Office for National Statistics

UK Health Accounts: methodological guidance

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

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1 . Introduction

This guidance note explains the methodology used to calculate the different financing schemes that constitute total current healthcare expenditure for the UK Health Accounts.

The first sections set out in detail how government-financed healthcare expenditure is calculated, while the latter sections focus on non-government financing schemes. The non-government healthcare spending elements of the UK Health Accounts are voluntary health insurance schemes, non-profit institutions serving households (NPISH), enterprise financing and out-of-pocket payments.

2 . Total government healthcare expenditure

The main data source for calculating total government healthcare spending for the UK Health Accounts is HM Treasury's (HMT's) Online System for Central Accounting and Reporting (OSCAR) dataset. This dataset is the most comprehensive source of government expenditure data and forms the basis of HMT's annual Public Expenditure Statistical Analyses (PESA) publication, as well as being used in the measurement of general government final consumption expenditure within the national accounts.

Data in OSCAR are recorded by month, enabling production of a measure for healthcare expenditure on a calendar-year basis. The OSCAR dataset is analysed using the international Classifications of the Functions of Government (COFOG) system, and the data used for the measurement of total government expenditure in health accounts is that which falls under COFOG 7 – health. However, the definition of healthcare used in the System of Health Accounts (SHA), differs from that used in the COFOG classification system. As a result, a number of modifications must be made to the OSCAR dataset from additional sources, the largest of which is the inclusion of health-related elements of local authority social care.

Treatment of current and capital expenditure

The headline measure of healthcare expenditure in the UK Health Accounts reports current expenditure, including capital consumption, but excluding capital expenditure.

Capital consumption covers the cost of depreciation of capital goods (items that are anticipated to be in use over several years and add to the stock of resources in the healthcare system) over time. Capital consumption is measured in the health accounts using the perpetual inventory method, as used in the national accounts.

Expenditure on the formation and acquisition of capital is excluded from our headline estimates, but reported separately as an additional indicator. These measures should not be summed, as the aggregate would double-count the consumption of fixed capital.

Deductions from government expenditure measure

A number of elements are deducted from the OSCAR dataset to match the System of Health Accounts (SHA) definitions.

Expenditure from the Department for Business, Energy and Industrial Strategy classified as health in the COFOG system is removed from the health accounts measure, as this relates to research and development, which is excluded from health accounts.

Grants to UK charities, including those funded by the National Lottery are excluded from the government expenditure measure of health accounts. This expenditure is instead classified under the non-profit institutions serving households (NPISH) financing scheme.

As health accounts specifically relate to UK residents, payments made by the UK government to fund the care of eligible former UK residents living in European Economic Area (EEA)[1] nations and eligible dependents (in EEA nations) of workers employed in the UK, are excluded from health accounts. Payments made by the UK government to EEA nations, to fund the care of UK residents who are injured or fall ill while temporarily in EEA nations, are included in the health accounts.

The health accounts make a deduction for education and training expenditure. Under the definitions of the SHA 2011, expenditure on future workforce education and training is deducted from the health accounts, but not expenditure on current workforce development.

Adjustments from additional data sources

In order to create a government expenditure measure consistent with the SHA 2011 definitions, a number of items calculated using sources other than OSCAR are added or deducted to the total government healthcare expenditure measure.

Social care expenditure included in health accounts

The largest of these additions is for social care. Social care expenditure has been included where the need for care is primarily due to a health condition (including old-age related conditions), and where care supporting basic Activities of Daily Living (ADLs, such as bathing, dressing and walking)[2] makes up a substantial element of the service provided.

This has resulted in the inclusion in health accounts of a considerable proportion of local authority-organised adult social care expenditure. The main elements of adult social care spending classified as long-term care in the health accounts are residential and nursing care, home care and direct payments, while substance misuse services are included in the health accounts as curative/rehabilitative care.

Excluded from our estimate of current healthcare expenditure are social care services for which the care component is primarily made up of support with Instrumental Activities of Daily Living (IADLs, including shopping, cooking and managing finances)[3], such as day care and supported accommodation. Also excluded from health accounts are home adaptations, which are considered capital expenditure, and non-healthcare related activity such as asylum seeker support. These are reported as the memorandum item “social long-term care” expenditure. Social long-term care expenditure can be added to health-related long-term care to give a measure of total long-term care expenditure, also reported within our bulletins.

