2022

Belgium

Health system summary

European Observatory on Health Systems and Policies
a partnership hosted by WHO

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This Health System Summary is based on the *Belgium: Health System Review* (HiT) published in 2020 and relevant reform updates highlighted by the Health Systems and Policies Monitor (HSPM) (www.hspm.org). For this edition, key data have been updated to those available in March 2022 to keep information as current as possible. 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.

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How is the health system organized?

Belgian residents are covered for a wide range of health services and the role of the Federated entities is increasing

ORGANIZATION

Compulsory social health insurance covers 99% of Belgian residents for a large range of services and with no selection based on health risks. Every Belgian resident must be affiliated to a sickness fund of their choice or to the public auxiliary fund. The provision of care is based on the principles of independent medical practice, direct access (no gate-keeping), free choice of physician and of health care facility, and predominantly fee-for-service payment. Reimbursed health care services are provided by both public and private institutions and individual health care providers who mainly comply with the same set of rules, enjoy the same therapeutic freedom, and offer the same services. The organization of the health care system is divided between the Federal authorities and the Federated entities.

PLANNING

Belgium is a Federal State consisting of one Federal level and the Federated entities – three regions and three communities (Box 1). The devolution of health-related matters from the Federal level to the communities and regions occurred during reforms in 1980 and the sixth State Reform in 2014. Because of the latter reform, more than € 5 billion were transferred from the Federal State to the Federated entities (nearly 15% of public expenditure on health). The implementation of this reform required major reorganization and the adoption of new legislative frameworks within the Federated authorities that were mainly completed in 2018–2019.

BOX 1 | DISTRIBUTION OF RESPONSIBILITIES IN BELGIUM HEALTH CARE

There are three levels of power in Belgium comprising the Federal authorities, Federated entities (three regions based on territory and three communities based on language – Dutch, French and German) and local authorities (provinces and municipalities). The Federal authorities are responsible for matters in the general interest of all Belgians, i.e. the national compulsory health insurance, setting the hospital budget, regulating health products and activities, regulating health care professionals and patients' rights. The National Institute for Health and Disability Insurance (NIHDI) manages the compulsory health insurance. The Ministry of Health (Federal Public Service Health, Food Chain Safety and Environment – Health Directorate) is responsible for the general organization of the health system. Federated entities undertake the main responsibility for primary care organizations, care for older people, mental health care and rehabilitation as well as health promotion and disease prevention. To facilitate cooperation between the Federal authorities and the Federated entities, inter-ministerial conferences are regularly organized.

PROVIDERS

Health care providers in Belgium are not directly contracted by the sickness funds. They are independent and their practice is private, but they can commit to respecting the national tariffs (so-called conventioned physicians). These conventions and agreements are established to determine the official fees and cost-sharing mechanisms. Those who do not accede to these conventions are known as non-conventioned practitioners and can ask for extra-billings. Some 86.5% of physicians agreed to the 2021 agreement. Tariffs and reimbursement levels for services are agreed between representatives from the health care providers and the sickness funds.

How much is spent on health services?

FUNDING MECHANISMS

The health system is based on compulsory health insurance with social contributions proportional to income as the main financing source. To control expenditure, a real growth cap has been established since 1995 to determine the global budgetary objective of the compulsory health insurance. Since 2022, the budget process also includes an allocation of resources based on clearly defined health objectives, with a longer-term vision and a multi-annual financial plan. The compulsory health insurance is managed by the NIHDI, which allocates a prospective budget to the sickness funds. Sickness funds are non-profit, private players that operate the reimbursement system of health care services covered by the compulsory health insurance for their members and the payment of a replacement income in case of long-term illness. The health insurance budget relies on negotiations between representatives of the government, patients (via the sickness funds), employers, salaried employees and self-employed workers.

HEALTH EXPENDITURE

Health spending increased over the past two decades and has stabilized at around 10% of gross domestic product (GDP) since 2009. In 2019, current health expenditure (CHE) as a share of GDP was 10.7%, and spending per capita was US$ purchasing power parity (PPP) 5 847 (Fig. 1). This places Belgium among the top 10 spenders on health across European Union (EU) countries and within the World Health Organization (WHO) European Region (Fig. 2). The public share of CHE was more than three quarters (76.8%) of health expenditure in 2019, while out-of-pocket payments (OOPs) and voluntary health insurance represented shares of 18.2% and 5%, respectively.

Health expenditure in Belgium is high at over 10% of GDP

FIG. 1

TRENDS IN HEALTH EXPENDITURE, 2000–2019

Note: PPP = purchasing power parity.

Source: WHO Global Health Expenditure Database, December 2021.

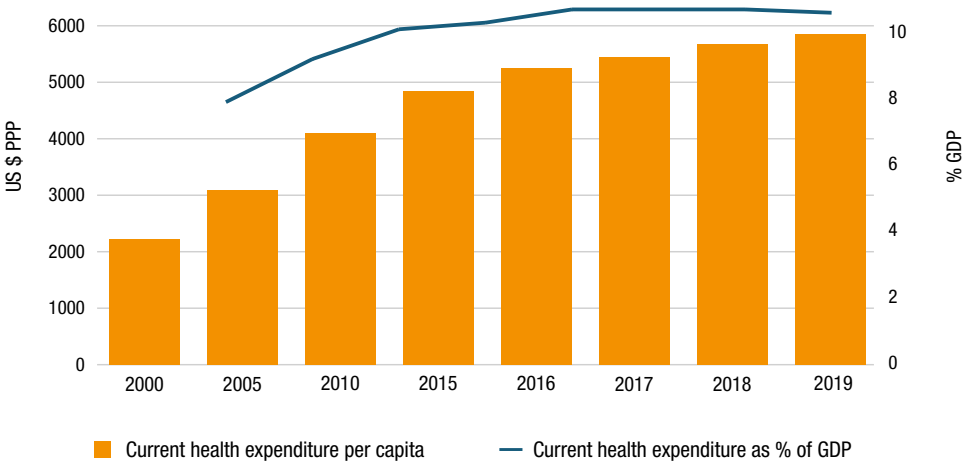
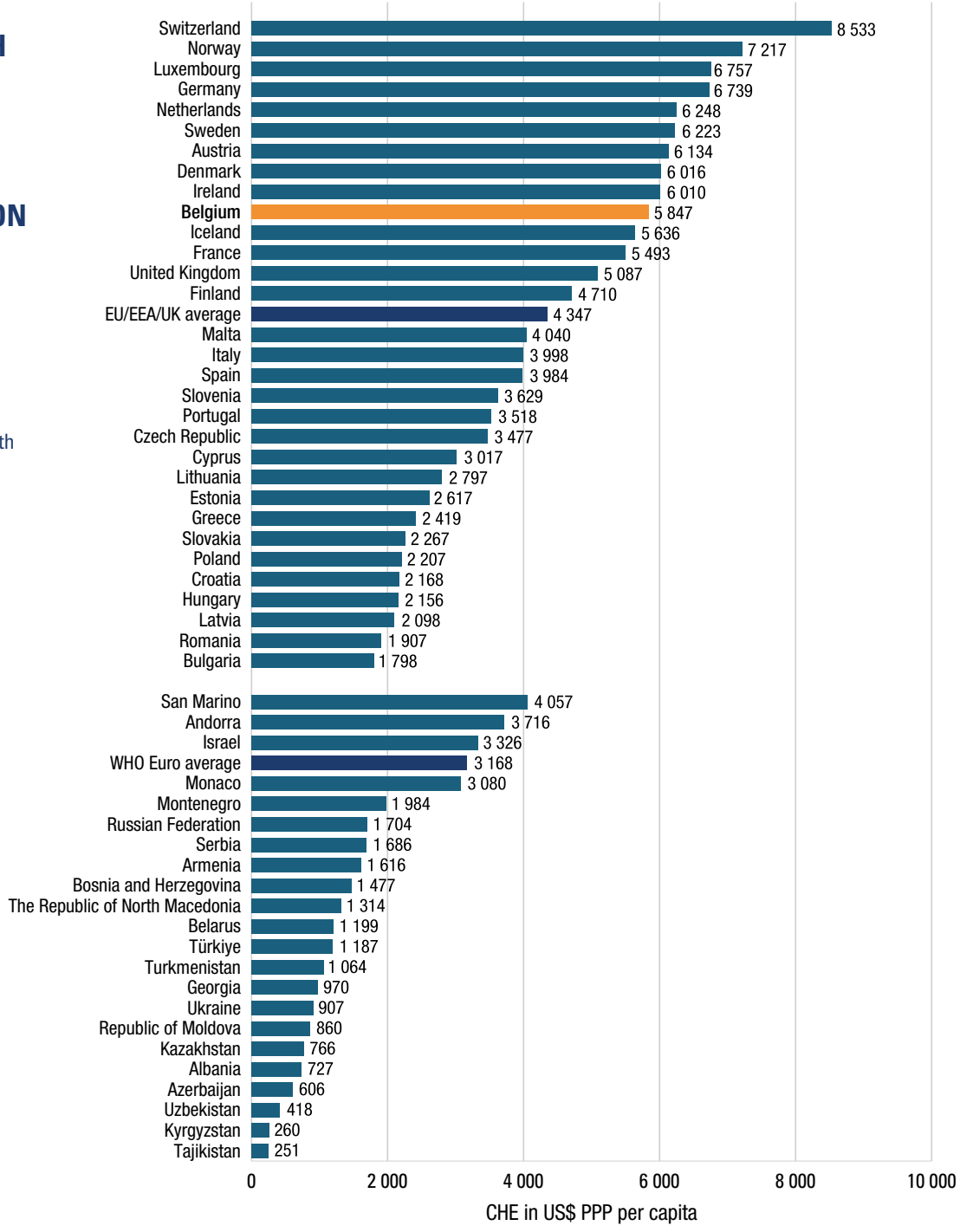


