

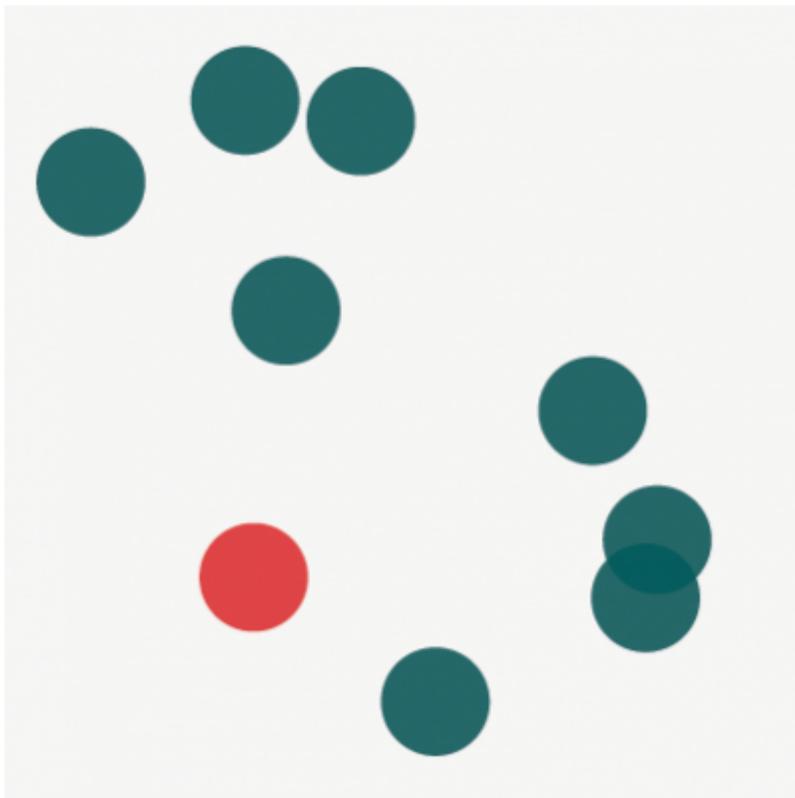
How does UK health spending compare across Europe over the past decade?

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About 7 mins to read

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Key points

- This analysis examines how health care spending in the UK compares with EU countries in the decade preceding the pandemic. Taking a longer term view enables us to see how trends in spending may have impacted health care resilience today.
- Average day-to-day health spending in the UK between 2010 and 2019 was £3,005 per person – 18% below the EU14 average of £3,655.
- If UK spending per person had matched the EU14 average, then the UK would have spent an average of £227bn a year on health between 2010 and 2019 – £40bn higher than actual average annual spending during this period (£187bn).
- Matching spending per head to France or Germany would have led to an additional £40bn and £73bn (21% to 39% increase respectively) of total health spending each year in the UK.
- Over the past decade, the UK had a lower level of capital investment in health care compared with the EU14 countries for which data are available. Between 2010 and 2019, average health capital investment in the UK was £5.8bn a year. If the UK had matched other EU14 countries' average investment in health capital (as a share of GDP), the UK would have invested £33bn more between 2010 and 2019 (around 55% higher than actual investment during that period).

Introduction

Health and care services in the UK are facing unprecedented challenges, including chronic staffing shortages and a growing backlog of unmet health care need. These problems have been exacerbated by the pandemic and are also affecting other countries. But what a country spends on health is crucial for the resilience of its health care provision and preparedness for future surges in demand (expected and unexpected).

In 2020, the latest year of available data for UK health spending, there was a big increase (14%) in spending in response to the pandemic. This has resulted in [renewed focus on how the UK compares in terms of health spending](#). The reality, however, is that 2020 was a significant outlier for most health systems even though spending in the UK was higher than most other countries. Taking a longer term view allows us to see how trends in spending may have impacted health care resilience today.