The NHS also provides funding for adult social care services, a proportion of which is used to fund services that are not considered to be healthcare in SHA 2011 using the ADL/IADL distinction. A deduction is made to the government expenditure figures to remove this spending.

Figures for government expenditure on care exclude client contributions to social care services, which are included in the out-of-pocket financing scheme, while grants by health bodies and local authorities to charities are recorded in the NPISH financing scheme instead of the government financing scheme.

It should be noted that there is a difference in the methodology used in the data source for adult social care services in England between 2013 and 2014. This is a result of the change in the NHS Digital data collection for expenditure on these services, from the PSS-EX1 collection to the ASC-FR collection. A similar method for allocating expenditure from the ASC-FR return has been developed to that used for the PSS-EX1 data, minimising the effect of the change in source on health-related long-term care expenditure in the two years. However, it should be noted that the division of this spending by the categories of inpatient and home-based care is not comparable between 2013 and 2014.

Also included in the measurement of current healthcare expenditure is a small component of children’s social care, again where this meets the criteria of the need for care being primarily due to a health condition and where care supporting basic ADLs makes up a substantial part of the care component. This covers a small proportion of children’s residential care and direct payments, in the cases where these are specifically provided as a result of a child’s medical condition, as well as expenditure on educational psychology services.

In addition to social care services, Carer’s Allowance is included in the health accounts, as it constitutes expenditure by government on funding household provision of long-term care, consistent with the SHA 2011 guidelines.

Other additions to total government healthcare expenditure:

- expenditure on healthcare in the armed forces, police custody suites and a small number of prisons where healthcare is not provided by NHS bodies is added to the government expenditure measure

- preventive healthcare spending by non-health government bodies is included in the health accounts; this covers elements of the spending of the Food Standards Agency, Health and Safety Executive, Drinking Water Inspectorate and transport authorities relating to information campaigns, risk analysis and making regulations to protect public health

- expenditure on the administration of healthcare that is not allocated to COFOG 7 (health) in the OSCAR dataset is added to total government healthcare expenditure; this includes elements of the Scottish and Welsh Governments responsible for health, and the Healthcare, and Care and Social Services, Inspectorates in Wales (equivalent bodies in the other UK nations already being included under healthcare in the OSCAR dataset)

- income received by the NHS from public authorities, insurers and private businesses under the Compensation Recovery Scheme is added to total government healthcare expenditure

Notes for Total government healthcare expenditure:

1. The EEA medical costs scheme covers the majority of EU member states plus Switzerland and Iceland.

2. ADLs include bathing, dressing, grooming, mouth care, toileting, transferring between bed and chair, walking, climbing stairs, eating.

3. IADLs include shopping, cooking, managing medications, using the phone and looking up numbers, doing housework, doing laundry, driving or using public transportation, managing finances.

3 . Analysis of government expenditure by function and provider

Government healthcare expenditure is analysed by the function (HC) and provider (HP) categories of health accounts in line with the System of Health Accounts (SHA) 2011 guidelines, and a summary of the definitions used for this apportionment can be found in An introduction to health accounts. This apportionment is carried out by the Office for National Statistics (ONS) in conjunction with the Department of Health, Scottish Government, Welsh Government, Public Health Wales, the Northern Ireland Executive and NHS England. Data were also provided by the Health and Social Care Information Centre for social care services, LaingBuisson for NHS purchases of care from non-NHS providers and the Department for Work and Pensions for Carer's Allowance.

The following section explains how each provider type (HP) is broken down by function type (HC) in the health accounts definitions.

Hospitals (HP.1)

This category includes all government expenditure in hospitals, including general, specialist and mental health hospitals, and government expenditure on independent sector hospitals. Under the health accounts functional classification, hospital care is split between:

- curative/rehabilitative care, which is further split between inpatient, day case and outpatient activity by mode of provision using sources including the NHS reference costs
- long-term care, which consists of palliative care (also split by mode of provision) and patients discharged from acute care, but not yet transferred home or to a specialist long-term care facility
- ancillary services, which include some hospital laboratory-based services that cannot be allocated to another function, and patient transport costs
- preventive care, which includes healthy condition monitoring and early disease detection services including outpatient obstetrics and medical genetics

Residential long-term care facilities (HP.2)

This category includes both local authority and NHS-funded care in residential and nursing homes. This is predominantly long-term, with the exception of some substance misuse services which are classed as curative /rehabilitative.