FIG. 2

CURRENT HEALTH EXPENDITURE (US$ PPP) PER CAPITA IN WHO EUROPEAN REGION COUNTRIES, 2019

Note: Data for Albania are from 2018.

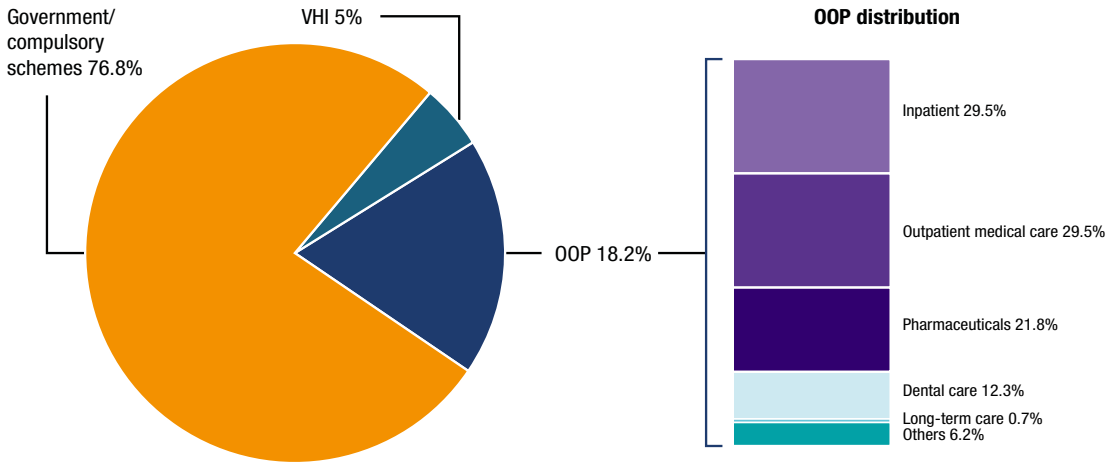
Source: WHO Global Health Expenditure Database, December 2021.



OUT-OF-POCKET PAYMENTS

OOPs (18.2% of CHE in 2019) apply for non-reimbursed services, official co-payments and extra-billings (Fig. 3). Official co-payments represented about 20% of patients' OOPs in 2018 (after deduction for reimbursements related to the system of maximum co-payments). The exact share of extra-billings (in particular in ambulatory care) is not known. Official co-payments vary from service to service and patients with preferential reimbursement status pay reduced co-payments. A series of protection mechanisms are also in place (e.g. a system of maximum co-payments), which mainly depend on household income.

FIG. 3 COMPOSITION OF OUT-OF-POCKET PAYMENTS IN BELGIUM, 2019



Source: OECD Health Statistics; Eurostat Database, 2021 (data refer to 2019).

COVERAGE

To be covered by the compulsory health insurance (99%), an individual must register with a sickness fund and pay social contributions. The 1% of the population who are not covered are people whose administrative and/or financial requirements have not been fulfilled. This does not mean that uninsured people have no rights to necessary medical care. These people's medical needs can be covered by their municipality's public centre for social assistance. The services that are (partially) covered by compulsory health insurance are described in the national fee schedule (called the nomenclature), which is negotiated between representatives of the sickness funds and of health care professionals (see Box 2).

BOX 2 | WHAT ARE THE KEY GAPS IN COVERAGE?

The share of OOPs for dental care expenditure is high (65.8% in 2019) and much higher than in Germany (25.4%) and the Netherlands (21.3%). OOPs account for 39.1% of spending for medical goods, 40.2% of spending for outpatient care, and 13.9% of spending for inpatient care. Reimbursement for mental health care is more limited than for acute care, but accessibility has been improved by the reimbursement of ambulatory psychological care for adults in 2019 and for children and older people in 2020.

According to the EU-SILC survey, in 2020, the share of individuals postponing medical examinations because of cost was 1.5%, which is below the EU27 average (1.8%) (see also Fig. 8). For dental care, this rate was 3.6% (in 2019), which is higher than the EU27 average (2.8%). Moreover, for the lowest income quintile group, these rates are among the highest in Europe for both medical (4.6%) and dental examinations (8.2%).

PAYING PROVIDERS

General practitioners (GPs) and medical specialists are mainly paid on a fee-for-service basis, while salaries are paid in a limited number of hospitals and in homes for older people. In community health centres with a capitation payment system, providers are paid a salary. Hospitals are mainly paid using a dual system: 1) an allocation from the national hospital budget covering nursing and non-medical activities, and 2) fees for medical and medico-technical activities such that providers give a share of their fees to the hospital to pay for (part of) the costs (of hospital space, equipment, personnel) (Fig. 4).

