

Statistical bulletin

# Healthcare expenditure, UK Health Accounts: 2022 and 2023

Healthcare expenditure statistics for 1997 to 2023, produced to the international definitions of the System of Health Accounts 2011.

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# 1 . Main points

- Our provisional estimates are that UK healthcare expenditure was around £292 billion in 2023; these are based on more timely but less comprehensive data sources than preceding years.
- Healthcare spending as a share of gross domestic product (GDP) decreased slightly to 10.9% in 2023 from 11.1% in 2022, as GDP growth exceeded healthcare spending growth.
- Total healthcare expenditure increased by 5.6% in nominal terms in 2023, but decreased by 1.4% after adjusting for inflation.
- Government-financed healthcare expenditure was around £239 billion in 2023, which is a real terms decrease of 2.1%.
- Total pharmaceutical spending reduced by 16.6% in real terms, the latest year for which data are available, caused by lower spending on the coronavirus (COVID-19) vaccination programme.
- Total long-term health and social care expenditure increased by 2.8% in real terms in 2022.

This measure of healthcare expenditure is not equivalent to NHS spending. The health accounts cover healthcare spending by government, private individuals, and non-government entities in the UK. The health accounts are produced to a set of internationally standardised definitions that are broader than those used in other UK analyses, and include some services typically considered social care in the UK.

## 2 . Preliminary estimates of healthcare expenditure in 2023

## Total current healthcare expenditure

Our preliminary estimates suggest that approximately £292 billion was spent on current healthcare in the UK in 2023 on a nominal (current prices) basis, including both government and non-government expenditure (current expenditure excludes capital outlay). Government expenditure covers public spending through the NHS and other public bodies, including local authorities. These preliminary figures are based on initial data and, therefore, subject to a greater degree of uncertainty than expenditure between 1997 and 2022.

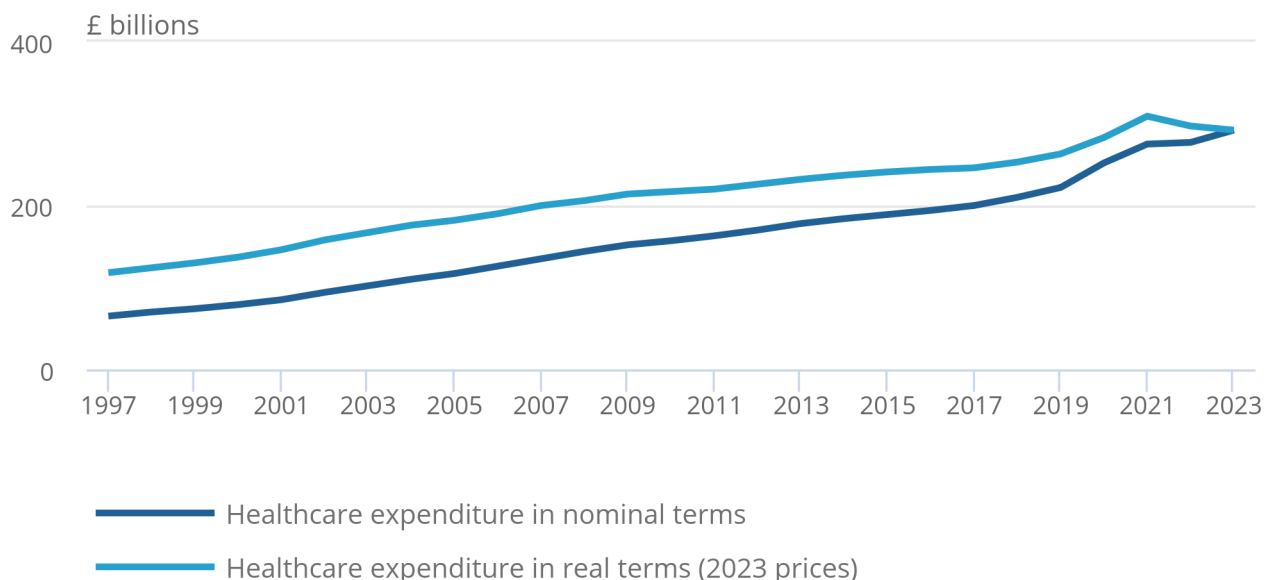
The analysis of healthcare spending in 2023 in this bulletin is limited to healthcare spending by financing schemes, with the more detailed analyses of healthcare expenditure relating to expenditure in 2022. In this bulletin, "healthcare spending" refers to current healthcare spending and excludes capital outlay. Estimates of healthcare capital expenditure are presented separately in [Section 6: Capital expenditure](#).

### Figure 1: Healthcare expenditure decreased in 2023 in real terms

Total current healthcare expenditure in nominal and real terms, £ billion, UK, 1997 to 2023

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Total current healthcare expenditure in nominal and real terms, £ billion, UK, 1997 to 2023



Source: UK Health Accounts from the Office for National Statistics

#### Notes:

1. Real terms figures are presented in 2023 prices, adjusted for inflation using the gross domestic product (GDP) deflator.
2. Because of challenges in measuring the GDP deflator over the coronavirus (COVID-19) pandemic, care should be taken in interpreting real terms expenditure growth over 2020 and 2021.
3. Figures for 2023 are preliminary estimates based on more timely but less comprehensive data sources than preceding years.