Offices of general medical practitioners (HP.3.1)

This category covers general practitioners and is split between the following functions:

- curative/rehabilitative care split between outpatient care and home-based care
- long-term care expenditure covers treatment for dementia, chronic obstructive pulmonary disease (COPD) and palliative care, and is measured by the funding GPs receive for these activities under the Quality and Outcomes Framework (QOF)
- pharmaceuticals and non-durable medical goods covers expenditure on GP-dispensed drugs
- preventive care services cover preventive advice healthy condition monitoring and early disease detection expenditure, using funding GPs receive for these activities under the Quality and Outcomes Framework (QOF)

Dental practices (HP.3.2)

This category covers all NHS-funded treatment in dental practices and is split between the following functions using a detailed survey of dental activity from NHS Scotland:

- curative/rehabilitative care provided in outpatient (practice-based) and home settings
- preventive care services such as routine check-ups, scaling and polishing, and porcelain veneers

Providers of home health care services (HP.3.5)

This category includes long-term home care services funded by local authorities and the NHS, covering both those organised by local authorities and those funded with direct payments. Also included are NHS-funded home care services provided by independent sector providers.

Other ambulatory care providers (HP.3.x)

This category is not part of the SHA framework, but has been produced to capture all other elements of ambulatory healthcare not included in the three other ambulatory care providers categories. In the SHA framework this covers other health care practitioners (HP.3.3) and ambulatory health care centres (HP.3.4).

It primarily consists of NHS community health services (including those funded by hospital trusts) and is split between:

- curative/rehabilitative care provided in day, outpatient, and home-based settings
- some long-term learning disability care services (not including those organised by local authorities)
- preventive care such as screening, health promotion and family planning services

Providers of ancillary services (HP.4)

This category contains the expenditure of ambulance trusts, which are classified as ancillary services in the functional classification.

Retailers and other providers of medical goods (HP.5)

This category includes pharmacies, opticians and other medical goods suppliers. Expenditure on medical goods is split in the functional classification between two categories – pharmaceuticals and non-durable medical goods, and therapeutic appliances and other medical goods. Also included in this category are eye tests provided by opticians, which are classified as curative/rehabilitative care.

Providers of preventive care (HP.6)

This category covers national public health bodies and the cost of preventive health services, such as information programmes, provided by bodies such as the Food Standards Agency and Health and Safety Executive. Expenditure is allocated to preventive care in the functional classification, except expenditure on making regulations which is classified as governance and health system administration. Activities relating to enforcement of regulations are excluded from the health accounts.

Providers of healthcare administration system and financing (HP.7)

This category is allocated to governance and healthcare system administration in the functional classification and covers bodies responsible for the following activities:

- the strategic governance of the healthcare system, including departmental costs and the central administration of NHS England
- developing healthcare regulations and regulating healthcare products and services
- setting and monitoring standards of care, and the performance of the health care system
- national information systems
- assessing the efficacy and value of treatments

Rest of economy (HP.8)

This category includes:

- households as providers of home healthcare (HP.8.1) which covers households in receipt of Carer's Allowance. This expenditure is classified as home-based long-term care in the functional classification.
- all other industries as secondary providers of healthcare (HP.8.2), which covers healthcare provided by bodies whose primary purpose is not healthcare, including curative/rehabilitative services provided by the police and schools (through the educational psychology service), and ancillary services provided by non-specialist transport providers (including taxis) reimbursed through hospital travel cost schemes.

Rest of World (HP.9)

This category covers healthcare services provided to UK residents temporarily abroad, including through the European Economic Area (EEA) medical costs scheme.

Expenditure on services not allocated to function and provider

A number of healthcare support services and overhead expenditure items cannot be allocated directly to the healthcare function and provider categories of health accounts. These include:

- commissioning costs, including clinical commissioning groups
- estates management, procurement and similar support services
- clinical negligence and other legal costs
- expenditure by central health education bodies to support the education costs of the current healthcare workforce; this does not include expenditure on future workforce development, which is excluded from health accounts
- expenditure on these services are pro-rated across the function and provider categories to which NHS expenditure has been allocated, in proportion to the expenditure on these services

In addition, social care support services, such as assessment and commissioning, are pro-rated across the care categories of social care expenditure. Therefore the proportion of these support services, which are included in the health accounts, is the same as the proportion of social care services that are included in health accounts.