FIG. 4 | **PROVIDER PAYMENT MECHANISMS IN BELGIUM**

GPs	Specialists	Acute Hospitals	Hospital Outpatient services	Dentists	Pharmacies
Fee-for-service Salary in community health centres	Fee-for-service Salary in community health centres and e.g. university hospitals	Mainly hospital budget allocation and share of providers' fee-for-service	Mainly fee-for-service	Mainly fee-for-service	Paid per product (reimbursed pharmaceuticals)

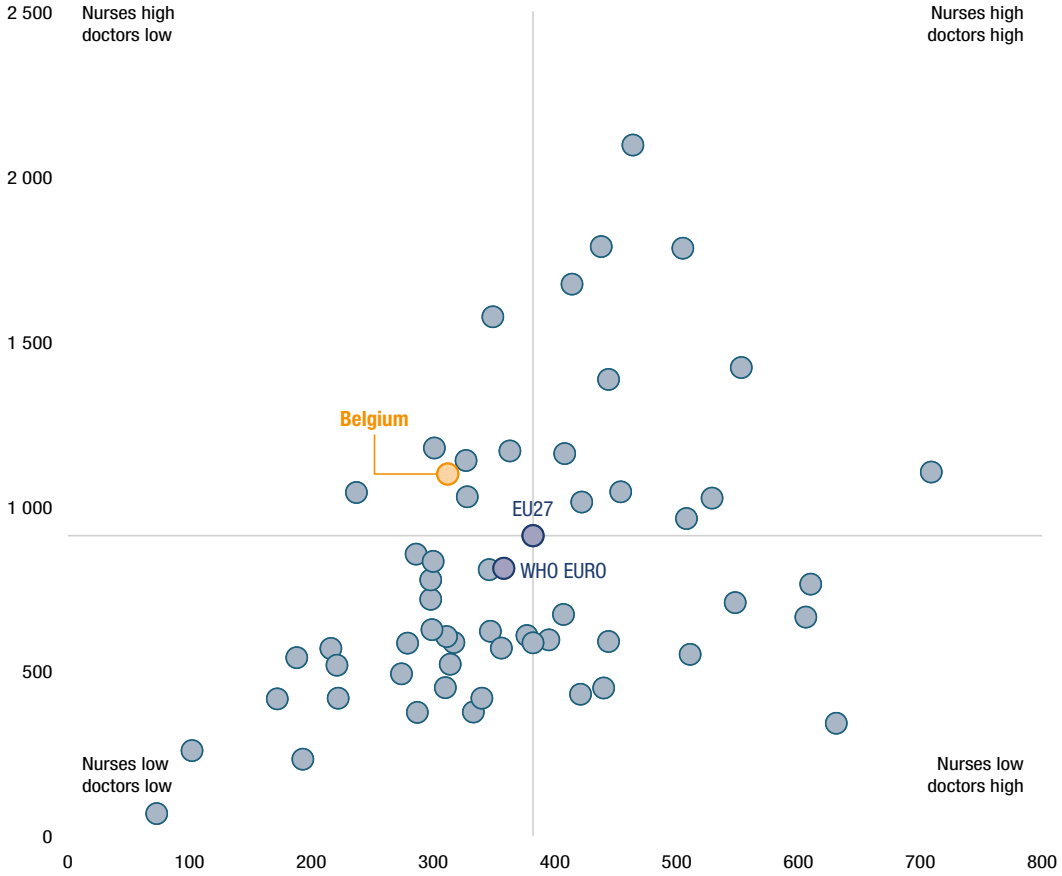
What resources are available for the health system?

HEALTH PROFESSIONALS

The number of practising physicians per 100 000 population in Belgium in 2018 was below the EU27 average (313 versus 395) (Fig. 5). Physicians in Belgium are getting older, such that 44% of practising physicians in 2019 were aged 55 years and over in comparison to 24.1% in 2000. The number of practising nurses has increased (from 879 to 1 107 per 100 000 inhabitants from 2004 to 2018), but the patient to nurse ratio in hospitals remains high. Access to specialization for physicians is limited with global quotas defining the maximum number of physicians as well as minimum quotas for some specialties where a possible shortage has been identified (i.e. GPs).

Physician numbers are regulated by a system of quotas, while the hospital landscape is changing

FIG. 5 PRACTISING NURSES AND PHYSICIANS PER 100 000 POPULATION, 2019



Note: Data for Belgium are for 2018.

Source: National Health Workforce Accounts (2022).

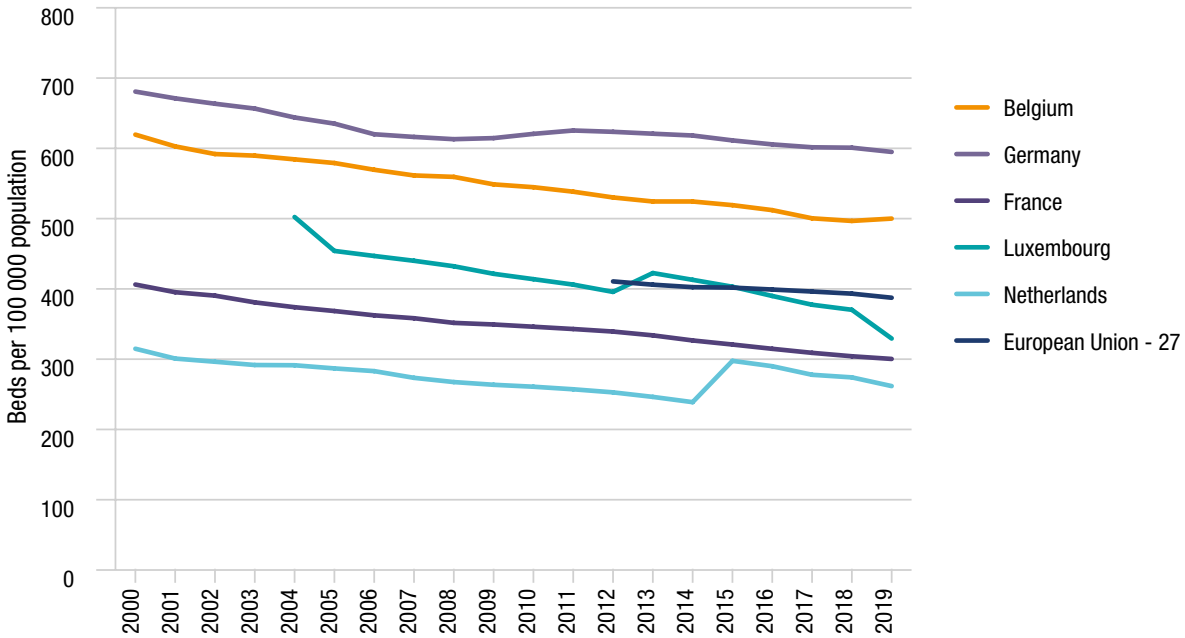
HEALTH INFRASTRUCTURE

In the hospital sector, mergers have led to larger hospitals which are spread over different hospital sites. Hospitals can be classified into acute care hospitals (104 in country) and psychiatric hospitals (60), which are spread over 274 sites (January 2020 data). There are also specialized or geriatric hospitals (9 in 2018) that are now totally under the responsibility of Federated entities.

There has been a gradual decrease in the density of curative care beds (from 620 to 500 per 100 000 population between 2000 and 2019). Compared with bordering countries, only Germany has a higher bed density (Fig. 6). A projection study on the required hospital capacity for 2025 concluded a decreased need for traditional hospital beds (–5.4%), especially maternity beds and surgical beds, but indicated a higher need for day hospitalization, geriatric beds and chronic care beds (Van de Voorde et al., 2017). Similar to neighbouring countries, the average length of stay has decreased. There is also national planning for heavy medical equipment and some specialized services and care programmes.