Total healthcare expenditure increased by 5.6% in nominal terms between 2022 and 2023, compared with growth of 0.9% in 2022. After adjusting to account for inflation, healthcare spending reduced by 1.4% in 2023, which is the second consecutive year of negative real terms growth following a 4.0% decrease in 2022. Our real terms estimates are produced using the GDP deflator to adjust for general inflation. However, it is important to remember that inflation in health-specific goods and services may differ from inflation in the general economy. Therefore, these growth rates do not represent changes in the volume of healthcare. Challenges in measuring the GDP deflator over the coronavirus (COVID-19) pandemic mean that particular care should be taken in interpreting real terms growth over 2020 and 2021.

Within the UK national accounts, we publish quarterly chained volume measures for government and household consumption expenditure on healthcare, shown in our [GDP data tables](#) and [Consumer trends bulletins](#), respectively. Our [Public service healthcare productivity articles](#) also provide estimates of public service healthcare output volumes for England, while volumes for a range of privately funded services are collected and reported by the [Private Healthcare Information Network](#). It is important to note that these data sources represent a different definition of healthcare to that used in the health accounts and are not directly comparable, for example, differences in the treatment of services considered in the UK to be social care. Further information on comparisons with other healthcare spending analyses is available in our [UK Health Accounts Quality and Methodology Information \(QMI\) report](#).

## Healthcare expenditure as a share of GDP

Healthcare expenditure represented 10.9% of nominal UK GDP in 2023, slightly lower than the share of 11.1% in 2022. This reduction was caused by nominal growth in healthcare expenditure being outpaced by growth in the overall economy in 2023.

While lower than at the height of the pandemic in 2020 and 2021, the share of GDP attributable to healthcare in 2023 remains higher than the levels observed before the coronavirus pandemic, with healthcare expenditure representing between 9.6% and 10.0% of the economy between 2009 and 2019.

### Figure 2: Healthcare spending as a share of GDP fell slightly in 2023

Share of nominal gross domestic product (GDP) attributed to total current healthcare expenditure and growth contributions, UK, 1997 to 2023

#### Notes:

1. The nominal GDP growth contribution is inverted relative to the direction of nominal GDP growth. For instance, a fall in GDP will be shown as a positive contribution of GDP growth to the change in healthcare expenditure as a percentage of GDP.

## Financing of healthcare expenditure in the UK

Government expenditure is the principal mode of healthcare financing in the UK and stood at £239 billion in 2023, representing 81.9% of overall healthcare spending. This mode of financing includes spending by the NHS, local authorities, and other public bodies financing healthcare. Government spending in 2023 was estimated to be 2.1% lower in real terms than spending in 2022.

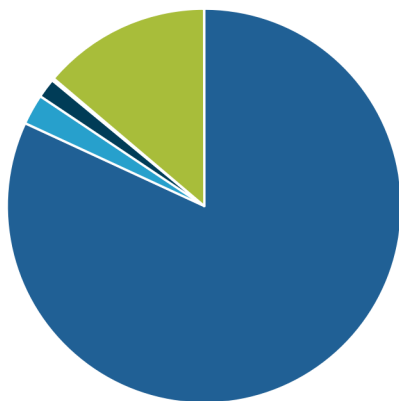
The largest of the non-government financing arrangement was out-of-pocket expenditure, which includes private spending by consumers on hospital treatments, medical goods, and other health services and products. This category accounted for 13.8% of overall healthcare spending or £40 billion in 2023. Voluntary health insurance was 2.5% of overall spending on healthcare in 2023, or around £7 billion, while non-profit institutions serving households (NPISH) and enterprise financing were the smallest financing schemes, accounting for 1.6% and 0.2%, respectively.

### Figure 3: Government financing represented around four-fifths of healthcare expenditure in 2023

Total current healthcare expenditure by financing scheme, percent, UK, 2023

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Total current healthcare expenditure by financing scheme, percent, UK, 2023



