Office for National Statistics

Article

How does UK healthcare spending compare with other countries?

An analysis of UK healthcare spending relative to comparable countries, using data produced to the international definitions of the System of Health Accounts (SHA 2011).

Contact:
James Cooper
healthaccounts@ons.gov.uk
+44 (0)1633 456551

Release date:
29 August 2019

Next release:
To be announced

Table of contents

1 . Main points

- In 2017, the UK spent £2,989 per person on healthcare, which was around the median for members of the Organisation for Economic Co-operation and Development: OECD (£2,913 per person).
- However, of the G7 group of large, developed economies, UK healthcare spending per person was the second-lowest, with the highest spenders being France (£3,737), Germany (£4,432) and the United States (£7,736).
- As a percentage of GDP, UK healthcare spending fell from 9.8% in 2013 to 9.6% in 2017, while healthcare spending as a percentage of GDP rose for four of the remaining six G7 countries.
- The UK's publicly funded NHS-based health system contributes to the UK having one of the highest shares of publicly funded healthcare (79%) in the OECD.
- In 2017, the UK spent the equivalent of £560 per person on health-related long-term care, which was less than most other northern or western European countries, but a similar amount to France (£569) and Canada (£556).

2 . Things you need to know about this release

This article contains UK health spending data first published in the Healthcare expenditure, UK Health Accounts: 2017 release. Comparable data for other countries were retrieved from the Organisation for Economic Co-operation and Development's (OECD) online statistical database, OECD.stat in August 2019. Note that the OECD updates their online dataset twice per year to report the latest data submissions from countries. This means that data for some countries may be revised over the coming months and differ from figures used in this article.

Data in this article relate to the years 2013 to 2017, the period for which we have produced health accounts statistics compliant with current international definitions. The OECD has also published preliminary estimates for health spending in 2018. However, these are projections of health spending and so are not used in this article.

Data are produced to the internationally standardised definitions of the System of Health Accounts 2011: SHA 2011 framework. All EU member states and most other OECD countries measure healthcare expenditure from at least 2014 onwards using SHA 2011 definitions. For some countries, statistics to these definitions are produced for 2013 or earlier.

This article presents comparisons of spending in pounds sterling per person, where spending is adjusted using purchasing power parities. Purchasing power parities (PPPs) are the rates of currency conversion that equalise the purchasing power of different currencies by eliminating the differences in exchange rates between countries. In their simplest form, PPPs are simply price relatives that show the ratio of prices in national currencies used to directly compare a basket of goods and services between countries. The actual individual consumption (AIC) PPPs deflator was used to adjust for price variations, for consistency with OECD statistics, and is available at OECD.stat.

Note that data on OECD.stat are generally presented in US dollars, whereas our statistics have been referenced in pounds sterling. An example of how $PPPs have been converted into £PPPs is provided in the annex.

Note that the figures for spending per person in the UK in this article will differ slightly from those on OECD.stat due to small differences in the population data used by the OECD. This article uses the latest UK population data available on our website as of August 2019.

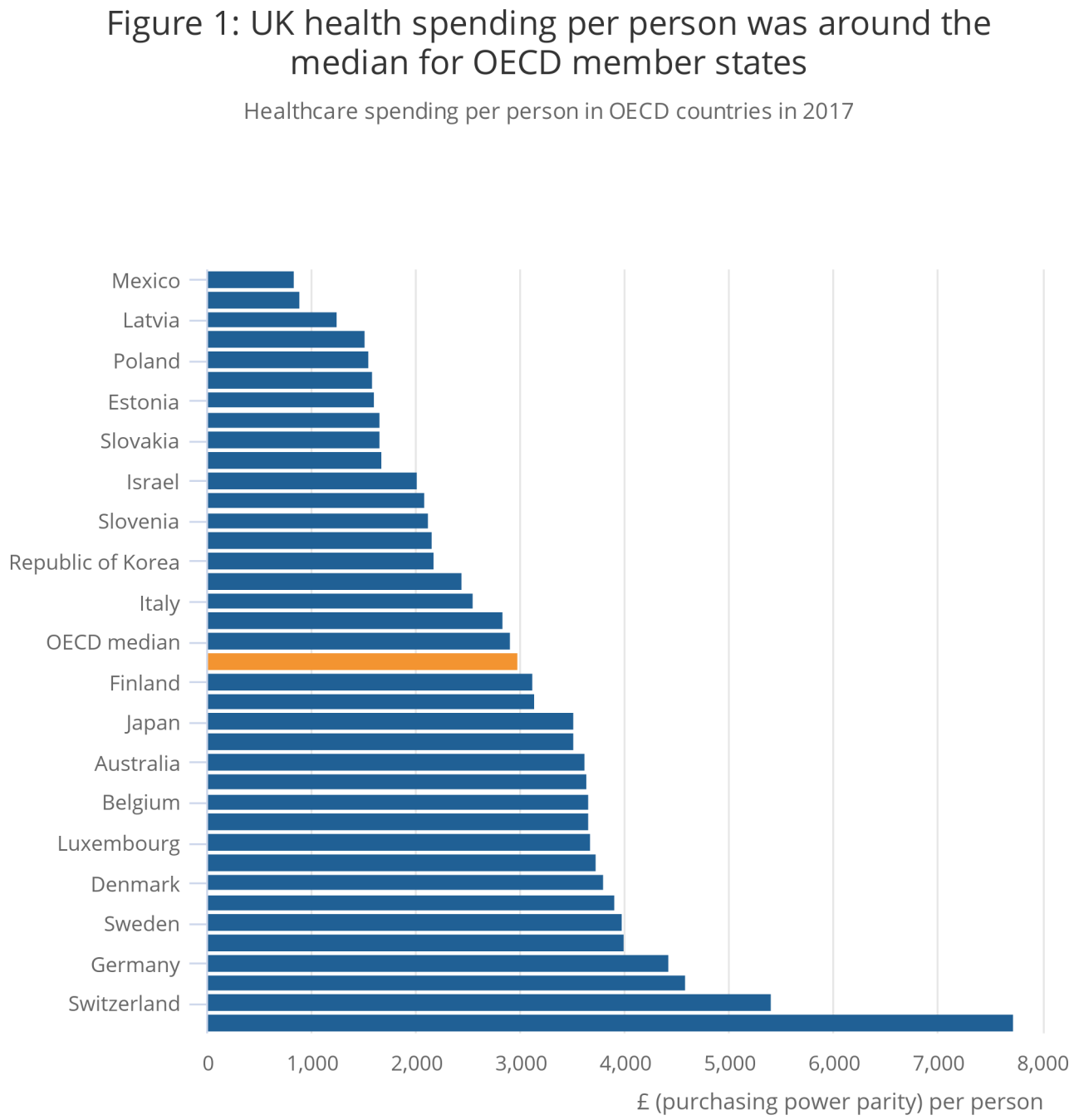
Further information on health systems in different countries are available in the Health Systems in Transition series produced by the European Observatory on Health Systems and Policies. Further international comparisons of health spending are available in OECD's Health at a Glance series of publications and the World Health Organization's Public Spending on Health.

