European Commission

State of Health in the EU

United Kingdom

Country Health Profile 2019

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

The Country Health Profile series

The *State of Health in the EU*'s Country Health Profiles provide a concise and policy-relevant overview of health and health systems in the EU/European Economic Area. They emphasise the particular characteristics and challenges in each country against a backdrop of cross-country comparisons. The aim is to support policymakers and influencers with a means for mutual learning and voluntary exchange.

The profiles are the joint work of the OECD and the European Observatory on Health Systems and Policies, in cooperation with the European Commission. The team is grateful for the valuable comments and suggestions provided by the Health Systems and Policy Monitor network, the OECD Health Committee and the EU Expert Group on Health Information.

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Data and information sources

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

The calculated EU averages are weighted averages of the 28 Member States unless otherwise noted. These EU averages do not include Iceland and Norway.

This profile was completed in August 2019, based on data available in July 2019.

To download the Excel spreadsheet matching all the tables and graphs in this profile, just type the following URL into your Internet browser: http://www.oecd.org/health/Country-Health-Profiles-2019-UK.xls

Demographic and socioeconomic context in the United Kingdom, 2017

Demographic factors	United Kingdom	EU
Population size (mid-year estimates)	66 059 000	511 876 000
Share of population over age 65 (%)	18.1	19.4
Fertility rate[1]	1.7	1.6
Socioeconomic factors		
GDP per capita (EUR PPP[2])	31 700	30 000
Relative poverty rate[3] (%)	17.0	16.9
Unemployment rate (%)	4.4	7.6

1. Number of children born per woman aged 15-49. 2. Purchasing power parity (PPP) is defined as the rate of currency conversion that equalises the purchasing power of different currencies by eliminating the differences in price levels between countries. 3. Percentage of persons living with less than 60 % of median equivalised disposable income.
Source: Eurostat Database.

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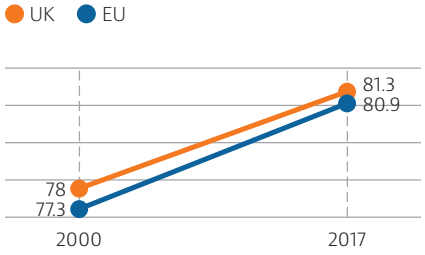
1 Highlights

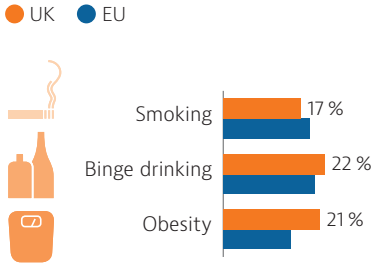
The United Kingdom's health system delivers good health outcomes relative to the level of health expenditure and the scale of income inequalities. Hospital capacity within the National Health Service (NHS) could be reduced because average length of stay has fallen and utilisation of hospital services is 25 % lower than the EU average due to effective gatekeeping at primary care level, although this limits the system's surge capacity. Strengthening the role of primary and community care in providing responsive, person-centred care has been the focus of recent policies.



Life expectancy at birth, years

Health status

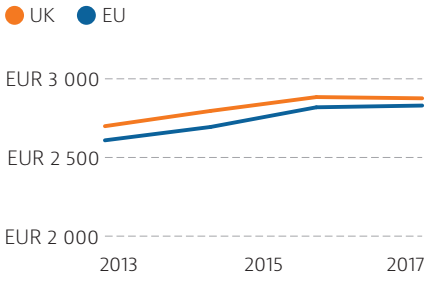
Advancements in life expectancy at birth, currently at 81.3 years, have slowed since 2011; mainly due to a slowdown in mortality improvements at older ages. Ischaemic heart disease and stroke remain the leading causes of death, although deaths from Alzheimer's disease are increasingly common. Disparities in health status highlight important socioeconomic inequalities. For example, people with a higher level of education can expect to live over four years longer than those with the lowest level.



% of adults

Risk factors

Smoking among adults has declined rapidly and is now 17 %, among the lowest in the EU. However, the legacy of previous heavy tobacco consumption impacts the current health of the population. Alcohol consumption has been falling, but particularly binge drinking remains above the EU average. More than one in five adults were obese in 2017, which is higher than in most other EU countries. As with health status, risk factors most affect those with lower income or education.



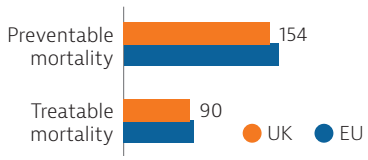
Per capita spending (EUR PPP)

Health system

The health system is funded from general taxation and financial protection is good. Separate NHS systems in the four nations of the United Kingdom provide universal access to a comprehensive package of services, which is free at the point of use. Health spending is comparable to the EU average but lower than in similarly wealthy countries. Since 2008, budgets have not kept pace with growing demand for services, leading to increased waiting times and provider deficits.

Effectiveness

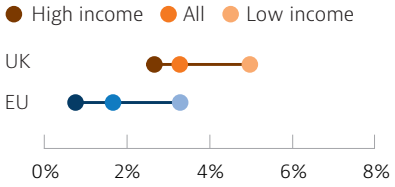
Although below EU averages, mortality rates from preventable and treatable causes are greater than in other high-income EU countries and have not improved in recent years. Tackling inequalities in health outcomes remains a challenge.



Age-standardised mortality rate per 100 000 population, 2016

Accessibility

Nearly all care is free at the point of use and overall access to health services is good. However, waiting times have grown and there are financial barriers to dental care, as it is not always free at the point of use.



% reporting unmet medical needs, 2017

Resilience

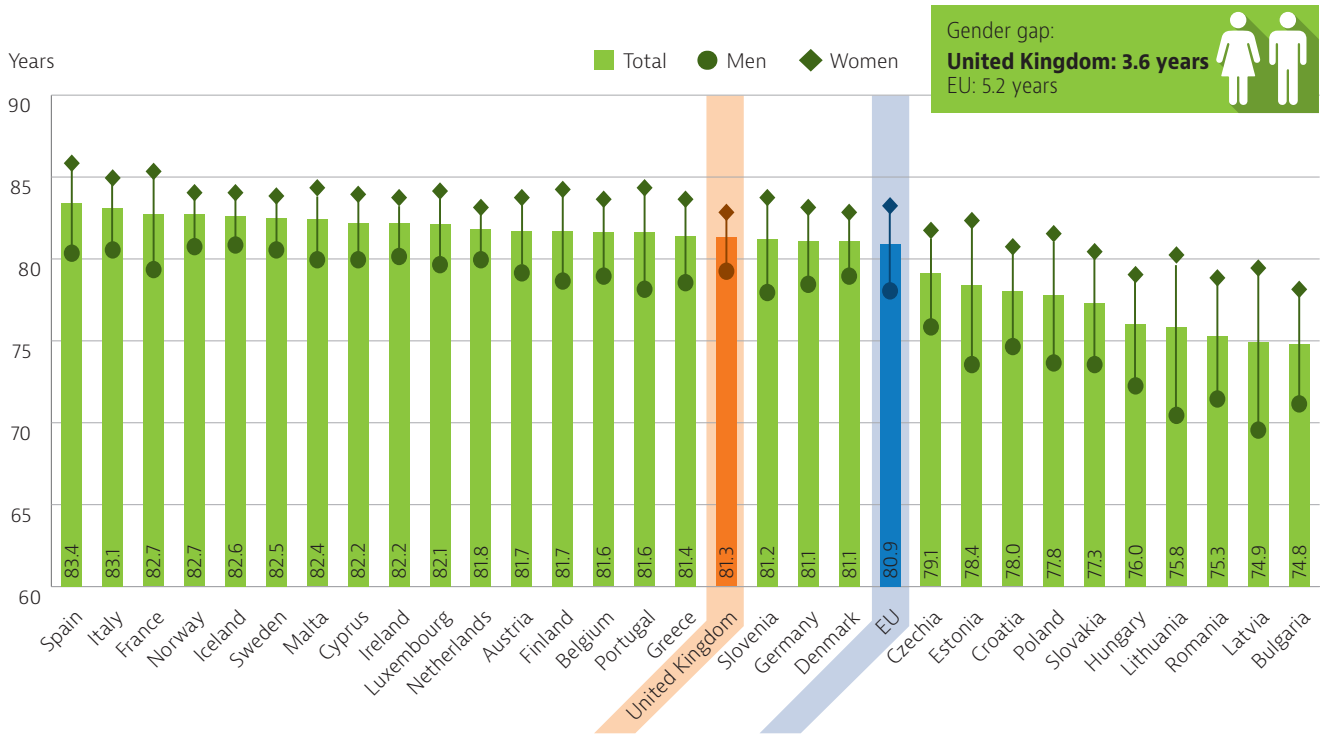
Workforce shortages threaten the sustainability of the health system. Ongoing shortages of doctors, nurses and care workers could negatively affect both access to care and its quality.

2 Health in the United Kingdom

Gains in life expectancy have slowed markedly over the past decade

In 2017, average life expectancy at birth in the United Kingdom was 81.3 years, slightly higher than the EU average (80.9 years). However, unlike male life expectancy, female life expectancy was lower than the EU average (Figure 1). Increases in life expectancy have slowed markedly in recent years mainly due to the slowdown in mortality improvements among older people. Between 2011 and 2017, there were no gains in life expectancy among women and the life expectancy of men increased by just half a year, compared to over 1.7 years in the preceding five-year period. This slowdown in life expectancy is not unique to the United Kingdom, occurring in France, the Netherlands and some other EU countries too, but it has been most marked in the United Kingdom.

Figure 1. Life expectancy of men in the United Kingdom is higher than the EU average, but lower for women



Source: Eurostat Database.

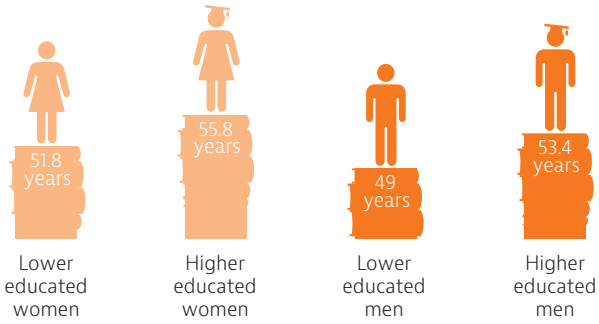
Differences in life expectancy by socioeconomic status are wider than the gender gap

In 2011, the difference in life expectancy at age 30 was four years between the lowest and the highest education groups in the United Kingdom, but the gender gap was much narrower than the EU average (Figure 2). As people with a higher level of education generally earn more, the education gap in life expectancy reflects differences in income level and living standards[1]. In 2014–16, the gap in life expectancy at birth between the most deprived and least deprived decile reached 9.3 years for men and 7.4 years for women, up from 9.0 years and 6.9 years in 2011–13 (Office for National Statistics, 2018).