Source: UK Health Accounts from the Office for National Statistics

#### Notes:

1. Figures may not sum because of rounding.

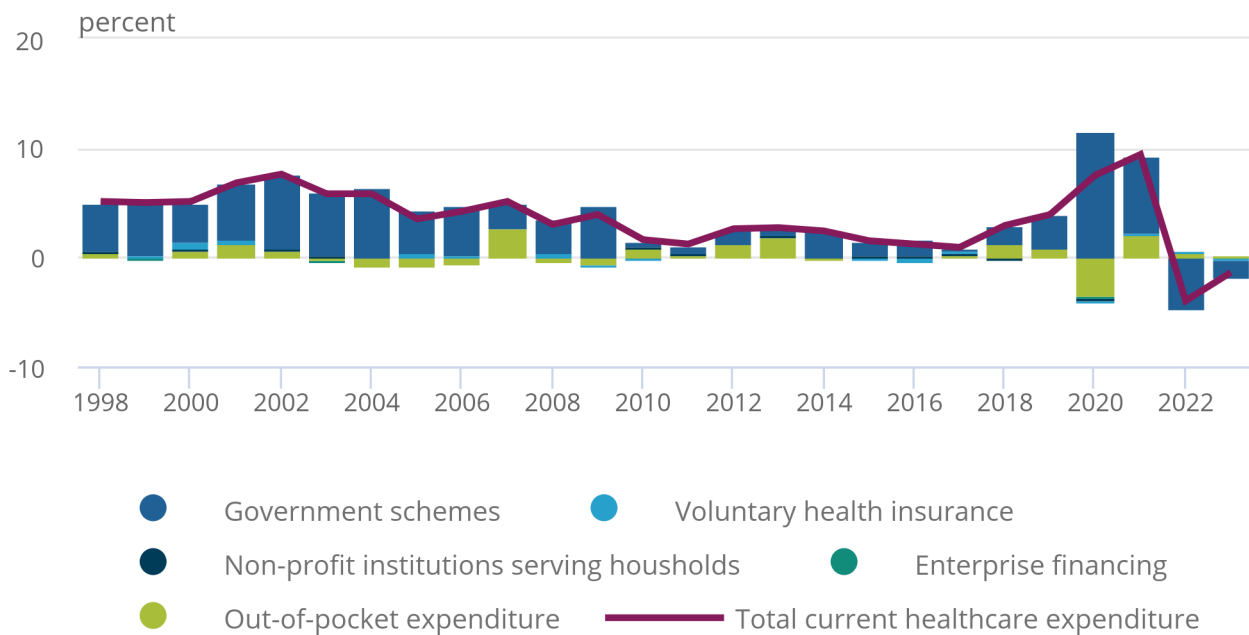
The real terms fall in healthcare expenditure in 2023 was predominantly caused by falls in government spending, with non-government financing growing overall in real terms, primarily because of growth in out-of-pocket expenditure.

**Figure 4: Falling total healthcare expenditure in 2023 can be attributed to a real terms reduction in government expenditure**

Annual growth rates in health expenditure and the contributions to growth for each financing scheme in real terms, percent, UK, 1998 to 2023

Figure 4: Falling total healthcare expenditure in 2023 can be attributed to a real terms reduction in government expenditure

Annual growth rates in health expenditure and the contributions to growth for each financing scheme in real terms, percent, UK, 1998 to 2023



Source: UK Health Accounts from the Office for National Statistics

Notes:

1. Figures are provided in real terms, adjusted for inflation using the gross domestic product (GDP) deflator.
2. Because of challenges in measuring the GDP deflator over the coronavirus (COVID-19) pandemic, care should be taken in interpreting real terms expenditure growth over 2020 and 2021.
3. Figures for 2023 are preliminary estimates based on more timely but less comprehensive data sources than preceding years.

### 3 . Healthcare expenditure in 2022

This and subsequent sections of the bulletin present more detailed analysis of healthcare expenditure up to 2022. These figures are produced from more comprehensive but less timely data sources than our preliminary high-level 2023 estimates in [Section 2: preliminary estimates of healthcare expenditure in 2022](#).

## Government healthcare expenditure

Government healthcare expenditure decreased by 0.7% in nominal terms and by 5.5% in real terms between 2021 and 2022. This was the first nominal terms decrease in government spending since the time series began in 1997. The reduction in government spending followed unprecedented year-on-year growth of 14.6% and 8.4% in real terms in 2020 and 2021 respectively, during the height of the coronavirus (COVID-19) pandemic.

Some data sources used to produce our analysis of government healthcare expenditure by healthcare function and provider have not been available in time to use for the analysis in this bulletin. As a result, some of our government healthcare expenditure estimates are labelled as provisional for 2022 and may be subject to a greater degree of revision than usual in next year's bulletin. Further information on the methods for producing these estimates are available in [Section 10: Strengths and limitations](#).