In this analysis we look at how health care spending compares for the decade preceding the pandemic. We explore comparisons for spending on day-to-day running costs and the capital investment spending that funds buildings, equipment and technology. To aggregate [EU14](#) figures into averages, we use the median to compare against to account for outliers. We primarily focus on health spending per head of population (unadjusted for inflation) between 2010 and 2019. We measure this in £s adjusted for differences between countries' 'buying power' using purchasing power parities (£PPP). We convert the \$PPPs of the OECD to £PPP using an exchange rate of £0.78 to US\$1, which was the average exchange rate in 2019 (source: OECD).

How does UK health spending compare over time?

Figure 1 shows that across the EU14, average total health spending between 2010 and 2019 was £3,655 per person (this includes government, as well as out of pocket, private and charity spending). In 2019, the UK spent £3,055 per person, 18% below the EU14 average. Over the decade, only four countries in the EU14 spent less per head of population: Greece, Portugal, Spain and Italy. Finland had very similar spending per head to the UK.

Between 2010 and 2019, health spending per person across these 14 countries increased by an annual average (median) of 2.6% a year, compared to 2.7% for the UK. The UK started the decade with lower spend per person and despite slightly higher growth it is still below the EU14 average. Six countries had an annual growth rate above the UK, including Germany, France and Belgium.

Figure 1

Funding expenditure on day-to-day care

Looking at the decade prior to the pandemic, average total UK spending was £187bn per year (in current terms). How much would overall spending have changed if the UK had spent the same amount per person as other European countries?

Figure 2 shows that if UK spending per person had matched the average across the EU14 during the decade, then UK total spending per year would have averaged £227bn between 2010 and 2019 – £40bn higher than actual average annual spending. Matching spending per head to France or Germany would have led to an additional £40bn and £73bn (21% to 39% increase respectively) of total health spending each year.

The EU14 is on average a group of comparatively high-spending countries. The EU14 is above both overall EU27 spending and the OECD. But there are longstanding EU member countries

with lower health spending than the UK – for instance, matching Spain’s spending per head would have resulted in UK spending being a fifth lower.

Figure 2

Countries differ not just in overall health spending but in the mix of funding sources – government spending vs ‘other’ (ie out of pocket, voluntary insurance and charity). In the UK, 79.9% of health spending is government funded (average 2010–2019), compared with 76.5% across the EU14. On average UK government health spending between 2010 and 2019 was £149bn per year in current terms.

With the UK’s mix of government and other health spending, matching the EU14 annual spending per person average between 2010 and 2019 would have meant £31.8bn of additional

government funding each year. If the UK had the same spending mix as the EU14, additional UK government spending would have been slightly lower at £30.5bn. So the significant difference in spending between the UK and other countries applies to both total and government spending.

Funding investment in equipment

Weaker resilience in the health care system can also be the result of underinvesting in capital (buildings, machinery, equipment and IT) required for the provision of health care. Investing less in equipment over time could mean that the UK has older or less effective equipment with which to treat patients, or fewer resources (such as hospitals or hospital beds) to care for its population.

Figure 3 shows how the UK compares with the EU14 countries that report health capital investment (this is only a subset of EU14 countries). UK capital investment in health care as a share of GDP was below investment in the EU14 countries for which there are investment data available. In each year since 2011 the UK has invested less than the EU14 average. Overall, if the UK had matched these countries' average investment in health capital (as a share of GDP), the UK would have invested £33bn more between 2010 and 2019 (around 55% higher than actual investment in that period).

Figure 3

Why is the UK spending and investing less?

Some of the differences in spending may be a result of different demographic characteristics (for instance, 5% of the UK population is aged 80 years and older, compared with 6% in France and close to 7% in Germany). Differences may also potentially arise from more efficient use of resources in the UK (administration costs in the UK are lower than the EU14 average, accounting for 1.9% of total current expenditure, compared with a 3% EU14 average as of 2020).

But the magnitudes of the yearly differences in spending and investment between the UK and these other countries may point towards sustained suboptimal spending per head on health care in the UK. The knock-on impact of this underinvestment could affect access (longer waiting lists), quality (overstretched staff or lack of investment in technology), in turn leading to a less resilient system.

Even before the pandemic, the proportion of people in the UK self-reporting that they needed treatment but could not access it [was one of the highest in Europe](#). So, systems that are already running at capacity may become reliant on emergency funding or on having to redeploy resources and deprioritise certain services to deal with surges in demand.

