



# State of Health in the EU United Kingdom

Country Health Profile 2017

## 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/10.1787/888933593874>

## Demographic and socioeconomic context in the United Kingdom, 2015

	United Kingdom	EU
Demographic factors	Population size (thousands)	65 129
	Share of population over age 65 (%)	17.7
	Fertility rate <sup>1</sup>	1.8
Socioeconomic factors	GDP per capita (EUR PPP <sup>2</sup> )	31 200
	Relative poverty rate <sup>3</sup> (%)	9.7
	Unemployment rate (%)	5.3

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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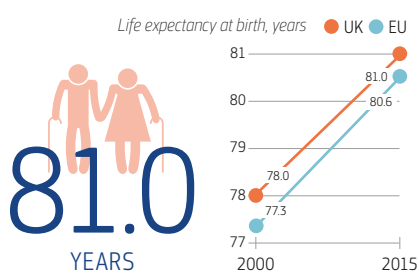
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# 1 Highlights

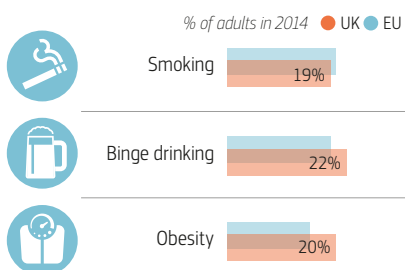
The health status of people in the United Kingdom is improving. People are living longer, but do not spend all their extra years in good health. The United Kingdom is made up of four devolved health systems (England, Scotland, Wales and Northern Ireland). An emerging policy focus is on achieving more integration and 'place-based' care, which will encourage organisations to work together with common resources to deliver services more efficiently.

## Health status



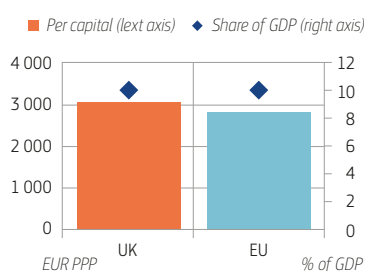
Life expectancy at birth was 81 years in 2015, up from 78 years in 2000 and above the EU average. Inequalities in self-rated health persist by socioeconomic status and in behavioural risk linked to education and income. Cancer and cardiovascular disease are the leading causes of death and there has been a large increase in (recorded) deaths from Alzheimer's and other dementias in recent years.

## Risk factors



Smoking prevalence among adults in the United Kingdom has fallen to 19%, which is below the EU average. Overall, alcohol consumption per adult has also decreased, but despite this 22% of adults engage in binge drinking – a higher proportion than in most EU countries. One in five adults are now obese, putting the United Kingdom in the top quintile of EU countries.

## Health system

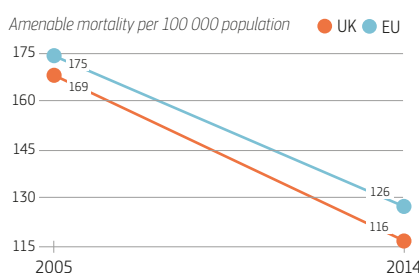


The health systems of the United Kingdom all provide comprehensive public services free at the point of use. Spending per head of EUR 3 080 in 2015 is above the EU average although the share of GDP spent on health (9.9%) matches the average. Public sources provide 80% of total health expenditure, which equates to 18.4% of total government spending. Out-of-pocket payments as a share of household consumption rank third lowest in the EU.

## Health system performance

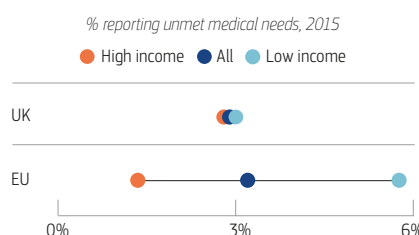
### Effectiveness

Overall, amenable mortality in the United Kingdom is better than the EU average and points to positive impacts of the health system on population health.



### Access

Unmet needs for medical care are low. Coverage is highly equitable with very narrow differences in access to care between high and low income groups.



### Resilience

Each nation takes its own approach to managing increasing health and care demands. The National Health Service in England faces a significant budget gap in the future with the government taking remedial action. Measures to achieve efficiency savings include providing more integrated services out of hospital and improving the coordination of services.



## 2 Health in the United Kingdom

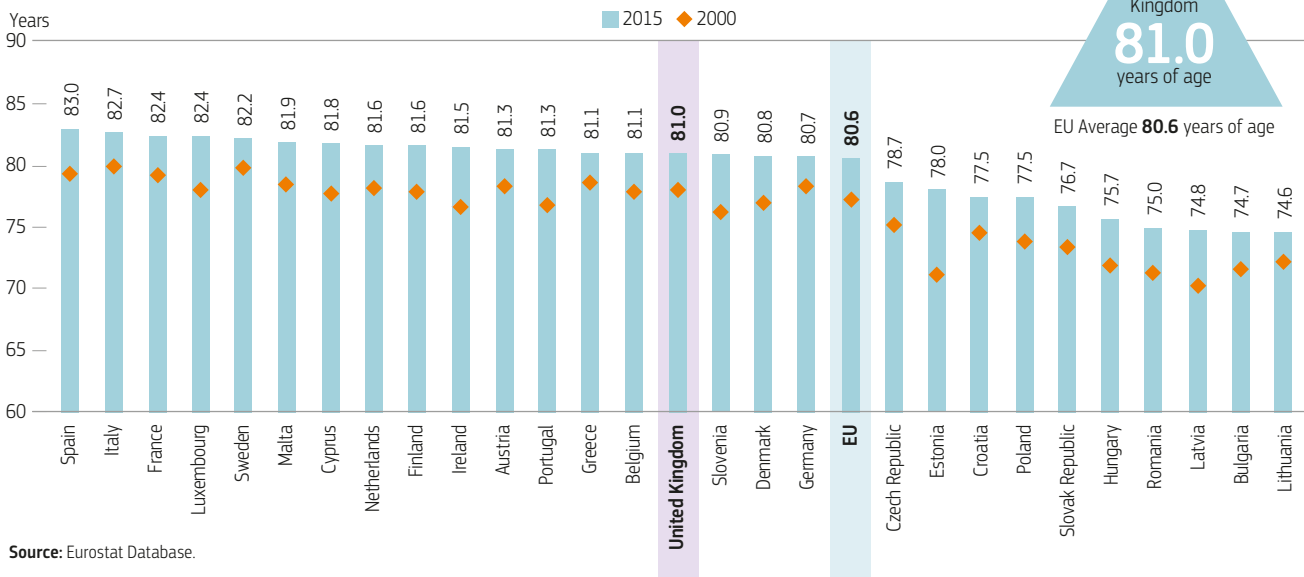
### Life expectancy has increased and the gap between men and women is shrinking

Life expectancy at birth in the United Kingdom increased by 3 years between 2000 and 2015 to 81 years (Figure 1), and is higher than the EU average. The gap in life expectancy at birth between men and women is relatively small (79.2 and 82.8 years), and has closed by 1.2 years since 2000.

Most of the gains in life expectancy have been after age 65, so life expectancy for women of 65 was 20.8 years and for men 18.6 years in 2015 (up from 19.0 and 15.8 years in 2000). However, the long-term decline in death rates at ages over 85 has halted for reasons that are still not fully established (Looptra et al., 2016). At age 65, people can expect to live only about a decade of their remaining years free from disability: women (50%) and men (55%).<sup>1</sup>

1. These are based on the indicator of 'healthy life years', which measures the number of years that people can expect to live free of disability at different ages.

