European Commission

# State of Health in the EU

# Germany

## Country Health Profile 2017

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European Observatory on Health Systems and Policies
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## The Country Health Profile series

The *State of Health in the EU* profiles provide a concise and policy-relevant overview of health and health systems in the EU Member States, emphasising the particular characteristics and challenges in each country. They are designed to support the efforts of Member States in their evidence-based policy making.

The Country Health 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 Member States and the Health Systems and Policy Monitor network.

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## Data and information sources

The data and information in these Country Health Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated in June 2017 to ensure the highest standards of data comparability. The sources and methods underlying these data are available in the Eurostat Database and the OECD health database. Some additional data also come from the Institute for Health Metrics and Evaluation (IHME), the European Centre for Disease Prevention and Control (ECDC), the Health Behaviour in School-Aged Children (HBSC) surveys and the World Health Organization (WHO), as well as other national sources.

The calculated EU averages are weighted averages of the 28 Member States unless otherwise noted.

To download the Excel spreadsheet matching all the tables and graphs in this profile, just type the following StatLinks into your Internet browser:
http://dx.doi.org/10.1787/888933593551

## Demographic and socioeconomic context in Germany, 2015

| | | Germany | EU |
|---|---|---|---|
| **Demographic factors** | Population size (thousands) | 81 687 | 509 394 |
| | Share of population over age 65 (%) | 21.0 | 18.9 |
| | Fertility rate[1] | 1.5 | 1.6 |
| **Socioeconomic factors** | GDP per capita (EUR PPP[2]) | 35 800 | 28 900 |
| | Relative poverty rate[3] (%) | 10.2 | 10.8 |
| | Unemployment rate (%) | 4.6 | 9.4 |

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 50 % of median equivalised disposable income.

**Source:** Eurostat Database.

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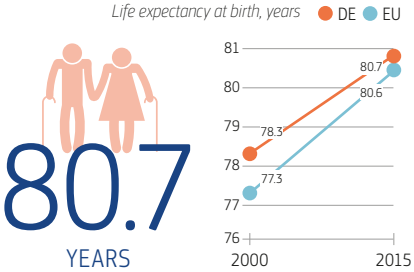
# 1 Highlights

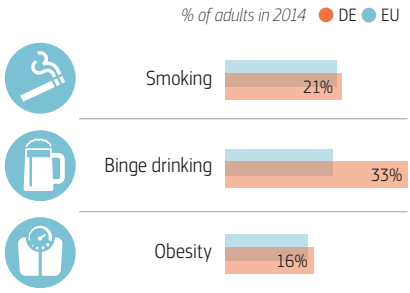
The health status of the German population has improved since 2000, but behavioural risk factors remain problematic. The health system offers a generous benefit basket, high levels of service provision and good access to care. Self-governing bodies play a strong role in shaping the health system – and sometimes complicate the structural reforms needed to overcome shortcomings in quality and efficiency.

## Health status



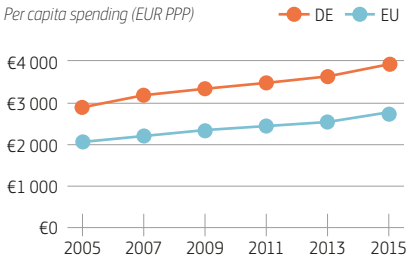

Life expectancy at birth was 80.7 years in 2015 and slightly above the EU average of 80.6, but it has increased more slowly than in most EU countries and is two years below that of Spain and Italy. Mortality due to cardiovascular diseases – still the leading cause of death – has come down significantly since 2000, whereas cancer mortality has increased.

## Risk factors




In 2014, 21% of adults in Germany smoked tobacco every day, which is close to the EU average. Smoking and alcohol consumption have generally declined, but binge drinking remains problematic and is the fifth highest in the EU. Obesity is a growing concern in Germany as its prevalence among adults has increased by nearly one third since 2003. In 2014, slightly more adults were obese in Germany than on average in the EU.

## Health system

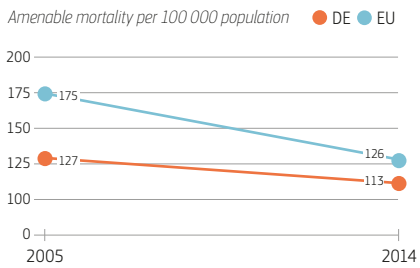



Health expenditure is high. In 2015, Germany spent EUR 3 996 per capita on health, the second highest amount in the EU, and 43% more than the average (EUR 2 797). In fact, Germany spends a greater proportion of its GDP on health (11.2%) than any other country in the EU (EU average: 9.9%). While 84.5% of health spending is publicly funded – again the highest share in the EU – out-of-pocket spending amounts to 12.5% and is below most other EU countries.

## Health system performance

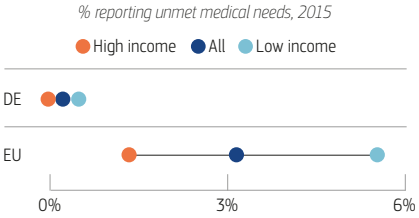
### Effectiveness

Amenable mortality in Germany is below the EU average, but still 10% of all deaths in 2014 were considered to be avoidable through higher quality and more timely care.




### Access

Access to health care in Germany is good, with very low numbers reporting unmet needs for medical care. However, the self-employed with low incomes may fall between the cracks of the Social Health Insurance system and migrants have access only to a restricted set of benefits.




### Resilience

Germany has a high level of service provision, and there is room for efficiency improvements. However, the strong role of self-governing bodies in shaping political decisions complicates reforms aiming to improve quality and efficiency.

# 2 Health in Germany

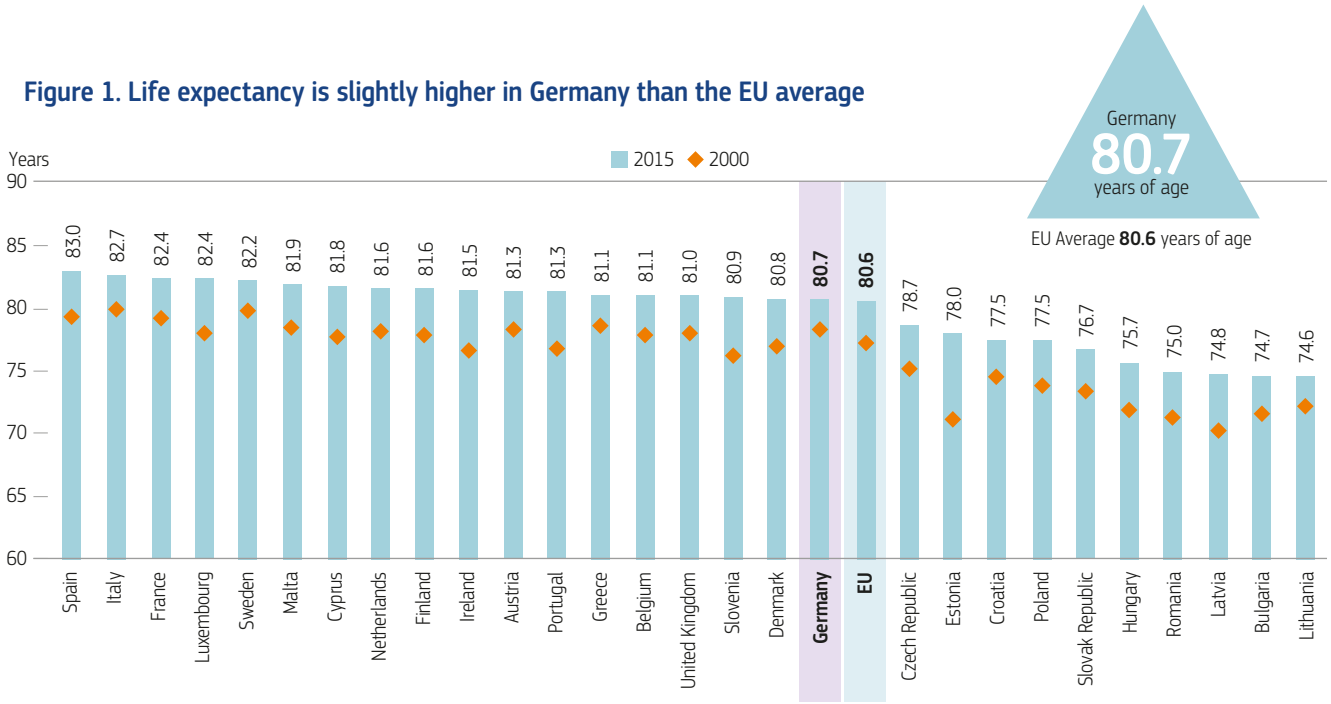
## Life expectancy in Germany is above the EU average, but behind the leading countries

Life expectancy at birth in Germany has increased to 80.7 years in 2015 (Figure 1) but is about 2 years below that of Spain and Italy – the leading countries in the EU. Life expectancy of women is nearly 5 years higher than that of men but the gap has narrowed since 2000.