Higher mortality rates for chronic diseases as well as a more significant stagnation in life expectancy occurs in more deprived areas, demonstrating the extent of socioeconomic disparities across the country (Public Health England, 2018a). It also is an indication of the significant poverty-related challenges facing the United Kingdom, particularly increasing child poverty rates and income inequalities (European Commission, 2019a).

1: 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.

Figure 2. Thirty-year-olds with a high level of education can expect to live four years longer than those with the lowest level of education



Education gap in life expectancy at age 30:

United Kingdom: 4 years
EU21: 4.1 years

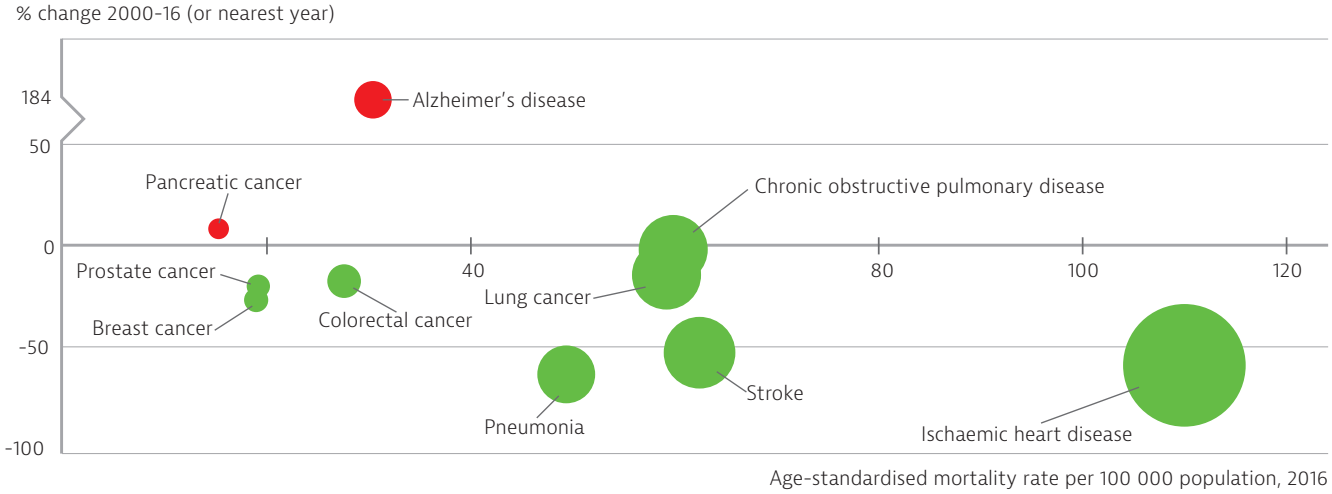
United Kingdom: 4.4 years
EU21: 7.6 years

Note: Data refer to life expectancy at age 30. High education is defined as people who have completed a tertiary education (ISCED 5-8) whereas low education is defined as people who have not completed their secondary education (ISCED 0-2).
Source: Murtin et al., OECD Statistics Working Paper N°78 (2017).

Cardiovascular disease remains the biggest cause of death

Deaths from Alzheimer's disease and pancreatic cancer have increased, while reductions in mortality rates from ischaemic heart disease have stayed constant after falling steeply for a number of years (Figure 3). Nevertheless, cardiovascular disease is the biggest cause of death along with cancers. The seemingly rapid increase in mortality rates from Alzheimer's disease is largely due to changes in diagnostic and cause of death registration practices.

Figure 3. Alzheimer's disease mortality is increasingly common, but ischaemic heart disease and stroke still lead



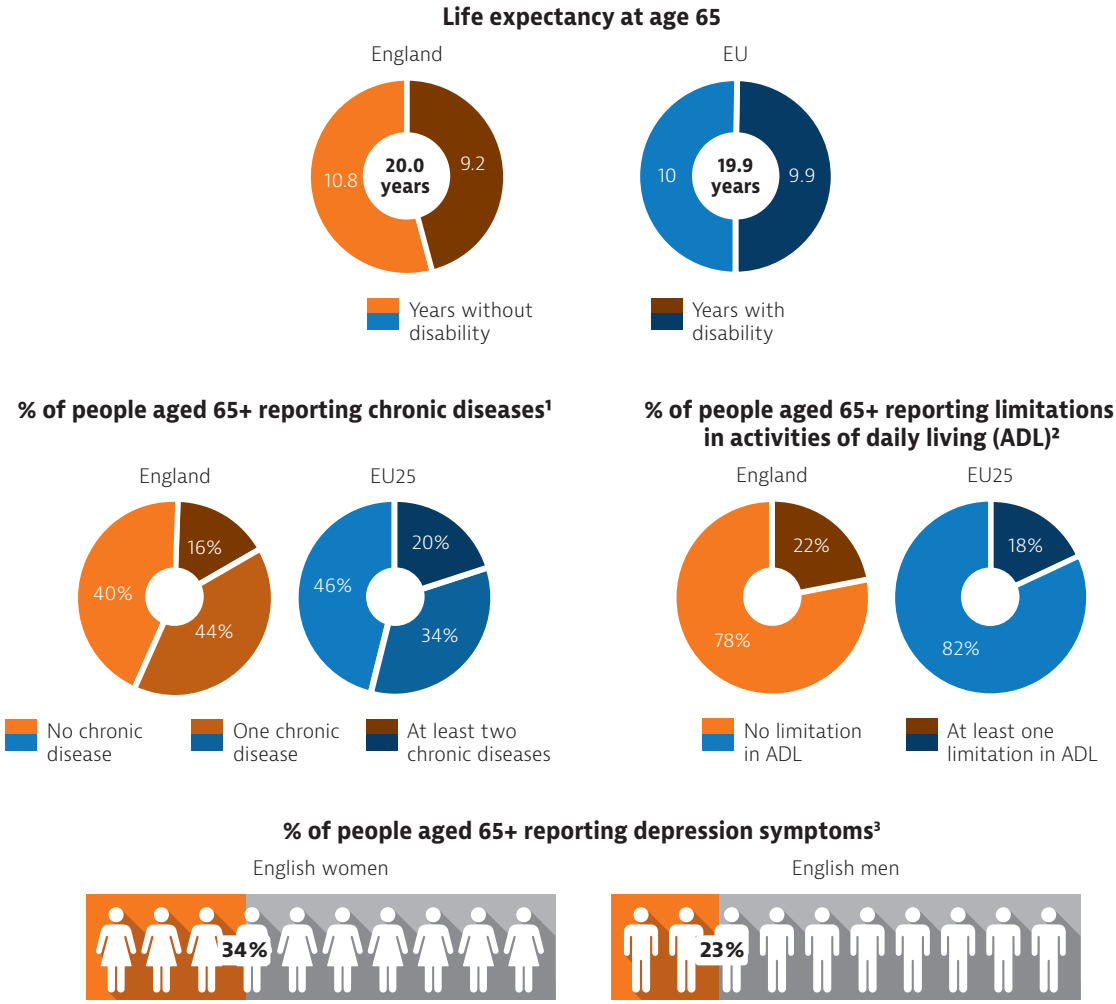
Note: The size of the bubbles is proportional to the mortality rates in 2016. The increase in mortality rates from Alzheimer's disease is largely due to changes in diagnostic and death registration practices.
Source: Eurostat Database.

People are living longer, but many of these additional years are spent with health problems

The share of people aged 65 and over is steadily growing due to the rise in life expectancy in previous decades and the ageing of the large cohort aged 55–75 years (the 'baby-boomer' generation). In 2016, British people at age 65 could expect to live another 20 years, similar to 65-year-olds in the EU as a whole. Just over half of these years (10.8) will be lived without disability[2] (Figure 4). There are no data covering the whole of the United Kingdom, but more than 40 % of people aged 65 years and over in England report having no chronic disease. Among those who do, more than 40 % reported having one chronic disease and more than 15 % stated that they had at least two. The rate of people with at least one chronic condition is slightly higher than the EU average. Most people in England are able to continue to live independently in old age, but around one in five people aged 65 and over reported some limitations in basic activities of daily living (ADL) such as dressing and eating. In addition, 34 % of English women aged 65 and over reported having symptoms of depression, compared to 23 % of men in this age group.

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

Figure 4. Britons aged 65 live just under half of the remaining years with some chronic diseases and disabilities



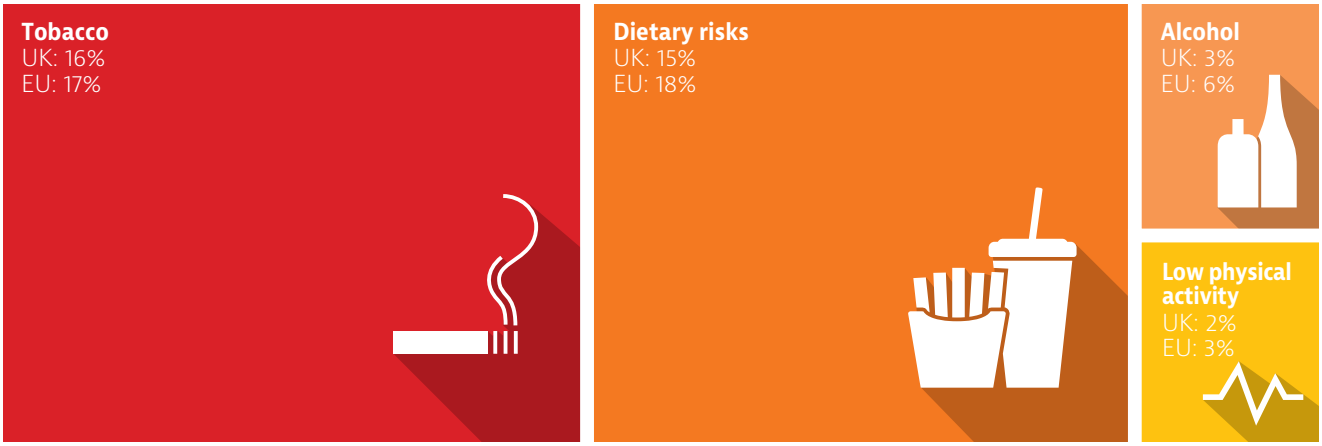
Note: 1. Chronic diseases include heart attack, stroke, diabetes, Parkinson disease, Alzheimer's disease and rheumatoid arthritis or ostheoarthitis. 2. Basic activities of daily living include dressing, walking across a room, bathing or showering, eating, getting in or out of bed and using the toilet. 3. People are considered to have depression symptoms if they report more than three depression symptoms (out of eight possible variables).
Source: Eurostat Database for life expectancy and healthy life years (data refer to 2017); ELSA survey for other indicators (data refer to 2016-17).

3 Risk factors

Over one third of all deaths in the United Kingdom can be attributed to behavioural risk factors

Behavioural risk factors, including tobacco smoking, poor diet, alcohol consumption and low physical activity, account for 34 % of all deaths in the United Kingdom, compared to 39 % for the EU as a whole (Figure 5). Around 16 % of all deaths in 2017 can be attributed to tobacco smoking alone (both direct and second-hand smoking). Dietary risks (including high sugar and salt consumption) are estimated to account for about 15 % of all deaths. Alcohol consumption and low physical exercise account for 5 % of deaths combined (3 % and 2 % respectively).

