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THE BMJ COMMISSION ON THE FUTURE OF THE NHS

# NHS funding for a secure future

**Demands on the NHS continue to increase, and difficult decisions have to be made on how much we want to spend and how to finance that spending to ensure its stability**

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Worries about the sustainability of NHS funding have a long history. Just five years after the NHS opened its doors, amid concern about escalating spending on the NHS, the then Conservative government set up an independent commission led by Claude Guillebaud to examine the costs of the NHS. That inquiry found that spending remained sustainable even though it had increased, and actually recommended that extra investment was needed in hospitals and community services.[1]

At the time of the Guillebaud inquiry, NHS spending represented 3.2% of gross domestic product (GDP).[2] More than seven decades later, spending has outstripped the growth in GDP so that by 2022 we spent around 9.3% of GDP on the NHS.[3] This growth has been driven in part by additional demand (the UK population has increased by around a fifth since the 1950s, for example) and also by supply. Medical technology has developed, creating new opportunities for treatment and care. Higher price inflation in healthcare relative to the economy as a whole has also contributed pressure to spend more than the growth in the country's economic wealth. Growth in the past few years has also included exceptional funding as a result of covid-19 measures of course, although these are now starting to unwind.

The willingness to spend more on healthcare is not unique to the UK. Internationally, over time, virtually all countries have increased spending as a share of national wealth. That willingness has been enabled by a combination of higher taxes, of one sort or another, and reprioritisation of public spending. For example, in the UK, defence spending in the 1980s was around 5.5% of GDP. It is now around 2.3%.[4]

Annual spending on the NHS has increased on average by around 3.4% in real terms, but budgets have not increased smoothly from year to year (fig 1). Annual increases averaged 6.2% over the decade from 2000 to 2010 but just 1.2% between 2010 and 2020. This represents a significant financial gap in funding that has had a direct impact on the performance of the NHS and the quality of care it has been able to deliver. Prospects for the financial year 2024-25 look bleak, with the Institute for Fiscal Studies analysis of planned day-to-day spending in England suggesting a real cut in funding of 1.2%—equivalent to £2bn—plus a 0.75% real cut for the Scottish NHS and only a modest real rise in Wales of 0.7%.[5]

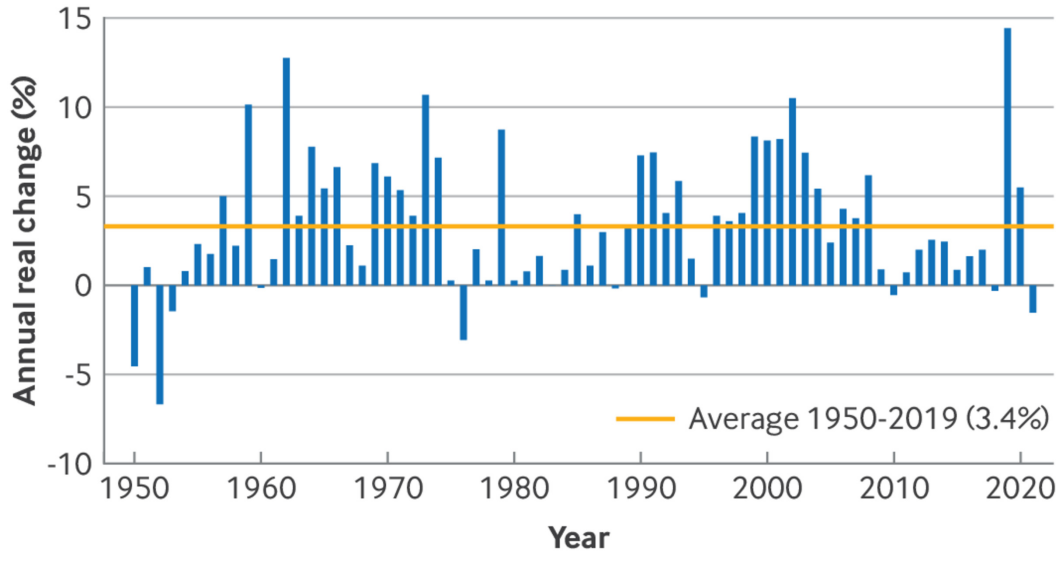


Fig 1 | Annual real changes in UK NHS spending 1950-51 to 2022-23. Data source: 1950-2018, British Social Attitudes survey[2]; 2019-22, authors' estimates based on UK health departments' annual accounts

The slowdown in funding has shown itself in worsening NHS performance on headline measures such as waiting lists and waiting times. The exigencies of the covid-19 pandemic had an

additional negative impact on performance, worsening trends that were clearly evident up to 2020. Increasingly poor performance is reflected in plummeting public satisfaction with the NHS which, in 2022, fell to just 29% being very or quite satisfied with the NHS, the lowest level since the British Social Attitudes survey started in 1983.[6]

Given this historical context of rising demand, rising costs, and worsening performance, the BMJ Commission set itself three fundamental questions about future funding of the NHS. How should we finance the NHS? How much do we want to spend? And how do we decide how much to spend?

As we elaborate below, we have decided to focus on the future process for determining NHS funding rather than recommending a particular future spending path. This is not to ignore the need to set a budget for the NHS or the pros and cons of how money is raised. We summarise the costs and benefits of alternative funding sources as well as key factors driving pressures to spend more on healthcare. However, the main thrust of this paper is our view on a need to try to reorientate debate about these matters among the public and policy makers to recognise the fundamental economic choice in deciding how much to spend, which involves the inevitable limits to growth in healthcare spending and the opportunity costs involved in spending on healthcare rather than on other competing calls on scarce public finances.

## How should we finance the NHS?

Historically, the NHS has been funded from a combination of general taxation (income tax, VAT, and other duties and taxes), National Insurance contributions, and charges to patients. The proportions from these sources have fluctuated slightly over time, particularly from 2003 onwards when National Insurance contributions were raised and the extra in essence hypothecated to the NHS owing to political promises at the time.[7] Broadly, today, funding from general taxation contributes around 80% of the NHS budget, National Insurance contributions around 18%, and charges to patients 2%. Although the absolute amount of privately funded healthcare has increased over time (from around 1.6% of GDP in 2000 to 2.1% in 2022[3]), so too have public sources, leaving the proportion of healthcare funded privately in the UK roughly stable at approximately 20%.

