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# International comparisons

by Ben Gershlick

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**BRIEFING:**

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The UK spends 9.3% of GDP on health, compared to the EU-15 average of 9.9%

## Key points

- 1. Spending on health in the UK (public and private) accounted for 9.3% of GDP in 2012.\*** This is lower than the EU-15 average of 9.9%, but in line with the OECD average of 9.3%.\*\* Only five EU-15 countries spent a lower share of their GDP on health in 2012 (Greece, Italy, Finland, Ireland and Luxembourg), but the UK's relative position has risen since 2000, when it spent less than all but one (Ireland) of the other 14 countries (see figure 1).
- 2. A high percentage of UK health spending is publicly funded compared to other countries.** Publicly funded spending accounts for 84.0% of UK health spending, as of 2012. This is the third highest level in the EU-15 (average: 76.5%) and the joint fifth highest in the OECD (average: 72.0%). In 2012, UK public spending on health was slightly higher than the EU-15 average of 7.6% of GDP (see figure 2).
- 3. Between 2008 and 2012 the average annual change in spending per person was lower for the UK than most EU-15 countries.** Between 2008 and 2012 the average annual change in UK health spending per person was marginally positive (0.03%). Eight EU-15 countries showed higher growth in per person spending, but the overall average change for the EU-15 remained negative, at -0.3% (see figure 3). This is largely as a result of some EU-15 countries having made sharp spending cuts (in particular Greece, Ireland and Portugal).
- 4. The rising prevalence of long-term conditions (LTCs) is a major driver of increased health care costs.** The average spend on LTCs for OECD countries rose from 0.7% of GDP in 1990 to 1.5% in 2012 (see figure 4). Data are not easily comparable, but suggest that UK spending on LTCs is similar to the OECD average.
- 5. The UK spends less than other OECD countries on pharmaceuticals and out-of-pocket payments.†** On average, UK patients also spend less time in hospital and generally use fewer resources (measured in terms of staff and beds) (see table 1).

\* This and other estimates will differ slightly from the proportion of GDP calculated and cited in the historical section of this briefing. This is due to several factors: a different definition of public health spending, a slightly different time period, being based on the calendar year (rather than financial year) and using different GDP estimates.

\*\* 'EU-15' refers to the first 15 countries to join the European Union: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom. OECD countries are those that have joined the Organisation for Economic Co-operation and Development, which incorporates 34 member countries from around the world.

† Out-of-pocket = patients making direct, personal payments on health care, for example on medicine or doctor's appointments.

UK spends less on health as a percentage of GDP than nine other EU-15 countries

### Total health spending

The main source of data for international comparisons of health spending is the Organisation for Economic Co-operation and Development (OECD). The OECD compares total health spending, both public and private, calculated on a calendar year basis. The latest available data for the UK are primarily for 2012.

The UK's total spending on health as a percentage of GDP is 9.3%. This is lower than the EU-15 average of 9.9% and in line with the OECD average of 9.3%. The UK spends less on health as a percentage of GDP than nine other EU-15 countries – a relative increase since 2000, when the UK spent less than all but one (Ireland) of the other 14 EU-15 countries (see figure 1).<sup>1</sup> Only the Netherlands, Belgium and Ireland have had a higher percentage point increase in their spending on health (as a percentage of GDP) since 2000.

Figure 1: Total health spending as a percentage of GDP for the EU-15 countries, 2000 and 2012



Source: Organisation for Economic Co-operation and Development, *OECD Health Statistics 2014 - Frequently Requested Data*.

\* Data for Portugal are current rather than total spending. Data for Belgium exclude investments.