Figure 5. Tobacco and dietary risks are major contributors to mortality



Note: The overall number of deaths related to these risk factors (205 190) is lower than the sum of each taken individually (218 645) because the same death can be attributed to more than one factor. Dietary risks include 14 components, such as low fruit and vegetable consumption and high sugar-sweetened beverage and salt consumption.
Source: IHME (2018), Global Health Data Exchange (estimates refer to 2017).

Although smoking and drinking among teenagers has declined, harmful alcohol consumption continues to be a problem

The United Kingdom has seen a substantial decline in smoking rates for both men and women, with some 17 % of adults being regular smokers in 2017. Similarly, smoking among 15-year-olds has fallen drastically and is now lower than in most other EU countries (Figure 6). The declines are partly due to the implementation of legislation to reduce people's exposure to tobacco advertising (including the requirement for cigarettes to be sold in plain, standardised packaging), but the increased availability of smoking cessation services has also contributed significantly (see Box 2 in Section 5.1).

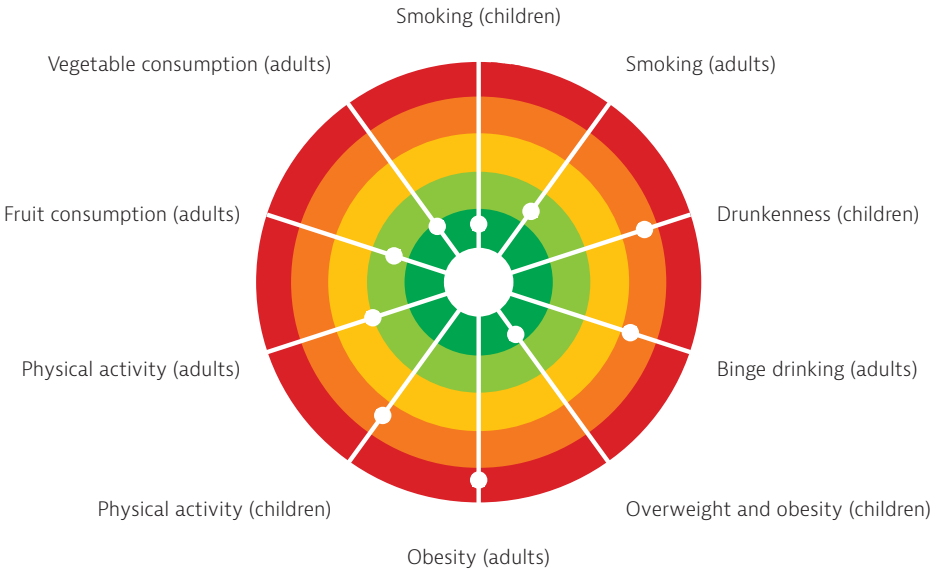
Alcohol consumption is also declining, but almost one third (31 %) of 15-year-olds in the United Kingdom report having been drunk more than once in their life compared to 25 % on average across EU countries (2013¬–14). More than one fifth of adults reported regular heavy alcohol consumption in 2014, a slightly higher proportion than in most other EU countries (Figure 6). Regular binge drinking[3] is twice as frequent among men as women. Following the introduction of minimum unit pricing policy in Scotland, alcohol sales have fallen to their lowest level ever recorded in that nation.

Obesity levels in children are relatively low but few teenagers are physically active

More than one in five adults (21 %) in the United Kingdom were obese in 2017 based on self-reported data on height and weight. This is a higher rate than in most other EU countries[4] (the EU average was 15 %); however, only 15 % of British 15-year-olds were overweight or obese in 2013–14 (EU average 17 %). Physical activity among 15-year-olds is relatively low, with only 13 % reporting daily moderate physical exercise (this is lower than the EU average of 15 %). This proportion is particularly low among girls: only 9 % of 15-year-old girls report being at least moderately active each day in 2013–14, compared with 16 % among 15-year-old boys.

3: Binge drinking is defined as consuming six or more alcoholic drinks on a single occasion for adults, and five or more alcohol drinks for children.
4: The obesity rate among adults is even higher based on the actual measurement of height and weight (26 % in 2016).

Figure 6. Obesity, heavy alcohol consumption and lack of physical activity are major public health concerns



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 ESPAD survey 2015 and HBSC survey 2013–14 for children indicators; and EU-SILC 2017, EHIS 2014 and OECD Health Statistics for adults indicators.

Socioeconomic inequalities have a negative impact on health risks

As in other EU countries, many behavioural risk factors in the United Kingdom are more common among people with lower education or income. In 2014, one fifth of adults (19 %) who had not completed their secondary education smoked daily, compared to only 7 % among those with a tertiary education. Similarly, in 2017 almost one quarter of people without a secondary education were obese (24 %), compared to 18 % among those with a higher education.

4 The health system

The NHS provides universal access to comprehensive services free at the point of use

Since 1999, health care has become a devolved responsibility in the four nations of the United Kingdom and the way in which services are organised and paid for have diverged as devolved governments have chosen different ways of addressing the issues they faced. However, all home nations have retained the tax-funded NHS model. Each nation has its own planning and monitoring frameworks and their own public health agencies, resulting in clear differences across some policy areas. However, the systems face very similar challenges and have sometimes independently proposed similar solutions (Box 1). With over 80 % of the United Kingdom's population living in England, the English NHS is the largest health service.

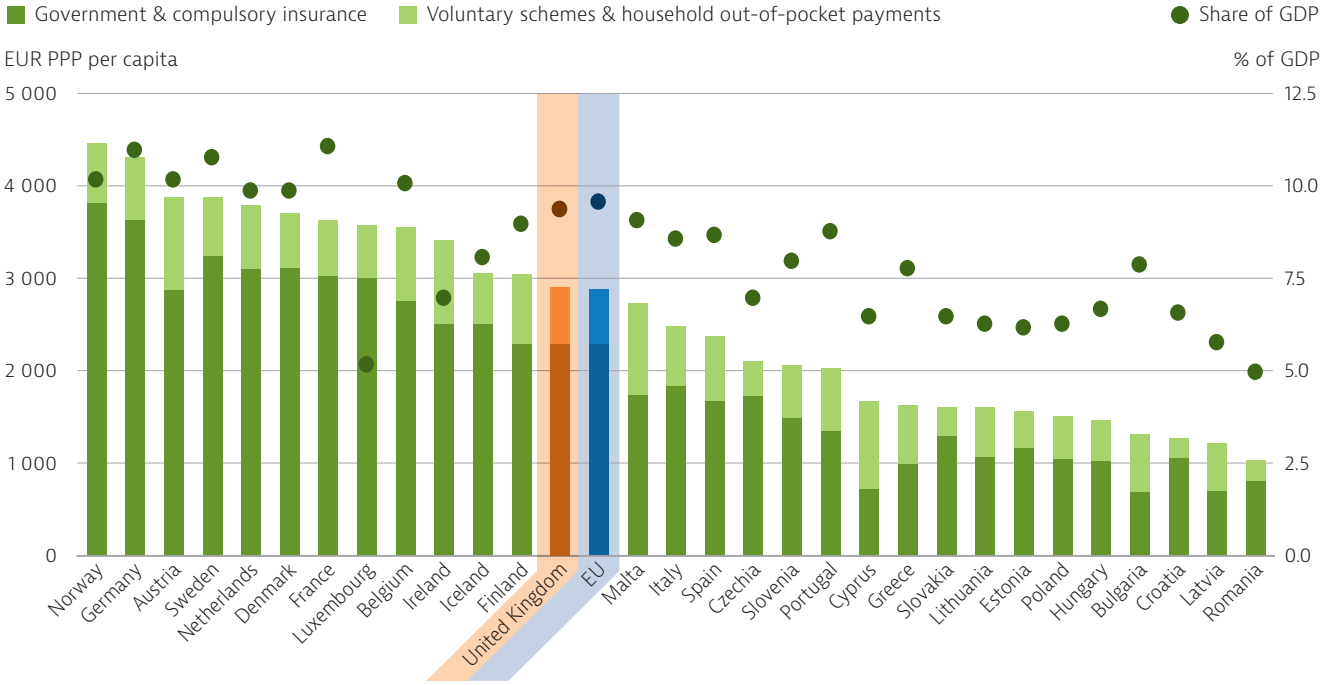
Health spending is comparable to the EU average but budgets have not kept pace with growing demand

In 2017, health expenditure in the United Kingdom was slightly higher than the EU average per person – EUR 2 900 (adjusted for differences in purchasing power) compared to EUR 2 884, and slightly lower as a proportion of GDP (9.6 % compared with 9.8 % for the EU). However, as shown in Figure 7, health expenditure is considerably lower than similarly wealthy countries such as Germany (EUR 4 300 per capita, 11.2 % GDP) and France (EUR 3 626, 11.3 %). This level of spending has been relatively stable over time, but it has not kept pace with growing demand for health services (European Commission, 2019a) (see Section 5.2).

Box 1. Primary care reforms are converging across the United Kingdom

NHS reforms in England, Scotland, Wales and Northern Ireland have been developed and implemented separately, but there are some common features; for example, moving towards a similar model for the delivery of primary care services by teams. These changes seek to better meet the needs of patients with chronic conditions, particularly those with multiple co-morbidities, while also addressing staff shortages and controlling costs. To meet the challenges outlined in the NHS Long Term Plan for England (2019), the aim is to create primary care networks that encourage more collaboration between General Practitioners (GPs) and with social care services. In Scotland, the vision is for general practices to work in partnerships and to develop effective relationships with secondary and social care to provide high-quality person-centred care. In Wales and Northern Ireland multidisciplinary 'clusters' or 'teams' have been established to achieve these ends. The Welsh long term plan for health and social care, 'A Healthier Wales' (2018), sets out a vision of a whole system approach to health and social care.