**Figure 1. Growth in life expectancy means that the United Kingdom is above the EU average**



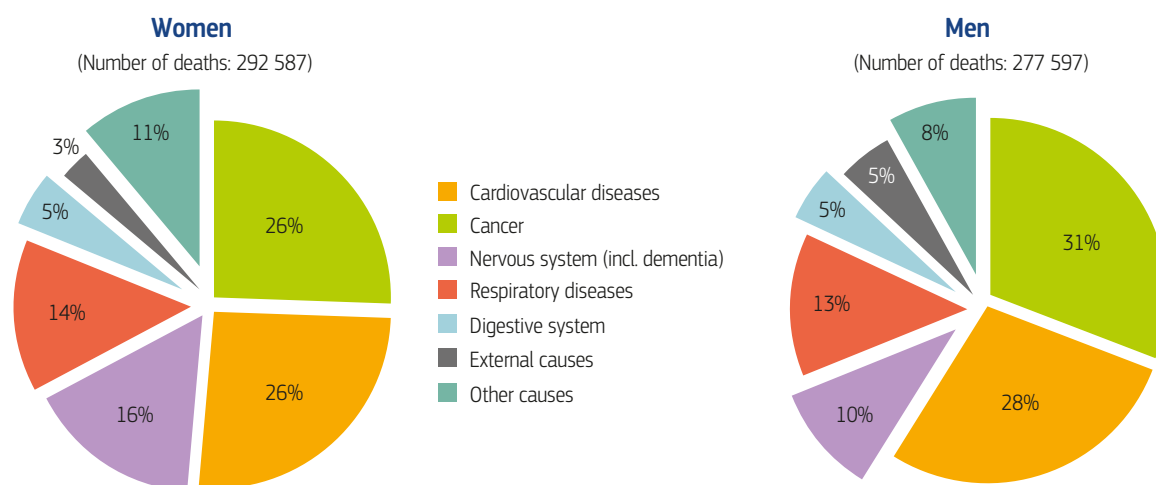
Source: Eurostat Database.

### Cancer and cardiovascular diseases account for the majority of all deaths

In the United Kingdom, cancer has overtaken cardiovascular disease as the leading cause of death among men (accounting for 31% and 28% of deaths, respectively) and causes almost the same number of deaths as cardiovascular diseases for women (Figure 2). This pattern differs from that in many EU countries. Cancer deaths are higher in the United Kingdom (at 278 per 100 000 population compared with the EU average of 262), whereas the United Kingdom has the fourth lowest cardiovascular disease death rate in Europe (265 per 100 000 versus the EU average of 374). This may reflect improvements in treatment of cardiovascular disease and issues with long-term cancer survival (see Section 5.1). Respiratory

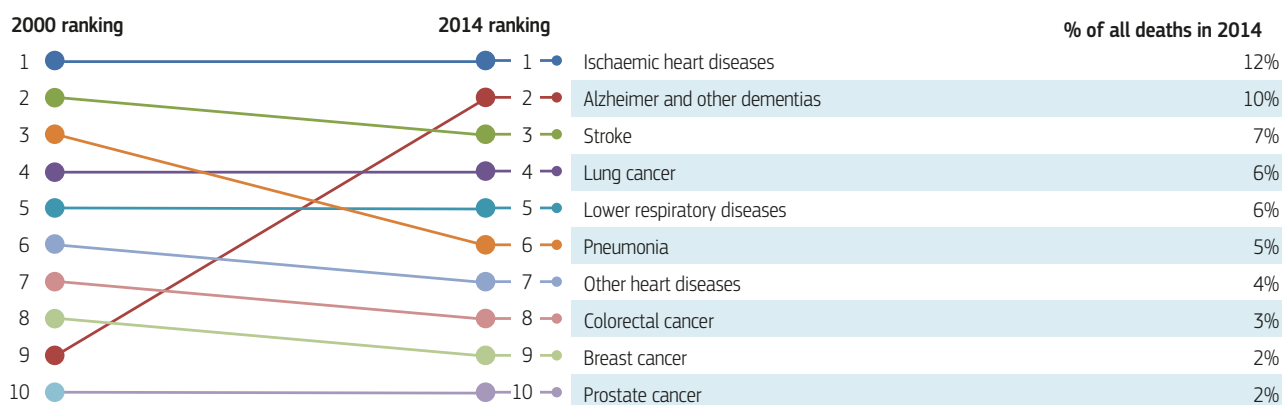
and nervous system diseases are the third and fourth main (broad) causes of death. The United Kingdom has the highest level of respiratory disease deaths in the EU and Alzheimer's and other forms of dementia are being acknowledged as an increasing cause for concern.

A 'drilling down' below the headings of cardiovascular disease and cancer shows that although the top 10 specific causes of death have stayed the same since 2000, their relative importance has changed (Figure 3). Alzheimer's and other dementias are now the second most common cause of death behind ischaemic heart diseases. This reflects more precise coding, the effect of population ageing and better diagnosis, although there is also evidence that age-specific prevalence rates are falling. The high numbers of deaths from lung

**Figure 2. More men die of cancer, and respiratory disease deaths are the highest in the EU**

**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. Alzheimer's and other dementias are recognised as the second most common cause of death**

**Source:** Eurostat Database.

cancer and respiratory diseases are likely to be a legacy of higher smoking rates and although these have fallen, exposure to outdoor air pollution is a growing concern with a 2016 report linking it to 40 000 deaths per year (Royal College of Physicians, 2016).

### Ischaemic heart disease and back pain account for a large part of the burden of disease

Ischaemic heart disease and musculoskeletal problems (including low back and neck pain) are the two most significant determinants of disability-adjusted life years (DALYs)<sup>2</sup> in the United Kingdom (IHME, 2016). Major depressive disorders are another leading health problem.

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).

### People with low incomes report being significantly less well than high income populations

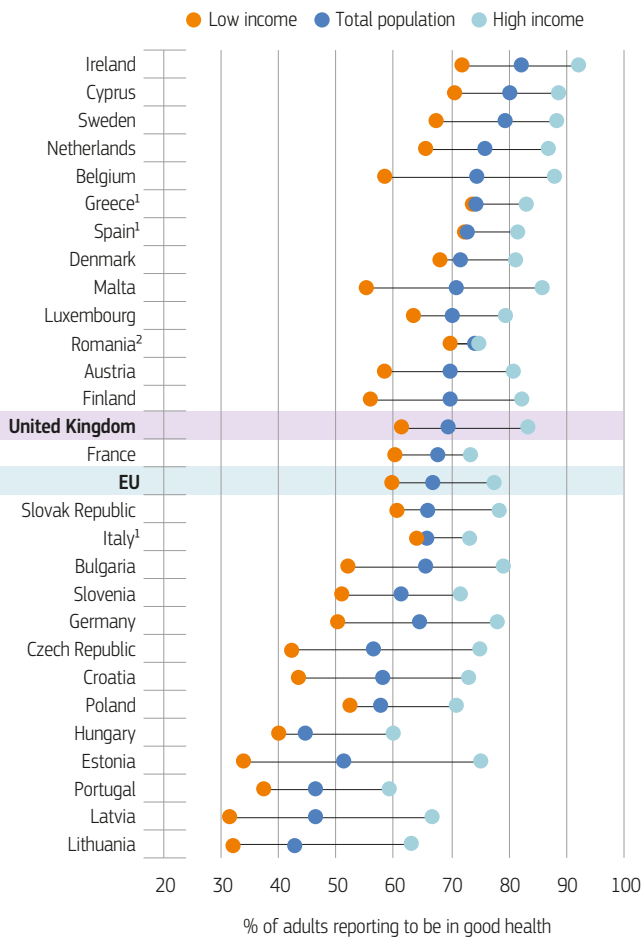
Self-reported data from the European Health Interview Survey (EHIS) indicate that close to one in six people report living with hypertension (the fourth lowest rate in the EU), one in eleven live with asthma and one in eleven have chronic depression, both of which are at the higher end of the EU spectrum. There are large inequalities in the prevalence of these chronic diseases by education level. Those with the lowest level of education<sup>3</sup> are nearly 50% more likely to live with asthma, almost twice as likely to have

3. Lower education levels refer 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).

depression, and nearly two and a half times as likely to report having diabetes, as those with the highest level of education.<sup>4</sup>

The majority of people in the United Kingdom report being relatively well with 70% of the population defining themselves as in good health, close to the EU average (67%). However, again the gap in self-rated health by socioeconomic status is considerable. Although more than 80% of the highest income quintile report being in good health, only 60% of the population in the lowest income quintile do (Figure 4). There are also disparities between health status in the four countries with some particular concerns in Scotland where diet overlays income issues. These are being addressed by special initiatives (see Sections 3, 4 and 5.1).

**Figure 4. Most people report being in good health, but there are large disparities by income group**



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).

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.