Of course, many other ways of raising money to pay for healthcare exist from, at one extreme, out-of-pocket payments, through to private or voluntary insurance and various forms of collective compulsory insurance. Although non-tax (and non-compulsory) ways of paying for healthcare, such as direct payments or voluntary insurance, are common features of most health systems, they generally account for a relatively small proportion of overall spending. They reflect the freedom for individuals to spend their income as they see fit, but they tend to be additional rather than alternatives to compulsory payment schemes (either in the form of taxes or compulsory social health insurance) as they are at odds with the general principles of universal healthcare systems with equity of access.

More common across health systems are some form of compulsory payment scheme such as tax based schemes or social health insurance, essentially earnings related and raised from employers and employees. Across 29 Organisation for Economic Co-operation and Development (OECD) countries in 2006, for example, the split between tax and social health insurance funding systems was around 50:50.[8] However, distinctions are not clear cut, with some variants of all types of funding—including, as noted, private/voluntary insurance—evident in all countries. Countries that predominantly rely on social health insurance also have differing models of provision and contracting with healthcare providers compared with tax based systems.

Current challenges in NHS financing may prompt consideration of new mechanisms to fund healthcare, such as a social health insurance model adopted by several other European nations. However, assessing what funding system is "best" is a tricky exercise.

Adam Smith suggested a set of criteria for assessing the worth of a taxation system (which could equally apply to other ways of raising funds for healthcare). These included some notion of fairness, certainty, convenience, and efficiency.[9] To these could be added other desirable features, such as simplicity, ease of administration, minimised distortion of general welfare and economic efficiency, and not least the ability to raise desired amounts of revenue in a stable and sustainable way.[9] Evaluating non-taxation based insurance models of healthcare financing against these criteria is, as noted, not straightforward. One broad based attempt to do so looked at the switch made by some OECD countries between tax and social health insurance funding models from 1960 to 2005. It concluded that: "[social health insurance] systems, on balance, have certain characteristics that make them more expensive than tax-financed systems, do no better in terms of most health outcomes that are amenable to medical care despite the extra spending, may do worse in respect of outcomes that require strong population-level public health programs, and do worse in terms of encouraging informal labor markets and discouraging employment."[8]

On the other hand, although a financing system for healthcare based on general taxes may tick Smith's four boxes for a good system, it can be made up of a variety of different taxes, structured and levied in different ways. It is not, at least in that sense, "simple." Moreover, the connection between revenues raised and public spending across competing services will, over time, be subject to political control and pressures that may not always fairly serve the population as a whole. Nevertheless, the UK's tax system overall is progressive in its structure,[10] is comparatively cheap to collect, and, with virtually everyone contributing through one tax or another, encourages a contributory social solidarity in line with the founding principles of the NHS.

Overall, limited empirical evidence suggests that any benefit from switching from a tax based to a social health insurance based funding system for healthcare is at best equivocal. Of interest, four countries that changed to a social health insurance system between 1960 and 2005 (the Czech Republic, Hungary, Poland, and the Slovak Republic) represented a certain special group of post-communist era countries that reverted to their pre-soviet social health insurance model in the 1990s. Meanwhile, eight countries (Denmark, Greece, Iceland, Italy, Norway, Portugal, Spain, and Sweden) all switched to predominantly tax financed systems between the 1960s and 1980s.

We therefore conclude that, with little compelling evidence to suggest that switching to a social health insurance model would justify the upheaval and costs of doing so, funding for the NHS should continue to be raised from general taxation. This is also the view of the public, across all demographics, including individuals' political allegiances, with around 82% supporting a tax funded NHS. Similar proportions also supported the principles that the NHS should be free at the point of use and available to all.[2] Such support not only reflects a general belief in the right to care as a shared responsibility but also recognises the inequitable financial burden that ill health imposes in the absence of a universal healthcare system. Dividing the annual NHS spend by the total UK population gives some indication of this burden, with a current annual average

NHS spend per capita of around £3236.[11] This average conceals a skewed distribution across the population, however, with spending on older and poorer groups being much higher than that on younger and better off groups, for example. Pooling the financial risk of ill health through general taxation coupled with universal access helps to mitigate such inequities.

## How much do we want to spend?

Over the lifetime of the NHS, spending on the NHS has grown on average at around 3.4% per year in real terms. Over the same period, UK GDP has grown on average by 2.1% per year. This has meant the NHS taking a larger share of GDP over time—from 3.2% in 1950-51 to around 9.3% in 2022-23.

Three main factors drive the pressure to spend more on the NHS: population changes, income effects, and other cost pressures.[12 13]

Historically, at least for the UK and many other countries, increases in population size and growing numbers of older people have not been a significant driver of spending. Rather, key factors have been increases in national income and a desire to spend a higher proportion of these increases on healthcare, plus changes and advances in medical technology. These, together with higher inflation and lower productivity in healthcare relative to the rest of the economy, have accounted for the bulk of overall spending pressures. Figure 2 sets out estimates of various spending pressures for some selected countries. "Other cost pressures" (for example, technology and inflation) account for a significant proportion of annual growth for several countries, especially the UK. The reasons for this are not clear, but as the effects of demography will vary across countries and time owing to differences in populations, so too will the structure and funding of countries' health systems and the propensity to adopt new technologies, for example, differ.