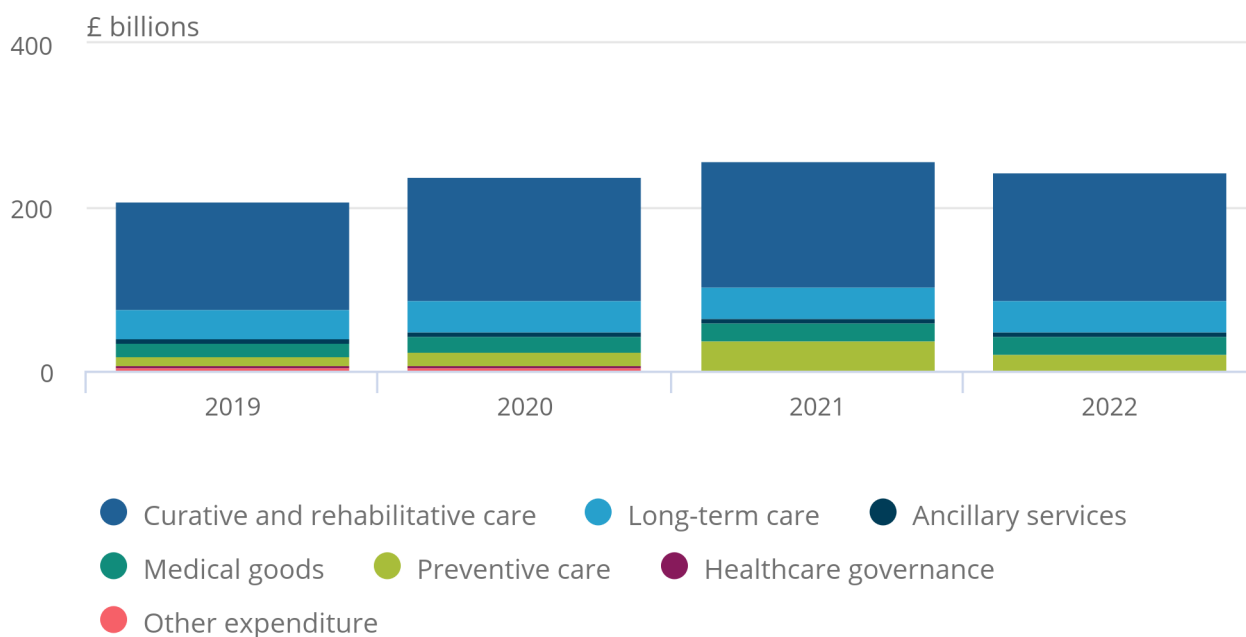
The decrease in government healthcare expenditure was attributed to reduced spending on preventive care. This component represented around 8.2% of government healthcare spending in 2022 compared with 14.1% in 2021, with spending reducing by 44.7% in real terms over this period.

### Figure 5: Government spending on preventive care decreased in 2022

Government health expenditure by function in real terms 2023 prices, £ billion, UK, 2019 to 2022

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Government health expenditure by function in real terms 2023 prices, £ billion, UK, 2019 to 2022



Source: UK Health Accounts from the Office for National Statistics

#### Notes:

1. Real terms figures are presented in 2023 prices, adjusted for inflation using the gross domestic product (GDP) deflator.
2. Because of challenges in measuring the GDP deflator over the coronavirus (COVID-19) pandemic, care should be taken in interpreting real terms expenditure growth over 2020 and 2021.
3. Data from 2022 are provisional estimates and are subject to revision in future editions of this bulletin.

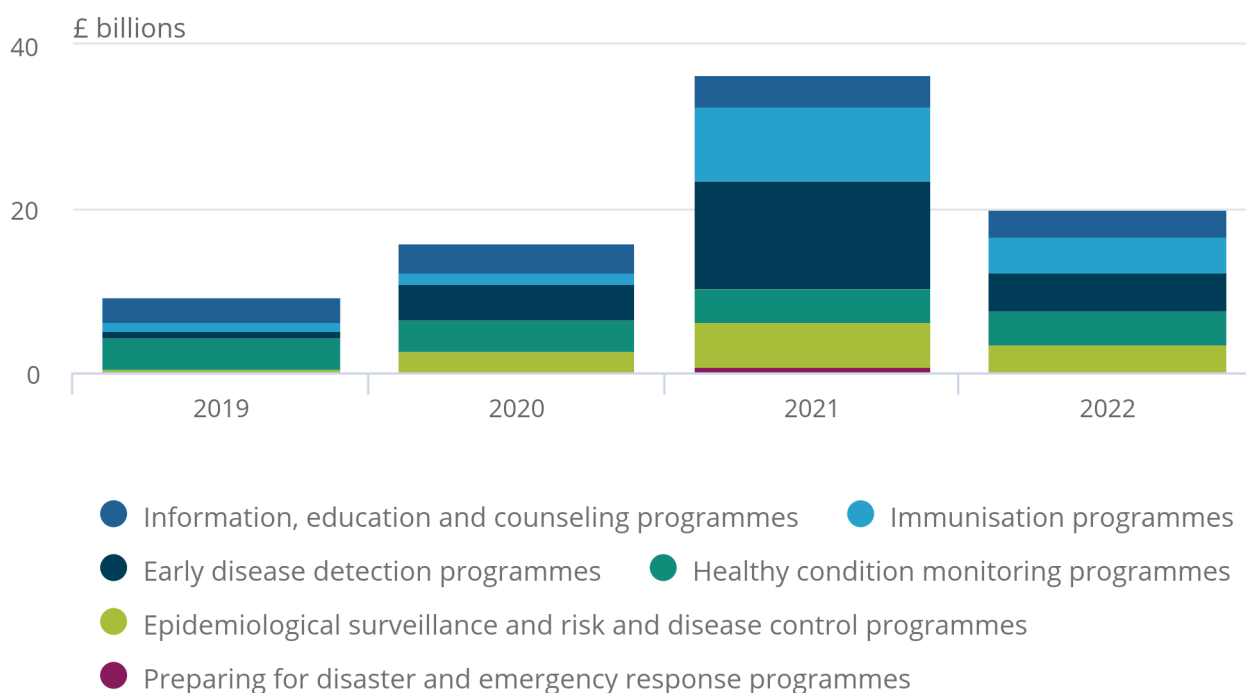
The onset of the coronavirus pandemic had a substantial impact on government healthcare spending between 2020 and 2022. This was especially true of preventive care spending, which went from representing 4.5% of government healthcare expenditure in 2019 to a peak of 14.1% in 2021, primarily because of the establishment of programmes responding to the coronavirus pandemic. During 2022, the [Living with COVID-19 strategy](#) and similar announcements in the devolved administrations of Scotland, Wales, and Northern Ireland set out plans to substantially reduce COVID-19 testing and tracing activities, while most people had received at least one dose of a COVID-19 vaccine by early 2022.