## 3 Risk factors

### Behavioural risk factors such as tobacco and alcohol consumption are major issues

Almost 28% of the overall burden of disease in 2015 (measured in terms of DALYs) could be attributed to behavioural risk factors – similar to the EU average. They include smoking, diet, alcohol use and physical inactivity (IHME, 2016) although these are being tackled actively.

The proportion of adults who smoke daily in the United Kingdom has decreased sharply since 2000 (from 27% to 19%) and is 2% below the EU average. Even steeper declines in regular smoking have been seen for 15-year-old girls (from 27% in 2001–02 to 9% in 2013–14) and boys (from 20% in 2001–02 to 8% in 2013–14), suggesting the effectiveness of tobacco control policies (see Section 5.1).

There has also been some progress in reducing alcohol consumption with adults consuming 9.5 litres per capita in 2015, (a reduction of 0.9 litres a year since 2000), despite which binge drinking<sup>5</sup> remains a major challenge both among adolescents and



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

adults. In 2013–14, 33% and 28% of 15-year-old girls and boys, respectively, reported having been drunk at least twice in their life, which is among the highest in the EU for girls and above average for boys. Furthermore, 22% of adults in the United Kingdom engage in binge drinking, more than in most EU countries.

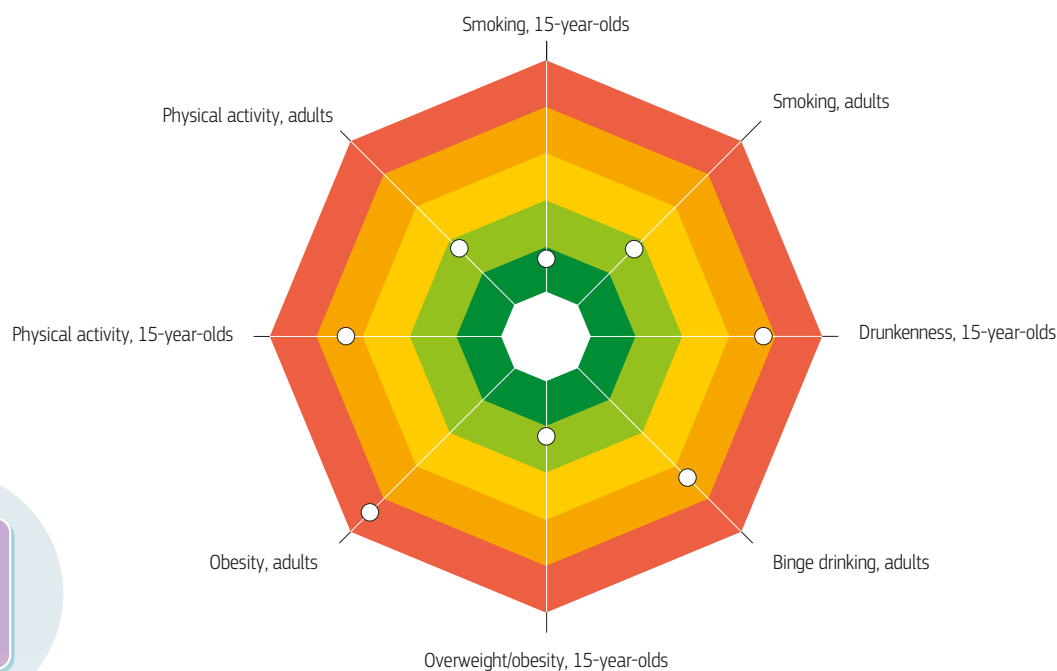
### Rates of obesity are high and growing, although adolescents compare better to EU averages

Self-reported data, which typically underestimate obesity, suggest that one in five (20%) adults in the United Kingdom are obese, putting it in the top quintile of EU countries.<sup>6</sup> Although nearly one in six 15-year-olds were overweight or obese in 2013–14, (and despite the fact that the problem is increasing over time and that levels of physical inactivity are relatively high) they do not compare as badly with other European countries as adults of the United Kingdom do<sup>7</sup> (see also Figure 5). The United Kingdom has implemented national strategies on nutrition to prevent and treat obesity, and to promote physical activity and other healthy behaviours.

### The disadvantaged take more behavioural risks although the better educated drink more heavily

Many behavioural risk factors are much more prevalent among populations disadvantaged by income or education. The exception is regular heavy drinking among adults, which is more prevalent among the United Kingdom's most educated. The prevalence of smoking is almost three times higher among those with the lowest level of education, and they are more likely to be obese. A higher prevalence of risk factors among disadvantaged groups contributes to differences in health status.

**Figure 5. There are mixed results on behavioural health risk factors compared to other EU countries**



6. Based on measured rates of obesity, one in four adults (25.6%) was obese in 2014.

7. Based on measured rates of overweight and obesity, one in four (25%) of children aged 6–15 was either overweight or obese in 2014

**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

### The four countries are separate but all organise along national health system lines

Each of the United Kingdom countries has its own advisory, planning and monitoring framework for its health system and its own Public Health agencies to tackle health protection and inequalities. Although the way in which services are organised and paid for has diverged, the National Health Service (NHS)<sup>8</sup> model applies in all four countries and gives universal access to comprehensive public services free at the point of use. Over 80% of the United Kingdom's population lives in England and it therefore has the largest health service.

### Purchasing and delivery models have undergone changes

In 1990, a purchaser–provider split was introduced with local health authorities charged with commissioning care for local people. A version of this model continues in England and Northern Ireland. There have been different policy iterations with England giving more budgetary control to General Practices (GP) and then consolidating the commissioning function (in 2012) and different levels of focus on local decision-making and internal markets. There have also been initiatives to foster privatised service delivery and

internal competition (2014), allied to strengthened regulation and the use of targets to encourage better efficiency and quality. In England, clinical commissioning groups are steered by primary care and commission emergency and elective hospital care, maternity, community and mental health services for primary care providers. They control two thirds of the total NHS England budget.

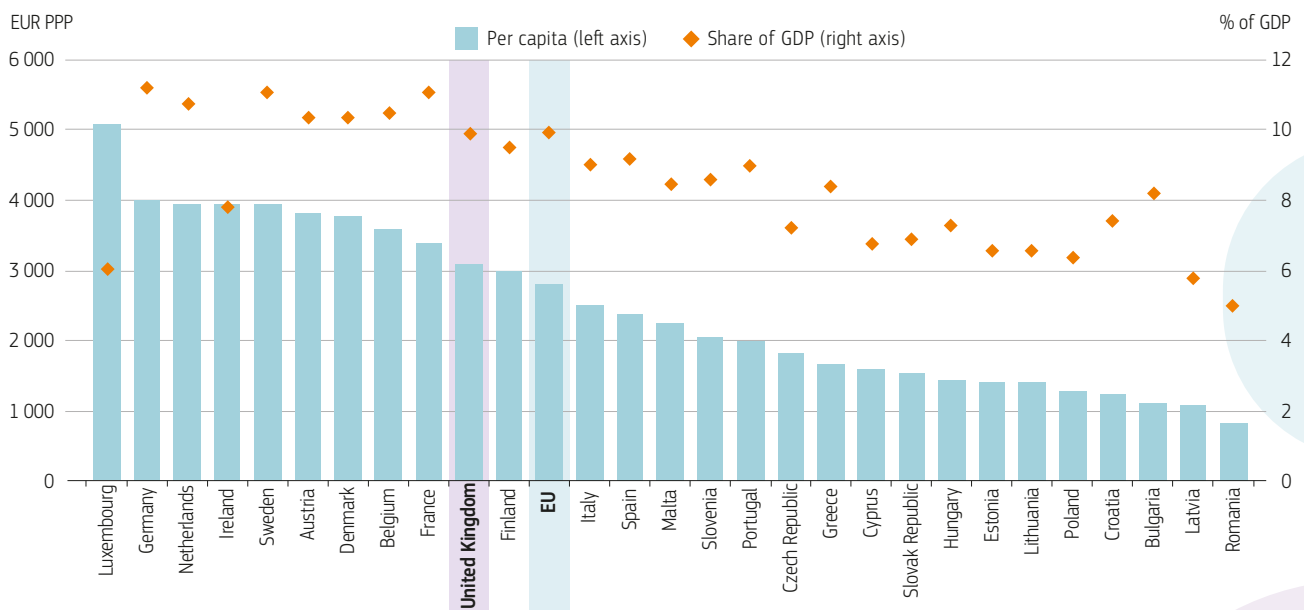
The most recent English policy position (2017's *Next Steps on the Five Year Forward View* NHS England, 2017) de-emphasises the role of markets and competition. It signals a scaling back of the purchaser–provider split in favour of new models of care that foster collaboration at local level. Scotland and Wales abolished the purchaser–provider split and have been less market focused but also see targets and integration as important levers for higher quality, more cost-effective care

### Health spending is comparable to the EU but there are concerns for the future

Health services are predominantly financed from general taxation and in 2015 80% of total health expenditure came from public sources (comparable to the EU average of 79%). The United Kingdom government allocates money for health care in England directly, and makes block grants to the 'devolved administrations', which then set their own health budgets, determining how the block grant will be used.