Where data are not available for expenditure on a certain service in one of the UK nations, it is estimated based on data from those nations where this information is available. This occurs in a small number of cases, such as for expenditure on the education psychology service, which for all devolved administrations is based on data from England and the division of dental expenditure by function, which is based on a record of dental expenditure kept by NHS Scotland.

In the small number of cases where data are not available for a certain year, it has been estimated by scaling expenditure using an index of healthcare expenditure in that nation from HM Treasury's Public Expenditure Statistical Analysis (PESA) publication. As of 2016, this mainly affects some of the 2012 to 2013 data, which formed one quarter of the 2013 calendar year figures. Some elements of expenditure in 2012 to 2013 were not available on a consistent basis to 2013 to 2014 for England, because of the restructure of NHS England between these two financial years. As a result some items of expenditure in the governance and health system administration, and the overheads elements of health accounts were estimated for 2012 to 2013 based on data for 2013 to 2014 and the growth rate of healthcare expenditure taken from the PESA publication.

While data from LaingBuisson and the Health and Social Care Information Centre enable much of the expenditure of the NHS on non-NHS providers to be allocated to function and provider, it is not possible to allocate all of this expenditure. Expenditure on non-NHS providers, which cannot be allocated to a function and provider, is allocated to "not elsewhere classified", as explained in the next section.

4 . Reconciliation between the analysis and total government healthcare expenditure

Most of the data sources used for the analysis of healthcare expenditure by function and provider are available only on a financial year basis, in contrast to the OSCAR data, which is calculated on a calendar year basis. As a result, the function and provider analysis usually uses two financial years apportioned to create a calendar year figure. The difference in the data periods covered results in a difference between the sum of expenditure of all categories of function and provider in the analysis of expenditure, and the total government healthcare expenditure figures.

In order to reconcile the total figures for total government healthcare expenditure and the analysis of government healthcare expenditure, the two sets of calculations are carried out separately based on the data from England, Scotland, Wales and Northern Ireland.

If the total government expenditure figure is greater than the sum of expenditure from all analysis categories, the difference between the total government expenditure figure and the sum of expenditure in the analysis categories is allocated to the “not elsewhere classified” function and provider categories (HC.0 and HP.0). In the event that the total government expenditure figure is lower than the sum of expenditure from all analysis categories, the expenditure figures are scaled down so that the sum of analysis categories matches the total government expenditure figures.

The total government expenditure figures are usually larger than the sum of expenditure in all analysis categories for England, as the available data do not enable the apportionment of all NHS England’s expenditure on non-NHS providers to the health accounts categories. In the instances where the total government expenditure figures are smaller than the sum of expenditure in all analysis categories in one or more of the devolved administrations, the difference between these two figures is usually small. This difference is as a result of expenditure not being smoothly allocated across the months of the year, leading to a difference between the figures produced using the calendar year OSCAR dataset and financial year data sources.

5 . Voluntary health insurance schemes

Total expenditure on voluntary health insurance schemes (HF.2.1) is calculated as net[1] earned premiums for relevant insurance products plus, where applicable, Insurance Premium Tax (IPT) and investment income attributable to insurance policyholders (interest earned on insurance reserves).

Insurance products included in voluntary health insurance

Private medical insurance (PMI)

PMI schemes typically cover acute secondary medical treatments. Original data source: LaingBuisson.

Self-insurance (employer-provided)

Employer self-insurance schemes are offered by employers to cover employees, where the employer assumes the risks associated with cover. Original data source: LaingBuisson.

Health cash plans

Health cash plans cover the costs of "everyday" medical expenses, such as dental and optical expenses. They are intended to payout on low-value high-frequency goods and services, unlike medical insurance which covers more occasional expensive acute treatments. Original data source: LaingBuisson.

Dental insurance

Dental insurance provides dental cover via a contract between insurers and patients, where insurers assess the risk of a patient before charging a premium. Original data source: LaingBuisson.

Dental capitation plans

Dental capitation plans are a contract between dentists and patients, where a dentist assesses the risk of a patient and the patient pays upfront for any treatment in a determined period. Original data source: LaingBuisson.

Travel insurance (health-related component only)

This covers the proportion of travel insurance which covers healthcare costs. Data source: Association of British Insurers (ABI).