Figure 7. Health expenditure is close to the EU average but less than similar sized economies



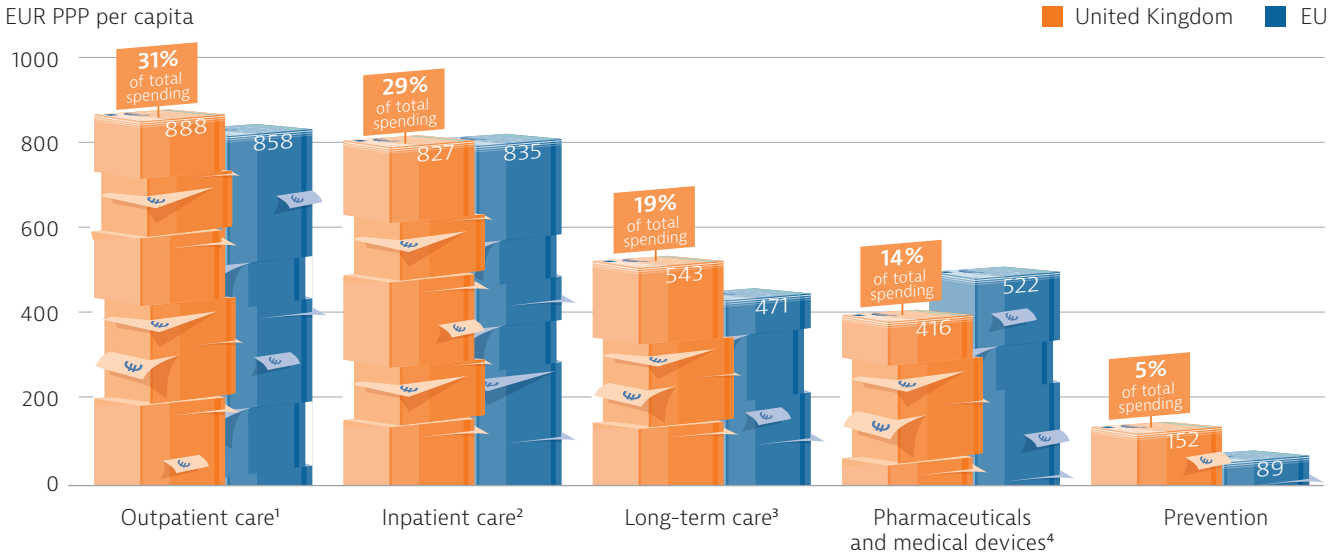
Source: OECD Health Statistics 2019 (data refer to 2017).

The health system is funded from general taxation and financial protection is ensured

In line with the EU average, health services are predominantly financed from general taxation and in 2017, 78.8 % of total health expenditure came from public sources. Voluntary Health Insurance plays a marginal, supplementary role in the system (3.1 % of total health expenditure) and out-of-pocket (OOP) spending is low (16 %) compared to most other EU countries. Financial protection is stronger in the United Kingdom than in many other EU countries, as most NHS services are free at the point of use for legal residents (Section 5.2). Fixed charges are applied to dental care and prescription pharmaceuticals (in England only), although several groups (such as children, pregnant women, people on low incomes and others) are exempted (see Section 5.2).

Most spending on health services goes towards outpatient (or ambulatory) care (31 %) but this is closely followed by inpatient services (29 %), both of which are comparable to EU averages. Per person, pharmaceutical expenditure lies below the EU-wide average (Figure 8) as a greater share of pharmaceutical spending is on generics (Section 5.3), while considerably more is spent on preventive services than in other countries (EUR 165 or over 5 % of health spending in 2017, compared with 3 % across EU countries).

Figure 8. Spending on pharmaceuticals is lower than other EU countries



Note: Administration costs are not included. 1. Includes home care; 2. Includes curative-rehabilitative care in hospital and other settings; 3. Includes only the health component; 4. Includes only the outpatient market. .
Sources: OECD Health Statistics 2019, Eurostat Database (data refer to 2017).

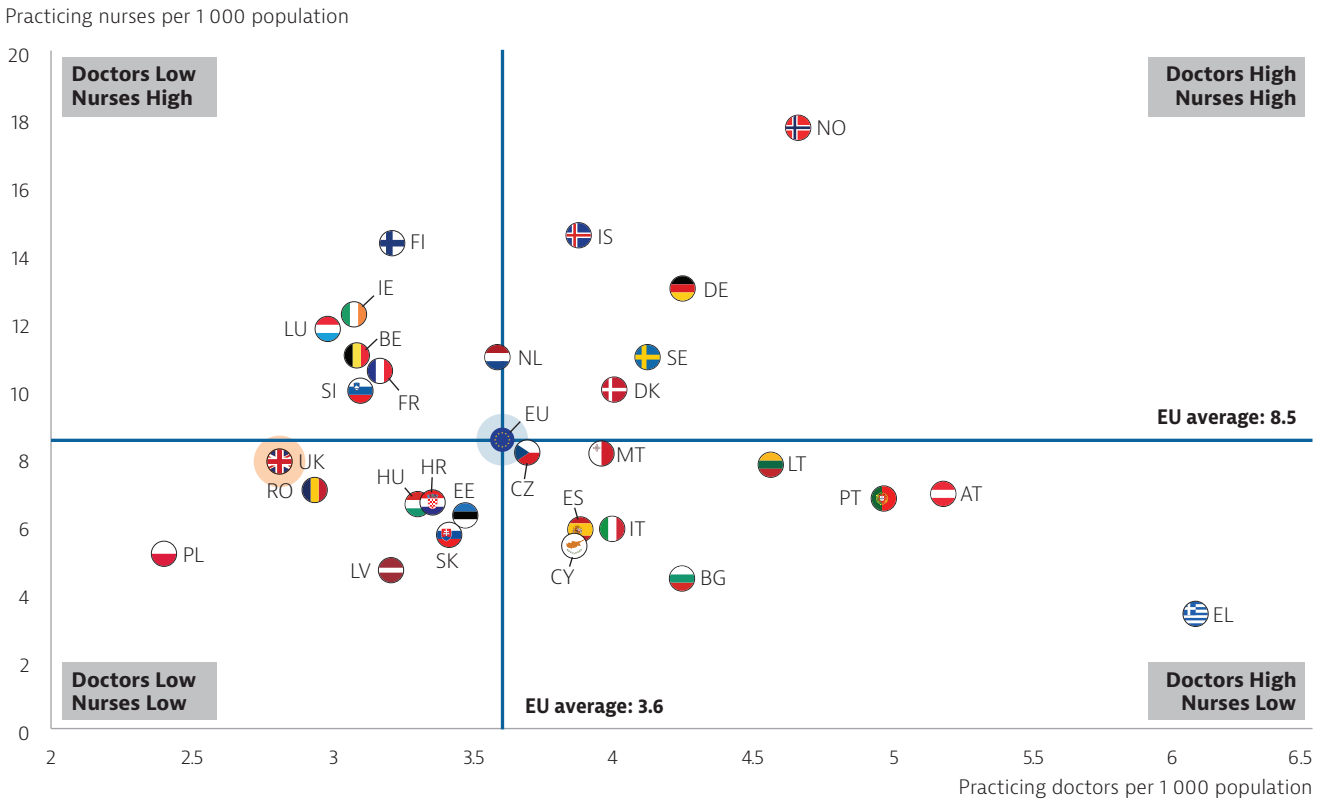
Decentralised purchasing of services allows coverage inequalities for some high-cost services

The central government directly allocates money for health care in England and provides block grants to the home nations (Scotland, Wales and Northern Ireland), which then set their own health budgets, determining how the block grants will be used. Local commissioning bodies in England make decisions about primary care and the routine services to be provided, considering budgetary constraints and national guidelines. High-cost specialist services are commissioned at national or regional level and should follow recommendations from the National Institute for Health and Care Excellence (NICE); however, some services are still subject to variation in coverage. Waiting lists for elective surgeries also vary between regions and nations depending on the pressures the respective services have faced.

The United Kingdom relies on international recruitment to maintain adequate health workforce numbers

Although it has been steadily increasing, the number of doctors per 1 000 population is low (2.8, compared with an EU average of 3.6 in 2017). In contrast, the number of nurses per 1 000 population has been declining since 2005, going from 9.2 to 7.8 in 2017, while the EU average steadily increased from 7.3 in 2005 to 8.5 in 2017. This has shifted the ratio of nurses to doctors in the United Kingdom (Figure 9). In 2018, there were 39 000 unfilled nursing vacancies in the English NHS (11 % of the nursing workforce); 80 % of these vacancies were filled by temporary staff. The government response has been to increase the number of nurse training places, but as of September 2018, the intake of new student nurses has remained steady. Shortages are driving innovation in changing workforce roles and career paths, but also affect access to services and waiting times (Section 5.2).

Figure 9. The United Kingdom has relatively few doctors and nurses per person



Note: In Portugal and Greece, data refer to all doctors licensed to practise, 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 (data refer to 2017 or nearest year).

The United Kingdom has a small hospital capacity for its population

The number of acute hospital beds is the second lowest in the EU (after Sweden) at 2.5 per 1 000 in 2016 (well below the EU average of 5.0 per 1 000). Average length of stay (ALOS) has also declined steadily, to 6.9 days in 2017, compared with the EU average of 7.9 days. These trends can be attributed, in part, to a greater focus on more cost-effective outpatient care and day surgery. However, low hospital bed numbers, high occupancy rates and increasing demand for inpatient care has limited the system's ability to absorb shocks (Section 5.3).

The integration of community-based services is increasingly important but challenging due to problems in social care provision

Primary care is provided by teams of GPs, nurses and sometimes other allied health professionals who provide the first point of contact and treatment for common conditions. Hospital discharges in 2016 (at 131 per 1 000 population) were 25 % lower than the EU average (172 per 1 000 population), indicating the importance of the gatekeeping role played by GPs. Strengthening the role of primary care teams in providing responsive, person-centred care has been the focus of policies to improve the quality of care for people with chronic conditions (Box 1). GPs are independent and contracted to provide services in the NHS, hence revising their contract is a key policy tool to shape future services.

Most secondary care is provided in NHS hospitals. Tertiary care services, which offer highly specialised care for the most complex cases and rarer diseases, tend to be larger teaching hospitals linked to medical schools. The trend has been to concentrate specialised care into fewer centres as a way of improving quality. Publicly funded adult social care is means-tested and funded by local governments. For those who fall outside this system or wish to supplement their social care benefits, it can be privately funded. In England, cuts to local council budgets and shortages of care workers put great strain on the social care branch of the long-term care sector, with many providers closing as they were no longer financially viable (Section 5.3).