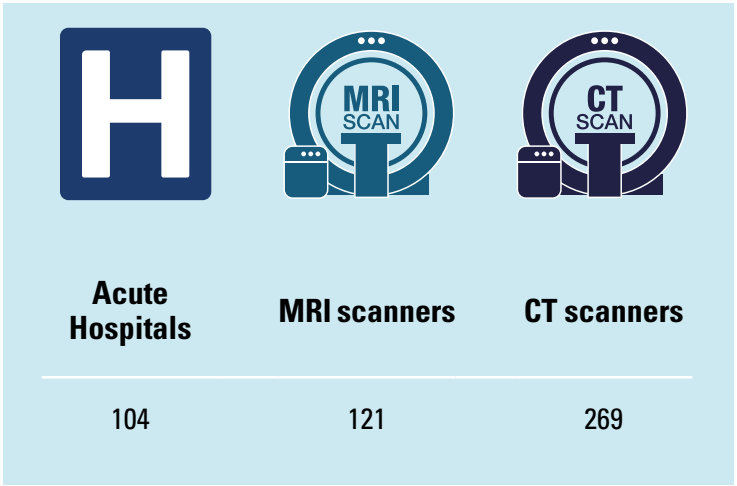
The number of magnetic resonance imaging (MRI) devices, subject to national planning, has remained unchanged at 121 from 2014 to 2020. In 2018, it was agreed that 18 new devices will be added progressively, increasing to 122 devices in January 2021 and 134 devices in January 2022. The number of computed tomography (CT) scanners has slightly increased from 269 in January 2020 (Fig. 7) to 283 in January 2022.

FIG. 6 CURATIVE CARE BEDS IN HOSPITALS PER 100 000 POPULATION IN BELGIUM AND SELECTED COUNTRIES, 2000–2019



Source: Eurostat, 2021.

FIG. 7 NUMBER OF ACUTE HOSPITALS AND MAGNETIC RESONANCE IMAGING AND COMPUTED TOMOGRAPHY SCANNERS, JANUARY 2020



Acute Hospitals	MRI scanners	CT scanners
104	121	269

Source: Ministry of Health, 2022a; 2022b.

DISTRIBUTION OF HEALTH RESOURCES

There are no major variations in the density of physicians dispersed between regions, although some rural provinces have lower ratios compared with urban areas. The geographical distribution of hospitals and the number of curative beds in each province is in line with population distribution. Moreover, the Belgian Hospital Act defines three types of hospital collaboration, which also impact on geographical distribution: hospital groups, hospital associations and hospital mergers. Since 2020, collaboration between general (basic) and specialized functions and university hospitals has been reinforced by the legal requirement that every hospital must be in a loco-regional hospital network, with task allocation within the network.

How are health services delivered?

Patients are free to choose their health provider for primary and hospital care

PRIMARY AND AMBULATORY CARE

Primary care is accessible without a referral and patients have the freedom to choose their health care provider, get a second opinion or even consult multiple providers simultaneously (Box 3). There is also direct access to specialist care. Nurses play a key role in providing services to people with chronic diseases or disabilities, i.e. wound and diabetes care. Pharmacists can also serve as a first point of contact, providing advice on medications, helping with over-the-counter products and referring patients to physicians. Medical specialists can work on an ambulatory basis in hospitals (public or private not-for-profit), in private for-profit clinics (called extramural centres) and/or in a private practice.

Measures have been taken to strengthen the position of the GP as the preferred entry point for health services, including the introduction of the Global Medical Record (GMR) which allows patients to have a single GP to manage their medical information and have lower co-payments. The electronic GMR was implemented in 2016. In 2016 (the latest data available), nearly 68% of patients visited their preferred GP three quarters of the time over a 2-year period (Devos et al., 2019). There is also increased reimbursement to patients for the first specialist visit if referred by a GP.

BOX 3 | WHAT ARE THE KEY STRENGTHS AND WEAKNESSES OF PRIMARY CARE?

Direct access and free choice of health care professionals by the patient is an important strength of the Belgian health care system; however, there are concerns about whether the availability of GPs will be sufficient to cope with an ageing population and increasing multimorbidity. Moreover, the mean age of practising GPs is rising and there are not enough new GPs. The absence of a real gate-keeping role can lead to overconsumption and inefficient use of resources. Nevertheless, there are incentives to encourage patient loyalty to a GP and to consult their GP as a primary entry point. In addition, there are initiatives to enforce primary care professionals to work in multidisciplinary teams and to share relevant patient information.

HOSPITAL CARE

Since 2015, there has been an Action Plan for both the Federal State and Federated entities to reform the hospital landscape. Initiatives on care concentration, including referral agreements are in progress, e.g. from January 2020, complex surgery of the pancreas and oesophagus are only reimbursed in a limited number of hospitals with proven experience. There are also initiatives to stimulate the integration of care between settings (see Box 4). The shift to day care varies between hospitals and between interventions. Some incentives have been introduced to promote day care; however, providers have not responded in large part due to the complex payment rules (some interventions are financed within a closed-end budget and others are paid for by lump sums) and lack of transparency.

BOX 4 | ARE EFFORTS TO IMPROVE INTEGRATION OF CARE WORKING?

Several initiatives have been launched to enhance the integration of care. Within hospitals (horizontal integration), the formation of loco-regional hospital networks will increase collaboration and strengthen referrals between hospitals.

Other initiatives aim to strengthen the relationship between and within hospitals and primary care settings (vertical integration), including:

- Providing care pathways for patients with chronic conditions (2009). An evaluation highlighted patient satisfaction and improvements of quality in terms of process, but also the lack of information on the existence of these pathways by the public and health professionals.
- Pilot projects on shortening length of stay after childbirth when a woman has had a normal delivery (2016). An evaluation showed no negative influence on the health of the child or mother, improved collaboration between care settings, and satisfaction of mothers concerning the care delivered.
- Pilot projects on alternatives to hospitalization, mainly covering intravenous antibiotics and cancer therapy (2017).
- Integrated care projects for the management of chronic patients (2018), such that stakeholders (including social care) are incentivized to set up innovative initiatives of care centred around patients across different care settings in their geographical area (Ministry of Health, 2018).

A major prerequisite for delivering integrated care efficiently is the ability to share patient information in a secure way. An eHealth plan was launched to enhance multidisciplinary information exchange.

PHARMACEUTICAL CARE

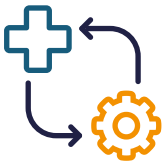
Pharmaceuticals, including over-the-counter medicines, are exclusively distributed through community and hospital pharmacies. To be reimbursed, pharmaceuticals must be included in a positive reimbursement list. The percentage of reimbursement varies according to the therapeutic importance of the pharmaceutical and the socioeconomic status of the patient (i.e. having access to a preferential reimbursement or not). Different measures were taken to sustain innovation, strengthen the role of the community pharmacist, improve accessibility and promote the cost-effective use of pharmaceuticals. Nevertheless, the exponential increase in the price of innovative treatments and the lack of transparency in confidential price agreements threaten the system and new solutions such as the BeNeLuxA initiative are being pursued.

MENTAL HEALTH CARE, PALLIATIVE, LONG-TERM AND REHABILITATION CARE

Regarding mental, palliative, long-term and rehabilitation care, the main focus is now on the deinstitutionalization of patients and the development of home-based and community-based care so that the patient can remain at home for as long as possible.

DENTAL CARE

Even though having regular contacts with a dentist is incentivized (e.g. with full reimbursement for the majority of preventive and restorative procedures for all children up to 18 years and reimbursement for some dental care made conditional upon a registered dental contact during the previous year), several treatments (e.g. fixed prosthodontics, most periodontal treatments, dental implants, orthodontics in adults, and fluoride applications) are not reimbursed at all. Overall, dental care is the health service with the lowest coverage, with only 34.2% of dental expenditure covered by the compulsory health insurance or the government in 2019.



What reforms are being pursued?