Net insurance premiums cover claims payouts on insurance policies as well as covering the cost of general administration, commission and expenses, and also providing profit. Net premiums are used over gross premiums to exclude reinsurance (risk received from other insurers and risk passed on to other insurers).

Insurance Premium Tax (IPT) is charged on some, but not all, of the products identified previously. Table 1 shows the rates charged on each product in 2013 and 2014.

Table 1: Insurance Premium Tax rate on health insurance products

Insurance product	IPT rate in 2019 (%)
Private medical insurance	12
Self-insurance	n/a
Health cash plans	12
Dental insurance	12
Dental capitation plans	n/a
Travel insurance	20

Source: Office for National Statistics

Investment income attributable to insurance policyholders, which covers investment income earned on insurance reserves, is added to voluntary insurance expenditure in line with national accounts, as well as health accounts, practices. As insurance reserves are considered a liability that insurers have towards policyholders, the income earned on reserves is considered to be earned by the policyholder and transferred to the insurer as part of their payment for insurance, in other words, part of their expenditure on insurance.

Analysis of voluntary insurance expenditure by healthcare function

The difference between total insurance expenditure and insurance claims, is allocated to the administration of health financing in the health accounts functional classification. This element is made up of:

- insurance administration costs plus profit (the difference between net premiums and net claims)
- investment income on reserves attributable to insurance policyholders
- Insurance Premium Tax

Health insurance claims are then split between the categories of care – curative/rehabilitative care, medical goods, preventive care and other care not elsewhere classified.

Private medical insurance and employer self-insurances schemes combined form the majority of voluntary insurance claims expenditure. Claims from these forms of insurance fund curative/rehabilitative care in independent hospitals, NHS private patient units, private specialists' fees, mental health hospitals and hospital-provided care delivered at home.

Expenditure on care in independent hospitals and NHS private patient units, as well as specialists' fees is then apportioned between inpatient, day case and outpatient care. Direct data splitting private acute hospital expenditure by these three modes of provision is not available, although the data source used (LaingBuisson) provides figures for total hospital treatment funded through these insurance schemes.

In order to estimate insurance-funded expenditure on each of inpatient, day case and outpatient care, the Office for National Statistics (ONS) imputes expenditure using LaingBuisson inpatient and day case activity data, and outpatient activity data collected from a number of private hospital groups. Activity data are then combined with data on the average relative cost of inpatient, day case and outpatient treatments in the NHS reference costs to derive an estimate for relative insurance expenditure on inpatient, day case and outpatient care. These estimates are then scaled to the LaingBuisson figures for total hospital treatment funded through these insurance schemes.

Claims on dental insurance, dental capitation plans and the dental services element of health cash plans are split between curative/rehabilitative outpatient and home-based care and preventive care assuming the same proportions of spending on each of these functions as for NHS-funded care. The non-dental elements of health cash plan claims are primarily split between curative/rehabilitative inpatient and outpatient care, and durable medical goods, based on data from LaingBuisson, while expenditure unallocated to a function is included in the "not elsewhere classified" category.

No information is available to split the health element of travel insurance claims by function and therefore this spending is allocated to the "not elsewhere classified" category.

Notes:

1. Premiums and claims are net of reinsurance.

6 . Non-profit institutions serving households

Healthcare expenditure by non-profit institutions serving households (NPISH) covers the expenditure of charities, which is funded through voluntary donations, grants and investment income.

Total expenditure on healthcare by NPISH, and the analysis of this expenditure by function, is calculated using a sample of charities taken from the charity income and expenditure dataset produced by the National Council for Voluntary Organisations (NCVO), which is also used in the national accounts. For health accounts, a sample of over 500 charities stratified by income band was taken from this dataset, which were classified as human health, residential care, and social work activities according to the Standard Industrial Classification of economic activities.

Sampled charities were researched to determine if the majority of their activity was healthcare according to the System of Health Accounts (SHA) 2011 definitions. Charities classified as healthcare in the SHA 2011 definitions were then allocated to the function that best fitted their main activity.

The expenditure of these charities used in health accounts was that funded from voluntary donations, grants and investment income. Excluded from NPISH is expenditure financed by client contributions (classed as out-of-pocket expenditure in health accounts) and purchases of care by public and NHS bodies (classed as government expenditure in health accounts).