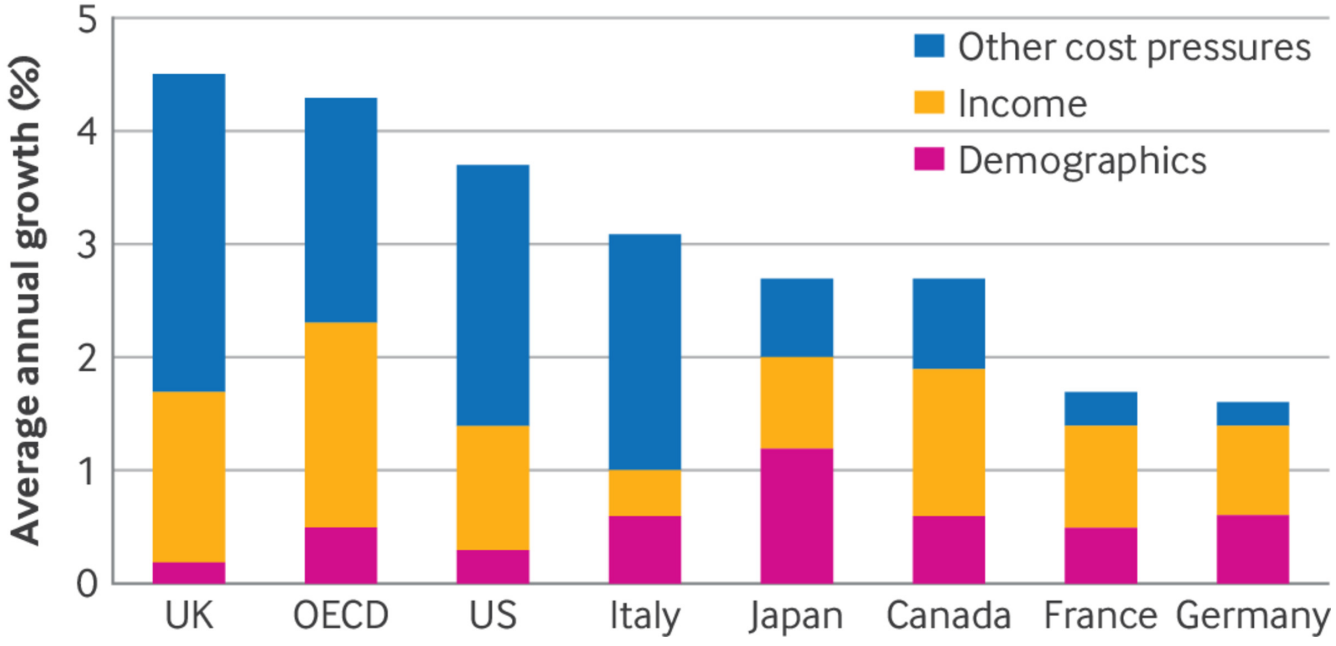


Fig 2 | Growth in public health spending per capita (1995 to 2009)[12]

Although these basic drivers of the pressures to spend more can be identified and to an extent quantified, spending on the NHS is ultimately a choice. Whether the rate of historical growth was the "correct" or "right" rate is, for all practical purposes, unanswerable; it reflects trade-offs, choices, and opportunity costs of spending on health rather than other public services, as well as wider economic considerations.

In economists' terms, in theory at least, an answer to the "correct"' level or growth in funding exists: in essence, spend more up to the point at which the benefits from spending on health equal the next best way of spending society's resources—education, say, or private spending. But calculating when this point is reached is not easy. As noted by Appleby and Harrison,[14]

*"Determining the point at which allocative efficiency is maximised (and hence the optimal level of health care spending identified) would require the Herculean task of quantifying (in commensurate units) all the total returns curves for all possible uses of the nation's scarce resources across all levels of spending and then allocating resources (in effect setting budgets) for every possible type of spending in a way which maximised returns at every level of spending until all resources are consumed. This exercise would need to be undertaken continuously to accommodate technological changes. The fact that every individual would place different values on the returns from different types of spending adds an almost infinitely complicating twist to an already near-impossible task."*

Nevertheless, budgets have to be set, and attempts have been made to grapple with this task. One guide on how much to spend is what other countries spend. As figure 3 shows, the UK ranked 16th highest for per capita spending out of 38 OECD countries for the pre-covid year of 2019 and 17th in 2022. The extent to which such knowledge helps to inform how much we want to spend is debatable.

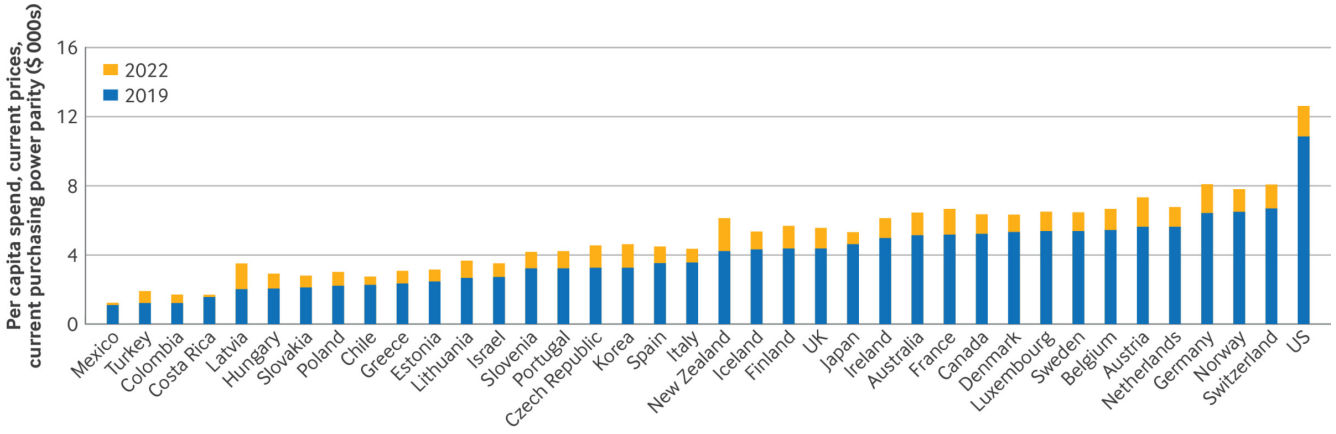


Fig 3 | Per capita spending on all financing schemes, OECD countries (2019 and 2022, $, purchasing power parities)[3]

Such international comparisons show that higher, and lower, healthcare spending is certainly possible, but taking account of factors known to influence spending levels—for example, and for illustrative purposes, countries' wealth as measured by GDP, the UK's healthcare spending is slightly higher than expected given its per capita GDP (fig 4).