3 . How much does the UK spend on healthcare compared with its international peers?

The UK spent £197 billion on healthcare in 2017, equating to £2,989 per person. This was slightly above the median expenditure for member states of the Organisation for Economic Co-operation and Development (OECD), which was £2,913 per person, but below the median for the EU15[1], which was £3,663 per person (Figure 1).

Figure 1: UK health spending per person was around the median for OECD member states

Healthcare spending per person in OECD countries in 2017



Source: Office for National Statistics – UK Health Accounts, Organisation for Economic Co-operation and Development – OECD.stat

Notes:

1. Figures are presented in current prices, unadjusted for inflation.
2. Expenditure is converted into pounds sterling and adjusted to account for purchasing power in different currencies.
3. Healthcare expenditure for Australia is an OECD estimate.
4. Rankings would differ slightly if using OECD projections of expenditure in 2018.

In the OECD, spending was lowest in Mexico at £837 per person and highest in the United States at £7,736 per person. The United States spend per person is considerably more than any other OECD country and more than two and a half times what is spent per person in the UK. While there are many reasons as to why countries spend different amounts on healthcare, the OECD report that countries spending the most tend to be high-income economies. Research suggests that the high spending in the United States, compared with other countries, is partly attributable to higher prices and partly because of the consumption of a greater volume of goods and services (PDF, 196KB).

Notes

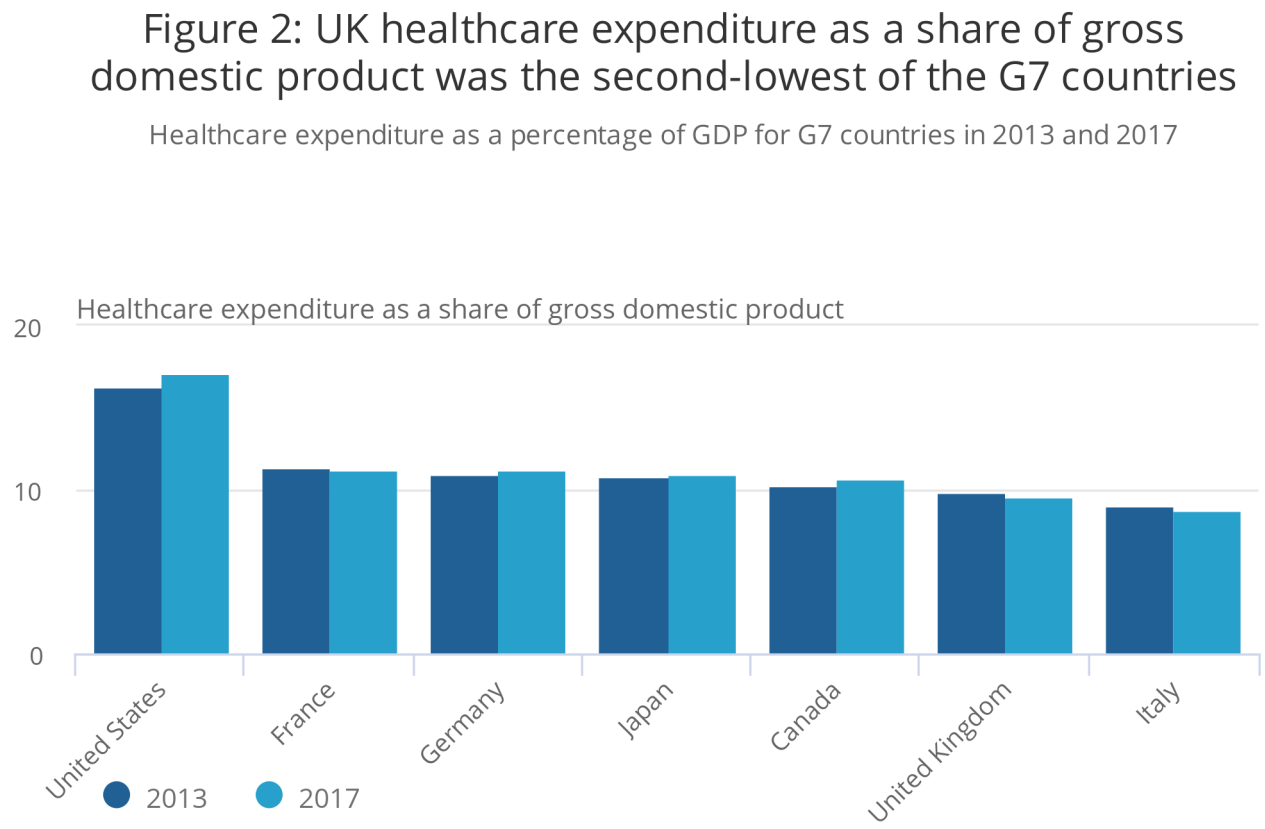
1. The EU15 is the group of countries that were members of the EU before 1 May 2004. This group consists of the UK, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and Sweden.

4 . How does health spending as a share of GDP in the UK compare with other G7 countries?

Spending can also be expressed as a percentage of gross domestic product (GDP). This represents the proportion of a country's economic output that relates to healthcare. For the UK, health spending equated to 9.6% of GDP, which was ranked as the second-lowest of the Group of Seven (G7), a group of the world's largest developed economies (Figure 2).

