

The NHS and the Welsh Budget: Outlook and challenges for the next Welsh Government

WELSH ELECTION BRIEFING

Preface

Declaration of funding

Wales Fiscal Analysis is hosted by the Wales Governance Centre and the School of Law and Politics at Cardiff University, and funded through a partnership between Cardiff University, the Welsh Government, the Welsh Local Government Association and Solace Wales. The programme continues the work of Wales Public Services 2025 hosted by Cardiff Business School, up to August 2018.

About us

Wales Fiscal Analysis (WFA) is a research body within Cardiff University's Wales Governance Centre that undertakes authoritative and independent research into the public finances, taxation and public expenditures of Wales.

The WFA programme adds public value by commenting on the implications of fiscal events such as UK and Welsh budgets, monitoring and reporting on government expenditure and tax revenues in Wales, and publishing academic research and policy papers that investigate matters of importance to Welsh public finance, including the impact of Brexit on the Welsh budget and local services, options for tax policy, and the economics and future sustainability of health and social care services in Wales.

Working with partners in Scotland, Northern Ireland, the UK and other European countries, we also contribute to the wider UK and international debate on the fiscal dimension of devolution and decentralisation of government.

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The NHS and the Welsh budget:

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WELSH ELECTION BRIEFING 1

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Executive Summary

Given the extraordinary circumstances under which the 2021 Senedd elections are being held, future plans for the NHS are likely to be once again at the forefront of the election campaign. This briefing looks at some of the financial implications of Covid-19 for the NHS. It is the first in a series exploring the fiscal outlook for the next Senedd term and the potential challenges facing the next Welsh Government.

Key findings

- The Welsh Government allocated an additional £1.4 billion to the NHS in 2020-21 in response to the Covid-19 pandemic. Covid-19 allocations to the Welsh NHS appear to have been well below the estimated consequentials stemming from Health and Social Care spending in England (£2.5 billion). One of the major reasons for this is that estimated spending on PPE and the devolved element of the test and trace system in Wales was approximately £158 per person, or 48%, lower than the equivalent planned spending in England.
- In the first six months of 2021-22, £440 million was allocated to meet Covid-19 costs. Some direct costs of Covid-19 are likely to continue beyond this point; for example, ongoing costs for the Test, Trace, Protect programme and potential future revaccinations.
- Social distancing and heightened infection control are likely to have a substantial impact on future productivity in the NHS. As an illustration of the potential funding implications, a 10% hit to productivity in 2020-21, falling to 1% by 2023-24 (relative to pre-pandemic trends), would imply additional funding pressures of over £600 million in 2021-22, falling to £90 million a year after 2022-23.
- It will likely take several years to clear the backlog in elective care waiting lists after the pandemic, especially if the sharp fall in referrals signals significant pent-up demand. Making several assumptions about the extent of returning patients and NHS activity next year, we estimate restoring waiting lists to pre-Covid levels could cost between £152 million and £292 million a year over a four-year period from 2022-23.
- In our baseline scenario, there is a significant projected funding gap between projected health consequentials from the UK government and funding pressures, of over £740 million in 2022-23. This funding shortfall would average £360 million a year (in cash terms) between 2023-24 and 2025-26.
- Future NHS funding pressures are highly uncertain, and our projections are highly sensitive to the assumptions made. However, likely post-pandemic pressures and current UK government spending plans suggest tough decisions and trade-offs for the next Welsh Government, balancing NHS funding pressures against pressures elsewhere in the budget and the potential use of devolved tax powers.

Direct costs of Covid-19 on the NHS

The Welsh Government has made a series of large allocations to the NHS budget to deal with the immediate effects of Covid-19, with more to be made over coming months.

- In three supplementary budgets since May 2020, the Welsh Government has allocated approximately £1.4 billion to the NHS budget for 2020-21 to meet the immediate costs of responding to COVID: funds to set up field hospitals, PPE costs, increasing staff resources, the Test, Trace, Protect (TTP) strategy, as well as a general £800 million 'stabilisation package' for the NHS.
- These Covid-19 allocations to the NHS in Wales appear to have been well below the estimated consequential stemmings from Health and Social Care spending in England (£2.5 billion).¹ We estimate spending on PPE and the devolved element of the test and trace system in Wales (£533 million) was below half the level of consequential triggered by England-only spending in these areas (£1,084 million). This implies spending on PPE and test and trace was £158 per person, or 48% lower in Wales than it was in England.
- The Welsh Government has so far allocated £440 million for the first six months of 2021-22, to fund the continued rollout of the vaccine, testing, PPE demands, enhanced infection control cleaning standards, and supporting NHS local response plans.
- The direct additional pressures associated with the pandemic are unlikely to subside after the first half of 2021-22, and entirely depends on the future path of the virus and success of the vaccine rollout. As long as the virus continues to circulate in Wales, there will be ongoing costs for the TTP programme, and revaccinations may be needed in future years.

Impact on NHS productivity

Changes in the productivity of the NHS – or the amount of patient care delivered for a given set of resources – are a key part of tackling long term funding pressures.

- Pre-pandemic projections by the Health Foundation assumed efficiency growth would need to be sustained at 1% a year to meet funding pressures.
- The Covid-19 pandemic is likely to have a substantial impact on productivity in the NHS. Some working practices introduced in response to the pandemic - such as remote, non-face-to-face services - may have a positive effect on productivity. However, social distancing and heightened infection control are likely to have reduced productivity considerably over the course of the pandemic.
- As a baseline scenario, we model the impact of a 10% hit to productivity in 2020-21, falling to 1% by 2023-24, relative to pre-pandemic trends. These trends would suggest

¹ 'Consequential' refers to the change in funding passed on to the Welsh Government from changes to UK government spending in England on functions devolved to Wales. Consequential are determined by the Barnett formula, which takes a population-based share of English spending, multiplied by the 'Needs-Based Factor' of 105%.

total additional funding pressures of over £600 million in 2021-22, falling to £90 million a year after 2022-23.

Cost implications of elective care backlog

Covid-19 has had a massive impact on waiting times and it will likely take several years to clear the backlog after the pandemic.