In 2012, public spending on health in the UK was equivalent to 7.8% of GDP

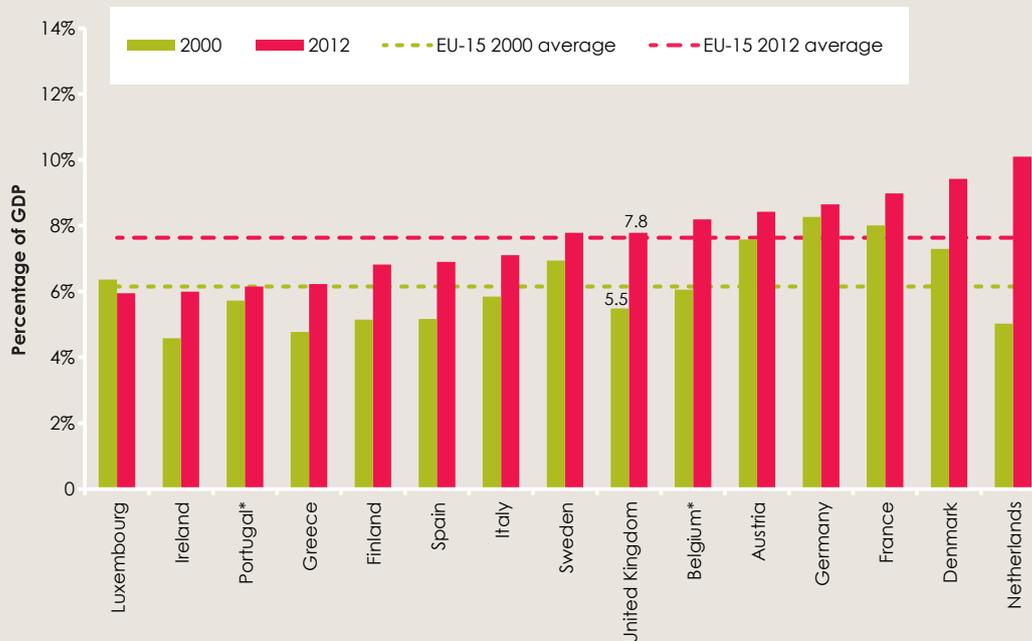
### Public spending on health

A high percentage of UK spending on health is publicly funded (84%). This is the third highest proportion in the EU-15 (behind Denmark and the Netherlands) and the joint fifth highest among the 34 OECD countries (see figure 2).<sup>1</sup>

In 2012, the UK's public spending on health of 7.8% of GDP was higher than, but similar to, the EU-15 average of 7.6%. This is in contrast to in 2000, when the UK's public spending on health was lower than the EU-15 average of 6.2%. This partly represents a 'catching up' in total spending on health. This is largely through increased public spending on health, which has grown from 79.1% to 84.0% of total health spending.

Public spending on health care consists of all government spending on health, including money spent in prisons and defence services. Research and development, as well as health care education and training, are not included.<sup>2</sup>

Figure 2: Public spending on health as a percentage of GDP for the EU-15 countries, 2000 and 2012



Source: Author's calculations using data from: Organisation for Economic Co-operation and Development, *OECD Health Statistics 2014 - Frequently Requested Data*.

\* Data for Portugal are current rather than total spending. Data for Belgium exclude investments.

The UK's average annual percentage change in public spending on health per head is

0.8%

Figure 3 shows how total health spending per head has changed since 2008, as EU countries have borne the impact of the economic downturn. From 2008 to 2012 the average annual change in health spending per head in the UK has been marginally positive (in real terms, using national currency units at 2005 GDP price level). However, by the same measure, growth in spending has been higher in most (eight) EU-15 countries.<sup>1</sup> The UK's average annual percentage change in public spending on health per head is more positive (at 0.8%). This is comparable to Denmark's 0.8%, although the UK's relative position in the EU-15 does not change.

Figure 3: Average annual percentage change in health spending per head in real terms, 2008–2012



Source: Organisation for Economic Co-operation and Development, *OECD Health Statistics 2014 - Frequently Requested Data...*

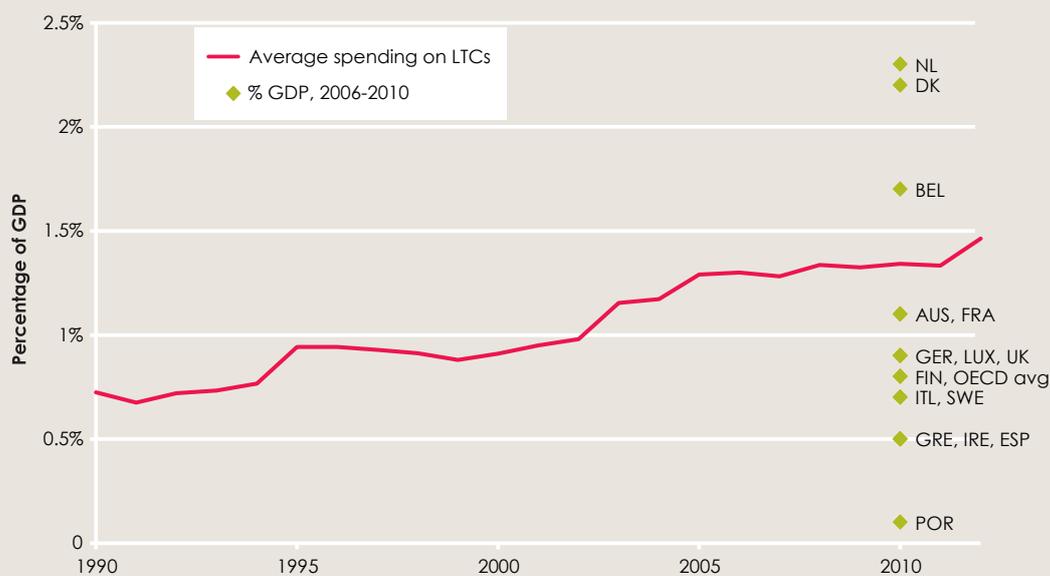
\* Data for the Netherlands and Portugal are current spending.