Much of the gain in life expectancy since 2000 has been after the age of 65, with life expectancy of women at age 65 reaching 21.0 years in 2015 (up from 19.6 years in 2000) and that of men reaching 17.9 years (up from 15.8 years in 2000). At age 65, Germans can expect to live approximately 60% of their remaining years free of disability (12.3 healthy life years for women and 11.4 healthy life years for men).[1]

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

**Figure 1. Life expectancy is slightly higher in Germany than the EU average**




**Source:** Eurostat Database

## Cardiovascular disease and cancer are leading causes of mortality but dementia deaths are increasing

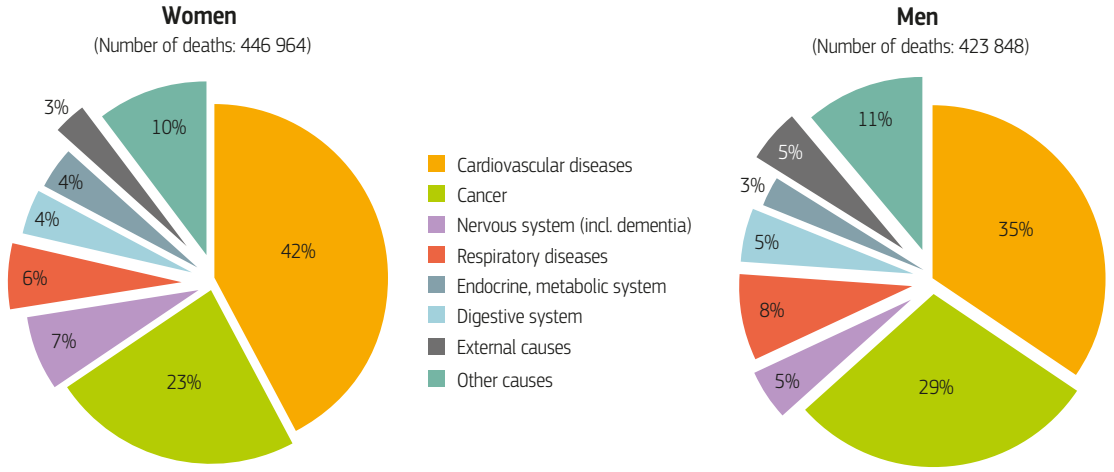
Cardiovascular diseases and cancer are the two leading causes of death in Germany, accounting for respectively 42% and 23% of all deaths among women and 35% and 29% of all deaths among men (Figure 2). Looking at more specific causes of death, deaths from heart diseases and stroke remain the leading causes of mortality (Figure 3), but have come down substantially since 2000. Over the same period, deaths from Alzheimer's and other dementias increased almost six-fold, from about 6 000 to nearly 35 000. Dementia – including Alzheimer's disease – now causes more than 4% of all deaths in Germany, up from less than 1% of deaths in 2000. This rise reflects both an ageing of the population and improved understanding and identification of Alzheimer's and other dementias (see Section 5.1).

## Chronic conditions are the leading causes of disability-adjusted life years lost

In addition to the high mortality burden caused by cardiovascular diseases and lung cancer, musculoskeletal problems (including low back and neck pain), dementias and mental health problems (including depression), are some of the leading contributors to disability-adjusted life years[2] (DALYs) lost in Germany (IHME,

2. DALY is an indicator used to estimate the total number of years lost due to specific diseases and risk factors. One DALY equals one year of healthy life lost (IHME).

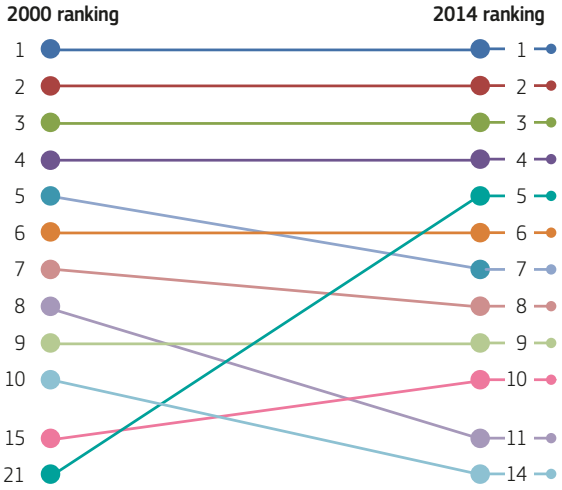
## Figure 2. Cardiovascular disease and cancer cause nearly two thirds of deaths in both men and women




**Note:** The data are presented by broad ICD chapter. Dementia was added to the nervous system diseases' chapter to include it with Alzheimer's disease (the main form of dementia).

**Source:** Eurostat Database (data refer to 2014).

## Figure 3. Mortality from Alzheimer's and other dementias has increased with the aging population




| | % of all deaths in 2014 |
|---|---|
| Ischaemic heart diseases | 14% |
| Other heart diseases | 11% |
| Stroke | 6% |
| Lung cancer | 5% |
| Alzheimer and other dementias | 4% |
| Lower respiratory diseases | 4% |
| Colorectal cancer | 3% |
| Diabetes | 3% |
| Breast cancer | 2% |
| Kidney diseases | 2% |
| Pneumonia | 2% |
| Liver diseases | 2% |

**Source:** Eurostat Database.

2016). Based on self-reported data from the European Health Interview Survey (EHIS), one in sixteen people in Germany live with asthma and more than one in ten live with chronic depression. People with the lowest level of education[3] are twice as likely to live with diabetes and over 30% more likely to live with asthma than those with the highest level of education.[4]

## There is a wide gap in self-reported good health between high and low income populations

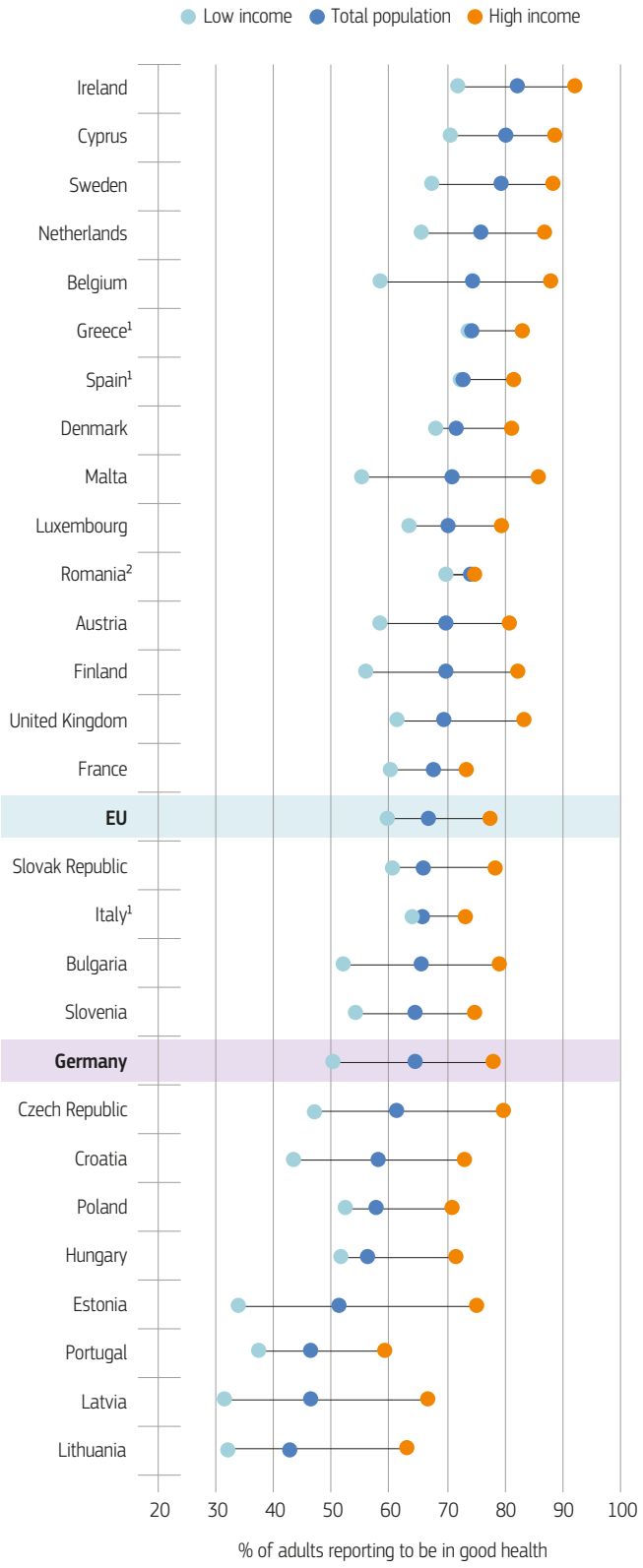
A slightly lower proportion of Germans considers themselves to be in good health compared with the EU average (65% versus 67%).[5] There is a striking difference in self-rated health by income: 78% of Germans in the highest income quintile consider their health to be good, but only 51% of those in the lowest income quintile report the same (Figure 4).

3. Lower education levels equate to people with less than primary, primary or lower secondary education (ISCED levels 0–2) while higher education levels refer to people with tertiary education (ISCED levels 5–8).

4. Inequalities by education may partially be attributed to the higher proportion of older people with lower educational levels; however, this alone does not account for all socioeconomic disparities.

5. Self-reported data need to be interpreted with care, particularly in international comparisons, since it is a subjective assessment influenced by individual and cultural expectations.

**Figure 4. Many people in Germany report good health, but large disparities exist by income group**




**Notes:**

1. The shares for the total population and the low-income population are roughly the same.
2. The shares for the total population and the high-income population are roughly the same.

**Source:** Eurostat Database, based on EU-SILC (data refer to 2015).

# 3 Risk factors

## Behavioural risk factors remain a major public health concern

The health status of the German population and persisting health inequalities are linked to a range of health determinants. Up to 28% of the overall burden of disease in Germany in 2015 (measured in terms of DALYs) could be attributed to behavioural risk factors – including dietary risks, smoking, alcohol use and low physical activity – and to high body mass index. Of all behavioural risk factors, poor diet and smoking contribute the most to poor health in Germany (IHME, 2016).

## Alcohol consumption has declined, though binge drinking remains problematic

Alcohol consumption per adult in Germany is 11.0 litres, 1 litre higher than the EU average – but nearly 2 litres less than in 2000. Consumption has declined more rapidly in Germany than across the EU. Nevertheless, the percentage of the population reporting binge drinking[6] is high, with one in three adults reporting such behaviour. Looking at alcohol consumption among adolescents, about one quarter of 15-year-olds reported having been drunk at least twice in their life in 2013–14. This proportion is slightly lower than in most other EU countries (see also Figure 5), and has come down over the past decade.