The results of the sample were weighted to the total population of charities in order to obtain total NPISH expenditure on healthcare. The analysis is based on NCVO data for 2012. National accounts data for the growth in NPISH final consumption expenditure associated with healthcare industries are used to estimate growth in subsequent years.

7 . Enterprise financing schemes

Enterprise financing covers arrangements where enterprises provide or directly purchase healthcare services for individuals, typically their employees. Enterprise financing schemes exclude employer-purchased insurance and employer self-insurance schemes, which are included in voluntary health insurance.

Total expenditure on healthcare through enterprise financing schemes is calculated using national accounts intermediate consumption data for purchases of human health services by industries other than those included elsewhere in health accounts (such as government bodies and residential care). As these data are only available for the year before the health accounts are published, with data up to 2013 available for the 2014 health accounts, this expenditure is extrapolated using the growth in gross value added for all industries, which is a measure of output.

Data from LaingBuisson are used to identify a proportion of this expenditure as occupational healthcare and employer-purchased hospital screening, which are both classified as preventive care in the health accounts functional classification.

Enterprise financing is introduced to UK healthcare expenditure estimates in health accounts for the first time, having not been part of our previous "Expenditure on Healthcare in the UK" series.

8 . Out-of-pocket expenditure

Out-of-pocket healthcare expenditure is calculated using different data sources for medical goods, medical services and long-term care. Expenditure on medical goods in health accounts is derived from the Office for National Statistics's (ONS's) Consumer Trends analysis, which forms the basis of private household consumption in the UK National Accounts. This data source was also used in ONS's previous "Expenditure on Healthcare in the UK" analysis.

However, figures for expenditure on medical services in Consumer Trends cannot be used in health accounts as they include expenditure from private insurance claims and do not provide the necessary information for the health accounts functional breakdowns. As a result, expenditure on medical services is derived from data from LaingBuisson and the Living Costs and Food Survey, with some functional splits estimated using data from the government-financed elements of health accounts.

Hospital and outpatient services funded through out-of-pocket payments within health accounts

Independent hospitals, NHS private patient units including specialists' fees

All self-pay for care in independent hospitals and NHS private patient units. This care is split between curative /rehabilitative inpatient, day case and outpatient care using the same method as insurance funded services described previously. Original data source: LaingBuisson.

Fertility treatments and pregnancy terminations

Fertility treatments, including In Vitrio Fertilisation (IVF), and pregnancy terminations financed through self-pay. These services are classified as curative/rehabilitative day case or outpatient care. Original data source: LaingBuisson.

Screening services

Private screening services in independent hospitals, non-hospital based wellness centres and mobile units is classified as preventive care. Original data source: LaingBuisson.

Mental health hospitals

Privately funded treatments in mental health hospitals cover predominantly acute psychiatry (including addiction treatments) and some brain injury rehabilitation. The split of this expenditure between curative/rehabilitative inpatient and outpatient care is estimated using data from the NHS reference costs. Original data source: LaingBuisson.

Private GP consultations and GP services

Covers private GP consultations and other services provided in private GP clinics. The split of expenditure between curative/rehabilitative outpatient and home-based care, is estimated using data from NHS England. Original data source: LaingBuisson.

Private and NHS dentistry

Covers self-pay for private dental work and client payments for NHS dental services. The split of expenditure between curative/rehabilitative outpatient and home-based care and preventive care is estimated using the same proportions as for government-financed expenditure. Original data source: LaingBuisson.

Optical services

Covers optical services and eye tests, but not the provision of optical equipment, which is included in medical goods, as described previously. This is classified as curative/rehabilitative outpatient care. Original data source: Living Costs and Food Survey.

Other outpatient services

Covers services of acupuncturists, chiropractors, counsellors, physiotherapists and other medical auxiliaries, and is allocated to curative/rehabilitative outpatient care. Original data source: Living Costs and Food Survey.

Expenditure on private provision of long-term care was made up of private residential long-term care and domiciliary home care services, and client contributions for local authority-organised care.

Out-of-pocket expenditure on inpatient long-term care services is calculated using LaingBuisson data on private residential and nursing care.

Out-of-pocket expenditure on home-based long-term care is also calculated using LaingBuisson data. However, a proportion of this care is not classified as part of healthcare in the health accounts, as it does not involve care supporting basic Activities of Daily Living. The proportion of out-of-pocket-funded care which involves assistance with basic ADLs is estimated using the Health Survey for England, which contains data on the activities supported by home carers and funding sources for care.