- The overall waiting list rose to 541,702 in January 2021. This represented an increase of 17% compared to January 2020. The number of patient pathways waiting more than 26 weeks to start treatment reached 262,064 in January 2021 – 241% higher than a year previously.
- In 2020, there were 372,000 fewer reported closed patient pathways compared with 2019 and 380,640 fewer referrals than in 2019. This fall in referrals may signal significant pent-up demand for elective care – how and when it materialises will be one of the key uncertainties facing the NHS. Overall waiting lists will significantly increase if the ‘missing’ patients return over coming months and years.

To explore the potential cost implications of clearing a post-Covid-19 backlog in elective care, we make simplified assumptions about future additions to the waiting list (and the extent of returning patients), and the level of patient pathways closed over coming months and years.

- Assuming 75% of missing patients return over the next twelve months, and that NHS activity levels remain below ‘normal’ levels throughout 2021-22, the projected total waiting list increases to over 900,000 in April 2022.
- Under these assumptions, we estimate returning waiting lists to pre-Covid levels would cost £195 million per year over the four years from 2022-23, or £292 million a year under a higher cost-per-patient assumption.

Mental health

The pandemic is likely to have greatly affected the mental health and wellbeing of the population.

- Our analysis of Understanding Society panel survey data suggests the proportion of the population with a severe mental health problem increased from 11.7% in February 2020 to 28.1% in April 2020. Overall, mental health problems increased by 17% between February 2020 and November 2020, as measured by GHQ-12 scores, a widely used measure to assess the severity of a mental health problem.
- Given this worsening picture for mental health among the population we would anticipate increased demand for mental health services over coming years. Modelling for England suggest the pandemic may cause a surge in referrals for such services. If these trends were replicated in Wales, additional pressures on mental health services would amount to £75 million to £98 million in 2021-22.

Staffing and NHS pay

The extent of overall funding pressures faced by the NHS in the coming years is also critically dependent on trends in pay.

- Under the UK government's proposals for NHS pay, we project that the pay bill would increase by approximately £143 million next year, mostly as a result of the increase in the number of staff. Meanwhile, we estimate that adopting the Scottish Government's approach in Wales would cost an additional £93 million (£236 million in total).
- Most long-run projections of funding pressures assume that pay will need to increase by 2% a year above inflation – the long-run average for earnings growth across the economy as a whole – to recruit and retain staff. Under this assumption, pre-pandemic projections by the Health Foundation (2016) imply underlying pressures of 2.2% a year in real terms between 2019-20 and 2025-26.
- Lower pay growth may allow higher levels of activity for a given level of resources. Increasing pay by the economy-wide average earnings growth from 2021-22 onwards – set to average 0.7% per year in real terms between 2019-20 and 2025-26 – underlying funding pressures fall to 1.6% per year in real terms between 2020-21 and 2025-26.
- However, given pay for many NHS staff has fallen in real terms over the last decade, and the enormous pressures the pandemic has created for NHS staff, such an approach may be incompatible with the need to recruit and retain staff required in future years.

Total NHS spending pressures and the outlook for the Welsh budget

The UK government's medium-term spending plans have been reined back significantly compared to pre-pandemic plans, which has impacted the outlook for the Welsh budget.

- Current spending plans contain no Covid-19 related funding for the years after 2021-22, assume that NHS and schools spending in England returns to pre-Covid-19 multi-year spending plans, and imply cuts in other areas of spending.

Analysing underlying spending pressures, as well as the Covid-19 related pressures discussed in this briefing, we compare total NHS spending pressures with all projected health-related consequentials from UK government spending plans in England.

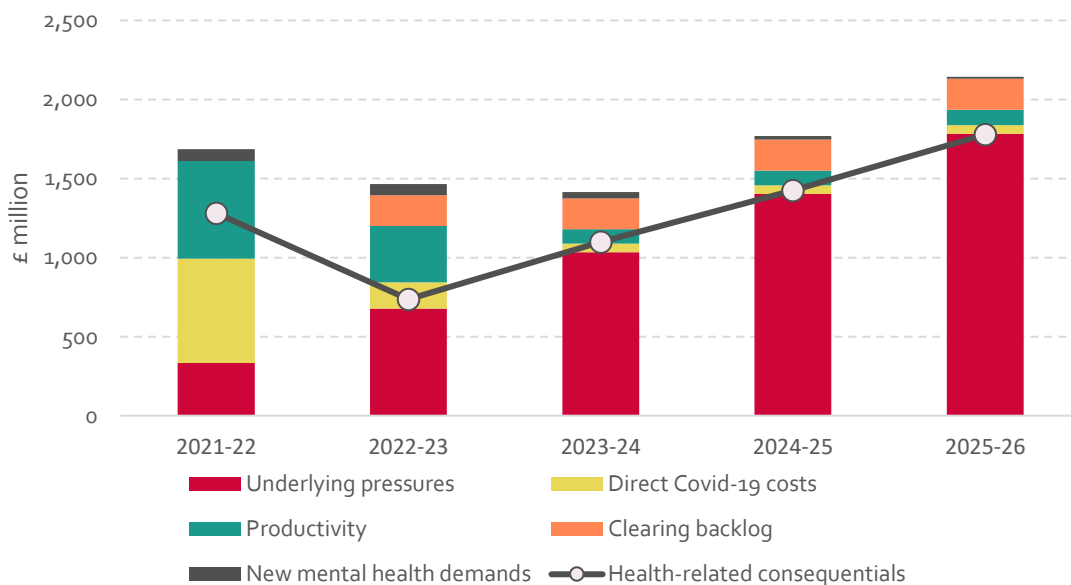
- Under our baseline assumptions, the Welsh Government appears to be in a position to meet funding pressures for 2021-22. However, as shown in **Figure E.1**, a significant projected funding gap between health consequentials and funding pressures of over £740 million opens up by 2022-23, driven by our assumptions on productivity and the cost of clearing the elective care backlog. This projected funding shortfall would average £360 million a year (in cash terms) between 2023-24 and 2025-26.
- In our 'downside' scenario, which includes significant direct Covid-19 costs, a slower recovery in NHS productivity and higher cost for clearing the backlog in elective care, the funding shortfall compared to health consequentials would be £1.35 billion in 2022-23, before falling to an average of £730 million a year between 2023-24 and 2025-26. In a more optimistic 'upside' scenario, the funding shortfall would amount to £320 million in 2022-23, falling to around £140 million a year between 2023-24 and 2025-26.
- Under a 'lower-pay' scenario, with NHS pay growing in line with UK government proposals for 2021-22 and with average earnings thereafter (rather than 2% per year

growth in real terms), then underlying funding pressures would reduce significantly, closing the shortfall in total funding pressures compared with health-related consequentials by 2023-24.