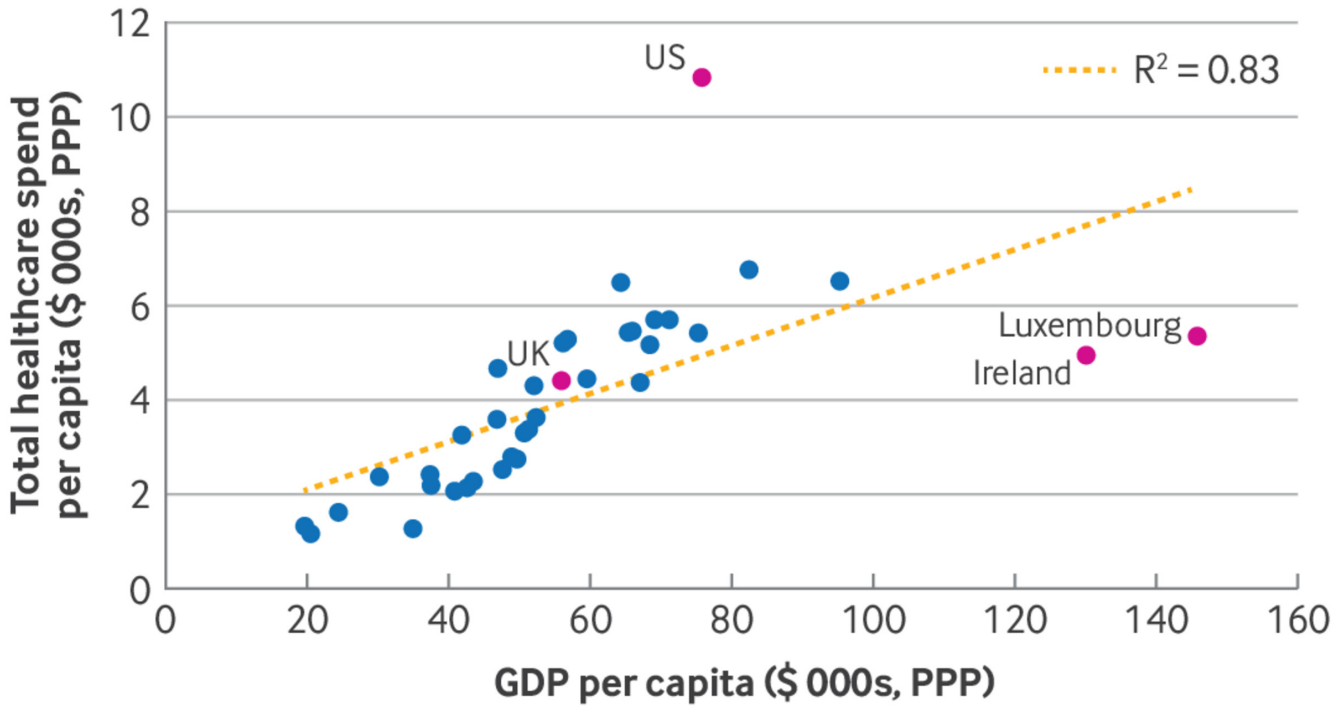


Fig 4 | Relation between per capita gross domestic product (GDP) and per capita healthcare spending. OECD countries, 2022 ($, purchasing power parities (PPP))[3] The regression trend line excludes three outlier countries: the US, Luxembourg, and Ireland. The last two are unusual owing to the nature of the sources of their GDP (eg, businesses registered in these countries for tax purposes and hence contributing to GDP but with minimal impact on population size and hence health spend) and the first has unusual levels of health spend associated with high inefficiencies in its production of healthcare. Inclusion of these countries weakens the relation between per capita GDP and health spend ($R^2$=0.43) but does not materially change the UK's position relative to its expected spend on healthcare given its GDP

A further approach is simply to use history as a guide, projecting forward historical spending growth. On this basis, as figure 5 shows, by around 2058 the share of GDP devoted to the NHS will double to 16.5%. By 2070 more than a fifth (21%) of the economy would be spent, and by the end of the century this would reach 36%. Increasing the rate of real growth in NHS spending to 4% from 2023-24 would mean that around 85% of UK GDP would be consumed by the end of the century. To put these figures in context, a doubling of the proportion of GDP spent on the NHS would, all things being equal, lead to a doubling of actual resources used by the NHS, not least labour, which could see its share of the working population also double, from around one in 17 now, to one in eight in 2058.

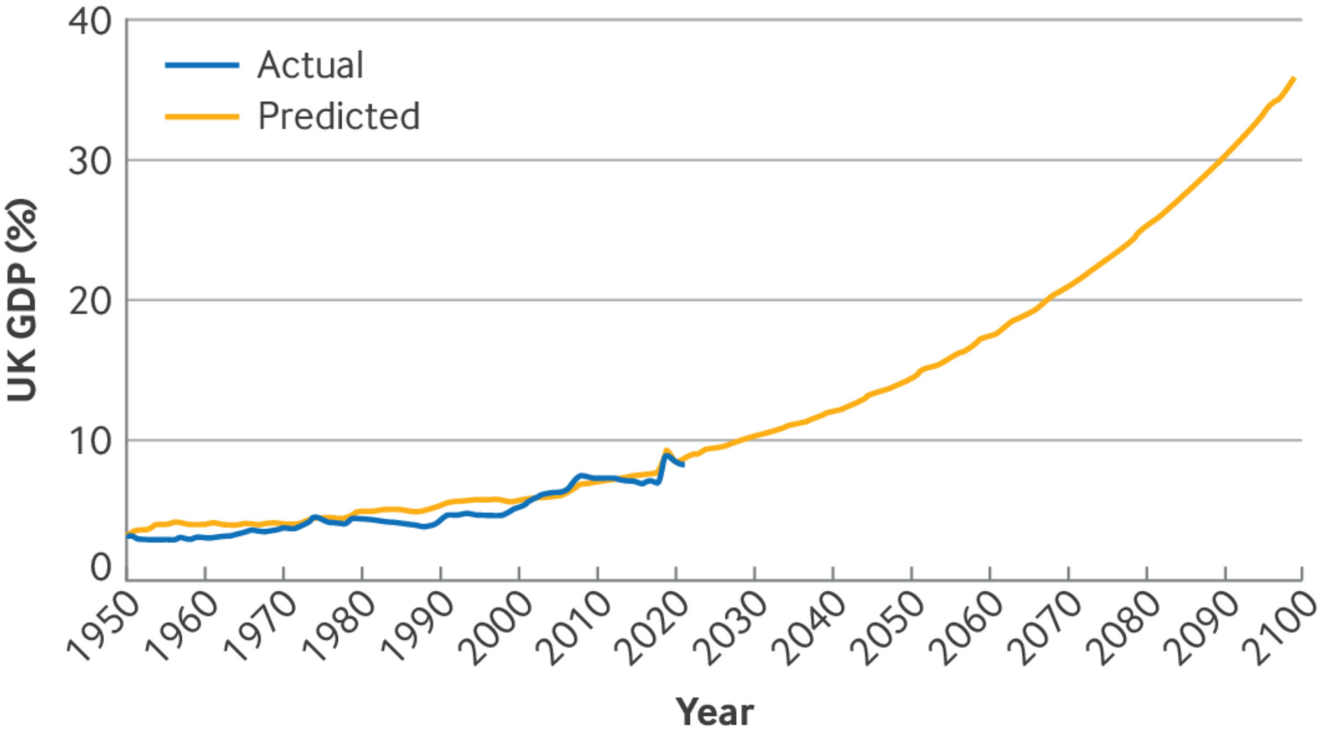


Fig 5 | UK NHS spending as a percentage of gross domestic product (GDP): actual and growth projected at 3.4% per year from 1950 to 2100. Data sources: 1950-2018, NHS Funding and Expenditure Briefing Paper CBP0724[3]; 2019-22, authors' estimates based on UK health departments annual accounts; projections, authors' calculations. From 2028-29 to 2072-73, real GDP growth as Office for Budget Responsibility long term projections.[15] From 2073-74 to 2100-01, real growth assumed to be 1.5% per year