Where does underspending and underinvestment leave the UK?

The key issue for health spending is what amount of actual resource (health care workers, medicines, diagnostics and beds) it buys. Figure 4 shows that the UK is also an outlier in terms of beds and doctors per head.

Figure 4

The UK has fewer practising physicians per person and fewer hospital beds per person than the EU14 average. The Netherlands has similar beds than the UK but combines this with more staff, using a model where more care is provided in community-based settings. The UK therefore stands as an outlier in having both fewer beds and fewer doctors than average.

The skills mix could explain some of the differences in doctors per head, but the UK also has fewer nurses than average per head of population (8.7 nurses for every 1,000 inhabitants in the UK compared with 9.9 average nurses for every 1,000 inhabitants in the EU14). The UK has a similar number of pharmacists (0.85 for every 1,000 inhabitants in the UK compared with 0.88 average for every 1,000 inhabitants in the EU14) and similar total workforce (60.7 for every 1,000 inhabitants in the UK compared with 60.4 average for every 1,000 inhabitants in the EU14), because of different models of health care.

Impact of COVID-19

As Figure 5 shows, the UK had a larger increase in health spending in 2020 in response to COVID-19 than any EU14 country. In the UK, spending increased by 14% compared with the EU14 average of just below 6%.

Figure 5

A key question is whether this marked increase in spending during the pandemic was related to the low spending and investment in the decade preceding that shock. It is likely that a decade of lower spending and fewer physical resources resulted in a health care system less resilient and one that needed to expand its capacity more rapidly when the pandemic hit. However, it is certainly not that straightforward. The chart also shows that other EU14 countries with historically lower average spending per person than the UK did not increase spending by as much as the UK. There are likely a number of different reasons to explain the growth in spending during the pandemic, including the room each country had to increase borrowing, individual policy decisions in response to COVID-19 and different prices paid for COVID-related treatment.

What can we learn from this comparison?

This analysis shows that over the past decade the UK has spent less on both day-to-day care and investment spending on health care compared with the average EU14 countries. This is mirrored by less capacity, fewer physical resources and therefore greater vulnerability to sudden surges in demand. This meant the UK had to increase spending more rapidly than other countries to respond to the pandemic. Of course, international comparisons also have limitations. Population characteristics differ, and some countries may use resources more efficiently than others and there may be differences in how countries recorded COVID-19 spend.

Overall if the UK had matched EU14 levels of spending per person on health, day-to-day running costs would have been £39bn higher each year, on average, over the past decade (£30.5bn of which would have been additional government spending). For capital spending, matching the cumulative EU14 average over the past decade would have resulted in the UK investing £33bn more in health-related buildings and equipment. These are significant gaps in spending. Had UK spending kept up with European neighbours it is fair to assume the NHS would have been more resilient and had greater capacity to provide care during the pandemic and reduce the large backlog of care that is its legacy.