- Post-pandemic pressures and current UK government spending plans suggest tough decisions and trade-offs for the next Welsh Government. Simply passing on all health-related consequentials to the NHS would fall short of funding pressures a would still require cuts to all other areas of the budget in 2022-23. Funding all additional NHS pressures from within the core Welsh Government budget would require huge – and likely unachievable – cuts in non-NHS spending over coming years.

Figure E.1

Total projected NHS funding pressures, 2020-21 to 2025-26



Source: Authors' calculations; see section 3 and Annex 1

Our projections of future funding pressures are highly sensitive to the assumptions we make in our analysis. This underlines the huge uncertainty about future funding pressures facing the NHS. Despite this uncertainty, we can conclude that fully meeting all the additional NHS funding pressures outlined in this report will be difficult. In the context of huge funding pressures and a relatively austere outlook for the budget, discussions around the use of the Welsh Rates of Income Tax should also play a part in meeting future challenges.

1 Introduction

At the March 2021 budget, the Office for Budget Responsibility described the potential legacy of the pandemic for public services as one of the most significant risks to the medium-term outlook for the public finances.² While the immediate fiscal response to the crisis has entailed a massive increase in departmental spending, it is likely that the after-effects of the pandemic will place significant additional demands on public services for years to come. At the forefront of these additional pressures will be the impact on the NHS.

Future plans for the NHS are likely to be once again at the forefront of Senedd election campaigns this year. The need to adequately fund the NHS – both in terms of recovering from Covid-19 and addressing underlying spending pressures – must be set in the context of the outlook for the Welsh budget and other spending pressures. This is the first briefing in a series of reports that explore the fiscal outlook for the next Welsh parliamentary term and the potential challenges facing the next Welsh Government. This briefing looks at some of the financial implications of recovery from Covid-19 for the NHS over coming years.

We first review the background trends in NHS spending over recent years and the pre-Covid projections of funding pressures. Second, we analyse the direct costs of the Covid-19 crisis on the Welsh NHS and the budget allocations made by the Welsh Government so far. Third, we review trends in waiting lists in Wales over 2020 compared to previous years, noting the potential for significant pent-up demand in the system. We then assess the financial implications of dealing with a substantial post-Covid-19 backlog in elective care. Fourth, we briefly discuss some of the other sources of funding pressures likely to materialise in the aftermath of Covid-19. We conclude by assessing the magnitude of all these varying spending pressures in the context of the outlook for the overall Welsh budget in the short and medium terms.

² Office for Budget Responsibility (2021) '*Economic and Fiscal Outlook – March 2021*'. Available at: <https://obr.uk/download/economic-and-fiscal-outlook-march-2021/>

2 Background: trends in NHS spending and pre-pandemic spending pressures

After real terms cuts in spending in the years following 2010-11, health spending in Wales has grown steadily in the years from 2013-14. In 2016, modelling by the Health Foundation suggested funding would need to grow by 2.2% a year in real terms to keep pace with spending pressures deriving from a growing and ageing population, and projected increases in chronic conditions.³ As shown in **Figure 2.1**, actual trends in budgeted spending on the NHS (excluding Covid-19 related spending) has increased broadly in line with this estimated funding need since 2015-16.⁴ This means that budgeted spending on the NHS in 2021-22 (excluding Covid-19 spending) is now almost a fifth higher than 2010-11 levels in real terms. Elsewhere however, the overall Welsh Government budget for day-to-day spending has barely recovered to 2010-11 levels after significant cuts over the first years of austerity. This means the NHS now accounts for just under half of the Welsh day-to-day spending budget, up from 42% in 2013-14.

While health spending pressures since 2015-16 appear to have been broadly met, the Health Foundation projections depended on assumptions on trends in NHS pay bill costs and productivity growth. The long-term projections in the report assumed 2% real term increases in pay. While overall pay pressures have been slightly below this trend, an increase in employer contributions to the NHS pension scheme in 2019-20 increased the overall pay bill significantly. The Health Foundation's spending projections also depended on the NHS achieving productivity growth of 1% per year. While this is in line with the average growth over recent years across the UK, up to date information on NHS productivity for Wales over recent years are unavailable. The impact of varying these assumptions on spending pressures are discussed in chapter 3.