Across OECD countries, the amount spent on LTCs more than doubled from 0.7% of GDP in 1990 to 1.5% in 2010

### Spending on long-term conditions

One of the major drivers of rising costs across the NHS is an increase in the prevalence of long-term conditions (LTCs). The impact of this trend can be seen across OECD countries, where the amount spent on LTCs more than doubled from 0.7% of GDP in 1990 to 1.5% in 2010 (see figure 4).<sup>3</sup> The figure also shows data, from another OECD source, about the spending on LTCs in different countries.<sup>4</sup>

Figure 4: OECD average spending on long-term conditions as a percentage of GDP



**Source:** Organisation for Economic Co-operation and Development. *OECD Health Data: Health expenditure and financing: Health expenditure indicators*. OECD Health Statistics (database). OECD, 2014; de la Maisonneuve C, Oliveira Martins J. A Projection Method for Public Health and Long-Term Care Expenditures. *OECD Economics Department Working Papers*. OECD, 2013;1048.

**Please note:** different sources mean trend data and country data are not directly comparable.

On average UK inpatients spend less time in hospital and generally use fewer resources than other OECD countries

### Further comparisons

As well as understanding funding in terms of public and per head spending, it is helpful to compare across other key metrics to give a sense of both inputs purchased and outputs and outcomes achieved. Table 1 collates some key resource indicators from the limited comparative data that is available. It shows that the UK spends less than other OECD countries on pharmaceuticals and out-of-pocket payments, and that on average UK inpatients spend less time in hospital and generally use fewer resources (measured in terms of staff and beds).

**Table 1: UK and OECD comparisons across key resource indicators**

|  | UK 2000 | OECD average 2000 | UK 2012    | OECD average 2012 |
|--|---------|-------------------|------------|-------------------|
| <b>Pharmaceutical expenditure per capita (US\$PPP)*</b>              | 260     | 300               | 367 (2008) | 462 (2008)        |
| <b>Out-of-pocket payments for health care (% of health spending)</b> | 11.1    | 21.0              | 9.0        | 19.8              |
| <b>Number of doctors (per 1,000 people)</b>                          | 2.0     | 2.7               | 2.8        | 3.1               |
| <b>Number of nurses (per 1,000 people)</b>                           | 9.0     | 7.5               | 8.2        | 8.1               |
| <b>Average length of stay, all causes (days)†</b>                    | 8.1     | 7.7               | 7.0 (2011) | 7.6 (2011)        |
| <b>Total hospital beds (per 1,000 people)</b>                        | 4.1     | 5.6               | 2.8        | 5.0               |

Source: Organisation for Economic Co-operation and Development, *OECD Health Statistics 2014 - Frequently Requested Data*.

\* United States Dollar Purchasing Power Parity, a way of comparing prices across countries

† Excluding Japan as data are not comparable

## References

- 1 Organisation for Economic Co-operation and Development. *OECD Health Statistics 2014 - Frequently Requested Data*. [www.oecd.org/els/health-systems/oecd-health-statistics-2014-frequently-requested-data.htm](http://www.oecd.org/els/health-systems/oecd-health-statistics-2014-frequently-requested-data.htm) (accessed 15 January 2015).
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- 4 Organisation for Economic Co-operation and Development. *OECD Health Data: Health expenditure and financing: Health expenditure indicators*. OECD Health Statistics (database), 2014. doi: 10.1787/data-00349-en (accessed 15 January 2015).

## About the author

Ben Gershlick is a Policy and Economics Analyst at the Health Foundation. In this role he works across a number of in-house projects aiming to improve the quality of health care in the UK through in-depth analysis of policy and economics. Previously he was the Strategy and Policy Officer at the Health Foundation. Before joining the Health Foundation Ben spent time at the Department of Health and at Channel 3 Consulting. Ben has an MSc in International Health Policy (focusing on health economics) from the London School of Economics, where he also spent his time as an undergraduate.

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**The Health Foundation**

90 Long Acre  
London WC2E 9RA

T 020 7257 8000  
E [info@health.org.uk](mailto:info@health.org.uk)

Registered charity number: 286967  
Registered company number: 1714937

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