# Czechia

Health system summary 2024



# **Authors**

#### Nathan Shuftan Lenka Šlegerová

Anna Maresso (Series Editor)

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This Health System Summary is based on the *Czechia: Health System Review* (HiT) published in 2023 but is significantly updated, including data, policy developments and relevant reforms as highlighted by the Health Systems and Policies Monitor (HSPM) (www.hspm.org). For this edition of the Health System Summary, key data have been updated to those available in September 2024 unless otherwise stated. Health System Summaries use a concise format to communicate central features of country health systems and analyse available evidence on the organization, financing and delivery of health care. They also provide insights into key reforms and the varied challenges testing the performance of the health system.

#### Main sources:

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Health Systems and Policy Monitor (HSPM) – Czechia (2024). European Observatory on Health Systems and Policies, https://eurohealthobservatory.who.int/monitors/health-systems-monitor.

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# How is the health system organized?



Stewardship of the health system is vested at the national level with key roles for regional authorities as well as health insurance funds

# **Organization**

The health system in Czechia serves a total population of 10.9 million (ČSÚ, 2024) and has three main organizational features:

- virtually universal social health insurance (SHI) providing a broad benefits package and funded primarily through compulsory contributions and government transfers from general taxes;
- diversity of provision, with outpatient care providers (mainly private) and hospitals (mainly publicly owned, with different legal forms) contracted by health insurance funds (HIFs); and
- joint negotiations by key actors within defined segments of care and reimbursement issues, supervised by the government.

Czech HIFs function as purchasers and payers of health services for their members. They are quasi-public, self-governing bodies. The national Ministry of Health is the main steward of the Czech health system and (along with subordinate agencies) is responsible for regulatory and supervisory functions (see also Box 1). The Ministry also exercises, to a certain degree, an ownership role. Major decentralization processes took place in 2003, with authority passing from the central government to 14 Regional Public Health Authorities (Krajské hygienické stanice, RPHAs). Some regions also later decided to change the legal incorporation of their hospitals from entities directly subordinate to regional authorities to joint-stock companies. Select areas such as highly specialized care have, however, been centralized in recent years.

#### **Box 1** Capacity for policy development and implementation

Regional authorities face challenges in effective planning, unless they have their own databases. The Institute of Health Information and Statistics (ÚZIS) has already provided some regions with regionally-targeted analyses, such as regional mortality rates from selected diseases and capacity reviews, although there was a backlog on the remaining regional reports, due to the COVID-19 pandemic in 2020–2021.

Although capacities for evidence-based governance are growing, policy capacity in the Czech health system (for example, the expertise to monitor developments, review evidence and draft legislation) is currently difficult to assess beyond mere resources. Effective planning (on any level) is also hindered by the lack of systematically captured data on waiting times for both outpatient and inpatient care and unmet needs, issues that are a recurrent theme in the Czech health policy debate but remain hindered by a lack of data.

Nevertheless, recent developments in health system performance assessment (HSPA) since 2023 provide a concrete basis for policy development capacities (see *Health system performance monitoring and information systems*).

### **Planning**

Planning in the Czech health system involves the Ministry of Health playing a major role by establishing general frameworks on scope, conditions and requirements for provision. Other stakeholders involved are HIFs, teaching and regional hospitals, and regional authorities. The Strategic Framework for the Development of Health Care in Czechia until 2030

(Health 2030) is the government's current main strategic document (MZČR, 2020a). Regarding financial planning, each HIF is obliged to develop its financial and operating plan (zdravotně pojistný plán) on an annual basis for the coming year, including an outlook for the 2 years ahead.

#### **Providers**

Most primary care providers are self-employed physicians working either in solo or group practices which are contracted to provide services. The Ministry of Health directly administers large hospitals with supra-regional spheres of influence, including teaching hospitals and some highly specialized tertiary care

facilities. All psychiatric hospitals and some therapeutic centres are managed by the Ministry of Health. Regional authorities are responsible for authorizing health service provision for outpatient providers as well as inpatient providers that are not directly subordinate to any ministry or region.<sup>1</sup>

# How much is spent on health services?



Financing of the Czech health system is primarily from public sources, while private expenditures, including out-of-pocket spending, are low

## **Funding mechanisms**

The main source of health funding comes from SHI contributions, consisting of wage-based contributions from individuals and employers, income-related contributions from self-employed people and transferred state contributions on behalf of economically inactive people. State contributions for the economically inactive increased substantially in 2020 and accounted for nearly a third (30.4%) of total SHI revenues in 2023 (MFČR, 2024). General tax revenue is also responsible for additional public expenditure in the health care sector, such as state or regional investment subsidies to providers.

All SHI contributions are managed by HIFs, including state budget transfers on behalf of the economically inactive. SHI revenues are fully subject to redistribution among HIFs according to a risk-adjustment scheme. The reallocation process among HIFs is calculated by the Ministry of Health through a special central account of the General Health Insurance Fund (VZP), which serves as a clearing centre. The reallocation process takes place monthly and is conducted 1 month after the respective collection of premiums.

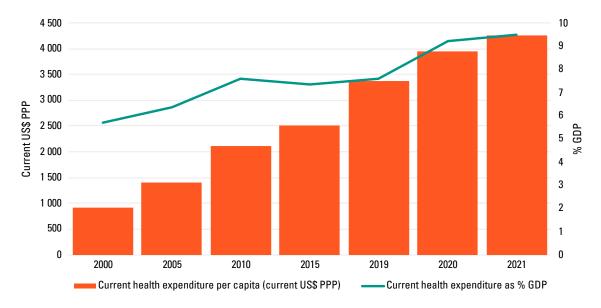
<sup>1</sup> Providers that are directly subordinate to any ministry or region include teaching hospitals and state-owned specialized inpatient facilities, and regional hospitals that were not transformed into commercial companies (i.e. regional hospitals that remained directly subordinate, so-called budgetary organizations of a region).