Figure 2: UK healthcare expenditure as a share of gross domestic product was the second-lowest of the G7 countries

Healthcare expenditure as a percentage of GDP for G7 countries in 2013 and 2017



Source: Office for National Statistics – UK Health Accounts, Organisation for Economic Co-operation and Development – OECD.stat

Notes:

1. OECD estimates of healthcare expenditure as a share of GDP are available for 2018 on the OECD.stat database.

Since 2013, the point at which internationally comparable data are first available for the UK, the percentage of GDP spent on healthcare has fallen slightly, from 9.8% in 2013 to 9.6% in 2017. Despite health spending increasing every year during this period, by an average annual rate of 3.5% in current price terms, the rate of growth in the wider economy was faster, at an average annual rate of 3.9% in current price terms. Italy and France were the only other G7 countries for which health spending as a percentage of GDP was lower in 2017 than in 2013.

The share of the economy attributed to healthcare increased slightly in Germany, Canada and Japan, between 2013 and 2017, bringing it closer to the share in France. The largest increase in healthcare spending as a percentage of GDP over the period was in the United States, where it rose from 16.3% to 17.1%. This was because of to health spending increasing at a faster rate than growth in the overall economy.

5 . How is healthcare funded?

There are a range of approaches to raising revenues to fund healthcare provision. These can be categorised into public and private sources of funding. These revenues are used to fund the different health financing schemes through which healthcare is accessed, such as government schemes, health insurance schemes or household spending.

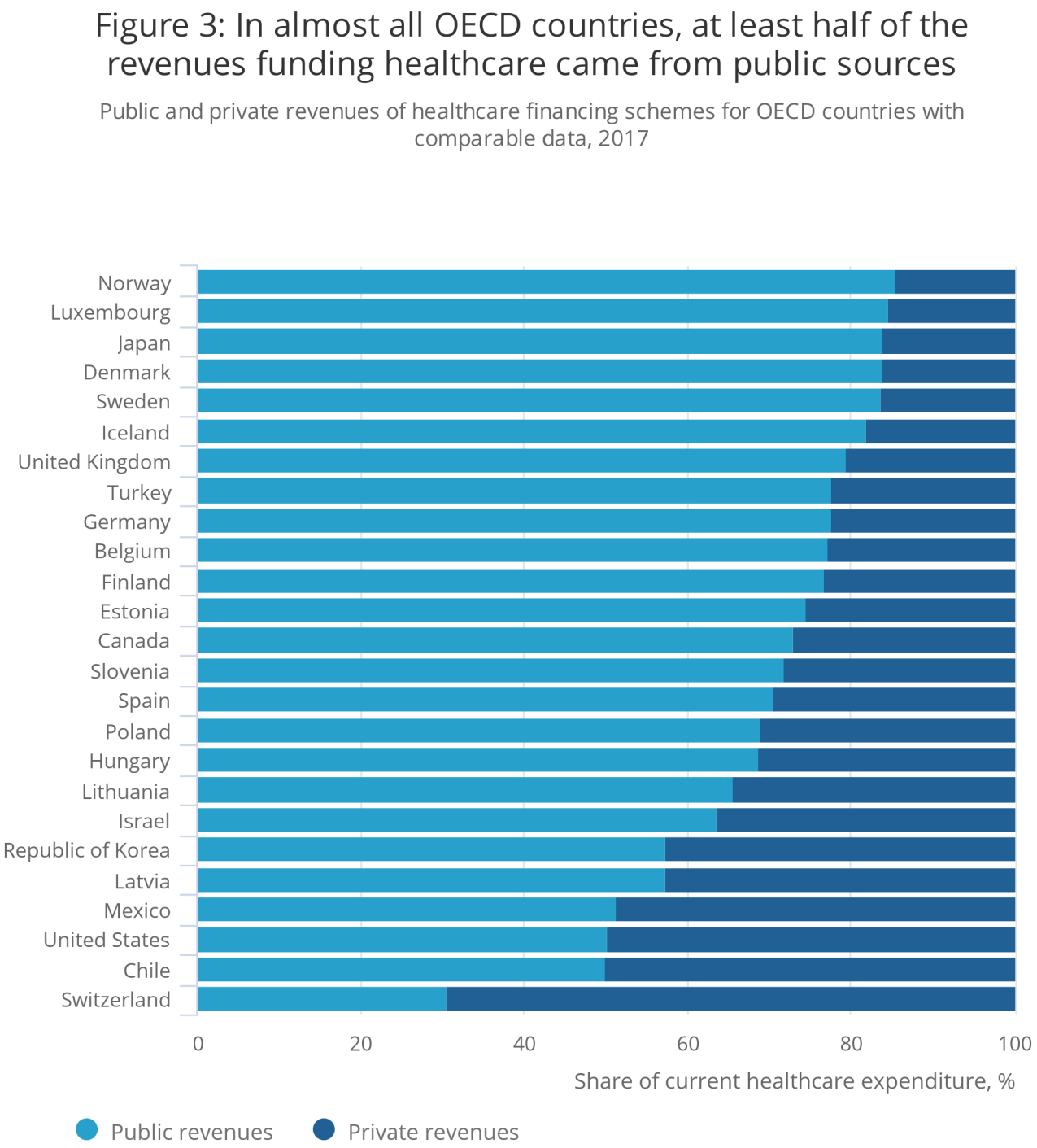
For the UK, around four-fifths (79%) of health expenditure is paid for through public revenues, mainly taxation. This is one of the highest shares of publicly funded healthcare out of the 25 Organisation for Economic Co-operation and Development (OECD) countries with comparable data. Several Nordic countries (Norway, Denmark, Sweden and Iceland) have larger shares of publicly funded healthcare and, like the UK, operate predominantly tax-funded healthcare systems (see European Observatory on Health Systems and Policies). Japan and Luxembourg are the only countries with a higher share of public revenues that operate primarily insurance-based health systems.

Public revenues cover the bulk of healthcare financing in most countries. Switzerland is the only OECD country, for which data are available, where the share of public healthcare funding is less than private funding. This is due to Switzerland operating a healthcare system where private health insurance is mandatory for citizens. Consequently, most healthcare funding comes from private insurance contributions.

Other countries that have a low share of public revenues funding healthcare include the United States, where there is a high share of privately-funded healthcare insurance, much of which is mandatory insurance under the Affordable Care Act (2014), as well as Chile and Mexico, where a large share of health expenditure is financed through out-of-pocket payments (Figure 3).

Figure 3: In almost all OECD countries, at least half of the revenues funding healthcare came from public sources

Public and private revenues of healthcare financing schemes for OECD countries with comparable data, 2017



Source: Office for National Statistics – UK Health Accounts, Organisation for Economic Co-operation and Development – OECD.stat

Notes:

1. Chart only contains OECD countries reporting the Revenues of Financing Schemes (FS) dimension of healthcare spending.

2. Public revenues equate to domestic transfers from government (FS.1), transfers from abroad distributed by government (FS.2) and social health insurance contributions (FS.3).