6. Binge drinking behaviour is defined as consuming six or more alcoholic drinks on a single occasion, at least once a month over the past year.

## Smoking has generally declined, but a wide gender gap exists

The smoking rate among adults (21%) is close to the EU average, but much greater than in countries like Sweden, Finland and Luxembourg. Approximately one quarter of men and one sixth of women are regular smokers. Encouragingly, smoking rates among adolescents have fallen much more quickly than the EU average. The smoking rate for girls at age 15 fell from 34% in 2001–02 to 15% in 2013–14, and for boys from 32% to 13%, but this remains much higher than in countries like Sweden and Denmark.

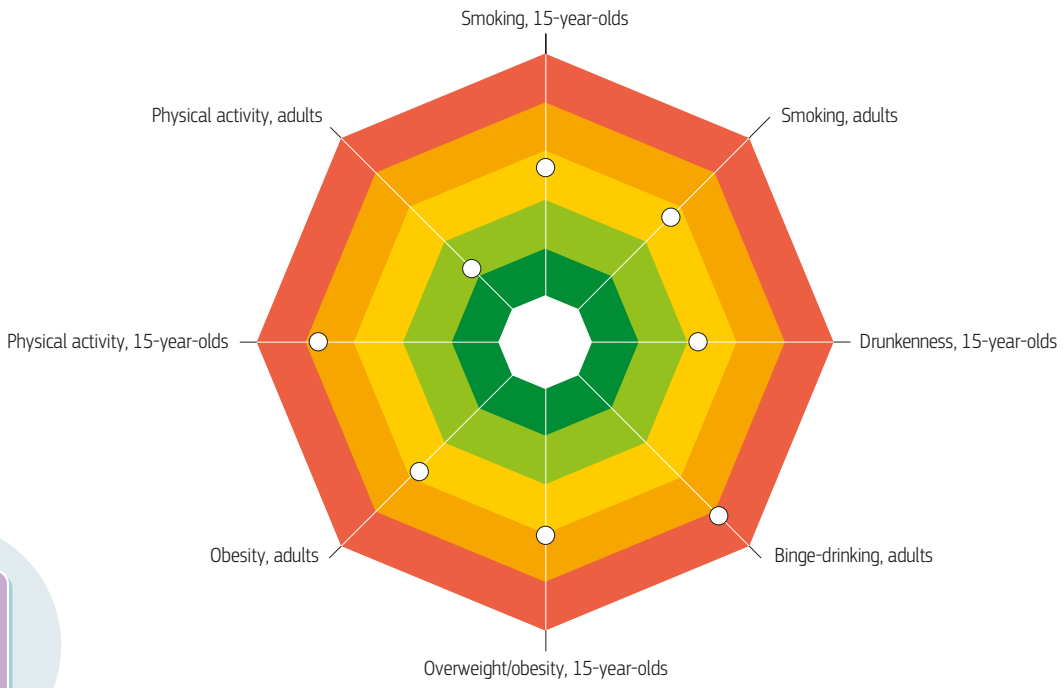
## Obesity is a growing public health concern

Obesity is a growing challenge in Germany. More adults in Germany are now obese than the EU average (16% vs 15% according to self-reported data), and the prevalence of obesity has increased by nearly one third since 2003. Self-reported overweight and obesity (which tends to underestimate the true prevalence of obesity) among adolescents increased by almost two thirds between 2001–02 and 2013–14 (from 11% to 18%), a particularly concerning development given that being overweight or obese in childhood and adolescence is a strong predictor of becoming overweight or obese as an adult. National policies focused on prevention and promoting healthier diets aim to address this trend (see Section 5.1).

## Behavioural risk factors are more common among disadvantaged populations

Behavioural risk factors are more prevalent among populations with a low level of education or income. For example, there is a six percentage point difference in smoking rates between adults with lower educational and higher educational attainment while the percentage of adults engaging in binge drinking is three percentage points higher among the least educated than the most educated. The difference is stark when it comes to obesity rates, with approximately a 40% difference between those with the lowest and highest levels of education.

**Figure 5. Germany remains average for many behavioural risk factors when compared across the EU**




**Note:** The closer the dot is to the centre the better the country performs compared to other EU countries. No country is in the white 'target area' as there is room for progress in all countries in all areas..

**Source:** OECD calculations based on Eurostat Database (EHIS in or around 2014), OECD Health Statistics and HBSC survey in 2013–14. (Chart design: Laboratorio MeS).

# 4 The health system

## Germany has the oldest social health insurance system in the world

Germany was the first country in the world to establish a nationwide Social Health Insurance (SHI) system in 1883. Even today, this legacy explains the two most characteristic features of the system: a multi-payer system with high reliance on self-governing structures for regulation, and the unusual co-existence of SHI and substitutive private health insurance (PHI) for financing.

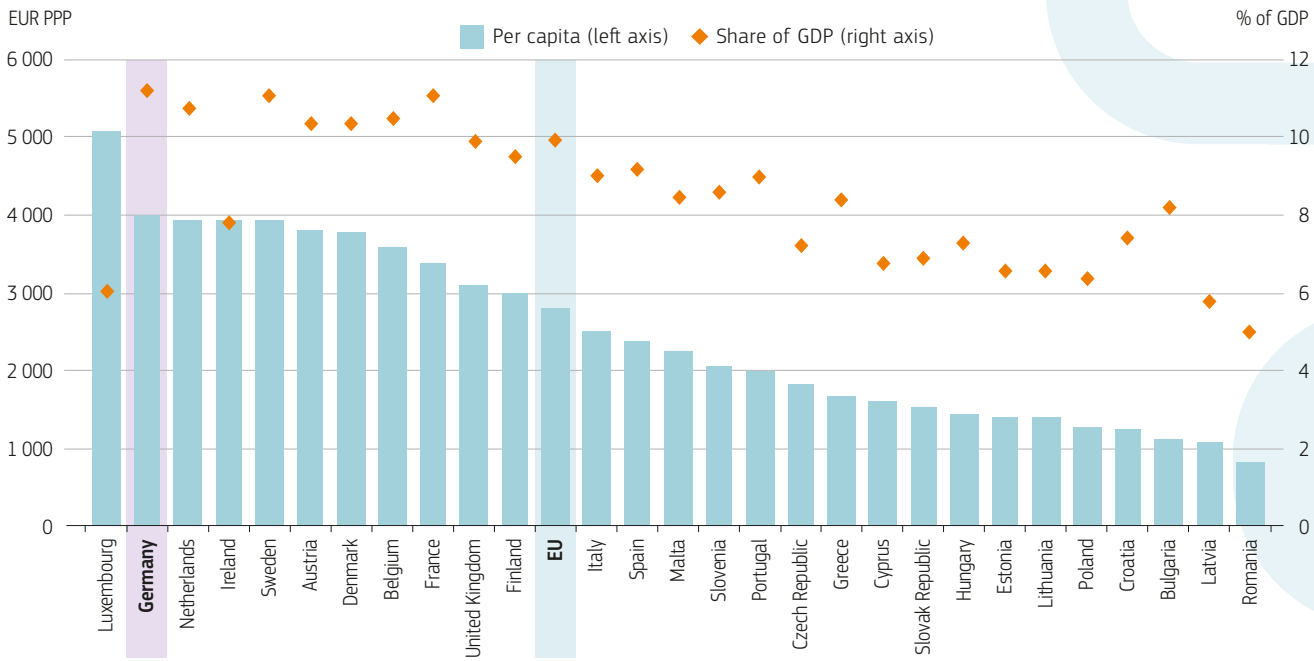
## A strong reliance on self-governmental structures characterises organisation and governance

The health system has a complex governance structure. The federal government defines only the legal framework, while the regulatory details are specified in directives issued by the Federal Joint Committee – the highest self-governing decision-making body in the country. The Federal Joint Committee consists of representatives of associations of sickness funds, physicians/dentists and hospitals and three independent members (plus patients' representatives without voting rights). It takes decisions on SHI benefits, reimbursement systems and quality assurance. The states (Bundesländer) supervise self-governing bodies at state level and are responsible for hospital planning and investments as well as medical education.

## Health expenditure is among the highest in the EU

Germany's health system is relatively expensive: per capita health expenditure is the second highest in the EU (EUR 3 996 in 2015) – 43% higher than the EU average (Figure 6) – and has grown more quickly since 2005 than on average in the EU. Germany also spends the highest share of its GDP on health in the EU (11.2% in 2015, EU average: 9.9%). The high spending in Germany is mostly related to high public expenditure: 84.5% of total health expenditure was public in 2015 – again the highest share in the EU.

**Figure 6. Germany spends the highest share of GDP on health**




**Source:** OECD Health Statistics, Eurostat Database, WHO Global Health Expenditure Database (data refer to 2015).

## Co-existing SHI and PHI ensure near universal coverage

Coverage is nearly universal and health insurance is mandatory. In 2017, there are 113 sickness funds providing SHI for 88% of the population, and financing about 58% of total health expenditure. PHI covers 10% of the population, while the remainder are covered under special schemes (e.g. soldiers or policemen). Employees earning less than a certain threshold (EUR 54 900 per year in 2015) are automatically insured by SHI. People earning above this threshold as well as the self-employed and civil servants can choose to opt for substitutive PHI or to stay in SHI on a voluntary basis (see Section 5.2).

## SHI and PHI follow different rules for funding and payment

Contributions to SHI are wage-related and more or less the same across different sickness funds. SHI revenues are pooled together with some tax subsidies in the central health fund and reallocated to sickness funds according to a risk-equalisation scheme (see Section 5.3). Sickness funds pay for ambulatory (out-patient) care using a global budget paid to regional associations of SHI physicians. Individual physicians are paid fee-for-service within practice-based budgets and unbudgeted for certain services.