Ensuring accessibility to health care and the sustainability of the health system have been long-standing policy objectives. Between 2014 and 2019, quality and efficiency were additional major objectives (Box 5). This resulted in the implementation of several measures aimed at improving the structure and quality of health care. Consequently, strategies such as multidisciplinary and integrated care, expertise concentration, patient care trajectories, patient empowerment, evidence-based medicine, outcome-based care, and the One Health approach were promoted, and the regulation of health professionals was restructured. An eHealth plan has also focused on improving information exchange between health care providers and settings, including the digitalization of medical records, electronic prescribing and patient access to their personal health information (see Box 5). The Belgian health care system has also been evolving to cope with an ageing population, an increase of chronic diseases and the development of new technologies.

There remains a continued focus on improving the quality of care and efficiency of the health system

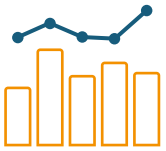
In terms of governance, the transfer of additional health competences from the Federal State to the Federated entities is in line with the general reorganization of the Belgian State. Initiatives to increase public accountability and to monitor

BOX 5 | KEY HEALTH SYSTEM REFORMS OVER THE LAST 10 YEARS

- **6th State Reform (2014)**: Transfer of some health competences from the Federal State to the Federated entities.
- **Mental health care (2014)**: Complementary protocol agreement between the Federal State and Federated entities on networks and care pathways in mental health care for children and young people (following the agreement of December 2012).
- **Hospital landscape and financing (2015)**: The Minister of Social Affairs and Public Health launched an Action Plan for a reform of the hospital landscape and payment system.
- **Medicines policies (2015)**: Belgium, the Netherlands, Luxembourg (and later Austria and Ireland) collaborate on pharmaceutical policy, horizon scanning, health technology assessment and pricing and reimbursement decisions (BeNeLuxA agreement).
- **eHealth (2018)**: Patients can access personal health information through an online portal/Personal Health Viewer.
- **Hospital's cooperation (2019)**: A new law obliges hospitals to concentrate their expertise in certain fields and cooperate within loco-regional networks and supra-regional networks (implementation in 2020).

performance through the Health System Performance Assessment (HSPA) framework have also occurred. A deliberation on the setting of national health targets to guide health policymakers is also underway.

Over the next few years, major measures are expected to be introduced in Belgium to continue improving the quality of care and efficiency of the health system. Among them are the continuation of the hospital landscape reform, the mental health care reforms, the integrated care projects, the development of a national health research system, the reform of the national fee schedule, and the possible integration of some vulnerable people currently covered by other systems (such as prisoners) into the compulsory health insurance system. Following the COVID-19 crisis, deliberations on how to improve the resilience of the health system are also underway.



How is the health system performing?

There is good overall access to health services of high quality, even if some challenges remain

HEALTH SYSTEM PERFORMANCE MONITORING AND INFORMATION SYSTEMS

The health system was recently assessed as having good overall access to health services of high quality (Devos et al, 2019). The trend is also towards a more efficient use of care services, such as with an increase in the use of low-cost medicines and a decrease in the length of stay for normal delivery. Nevertheless, some challenges remain in terms of appropriateness of pharmaceutical care, availability of GPs in the future, availability of nurses in hospitals, and accessibility to some care such as dental care, especially for the lowest income groups. Since 2018, patients can access a large amount of personal health information through an online portal/ Personal Health Viewer.

In recent years, a new eHealth plan (2019–2021) was established to reinforce ongoing projects and the coordination of eHealth initiatives. Since January 2020, electronic prescriptions are mandatory (with some exceptions).

ACCESSIBILITY AND FINANCIAL PROTECTION

Challenges remain with waiting times as, in 2018, just under half of patients (48.4%) had to wait 2 or more weeks for a specialist appointment compared with 38.4% in 2013. This self-reported indicator is slightly higher in the Walloon region (see Box 6). The distribution of conventioned GPs, dentists and medical specialists is also a good indicator of accessibility. In 2016, the number of conventioned GPs was equally distributed between the provinces, except for Brussels and Walloon Brabant where the ratio of GPs-to-population was lower than in the other provinces. There is also reduced accessibility for mental health and dental care due to higher user charges. The share of individuals reporting unmet needs for medical examination is similar to the EU27 average (1.8% versus 1.5% in 2020), yet in Belgium there is a large difference between the lowest and highest-income quintiles, 4.6% and 0.1% respectively (Fig. 8).

BOX 6 | WHAT DO PATIENTS THINK OF THE CARE THEY RECEIVE?

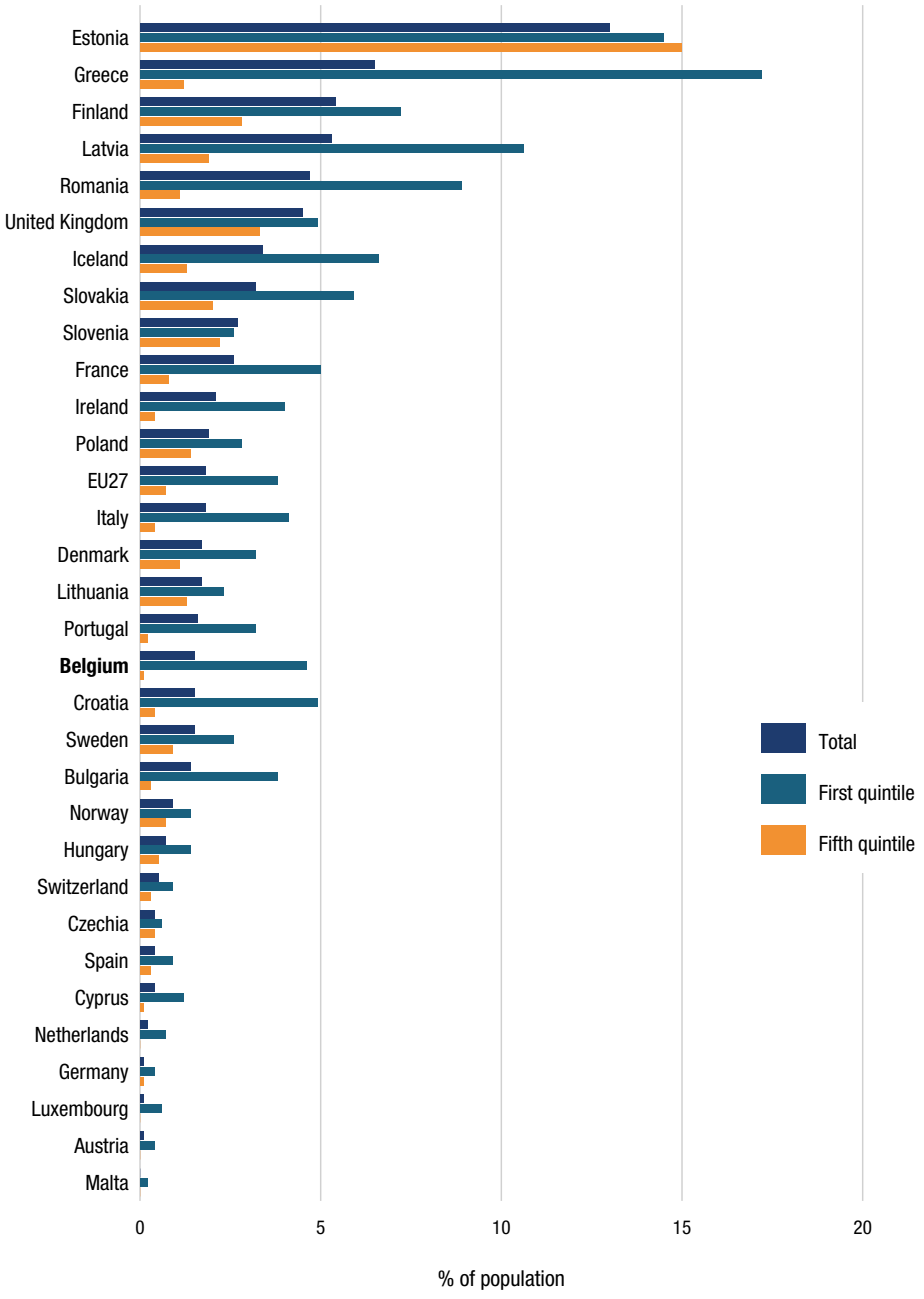
The Belgian Health Interview Survey includes information on patient experiences (i.e. waiting times, time spend during consultation, medical explanation and shared decision-making). In 2018, only 5.9% of the population (aged 15 years and over) had a problem with the waiting times to get an appointment with physicians, 97.5% reported that the doctor spent enough time with them, and 97.5% reported that the doctor gave them the opportunity to ask questions or raise concerns about recommended treatment.