3. Private revenues equate to compulsory and voluntary private health insurance (FS.4 and FS.5), other domestic revenues (FS.6) and direct transfers from abroad (FS.7).

4. 2016 data are used for Japan.

Public funding for healthcare in the UK is almost exclusively spent on government-financed healthcare, such as NHS services or certain elements of local authority-funded social care. However, a small amount of public revenues also funds healthcare services accessed through charities. This represents less than 1% of overall healthcare funding.

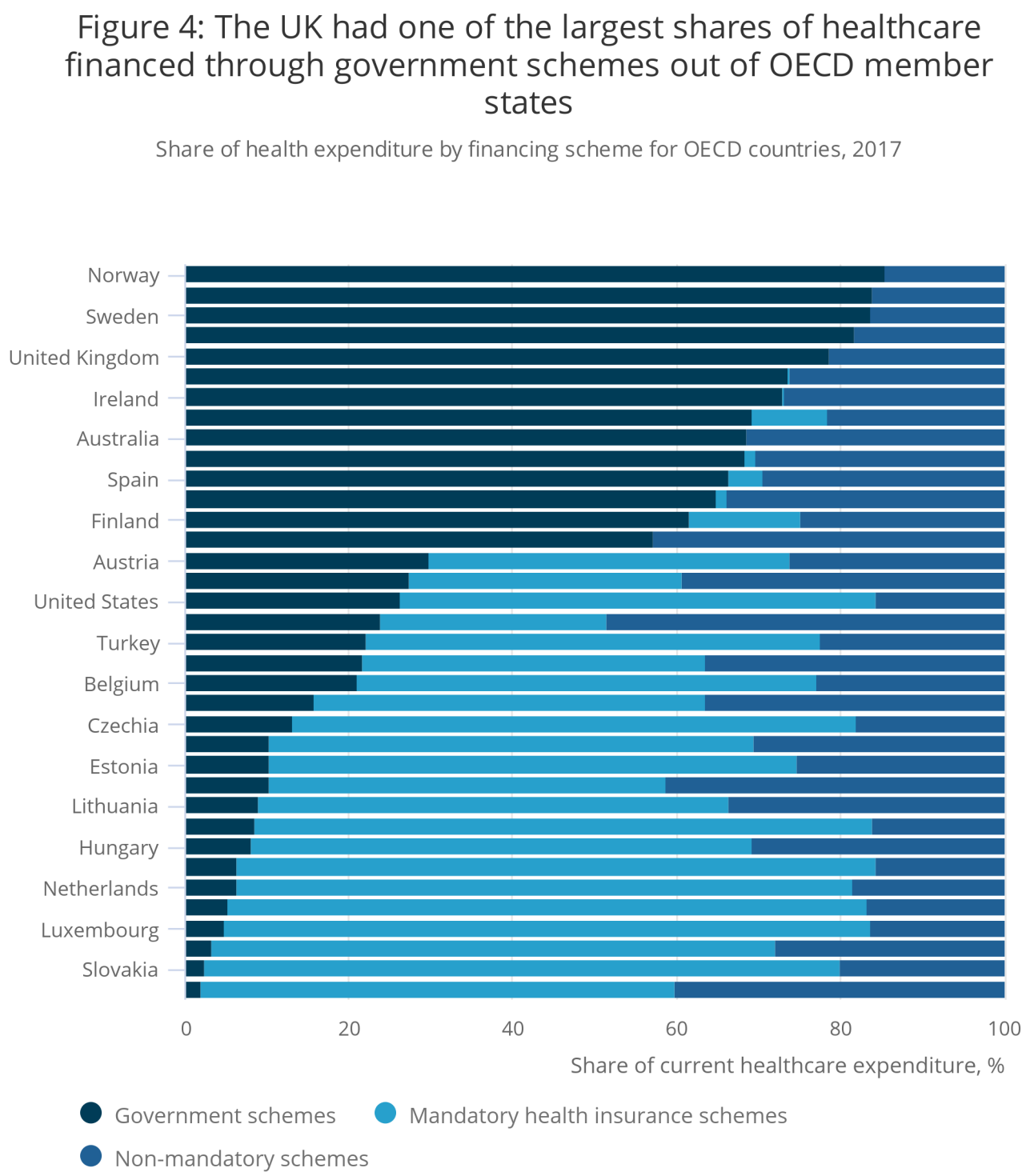
6 . What type of healthcare systems exist outside the UK?

In all Organisation for Economic Co-operation and Development (OECD) countries, most healthcare is accessed through mandatory financing schemes, which take a variety of forms. Some countries, like the UK, have NHS-based healthcare systems, where most services are financed and accessed through government schemes. Others have insurance-based systems, where many healthcare services are provided through either government-run social health insurance schemes, or through the mandatory uptake of private health insurance. In many instances, countries operate a mixture of government and mandatory insurance-based schemes.

The UK has one of the largest shares of healthcare spending financed through government schemes (79%) (Figure 4). Almost all funding for government schemes in the UK derives from public funds, meaning this share almost equates to the share of public revenues financing healthcare, as discussed in from Section 5. However, public revenues (Figure 3) also include a small amount of government grants funding healthcare accessed through charities.

Figure 4: The UK had one of the largest shares of healthcare financed through government schemes out of OECD member states

Share of health expenditure by financing scheme for OECD countries, 2017



Source: Office for National Statistics – UK Health Accounts, Organisation for Economic Co-operation and Development – OECD.stat

Notes:

1. Mandatory health insurance covers both social health insurance schemes and mandatory private health insurance.

2. Non-mandatory schemes cover healthcare financed through voluntary health insurance schemes (HF.2.1), non-profit institutions serving households, such as charities (HF.2.2), enterprise-financing (HF.2.3) and out-of-pocket payments (HF.3).

3. In some countries, non-mandatory schemes may also include a small share of healthcare financed from abroad (HF.4).

4. 2016 data are used for Australia and Japan.

Government schemes also account for a high share of overall spending in several Nordic countries including Norway, Denmark, Sweden and Iceland, where healthcare services are either managed centrally or at a more local level. Countries such as France, Germany and Japan have healthcare systems based on social health insurance schemes, in which healthcare is operated through one or more insurance funds. Switzerland and the Netherlands are examples of countries where some health services are accessed through the mandatory uptake of private health insurance.