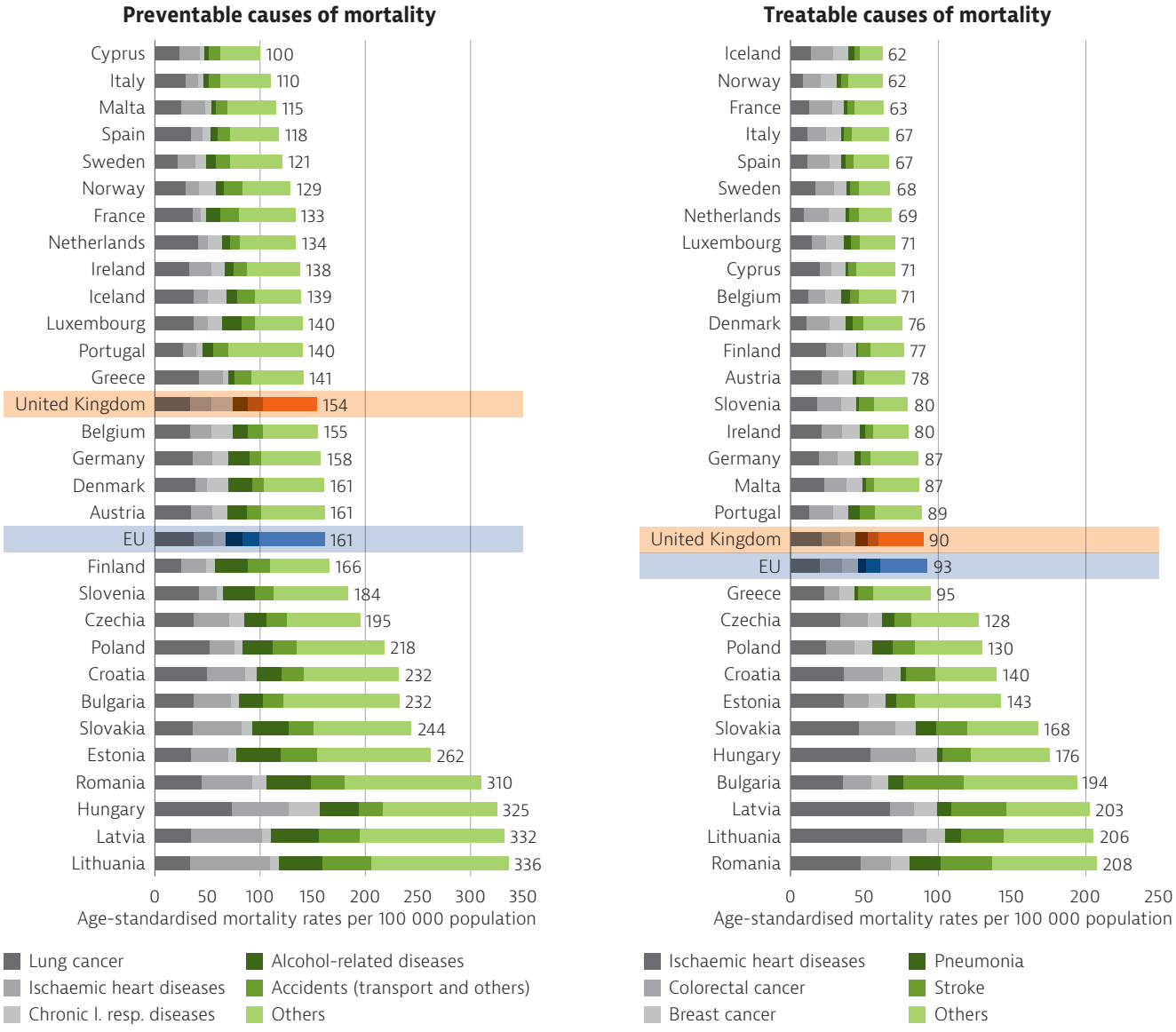
5 Performance of the health system

5.1. Effectiveness

Preventable mortality rates are below the EU average but higher compared to other high-income EU countries

Preventable mortality rates indicate how effective public health and primary prevention interventions are at preventing and controlling disease. In the United Kingdom, preventable mortality rates are slightly below the average for the EU, but noticeably higher than in the Netherlands or Sweden, suggesting room for improvement (Figure 10). Also, there has been little progress in reducing preventable mortality since 2011. Smoking rates have fallen as a result of concerted policy efforts for tobacco control and the increased availability of smoking cessation services (Box 2). However, the impact of historically high smoking rates is still visible as one in five preventable deaths is due to lung cancer.

Figure 10. Mortality from preventable and treatable causes in the United Kingdom is just below European averages



Note: Preventable mortality is defined as death that can be mainly avoided through public health and primary prevention interventions. Mortality from treatable (or amenable) causes is defined as death that can be mainly avoided through health care interventions, including screening and treatment. Both indicators refer to premature mortality (under age 75). The data are based on the revised OECD/Eurostat lists.
Source: Eurostat Database (data refer to 2016).

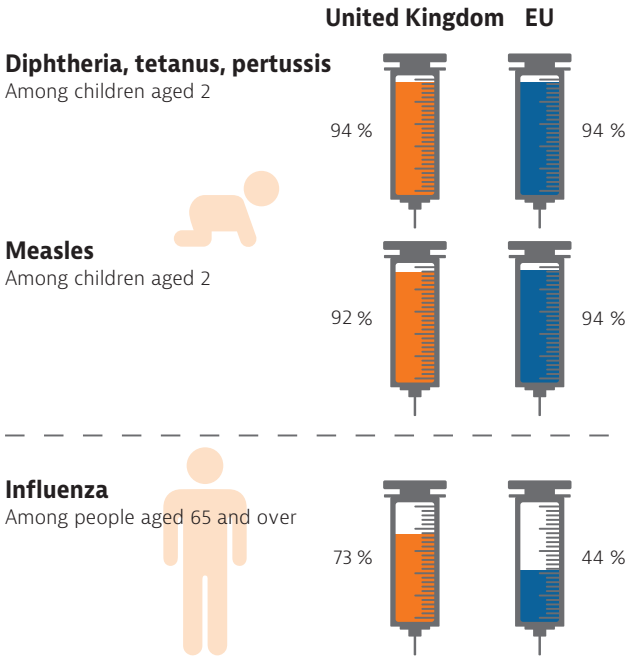
Box 2. Digital transformation and prevention in the United Kingdom

Digital technologies are an increasingly evident part of the health care landscape. There are many widely available apps to give fast-track access to a GP or general health monitoring services offered by private health care companies. The arrival of GP apps has challenged policymakers to re-evaluate how primary care is delivered and reimbursed with the potential to enable more flexible working patterns for doctors. There are also pilot public–private partnerships to explore the potential of digital technologies to give access to medical records or out-of-hours care. The use of mHealth (mobile health) for prevention is already widely adopted. The most established is NHS Smokefree, which is a free app that provides a 28-day smoking cessation programme that has proven itself effective. A Change4Life app (launched as part of a wider campaign) is also available that enables users to scan the barcodes of popular foods and drinks to access nutritional information. The NHS Apps Library lists apps and digital tools that have been approved as safe and effective.

Investment in preventive services is the highest in the EU

Although cuts to local government budgets have had a negative impact on public health funding in England, overall spending on preventive services in the United Kingdom is the highest in the EU as a proportion of total health expenditure (Section 4). Extra efforts have been required to try to meet WHO recommended targets for vaccination – 95 % for children's vaccinations and 75 % for influenza vaccines for older people (Box 3). Child vaccination rates are still slightly below recommended levels, while influenza vaccination for people aged 65 years and over was the highest in the EU at 73 % in 2017 (the EU average was 44 %) (Figure 11). Priority groups, including those aged 65 and over, are eligible for vaccination free of charge and vaccines are widely available as GP practices and community pharmacies run vaccination programmes.

Figure 11. Vaccination for influenza is the highest in the EU



Note: Data refer to the third dose for diphtheria, tetanus and pertussis, and the first dose for measles.
Source: WHO/UNICEF Global Health Observatory Data Repository for children (data refer to 2018); OECD Health Statistics 2019 and Eurostat Database for people aged 65 and over (data refer to 2018 or nearest year).

Box 3. Measles vaccination rates are recovering from vaccine hesitancy

Current vaccination rates in the United Kingdom are relatively good. While WHO declared the elimination of measles for the first time in 2017, that is, endemic transmission had been interrupted for three consecutive years, a rise in cases was reported the following year mainly due to outbreaks arising from imported cases, and the United Kingdom lost its measles-free status in August 2019. In 2017, 92 % of children received the first dose of the measles, mumps and rubella (MMR) vaccine by their fifth birthday. Nevertheless, under-immunised cohorts persist in older age groups as a result of a drop in immunisation rates in the late 1990s. Older children and adults are eligible to receive the MMR vaccine free of charge. There are also inequalities in vaccine uptake by ethnicity, deprivation and geography, with London having particularly low vaccination coverage rates. These gaps continue to threaten herd immunity. In January 2019, all four of the nations committed to implementing the United Kingdom Measles and Rubella Elimination Strategy (Rechel, Richardson & McKee, 2018).

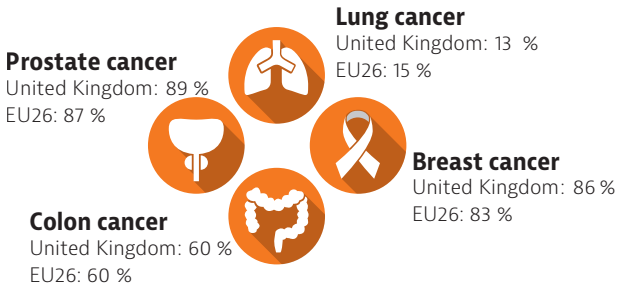
Cancer survival rates are low compared to other high-income countries

Five-year cancer survival rates are worse in the United Kingdom compared to other high-income countries in the EU (Figure 12). However, 25 years ago the gap was much wider and a strong policy focus on improving the effectiveness of cancer services has led to rapid improvements in the five-year net survival rates for the most common cancers. Three quarters of eligible women participated in breast cancer and cervical cancer screening programmes in 2016.

Tackling health inequalities in avoidable deaths is a core challenge

Population health in the United Kingdom, and the risk factors that influence it, are strongly shaped by health inequalities according to socioeconomic status (Section 2, Section 3). The amenable mortality gap between more and less affluent areas narrowed between 2001 and 2010, as improvements in deprived areas were greater. However, the gap is still wide and follows a clear socioeconomic gradient. The rate of mortality amenable to health care in the most deprived areas of England in 2010 was more than double that in the least deprived areas. This means that although mortality from preventable and treatable causes is on aggregate similar to the EU average, it is noticeably higher in lower income groups. These patterns of inequality hold true for cancer survival rates, but also for basic indicators such as infant mortality (Public Health England, 2018b). However, the determinants of these inequalities lie largely outside the health system.

Figure 12. Five-year net cancer survivals have improved, but remain around the average

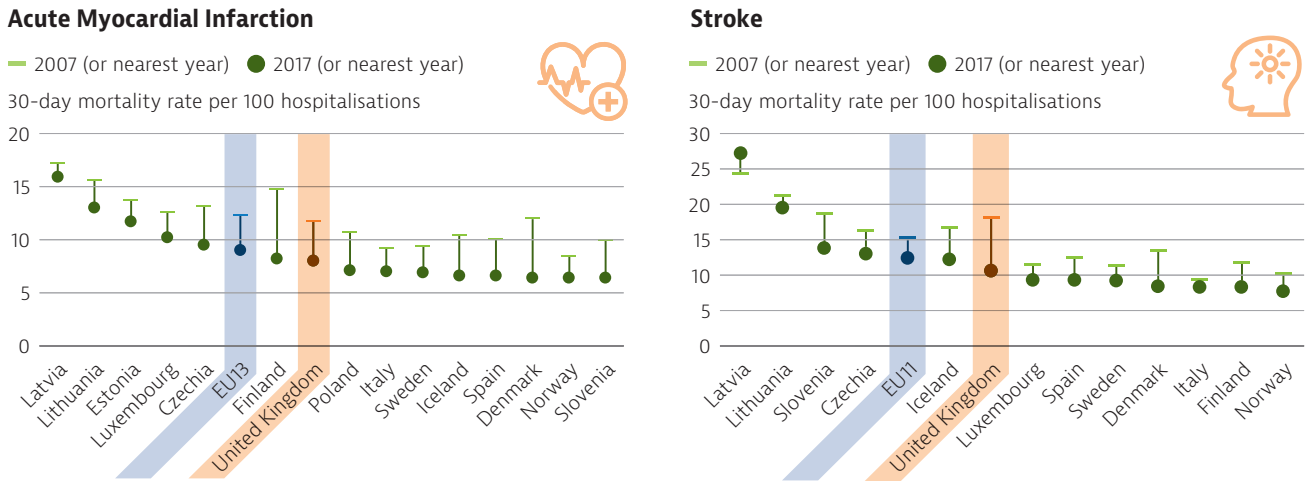


Note: Data refer to people diagnosed between 2010 and 2014.
Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

Quality of care is of major policy importance, and key indicators show it is improving

Lower in-hospital case fatality for stroke and heart attack (myocardial infarction) within 30 days of admission suggests that quality of acute care is above EU averages (Figure 13), and there has been considerable improvement over time. The concentration of cardiology services into fewer more specialist providers has been influential in improving outcomes (Section 4).