Further reading

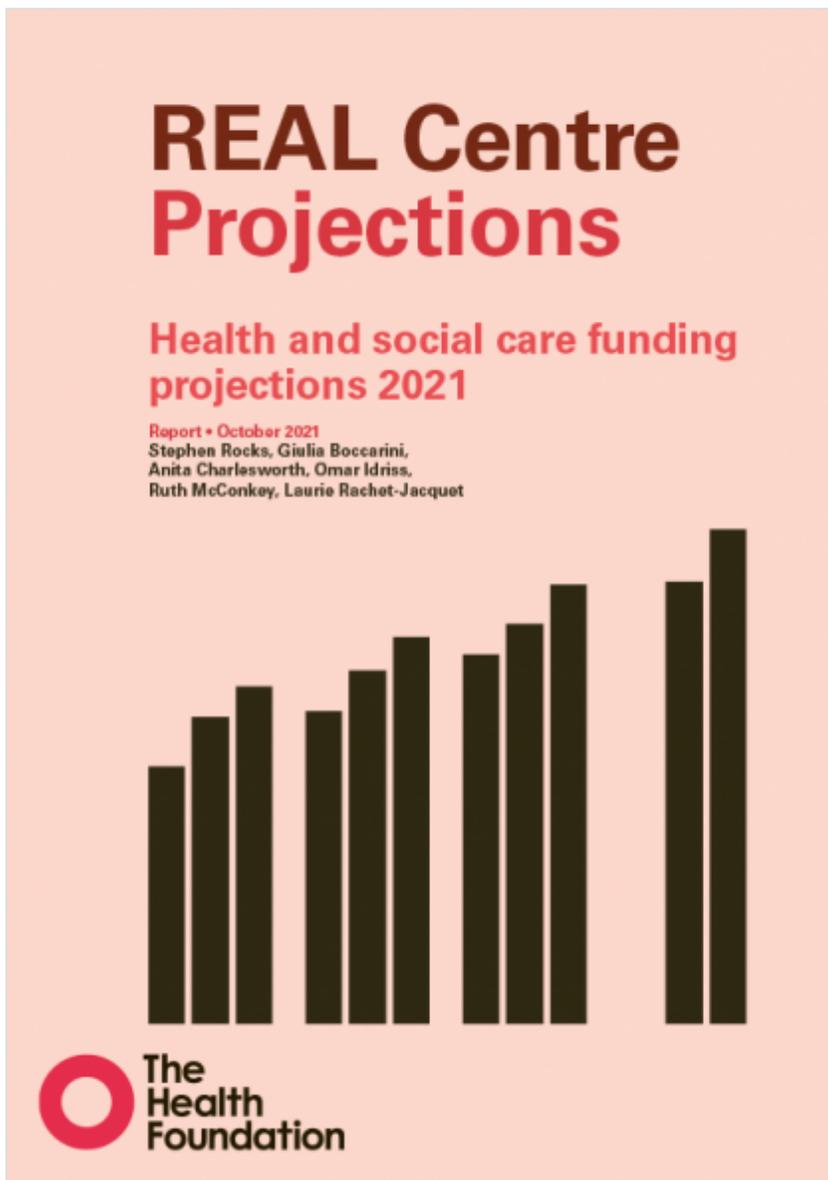
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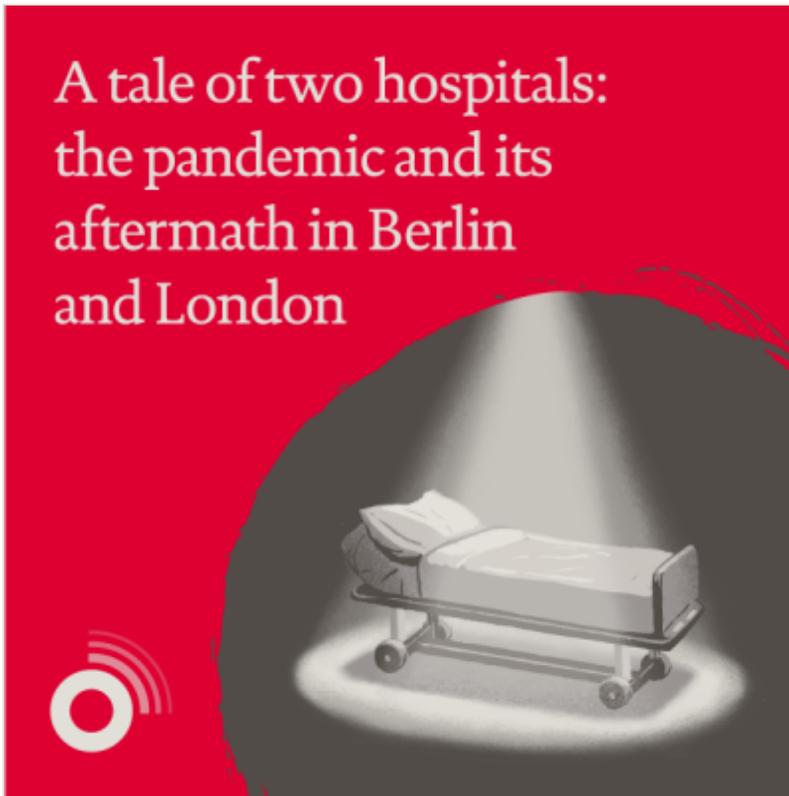
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