7 . How much is spent on healthcare governance and financing?

In 2017, the UK spent the equivalent of £53 per person on healthcare governance and the costs associated with financing healthcare. This was below the median for Organisation for Economic Co-operation and Development (OECD) countries with comparable data (Figure 5).

For the UK, this spending covers central departmental governance, the regulatory activities of bodies such as the Care Quality Commission, as well as the operating of voluntary health insurance schemes, which include policy management, administrative costs, such as marketing, and profits earned. Governance and financing costs shown in Figure 5 exclude overhead expenses associated with the administration or functioning of healthcare providers, for example hospital management or payroll and procurement administration, which are instead included in other healthcare expenditure categories.

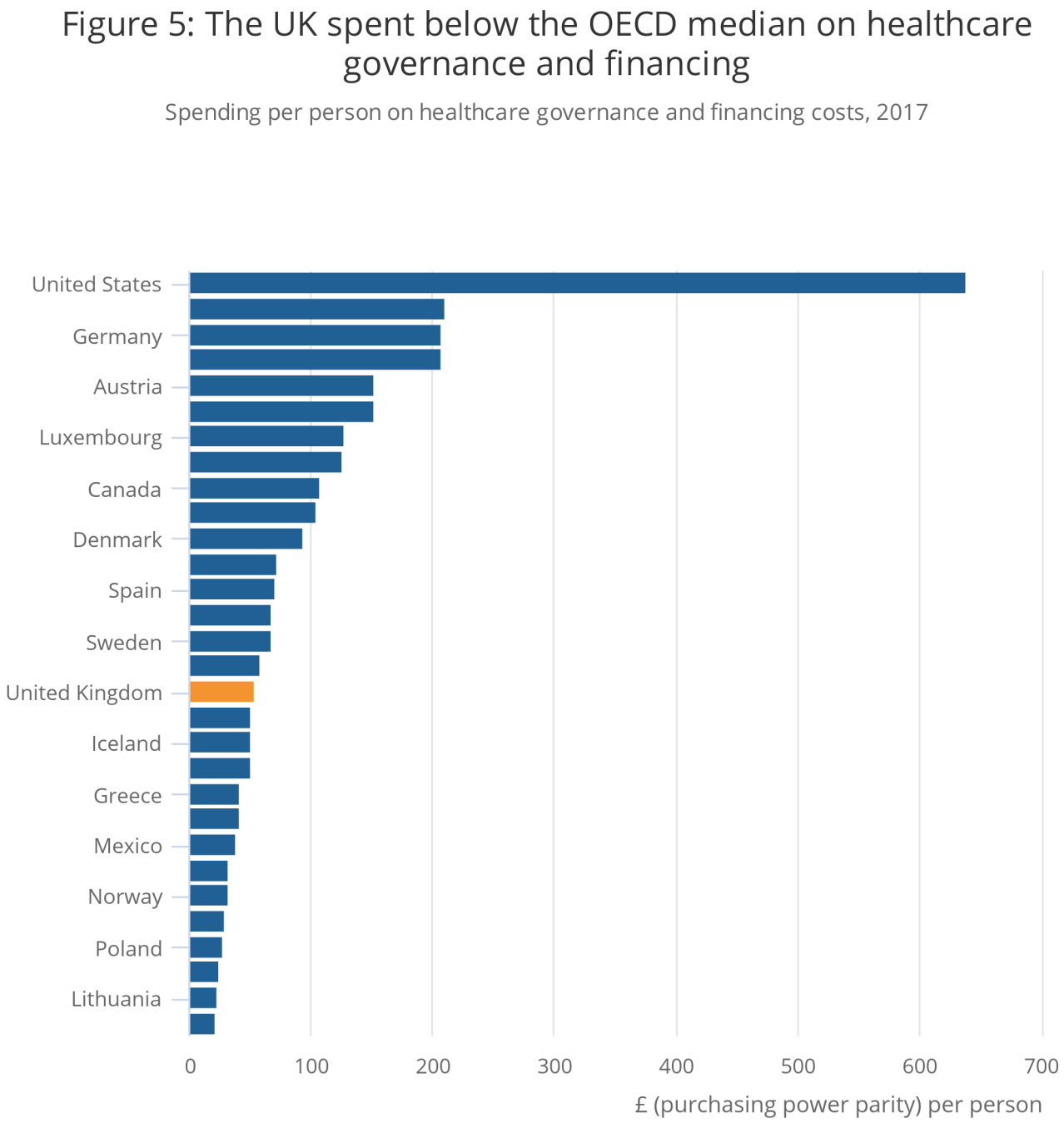
The relatively low UK spending on governance and financing costs is partly down to the type of health system the UK operates. The NHS and other tax-based healthcare systems do not tend to have the financing costs typically incurred in health insurance schemes, such as revenues collection (the equivalent of which would be managed centrally in tax-based systems), risk-management, and profits in the case of mandatory private health insurance schemes.

The OECD reports that in countries with predominantly insurance-based health systems, these financing costs are expected to be much higher, which helps to explain why governance and financing costs are greater in high-income countries with insurance-based systems, such as France and Germany. Spending on governance and financing is highest in the United States, the equivalent of £639 per person. This is three times as much as the second-highest spender and 12 times the amount spent in the UK.

The importance of private health insurance in the United States is an important factor in explaining the high level of spending, in particular the associated purchasing, contracting and provider negotiations. The OECD cites other possible reasons as including the "litigious environment" in the United States and "scrutiny from regulatory bodies and efforts devoted to utilisation management and quality improvement" (Tackling wasteful spending on health, 2017).

Figure 5: The UK spent below the OECD median on healthcare governance and financing

Spending per person on healthcare governance and financing costs, 2017



Source: Office for National Statistics – UK Health Accounts, Organisation for Economic Co-operation and Development – OECD.stat

Notes:

1. Figures are presented in current prices, unadjusted for inflation.

2. Spending is converted into pounds sterling and adjusted to account for purchasing power in different countries.

3. Governance and financing is otherwise known as "Governance and health system and financing administration" (HC.7).

4. Chart excludes countries without 2017 governance and financing data.

The overhead expenses associated with the administration or functioning of healthcare providers, such as hospital management or payroll and procurement administration, are included in different healthcare expenditure categories, such as curative or rehabilitative care, both in the UK and other countries. Overhead costs excluded from the healthcare governance and financing costs measure would, for instance, include the £4.3 billion of spending estimated by the Carter Review (2016) (PDF, 5.32MB) on staff employed in corporate and administration roles in NHS acute trusts in England.