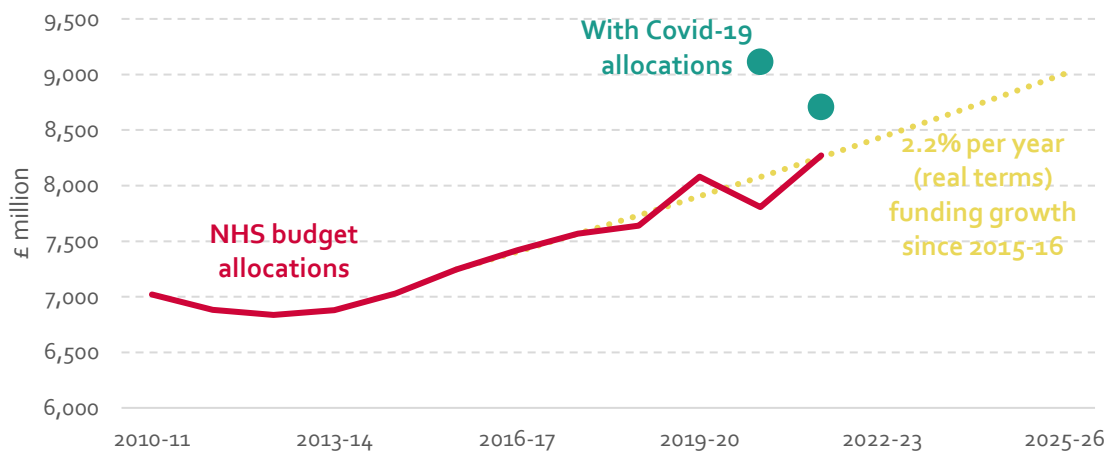
A key determinant of the funding available for the Welsh Government to spend is the consequential arising from UK government health spending in England. The multi-year funding deal announced for the NHS in England in 2018 (and later topped up) has been the primary source of increases to the core Welsh day-to-day spending budget in recent years. **Figure 2.2** shows the projected additional consequential from increased NHS England spending between 2010-1 and 2025-26, assuming health spending grows in line with the economy after 2023-24. Given these assumptions, the Welsh Government could expect an

³ Watt and Roberts (2016) *'The Path to Sustainability'*, The Health Foundation. Available at: <https://www.health.org.uk/publications/reports/the-path-to-sustainability>

⁴ Changes in budget presentation and portfolio changes between years makes it difficult to compare trends across multiple years. In line with our previous reports, we build a consistent definition of NHS spending by aggregating across budget lines. This definition includes spending on the delivery of core NHS services, targeted NHS services, education and training spending, mental health spending and the substance misuse action plan fund (both now in a different portfolio). Public Health Wales and A Healthier Wales spending is excluded as it contains some non-NHS related spending.

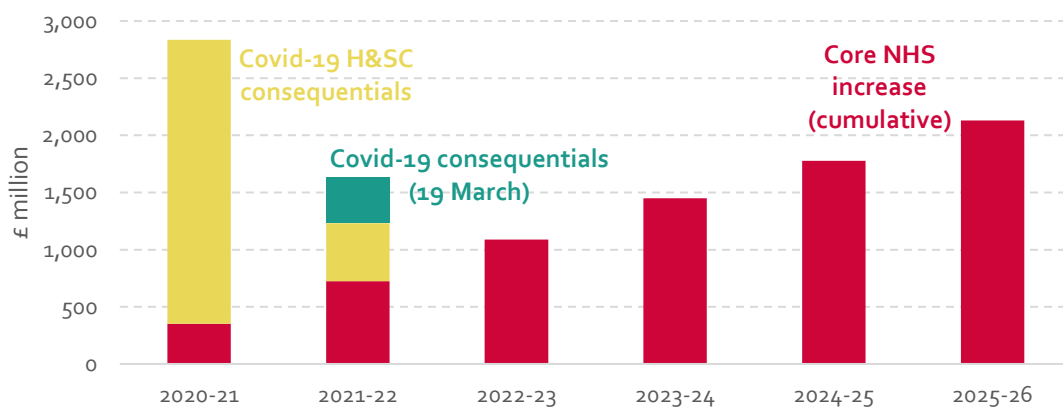
additional £2.1 billion in health-related consequentials by 2025-26, compared with the 2019-20 baseline (in nominal terms).

Figure 2.1
Welsh Government NHS budget allocations and projected funding pressures since 2015-16, 2010-11 to 2025-26 (2020-21 prices)



Source: Welsh Government budget documents – last supplementary budgets for each year used; Health Foundation (2016) *The Path to Sustainability*; ONS (2021) *GDP Deflators at Market Prices*; and authors' calculations.

Figure 2.2
Projected consequentials from increased NHS England spending, 2020-21 to 2025-26 (nominal terms)



Source: Authors' calculations based on Budget 2021 and Spending Review 2020 documents.

Note: Assumes NHS spending in England grows in line with GDP after 2023-24. Covid-19 consequentials from Health and Social care departmental spending for 2020-21 calculated from Honeysett et al. (2020) – see Annex 1 – and from Budget 2020-21 documents for 2021-22.

All other things being equal, this projected increase to the Welsh budget would therefore be sufficient to cover underlying funding pressures, based on pre-pandemic projections (of just under £2.1 billion from 2019-20 to 2025-26 in nominal terms). **Figure 2.2** also shows our estimate of the huge funding that has come from allocations made to the Department for Health and Social Care in England to deal with Covid-19, including for the NHS in England, PPE costs, and the devolved element of Test and Trace spending. The Welsh Government decided to move a share of overall Covid-19 consequential from 2020-21 to 2021-22, and the UK government has recently allocated additional spending on health and social care in England for 2021-22, further boosting Covid-19 consequential.

Beyond 2021-22, however, the UK government has made no additional spending allocations to deal with the legacy of Covid-19. In fact, the Spending Review 2020 and March Budget 2021 cut back on pre-pandemic departmental spending plans, which will reduce the overall estimated consequential for the Welsh budget by around £600 million a year in 2022-23 and 2023-24, compared with what could have been expected based on March 2020 budget plans.⁵ Although the Welsh Government has significant resources to meet Covid-19 costs next year, the outlook for the Welsh budget beyond next year is relatively austere, especially in the face of post-pandemic spending pressures. The UK government may decide to reverse the decision to cut back on pre-pandemic spending plans, but the Chancellor reiterated the manifesto commitment to not raising the main rates of income tax, VAT or National Insurance, which are the obvious ways for revenues to be increased substantially.

⁵ Ifan, G., Rodríguez, J. and C. Siôn (2021) 'UK Budget 2021: the implications for Wales and the Welsh budget', Wales Governance Centre. Available at: https://www.cardiff.ac.uk/_data/assets/pdf_file/0007/2503816/WFA_UK_budget_analysis.pdf

3

The costs of Covid-19

This third chapter explores the numerous ways in which the Covid-19 pandemic has had a major impact on Welsh Government funding for the NHS. First, we assess the budget allocations already made, in supplementary budgets for 2020-21 and in the Final Budget for 2021-22. We then explore the numerous ways in which the legacy of the pandemic will have an impact on future funding pressures.