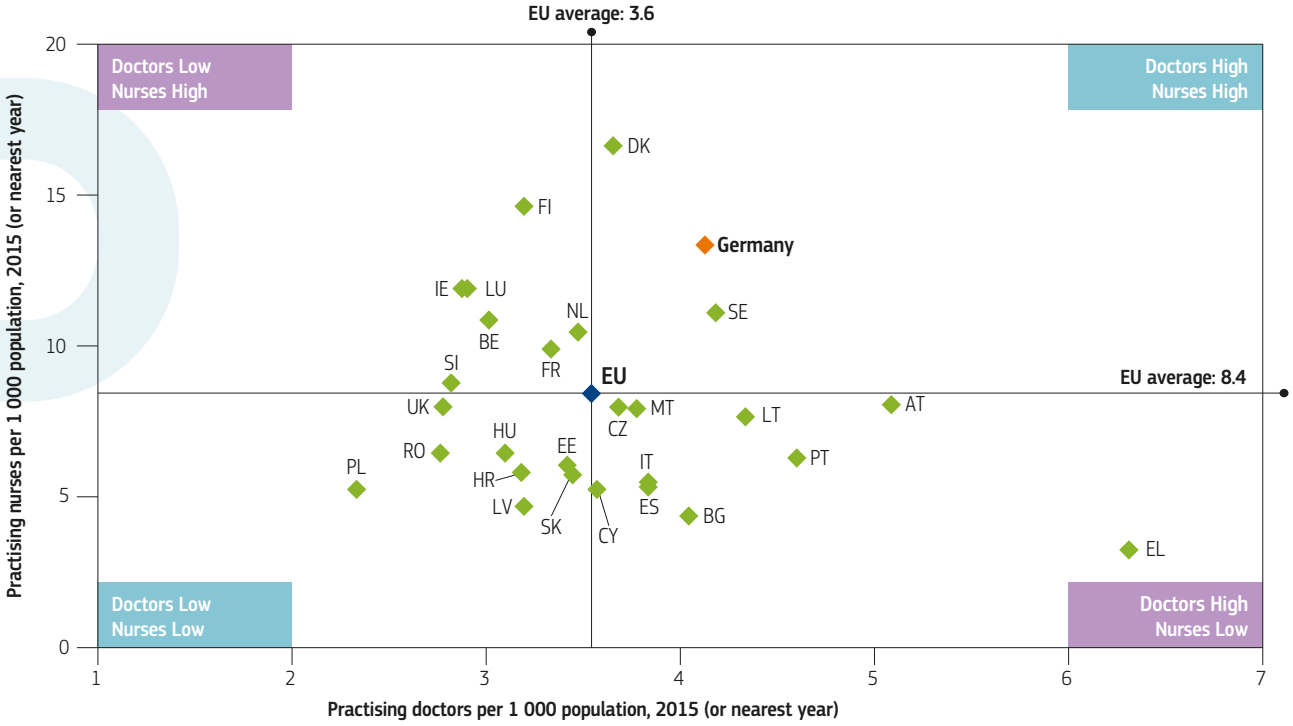
Inpatient care is reimbursed through diagnosis-related group-based payment. PHI contributions depend on individual health risk and provider payment by PHI is higher than by SHI. This difference in payment, in particular for ambulatory care, gives rise to equity concerns (see Section 5.2).

## Germany's high number of hospital beds results in low staff per bed ratios

Germany has a very large hospital inpatient sector. It has 813 beds per 100 000 population, a ratio that is the highest in the EU and 58% above the average. Bed capacity has been reduced by only 11% since 2000, whereas countries like Finland or Denmark have reduced capacity by more than 40% over the same period.

Germany also has high and growing numbers of physicians and nurses, with per population ratios and growth rates well above the EU average (Figure 7). Growth in physician numbers has been particularly strong for hospital physicians. Since 2004, when diagnosis-related group-based hospital payment was introduced, the number of full-time equivalent physicians in hospitals increased by 30% (from 125 000 to 163 000 in 2015). Nevertheless, given the high number of hospital beds, the physician to bed ratio is comparatively low, and the nurse to bed ratio is one of the lowest in the EU.

**Figure 7. Germany has comparatively high numbers of physicians and nurses for its population**




**Note:** In Portugal and Greece, data refer to all doctors licensed to practice, resulting in a large over-estimation of the number of practising doctors (e.g. of around 30% in Portugal). In Austria and Greece, the number of nurses is under-estimated as it only includes those working in hospital.

**Source:** Eurostat Database.

## Provision is characterised by high activity

Patients have free choice of provider and there is no formal gatekeeping system. Around 150 000 – mostly office-based – physicians provide ambulatory care, with about 42% providing primary care and 58% specialist care. Hospital care continues to be confined mostly to inpatient care for legal and financial reasons. Publically and privately insured patients use the same providers, irrespective of different financing mechanisms.

The level of activity in both ambulatory and hospital care is high. Every person sees a physician on average 10 times per year, which is more often than in most other EU countries. In fact, other national data sources indicate an even higher rate. The hospital admission rate is at 255 per 1 000 population, which is the third highest in the EU (after Austria and Bulgaria).

## Fragmentation persists despite reform attempts to improve coordination

There is a comparatively strong separation in Germany between ambulatory care and hospital care, as well as between primary and specialist care. This has led to a lack of continuity and coordination with potentially negative consequences for quality and efficiency of care. However, disease management programmes and new models of integrated care have been implemented progressively since 2002 with the aim of improving care, in particular for people with chronic conditions.

# 5 Performance of the health system

### 5.1 EFFECTIVENESS

## Amenable mortality in Germany is below the EU average but higher than in leading countries

The German health system effectively contributes to avoiding deaths from causes that are amenable to health care (e.g. deaths from breast cancer and ischaemic heart disease).[7] Figure 8 shows that amenable mortality is slightly below the EU average for both men and women. Nevertheless, about 87 000 deaths or 10% of all deaths in Germany in 2014 (down from 12% in 2009) were still considered to be avoidable through higher quality and more timely care. In comparison, in France, where less than 8% of deaths are considered to be amenable to health care, amenable mortality is over 30% lower than in Germany.

## Cancer care is effective and population-based screening programmes may improve screening uptake

According to CONCORD programme data, Germany is among the top ten countries with the highest cancer survival rates for breast, cervical and colorectal cancer. These rates have remained relatively stable over time or have slightly improved since 2000. Screening rates are high. Based on self-reported data from the EHIS survey in 2014, 80.4% of women aged 20-69 reported having been screened for cervical cancer over the past three years while for breast cancer, 73.5% of women aged 50-69 reported having been screened over the past two years.

## Preventable mortality is about average but there is room for improvement

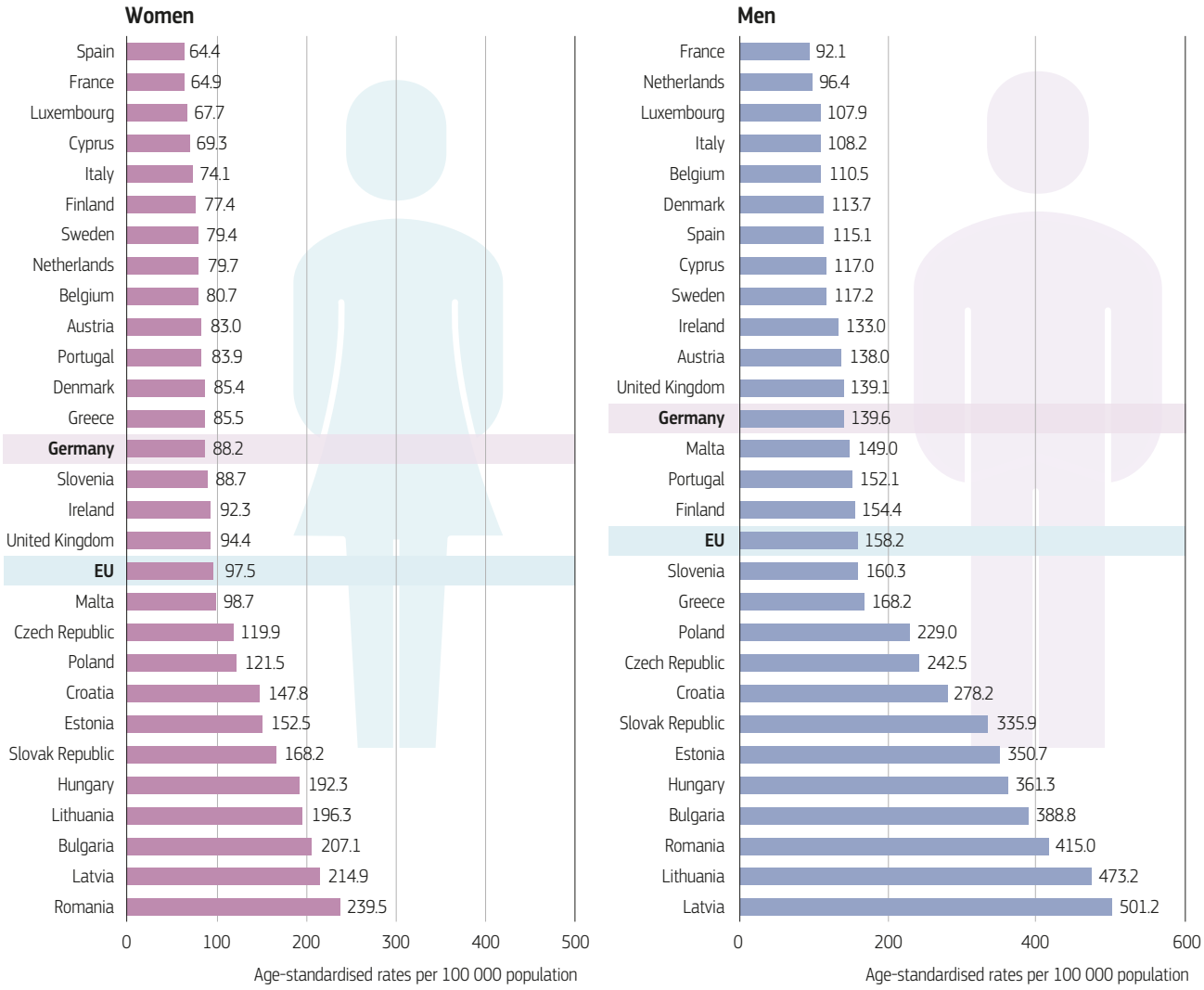
Preventable mortality, such as mortality related to alcohol, tobacco or road traffic accidents, has been reduced considerably over recent years in Germany – in line with the trend in most EU countries. Mortality from road traffic accidents is at 4.6 per 100 000 population and below the EU average (5.8) but considerably above rates in the United Kingdom (2.8). Road traffic mortality is largely a male-dominated problem with three times as many men dying on German roads (7.3) as women (2.1). Alcohol-related mortality is above the EU average (19.4 in Germany versus 15.7 on average). Other countries in the EU, such as Italy, have considerably lower alcohol-related mortality.