#### **Health expenditure**

Czechia's per capita health expenditure was US\$ 4249 in 2021 (adjusted for differences in purchasing power) (Figs. 1 and 2). As a percentage of GDP, health spending jumped greatly during the first years of the COVID-19 pandemic, rising from 7.6% in 2019 to 9.2% in 2020 and further to 9.5% in 2021, though still below the EU average of 11.0%. With 86.4% of current health expenditure coming from public sources in 2021,

Czechia has the highest level of public financing in the EU and the WHO European Region. Prior to the pandemic, private health care expenditure had hovered between 15% and 20% of health spending: out-of-pocket (OOP) payments traditionally made up more than three quarters of this and stood at 12.7% of total health spending in 2021. Voluntary Health Insurance (VHI) is negligible in Czechia (0.86% in 2021).

Fig. 1 Trends in health expenditure, 2000–2021 (selected years)



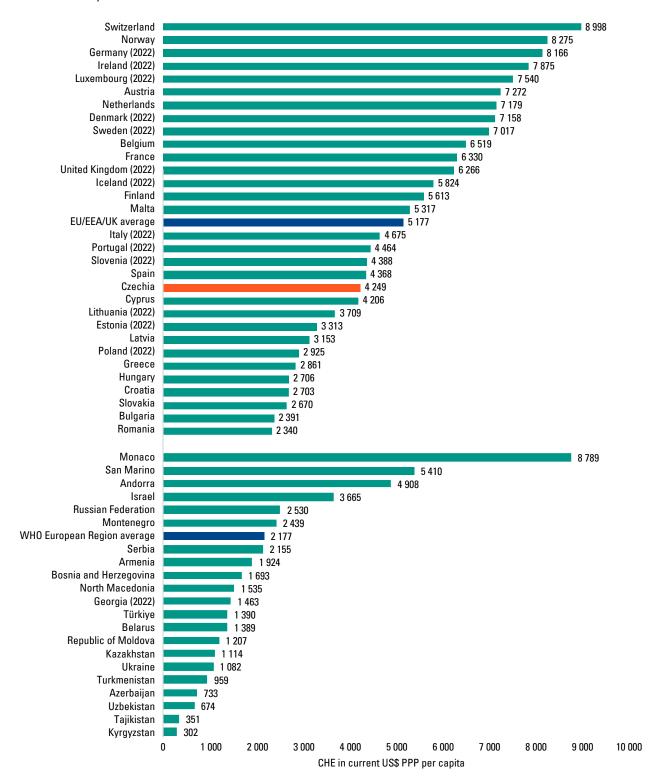
**Notes:** GDP: gross domestic product; PPP: purchasing power parity.

Source: WHO, 2024.

# **Out-of-pocket payments**

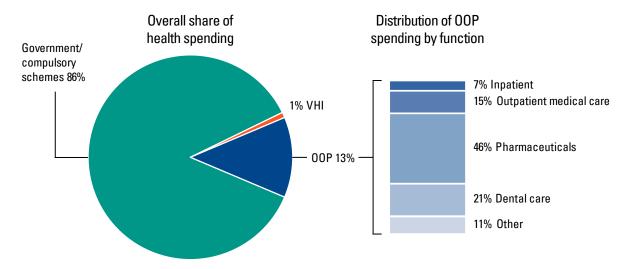
OOP payments consist of direct payments for overthe-counter pharmaceuticals; co-payments on prescription pharmaceuticals; above-standard medical procedures and services; and the few direct payments and surcharges for dental care. Outpatient and inpatient health services are provided free of charge at the point of use, except for some prescription pharmaceuticals, medical devices and aids and the user fee for accessing outpatient out-of-hours services. The composition of OOP payments is depicted in Fig. 3.

Fig. 2 Current health expenditure (US\$ PPP) per capita in WHO European Region countries, 2021 or latest available year



**Notes:** CHE: current health expenditure; EEA: European Economic Area; EU: European Union; PPP: purchasing power parity. **Source:** WHO, 2024.

Fig. 3 Composition of out-of-pocket payments, 2021



Notes: OOP: out-of-pocket; VHI: voluntary health insurance.

Source: OECD, 2024. Data refer to 2021.

#### Coverage

Compulsory membership for all Czech citizens residing in the country, including the self-employed as well as for permanent residents, results in near universal coverage (Box 2). Moreover, a large portion of the population is exempt from paying SHI contributions due to being classified as economically inactive (including students, pensioners and the

unemployed). The range of benefits covered by SHI is very broad and includes inpatient and outpatient care, prescription pharmaceuticals, some dental procedures, rehabilitation, spa treatments and over-the-counter pharmaceuticals (the last three if prescribed by a physician) and long-term care when provided in hospitals.

#### **Box 2.** What are the key gaps in coverage?

Gaps in population coverage are very small in Czechia; SHI covers the entire population with the exception of family members of non-EU nationals employed by Czech companies. Asylum seekers are covered, and measures are steadily taken to cover specific groups. Beginning in 2021, for example, babies born in Czechia with only the mother having Czech permanent residence also receive coverage. The very broad scope of SHI health services coverage leaves only limited space for potential VHI. For this reason, VHI plays a marginal role and is mainly used for travel purposes to cover health care abroad, rather than being complementary insurance for Czech-based services. Regarding depth of coverage, the Czech system applies almost no cost-sharing and virtually all health services are free at the point of use. This SHI design with a comprehensive benefits package makes health care affordable, resulting in high financial protection and low levels of unmet medical care needs (OECD/European Observatory on Health Systems and Policies, 2021; Eurostat, 2024).