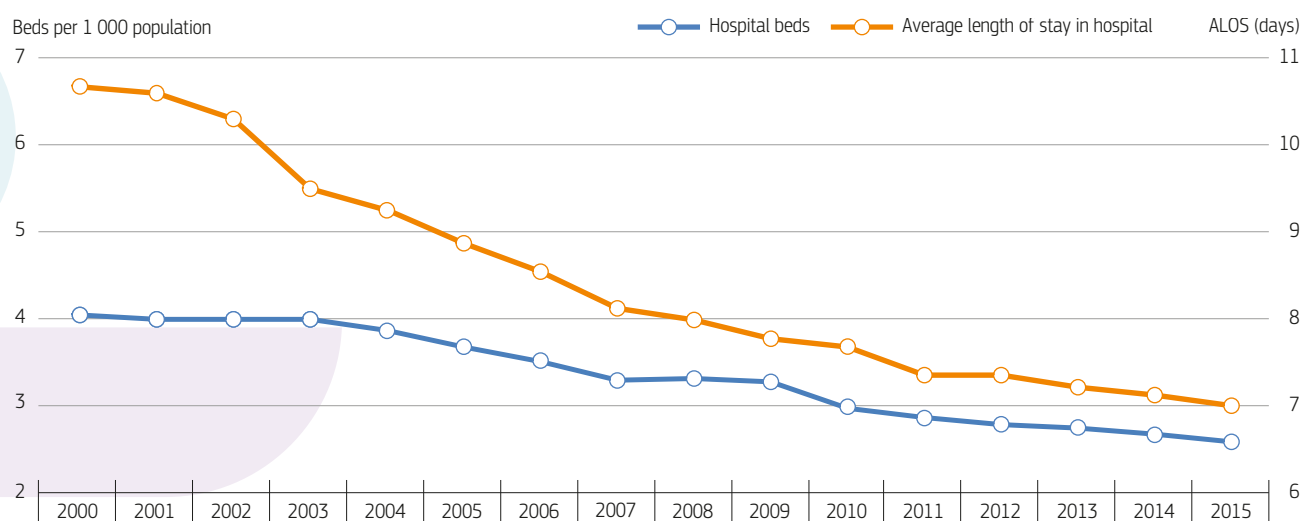
8. Called Health and Social Care in Northern Ireland.

**Figure 6. The United Kingdom spends more per capita on health care than the EU average**



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



**Figure 7. The total number of hospital beds and average length of stay continue to decline**

**Note:** There is a break in the series of hospital beds in 2010.

**Source:** Eurostat Database.

Health expenditure has grown to a 9.9% share of GDP in 2015, which is at the EU average, and amounts to EUR 3 080 per capita (adjusted for differences in purchasing power), compared to the EU average of EUR 2 797 (Figure 6). The pattern of growth in health spending stalled in 2010 and 2011 with the imposition of fiscal consolidation measures in 2010, following the 2008 financial crisis.<sup>9</sup> It has picked up again slightly in recent years, but is forecast to fall again in 2018 and 2019. Moreover, official estimates highlight that by 2021 there will be a 30 billion pounds sterling shortfall in NHS funding in England, prompting government action to inject extra funds into the health system (see Section 5.3).

## Local authorities determine what is provided

To varying degrees, devolved administrations and local authorities make decisions about what services they will provide given budgetary constraints. Although the NHS provides largely comprehensive care, there are variations in coverage for some services and growing numbers of examples of local rationing, for example of in vitro fertilisation or elective surgery (termed ‘the postcode lottery’). Out-of-pocket payments remain low and relate largely to prescription charges (mainly in England), cost of glasses and dental care, and contributions to long-term care (see also Section 5.2). In 2015, out-of-pocket payments comprised 15% of total health expenditure, which is equal to the EU average.

## Low hospital bed numbers and high occupancy rates mean limited capacity to absorb shocks

The number of hospital beds is the third lowest in the EU (along with Ireland) at 2.6 per 1 000 in 2015 (well below the EU average of

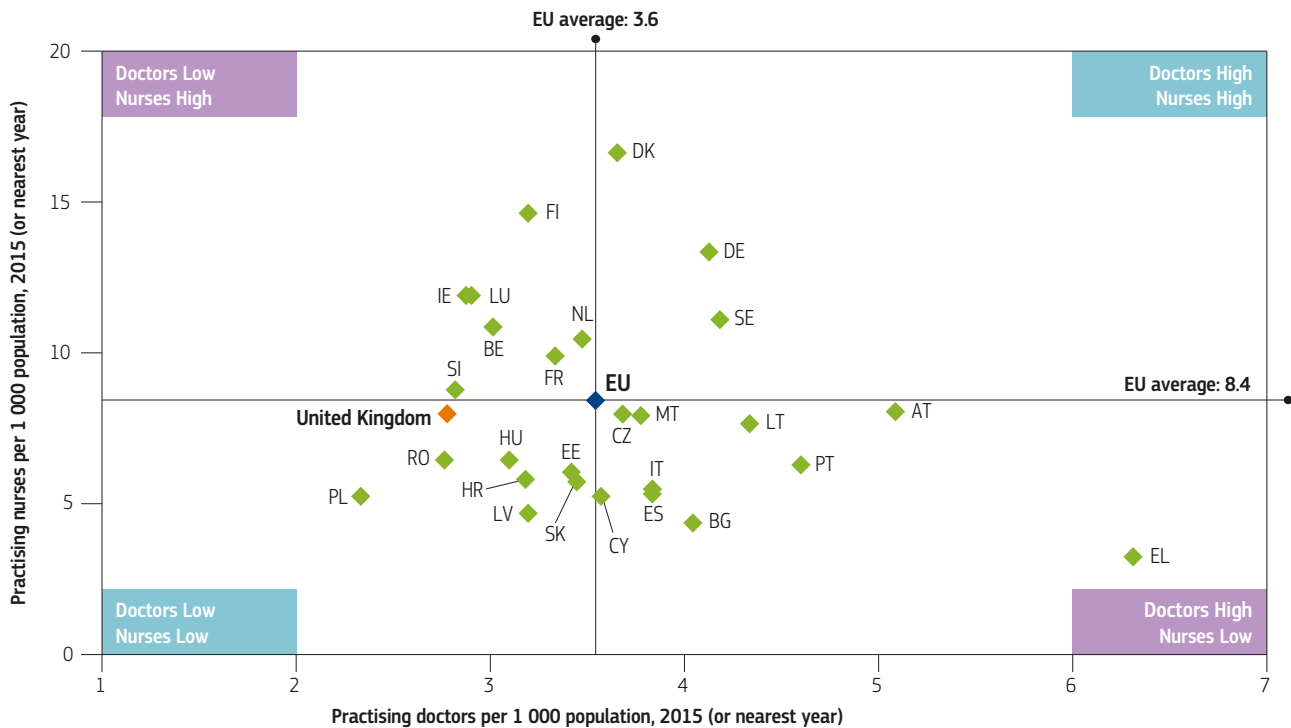
5.1 per 1 000). The average length of stay has also been declining, reaching a low of 7.0 days in 2015 (EU average is 8.0 days) (Figure 7). Scotland has contributed to this reduction through developments in telehealth and telemedicine, which are particularly appropriate in a country with large remote rural areas, but in general the pressure on beds has been problematic for hospitals. Difficulties finding beds have introduced inefficiencies, for example when patients have long waits in Emergency Departments, while high bed occupancy rates (at 84.4% the second highest in the EU) suggest little spare capacity to deal with demand shocks.