**Figure 6: The fall in preventive care spending in 2022 was contributed to largely by a reduction in coronavirus (COVID-19)-related activities**

Preventive care expenditure by function in real terms 2023 prices, £ billions, UK, 2019 to 2022

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Preventive care expenditure by function in real terms 2023 prices, £ billions, UK, 2019 to 2022



Source: UK Health Accounts from the Office for National Statistics

Notes:

1. Real terms figures are presented in 2023 prices, adjusted for inflation using the gross domestic product (GDP) deflator.
2. Because of challenges in measuring the GDP deflator over the coronavirus (COVID-19) pandemic, care should be taken in interpreting real terms expenditure growth over 2020 and 2021.
3. Preventive care includes spending on COVID-19 related testing, tracing, vaccination and pandemic management from 2020 onwards.



## Non-government healthcare expenditure

Total non-government healthcare expenditure increased by 3.7% in 2022 in real terms compared with 2021, with growth in all non-government financing schemes. This partly reflects the resumption of services that experienced disruption in 2020 following economy-wide measures to combat the coronavirus pandemic, with non-government healthcare spending having reduced year-on-year by 19.4% in 2020 and then increased by 14.3% in 2021. Total non-government spending was 4.4% lower in real terms in 2022 than before the pandemic in 2019.

The largest non-government financing scheme in the UK is out-of-pocket expenditure, which represents direct payments for healthcare by households. This includes entirely self-funded treatments, as well as contributions to government funded care and co-payments on health insurance.

In 2022, out-of-pocket spending grew in real terms by 3.0%, with dental expenditure being a particularly strong contributor to growth. In comparison, self-funded medical goods spending decreased in 2022, attributed primarily to lower spending on over-the-counter medicines. Out-of-pocket health-related long-term care spending rose by 6.3% in real terms in 2022 and represented around 38% of out-of-pocket spending. Out-of-pocket dental expenditure was 19.7% lower in real terms than spending before the pandemic in 2019, while medical goods spending was 12.4% lower. Long-term care spending was 4.3% higher in real terms than in 2019.

Spending on care financed through voluntary health insurance (VHI) increased by 7.3% in 2022 in real terms. In 2022, there was growth in both the administration and financing costs of providing insurance (14.6%) as well as the cost of claims (4.2%). In real terms, spending on voluntary health insurance was lower in 2022 than in 2019 before the pandemic.

## 4 . Long-term care expenditure

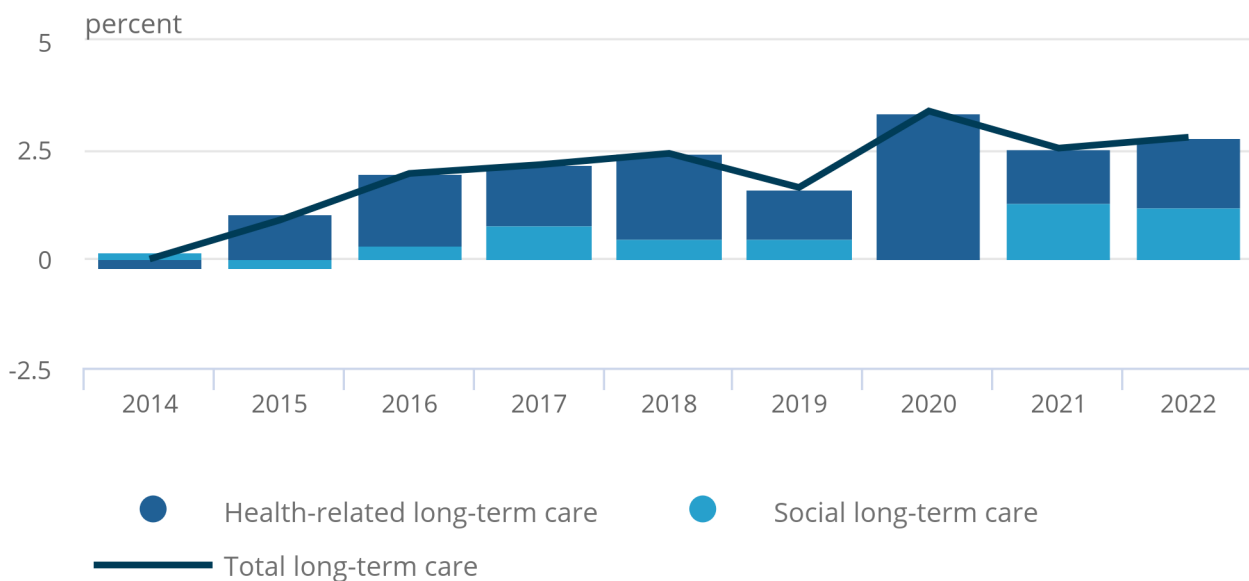
In 2022, total long-term health and social care expenditure stood at £68.2 billion in 2023 prices, growing by 2.8% in real terms since 2021. Total long-term care in 2022 was 8.9% higher than before the coronavirus (COVID-19) pandemic in 2019.