## **Paying providers**

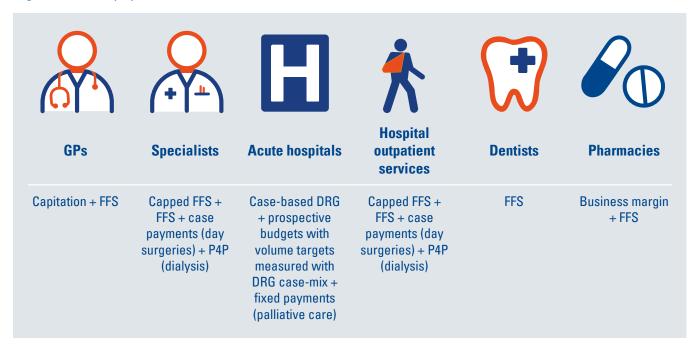
The system of paying for health services combines several payment mechanisms that are applied by HIFs, mainly capitation, capped FFS payments, case payments based on DRGs and activity-based prospective budgets. Payment mechanisms for different

providers are shown in Fig. 4. HIFs provide monthly advance payments to providers and the final billing takes place the following year. Payments to providers are based on the Reimbursement Directive, issued by the Ministry of Health annually for the

following calendar year, or on individual agreements between providers and HIFs. During the COVID-19 pandemic, an exceptional Compensation Directive

took effect to compensate providers for losses of income and higher costs for treating COVID-19 patients.

Fig. 4 Provider payment mechanisms in Czechia



Notes: DRG: diagnosis related group; FFS: fee-for-service; P4P: pay for performance.

# What resources are available for the health system?



Czechia has hospital bed capacities well above the EU average, while the endowment of doctors and nurses was slightly higher than the EU averages in 2021

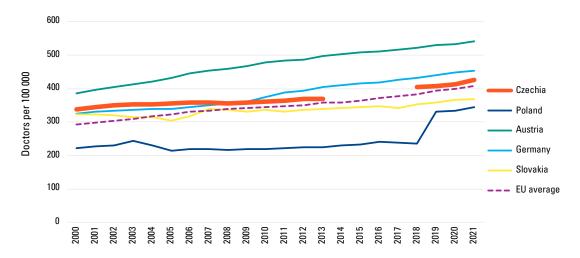
# **Health professionals**

In 2021 Czechia had 426 physicians per 100 000 population compared with an EU average of 407 and 828 nurses per 100 000 population compared with 770 (EU average). Trends in numbers and selected country comparisons are displayed in Figs. 5a and 5b.

An ageing and unevenly distributed workforce has been acknowledged by various strategic documents from the Ministry of Health, HIFs and regional authorities. However, mechanisms for planning human resources are not very developed in

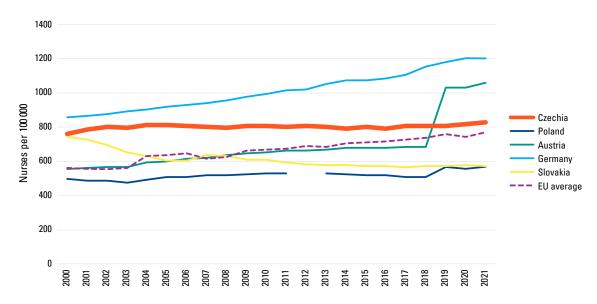
Czechia. Financing from the state budget has helped to contribute to the recent rise in the number of new medical students. The state budget has also provided subsidies from regional authorities to attract health workers, for example with recruitment bonuses, equipment for outpatient offices and scholarships to medical students who commit to practicing for a certain number of years in the region. Legislation has also been passed to simplify postgraduate training.

Fig. 5a Practising physicians per 100 000 population in Czechia and selected countries, 2000–2021



Source: Eurostat, 2024.

Fig. 5b Practising nurses per 100 000 population in Czechia and selected countries, 2000–2021



Source: Eurostat, 2024.

## **Health infrastructure**

In Czechia a previous trend of decreasing acute care beds from the 1990s to the early 2010s has eased off, and the total bed density of 654 hospital beds per 100 000 population is well above the EU average (Fig. 6). The density of computed tomography (CT) scanners in Czechia has increased by 10% since 2013, recording 1.65 such units per 100 000 population in 2022, with an overwhelming majority in inpatient facilities. A more pronounced trend exists for magnetic resonance imaging (MRI) units, which increased by nearly 60%

from 0.74 per 100 000 population in 2013 to 1.17 in 2022 (see Fig. 7).

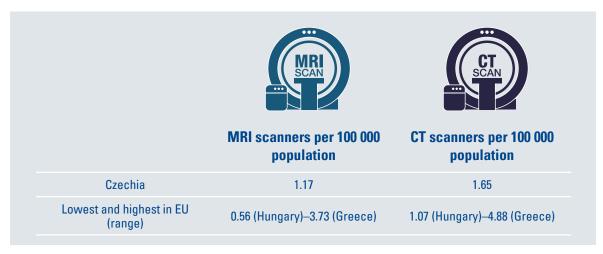
As upkeep has long been underfinanced and facilities need repairs, university and state-owned hospitals have recently begun to receive state subsidies for improvements. Recent programmes through the European Regional Development Fund have also targeted smaller regional hospitals to improve the quality in these facilities.

1 000 900 800 Hospital beds per 100 000 700 Czechia 600 Poland Austria 500 Germany 400 Slovakia 300 EU average 200 100 n 2005 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2015 2017

Fig. 6 Hospital beds per 100 000 population in Czechia and selected countries, 2000–2022

Source: Eurostat, 2024.

Fig. 7 Magnetic resonance imaging (MRI) and computed tomography (CT) scanners in Czechia, per 100 000 population, 2022



Source: Eurostat, 2024.

### **Distribution of health resources**

Although the hospital network is generally quite dense across the country (including the capital Prague), hospitals are more sparsely and unevenly distributed in some regions. Accessibility targets are set (including in rural and border areas) and HIFs are responsible for guaranteeing access for their clients, including to primary care, though legal limits are sometimes simply met without being adapted to conditions in rural areas.