## Doctor numbers have increased but are still low while nurse numbers have fallen

The NHS is the largest employer in the United Kingdom. NHS Employers is an organisation that negotiates pay and conditions for NHS employees across the United Kingdom, with some variations across countries. Historically, the United Kingdom has employed health workers from Commonwealth countries and the EU and at times there has been intensive international recruitment (see Section 5.3).

There have been steady increases in recent decades, despite which the number of doctors per 1 000 population (2.8) was the third lowest in the EU in 2015 (with an EU average of 3.6 per 1 000) (Figure 8). There was a sharp fall in nursing numbers per 1 000 population after the financial crisis, with levels lower than the EU average from 2013 onwards (7.9 versus 8.4 in 2015). There are a number of reasons for this, including the introduction of language testing to qualify for registration. There are also uncertainties about the future after the United Kingdom leaves the EU.

<sup>9</sup> A change in methodology also affects the data for these years.

**Figure 8. There are fewer doctors and nurses per person in the United Kingdom than the EU average**

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

**Source:** Eurostat Database.

## Patients follow similar pathways through primary to secondary care

Primary care is provided by teams of health care professionals, comprising GPs, nurses and therapists, and provides a first point of contact, a gatekeeping role for specialist care, and treatment for common conditions and injuries. Hospital discharges for 2015 (at 13 190 per 100 000 population) are nearly 25% lower than the EU average (17 309), indicating the strengths of the system. Most secondary care is provided by salaried specialist doctors in NHS hospitals. Local clinical commissioning groups pay hospitals for outpatient (or ambulatory) consultations at nationally determined rates.

Tertiary care services offer more specialised care for the most complex cases and rarer diseases and tend to be linked to medical schools. There has been a move to concentrate specialised care in fewer centres as a way of improving quality. Emergency care has often been misused so public information campaigns have tried to reduce demand while initiatives like minor injury clinics and phone consultations have sought to broaden access to other urgent care services.

## The integration of health and social care is a growing focus

Health and social care are divided in England, Scotland and Wales with social care funded through local government and mostly privately provided. In England, integration is being pursued through the Better Care Fund (5.9 billion pounds sterling in 2016–17) and in a Greater Manchester pilot, which controls a unified budget. Efforts towards integration are also underway in Scotland (Box 1). Northern Ireland is already pursuing an integrated approach.

### BOX 1. SCOTLAND HAS INTRODUCED A NEW FRAMEWORK TO SUPPORT INTEGRATION

In 2014, the Scottish Government introduced the Public Bodies (Joint Working) Scotland Bill, which provided a legal framework to integrate health and social care and to support improvements in the quality and consistency of services. Some 31 Integrated Care Partnerships have been formed across Scotland, at the intersection of NHS Health Boards and Local Authorities to deliver seamless health and social care. The Partnerships manage the bulk of Scotland's total health and care budget (8.1 billion pounds sterling out of 13.1 billion pounds sterling) to deliver integrated care.

## 5 Performance of the health system

### 5.1 EFFECTIVENESS

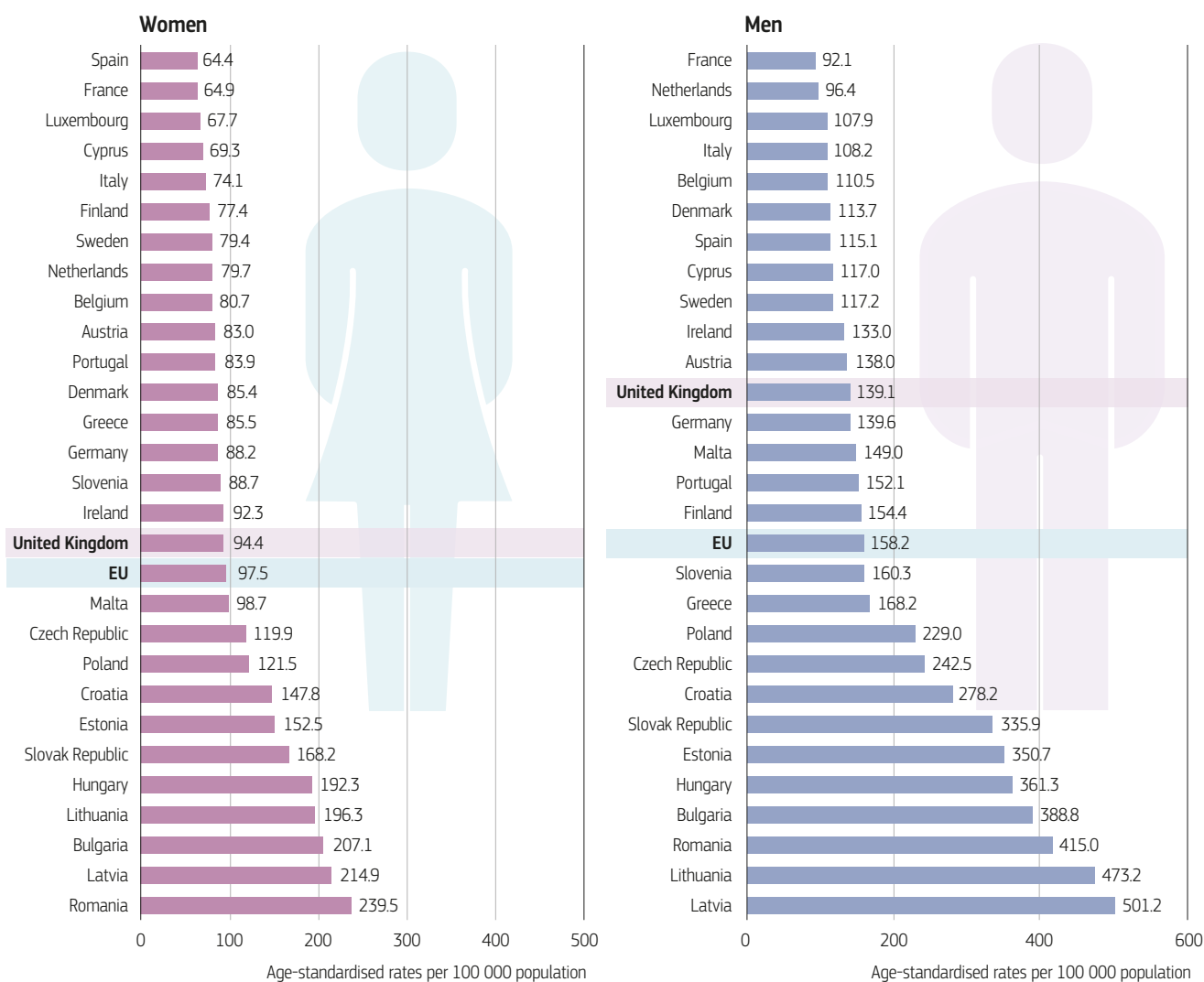
#### Amenable mortality rates are not as good as other wealthier EU countries

Amenable mortality<sup>10</sup> gives an indication of how timely and effective health care is. It improved year-on-year from 2001 to 2014 with total amenable deaths per 100 000 population decreasing from 133 to 116 (compared to a decline in the EU average from 149 to 126). However, the latest United Kingdom figures, while still below the EU average for both men and women, are higher than in many of the wealthier EU countries (Figure 9), particularly due to higher death rates from ischaemic heart disease and respiratory conditions (see Section 2).

#### A varied track record on 5-year cancer survival suggests room for improvement

Cancer screening rates are high but 5-year survival rates after diagnosis remain in the bottom half of the 25 countries for which data are available. The most recent CONCORD programme data indicate that for breast cancer the survival rate has improved since 2000 (from 79.8% in 2000–04 to 85.6% for 2010–14). For colorectal cancer it has lower reported rates, although the trend is improving overall. For cervical cancer, survival has improved only moderately (by 4 percentage points) but steadily since 2000–04, reaching 63.8% for the period 2010–14.

**Figure 9. The United Kingdom does comparatively worse on amenable mortality rates for women than for men**



Source: Eurostat Database (data refer to 2014).