**Figure 7: Both health-related and social long-term care contributed to total long-term care growth in 2022**

Annual growth rates in total long-term care and the contributions to growth for components in real terms, percent, UK, 2014 to 2022

### Figure 7: Both health-related and social long-term care contributed to total long-term care growth in 2022

Annual growth rates in total long-term care and the contributions to growth for components in real terms, percent, UK, 2014 to 2022



Source: UK Health Accounts from the Office for National Statistics and LaingBuisson

**Notes:**

1. Figures are provided in real terms, adjusted for inflation using the gross domestic product (GDP) deflator.
2. Because of challenges in measuring the GDP deflator over the coronavirus (COVID-19) pandemic, care should be taken in interpreting real terms expenditure growth over 2020 and 2021.

Government spending made up 68.5% of total long-term care expenditure in 2022 and grew by 1.4% in real terms on spending in 2021. Out-of-pocket expenditure, the second-largest financing scheme for total long-term care, increased by 5.9% in real terms compared with 2021.

## 5 . Total pharmaceutical expenditure

Total UK pharmaceutical expenditure was £36.7 billion in 2022 (2023 prices), with around:



- 48.3% relating to spending on community-prescribed medicines
- 21.4% on over-the-counter medicines
- 11.7% relating to immunisation programmes
- 18.6% relating to medicines administered as part of courses of treatment

The measure presents net expenditure on medicines, accounting for pharmaceutical rebates, as well as payments made through voluntary and statutory payback schemes such as the [2019 voluntary scheme for branded medicines pricing and access](#). The scale of payments made through payback schemes each year may be affected by previous years' sales and payments, which can influence growth in overall pharmaceutical expenditure. As a comparison, gross of these payments total pharmaceutical expenditure in 2022 (2023 prices) was £39.4 billion.

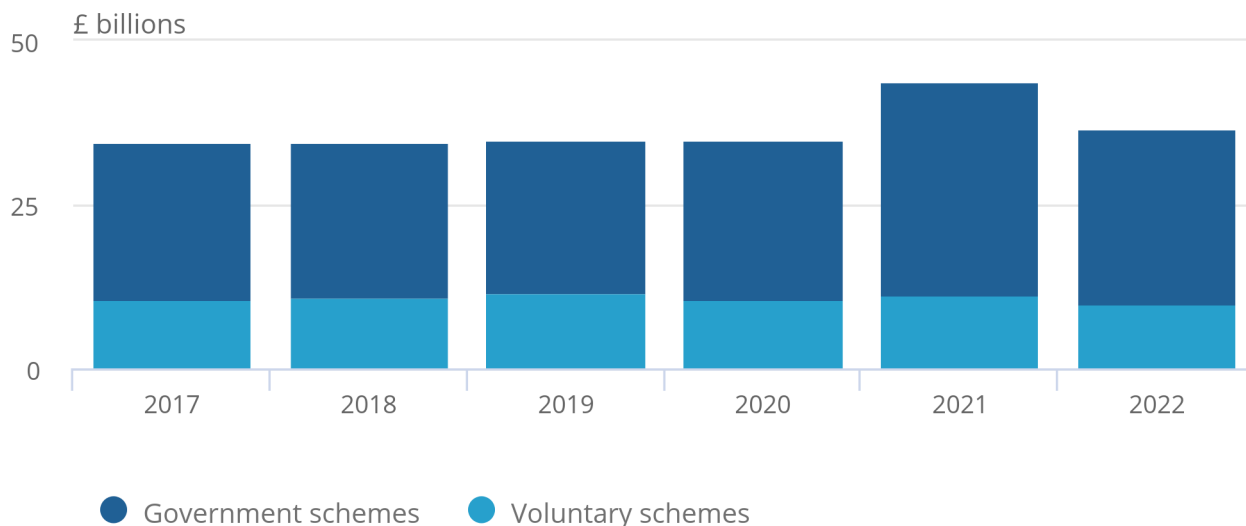
Total pharmaceutical expenditure decreased by 16.6% in 2022 in real terms because of lower government spending, mainly reflecting lower spending on the coronavirus (COVID-19) vaccination programme. Lower spending on vaccination programmes represented 11.1 percentage points of the decrease in total pharmaceutical spending. Non-government expenditure also decreased in 2022, by 10%, because of a fall in household spending on over-the-counter medicines.