Specialized inpatient centres are concentrated in urban areas. This results in patient mobility towards

regional centres and Prague in particular. As core catchment areas have been abolished, patients living across Czechia may be treated anywhere they desire.

Both the COVID-19 pandemic and the Act on eHealth (Zákon 325/2021 o elektronizaci zdravotnictví, 2021) have significantly accelerated digital health priorities in Czechia, with electronic prescriptions, digital sick notes and electronic information sharing in place. Phone consultations have also become more widespread and accepted.

# How are health services delivered?



Public health responsibilities are divided between the national and regional levels. Primary care can be delivered in solo or group practice settings, while inpatient care features many specialized facilities around the country

#### **Public health**

The Ministry of Health is responsible for supervising agencies charged with protecting public health: the National Institute of Public Health (*Státní zdravotní ústav*, SZÚ), two regional Institutes of Public Health, and 14 RPHAs.

The National Institute of Public Health conducts research, provides advice on methodology and drafts expert opinions on the safety of various products, including cosmetics, food supplements and other items of daily use. The two regional Public Health Institutes share some epidemiological surveillance duties with SZÚ, though their chief domains are

science and research. They also collaborate with primary care facilities (which are responsible for providing vaccinations and antenatal services) on immunization logistics. RPHAs are responsible for public health services including certifications, authorizations and immunization logistics (along with the two regional institutes of public health).

Health 2030 has a particular focus on the following areas of public health: disease prevention, health promotion and protection, and increasing health literacy (Box 3).

### Primary and ambulatory care

A patient's first point of contact with the Czech health system is typically through non-emergency primary care, although there is no true gatekeeping role and patients are free to (and often do, with some exceptions) obtain care directly from specialists of their choice without referral (Box 3).

Primary care is provided to patients by 'registering providers', although it is not compulsory to register with such a physician. The Health Service Act of 2011 defines registering providers as those in general practice medicine, general practice for children and adolescents, dentistry, and gynaecology and obstetrics, who have admitted patients onto their lists to provide them with primary care (Zákon č. 372/2011 Sb. Zákon o zdravotních službách a podmínkách jejich poskytování (zákon o zdravotních službách, 2011). Most

primary care physicians are self-employed in solo practices, typically employing a nurse who also has administrative duties. A primary care physician may join others to work in private group practices, health centres or polyclinics.

Patients may register with a physician of their choice and can switch to a new one every 3 months without restrictions. Registering physicians can refuse to register new patients, primarily if a tolerable workload has been exceeded.

Similar to primary care, specialized outpatient services in Czechia are offered by self-employed specialists in solo or group practices, health centres or polyclinics, or employed in hospital outpatient departments (see also Box 4).

#### Box 3 What are the key strengths and weaknesses of primary care?

Health centres and polyclinics, where primary care is practiced among physicians working together, tend to be well equipped. Most have electrocardiographs, ultrasound scanners and X-ray equipment. They also generally have diagnostic laboratory facilities on the premises and employ nurses and physiotherapists.

Key weaknesses in primary care in Czechia include low competencies of primary care physicians, the incomplete gate-keeping role, a fragmented provider landscape (the prevalence of solo practices) and the decline in the number of general practitioners (GPs) in remote areas. Moreover, primary care physicians working in solo practices are less likely to have direct access to advanced diagnostic equipment. In 2022, the average age of GPs in Czechia was 55.0 years. The situation is even more difficult with paediatricians, with an average age of 57.4 years (VZP, 2023). Currently, there is a strong renewed interest among medical students to become GPs, although the same interest has not yet been seen for paediatricians.

To address these, Health 2030 aims to:

- strengthen the competencies of GPs and establish a clear definition of relationships with outpatient specialists;
- provide incentives to increase the availability of care and promote preventive check-ups;
- · effectively manage chronic diseases;
- improve the reimbursement mechanism; and
- improve quality through monitoring of quality indicators.

Various incentives for health care providers are defined in the Reimbursement Directives (for example, rewards for working in remote areas and for extended office hours) (MZČR, 2020b). HIFs can award bonuses regarding quality, and the General Health Insurance Fund launched the *VZP PLUS programme* in 2019 to reward good organization and high quality of (mostly chronic) care.

### **Hospital care**

Inpatient care in Czechia is provided in hospitals and specialized inpatient facilities. Access to specialist care is not restricted by gatekeeping, though referrals are necessary for hospitalization (except in cases of medical emergency, including life-threatening situations, childbirth or law-mandated hospitalization, such as highly contagious individuals). Patients can usually go to a hospital of their choice if that hospital has a contract with their HIF.

Large hospitals providing maximum care are situated exclusively in larger cities. Hospitals in smaller cities and towns tend to focus on a limited number of medical specialties (for example, internal medicine and maternity wards) and the scope of care offered is less broad. In recent years, some of these hospitals

have focused on day surgery and reduced their inpatient services to focus more on outpatient services. Teaching hospitals, which are directly subordinate to the Ministry of Health (except for one that is subordinate to the Ministry of Defense), have a special status, as they perform educational and research duties in addition to their function as providers.

For economic and management reasons, some regions have integrated their hospitals under regional holdings. Regions also aim to acquire small local hospitals, helping local hospitals to survive after restructuring the care they provide (where the continued operability of small local hospitals would be at stake). These hospitals then form a regional network of hospitals and are coordinated from the regional centres.

#### **Box 4** Are efforts to improve integration of care working?

Vertical integration of outpatient care is represented by disease management of some (chronic) diseases, such as diabetes mellitus, which operates via a functioning network of GPs closely cooperating with diabetologists. The role of GPs is to identify asymptomatic diabetic patients and treat non-complicated diabetic patients for which GPs are compensated in addition to the capitation reimbursement they receive. Should complications emerge, a patient is sent to a specialist (diabetologist, etc.).