Other patient-reported experience measures (PREMs) initiatives are mostly organized in hospitals, either on a regional level or more localized per hospital, such as the Flemish Indicator Initiative (VIP²) in Flanders and the Attentes et Satisfaction des Patients et de leur Entourage (ASPE Project) in some hospitals of the Walloon region and Brussels. The VIP² initiative reported that more than half of the hospitals do not meet the required target for the indicator patient experiences (Flemish Agency for Care and Health, 2018).

FIG. 8 UNMET NEEDS FOR A MEDICAL EXAMINATION (DUE TO COST, WAITING TIME, OR TRAVEL DISTANCE), BY INCOME QUINTILE, 2020

Note: Data refer to 2020 except for Italy (2019), Iceland (2018) and United Kingdom (2018).

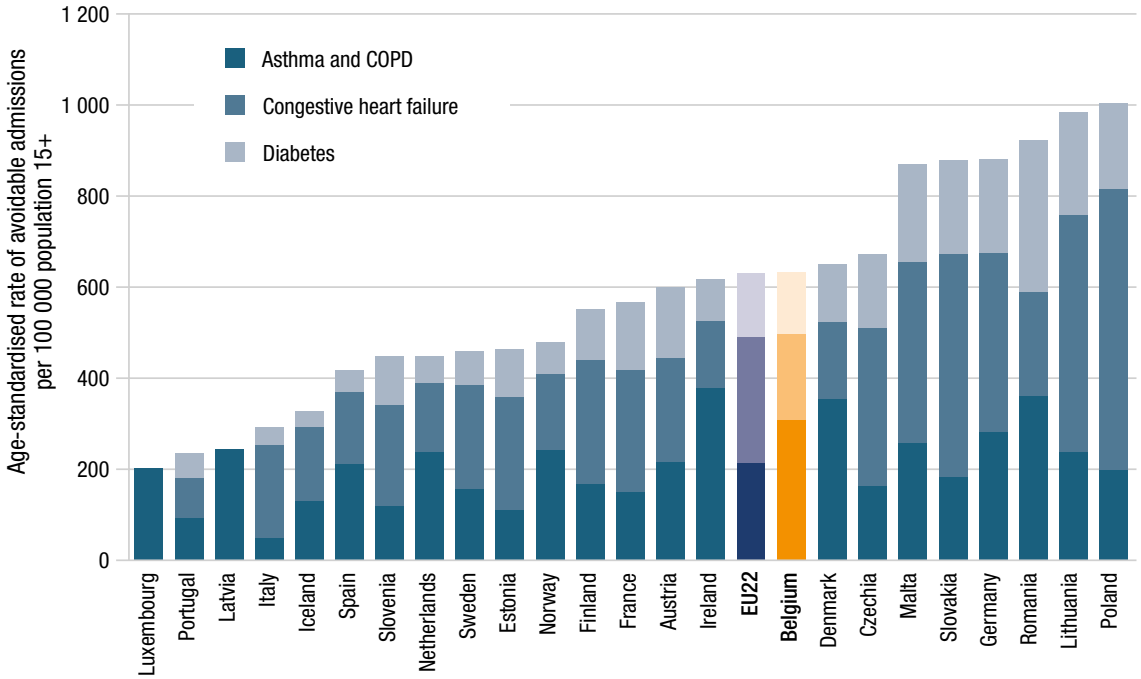
Source: Eurostat, 2021.



Avoidable hospital admission rates for conditions that could be treated in primary care are indicative of the quality of primary care or inefficiencies in the provision of primary care. The number of hospital admissions related to diabetes complications in adults has been slowly decreasing since 2012 and in 2019 was slightly lower in Belgium than the average for the 22 EU countries for which data are available (135 versus 140 per 100 000 population) (Fig. 9). In contrast, the trend for avoidable hospitalizations for asthma and chronic obstructive pulmonary disease (COPD) combined have remained relatively high compared with other European countries (although if analysed separately there has been a decrease for asthma and an increase for COPD). These results highlight that chronic disease management outside hospitals and the functioning of primary care has improved in some areas but could improve further.

In 2016, the total volume of antibiotics prescribed in outpatients was 27.7 defined daily dose (DDD) per 1 000 population per day. This is much more than in some other European countries, such as the Netherlands (9.7 DDD) (Devos et al., 2019).

FIG. 9 AVOIDABLE ADMISSIONS FOR ASTHMA AND COPD, CONGESTIVE HEART FAILURE AND DIABETES, 2019



Note: [1] Data for congestive heart failure and diabetes are not available in Latvia and Luxembourg.

Source: OECD Health Statistics, 2021 (data refer to 2019 or nearest year).

The effectiveness of acute hospital care can be evaluated by estimating mortality rates within 30 days after admission for acute myocardial infarction (AMI) and stroke. Between 2016 and 2019, the mortality rate for AMI slightly decreased (from 7.2% to 6.4%). However, a stronger decrease is shown over a longer period as the rate was halved between 2000 and 2015. For ischaemic stroke, the related mortality rate has decreased only slightly between 2016 and 2019. The mortality rate after ischaemic stroke is worse in Belgium than in most of the EU15 countries and with 7.9 deaths per 100 patients in 2019. The mortality rate after haemorrhagic stroke was 26.4 deaths per 100 patients in 2019, which is among the highest mortality rates for EU countries with available data.

HEALTH SYSTEM OUTCOMES

While the health status of the population is generally good, and amenable and preventable mortality rates are decreasing, important socioeconomic inequalities are observed through the whole spectrum of health indicators. Amenable mortality refers to causes of death that can be mainly avoided through timely and effective health care interventions, including secondary prevention and treatment (i.e. after the onset of disease, to reduce case-fatality). As such it is used as an indication of the contribution that health care makes to improve population health. Preventable mortality refers to causes of death that can be mainly avoided through effective public health and primary prevention interventions (i.e. before the onset of disease/injury, to reduce incidence).

In 2019, amenable mortality was below the EU27 average (68 versus 111 per 100 000 inhabitants) (Fig. 10). Although the preventable mortality rate has been decreasing since 2000, and is below the EU average, Belgium ranks poorly compared with comparator countries among the EU15 with 54 preventable deaths per 100 000 inhabitants (Fig. 10). The leading causes of preventable mortality are lung cancer, accidents, chronic lower respiratory diseases and alcohol-related diseases; rates are much higher for men than for women (sex ratio: 1.8) and this ratio is comparable in all three regions. Some improvements in health determinants have been observed (see Box 7), including a substantial decrease in the percentage of daily smokers over the past 15 years, a slight decrease in the consumption of sugar-sweetened beverages since 2004, and a decrease of the prevalence of alcohol consumption since 2013.