## Figure 8: Total pharmaceutical expenditure decreased in 2022, mainly because of reduced immunisation programme expenditure

Total pharmaceutical expenditure in real terms 2023 prices, £ billions, UK, 2017 to 2022

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Total pharmaceutical expenditure in real terms 2023 prices, £ billions, UK, 2017 to 2022



Source: UK Health Accounts from the Office for National Statistics

#### Notes:

1. Real terms figures are presented in 2023 prices, adjusted for inflation using the gross domestic product (GDP) deflator.
2. Because of challenges in measuring the GDP deflator over the coronavirus (COVID-19) pandemic, care should be taken in interpreting real terms expenditure growth over 2020 and 2021.

The definitions of our measure of total pharmaceutical expenditure differ compared with other sources of data, including NHS estimates (see [Section 10: Strengths and limitations](#)). Caution should be exercised when making international comparisons, as not all countries estimating total pharmaceutical expenditure are able to account for pharmaceutical rebates and pricing mechanisms.

## 6 . Capital expenditure

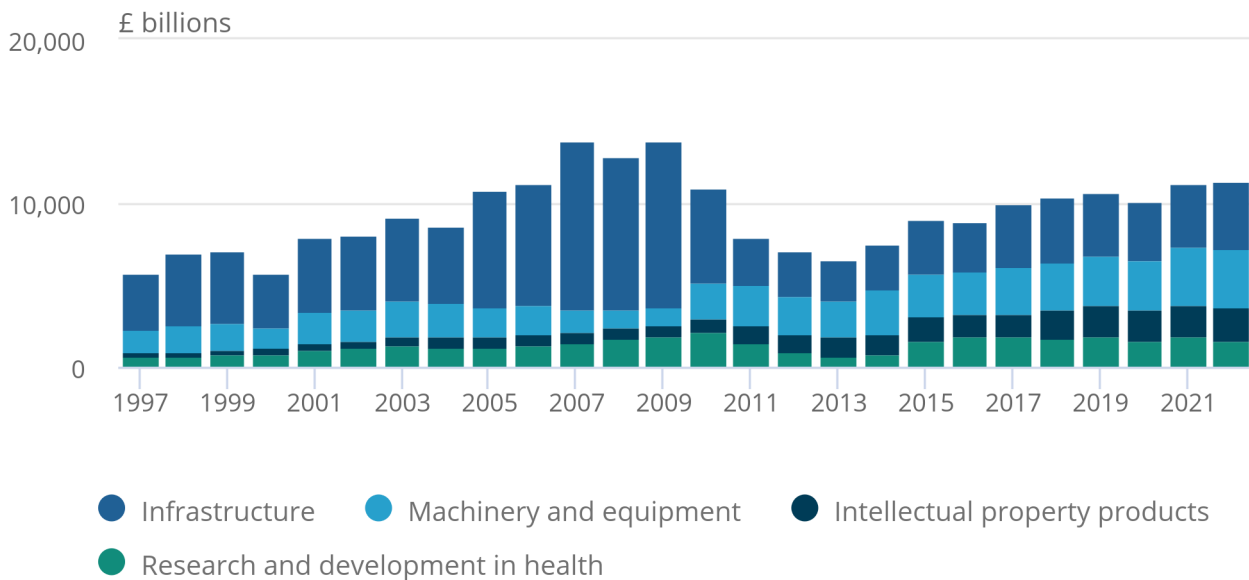
Gross fixed capital formation is an estimate of net capital expenditure by both the public and private sectors in the UK, after depreciation. This is an additional measure and not a part of the headline current healthcare expenditure statistics. For more information, see our [Guide to gross fixed capital formation and business investment](#). The net capital outlay on healthcare in the UK was £11.3 billion in 2022 (in 2023 prices). This was an increase of 0.8% in real terms and its highest level since 2009.

**Figure 9: Infrastructure accounted for the largest share of healthcare-related capital expenditure in 2022**

Expenditure on healthcare gross fixed capital formation in real terms 2023 prices, £ billions, UK, 1997 to 2022

### Figure 9: Infrastructure accounted for the largest share of healthcare-related capital expenditure in 2022

Expenditure on healthcare gross fixed capital formation in real terms 2023 prices, £ billions, UK, 1997 to 2022



Source: Gross fixed capital formation from the Office for National Statistics

**Notes:**

1. Figures are presented in real terms, adjusted for inflation using the gross domestic product (GDP) deflator.
2. Intellectual property products exclude research and development for better international comparisons.
3. Previous editions of this bulletin excluded research and development from capital expenditure.

## 7 . Revisions

Last year's preliminary estimates in our [Healthcare expenditure, UK Health Accounts provisional estimates: 2022 bulletin](#) were revised downwards by £5.7 billion overall, with the largest revision being a £2.5 billion downward revision to out-of-pocket spending.

Table 1: Revised estimates of healthcare expenditure in 2022 (£ billions, current prices)

	All financing schemes	Government Schemes	Voluntary health insurance	Non-profit institutions serving households	Enterprise financing	Out-of-pocket expenditure
<b>Preliminary estimate</b>	282.6	230.5	7.2	5.1	0.6	39.3
<b>Revised estimate</b>	277.0	228.3	6.9	4.4	0.5	36.8

Source: UK Health Accounts from the Office for National Statistics

For years before 2022, improvements and changes to data sources have resulted in revisions to the UK Health Accounts back series of no more than 2.2% of total current healthcare expenditure either upwards or downwards. Further information on revisions is available in our [UK Health Accounts dataset](#). Changes to the back series result from updated source data. In particular, we have incorporated newly available data for voluntary health insurance and out-of-pocket expenditure following reporting expenditure as provisional estimates in last year's bulletin.