In January 2024, the Ministry of Health launched a project to support the planning of the development of integrated health and social care. This 3-year project aims to react to the rising needs of the gradually ageing population and growing number of chronically ill patients. The goal is to map the existing health and social services around Czechia and identify what is missing. The ambition is to determine specific steps to fill these so-called white spaces. A preliminary investigation shows that one of the problems might be the lack of rules and conditions for cooperation and coordination. The project will take place in all 14 regions and will also include training of officials of the health and social departments of regional offices.

#### Pharmaceutical care

Prescription pharmaceuticals and medical devices are covered by SHI, though 17.9% of expenditure on pharmaceuticals and medical devices went toward non-covered, non-prescribed purchases<sup>2</sup> in 2021 (ÚZIS, 2022a).

Pharmaceutical services were provided by 2496 pharmacies and 218 (medical device) dispensaries in Czechia in 2021: representing roughly 4219 inhabitants per pharmacy. Pharmacy density differs throughout the country, with denser coverage in larger cities. Half of all pharmacies are open 6 days a week with the rest opening 5 days a week. Pharmacies that belong to key regional and teaching hospitals are open 7 days a week or offer around the clock services (ÚZIS, 2020a, 2022a).

Online pharmacies and online sales of pharmaceuticals have increased in importance, particularly since the COVID-19 pandemic. In 2021, online sales of non-prescribed drugs, including dermatological products, reached 14% of all freely disposable sales (without prescription) of pharmaceuticals.

Extremely costly pharmaceuticals are only provided in centres of highly specialized care and are reimbursed based on contracts with HIFs; these include, for example, biological treatments and highly innovative drugs with temporary reimbursement. Recently, the General Health Insurance Fund (VZP) ran a pilot project regarding delegated prescriptions for oncological therapies with several pharmaceuticals so that patients have the option to be treated closer to their homes, and complex oncology centres can better manage the increasing number of patients.

GPs have also recently gained new competencies. Since July 2024, they can prescribe around 1000 additional medicines that previously only specialists could prescribe to patients. This change is expected to improve access to medicines; direct beneficiaries include chronically ill patients or those recently discharged but yet to find the necessary specialist(s). Moreover, the policy is expected to reduce specialists' workload.

#### Mental health care

Efforts to modernize mental health services have been underway following the psychiatric care reform launch in 2011 which stemmed from underfinancing and outdated organization that focused on psychiatric hospitals that could provide neither sufficient support for patients in their own environment nor coordination among providers. The underlying goal has been to improve quality of life for people living with

<sup>2</sup> These are over-the-counter purchases and also additional payments when HIFs cover only a part of the pharmaceutical and the individual needs to cover the rest.

mental health conditions, mainly by deinstitutionalizing psychiatric care, shifting from psychiatric hospitals to community and outpatient settings while stressing the importance of multidisciplinary teams and the linkage between health and social services. Full implementation of these reforms began in 2017 and the first mental health centres opened in July 2018; the goal is to have 100 functioning centres by 2030. Three dedicated action plans under the *Health 2030* strategy (the National Mental Health Action Plan 2020–30, the National Action Plan for Alzheimer's and Other Dementias 2020–30, and the National Suicide Prevention Action Plan 2020–30) are key policy instruments driving developments.

#### **Dental** care

Dental care in Czechia mainly comes from private providers, and there has been a long-running trend for dentists to only take private (self-paying) patients. One in four dentists was aged 60 years or over in 2023,

and nearly 95% of dentists are specialized in general dentistry, leaving personnel gaps for specialists (ČSK, 2024). Some dental care is also available in publicly owned hospitals.

# What reforms are being pursued?



Recent reforms to the Czech health system have focused on building up public health capacities, financing, eHealth and integrating care

Although the COVID-19 pandemic highlighted the necessity of further strengthening public health efforts, other challenges such as the sustainability of health financing, improvements to care provision and addressing health workforce shortages had been the subject of reform measures before the onset of the pandemic in 2020.

Tobacco and alcohol policies have been strengthened in recent years: a full-scale ban on smoking in public places was introduced in 2017, and gradual increases to excise taxes on cigarettes, cigars and additional tobacco products were launched in 2020, with annual increases continuing through to 2023.

The sustainability (and fairness) of health financing and reimbursement is a continued area of focus. In 2018, another reform to risk adjustment and redistribution among HIFs took effect, which included a redistribution mechanism that added adjustments

for patients with chronic diseases identified by their pharmaceutical consumption. On the revenue side, state transfers for the SHI contributions on behalf of the economically inactive population changed in 2022, with transfer amounts becoming linked to overall economic performance.

Provision of care reforms were seen in the area of concentration of highly specialized care, leading to designated networks for traumatology, oncology, severe burns, cardiology, stroke care and transplantation medicine throughout the 2010s. Functionalities for eHealth were accelerated by the COVID-19 pandemic, such as electronic prescriptions and digital sick notes, and a previous app to store COVID-19 vaccinations can now be used to store all patient vaccination history. Most recently, a new pilot is focusing on improving integrated care for those with chronic conditions (Box 5).

#### Box 5 Key health system reforms over the past 10 years

- Implementation of psychiatric care reform (2017): mental health centres offer new health and social services.
- Legislation for a full-scale ban on smoking in public places (2017): extended the scope of smoke-free areas and removed several previous exemptions.
- Implementation of compulsory electronic prescriptions for all health care providers (2018-2020): Further
  functionalities were rolled out in 2020, including the options to access long-term prescription records and
  control for duplicate prescriptions.
- Expansion of competencies for GPs (2019–2022): to monitor oncological patients; manage and analyse
  colorectal screenings; detect early dementia; care for patients with prediabetes and detect candidates for
  lung screening pilots.
- eHealth Act (2021): introduced a basic legislative framework, defined obligations and standardized rules for communication, information sharing and data protection among providers or between providers and HIFs.
- Introduction of CZ DRGs (2021): gradual implementation of a performance measure as a reimbursement mechanism for acute care hospitals.
- Legislative change to link transfers to SHI on behalf of the economically inactive population to economic performance (2021–2022): annual adjustments are now automatic.
- Full digitalization of vaccination history (2023): the EZKarta (originally Tečka and used only for COVID-19 vaccinations) now contains information on a user's full vaccination history since January 2023.
- Launch of a pilot to integrate care for the chronically ill (2024): the Ministry of Health is overseeing a project to support the planning of the development of integrated health and social care.