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

## There are sustained efforts on major risk factors but mixed progress in preventable mortality

Vaccination coverage for children is at the (high) EU average, with 96% for diphtheria, tetanus and pertussis and 95% for measles (2015), so reaching herd immunity levels. Influenza vaccination among people aged 65 or over was the highest in the EU at 71.1% in 2015, although it has come down slightly in recent years.

Inter-sectoral efforts encourage healthy living. The United Kingdom has been a leader in tobacco control with tax rises, standard packaging and bans on point-of-sale displays showing results (Figure 5). Alcohol programmes have reduced consumption and despite increasing levels of binge drinking (see Section 2) deaths from alcohol-related causes are declining and are well below the EU average. Action on transport accidents has led to the second-lowest mortality in the EU (2014). However, obesity reduction efforts have had less impact.

Future plans include a tax on sugar-sweetened drinks (from April 2018). Scotland has implemented innovative public health policies, including a tobacco-free generation (by 2034) but its minimum unit pricing policy for alcohol is currently under legal challenge by industry. Meanwhile, Public Health England has set out priorities for ensuring a better start in life, reducing dementia risk, and tackling tuberculosis and antimicrobial resistance.

## Quality of care is getting better

All four of the United Kingdom's health systems place a high premium on the quality of care. Since the Public Inquiry into poor care at Mid Staffordshire NHS Foundation Trust there has been a concerted drive to improve patient safety. There have

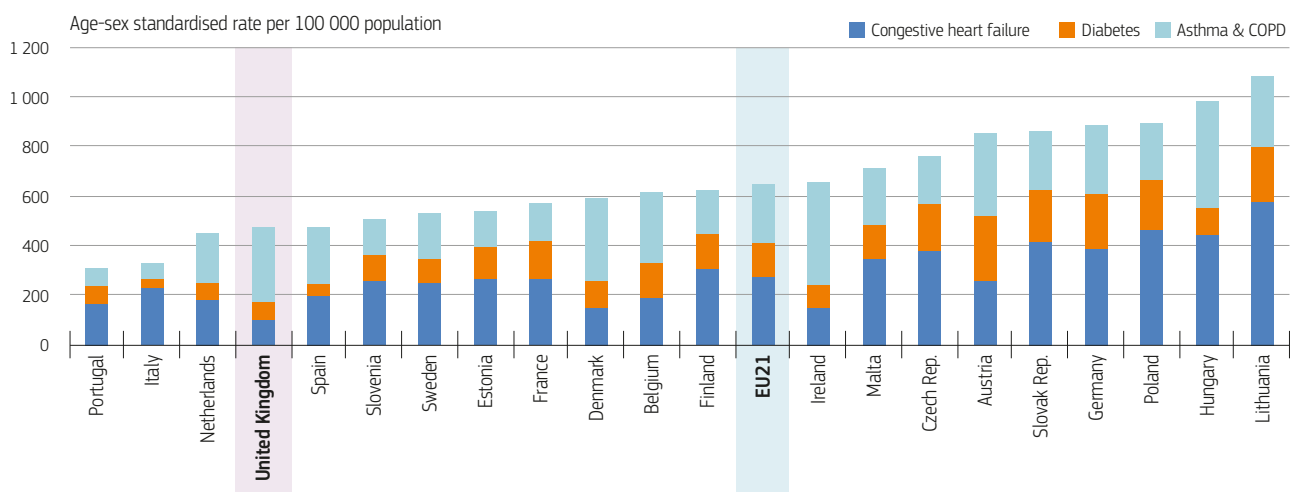
been improvements in acute cardiovascular care contributing to reductions in cardiovascular mortality rates. The United Kingdom records broadly average rates of death within 30 days of admission to hospital for acute myocardial infarction. Case-fatality rates for people hospitalised for stroke show a decrease over time, but remain above those in many wealthier European countries.

Performance targets have been used extensively as a tool to improve quality of care (and access) and are credited with achieving success with specific indicators, although empirical evidence is lacking. Diabetes though is an interesting example, with GPs rewarded for good management (through the Quality and Outcomes Framework) and hospital admissions for diabetes are among the lowest in the OECD (72.8 per 100 000 population in 2015 versus the EU average of 136.0) (Figure 10). Admission rates for congestive heart failure (CHF) are around one third of the EU average.

## Health inequalities persist despite being a focus of attention

Since the 1980s, health inequalities between socioeconomic groups in England and Wales have increased (ONS, 2015). Various plans have been put in place to address them, including two key targets for England: reducing the infant mortality rate and increasing life expectancy – with progress on both fronts. The policy focus in England has shifted away from central targets to a more comprehensive approach that includes addressing the wider causes of ill health, promoting healthier lifestyles and tackling differences in access and outcomes from health and public health services (since 2010). Scotland, Wales and Northern Ireland have also seen some gains in overall health status. However, the most deprived communities across the United Kingdom continue to fall behind and there are health inequalities between the four nations.

**Figure 10. The United Kingdom has low avoidable hospitalisation rates, particularly for diabetes**



**Note:** Rates are not adjusted for health care needs or risk factors.

**Source:** OECD Health Statistics 2017 (data refer to 2015).

## 5.2 ACCESSIBILITY

### There is universal coverage including provision for asylum seekers and little unmet need

The NHS provides universal access to care for those ordinarily resident in the United Kingdom. The NHS Constitution for England commits it to providing access without discrimination and based on need and not ability to pay. It also specifies timeframes for the provision of planned hospital care, emergency care and community-based mental health services.

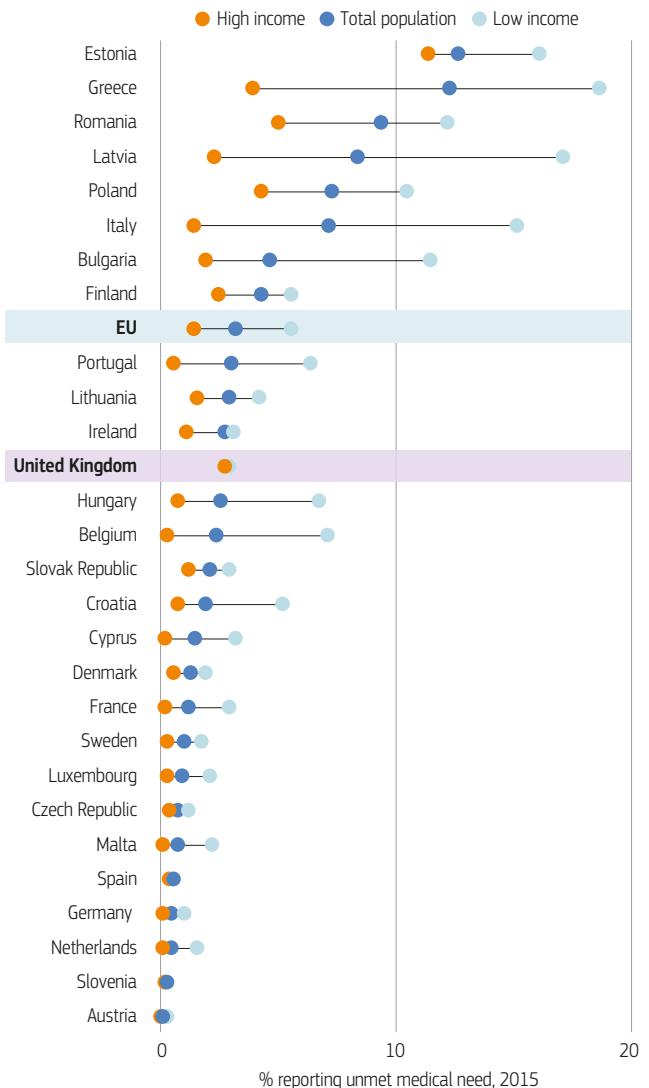
All persons who are not 'ordinarily resident' in the United Kingdom, with the exception of European citizens visiting the United Kingdom, must pay the full cost of any treatment provided. Although this was nominally the case in the past, coverage has been restricted in practice over recent years. Since April 2015, non-European Economic Area migrants must have 'indefinite leave to remain' before accessing free NHS hospital care and all users are expected to demonstrate entitlement. Those who are not covered must pay an NHS charge (premium), the cost of which has increased sharply. All asylum-seekers and refugees are entitled to register with a GP and receive free NHS hospital care; however, coverage for irregular migrants differs across the parts of the United Kingdom. All patients are exempt from charges for the treatment of certain specified communicable diseases, compulsory mental health treatment, treatment provided for an accident, and Emergency Department services.

