handling public health events and emergencies. Under the IHR, all Member States are required to develop public health capacities to prevent, detect, assess, notify and respond to public health risks. The monitoring process of IHR implementation status involves assessing, through a self-evaluation questionnaire, 13 core capacities.

#### Figure 18. Testing rates remained below the EU average despite actions taken to increase capacity



Note: The EU average is weighted (the number of countries included in the average varies depending on the week). Source: ECDC.

# Health care workforce and infrastructure capacity were boosted in response to the pandemic

Hungary's ongoing workforce shortages were exacerbated by the COVID-19 emergency (see Section 4). In response, the government introduced several temporary measures to boost workforce capacity rapidly. Key measures included recruiting 900 voluntary health care professionals, such as students, and stationing soldiers in hospitals across the country to perform physical and logistical work.

The government also dedicated funds to enhance physical infrastructure and equipment to cope with the demands of the pandemic –for example, building a temporary 330-bed hospital within Budapest's exhibition centre and a temporary 150-bed hospital in the city of Kiskunhalas. These actions helped Hungary increase the total number of intensive care unit beds by 44 % between January and December 2020 (NEAK, 2020a; NEAK, 2020b). Nevertheless, a shortage of health care workers such as anaesthesiology and intensive therapy specialists made it difficult to boost intensive care unit capacity.

#### Protective measures contributed to a relatively low number of deaths in long-term care facilities

Older people are at significantly higher risk of developing serious complications or dying from COVID-19. To help LTC facilities respond to the COVID-19 outbreak, the government developed an LTC taskforce and appointed a COVID-19 leader responsible for ensuring preparedness who was therefore accountable in the event of an outbreak – a measure taken by only one other country: Ireland (Curry & Langins, 2020). Furthermore, the remit of hospital commanders was extended to LTC nursing care facilities. Like most EU countries, Hungary also introduced mandatory testing for those working in care homes, a nationwide inspection of nursing homes and restricted visitation rights. As of January 2021, 23 % of all COVID-19 deaths in Hungary were recorded in LTC facilities.

# Hungary's decision to approve additional vaccines increased supply early in the vaccine rollout

Hungary was the first EU country to grant approval for vaccines produced in the People's Republic of China and the Russian Federation. The decision to authorise the use of these two COVID-19 vaccines prior to their approval by the European regulator increased the availability of vaccines during the early phase of the programme rollout. As a result, the proportion of vaccinated people was higher than that in other EU countries during March to July 2021 (Figure 19).

The decision to bypass the European Medicines Agency's assessment triggered concerns from EU institutions about risks of undermining public confidence in COVID-19 vaccinations. This decision, however, did not seem to affect public confidence, and the Sputnik and Sinopharm vaccines comprised approximately one third of all vaccines administered in Hungary as of July 2021 (ECDC, 2021).



#### Figure 19. Hungary's vaccination rate surpassed the EU average during early stages of the vaccine rollout



Note: The EU average is unweighted (the number of countries used for the average varies depending on the week). Sources: ECDC for COVID-19 cases; Our World in Data for vaccination rates.

### Hungary has a strong health data and information system

The COVID-19 pandemic highlighted the importance of real-time data to develop and implement appropriate policy responses. Hungary was in a strong position prior to the pandemic to provide up-to-date data related to COVID-19, given its advanced health information system – the National e-health Cloud. This provides an online summary of patient information, including laboratory results and e-prescriptions. It is envisaged that information collected as part of the National e-health Cloud will in future be linked with data from other EU countries as part of the European Health Data Space project (Box 6). Hungary also introduced innovative methods to use large, routine datasets to support pandemic decision making. One such example is the collaborative project between the Ministry for Innovation and Technology, data experts and three leading telecommunication companies, which aims to measure the effectiveness of policies that restrict the movement of people by analysing data on mobile phone usage. Specifically, the government receives aggregated mobile phone data in the form of two indices – a "mobility" and a "stay at home" index. Information from both indices is published on the government's pandemic management dashboard, which can only be accessed by government officials (Szocska et al., 2021).

#### Box 6. The European Health Data Space will improve data access and exchange

The creation of a European Data Space is one of the priorities of the Commission over the period 2019-25, including in the health sector. A common European Health Data Space will promote better exchange and access to different types of health data (e.g. electronic health records, genomics data, data from patient registries and so on), to support health care delivery and health research and policy making.

#### Source: European Commission (2021c).

#### Hungary plans to invest heavily in its health system using the EU's Recovery and Resilience Facility

Hungary has requested EUR 7.2 billion in grants from the EU Recovery and Resilience Facility. The government plans to spend a large proportion (34 %) of the grant money on improving the country's health care system between 2021 and 2026. The entire data system will be built on transparent foundations that fully protect citizens' data and reinforce the portability of their health data. The European Health Data Space will be built on three main pillars:

- a strong system of data governance and rules for data exchange
- data quality
- strong infrastructure and interoperability

Key health proposals outlined within the country's National Recovery and Resilience Plan include investment in primary care – in particular in the field of prevention and management of chronic conditions – and funding for an increase in the salary of doctors by 120 % (see Section 5.2).