## Prevention and health promotion are on the political agenda

There has been considerable activity at the political level to improve prevention and health promotion in Germany. The recent Act to Strengthen Health Promotion and Prevention regulates vaccination policy and expands health check-ups. Sickness funds

7. Amenable mortality is defined as premature deaths that could have been avoided through timely and effective health care.

**Figure 8. Amenable mortality rates are slightly below the EU average**




**Source**: Eurostat Database (data refer to 2014)..

and long-term care funds invest substantial resources into health promotion in children's day-care facilities, schools, the work environment and long-term care facilities. The National Action Plan 'IN FORM – German national initiative to promote healthy diets and physical activity' aims to achieve lasting improvements in dietary and exercise habits in Germany by 2020 for the whole population with a focus on children and adolescents. In addition, the Federal Ministry of Health established a funding priority to promote research in the field of childhood obesity.

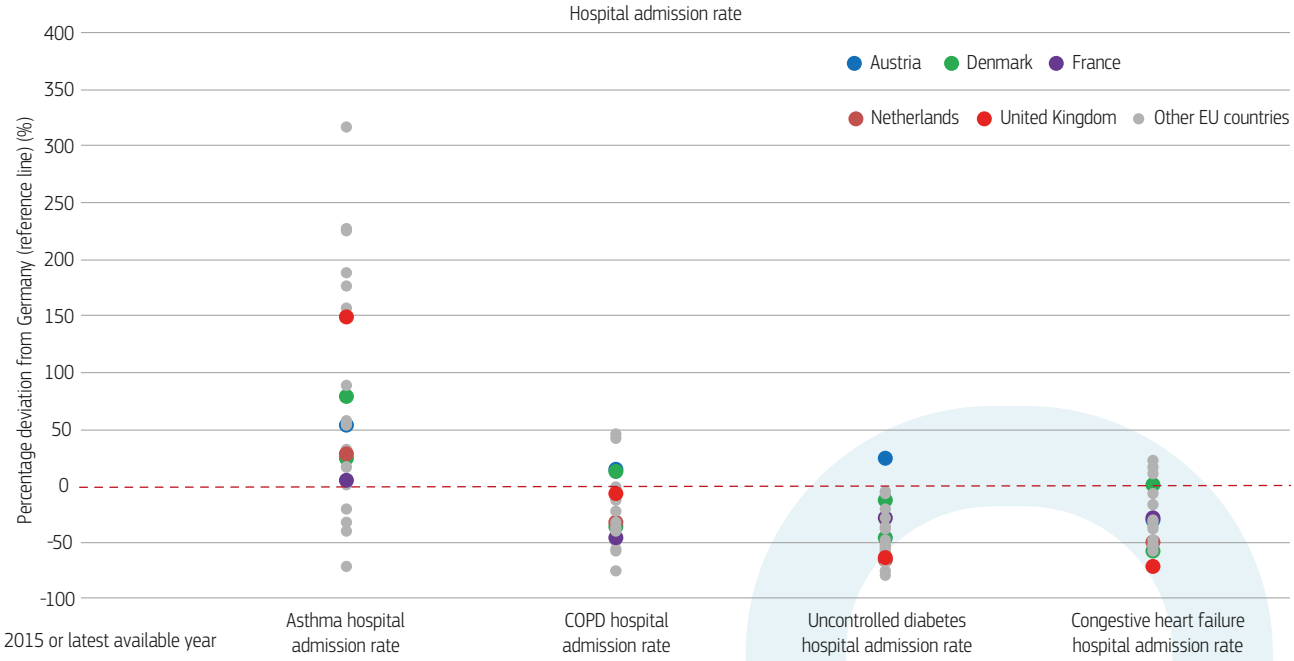
## The number of measles outbreaks has increased in recent years

Immunisation coverage rates against measles have been stable since about 2004 at 97%, which is close to the EU average. However, there have been occasional measles outbreaks in recent years as coverage is low among vaccine objectors. In the first 4 months of 2017, Germany reported 583 cases of measles, exceeding the total number of 326 cases reported in 2016. By contrast, hepatitis B (HepB3) immunisation coverage among 1-year-olds is only 88%, which is below the EU average of 90%, and only Sweden and France have lower rates. About every third person among the elderly is vaccinated against seasonal influenza, which is close to the EU average.

## A high rate of avoidable hospital admissions may point to shortcomings in ambulatory care

Hospital admission rates for asthma are low compared to other EU countries, but admission rates for chronic obstructive pulmonary disease (COPD), congestive heart failure and diabetes are higher in Germany than on average in the EU (Figure 9). Hospital admissions of patients with these conditions are generally considered to be avoidable because they can be effectively treated in ambulatory (or outpatient) care. However, disease prevalence may explain some variation in the rates across countries. Nevertheless, it is clear

**Figure 9. There are high admission rates for patients with chronic conditions compared to other countries**




**Note:** Admission rates are not adjusted by the prevalence of these conditions or population age structure.

**Source:** Eurostat Database (data refer to 2015 or latest year available).

that lack of coordination in ambulatory care and strong sectoral boundaries between ambulatory and inpatient care are problems of the German health care system that may contribute to higher rates.

## Deficiencies in ambulatory care persist despite high uptake of disease management programmes

Disease management programmes have been progressively introduced since 2002 to tackle avoidable hospital admissions. By the end of 2015, the number of participants in disease management programmes had increased to 6.6 million insured, but avoidable hospital admission rates of patients have been stable over time. Possible explanations for this include insufficient identification of and lack of enrolment by the most at risk populations (Rathman et al., 2013), and excess bed capacity in hospitals (Burgdorf and Sundmacher, 2014).

In addition, the recent introduction of a medication plan for patients taking three or more medications aims at improved coordination and prescribing. However, this plan is still paper-based and held only by patients, although it will be saved on patients' electronic health cards from 2018 onwards.

## Other quality indicators show a mixed picture

Inpatient mortality rates are relatively low for stroke, but high for patients with acute myocardial infarction (OECD, 2017). In general, inpatient services often continue to be provided in many small hospitals that often lack the necessary human resources (24-hour availability of a range of specialists) and technical equipment (computed tomography scanners, intensive care units) to provide high quality care; and quality of care has received relatively little consideration during hospital planning.

## Several reforms have targeted health care quality and transparency of care quality

A new Institute for Quality Assurance and Transparency in Health Care (IQTiG) was founded in January 2015 to make health care quality more transparent for patients. Quality assurance in Germany has traditionally been split between the ambulatory sector and the inpatient sector. Public reporting of hospital quality has existed for many years but information on quality in ambulatory care remains largely unavailable. The IQTiG is charged with harmonising the existing separate programs for quality assurance in ambulatory and hospital care. In addition, IQTiG will develop quality indicators that can support quality-based planning of hospital capacities, and other indicators for a planned introduction of pay-for-performance for hospitals.

## 5.2 ACCESSIBILITY

### Population coverage is near universal but certain groups still fall between the cracks of the system

The German health system ensures near universal coverage (99.9% of the population) through a range of mechanisms (see Section 4). There is a legal mandate to have health insurance but it has been estimated that about 0.1% of the population (79 000 people) did not have insurance in 2015. These individuals fall between the cracks of the system either because of administrative hurdles or because they have problems paying PHI premiums or SHI contributions (for example, low-income self-employed). A particular problem exists for undocumented migrants who (theoretically) have a right to health care but who cannot access care because of language barriers or because they are afraid of legal consequences.

A significant obstacle for uninsured people who are willing to (re-)insure is that they have to retrospectively pay insurance contributions or premiums (plus interest rates) also for the period when they were (still) uninsured. In an attempt to address this problem, the 2013 Law on Removing Social Hardship in Case of Health Insurance Debts cancelled these debts for those who (re-) insured between August and December 2013 – about 33 000 people did – and it lowered interest rates on payment arrears.