## 8 . Health expenditure data

### [UK Health Accounts](#)

Dataset | Released 31 May 2024

UK current healthcare expenditure data by financing scheme, function and provider. Additional analyses of long-term care expenditure, total pharmaceutical expenditure and capital healthcare expenditure.

### [OECD health accounts](#)

Dataset | Updated as new data becomes available

Data on health expenditure and financing for Organisation for Economic Co-operation and Development (OECD) member states.

## 9 . Measuring the data

Data presented in this bulletin are consistent with the definitions of the [System of Health Accounts 2011 framework](#).

More information about the sources and methods used to produce the UK Health Accounts are available in [UK Health Accounts: methodological guidance](#). For more information about the sources and methods used to produce our provisional 2023 estimates of healthcare expenditure, please see [UK Health Accounts: methodological guidance for t-1 estimates of healthcare expenditure](#). The methods used to compile our back series before 2013 are presented in [Estimating the 1997 to 2012 UK Health Accounts time series – methodology guidance](#).

Long-term care expenditure accounts for services aimed at managing chronic health conditions related to long-term care dependency and reducing suffering where an improvement in health is not expected. Total long-term care can be divided into health-related long-term care and social long-term care. For definitions of these terms, please see our [Healthcare expenditure, UK Health Accounts: 2019 bulletin](#).

Quality and methodology information (QMI) for the UK health accounts can be found in our [UK Health Accounts QMI](#).

## 10 . Strengths and limitations

### International comparability

The UK Health Accounts are constructed using standardised definitions drawn from the [System of Health Accounts 2011 \(SHA\) framework](#). This framework is employed by all EU member states and most Organisation for Economic Co-operation and Development (OECD) countries, making the Health Accounts the most suitable source for international comparisons of healthcare expenditure.

### Timeliness

Sufficiently detailed data needed to produce estimates of spending on healthcare functions and providers are only available at a two-year lag, which limits the timeliness of our detailed Health Accounts breakdowns.

However, we produce preliminary estimates of healthcare expenditure at a one-year lag, which means we can present high-level estimates for healthcare expenditure for 2023. The data used to produce these provisional estimates are based on growth presented in quarterly national accounts data. These preliminary estimates are subject to data revisions, reflecting the inherent trade-off between timeliness and accuracy of different data sources. Quarterly national accounts data are subject to revision, as explained in our [National Accounts revision policy](#).

### Data limitations

Our estimates of government healthcare expenditure by healthcare function and provider for 2022 are subject to more uncertainty because of delays to the publication of the National Cost Collection (NCC), which presents data relating to NHS trust expenditure by type of activity in England. Consequently, we are presenting government healthcare expenditure by function and provider as provisional for some components, including breakdowns of hospital spending, ancillary providers, and other ambulatory providers. These provisional estimates use a partial unpublished version of NCC data to identify growth in different healthcare function and provider categories. As not all components are available, these growth rates are intended to be indicative and subject to revision once the full NCC data are available for our next bulletin. The full NCC will be published by NHS England later in the year. As part of our next bulletin, which we expect to release in Spring 2025, we will revise our estimates of government expenditure by function and provider for 2022 to make use of the full published vintage of NCC data. We do not anticipate needing to produce provisional estimates of healthcare expenditure by function and provider for 2023 in our next release.



## Identification of COVID-19-related costs

While we have attempted to identify expenditure on coronavirus (COVID-19)-related services in 2021, we have been limited to reporting spending on testing and tracing services, COVID-19 vaccinations, and therapeutic treatments for COVID-19. We have not been able to separately identify other COVID-19 services, such as costs associated with treating COVID-19 from other forms of treatment.

## 11 . Related links

### [UK Health Accounts: methodological guidance](#)

Methodology | Revised 17 May 2023

This guidance note explains the methodology used to calculate healthcare expenditure for government and non-government financing schemes of health accounts.

### [UK Health Accounts QMI](#)

Methodology | Revised 31 May 2024

Quality and methods information for the UK health accounts.

### [Introduction to health accounts](#)

Article | Revised 12 May 2016

This article explains what health accounts are and how they differ from the previous Office for National Statistics (ONS) analysis "Expenditure on healthcare in the UK".

### [System of Health Accounts 2011 \(revised edition\)](#)

Framework | Released 16 March 2017

A systematic description of the financial flows related to the consumption of healthcare goods and services.

### [Public service productivity, healthcare, England: financial year ending 2022](#)

Bulletin | Released 22 March 2024

Estimates of output, inputs and productivity for public service healthcare in England.

## 12 . Cite this statistical bulletin

Office for National Statistics (ONS), released 31 May 2024, ONS website, statistical bulletin, [Healthcare expenditure, UK Health Accounts: 2022 and 2023](#)