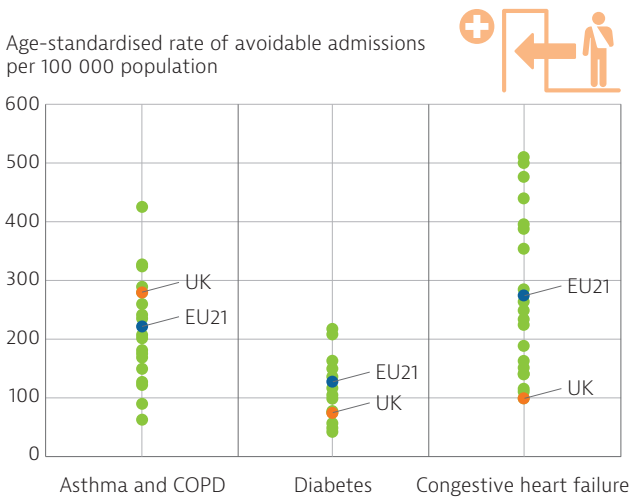
Figure 13. Survival after heart attack or stroke is better than the EU average



Note: Figures are based on patient data and have been age–sex standardised to the 2010 OECD population aged 45+ admitted to hospital for AMI and stroke.
Source: OECD Health Statistics 2019.

The quality of primary care is reflected in the levels of avoidable admissions to hospital for diabetes and congestive heart failure, which are much lower than the EU average (Figure 14). Avoidable admissions for asthma and chronic obstructive pulmonary disease (COPD) are above the EU average, which may be a legacy of previously high smoking rates and current exposure to air pollution, which is a growing concern (European Commission, 2019a).

Figure 14. Avoidable admissions for diabetes and congestive heart failure are among the lowest in the EU, while admissions for asthma and COPD are among the highest



Source: OECD Health Statistics 2019 (data refer to 2017 or nearest year).

Action to address anti-microbial resistance continues with a new 20-year strategy

Quality assurance in the system is a devolved matter, but the nations all work together in the interests of public health on issues such as anti-microbial resistance (AMR). The United Kingdom government has long been an advocate for action on AMR, with a national strategy and action plan in place since 2000. The first integrated One Health strategy ran from 2013 to 2018 resulting in animal use of antibiotics falling by 40 % and human use falling by 7.3 % by 2017. However, with 20 % of all antibiotic prescriptions in primary care still considered inappropriate, further work is needed; the next 20-year vision was launched in January 2019 (Department of Health, 2019).

5.2. Accessibility

Waiting times are the main barrier to access

On average, around 3 % of the population reported unmet needs for medical care due to cost, waiting time or distance, with a relatively small gap between those on high and low incomes (Figure 15). As care is provided free at the point of use, access is not rationed by ability to pay. Instead, where demand outstrips resources available, waiting lists are used. To maintain access, providers are held accountable for waiting times that exceed centrally determined standards. A recent survey across the United Kingdom found that 49 % of respondents reported problems in accessing out-of-hours urgent care. Barriers to access in this part of the system increase pressure on emergency care and attendance rates are increasing. In January 2018, NHS England found that 84.4 % of patients were waiting no more than four hours for treatment in emergency departments, but the target was 95 %. The standard was last met in July 2015. Difficulties in accessing primary care are mainly experienced due to delays in getting a GP appointment.

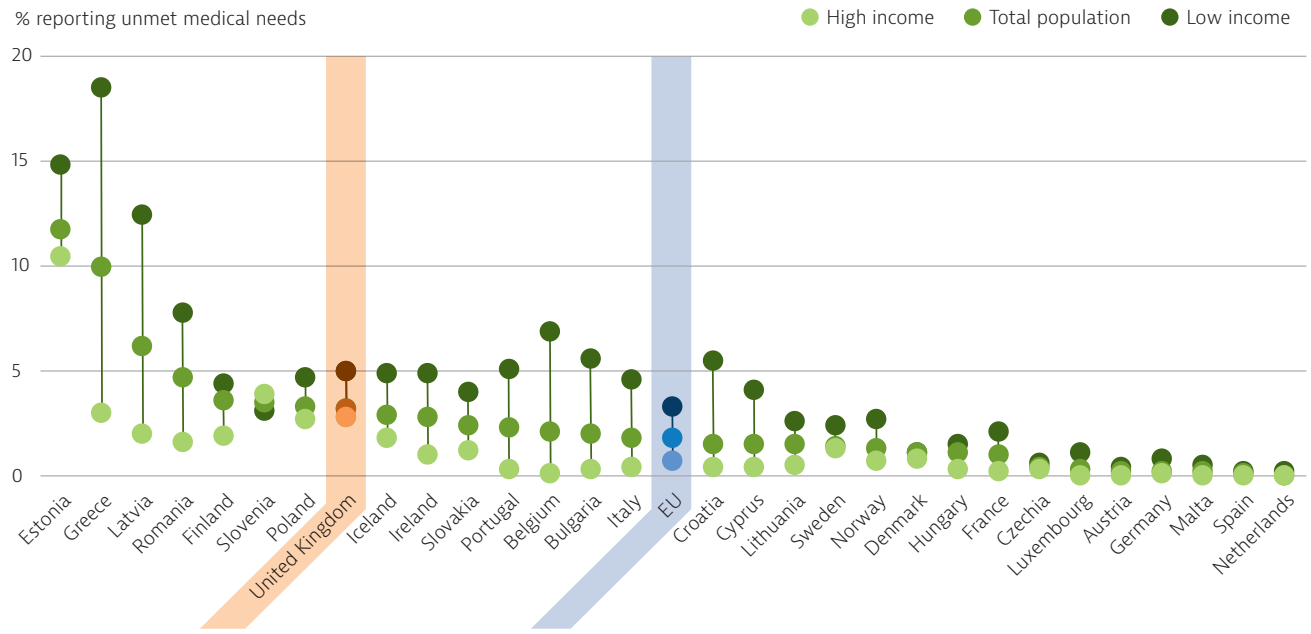
All people who are ordinarily resident in the United Kingdom are entitled to comprehensive National Health Service care

Access to services based on need rather than ability to pay is a core value of the NHS. There is a limited benefit package for those who are not ordinarily resident (such as irregular migrants) that cover treatment for a defined list of communicable diseases, compulsory mental health treatments and care provided in emergency care departments. Groups such as refugees and asylum seekers are not charged when accessing NHS services. Since April 2015, migrants who have come from outside the European Economic Area are required to pay an NHS premium when processing their visa to entitle them to NHS care as they are not considered ordinarily resident until they have been awarded 'indefinite leave to remain'. Visitors who have European Health Insurance Cards (EHICs) do not pay out of pocket for care, but the NHS can claim the cost of treatment back from the statutory scheme in the patient's home country. Other visitors must pay the full cost of treatment provided and providers increasingly have mechanisms in place to invoice patients directly (Box 4). The cost to the NHS of treating all non-residents is estimated at GBP 1.8 (EUR 2.05) billion a year, of which GBP 400 (EUR 455) million can be recouped directly from patients or through the EHIC scheme (Bradshaw, Bloor & Doran, 2018).

Box 4. Access to services for irregular migrants is increasingly limited

Since 2017, new regulations require providers to bill for the cost of hospital care up front and patients who, for example, have overstayed their visas are being denied care. The underlying policy trend has been to restrict access to services for those deemed to be irregular migrants living in the United Kingdom. There have been some high-profile cases where people who migrated to the United Kingdom as British citizens and are long-term legal residents, but who do not have the right paperwork to prove it, have been denied treatment or billed inappropriately.

Figure 15. Unmet needs are reasonably low and access to care is equitable across income groups



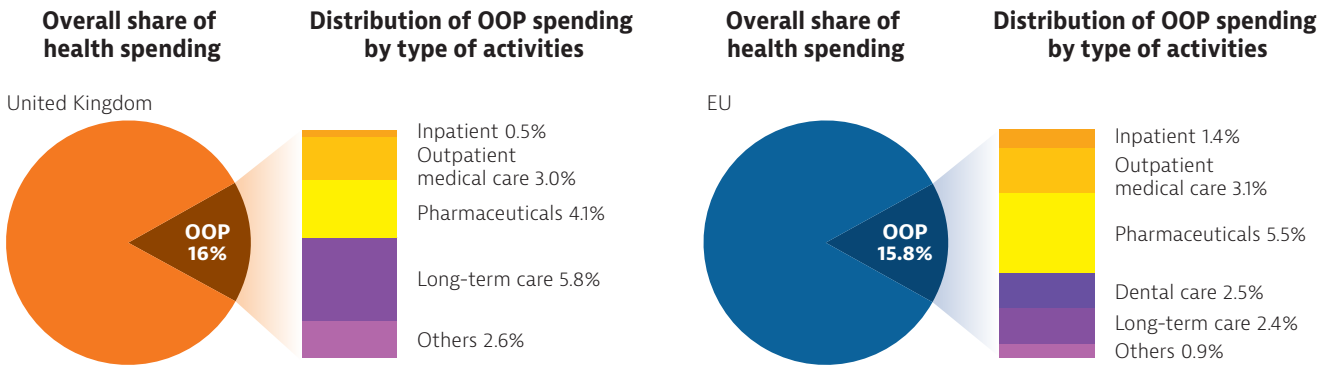
Note: Data refer to unmet needs for a medical examination or treatment due to costs, distance to travel or waiting times. Caution is required in comparing the data across countries as there are some variations in the survey instrument used.
Source: Eurostat Database, based on EU-SILC (data refer to 2017).

There is no explicit list of benefits and all necessary health services are covered

There is a legal requirement for the NHS to deliver necessary health services and a commitment to patients' rights. However, commissioning decisions are most often made at the local level. This means that the provision of certain services which are considered high-cost but non-essential (such as some fertility treatments) are more readily accessible in some parts of the United Kingdom than in others (Section 4). Dental care is included in the benefit package, but patients pay fixed charges for NHS dental care unless they are exempt (e.g. children aged under 18 years, pregnant and postpartum women, low-income households and other groups). Fixed charges also apply for prescribed outpatient medicines in England, although 90 % of those prescribed annually are dispensed free of charge. The largest gap in coverage is for long-term care, which dominates OOP spending (Figure 16). In England, spending on social care is means-tested and not automatically funded by the government. Personal social care is only considered a universal benefit in Scotland.