3.1 The Direct cost of Covid-19 on the Welsh NHS

Since the start of the pandemic, the Welsh Government has made a series of large allocations to the NHS budget to deal with the immediate effects of Covid-19. In three supplementary budgets since May 2020, the Welsh Government has allocated approximately £1.4 billion for the NHS budget lines for 2020-21. The 1st Supplementary Budget for 2020-21 reprioritised £73 million of NHS spending to fund the Covid-19 response, and allocated an additional £480 million from new consequentials. The 2nd Supplementary Budget in October contained an £800 million 'stabilisation package' for the NHS,⁶ while the 3rd Supplementary Budget in February contained smaller allocations worth £80 million.

A detailed breakdown of spending on different aspects of the Covid-19 response is not yet available. £166 million was initially allocated to open field hospitals across Wales. This amount was later reduced to £141 million, and included the costs relating to decommissioning. While £100 million was allocated in the 1st Supplementary Budget for PPE costs, this amount will have increased over time, funded by the stabilisation package. Details of Welsh Government allocations made by 30 November revealed that £275 million had been allocated to the NHS Wales Shared Services Partnership for PPE for health and social care.⁷ £91 million was initially allocated to increase staff resources within the NHS and £30 million was allocated for the use of private hospitals – however, these costs will also have changed from last May.

£57 million was initially allocated to support the Welsh Government's Test, Trace, Protect (TTP) strategy, while a further £60.7 million was allocated at later budgets for contact tracing work. An Audit Wales report projected the TTP programme would cost £120 million during 2020-21.⁸

⁶ <https://gov.wales/ministers-announce-800m-stabilisation-package-welsh-nhs>

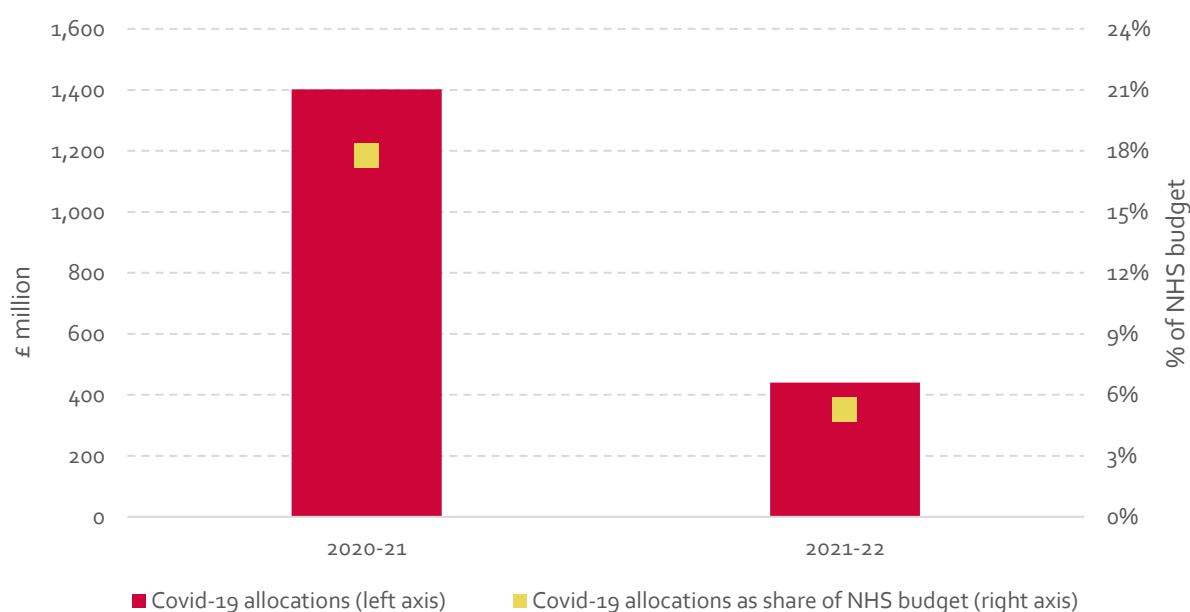
⁷ <https://business.senedd.wales/documents/s112096/Welsh%20Government%20response%20-%20January%202021.pdf>

⁸ https://www.wao.gov.uk/sites/default/files/publications/track-trace-protect-Eng_o.pdf

Lastly, in February’s supplementary budget, £27 million was allocated for the deployment of vaccines.

Actual NHS spending is likely to diverge significantly from these budget allocations. However, comparing **Figures 2.2** and **3.1**, we can say that Covid-19 allocations to the NHS in Wales (£1.4 billion) have been well below the estimated consequentials stemming from Health and Social Care spending in England (£2.5 billion). Although a full breakdown of consequentials and spending is not yet available, we estimate that Welsh Government allocations for PPE and TTP (approximately £533 million)⁹ are below half the level of consequentials stemming from planned England-only spending on PPE and Test and Trace (£1,084 million – see Annex 1). This suggests spending in these areas in Wales has been £158 per person, or 48%, lower than in England.

Figure 3.1
Covid-19 allocations made to NHS budget lines in Welsh Government budgets, 2020-21 and 2021-22



Source: Welsh Government (2021) 3rd Supplementary Budget 2020-21; Welsh Government (2021) Final Budget 2021-22; Welsh Government (2020) 2nd Supplementary Budget 2020-21; Welsh Government (2020) 1st Supplementary Budget 2020-21; and authors’ calculations

The direct additional costs of Covid-19 will persist into 2021-22. At the Final Budget for 2021-22, the Welsh Government allocated £380 million for the first six months of 2021-22. This includes funding to continue the rollout of the vaccination programme, maintain Covid-19 testing capacity, meet PPE demands, maintain enhanced infection control cleaning standards,

⁹ This estimate assumes the costs of PPE to the end of November 2020 carries forward for the remaining four months of the financial year (to total £413 million over 2020-21).

and support NHS local response plans. An additional £60 million has also been allocated to the contact tracing workforce for 2021-22.