# **6** Key findings

- Before the COVID-19 pandemic, life expectancy in Hungary was growing at a slightly faster rate than in most EU countries, but remained almost five years below the EU average in 2019. In 2020, Hungary experienced a temporary decline in life expectancy of 10 months as a result of the COVID-19 pandemic, a reduction similar to the EU average.
- Risk factors including smoking, alcohol consumption and unhealthy diets are more prevalent in Hungary than other EU countries. These have contributed to relatively high rates of preventable causes of death, such as cancer and cardiovascular diseases.
- Spending on preventive care as a proportion of total health spending has fallen over the past 10 years in Hungary. In an effort to improve disease prevention, the government introduced five national health programmes for 2019-22, which focus on prevention across the lifecycle.
- Despite growth in recent years, health spending per capita and as a proportion of GDP in Hungary remains well below the EU average. Public spending is particularly low for outpatient care and pharmaceuticals.
- Hungary has experienced persistent health workforce shortages, which the government has been addressing recently through substantial wage increases. During the pandemic, short-term measures to boost the workforce were introduced, including recruitment of 900 voluntary staff. In the longer term, the government aims to address workforce shortages via the new public sector employment contract, which includes a 120 % pay increase for doctors by 2023.

- In response to the COVID-19 pandemic, the Hungarian government centralised power by establishing an Operative Corps led by the Minister of the Interior and Minister of Human Capacities. In an effort to reduce disease transmission, two rounds of lockdown measures were introduced between March 2020 and May 2021. In addition, the Operative Corps aimed to free up existing resources by cancelling elective surgeries and requiring hospitals to reserve a high proportion of beds for COVID-19 patients. The latter policy resulted in securing a higher number of hospital beds during the first wave of the pandemic than what was justified based on infection figures.
- Hungary implemented an intensive, swift and broad-based vaccination campaign by being the first European country to approve Chinese and Russian vaccines. As a result, during the early months of the rollout, the proportion of people vaccinated progressed at a faster pace than in most EU countries.

# Key sources

OECD/EU (2020), Health at a Glance: Europe 2020 – State of Health in the EU Cycle. Paris, OECD Publishing, https://doi.org/10.1787/82129230-en. WHO Regional Office for Europe, European Commission, European Observatory on Health Systems and Policies (2021), COVID-19 Health Systems Response Monitor – Hungary: https://www.covid19healthsystem.org/ countries/hungary/countrypage.aspx; accessed on 12 May 2021.

## References

Curry N, Langins M (2020), Cross-country analysis: what measures have been taken to protect care homes during the COVID-19 crisis?

ECDC (2021), COVID-19 vaccine rollout review – Week 27, 2021.

EU Expert Group on Health Systems Performance Assessment (HSPA) (2020), Assessing the resilience of health systems in Europe: an overview of the theory, current practice and strategies for improvement.

Eurofound (2021), *Living, working and COVID-19 survey, third round* (February-March 2021).

European Commission (2020a), State of vaccine confidence in the EU+UK – 2020.

European Commission (2020b), A Pharmaceutical Strategy for Europe.

European Commission (2021a), *Europe's Beating Cancer Plan.* 

European Commission (2021b), *Mapping of national health workforce planning and policies in the EU-28: final study repor.t*  European Commission (2021c), *The European Health Data Space.* 

Gaal P et al. (2021), The 2020 reform of the employment status of Hungarian health workers: Will it eliminate informal payments and separate the public and private sectors from each other? Health Policy, 125(7):833-40.

NEAK (2020a), Jelentés a fekvőbeteg-szakellátás teljesítményéről [Report on the performance of inpatient specialist care]. Budapest, http://www.neak.gov.hu/data/ cms1028127/hf\_202012.pdf.

NEAK (2020b), Jelentés a fekvőbeteg-szakellátás teljesítményéről [Report on the performance of inpatient specialist care]. Budapest, http://www.neak.gov.hu/data/ cms1025661/hf\_202001.pdf.

Szigeti S et al. (2019), *Tax-funded social health insurance: an analysis of revenue sources, Hungary,* Bulletin of the World Health Organization, 97(5):335-348.

Szocska M et al. (2021), *Countrywide population movement monitoring using mobile devices generated (big) data during the COVID-19 crisis*, Scientific Reports, 11(5943).

### **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		



### **State of Health in the EU** Country Health Profile 2021

The Country Health Profiles are an important step in the European Commission's ongoing *State of Health in the EU* cycle of knowledge brokering, produced with the financial assistance of the European Union. The profiles are the result of joint work between the Organisation for Economic Co-operation and Development (OECD) and the European Observatory on Health Systems and Policies, in cooperation with the European Commission.

The concise, policy-relevant profiles are based on a transparent, consistent methodology, using both quantitative and qualitative data, yet flexibly adapted to the context of each EU/EEA country. The aim is to create a means for mutual learning and voluntary exchange that can be used by policymakers and policy influencers alike. Each country profile provides a short synthesis of:

- health status in the country
- the determinants of health, focussing on behavioural risk factors
- the organisation of the health system
- the effectiveness, accessibility and resilience of the health system

The Commission is complementing the key findings of these country profiles with a Companion Report.

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