Although these are long time periods, the bad news is that for economic and not least arithmetic reasons, at some point NHS spending growth in excess of GDP growth is unsustainable. At some point the curve must bend. Or, as the American economist Herb Stein noted, if something can't go on forever, it must stop (Stein's law).[16] Of course, bending the curve does not mean spending less on healthcare; more can be spent in real terms to obtain more of the things we value from healthcare (higher quality, better health outcomes, etc). Rather, it is the rate of growth that must, at some point, inevitably align with the rate of GDP growth.

A more sophisticated attempt to answer the spending question and a heroic effort to bend the spending curve was the work of the Treasury team headed by Derek Wanless, initiated by the then chancellor, Gordon Brown, and published in 2002.[17] Wanless and his team of government economists set about answering the question by first defining what a high quality health service would look like: fast access, safe, "consistently high quality care, in appropriate settings, with smooth integration between different types and settings of care … no bottlenecks between health and social care, with patients moving from hospital as soon as they are medically fit to do so, and a choice of residential or nursing home placement for patients who cannot be cared for appropriately at home."

The bill, Wanless reckoned, would mean total (public plus spending by individuals on privately provided care) healthcare spending increasing from a then estimated 7.7% in 2002 to between 10.6% and 12.5% by 2022-23, depending on three future scenarios (fig 6). These figures included an estimate for private spending of 1.2% of GDP, with the increase overall being due to increases in NHS spending. In fact, we now know that total spending in 2002 was more like 7.9% than the assumed 7.7%.

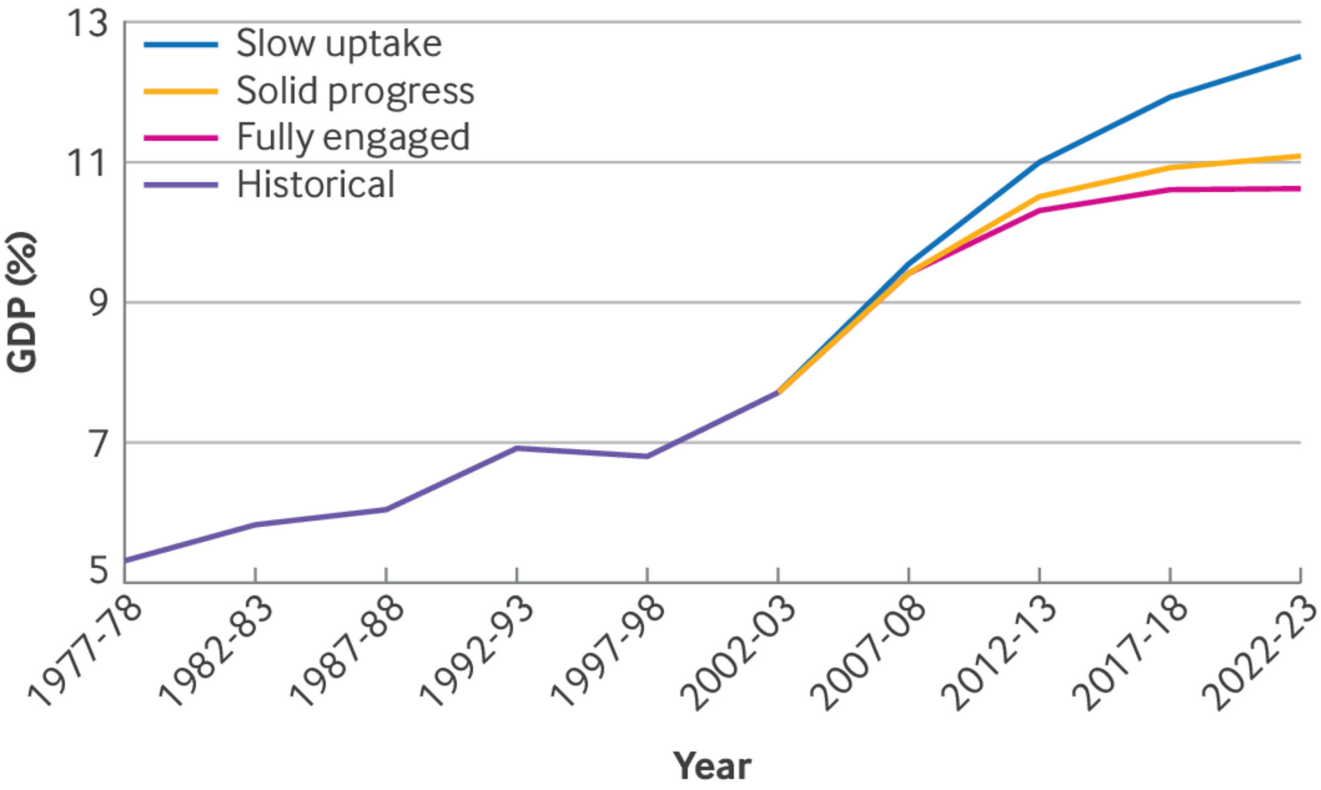


Fig 6 | 2002 Wanless review: UK total (public+private) healthcare spending scenariose.[17] GDP=gross domestic product

Notably, the Wanless review postulated an initial "catch up" and then a subsequent "keep up" funding path, which, in the most optimistic scenario, implied a flattening of spending growth at around 10.6% of GDP, with the NHS accounting for around 9.2% of GDP. So, spending would grow in real terms each year but at the same rate as the growth in GDP. By 2019 total health spending had reached 10.2% of GDP and was pretty much on track to meet his lower spending scenario, even allowing for the slightly miscalculated starting point in 2002.