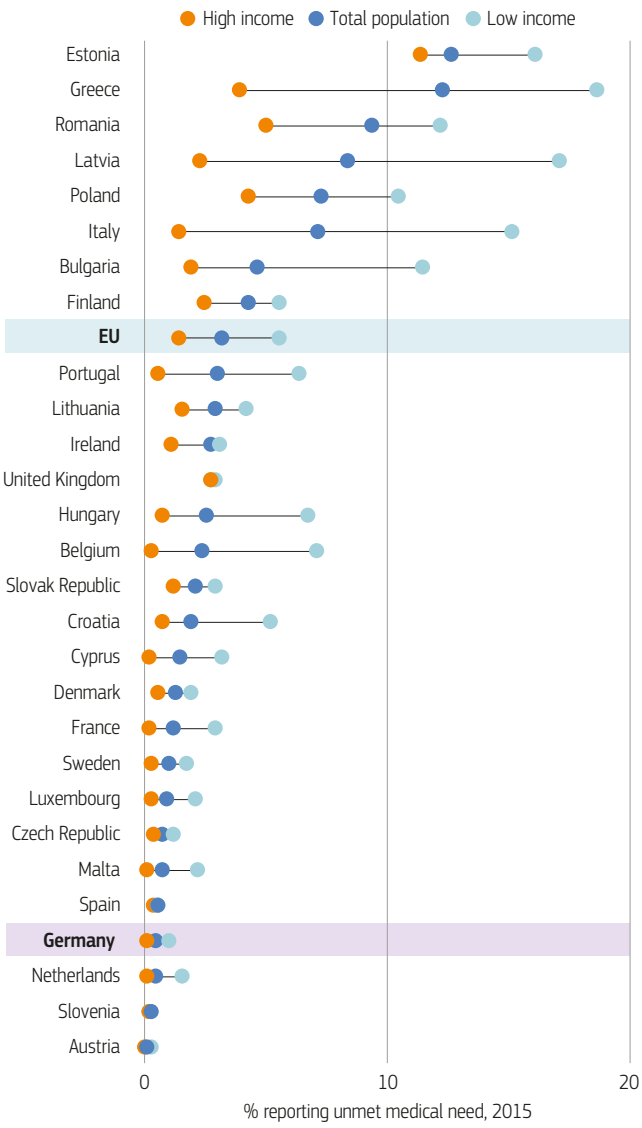
### Self-reported unmet needs are very low in Germany

Only 0.5% of the population report having forgone needed care (Figure 10) – a rate that is among the lowest in Europe. As in most EU countries, unmet need is higher for lower income groups than for higher income groups. In Germany, 1% of the lowest income quintile reported an unmet medical need in 2015, whereas this number was 0.1% in the highest income quintile. However, the difference between income groups is smaller in Germany than in most other countries. Interestingly, a recent national study shows that self-reported unmet need in Germany is related to perceived discrimination (e.g. because of longer waiting times or not having PHI) rather than to financial barriers (Röttger et al., 2016).

### The co-existence of SHI and PHI contradicts solidarity and leads to distorted payment incentives

Germany is unusual in allowing higher income groups, which also tend to be healthier, to opt out of the SHI system. This contradicts the principle of solidarity inherent in SHI, in which contributions depend on ability to pay but services are provided according to need. In addition, physician payment in ambulatory care is higher

**Figure 10. Self-reported unmet needs are very low in Germany**




**Note:** The 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 2015).

for PHI patients than for SHI patients, which makes these patients financially more attractive and leads to equity concerns related to longer waiting times for SHI patients (Klein and von dem Knesebeck, 2016).

### The benefits package includes dental care for adults.

SHI covers a broad minimum benefits package and individual sickness funds may include further services for their insured. In contrast to some countries (e.g. the Netherlands and Norway), the German benefits package also includes dental care, dental prostheses and orthodontics – although considerable user charges apply. Alternative and complementary medicine is mostly excluded

from SHI, although several sickness funds cover homeopathy, osteopathy and acupuncture more generally. A particularity is that the German benefits basket includes all licensed prescription drugs, i.e. there is no positive list of covered pharmaceuticals. Instead, Germany relies largely on price mechanisms to regulate pharmaceutical care.

## Migrants have access only to a restricted set of benefits

There are some population groups in Germany that have access only to a limited set of benefits. This includes, in particular, asylum seekers, refugees and irregular migrants during the first 15 months of their stay in Germany. During this time period, they have a legal right to care only in case of acute or painful conditions, and all care related to pregnancy, healthy child check-ups and vaccinations. However, in practice, there is considerable regional variation in access of migrants to health care as each state can make its own regulations – and some provide access to the normal benefits package.

## Out-of-pocket spending in Germany is low, indicating that health care is affordable

Health care in Germany is generally affordable. Patients pay only about 13% of total health expenditure out-of-pocket, which is below the EU average (15%). In fact, this share is lower only in France, Luxembourg and the Netherlands. Furthermore, out-of-pocket spending accounts for only 1.8% of final household consumption – again this share is lower only in France, Luxembourg, the United Kingdom and Romania. The share of out-of-pocket spending increased somewhat from 12.8% in 2003 to 14.2% in 2005, when a range of user charges were introduced or increased. In particular the EUR 10 co-payment per first physician visit in a quarter was highly unpopular and was discontinued in 2013, bringing the share of out-of-pocket spending back to below 14%.

## Out-of-pocket spending is related mostly to medical goods and long-term care

The most important categories of out-of-pocket spending in Germany are related to medical goods (37% of out-of-pocket expenditure in 2015), mostly for over-the-counter medicines and 'other medical non-durables', e.g. eye-glasses and hearing aids, long-term care (33% of out-of-pocket spending), and dental care (15% of out-of-pocket spending). Increasingly important is spending on so-called individual health services (IGeL) provided by physicians in ambulatory care. These are services that are not covered by SHI because their therapeutic benefit has not (yet) been demonstrated. Since the end of the 1990s, such services have expanded considerably.

## The high density of physicians and hospitals contributes to good service availability

Density of physicians, nurses and hospitals in Germany is among the highest in Europe (see Section 4). This assures that service availability is, in general, very good: about half of the population can reach a hospital within a 10-minute car ride and 99% within half an hour (Leber and Scheller-Kreinsen, 2015). The closest general practitioner (GP) is less than 1 km away for more than half of the population in Germany, and even in rural areas, about 90% of the population live less than 5 km away from the closest GP (Figure 11). International data show that density of beds and physicians, even in regions with the lowest rates, is still above or close to the average of most other EU countries.

Unmet medical needs because of waiting times or distance are almost non-existent in Germany (EU-SILC). Data from the 2016 Commonwealth Fund International Health Policy Survey show that waiting times for specialist appointments are the lowest in Germany: only 3% of survey respondents waited 2 months or longer.

## Several reforms have aimed to improve availability in rural areas

National data show that some rural areas, particularly in the Eastern Länder, have an acute shortage of physicians, and several recent reforms have addressed potential access problems. For example, the 2015 Healthcare Strengthening Act enables municipalities to set up health centres and allows hospitals in under-served areas to provide outpatient care. In addition, physicians working in under-served areas receive financial incentives.

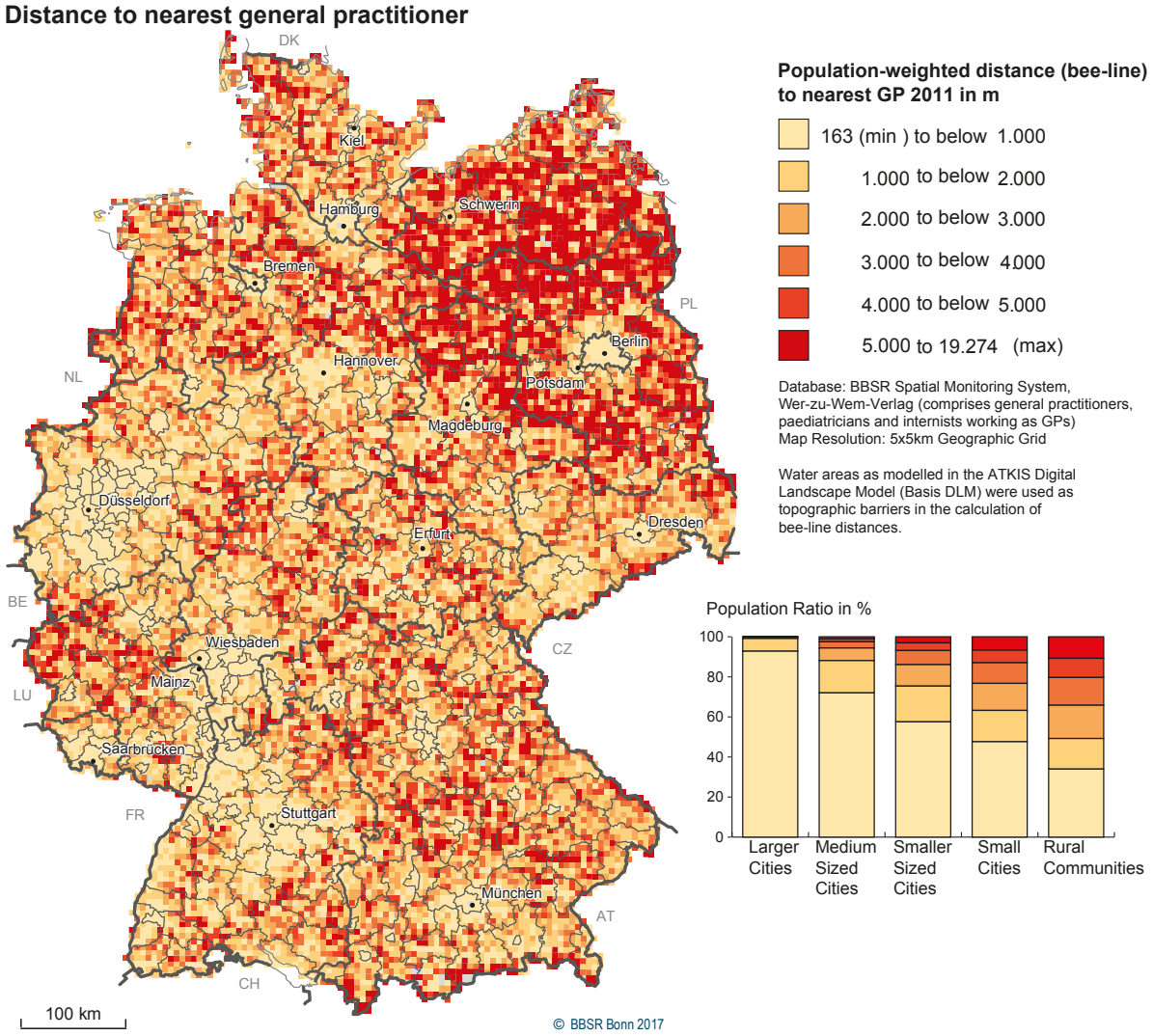
### 5.3 RESILIENCE[8]

## Financial reserves of the SHI system may cushion future revenue shortfalls

The favourable economic and fiscal climate of the last few years has led to a situation where sickness funds and the Central Health Fund together had accumulated financial reserves of EUR 25 billion by the end of 2016 – corresponding to more than 10% of the total annual expenditures of the SHI system. This reserve is large enough to absorb significant potential revenue shortfalls. Furthermore, countercyclical measures have contributed to resilience in times of crises, e.g. during the financial crisis in 2009, because the government pays for SHI contributions for the unemployed and assumes responsibility for revenue shortfalls of the Central Health Fund. During the financial crisis, the government also used the Central Health Fund to channel general tax income

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

**Figure 11. Most of the population live less than 1000 m from the closest general practitioner**




**Source:** Federal Institute for Research on Building, Urban Affairs and Spatial Development 2017.

to the SHI system and to reduce contribution rates from 15.5% to 14.9% of wages between mid-2009 and end of 2010.