BOX 7 | ARE PUBLIC HEALTH INTERVENTIONS MAKING A DIFFERENCE?

In 1995, a national anti-drink-driving campaign (BOB) was established by the Vias Institute. Because of its huge success, it has been renewed each year. Advertising alcoholic products is restricted; however, the efficiency of the measures is uncertain. Hard liquor can only be sold to those over 18 years of age, while other alcoholic beverages can be sold to those over 16. Yet it remains relatively easy for minors to buy hard liquor as checks are limited and the definition of hard liquor in the law is ambiguous, hampering implementation.

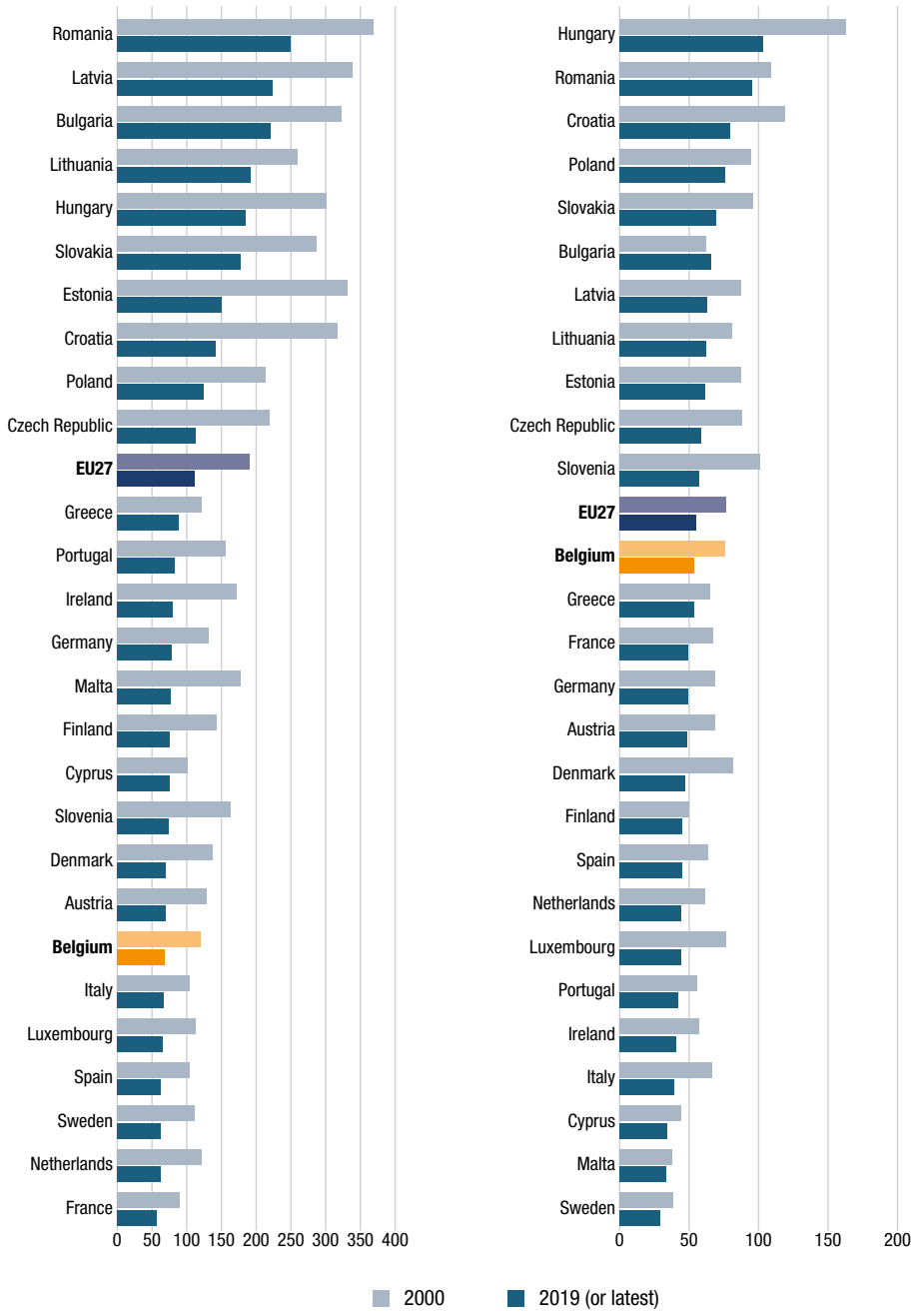
Prohibition of tobacco use includes the ban on smoking in public places, workplaces and vehicles carrying minors. All tobacco-related products need to adhere to tobacco regulations including electronic cigarettes. Since 2019, sales of tobacco products are restricted to those over 18. Advertising tobacco products (and sponsorship) is prohibited with some exceptions. Plain packaging became mandatory in 2020. However, the advertising ban has some gaps, sales to minors could be better controlled, and the ban on smoking in schools could be better applied.

Several initiatives are in place to promote healthy eating and exercise in schools. In 2018, the Nutri-Score was introduced on food packages in Belgium to influence healthier buying behaviour.

FIG. 10 AMENABLE AND PREVENTABLE MORTALITY PER 100 000 POPULATION IN BELGIUM AND OTHER EU COUNTRIES, 2000 AND 2019

Note: Age-standardized death rates for all persons calculated by European Observatory for Health Systems and Policies.

Source: Mortality and population data from WHO detailed mortality files (released June 2021); Amenable causes as per list by Nolte and McKee (2004); preventable causes: lung cancer, chronic liver disease, road traffic.