# How is the health system performing?



Evidence-informed policy making is being used to improve transparency and accountability in the health system; improving quality is also a major strategic aim

# Health system performance monitoring and information systems

Czechia has undertaken efforts to improve transparency and accountability in the health system, through patient and stakeholder involvement and evidence-informed policy-making in *Health 2030*. *Health 2030*'s corresponding implementation programmes also strive for an evidence-based approach, particularly via indicators to monitor the evolution of the reforms.

The Health Insurance Bureau contributes to evidence-based health system governance through efforts to optimize the concentration of specialized care, and began this by evaluating the performance of inpatient providers contracted with HIFs. These

evaluations proved to be an efficient benchmark for providers and useful as a source for professional organizations to use in discussions establishing and assessing volume limits for the concentration of specialized care.

In 2023, the OECD-led project on health system performance assessment (HSPA) in Czechia published a framework to enable national authorities to implement an institutional framework for reporting health system performance indicators. This was funded by the European Union via the Technical Support Instrument and aims to improve dissemination of

information on the state of the Czech health system, population health status and health care outcomes, thus contributing to better policy development. The framework features 12 domains across four areas: outcomes, outputs, processes and structures. The

final report also selects indicators for the implementation of the first Czech HSPA (OECD, 2023). For policy-makers, it will flag undesirable developments, no developments, or worsening of a particular indicator.

### **Accessibility and financial protection**

There are low levels of self-reported unmet needs for medical care due to cost, distance and waiting times, with few differences between income groups (Fig. 8). In 2023, only 0.4% of Czechs reported unmet needs for medical examinations, compared with the EU average of 2.4%. Czechia has a high level of financial protection, which includes annual caps on co-payments for vulnerable groups.

As HIFs must accept all applicants with a legal basis for entitlement and risk selection is not permitted, Czechia has virtually 100% population coverage. The range of benefits covered by SHI is broad, cost-sharing is rare (mostly for pharmaceuticals) and virtually all health services are free at the point of use.

The accessibility of care is defined by Governmental Regulation no. 307/2012 of 2012, which defines reachability (in minutes) for certain specialties and the maximum time one should wait for chosen medical interventions (in weeks). However, as waiting times in Czechia are not systematically monitored, these estimates are not reliable.

### **Health care quality**

There are national efforts to monitor the quality of primary and inpatient care in Czechia, accompanied by a recent initiative to implement patient satisfaction questionnaires (Box 6).

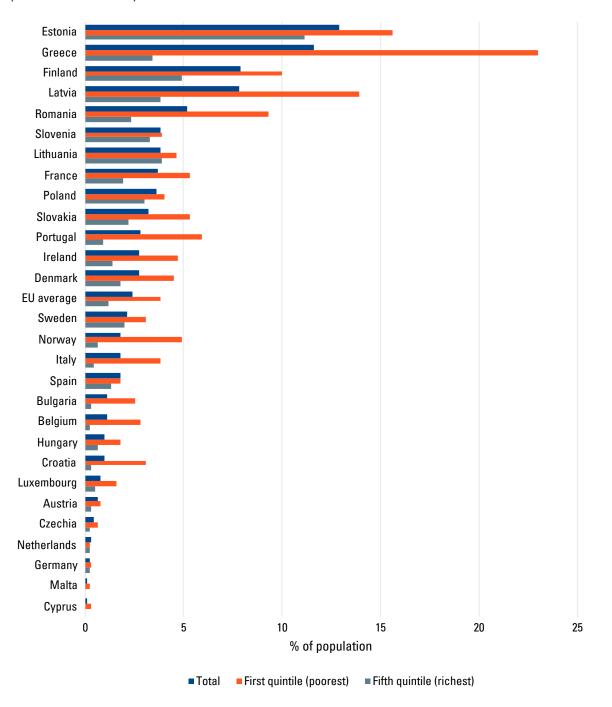
Avoidable hospital admissions for chronic conditions such as asthma, COPD, congestive heart failure, hypertension and uncontrolled diabetes are usually seen as a marker of access to, and the quality of, primary care delivery. Lowering these admissions rates is generally interpreted as an improvement in the quality of primary care, with patients being managed better in ambulatory settings. Fig. 9 shows that overall, among selected countries, Czechia ranked third-highest for avoidable hospital admissions in 2021. Looking at the breakdowns, patients in Czechia were admitted to hospital for asthma and COPD (119.3 per 100 000), hypertension (59.3 per 100 000), diabetes

(100.2 per 100 000) and congestive heart failure (357 per 100 000) at higher rates than most European counterparts. Avoidable hospital admission rates have been reduced since 2010 for asthma, COPD, diabetes and hypertension. Hospital admissions for CHF were only slightly reduced over that time, however (OECD, 2024).<sup>3</sup>

In terms of the quality of acute care, Fig. 10 shows in-hospital mortality rates (deaths within 30 days of admission) for admissions following acute myocardial infarction (AMI), haemorrhagic stroke and ischaemic stroke. Compared to its four neighbours, Czechia had the second-lowest rate for AMI deaths (6.2, after Poland), and the third-highest rates for haemorrhagic stroke (33.2, after Poland and Slovakia) and ischemic stroke (9.4, after Poland and Slovakia)

Caution should be exercised in the interpretation of the trend for this indicator in the years 2020–2021 when the COVID-19 pandemic caused a decrease in all hospital admissions for non-emergency inpatient treatment, and consequently may also be reflected in a decrease in avoidable hospitalizations for ambulatory sensitive conditions. Therefore, decreases in avoidable hospital admissions during this period may indicate unmet needs for care, not improved quality of primary care.