Unfortunately, the future was a bit more uncertain than anticipated. Although spending did, more or less, hit Wanless's lower suggestion (in total and for the NHS), the figure depended on significant and sustained increases in productivity each year that the NHS did not achieve and a well behaved public who stopped smoking, ate their greens, and generally looked after themselves. The NHS was spending more, but whether it was delivering "high quality services to the UK population" is debatable. Funding was on the fully engaged scenario trajectory, but performance was more like slow uptake.[18]

A key conclusion of the 2002 Wanless review was that a similar exercise should be carried out every few years to take account of changes in the population (its size, demography, and epidemiology), as well as changes on the supply side (advances in medical technology, etc).

We support this recommendation but would emphasise two things. The first is a more explicit acknowledgment of the need to find and justify a sustainable long term future funding path that recognises Stein's law and the opportunity costs of healthcare spending. The second is the need to actively promote and support efforts to ensure the best and most productive use of NHS resources.

Finally, a strong case can be made for immediate financial intervention in the NHS to boost funding. Even allowing for the large jump in spending in 2020-21 as a result of covid-19 related measures, if spending had increased at the long term average from 2010-11 to 2022-23, UK NHS spending by 2022-23 would have been around £32bn (15%) higher than actual spend. In the recent spring budget, the government has pledged a further £2.5bn for the NHS in England in 2024-25 to keep up day-to-day funding of the health service, with a further £3.4bn investment over three years to improve productivity through digital transformation. These figures, although a start, certainly will not make up the significant shortfall that the NHS now faces.[19]

Catching up on this shortfall in revenue and capital spending would, realistically, take time. But a start could be made with a real increase of 4% for 2024/25, equivalent to around £8.5bn at 2022-23 prices. Similar increases over the subsequent four years would make up the shortfall. With the proviso that it will be up to the NHS to decide the detail of how best to spend additional funds, it is clear that immediate priority should be given to investment that will sustainably reduce elective, mental health, and cancer waiting times; improve access to primary care; and address the workforce and capital investment challenges that the NHS is currently facing. We would note that given current economic conditions and financial pressures across public services in general, no easy short term fixes to public finances are available. Future governments will need to grapple with difficult decisions, including the probability of raising more money from general taxation.

## How do we decide how much to spend?

In broad terms, the current approach to setting public spending involves a spending review led by HM Treasury and, through various

public service agreements, defines the key improvements that the public can expect from these resources. Spending reviews usually take place every two to four years.

Challenges with the current process for funding NHS healthcare are well recognised, and include the following:

- Year-on-year funding shows significant volatility, which makes long and medium term planning a challenge for healthcare managers. This volatility is partly related to the political cycle, but it is also influenced by other external factors, such as the pandemic or the overall financial outlook.
- Public engagement in the decision making process is limited, meaning that little opportunity has been available for determining public priorities or taking them into account. One example where the public has contributed is through the decisions on funding taken by the National Institute for Health and Care Excellence (NICE). NICE includes lay members on all its committees and has used a representative citizens' council to answer strategic questions on priorities—for example, should we prioritise spending on the treatment of younger people over that of older people.[20]
- No systematic approach exists for calculating additional funding for areas such as service transformation or potential savings such as from reduction in waste or improved productivity.
- Capital funding is ring fenced, but in practice this budget has been raided by the NHS to bolster revenue spending, so new developments may not be prioritised leading to a lack of investment in the future.

Taking all these factors into account, we propose a future process for determining national NHS funding that would rely on a new independent body, an Office for NHS Policy and Budgetary Responsibility (OPBR) to inform this process. This body would produce regular independent reports on the state of the nation's health, on healthcare, and on medium term (five to 10 years) and long term (50 years) modelled funding projections for the NHS (including the local authority public health grant). At the start of the term of a new government, this report would trigger a public response from government with a firm NHS funding settlement for five years and a provisional settlement over the medium term period (fig 7).