Spending on outpatient medical care is often private spending to access services that are formally available with the NHS, but which have long waiting lists, such as physiotherapy. Patients circumvent waiting lists to receive quicker treatment by paying out of pocket to access private services, but not all households can afford to do this.

Figure 16. Out-of-pocket expenditure is relatively low and dominated by spending on long-term care

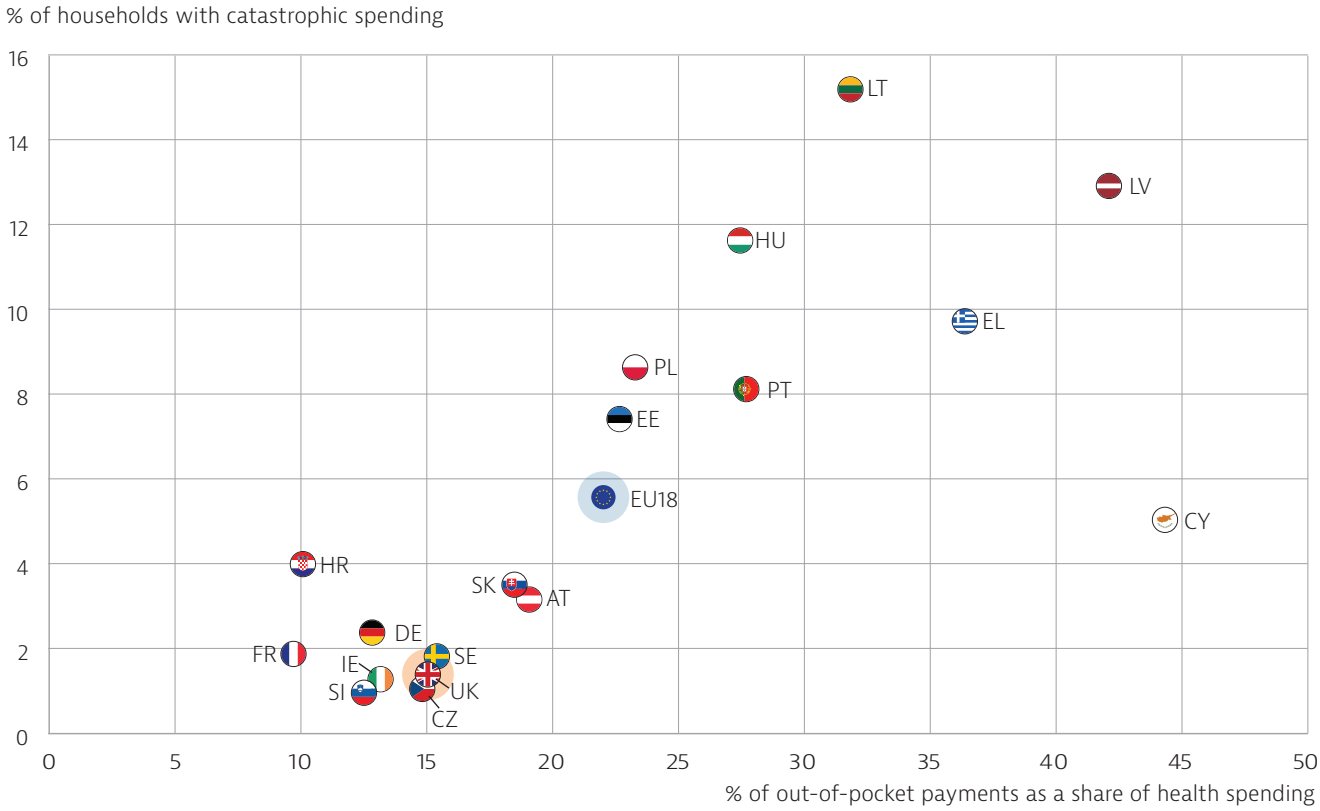


Source: OECD Health Statistics 2019 (data refer to 2017).

Despite good financial coverage and low levels of unmet needs, catastrophic household health spending is still an issue

OOP spending on inpatient care is low, and this is reflected in the low percentage of households facing catastrophic spending compared to the EU average (Figure 17).[5] Although very low by international standards, in 2014, 1.4 % of households in the United Kingdom – 1.1 million people – experienced catastrophic spending on health services; over two thirds of these households are in the poorest income quintile. Although spending on outpatient medicines does not lead to financial hardship in the general population, they are the most significant source of financial burden for households in the poorest quintile, despite income-based exemptions from prescription charges. This could reflect spending on over-the-counter medicines (Cooke O'Dowd, Kumpunen & Holder, 2018).

Figure 17. Catastrophic spending and out-of-pocket spending are both low



Source: WHO Regional Office for Europe 2018; OECD Health Statistics 2019.

Unmet needs for health care in the United Kingdom are generally due to waiting times rather than for financial reasons. Survey results show that of those aged over 16 reporting unmet needs for health care, 90 % reported waiting times as the main reason. Overall, self-reported unmet needs are also low relative to EU averages, but since 2008, unmet needs have been increasing. Income inequality in unmet needs is greater for dental care than for medical care. Formally, low-income households can access NHS dental care free of charge but finding a dentist willing and able to treat NHS patients can be challenging and private dentists are expensive.

Health workforce shortages are increasingly a factor in determining longer waiting times, reducing access to health care

Workforce shortages are such that recent extra investments in the health system aimed at reducing waiting times and meeting targets could be left unspent because there are insufficient staff to provide the extra services being commissioned (Section 4 and Section 5.3). This has pushed some providers to develop innovative solutions to cope such as changing the skill mix of the health care workforce to maximise operational efficiency (Box 5). As part of the new Long Term Plan for the NHS in England, digital solutions to improve productivity were also suggested (Box 6).

5: *Catastrophic expenditure is defined as household OOP spending exceeding 40 % of total household spending net of subsistence needs (i.e. food, housing and utilities).*

Box 5. Skill mix is changing to cope with shortages

Periodic shortages of professional staff have fostered skill mix innovation and change. A key feature has been to allow lower level staff to perform roles or tasks previously done by professionally qualified staff in order to fill gaps. In hospitals, a shortage of junior doctors triggered a growth in extended roles for registered nurses. Similarly, there has been an increase in the number of clinical support roles to perform more routine aspects of patient care to reduce the workload of registered nurses. Many such changes are locally organised by employers or have been issued by professional bodies. This has led to an increase in variety and thus challenges to ensure consistency and transferability of recognition for these competencies.

Box 6. Digital-first primary care in the Long Term Plan

As part of the Long Term Plan for the NHS in England, digital-first primary care will become a new option for every patient to enable fast and convenient access to primary care by 2021. It is hoped that similar remote consultations for outpatient services will reduce the number of in-person visits by up to one third (avoiding up to 30 million outpatient visits a year). There are still concerns about monitoring and regulating the quality of care provided using these digital tools (such as apps), as the doctors seeing patients could be based anywhere – practices can subcontract this service to an online provider. This has already happened as a pilot project in some areas of London for out-of-hours care. Data are collected through these apps to train algorithms that improve diagnostics and suggestions. It is therefore important that data storage and use by these private companies is adequately regulated to ensure that any big data generated serves the public good (Castle-Clarke & Imison, 2016). As new models of digital primary care services are developed, unintended issues they may present are being examined to support innovation, while safeguarding patients, general practice and the wider system.

5.3. Resilience[6]

The health system faces increasing demand with historical underfunding and recruitment deficits

Since 2008, the focus shifted onto achieving efficiency savings in the health system by increasing productivity. A funding gap has emerged between meeting the increasing health needs of the population and the limited resources that have been made available to achieve this. Some of the increasing demand is the result of natural demographic changes, such as the large cohort of 'baby boomers' ageing, but technological and medical advances and increased patient expectations have also played a role. Reduced access to long-term care has also added pressure on hospital services. Demographic changes are projected to increase spending on long-term care from 1.5 % of GDP in 2020 to 2.7 % in 2070, while public spending on health care would increase from 8.1 % GDP in 2020 to 9.4 % in 2070, which contributes to the identification of fiscal sustainability risks in the medium and in the long-term (European Commission, 2019b).

In 2017, analysis of projected demand and historical funding growth rates suggested that at least GBP 4 billion more for the NHS was needed in 2018/19 to stop patient care deteriorating. Spending was projected to fall by 0.3 % in 2018/19 without considerable investment. The government announced an increase in NHS spending (March 2018) and published the Long Term Plan for the NHS in England (January 2019). It sets out how an increase of GBP 33.9 billion by 2023 (a 3.4 % annual increase in real terms) should be spent. Most of the new spending is for clinical care, while new spending on capital, public health and staff training are not included. This injection of funds allowed hospitals to reduce or overcome their deficits, but access to the new funds was conditional on providers making further efficiency gains, and it is not clear how this can be achieved. Providers are still overspending because of increased demand – particularly in urgent and emergency care.

Reforms to commissioning and primary care seek to improve the resilience of the system by integrating care at the local level, but also by addressing health workforce shortages. However, commitments to expand the health workforce, by providing more undergraduate places and improving retention of existing staff, are probably insufficient to address the short-term shortages of staff (Section 4).

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

Workforce challenges now present the greatest risk to the sustainability of the health system

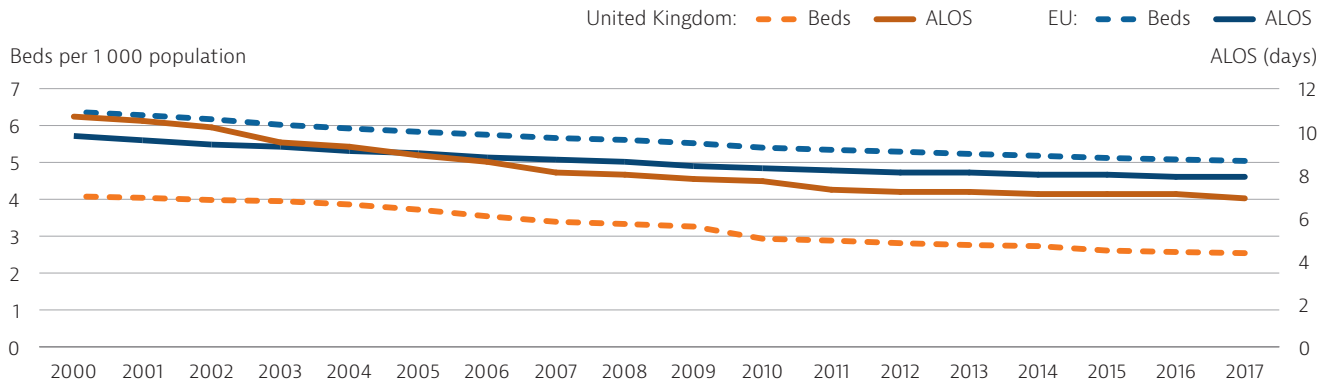
A key driver of the overspending against budgets is the increase in temporary staffing. Temporary staff are used to manage workload in the face of increased unplanned demands, high levels of vacancies, sickness/absence and staff turnover. Workforce shortages are due to the insufficient supply of domestic health workers as well as doctors and nurses leaving the workforce early. Migration policies which hamper international recruitment are also cause for concern. A drop in international recruitment has the potential to cause great pressure in social care due to substantial staffing shortages (Health Foundation, King's Fund & Nuffield Trust, 2018).