Access to care is good, with low recorded unmet needs for medical care due to cost, distance and waiting lists (2.8%), which are below the EU average (3.2% EU). Coverage is also highly equitable with very narrow differences in unmet need between high and low income groups (Figure 11).

### Financial protection is very good with low out-of-pocket spending

In 2015, out-of-pocket payments comprised 15% of total health expenditure, equal to the EU average. Out-of-pocket medical spending as a share of household consumption in the United Kingdom ranks third lowest in the EU (1.5% in the United Kingdom, compared with 2.3% for the EU average). Moreover, unmet needs for medical care due to the cost of services are broadly similar across income groups, due to the absence of financial barriers to access for most services and wide-ranging exemptions to charges where these do exist (for example, prescriptions in England, medical devices) (see also Box 2). Studies to assess the risk of impoverishment posed by out-of-pocket spending show that since 2008 (when these data first became available) less than 1.5% of households have faced a threat of impoverishment from out-of-pocket payments, a percentage that is among the lowest in Europe.

**Figure 11. Self-reported unmet needs for medical care hardly vary between income groups**



**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).

### Choice of available treatments is made locally in light of national health technology assessment

There is no explicit list of benefits although there is a legal requirement for the system to deliver necessary health services and a commitment to patients' rights. Devolution means health boards in Scotland, Wales and Northern Ireland decide what treatments will be funded whereas in England, the 211 clinical commissioning groups make decisions about the services available to their local population – although highly specialist care is still commissioned nationally. There are some emerging blocks to access in different areas due to budgetary constraints and different priority setting but not for essential services.

The National Institute for Health and Care Excellence is a specialist health technology assessment agency servicing commissioners in England, Northern Ireland and Wales. Its cost-effectiveness analyses offer (non-mandatory) guidance on allocating resources efficiently. Scotland refers to the Scottish Intercollegiate Guidelines Network, which aims to even out 'postcode lotteries' (where some areas will cover services/treatments that are not available in a neighbouring region) and improve equity between regions.

## Patient choice is offered in primary and secondary care

Patients are free to choose the GP of their choice although some patients report difficulties registering. They are generally able to choose any NHS hospital provided their GP is willing to refer them. England made offering (limited) choice, particularly around elective procedures, a priority (2012) but other devolved administrations also try to facilitate it and patient information is readily accessible online through NHS Choices (England), SHOW Scotland, NHS Direct Wales and NI Direct.

## There have been efforts to reduce waiting times but they can still pose a challenge to access

Unmet needs due to distance do not appear to be an issue, yet unmet needs due to waiting times remain a challenge across the United Kingdom, although they are similar between income groups. Waiting times have increased between 2012 and 2015 despite very considerable efforts in this area.

The English NHS, for example, put into legislation (that came into effect in early 2013) a long-standing waiting time standard committing it to treat 92% of all patients for elective surgery within 18 weeks of GP referral. Performance improved initially, but since mid-2013 the proportion of patients waiting has grown (with some fluctuations), with the worst performance observed in December 2016 when 10% of patients were waiting more than 18 weeks (Thomson, 2017). Emergency Department waiting times have also been increasing and from October to December 2016 the proportion of people waiting longer than the 4-hour target reached its highest level in a decade (King's Fund, 2017).

### BOX 2. SOME ADDITIONAL SERVICES ARE PAID FOR BUT THIS DOES NOT CREATE BARRIERS TO ACCESS

The United Kingdom provides additional benefits under the NHS, including: district nursing, midwifery, health visiting, family planning and physiotherapy services, none of which patients are charged for. There is free transport to hospital based on medical need only for those on low income with a referral.

Patients pay for NHS dental services in England and Wales with standard charges set centrally. There is no charge for children under 18, pregnant women, new mothers, or people receiving income support. In Scotland and Northern Ireland, patients pay up to 80% of the cost of treatment. Optical care is not generally covered although vouchers are available for glasses or lenses for certain groups in England, Wales and Northern Ireland.

Charges for outpatient prescription drugs apply in England with exemptions for those with low income, older people, children, pregnant women, new mothers and some disabled/chronically ill people. Pre-payment certificates create a ceiling that protects people requiring multiple prescriptions.<sup>11</sup> Nine out of ten prescriptions were dispensed free in 2012 (although by no means 90% of the population were exempt).

Notwithstanding the challenges faced with existing targets, they are seen as a valuable tool for enhancing access. Scotland has an 18-week referral to treatment standard, and is working towards a 12-week wait time for inpatient and day cases. It also has a 6-week standard waiting time for eight diagnostic tests (from 2009). England, Wales and Scotland have all set waiting time targets for cancer treatment specifying that treatment should start 62 days after an urgent GP referral and 31 days after diagnosis. England also has targets for radiology investigations and allows patients who have not received an appointment for a scan within 13 weeks to go to another provider (including in the private sector). Additional waiting time targets were recently introduced for mental health in England and Wales, reflecting the increasing priority attached to this area.

11. Prepayment certificates cost 29.10 pounds sterling per 3 months or 104 pounds sterling per year, whereas a single prescribed medicine is 8.60 pounds sterling as of April 2017.



### 5.3 RESILIENCE<sup>12</sup>

#### A potential 30 billion pounds sterling funding gap poses questions about resilience

Health spending was protected from any reductions from 2009 to 2014 and actually increased from 2012 to 2015 at about 1% per year in real terms. On the other hand, long-term care expenditure was cut (leading to significantly fewer people having their social care needs met than in 2009–10, which has proved unsustainable). The NHS Five Year Forward View report (NHS England, 2014) suggested that if demand continued its growth trajectory, England was likely to face a 30 billion pounds sterling mismatch between resources and patient needs by 2020–21, unless there were efficiency savings or funding increases.

In response, the government provided NHS England with an extra 1.5 billion pounds sterling in 2015–16 and committed an extra 3.8 billion, 5.3 billion, 5.8 billion, 6.7 billion and 8.4 billion for each of the next 5 years to 2020–21 (with long-term care expenditure projected to rise by 2% per year in real terms). However, this involves finding some 22 billion of efficiency savings.

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

#### Cost control, addressing variation and disease prevention are seen as key to savings

The cost-effectiveness of the health system can be intimated, albeit rather crudely, through relating amenable mortality rates to total per capita expenditure levels, but with the proviso that health behaviours as well as health system factors influence the level of amenable mortality. On this measure the United Kingdom is doing fairly well in terms of the effective use of resources but there is a cluster of countries who have around the same outcomes for less spending (Figure 12).

NHS England intends to maintain service quality and has three main approaches to efficiency savings. The first is cost control by restricting pay rises for NHS staff (with a cap of 1% per year for 2017–20) and through the voluntary Pharmaceutical Price Regulation Scheme. Prolonged pay restraint will, however, leave NHS staff poorer year on year after adjustment for inflation and is likely to exacerbate problems of recruitment and retention. Second, there are efforts to address variations in treatment and cost by encouraging benchmarking and best practice (Briggs, 2012; Carter, 2016). The third approach involves fostering more appropriate use of services (managing people in the community) and tackling population health upstream (by improving health behaviours).

**Figure 12. The health system achieves fairly good levels of amenable mortality for the amount spent**

Health expenditure per capita, EUR PPP



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

The importance of addressing resilience was reinforced by the House of Lords Select Committee (2017), which identified the lack of a long-term workforce strategy as the greatest threat to NHS stability and called for more funding. It also demanded immediate action on adult social care, radical service transformation, long-term funding solutions and the creation of a new independent Office for Health and Care Sustainability.

### Shifting care into the community is intended to be more cost-effective and improve patients' experiences

As mentioned in Section 4, indicators suggest that hospital care in the United Kingdom is efficient (with low hospital bed numbers, low average length of stay and high bed occupancy). These can also be viewed as markers for the ambition to shift care into the community. However, cuts to social and long-term care have led to bed blocking through delayed transfers and, it seems, longer wait times in Emergency Departments.