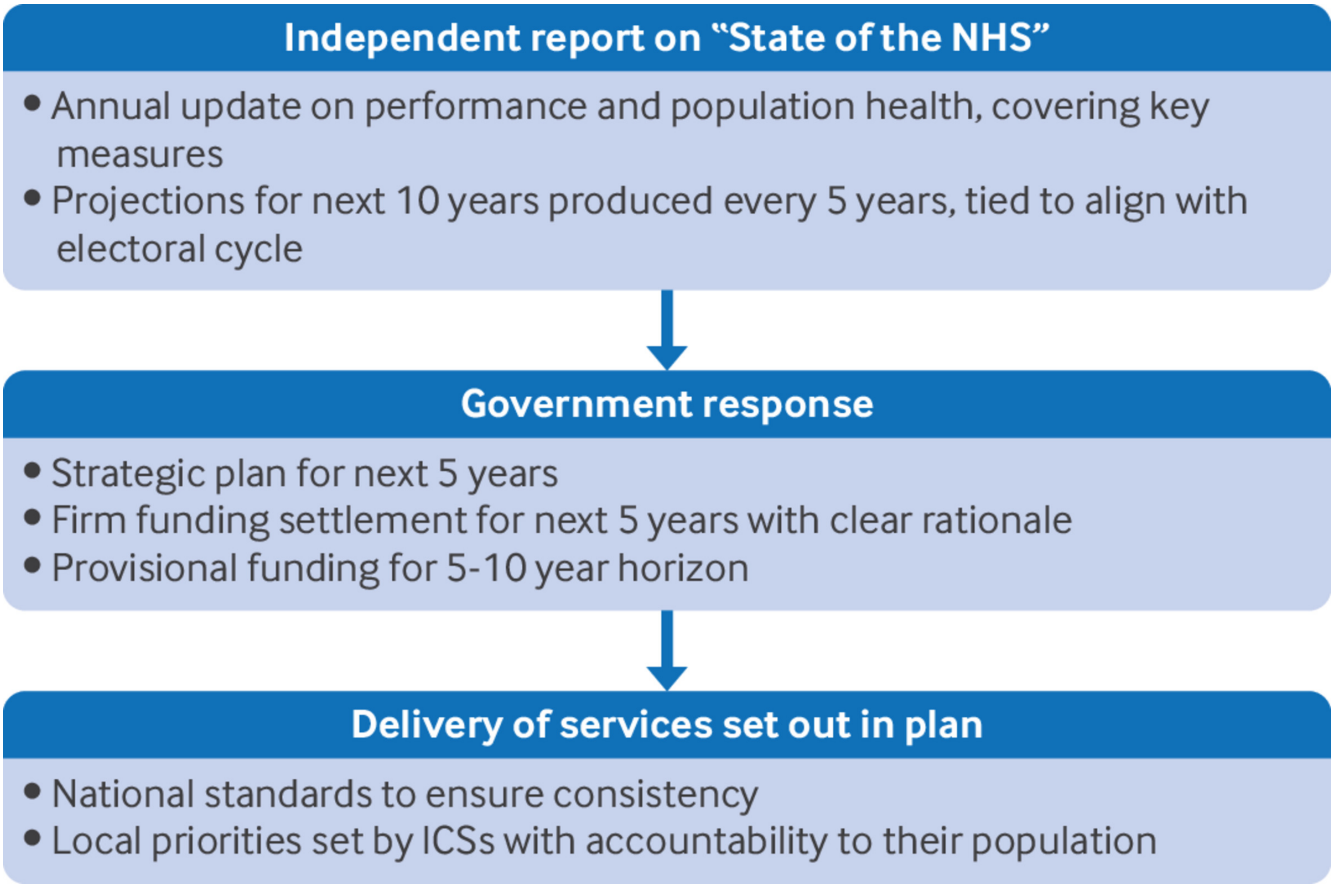


Fig 7 | Overview of a transparent, accountable approach to NHS funding. ICS=integrated care system

The aims of this approach would be to link the funding settlement to the cycle of new governments and improve planning by including a forward prediction for the next 10 years. It would increase government accountability by requiring a response to the independent report and lengthen the funding settlement period to 10 years.

To ensure the government response on what can and cannot be funded, we need a process for taking public opinion into account. This might follow a model similar to a citizens' council or jury, whereby representative members of the public are randomly selected to debate a particular question or problem in depth. This provides a useful mechanism to distil informed public opinion and ensure

that their priorities are taken into account.[21-24] This process requires time and resources to be done well, and therefore should be focused on key questions for which general public opinion will add most value. Once decided, the process should enable the public to hear from a range of experts with differing perspectives and give them the opportunity to have an open debate.

The independent annual report on NHS performance and population health should include routine, consistent measures that allow year-on-year comparisons to be made. The data should be drawn from routinely collected information, without creating a new burden on NHS providers. It would collate information already produced by sources such as the King's Fund and the Nuffield Trust into a consistent format that allows year-on-year comparisons to be drawn.[25] As a minimum, the annual report should reflect the following measures during the period of the report, and be analysed at an integrated care system level to enable comparisons to be drawn in the efficacy of health spending:

- Resources allocated to healthcare (input measures), including funding (capital and revenue), levels of staffing, and service and equipment provision in agreed key areas.
- Impact on healthcare (output measures), including staff retention and turnover rates, access to healthcare (waiting lists and waiting times in primary care), patient satisfaction, treatment outcomes, and wider measures of population health.
- Comparative measures, including how the UK performed against comparable countries in terms of healthcare spending, population health outcomes, measures of health and healthcare equity, and productivity measures.

In addition, an independent, future focused report would be produced every five years, timed to be published in advance of a general election. It would similarly be prepared by the OPBR, drawing on reports and input from relevant national and regional healthcare bodies including NHS England, royal medical and nursing colleges, regulatory bodies, integrated care systems, and public opinion. It would also include medium and long term modelled projections of pressures on healthcare spending. Various approaches can be taken to such projections,[10] but commonly any method would include scenarios informed by various demographic, national income, and technological assumptions and projections. The report would be expected to cover where change will be needed over the next 10 years and to anticipate what changes in funding and healthcare services would be needed to tackle these changes. This would therefore include:

- Expected demographic changes, including predicted changes in population health outcomes, life expectancy, and birth rates.
- Likely significant technological advances that will affect health and healthcare, including new drugs, advanced therapies, medical technologies, and artificial intelligence.
- Opportunities for improving productivity and reducing the carbon footprint of healthcare provision.

The government would be expected to produce a public response to the OPBR's report within the first six months of taking office. This response would be developed in consultation with those bodies involved in developing the independent report and take into account public opinion through the citizens' council. The government's response should explicitly cover the matters raised in the independent OPBR report, identifying areas that will be taken forward over the subsequent five years. If areas have not been prioritised for future development, a rationale should be given and the response will be scrutinised by the OPBR. The government's response should be framed as a five year strategic plan for health. It should include:

- Expected routine delivery of core services over the five year period, so the public, clinicians, and healthcare managers know what to expect and what to prioritise.
- New developments, including service improvements such as infrastructure and capital projects, and facilities needed to deliver on anticipated future pressures.
- Support for enablers of the system, such as data requirements, artificial intelligence, digital developments, and workforce plans
- A detailed financial settlement for a five year period and a provisional settlement for the five to 10 year period.

## Conclusions and recommendations

The past 75 years have seen dramatic improvements in the health of the UK population, partly as a result of living conditions and partly as a consequence of technological advances. When the NHS was established in 1948, healthcare options were minimal compared with the sophisticated treatments now available. As a consequence, healthcare providers around the world have experienced year-on-year increases in expenditure, and all are concerned about how to prioritise spend to get best value in return. In response to the questions that we asked above, we make four recommendations.

*Funding model*—We recommend that the current model of NHS funding, primarily through taxation, is maintained. This mandatory payment system avoids many of the problems associated with voluntary insurance markets. It benefits from economies of scale in terms of administration, risk management, and purchasing power. Continuing with the status quo also avoids the inevitable disruption of moving to a new model such as a compulsory social health insurance system.

*Performance monitoring*—NHS performance should be monitored by a new independent body, the Office for NHS Policy and Budgetary Responsibility for England. Drawing on existing work from other organisations, it would produce an annual report on the performance of the NHS, including population health outcomes, access, and waiting lists, plus patient and public satisfaction and an analysis of expenditure. Every five years, ahead of a general election, it should also produce a report on the future of healthcare in the following 10 years, covering expected demographic change, technological advances, and opportunities for increased productivity. It would also provide a very long term indicative view (over the next 50 years) of spending pressures based on known drivers of such pressures.

*Strategic planning*—Governments should be required to respond to the report within six months of taking office. The response would be developed in consultation with professionals and the public, setting out what new areas will be taken forward and what cannot be prioritised. The output would be a five year strategic plan for the NHS with a detailed five year financial settlement, and a provisional settlement over the five to 10 year horizon. The response would be scrutinised by the OPBR.