The direct additional demands and cost pressures associated with the pandemic are unlikely to subside entirely for the last six months of 2021-22, and clearly depend on the future path of the virus and success of the vaccine rollout. The Welsh Government itself has significant unallocated resource spending in its current budget plans, and will expect some further consequential from the UK government’s Covid-19 reserve later this year. If additional Covid-19 allocations for the second half of 2021-22 match those of the first six months, then allocations would increase to £880 million, although the composition of these allocations could be different.

As shown in **Figure 3.1**, Covid-19 allocations constitute an additional 18% on top of the core NHS budget for 2020-21, while current allocations for 2021-22 amount to an additional 5%.

Beyond 2021-22, these additional direct costs of Covid-19 on health spending may reduce significantly – current UK Government spending plans make no provision for Covid-19 costs beyond next year. However, as long as the virus continues to circulate in Wales, there could be ongoing costs for the Test, Trace, Protect programme. Enhanced PPE requirements may also still be needed across the NHS. Furthermore, as the UK government notes in its ‘Roadmap’, “over the longer term, revaccination is likely to become a regular part of managing Covid-19”.¹⁰ There are also the potential cost implications from treating and supporting patients suffering long-term symptoms from Covid-19, although the number and costs of such treatments are unknown. The Welsh Government acknowledges “some of the additional costs that have been necessary during the pandemic ... may remain with the NHS as core spending for some time to come”.¹¹

Figure 3.2

‘Direct’ costs of Covid-19 under different scenarios

	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Baseline scenario	1,400	660	165	55	55	55
Upside scenario	1,400	440	0	0	0	0
Downside scenario	1,400	880	440	220	220	220

Source: Welsh Government budget documents (2020 and earlier) and authors’ calculations

¹⁰ Available here: <https://www.gov.uk/government/publications/covid-19-response-spring-2021>

¹¹ <https://gov.wales/improving-health-and-social-care-covid-19-looking-forward>

Reflecting this enormous uncertainty, we produce three possible scenarios for the future path of direct Covid-19 costs. As shown in **Figure 3.2**, as a baseline scenario, we assume that direct Covid-19 costs halve every six months from the allocations for the first half of 2021-22, before stabilising at £55 million per year after 2023-24. As an 'upside' scenario, we assume no further 'direct' Covid-19 costs after the first half of 2021-22. As a 'downside' scenario, costs only halve in 2022-23, halve again in 2023-24 and remain at that level over the medium term.

On top of these persisting direct costs of Covid-19, there will be a number of post-pandemic cost and demand pressures, as explored in the following sections.

3.2 Impact on NHS productivity

Changes in the productivity of the NHS – or the amount of patient care delivered for a given set of resources – are a key part of tackling long term funding pressures.¹² In its analysis of the financial sustainability of the NHS in Wales, the Health Foundation (2016) suggested efficiency growth would need to be sustained at 1% a year to meet funding pressures, assuming funding growth of 2.2% a year in real terms. Similarly, the multi-year funding plan for the NHS in England announced in 2018 set ambitious plans to deliver productivity gains of 1.1% a year to 2023-24. Although separate figures for Wales are unavailable, estimates of public service healthcare productivity across the UK show relatively rapid growth in productivity over the last decade, averaging 1.4% a year from 2010 to 2018, but 0.9% a year average over a longer period from 1995.¹³

The Covid-19 pandemic is likely to have a substantial impact on productivity in the NHS. Some working practices introduced in response to the pandemic - such as remote, non-face-to-face services - may have a positive effect on productivity. However, social distancing and heightened infection control are likely to have reduced productivity considerably over the course of the pandemic. For all public services across the UK, relative to Q4 2019, estimated output per hour worked was 10% lower in Q2 2020 and was 2% lower by Q4 2020.¹⁴ Productivity is likely to have been more significantly affected in the health and social care sector than for other public services.

We model the impact of this effect on funding pressures from the following scenarios for productivity trends:

- **'Baseline' scenario:** a productivity hit of 10% in 2020-21, falling to 1% by 2023-24 (relative to pre-pandemic trends)

¹² <http://ppi.w.org.uk/files/2016/09/Efficiency-and-the-NHS-Wales-Funding-Gap.pdf>

¹³ <https://www.ons.gov.uk/economy/economicoutputandproductivity/publicservicesproductivity/articles/publicservicesproductivityestimateshealthcare/financialyearending2019#healthcare-productivity-for-the-uk-on-a-calendar-year-basis>

¹⁴ <https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/datasets/flashproductivitybysection>

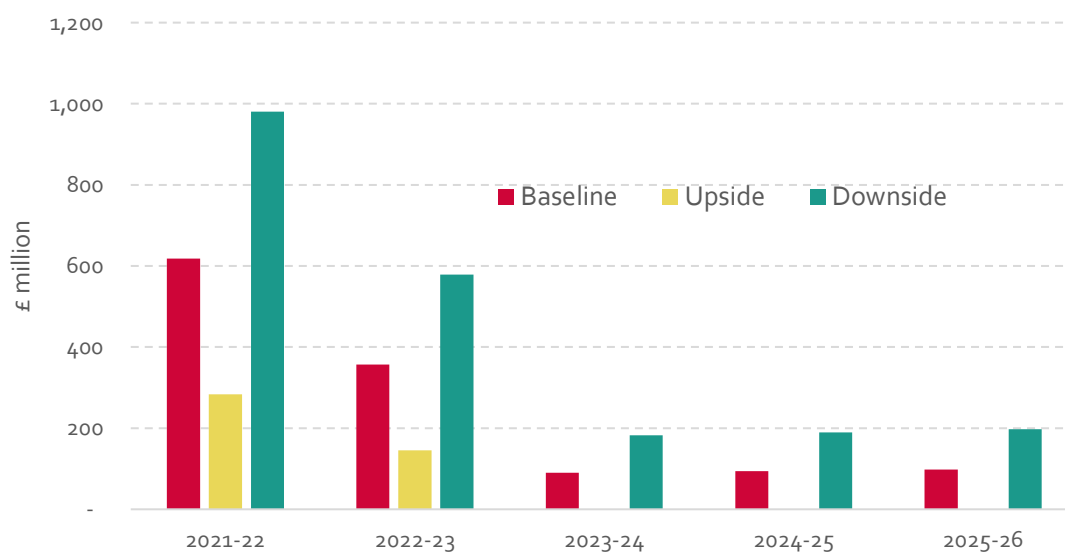
- **'Upside' scenario:** a productivity hit of 5% in 2020-21, and no effect by 2023-24
- **'Downside' scenario:** a productivity hit of 15% in 2020-21, falling to 2% by 2023-24.