Indicators suggest the health system allocates resources efficiently

The aim has been to protect health spending at a given level but create savings to increase funds available by 'doing more with less'. Over the past decade, productivity in the health system has grown more than it has in the rest of the economy, and caution is now needed to ensure that any possible future efficiencies are achieved without sacrificing access to services or quality of care. Hospital indicators suggest that hospital care in the United Kingdom is very efficient, with low bed numbers and low ALOS compared to the EU average (Figure 18), but the small capacity limits the system's ability to absorb shocks.

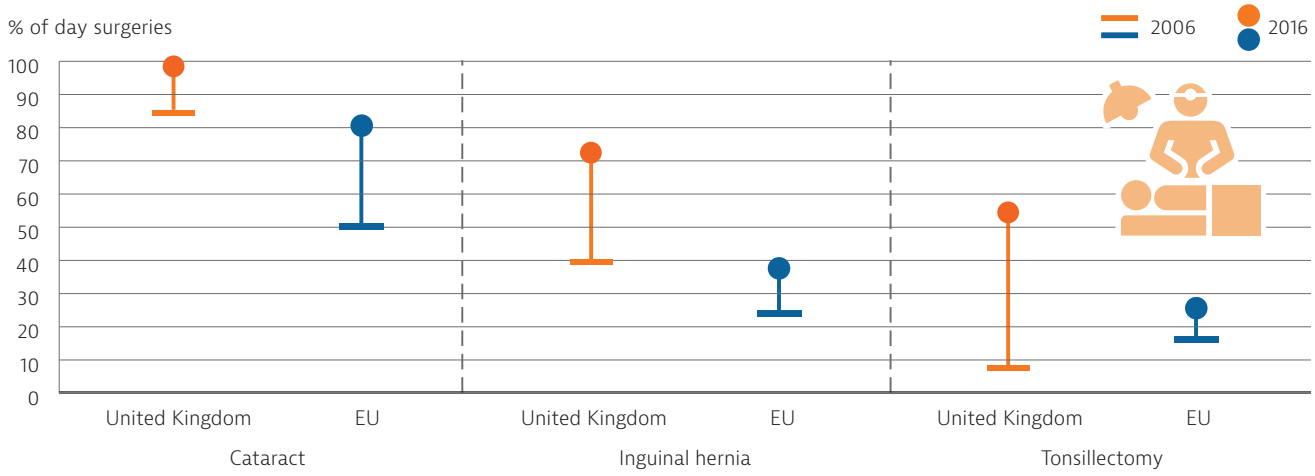
Estimated bed occupancy rates are among the highest in the EU at 84.3 %, second only to Ireland in 2016. This reflects the drive to move more care out of hospitals and into ambulatory care (Section 4). The growth in day surgery has also been rapid (Figure 19). However, as elsewhere, the system favours acute care over preventive care services and, despite strong advocacy for prevention, in England the public health budget has been severely cut in real terms since 2015 and more spending cuts are planned (Bradshaw, Bloor & Doran, 2018).

Figure 18. Both average length of stay and the number of hospital beds are substantially lower than the EU average



Source: Eurostat Database (data refer to 2017 or nearest year).

Figure 19. The share of surgical operations and procedures performed as day surgery has increased more rapidly than the EU average



Source: OECD Health Statistics 2018; Eurostat Database (data refer to 2006 and 2016, or nearest year).

Prescribing by active principle is widespread and leads to the high penetration of generic medicines

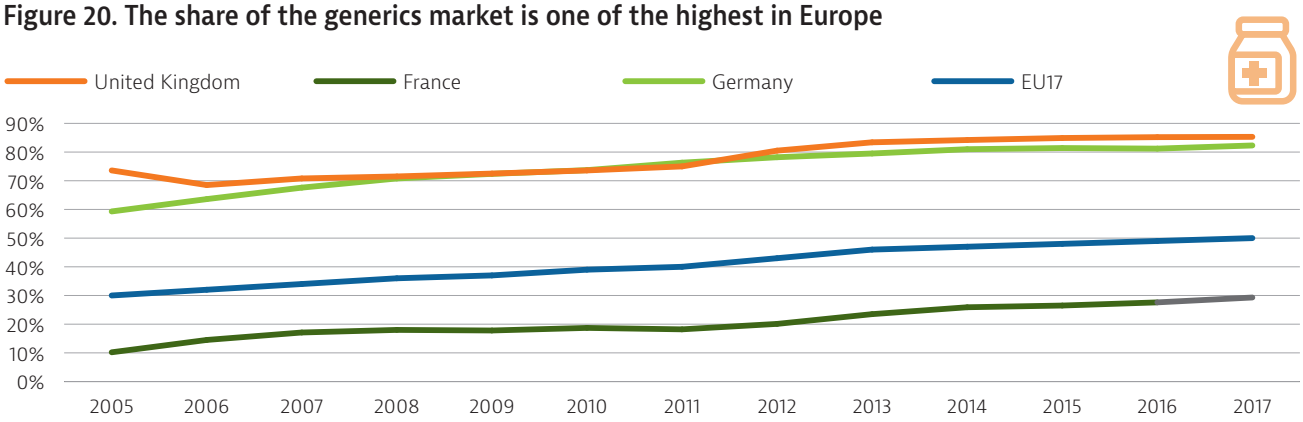
Prescribing by international non-proprietary name (INN) is an important driver of efficiency. The generics market share has been consistently growing since 2000 with the United Kingdom having the highest proportion by volume in the EU at 85.2 % for the publicly funded pharmaceutical market (Figure 20). By value, 37.6 % of the publicly funded pharmaceutical market is made up of generics, which is the second highest in the EU behind Austria. This is due, at least in part, to the implementation of prescribing guidelines for GPs (European Commission, 2019c). All four nations collate evidence of cost–effectiveness and the affordability of new treatments to inform policymaking and make the best use of available resources (Box 7).

Box 7. Embedding health technology assessment ensures efficient access to effective medicines

NICE is a specialist health technology assessment (HTA) agency for the NHS in England, Wales and Northern Ireland, and it works closely with Healthcare Improvement Scotland. These agencies assess the affordability of new treatments in addition to their cost–effectiveness (through a 'budget impact threshold'). Their recommendations are advisory but are generally considered in decisions about which services to commission. Both are partners in the EUnetHTA Network.

Their analysis is also used when negotiating down the high cost of innovative medicines, which are purchased centrally. From January 2019, a voluntary scheme to introduce a more streamlined and flexible approval process fast-tracks the best value innovative medicines. This will give patients access to new medicines up to six months earlier, as well as potentially saving the NHS nearly GBP 1 billion in the next year.

Figure 20. The share of the generics market is one of the highest in Europe



Note: Data refer to the share of generics in volume.
Source: OECD Health Statistics 2019.

Effective knowledge-generation provides evidence to guide policymaking

The health system has good capacity for generating evidence, as well as for monitoring and evaluating performance. The National Institute for Health Research is the largest funder of health and social care research in the UK and its role is to provide the evidence base to guide decision-making in the NHS. There is also enormous research capacity in higher education, as well as many non-government organisations which analyse developments in the health system. The evidence generated is regularly used by policymakers to assess and inform the implementation of new strategies and policies, but it does not always filter through to potential solutions. Policymakers are under pressure to achieve positive results from big changes over very tight time scales, which are often over-optimistic given the complexity of reforming health systems and how long change generally takes to bear fruit (Edwards, 2018).

6 Key findings

- The population of the United Kingdom enjoys high life expectancy, and the overall health status of the population is good. However, these average figures mask wide disparities in health by socioeconomic status. The gap in life expectancy at birth between the most affluent and most deprived is 9.3 years for men and 7.4 years for women. Improvements in life expectancy have slowed since 2011, mainly due to the slowdown in mortality improvements at older ages.

- Although the proportion of deaths attributed to behavioural risk factors is below average for the EU, over one third of all deaths in the United Kingdom can be attributed to tobacco smoking, dietary risks, alcohol consumption and low physical activity. The United Kingdom spends considerably more on preventive services than other countries, yet there has been little progress in reducing preventable mortality since 2011.

- The four nations of the United Kingdom all have tax-funded health systems that provide universal access to a comprehensive benefit package. Overall, there are low levels of unmet needs, low out-of-pocket spending and good financial protection. This is achieved with average levels of health spending.

- Waiting times are the main barrier to access and are used to ration care in the face of resource constraints and increasing demand. Waiting times are increasing, but are similar across socioeconomic groups. As in other countries, increasing demand in the United Kingdom is largely due to population ageing; while people are surviving previously untreatable conditions, they are living longer with chronic diseases and multimorbidity.

- The health system has been a site of policy innovation as decision makers have sought to meet increasing health demands with limited resources. Innovations in workforce policies have focused on greater team working and task shifting in both primary and specialist care. Increasingly, the use of remote consultations relying on modern communications technologies have become a reform target for both primary and hospital outpatient (ambulatory) care. While these innovations may improve accessibility and integration, it is not clear that they will automatically contain costs.

- In 2018, an injection of funding for the many English National Health Service providers in deficit relieved some of the financial pressure in the system as it cut deficits, but disbursements were conditional on providers achieving even more efficiency gains. Hospitals are already working at near full capacity with high occupancy rates and short lengths of stay. It is unlikely that additional efficiency gains alone can be sufficient to reduce health spending. The system is already efficient, and overspending is driven by the need to meet increasing demand for services. In social care, funding cuts have pushed many providers to the brink of financial insolvency.

- Beyond underfunding, shortages in the health workforce are a key challenge. The United Kingdom relies on migration to sustain its health system. International recruitment is hampered by restrictive migration policies, uncertainties around the United Kingdom's position vis-à-vis the EU and the rights of EU nationals living there. In turn, staffing shortages make the working environment more stressful and difficult.

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Country abbreviations

Austria	AT	Denmark	DK	Hungary	HU	Luxembourg	LU	Romania	RO
Belgium	BE	Estonia	EE	Iceland	IS	Malta	MT	Slovakia	SK
Bulgaria	BG	Finland	FI	Ireland	IE	Netherlands	NL	Slovenia	SI
Croatia	HR	France	FR	Italy	IT	Norway	NO	Spain	ES
Cyprus	CY	Germany	DE	Latvia	LV	Poland	PL	Sweden	SE
Czechia	CZ	Greece	EL	Lithuania	LT	Portugal	PT	United Kingdom	UK

European Commission

State of Health in the EU
Country Health Profile 2019

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

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

Each country profile provides a short synthesis of:

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

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

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