Given the £4.3 billion figure from the Carter Review does not include non-staff costs, the costs of other sorts of NHS provider, or costs for the whole UK, total expenditure on overhead and administrative costs incurred in the UK healthcare system is likely to greatly exceed expenditure on healthcare governance and financing displayed in Figure 5.

8 . What about healthcare spending that relates to long-term care?

Of the £197 billion the UK spent on healthcare in 2017, £37 billion was spent on health-related long-term care. This equated to £560 per person and concerns the medical or personal care services for people with chronic health conditions (including old-age and disability-related conditions) where an improvement in health is not expected.

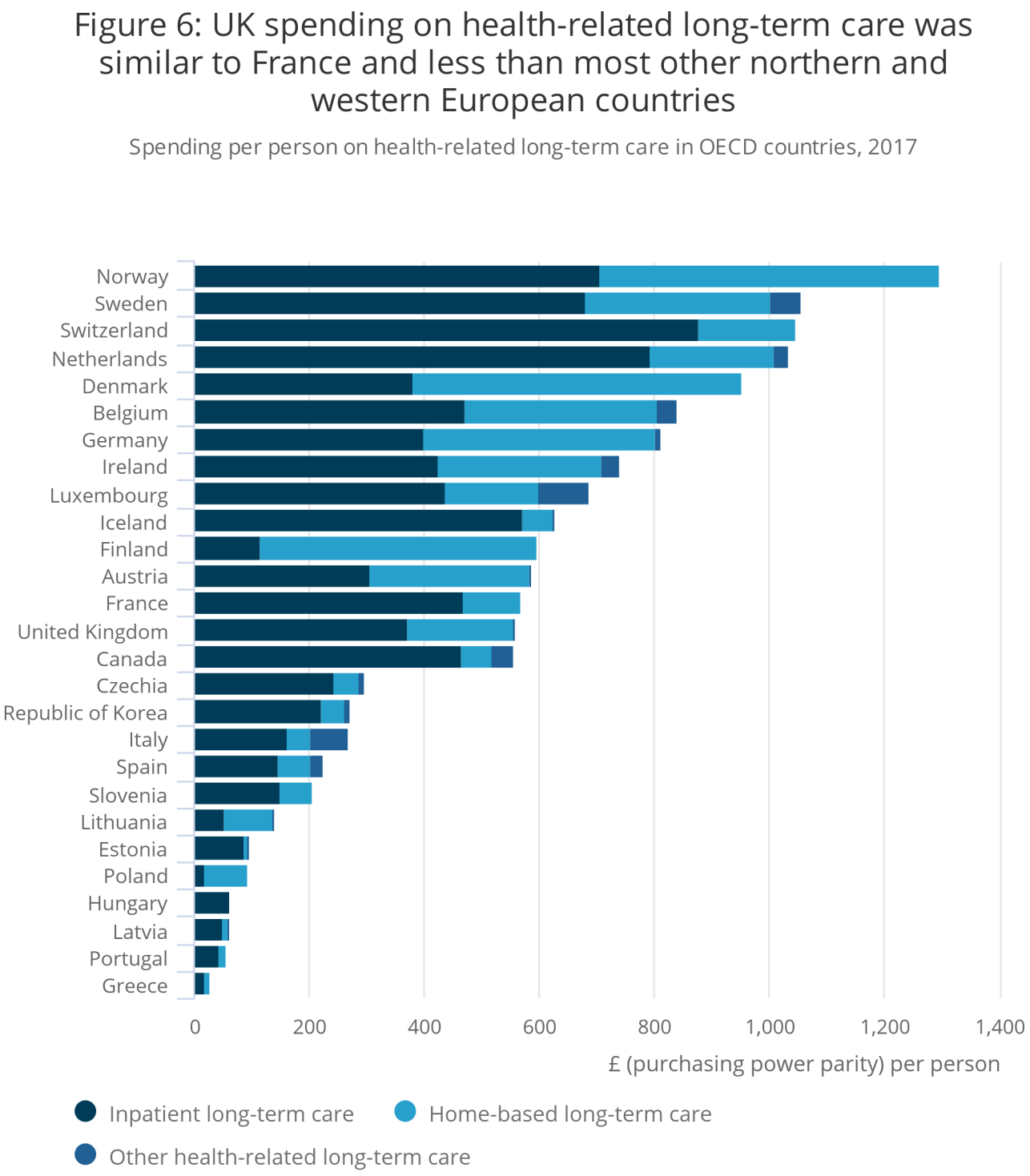
For the UK this includes residential and nursing care or home-based care financed privately or through local authorities, care costs reimbursed through the Carer's Allowance, as well as palliative care and other long-term care delivered through the NHS.

This figure does not include "social" long-term care spending, which relates to services where the primary concern is to provide assistive-based services that help people with long-term care conditions to live independently, for example, meals-on-wheels, supported living and day care services. For more information on this and total long-term care spending in the UK, see: Healthcare expenditure, UK Health Accounts: 2017.

The UK's spending on health-related long-term care was similar to that of France (£569 per person) and Canada (£556 per person) (Figure 6). Northern European countries such as Norway, the Netherlands and Sweden tended to spend the most, while many eastern, central and southern European countries, in which informal care has a greater role, tended to spend less. However, some difficulties in these comparisons arise from differing national definitions as to what constitutes long-term care and problems separating long-term care services that predominantly concern personal care.

Figure 6: UK spending on health-related long-term care was similar to France and less than most other northern and western European countries

Spending per person on health-related long-term care in OECD countries, 2017



Source: Office for National Statistics – UK Health Accounts, Organisation for Economic Co-operation and Development – OECD.stat

Notes:

1. Figures are given in current prices, unadjusted for inflation.

2. Spending is converted into pounds sterling and adjusted to account for purchasing power in different countries.

3. Chart only includes countries that report both inpatient (HC.3.1) and home-based (HC.3.4) long-term care services.

4. Other health-related long-term care covers day (HC.3.2) and outpatient (HC.3.3) long-term care services.

5. This chart only refers to long-term care services considered part of healthcare expenditure. It does not include primarily assistive-based services, which are considered non-health-related long-term care.