In all scenarios, productivity recovers, though not to the levels expected before the pandemic in the baseline and 'upside' scenarios. **Figure 3.3** shows the additional funding pressures which would be associated with these trends in productivity from 2021-22 onwards. Under these scenarios, additional funding pressures range from £283 million to £981 million in 2021-22 and reduce to £0-£182 million over the longer term.

Actual trends in productivity in the NHS are likely to vary significantly between different areas of the NHS and are unlikely to entirely follow the trends modelled here. These estimates however illustrate the importance of considering the impact of the pandemic on productivity in the NHS when assessing future funding requirements.

Figure 3.3

Additional funding needed to meet underlying pressures, under different assumptions of hit to NHS productivity (nominal prices)



Source: Authors' calculations – see main text and annex 1 for methodology

3.3 Impact on waiting lists for elective care

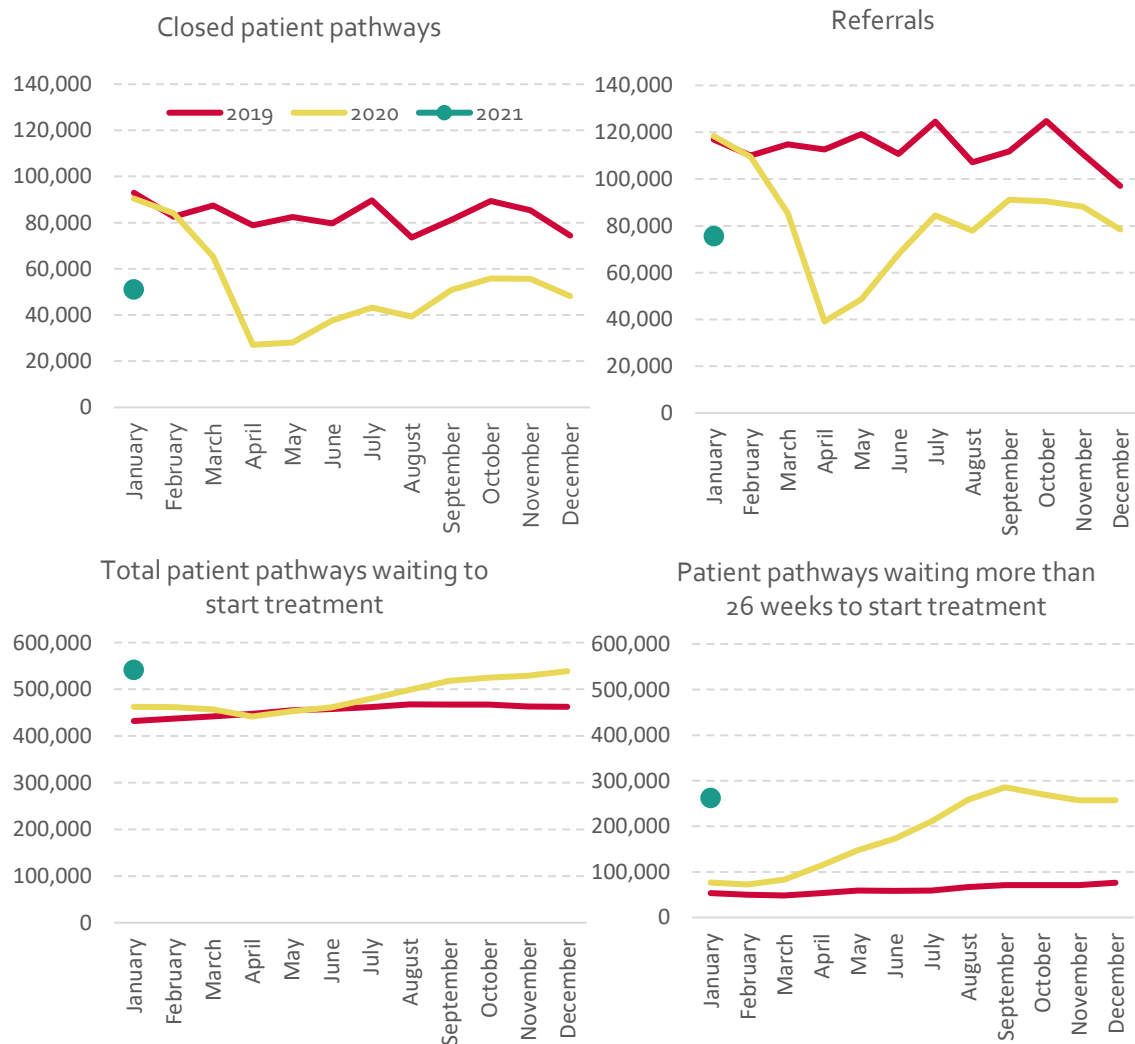
The overall NHS waiting list increased over the course of the pandemic, with the number of patient pathways waiting to start treatment reaching 541,702 in January 2021.¹⁵ This represented an increase of 79,344 (or 17%) compared to January 2020. The number of patient

¹⁵ The term 'patient pathways' is used instead of 'patients' to reflect the fact that one person can be on multiple waiting lists for different conditions.

pathways waiting more than 26 weeks to start treatment reached 262,064 in January 2021 – 241% higher than a year previously. This figure has fallen somewhat from a peak of 285,568 patient pathways in September 2020.

Figure 3.4

Number of outpatient referrals, completed patient pathways, and patient pathways waiting to start treatment in Wales in 2019, 2020 and 2021



Source: Statswales (2021)

Figure 3.4 shows the impact of the pandemic on waiting lists, as well as on the two main factors that determine the size of the waiting list.