Fig. 8 Unmet needs for a medical examination (due to cost, waiting time, or travel distance), by income quintile, EU/EEA countries, 2023



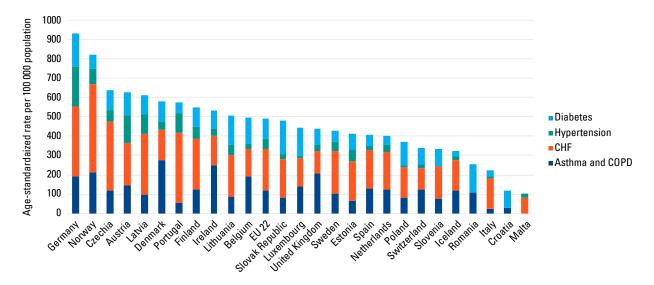
Notes: EEA: European Economic Area; EU: European Union.

Source: Eurostat, 2024.

#### **Box 6.** What do patients think of the care they receive?

Some providers (mainly inpatient facilities) distribute patient satisfaction questionnaires for their own purposes. In 2020, the Ministry of Health launched the National Patient Satisfaction Assessment (https://spokojenost.mzcr. cz/), the aim of which was to standardize part of the internal quality assessment. The evaluation takes the form of a questionnaire, and provider participation is voluntary. Results are intended for internal management use rather than public rankings. Results have not yet been made publicly available (as of September 2024).

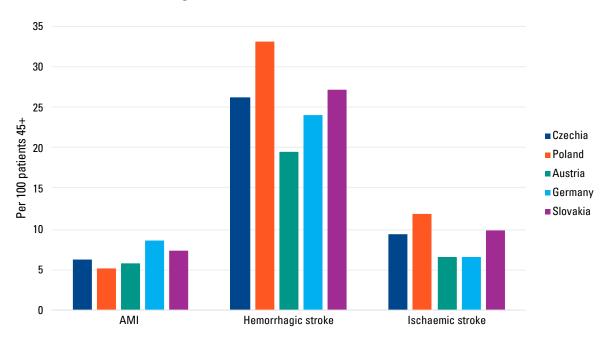
Fig. 9 Avoidable hospital admission rates for asthma and chronic obstructive pulmonary disease, congestive heart failure, hypertension and diabetes, Czechia and selected countries, 2021



**Notes:** CHF: congestive heart failure; COPD: chronic obstructive pulmonary disease. Croatia and Romania: no data for CHF or hypertension; Malta: no data for asthma and COPD or diabetes.

**Source:** OECD, 2024.

Fig. 10 In-hospital mortality rates (deaths within 30 days of admission) for admissions following acute myocardial infarction, haemorrhagic stroke and ischaemic stroke, Czechia and selected countries, 2021



Notes: AMI: acute myocardial infarction.

Source: OECD, 2024. Data refer to 2021 or nearest year.

#### **Health system outcomes**

Reductions in treatable mortality can be seen across Europe, and Czechia was just above the EU average in 2021 (Fig. 11). In Czechia, mortality from treatable causes, or deaths that could have been avoided through timely and effective health care interventions, reduced from 145.5 deaths per 100 000 population in 2012 to 125.9 per 100 000 in 2021 (Eurostat, 2024). Diseases of the circulatory system and cancer are the leading causes of treatable mortality.

Mortality from preventable causes (i.e. deaths that could have been avoided through public health interventions focusing on the wider determinants of public health, such as behaviour and lifestyle factors, socioeconomic status and environmental factors) stood at 285.9 deaths per 100 000 population in 2021. Although preventable mortality rates had been declining before the COVID-19 pandemic, the rate in 2021 was above the EU average (200.8 per 100 000). Lung cancer is a leading cause of preventable deaths

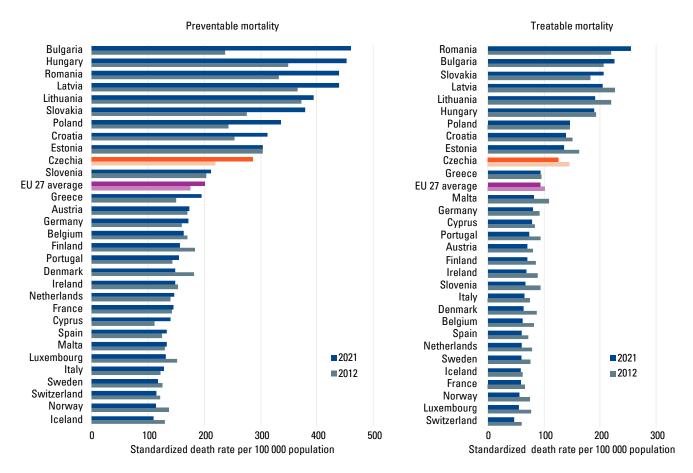
in Czechia. Comprehensive tobacco control legislation was introduced in 2017, and the reduction of smoking has also been enshrined as a priority area in *Health 2030*. Although vaccination rates are traditionally high, the development of health literacy and reductions in behavioural risk factors (such as smoking, alcohol consumption and obesity) present paths to reduce preventable mortality further (see Box 7).

The inequity of population health outcomes is a concern. Health outcome differences are documented along socioeconomic groups, for example, for disabled persons, the Roma population, and by age, employment status and along educational lines. Other factors, such as marital status, also seem to have an impact on health outcomes in Czechia (Tillmann et al., 2017). Finally, regional disparities in the provision of health services hinder the realization of health equity across the population.