In the UK, spending on inpatient long-term care represented two-thirds (66%) of overall health-related long-term care spending, with the remaining expenditure mostly attributed to home-based care. Inpatient long-term care spending tends to be higher than home-based care in most European countries. However, some countries, such as Finland and Denmark, buck this trend.

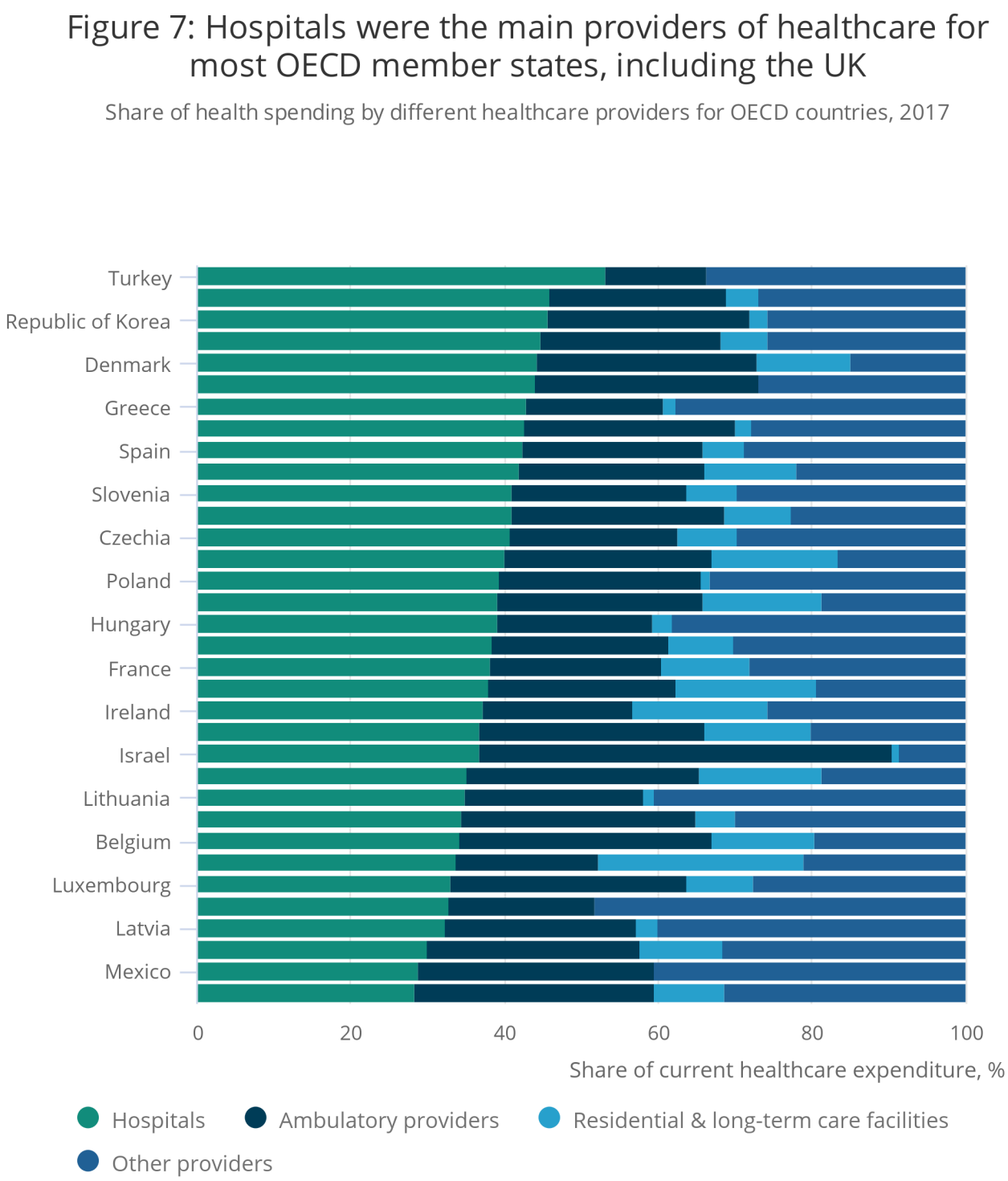
9 . Differences in where healthcare is provided

There are also differences in where healthcare services are typically provided in different countries. In the UK, hospitals, which mainly provide curative and rehabilitative care, make up around two-fifths (42%) of overall spending. This is comparable to the proportion in Spain, Portugal and Slovenia (Figure 7).

UK spending on hospitals includes outpatient care that in some countries would instead be provided through visits to specialists in ambulatory settings (for example, specialist clinics).

Figure 7: Hospitals were the main providers of healthcare for most OECD member states, including the UK

Share of health spending by different healthcare providers for OECD countries, 2017



Source: Office for National Statistics – UK Health Accounts, Organisation for Economic Co-operation and Development – OECD.stat

Notes:

1. Expenditure on residential and nursing care facilities is missing for Australia, Mexico and Slovakia.
2. Expenditure shares for Australia are based on 2016 data, and for Israel are based on 2015 data.
3. No data on healthcare providers are available for Chile or New Zealand.

Hospitals account for the largest share of health expenditure for any provider group in almost all Organisation for Economic Co-operation and Development (OECD) countries with available data. However, in Germany, Mexico and Israel, more money is spent on healthcare delivered in ambulatory settings, which includes walk-in settings such as GP surgeries, dental practices, community-based services and specialist clinics, as well as the services of home care providers.