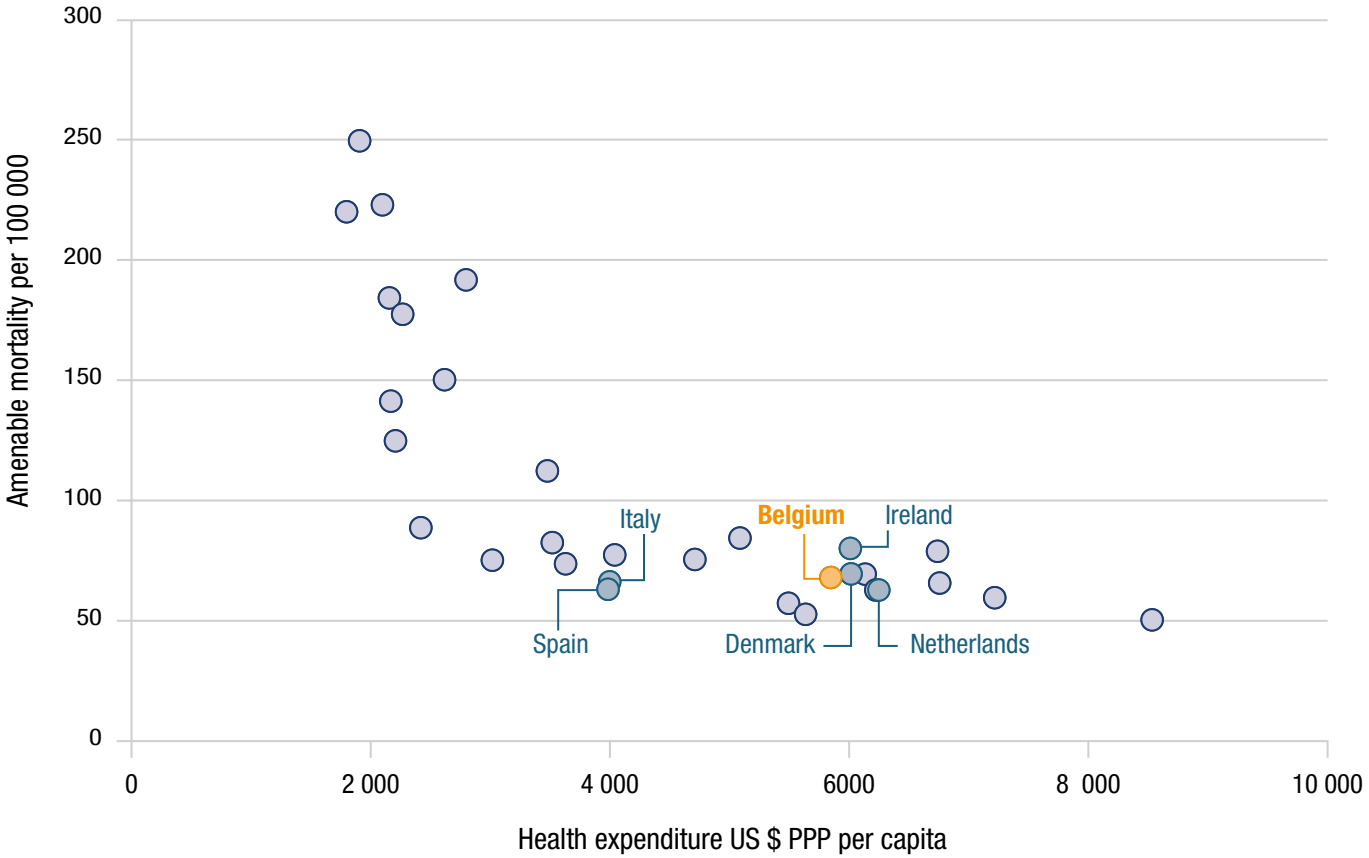
HEALTH SYSTEM EFFICIENCY

Technical efficiency indicates the extent to which a health system is securing the minimum levels of inputs for a given output. When comparing Belgium with countries such as Italy and Spain, which have a similar level of amenable mortality, the Belgian per capita health expenditure is comparatively high. However, there are a cluster of countries with similar levels of spending as Belgium, such as Denmark and Ireland, whose health outcomes in terms of amenable mortality are similar or slightly worse than Belgium (Fig. 11). When looking at specific indicators, including average length of stay for a normal delivery of an infant, this has reduced from 5.0 days in 2000 to 3.0 days in 2018 (comparable with the EU average of 3.4 days). The proportion of surgical procedures performed in one-day hospital stays in Belgium has increased from 34.8% in 2000 to 47.2% in 2016 (Devos et al., 2019). Although few variations of this indicator were observed across the Belgian regions; high variability can be observed according to the type of procedure. Nearly 95% of cataract procedures are performed in a one-day surgery setting, while other procedures (i.e. gallbladder removal by laparoscopy) are much more rarely done as a one-day surgery compared with other countries. This is due to the funding specificities of these procedures, which are in favour of standard hospitalization. Efforts have also been made to encourage the prescription of low-cost medicines (Box 8).

BOX 8 | IS THERE WASTE IN PHARMACEUTICAL SPENDING?

Since 2005, physicians have been encouraged to prescribe a certain percentage of low-cost drugs, and their prescription profile is screened by NIHDI. The percentage of low-cost drugs prescriptions issued on an outpatient basis (i.e. outside of hospitals) has been consistently increasing from 49.1% in 2015 to 53.8% in 2017. The degree of substitution of biological treatments with biosimilars is still very low in Belgium, but an upward trend can be observed (0% in 2008 to 5.71% in 2017). The increase has been particularly accelerated since 2015 (0.42%) which is related to the increase of biosimilars available on the market. In 2018, nine biosimilars were available in the Belgian market, representing a combined cost of € 430 million for NIHDI (Devos et al., 2019).

FIG. 11 AMENABLE MORTALITY PER 100 000 POPULATION VERSUS HEALTH EXPENDITURE PER CAPITA, BELGIUM AND SELECTED COUNTRIES, 2019



Source: WHO Global Health Expenditure Database and WHO mortality data, December 2021.

Summing up

Belgium enjoys qualitatively good health care, yet challenges remain in terms of appropriateness of care concerning the use of antibiotics, psychotropics and medical imaging. Recent initiatives on evidence-based decisions, monitoring, integrated care, expertise concentration, health in all policies, and patient involvement have been initiated to further improve the quality of care. In terms of access, nearly the entire population is covered by the compulsory health insurance that includes a broad benefits package. Nevertheless, for the lowest income population, Belgium faces higher unmet medical and dental needs for financial reasons compared with the EU15 average.

The new division of competences (and budgets) between the Federal State and the Federated entities has been an important occurrence and aims at developing care that is more in line with population needs. However, with the increasing complexity and fragmentation of the system, avoiding duplication of efforts and inefficiencies will be a challenge. Finally, because additional challenges have been highlighted by the COVID-19 crisis, considerations on how to improve the resilience of the system during a health crisis are underway.

The increasing complexity and fragmentation of the system is a possible challenge

POPULATION HEALTH CONTEXT

KEY MORTALITY AND HEALTH INDICATORS

LIFE EXPECTANCY (YEARS)	
Life expectancy at birth, total	80.9
Life expectancy at birth, male	78.6
Life expectancy at birth, female	83.1

MORTALITY (SDR PER 100 000 POPULATION)	
All causes*	944
Circulatory diseases*	246
Malignant neoplasms*	230
Communicable diseases*	21
External causes*	67
Infant mortality rate (per 1 000 live births)	3.7
Maternal mortality rate per 100 000 live births (modelled estimate)	5.0

Notes: SDR: standardized death rate.

* Age-adjusted rates with the European standard population 2010. Life expectancy data are for 2020. Mortality data are for 2018. Infant mortality data are for 2019. Maternal mortality data are for 2017.

Source: Eurostat, 2022; World Bank, 2022 for maternal mortality.

REFERENCES

Devos C et al. (2019). Performance of the Belgian health system – Report 2019. KCE Reports 313. Brussels: Belgian Health Care Knowledge Centre (KCE).

Eurostat (2021). Database – Eurostat. Luxembourg: European Commission.

Flemish Agency for Care and Health (2018). Mapping out the quality of the Flemish hospitals. Brussels: Flemish Agency for Care and Health, Flemish Indicators Project for Patients and Professionals.

Ministry of Health (2018). Integrated care for a better health. Brussels: Federal Public Service Health, Food Chain Safety and Environment (https://www.integreo.be/nl, accessed 29 April 2022).

Ministry of Health (2022a). Chiffres et rapports. Brussels: Federal Public Service Health, Food Chain Safety and Environment.

Ministry of Health (2022b). Publications imagerie médicale. Brussels: Federal Public Service Health, Food Chain Safety and Environment (https://www.health.belgium.be/fr/publications-imagerie-medicale, accessed 21 April 2022).

Nolte E, McKee M (2004). Does healthcare save lives? Avoidable mortality revisited. Research report. London: Nuffield Trust.

OECD (2022). OECD Health Statistics. Paris: OECD Publishing.

Van de Voorde C et al. (2017). Required hospital capacity in 2025 and criteria for rationalisation of complex cancer surgery, radiotherapy and maternity services. KCE Reports 289. Brussels: Belgian Health Care Knowledge Centre (KCE).

World Bank (2022). World Development Indicators database. Washington DC: World Bank.

World Health Organization (WHO) (2021). Global Health Expenditure Database. Geneva: World Health Organization (https://apps.who.int/nha/database/Select/Indicators/en, accessed December 2021).

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