#### **Box 7** Are public health interventions making a difference?

There have been recent efforts to reduce smoking rates via comprehensive tobacco control legislation. Although 16.6% of adults smoked daily in 2020, daily tobacco consumption had decreased significantly over the past decade in Czechia (from 23% in 2010), and was below the EU average (19.3%) in 2019. This development has been supported by public health interventions, including the introduction of comprehensive tobacco control legislation in 2017, which banned smoking in public places. Smoking continues to be more prevalent among men (21% smoked daily in 2020) than women (12.2%). A survey by the National Institute of Public Health also showed that 20% of people continued to be subject to second-hand smoke at their workplace in 2020. Despite significant decline in recent years, tobacco consumption among adolescents remains a concern. In 2022, 14% of 15-year-olds reported smoking during the past month, a lower share than the EU average (17%). Furthermore, on 23 October 2023, flavoured warm tobacco was banned (following European legislation), though the effects of this still need to be evaluated.

Fig. 11 Mortality from preventable and treatable causes 2012 and 2021



**Notes:** After 2020, deaths due to COVID-19 are counted as preventable deaths, resulting in an increase in mortality from preventable causes for most countries.

Source: Eurostat, 2024.

# Health system efficiency

Efficiency is not systematically monitored in the Czech health system, although a few studies have researched and assessed efficiency of selected sectors, such as inpatient providers. A very cursory way of illustrating how the Czech health system is performing in terms of input costs and outcomes is to plot current expenditure on health against the rate of treatable mortality. On this metric, Figure 12 shows that there is a cluster of countries, which includes Italy and Spain, that have lower health expenditure levels than Czechia but also achieve lower treatable mortality rates.

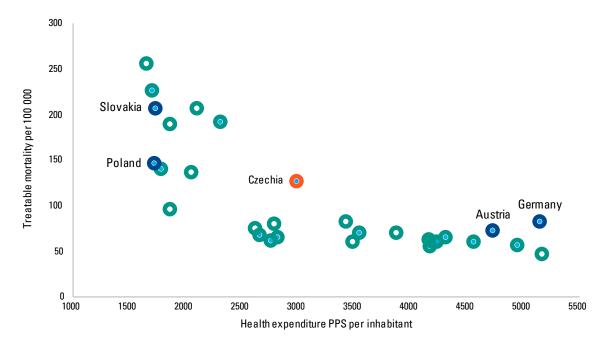
There are areas for improving technical efficiency in the Czech health system, including in pharmaceutical policy (Box 8). The inefficient use of resources and overconsumption of health services remain two important challenges. While the number of beds in

acute care has been steadily decreasing, occupancy rates have been relatively stable over time, decreasing slightly in recent years. At the same time, the average length of stay in hospital has been stable since 2012 and is still higher than in other EU countries (Eurostat, 2024). Moreover, while the number of inpatient hospital discharges per 100 000 inhabitants had decreased slightly between 2012 and 2019, and then much more significantly in 2020 due to the impact of the COVID-19 pandemic (reflecting cancelled or postponed non-urgent inpatient procedures), the number of discharges is still comparatively among the highest in the EU (Eurostat, 2024). The number of outpatient consultations is also among the highest compared with other countries and has increased in recent years (Eurostat, 2024).

#### Box 8 Is there waste in pharmaceutical spending?

Even though the number of total packages sold between 2010 and 2019 decreased slightly, the amount paid for pharmaceuticals gradually rose (from 2011 to 2021, revenues went up by 46%, though nearly half of this is attributed to inflation (ÚZIS, 2022b). Generic substitution in pharmacies has been allowed since 2008, though there is only limited information on the share of generic pharmaceuticals dispensed. Determinants of generic substitution in pharmacies, that is, dispensing of a generic pharmaceutical if a non-generic medicine was prescribed, were explored by Votápková & Žílová (2016) and the scope for efficiency improvements in reducing pharmaceutical expenditure and path dependencies on non-generic medicines was established.

Fig. 12 Treatable mortality per 100 000 population versus health expenditure per inhabitant, Czechia and selected countries, 2021



Note: PPS: purchasing power standard.

Sources: Eurostat, 2024.

# **Summing up**



In the coming years, the Czech health system will have to further develop its health workforce, secure financial sustainability, expand eHealth capacities and address inequalities across regions.

The Czech SHI system provides almost universal population coverage and high accessibility to services. Overall, health outcomes in terms of

life expectancy, mortality and survival rates for major diseases have improved in recent years, although there remains considerable scope to further

strengthen disease prevention and health promotion. Planning of the dense network of health care providers, and the accompanying need to secure adequate numbers of health professionals, has become major focal points for the Czech health system. There are also some concerns about the sustainability of health financing, which were reinforced by the COVID-19 pandemic; robust financing is central to addressing challenges such as low wages in the health workforce, reduced capital investments and having adequate reserves to embark on the modernization of service provision.

Recent reforms in the form of eHealth for pharmaceutical records and history, as well as electronic prescriptions, are also areas of focus with potential to contribute to efficiency goals in the coming years. Finally, socioeconomic disparities in health are likely to develop further, although the main reasons for these are not fully within the scope of the health system, being also impacted by the education system, infrastructural problems, unemployment and social integration issues, but put together these challenges contribute to already existing regional disparities in population health outcomes.

### **Population health context**

#### Key mortality and health indicators

Life expectancy (years)	2023
Life expectancy at birth, total	80
Life expectancy at birth, male	77
Life expectancy at birth, female	82.9
Mortality	2021
All causes (SDR per 100 000 population)	1436.99
Circulatory diseases (SDR per 100 000 population)	525.62
Malignant neoplasms (SDR per 100 000 population)	257.03
Communicable diseases (SDR per 100 000 population)	22.8
External causes (SDR per 100 000 population)	53.33
Infant mortality rate (per 1000 live births)	2.2
Maternal mortality per 100 000 live births (modelled estimates)*	3.4

Notes: Maternal mortality data is for 2020.

Source: Eurostat, 2024; WHO Regional Office for Europe, 2024

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