## Future sustainability of long-term care is on the political agenda

Three recent Long-Term Care Strengthening Acts have considerably expanded the benefits package. This was coupled with an increase in insurance contribution rates by 0.5 percentage point. Part of this increase (0.1 percentage point) is used to create a long-term care precaution fund to stabilise future contributions after 2035. However, long-term sustainability of long-term care insurance depends strongly on future demographic developments and migration, which are difficult to predict. The median age of the German population is the highest in the EU and fertility rates remain low but have improved since 2010. The EC 2015 Ageing Report – from before the long-term care reforms – show that public spending on long-term care as a share of GDP is below EU average in Germany, but it is projected for some scenarios to exceed the EU average by 2040 (European Commission and Economic Policy Committee, 2015).

## There is an increasing reliance on foreign doctors and nurses

There is a shortage of health workers in rural areas and some specialisations despite comparatively high and increasing numbers of physicians and nurses in Germany (see Section 4). The number of medical graduates has been stable since 2000, and is exceeding the number of physicians retiring. In addition, the German health system is increasingly relying on physicians from abroad who accounted for 11% of all practicing physicians in Germany in 2015 (up from 4% in 2000) and for 30% of all newly registered physicians. The number of nursing graduates has increased by one third since 2000, and about 12% of active nurses in Germany have a migration background.

## Very high levels of service provision raise doubts about the appropriateness of care

Germany provides a large amount of health services: the number of outpatient contacts is among the highest in the EU and the number of inpatient stays is the second highest after Austria. Germany also has the highest rate of hip replacement surgeries in the EU (50% above average), and the highest number of magnetic resonance imaging examinations per capita (70% above average). Per capita expenditure on retail pharmaceuticals is the highest in Europe (Panteli et al., 2016), and the consumption of prescribed defined daily doses has increased by more than 50% between 2004 and 2015 (Busse et al., 2017). These statistics raise concerns about overprovision of services and the appropriateness of care.

## Individual services are provided efficiently

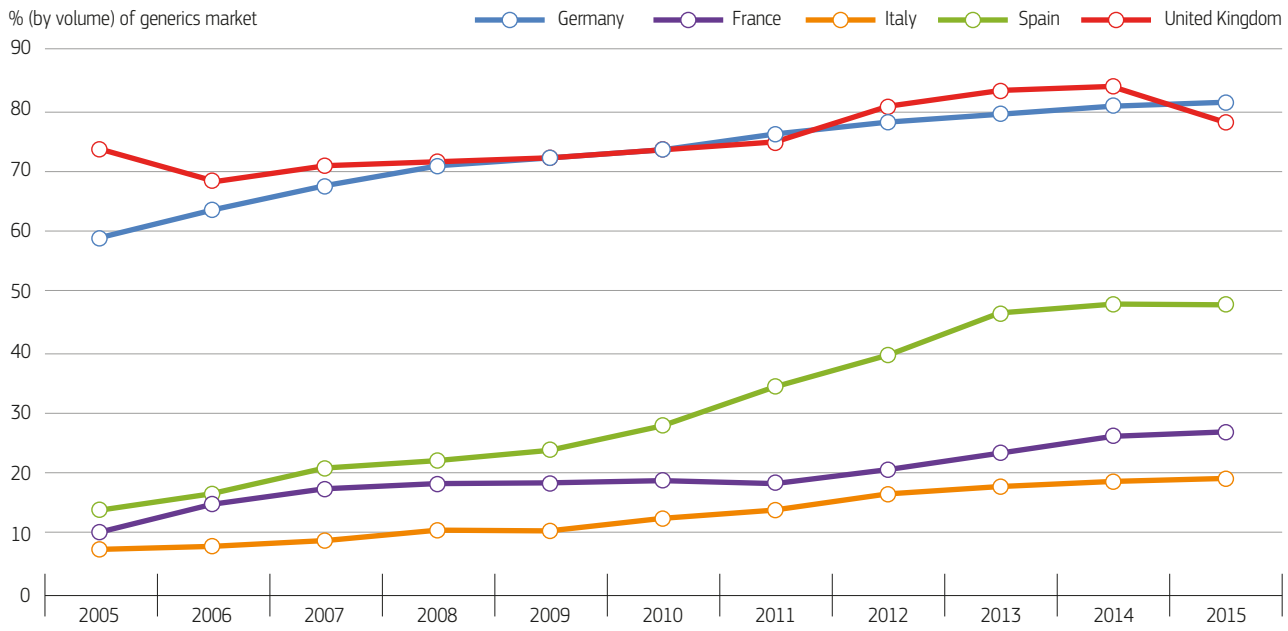
The efficiency of service provision (technical efficiency) is comparatively good. Spending on inpatient care (as a percentage of GDP) is only slightly above the EU average, indicating that costs per inpatient case are comparatively low. In fact, inpatients are treated by comparatively low numbers of staff (see Section 4), and costs per inpatient case have remained stable since 2005 (Busse et al., 2017). In ambulatory care, every SHI physician–patient contact costs on average less than EUR 30, a low figure if one considers that around half of these contacts are with specialists. Germany also has been successful at shifting pharmaceutical consumption to generics (almost 80% of prescribed pharmaceuticals), although pharmaceutical prices remain comparatively high (Figure 12).

## Health system efficiency could be improved

At a more aggregate level, the health system seems to have room for efficiency improvement. Figure 13 shows that many countries spend less per capita but achieve lower rates of amenable mortality, albeit with the proviso that health behaviours as well as health system factors influence the level of amenable mortality.

The high level of activity in inpatient care raises doubts about the efficient use of resources. Germany has been less successful than other countries at moving service provision, e.g. for tonsillectomies, to an outpatient or day care setting. Moreover, regional variation in inpatient service provision suggests oversupply in certain areas. For example, the rate of tonsillectomies, appendectomies and prostatectomies varies about eight-fold between districts with the highest rates and those with the lowest (Grote-Westrick et al., 2015). There are also large regional discrepancies in ambulatory care expenditures per capita. Together, this suggests that the rational use of resources could be improved.

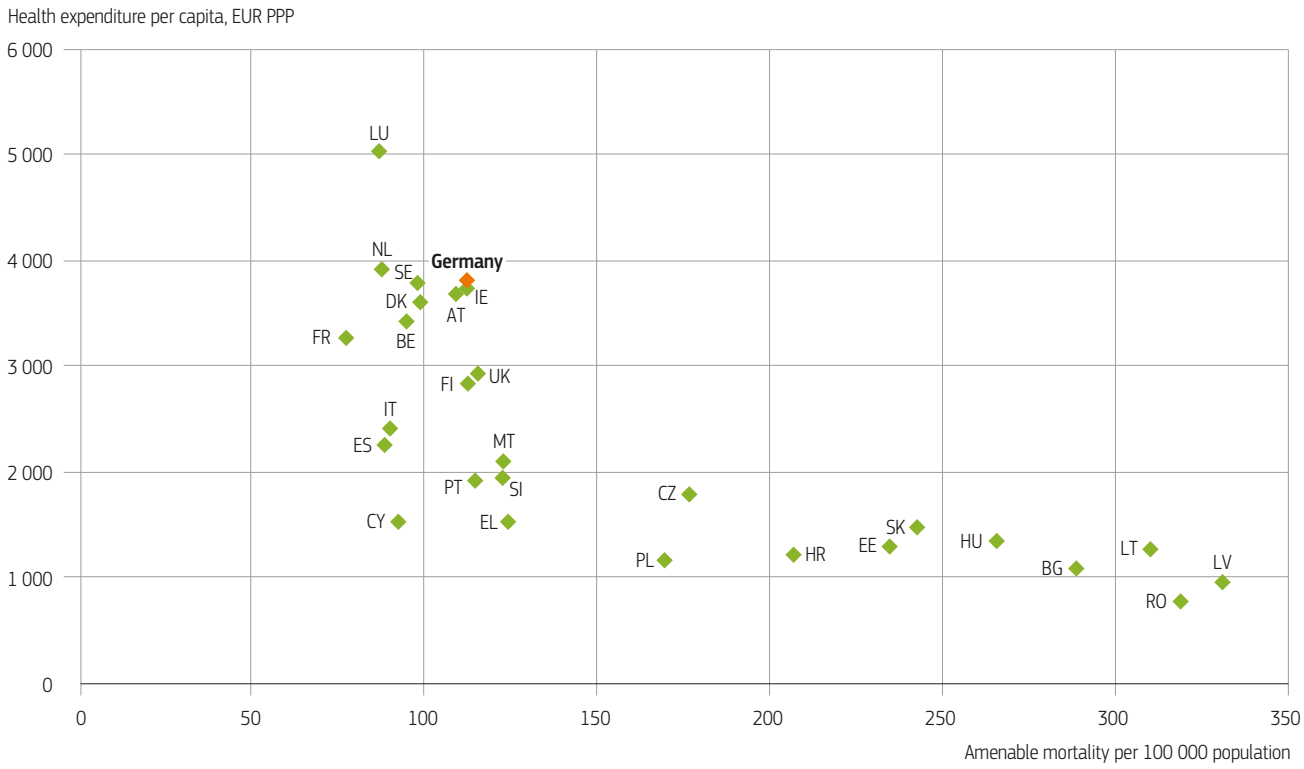
**Figure 12. The share of the generics market in Germany is among the highest in Europe**




**Note:** Data for Germany, Spain and the United Kingdom are for reimbursed pharmaceutical market. Data for France and Italy are for total pharmaceutical market.