*Cash injection*—In the immediate future, the NHS needs an injection of funding to tackle the emergency in current NHS provision. The settlement should include funding for capital projects that have been delayed or deferred during the past five to 10 years (in 2022 the cost of backlog maintenance was estimated to be £10.2bn in

England, for example[26]) to enable a period of catch-up for NHS infrastructure.

Following these recommendations would ensure the stability of the NHS funding model, with ongoing independent analyses of population health outcomes and the healthcare system, and a five year strategic plan that would increase government accountability and facilitate healthcare planning.

**Recommendations**

- Continue funding the NHS primarily through taxation
- Establish an independent Office for NHS Policy and Budgetary Responsibility for England to provide unbiased, robust reports on health and healthcare
- Create a five year strategic plan for the NHS, with a detailed five year financial settlement and a provisional settlement over five to 10 years
- Provide an immediate cash injection to start to recover a £32bn shortfall in funding over the decade to 2020 and to help to tackle the current NHS crisis, especially the surgery backlog and access to primary care

Contributors and sources: JA is a health economist who has written and researched on healthcare funding and health policy more generally for over 40 years. GL is medically qualified, an international expert on evidence based practice, and the former chief executive of NICE. MM is the chair of the Nuffield Trust, a past chair of the Royal College of General Practitioners, and, until 2022, a general practitioner in Newham, East London; he has written and researched extensively on primary care and the quality of care more generally. All authors are members of the BMJ Commission. JA, GL, and MM conceived the paper. JA and GL wrote the paper, and MM commented on drafts. JA is the guarantor.

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1 Guillebaud CW. The Committee of Enquiry into the Cost of the National Health Service ('The Guillebaud Report'). 1956. https://sochealth.co.uk/1956/01/10/guillebaud-report/.
2 Harker R. NHS Funding and Expenditure. Briefing Paper CBP0724. 2019. https://researchbriefings.files.parliament.uk/documents/SN00724/SN00724.pdf.
3 Organisation for Economic Co-operation and Development. OECD Health Statistics 2023. https://www.oecd.org/health/health-data.htm.
4 Statista. Defense spending as share of GDP in the UK 1980-2021. 2024. https://www.statista.com/statistics/298527/defense-spending-as-share-of-gdp-united-kingdom-uk/.
5 Phillips D. Health spending planned to fall in England and Scotland in 2024-25, suggesting a top-up likely. 2024. https://ifs.org.uk/articles/health-spending-planned-fall-england-and-scotland-2024-25-suggesting-top-likely.
6 Morris J, Schlepper L, Dayan M, et al. Public satisfaction with the NHS and social care in 2022: Results from the British Social Attitudes survey. 2023. https://www.nuffieldtrust.org.uk/research/public-satisfaction-with-the-nhs-and-social-care-in-2022-results-from-the-british-social-attitudes-survey.
7 Tempest M. Brown unveils tax hike to fund NHS. 2002. https://www.theguardian.com/politics/2002/apr/17/economy.uk1
8 Wagstaff A. Social Health Insurance vs. Tax-Financed Health Systems—Evidence from the OECD. Policy Research Working Paper 4821. 2009. https://documents1.worldbank.org/curated/en/545121468028868365/pdf/WPS4821.pdf
9 Adam S, Besley T, Blundell R, et al. Tax by design. 2011. https://ifs.org.uk/books/tax-design.
10 Giles C. UK tax system is more progressive than thought, says IFS. 2019. https://www.ft.com/content/505fc7ba-7e4b-11e9-81d2-f785092ab560.
11 HM Treasury. Public Expenditure Statistical Analyses 2023. https://www.gov.uk/government/statistics/public-expenditure-statistical-analyses-2023.
12 Licchetta M, Stelmach M. Fiscal sustainability analytical paper: Fiscal sustainability and public spending on health. 2016. https://obr.uk/docs/dlm_uploads/Health-FSAP.pdf.
13 Appleby J. Spending on health and social care over the next 50 years: Why think long term? 2013. https://www.kingsfund.org.uk/insight-and-analysis/reports/spending-health-social-next-50-years.
14 Appleby J, Harrison A. Spending on health care: How much is enough? 2006. https://www.kingsfund.org.uk/insight-and-analysis/reports/spending-health-care.
15 Office for Budget Responsibility. Economic and fiscal outlook—March 2023. https://obr.uk/efo/economic-and-fiscal-outlook-march-2023/.
16 Stein H. What I Think: Essays on Economics, Politics, and Life. 1998. https://www.aei.org/research-products/book/what-i-think/.
17 Wanless D. Securing our Future Health: Taking a Long-Term View. Final Report. 2002. https://www.yearofcare.co.uk/sites/default/files/images/Wanless.pdf.
18 Triggle N, Pym H. The key NHS targets that have never been met. 2024. https://www.bbc.co.uk/news/health-67884322.
19 HM Treasury. Spring Budget 2024. https://assets.publishing.service.gov.uk/media/65e8578eb559930011ade2cb/E03057752_HMT_Spring_Budget_Mar_24_Web_Accessible__2_.pdf.
20 National Institute for Health and Care Excellence. NICE Citizens Council Report on Age. Citizens Council Reports No. 2. 2023. https://www.ncbi.nlm.nih.gov/books/NBK401698/.
21 Involve. Citizens' Jury. 2024. https://www.involve.org.uk/resource/citizens-jury.
22 Centre for New Democratic Processes. How We Work: Citizens Juries. 2024. https://www.cndp.us/about-us/how-we-work/.
23 Coote A, Lenhaglan J. *Citizens' Juries: From Theory to Practice*. Institute for Public Policy Research, 1997.
24 Street J, Duszynski K, Krawczyk S, Braunack-Mayer A. The use of citizens' juries in health policy decision-making: a systematic review. *Soc Sci Med* 2014;109:-9. doi: 10.1016/j.socscimed.2014.03.005 pmid: 24657639
25 Nuffield Trust. NHS performance tracker. QualityWatch. 2024. https://www.nuffieldtrust.org.uk/qualitywatch/nhs-performance-summary.
26 Appleby J. Chart of the week: The cost of NHS backlog maintenance hits an all-time high. 2022. https://www.nuffieldtrust.org.uk/resource/the-cost-of-nhs-backlog-maintenance-hits-an-all-time-high.