Out-of-pocket expenditure on client contributions for local authority-organised care is calculated using the same data sources used for government-financed local authority care. Services included in the out-of-pocket-financed element of health accounts are the same services as included in the government-funded elements of health accounts, and are allocated to the same functions.

Additional information about the differences between the health accounts figures and those included in the earlier publication "Expenditure on Healthcare in the UK" can be found in An introduction to health accounts.

9 . Total pharmaceutical expenditure

A measure of total pharmaceutical expenditure was produced for the first time in our Healthcare expenditure, UK Health Accounts: 2021 bulletin.

The estimates capture UK expenditure across all financing schemes relating to:

- prescribed medicines
- purchases of over-the-counter medicines
- vaccine programme expenditure
- medicines that are used within wider courses of treatment

Our estimates reflect the cost of consumption, which is the final cost to the consumer as opposed to the raw medicine ingredient cost. This includes taxes payable on medicines, as well as overhead costs associated with providing medicines, such as pharmacy, storage and distribution costs. For household purchases these costs are reflected in the retail price of pharmaceuticals. For government services, these costs are added to ingredient costs to ensure a comparable level of coverage to market provision.

Government expenditure also reflects rebates and payments from pricing agreements between the government and pharmaceutical suppliers, such as the Voluntary scheme for branded medicines pricing and access agreement on GOV.UK.

How we compile our estimates separately for government and non-government expenditure

Government expenditure on prescribed medicines (HC.5.1.1) and vaccination programmes (HC.6.2) are already reported and identified in our UK Health Accounts datasets. Added to this is expenditure on pharmaceuticals used as part of treatments, which comprises secondary care prescribing and the intermediate consumption of medicines from residential and non-residential social care settings. We cannot identify pharmacy on-costs in hospital settings nor separately identify pharmaceuticals prescribed as outpatient drugs from hospital pharmacies because of data availability.

Rebates from arrangements agreed by NHS England (NHSE) and pharmaceutical companies, as well as voluntary and statutory scheme payments made by pharmaceutical companies to the Department of Health and Social Care (DHSC), are included in the measure to better reflect the actual net spend on pharmaceuticals. These are applied to the measure of hospital drugs spending rather than community prescribing on a majority basis. This means that no deduction is made to the measure of prescribed drugs (HC.5.1.1) in the health accounts.

For non-government financing schemes, household spending on prescribed drugs (HC.5.1.1), which includes NHS prescription fees, and over-the-counter medicines (HC5.1.2) is separately identifiable within our health accounts, derived from national accounts and DHSC annual accounts data. We supplement this with estimates of the intermediate consumption of medicines in household and non-profit institutions serving households (NPISH) economic sectors drawn from supply-use data used in the compilation of the national accounts.

How our measure compares with NHS data

The NHS Business Services Authority (NHSBSA) present the actual costs paid by the NHS in England for drugs, dressings, appliances and devices, covering drugs dispensed in both hospital and community settings. This can be seen in the NHS's Prescribing Costs in Hospitals and the Community series.

These data are an important data source used within our own analysis, but there are several important distinctions in the respective coverage.

Geographical coverage

Our estimates reflect UK-wide expenditure, while NHSBSA figures refer to prescribers in England.

Definition of pharmaceutical expenditure

Our health accounts measure reflects the relative cost to the consumer and needs to include a range of additional costs such as pharmacy and retailer margins, while the NHSBSA measure reflects the cost of drugs to the NHS.

Product coverage

Our health accounts measure refers purely to spending on drugs, while the NHSBSA data refer to spending on wider medical goods, including dressings, medical appliances and devices.

Industry

Our health accounts measure presents medicines spending by both the NHS and other healthcare facilities, such as providers of residential and non-residential long-term care services.

Vaccines

Our health accounts measure includes expenditure on immunisation programmes including the coronavirus (COVID-19) vaccination roll-out.

Economic sector

Our health accounts measure present expenditure across both government and non-government financing schemes.

Time period

Our health accounts measure are presented on a calendar year basis, whereas the NHSBSA figures are presented on a financial year basis.

Net spending

Our health accounts measure figures are presented net of payments made from pharmaceutical suppliers under the terms of the voluntary and statutory schemes negotiated by the DHSC on behalf of the UK.

10 . References

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