Nonetheless, shifts in funding across the United Kingdom have favoured primary over secondary care in the belief that treating patients outside hospital and before conditions worsen will be cost-efficient and more effective. The United Kingdom spends the greatest proportion of health expenditure on outpatient (or ambulatory) care (29.8%) followed closely by inpatient care (28.7%) and is near to the EU averages (of 29.8% and 29.5%, respectively, in 2015). There has

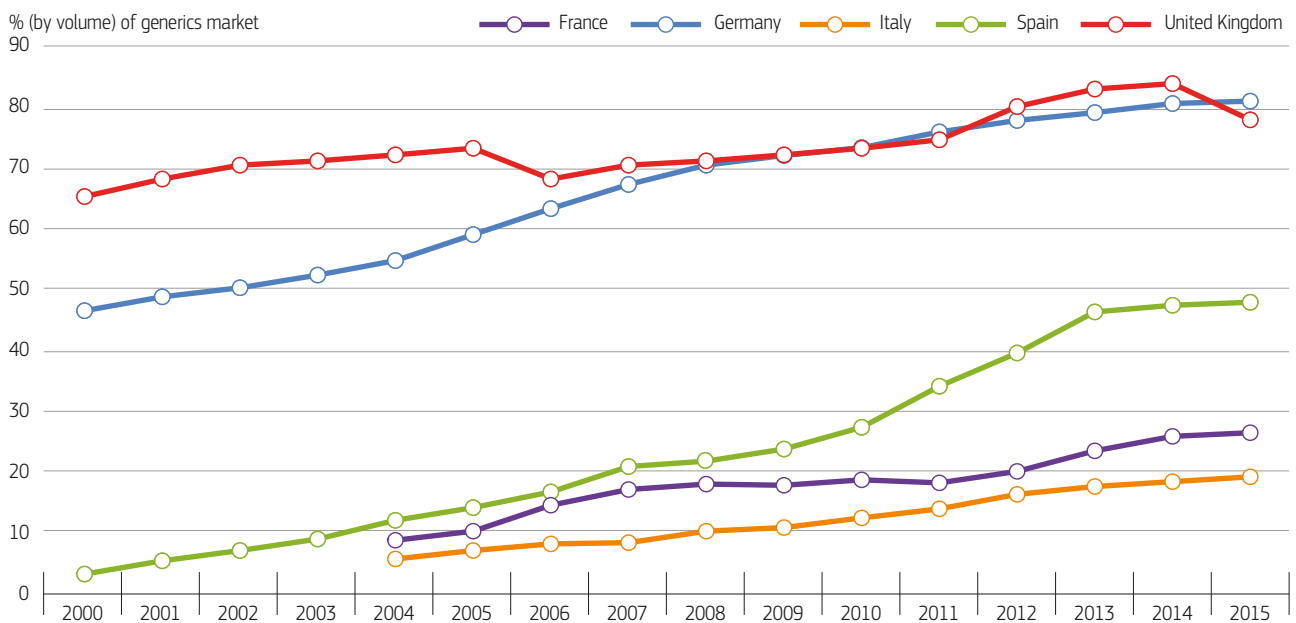
also been progress in day-case surgery rates so, for example, in 2015 over half of all tonsillectomies were day cases, approaching double the EU average of 29% and in marked contrast to 2000 when only 8% were treated as outpatients.

### Generic prescribing and health technology assessment are being used to increase efficiency

The United Kingdom has also made much progress with generic prescribing due, at least in part, to guidelines for GPs. Generic medicines now make up 78% of volume and 39% of the value of (reimbursed) pharmaceuticals, a much higher proportion than in most other EU countries (Figure 13). The National Institute for Health and Care Excellence, the health technology assessment agency, has introduced additional hurdles for reimbursement, looking at the affordability of new treatments in addition to their cost-effectiveness (through a 'budget impact threshold'). There has also been action to reduce staff turnover, sickness absence and use of agency staff.

A 2017 report by the Commonwealth Fund named the United Kingdom health system as the most efficient of 11 high-income countries, citing low expenditure per capita and as a proportion of GDP and comparatively low levels of bureaucracy (Schneider et al., 2017). However, it should be noted that in the same report the United Kingdom performed second from worst on the composite indicator of health outcomes.

**Figure 13. The share of the generics market in the United Kingdom 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.



## Workforce shortages remain – with further challenges anticipated

Health Education England has been responsible (as part of a mandate set by the Department of Health) for workforce planning, education commissioning and education provision since 2013. The NHS has been very reliant on the international recruitment of health workers with 10% of doctors and 4% of nurses currently from EU countries (Dayan, 2016), and one-third of new nurses and midwives in 2015–16 being from the EU (NHS Pay Review, 2017). Although there has been an increase in the total number of doctors over 2010–16 and the number of consultants in particular has increased by over 20%, there continues to be a shortage of primary care providers and nurses coupled with concerns about future staffing once the United Kingdom leaves the EU.

## Reshaping the way care is delivered is understood as central to sustainability

All the devolved administrations are seeking to address similar concerns and to prioritise prevention, early intervention, the avoidance of unnecessary hospital admissions, and initiatives to enable people to stay well at home. From 2015, England has

encouraged a range of initiatives on new models of care with a raft of organisations and partnerships running pilots (known as ‘vanguard’ sites) and working on new organisational forms and contracting arrangements to improve coordination and deliver better integrated services and more care outside hospital. It is hoped that these will both improve quality and deliver the kinds of efficiency savings needed to fill the expected funding gap.

Additionally, following the Carter review (Carter, 2016), there are efforts to identify unwarranted variations in running costs, sickness absence, infection rates and prices paid for supplies and services and to allow all NHS hospitals to measure their performance against other trusts and a ‘model hospital’. It is hoped that this will prompt optimal allocation of resources, and raise the quality of care and financial management to that of the best performers.

Finally, there are policy commitments to enhance resilience by making the NHS and local authorities work together to improve social care and free up hospital beds; by addressing the fragmented nature of out-of-hospital services; and by making (what is heralded as) the biggest national move towards integrated care of any major western country.



## 6 Key findings

- The four countries of the United Kingdom show favourable life expectancy and health status. Cancer is the leading cause of death, and the health system struggles to achieve the 5-year cancer survival rates of other European countries. Alzheimer's and other dementias are increasingly important and recognised as such, and there is growing concern around mental health.
- Behavioural risk factors account for some 28% of the burden of disease, but work to promote healthy lifestyles appears to be producing some positive results, with low smoking levels (particularly among the young) and reductions in alcohol use. However, obesity and binge drinking are growing and up to half of additional life years at age 65 are spent in ill health.
- Care is equitable in terms of access, with low levels of unmet need, low out-of-pocket spending, good financial protection and waiting times that affect all income groups equally. However, the United Kingdom has striking inequalities in self-reported health by socioeconomic status and most behavioural risk factors are far more prevalent among people with lower income and education. Efforts to tackle the social determinants of health, including those targeting children under 5, are not yet achieving their aims.
- Hospitals are working at near-full capacity with low bed numbers, high occupancy rates and short lengths of stay. There are also relatively few doctors and falling numbers of nurses per population. These factors place strains on the system that, together with the discontinuity with social care, contribute to the long-standing challenges of waiting times for elective and emergency care. Targets are often used to address areas of weakness and have shifted recently from waiting times to cancer care and mental health.
- A 30 billion pounds sterling funding gap has been projected by 2020–21 in England's National Health Service, which presents a real challenge to resilience. The government has committed extra funding, but expects much of this to be derived from efficiency gains. This has prompted some refocusing of policy.
- Integration of care is seen as increasingly central to improving efficiency and keeping patients in the most appropriate (and lowest cost) setting. England's National Health Service is seeking to catch up with Northern Ireland, Scotland and Wales. It is shifting the emphasis to collaboration between entities and reigning back on the promotion of market forces and competition. It is hoped that new models of (place-based) care will deliver better coordinated, more efficient and cheaper care outside hospital, but also that they will address prevention upstream so as to reduce the long-term call on health services.
- There are also resilience challenges around the health workforce. Shortages persist and may be exacerbated by wage caps and by the United Kingdom's intention to leave the EU, which creates uncertainty for the many foreign health and social care professionals in the country.



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## 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		



# 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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