**Source:** OECD Health Statistics 2017.

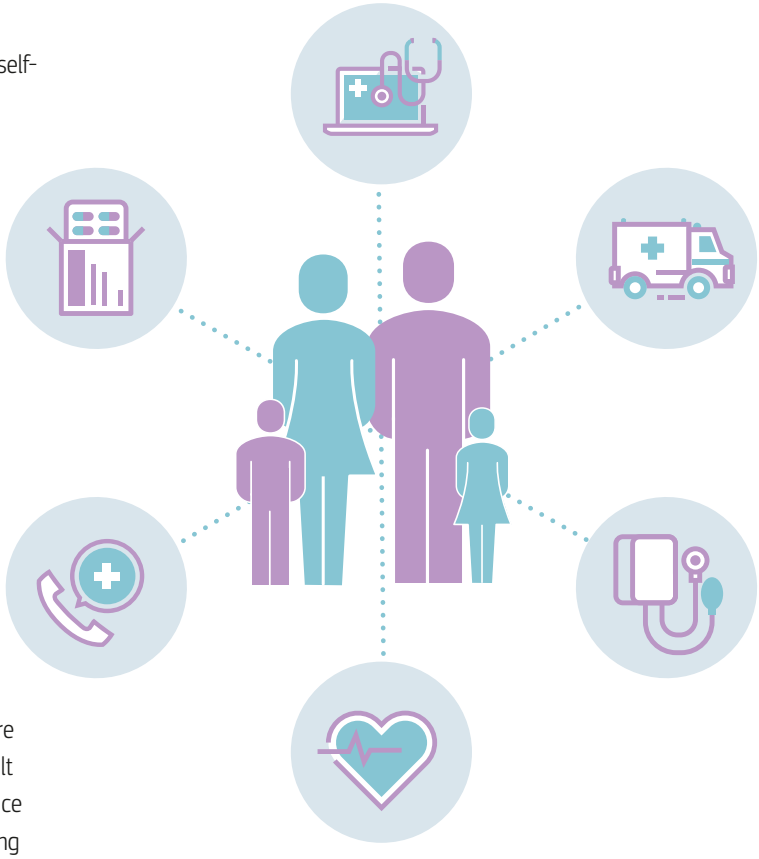
**Figure 13. Some countries have lower amenable mortality rates but spend less per capita than Germany**




**Sources:** OECD Health Statistics, Eurostat Database, WHO Global Health Expenditure Database (data refer to 2014).

## Self-governance assures effective day-to-day management

Governance of the German health system relies strongly on the self-governing structures and there is relatively limited state control (see Section 4). This arrangement assures that decisions are well-informed by the institutionalised day-to-day knowledge of actors in the field. However, it also means that decisions often reflect the priorities of insurers and providers, and not necessarily the interests of patients or the general public. Furthermore, both the federal level and the states are in a continuous struggle over competencies. When conflicts arise, this constellation may block reforms or lead to suboptimal results.



## More fundamental reforms may require stronger leadership

Achieving improvements in several important reform areas might require the formulation of a clearer vision by the legislator and the development of a common plan for all relevant actors – not only insurers and providers – for the future development of the health system. Otherwise, it may be difficult to move the health systems towards better integration of service provision, reducing oversupply of inpatient services, restructuring hospital capacities, and assuring equal access in rural areas.

# 6 Key findings

- Life expectancy in Germany is similar to the EU average, but Germans die about two years earlier than people in Spain or Italy. Cardiovascular diseases and cancer are still the leading causes of death, though deaths from dementia have increased sharply during the last years. Behavioural risk factors remain a major public health concern, particularly with regard to disadvantaged populations, and there is a growing burden of obesity.

- Germany has the oldest social health insurance system in the world. The country spends the highest proportion of its wealth on health in the EU and health expenditure per capita is the second highest. There are more hospital beds per population than in any other EU country and the rates of physicians and nurses per population are well above the EU average. Interestingly, the physician-to-bed and nurse-to-bed ratios are comparatively low because of the unusually high number of hospital beds.

- The health system is effective at preventing amenable mortality, which is lower in Germany than the EU average – but considerably higher than in France or Spain. A comparatively strong separation between ambulatory and hospital care, as well as between primary and specialist care, has led to problems with continuity and coordination. These problems persist despite a high uptake of disease management programmes and other forms of integrated care.

- Several quality indicators, such as avoidable hospital admissions or inpatient mortality rates, show that there remains room for quality improvement. In fact, several recent reforms have aimed at improving quality of care.

- Access to health services is, in general, very good – not surprising in view of the substantial resources available in the system and the low level of out-of-pocket payments. Self-reported unmet need due to financial reasons is comparatively low. However, lower income groups report it more frequently than higher income groups, which may be related to the co-existence of social health insurance and substitutive private insurance. Several recent reforms have aimed to address potential access problems in rural areas.

- The German health system provides a high number of services at comparatively low costs per case, both in inpatient and ambulatory (or outpatient) care. However, a strong increase in service provision, in particular in inpatient care, raises concerns about the system's allocative efficiency. Germany has been less successful than other countries in shifting service provision away from inpatient care towards outpatient care; and regional variations indicate co-existing problems of over-supply and under-supply.

- Governance is complex, with limited state control and a strong reliance on self-governing structures of sickness funds and providers. The highest self-governing body – the Federal Joint Committee – defines rules for access, benefit coverage, coordination of care, quality and efficiency. This arrangement assures that decisions are well-informed by the institutionalised day-to-day knowledge of actors in the field. However, when conflicts arise, this constellation may block reforms or lead to suboptimal results.

# Key sources


Busse, R. and M. Blümel (2014), "Germany: Health System Review", *Health Systems in Transition*, Vol. 16(2), pp 1–296.

OECD/EU (2016), *Health at a Glance: Europe 2016: State of Health in the EU Cycle*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264265592-en.


# References


Burgdorf, F. and L. Sundmacher (2014), "Potentially Avoidable Hospital Admissions in Germany – An Analysis of Factors Influencing Rates of Ambulatory Care Sensitive Hospitalizations", *Deutsches Ärzteblatt International*, Vol. 111(13), pp. 215-223.

Busse, R. et al. (2017), "Statutory Health Insurance in Germany: A Health System Shaped by 135 Years of Solidarity, Self-governance and Competition", *The Lancet*, http://dx.doi.org/10.1016/S0140-6736(17)31280-1.

European Commission (DG ECFIN) and Economic Policy Committee (AWG) (2015), "The 2015 Ageing Report – Economic and Budgetary Projections for the 28 EU Member States (2013–2060)", *European Economy 3*, Brussels, May.

Federal Institute for Research on Building, Urban Affairs and Spatial Development (2017), "Distance to Nearest General Practitioner", Bonn.

Grote-Westrick, M. et al. (2015), "Faktencheck Gesundheit: Regionale Unterschiede in der Gesundheitsversorgung im Zeitvergleich", Bertelsmann Stiftung, Berlin.

IHME (2016), "Global Health Data Exchange", Institute for Health Metrics and Evaluation, http://ghdx.healthdata.org/gbd-results-tool.

Klein, J. and O. von dem Knesebeck (2016), "Soziale Unterschiede in der ambulanten und stationären Versorgung", *Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz*, Vol. 59(2), pp. 238–244.

Leber, W.D. and D. Scheller-Kreinsen (2015), "Marktaustritte sicherstellen: Zur Rolle rekursiver Simulationen bei der Strukturbereinigung im Krankenhaussektor", in J. Klauber et al. (eds.), *Krankenhaus-Report 2015: Strukturwandel*, Schattauer, Stuttgart, pp. 187-210.

OECD (2017), *Health at a Glance 2017: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2017-en.

Panteli, D. et al. (2016), "Pharmaceutical Regulation in 15 European Countries: Review", *Health Systems in Transition*, Vol. 18(5), pp. 1-118.

Röttger, J. et al. (2016), "Forgone Care Among Chronically Ill Patients in Germany – Results from a Cross-sectional Survey with 15 565 Individuals", *Health Policy*, Vol. 120(2), pp. 170–178.


## Country abbreviations

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Austria | AT | Denmark | DK | Hungary | HU | Malta | MT | Slovenia | SI |
| Belgium | BE | Estonia | EE | Ireland | IE | Netherlands | NL | Spain | ES |
| Bulgaria | BG | Finland | FI | Italy | IT | Poland | PL | Sweden | SE |
| Croatia | HR | France | FR | Latvia | LV | Portugal | PT | United Kingdom | UK |
| Cyprus | CY | Germany | DE | Lithuania | LT | Romania | RO | | |
| Czech Republic | CZ | Greece | EL | Luxembourg | LU | Slovak Republic | SK | | |

European Commission

# State of Health in the EU

## Country Health Profile 2017

The Country Health Profiles are an important step in the European Commission's two-year *State of Health in the EU* cycle and 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. This series was co-ordinated by the Commission and produced with the financial assistance of the European Union.

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 Member State. The aim is to create a means for mutual learning and voluntary exchange that supports the efforts of Member States in their evidence-based policy making.

Each Country Health Profile provides a short synthesis of:

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

This is the first series of biennial country profiles, published in November 2017. The Commission is complementing the key findings of these country profiles with a Companion Report.

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