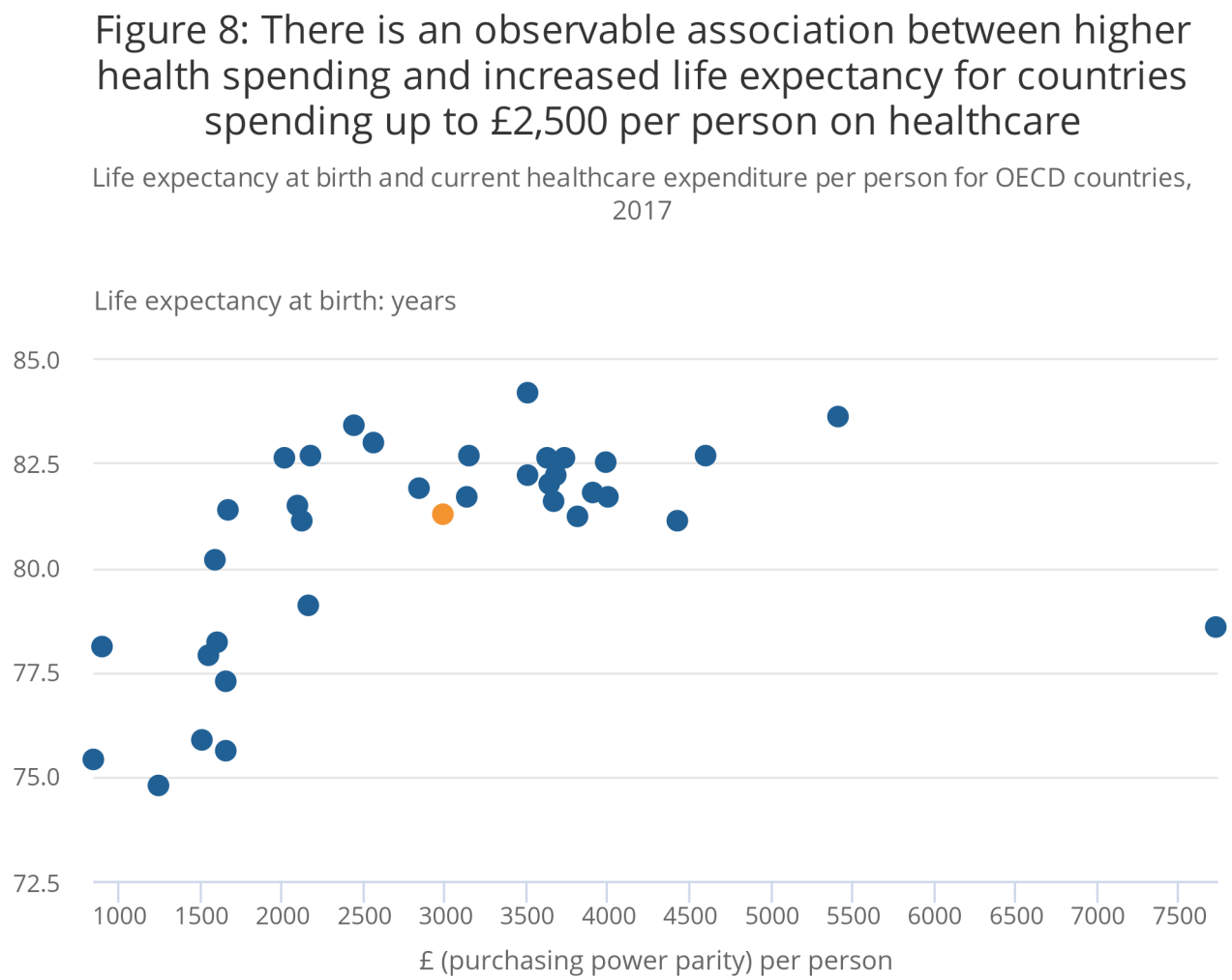
10 . Healthcare spending compared with health outcomes

The circumstances that influence health outcomes, such as improvements in mortality, are many and the picture is complex. The complexity and difficulty of isolating a specific set of factors has recently been reported on by Public Health England (PHE) in their analyses of what might be driving the recent changes in mortality in England and Wales. One of the potential factors PHE proposed was the influence healthcare spending had on recent mortality changes.

This section looks at the international pattern of associations between health outcomes and healthcare funding. Taking an international perspective, average life expectancy tends to be longer in countries that spend more on healthcare, with the notable exception being the United States. However, while the association between more expenditure on healthcare and longer life expectancy is observable for countries that spent less than £2,500 per person on healthcare, it is harder to discern an association between these factors for higher-spending countries (Figure 8).

Figure 8: There is an observable association between higher health spending and increased life expectancy for countries spending up to £2,500 per person on healthcare

Life expectancy at birth and current healthcare expenditure per person for OECD countries, 2017



Source: Office for National Statistics – UK Health Accounts, Organisation for Economic Co-operation and Development – OECD.stat

Notes:

1. Healthcare expenditure for Australia is an OECD estimate.

Research by the Organisation for Economic Co-operation and Development (OECD) shows that, while higher healthcare spending is an important factor associated with higher life-expectancy in member state countries, other factors are also relevant.

The analysis looks at the association between life expectancy and lifestyle factors (such as smoking, drinking and healthy eating), socioeconomic factors (such as income, education and unemployment) and environmental factors, like air quality. The findings show the largest gains in life expectancy appeared to be associated with health spending and higher educational attainment, where better education encourages healthier lifestyles, with individuals more informed about potential health risks, such as the effects of smoking, and income.

However, gains in life expectancy are not limited to these factors, with many other personal health-risk factors likely to be related. It is also important to consider that most OECD countries are developed high-income economies and life expectancy gains in lower-income countries can be driven by other factors, such as inequalities.

11 . Annex 1 – Calculating pounds sterling purchasing power parities

Where expenditure is expressed in per head terms in this article, data are presented in pounds sterling and adjusted to equalise the purchasing power of different currencies. Purchasing power parities (PPPs) act as both a currency converter and a spatial deflator, and can be used to express expenditure in a single common currency.

The Organisation for Economic Co-operation and Development (OECD) collect prices for a common basket of comparable goods and services from member states, which inform the price relatives of different sectors of the economy across countries. The OECD publish PPPs on their international database OECD.stat and where data are converted into a common currency they are referenced in US dollars. In this article, we have re-referenced PPPs into the UK's currency – pounds sterling.

This was done by taking expenditure in the national currency, unadjusted for purchasing power and also in US dollars (PPPs). Dividing expenditure in a national currency by the expenditure expressed in US dollars (PPPs) gives the PPPs used to convert health expenditure into US dollars, which can be re-referenced into pounds sterling. Then by dividing expenditure in national currencies by the rebased PPPs converter, health spending in pounds PPPs can be calculated.

$$\text{PPP conversion rate of national currency to US dollar} = \frac{(\text{Expenditure in national currency})}{(\text{Expenditure in US dollars (PPPs)})}$$

$$\text{PPP conversion rate of national currency UK pounds sterling} = \frac{(\text{PPP conversion rate of national currency to US}}{(\text{PPP conversion rate of UK pounds sterling to U}}$$

$$\text{Expenditure expressed in pounds sterling (PPPs)} = \frac{(\text{Expenditure in national currency})}{(\text{PPP conversion rate of national currency to UK pounds sterl}}$$