The first factor is the rate at which patient pathways are closed, through treatment, patients no longer wanting to be seen, or deceased patient pathways. During the first peak of the pandemic, the number of patient pathways being closed fell substantially. Levels in April and May 2020 were just above one-third of 2019 levels, amounting to fewer than 106,000 fewer

patient pathways being closed over these months. Although levels recovered somewhat over later months, there were 372,000 fewer closed patient pathways in 2020 compared with 2019.

A second factor which determines the size of waiting list is the rate at which new pathways are opened and patients are added to the waiting list, usually following a referral by a GP or another primary care provider. As shown in **Figure 3.4**, referrals also fell substantially during the course of the pandemic, especially during the first peak. Overall, in 2020, there were 380,640 fewer referrals compared with 2019. While GP services remained open during the pandemic, with most routine hospital services suspended they were unable to refer as many patients as normal. It is also possible that fewer people used GP services during the pandemic. This fall off in referrals may signal significant pent-up demand for elective care.

The picture for overall waiting lists would significantly worsen if the 'missing' patients return over coming months and years. The extent of suppressed demand – and how and when it materialises – will be one of the key uncertainties facing the NHS in Wales. As argued by NHS Wales chief executive Andrew Goodall, it will take “a number of years” to tackle the backlog caused by the pandemic.¹⁶ The Welsh Government’s report on the future of health and social care argues “funding levels intended to maintain core service provision – “keeping the wheels on” – will not be sufficient to address the significant backlog in planned care”.¹⁷ The following section outlines the potential financial implications of reducing the backlog of patients.

3.4 Cost implications of elective care backlog

In this section we present estimates for the potential cost implications of clearing a post-Covid-19 backlog in elective care in the NHS. These estimates should be seen as 'order of magnitude' estimates only – the validity of some of the assumptions on future referrals and their associated costs are at present unknowable. Relatively small changes to these assumptions have a big impact on projected funding pressures.

In projecting the path of the total waiting list, we follow broadly similar approaches to those in reports by the NHS Confederation and the Health Foundation for England.^{18 19} Specifically, we make the following assumptions:

- **For February 2021 and March 2021** – we assume closed patient pathways and additions to the waiting list stay at average levels observed in the data from September 2020 to January 2021 (at 63% and 74% of 'normal' levels respectively).
- We estimate that the total 'missing' patients as the difference between actual new additions to the waiting list between March 2020 and January 2021, as well as the

¹⁶ <https://www.bbc.co.uk/news/uk-wales-56435644>

¹⁷ https://gov.wales/sites/default/files/publications/2021-03/health-and-social-care-in-wales--covid-19-looking-forward_o.pdf

¹⁸ <https://www.nhsconfed.org/-/media/Confederation/Files/Publications/Documents/Exploring-referral-to-treatment-waiting-trajectories-2021.pdf>

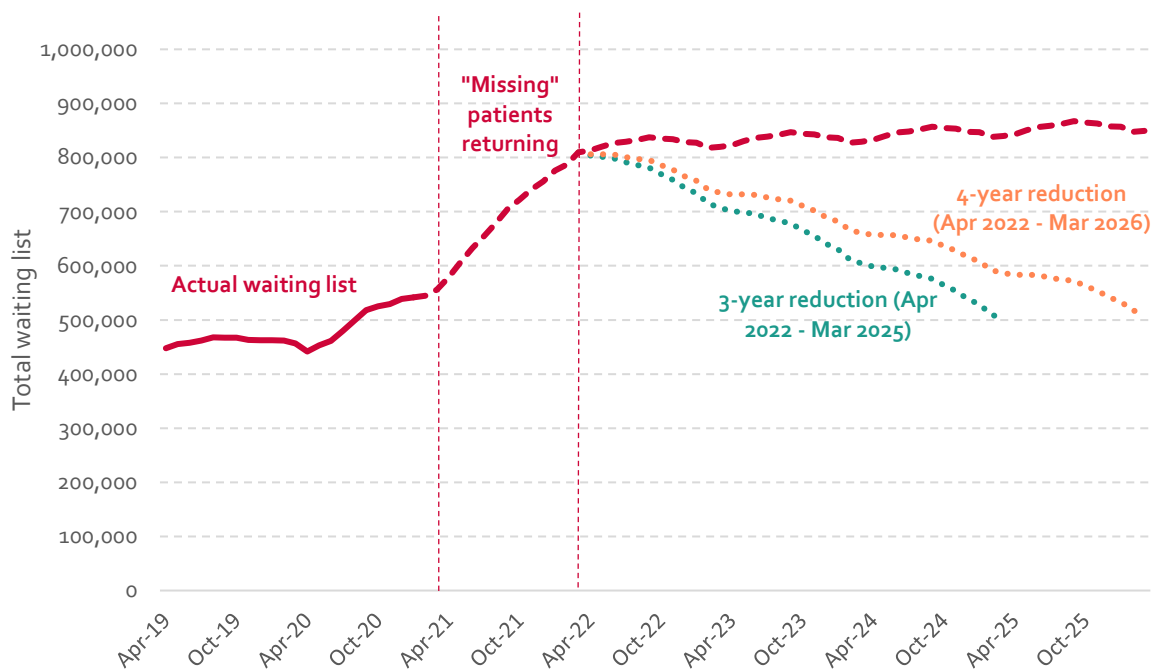
¹⁹ <https://www.health.org.uk/publications/long-reads/managing-uncertainty#lf-section-105791-anchor>

assumed additions to March 2021, from a projection a projection of the additions we would have expected based on pre-pandemic trends.²⁰

- **From April 2021 to March 2022** – we assume closed patient pathways return to 95% of 'normal' levels while new additions to the waiting list return to 'normal' levels. Following the Health Foundation assumptions, we assume 75% of the "missing" additions to the waiting list return, but uniformly over the twelve months of 2021-22.
- **After April 2022** – we assume closed patient pathways and new additions to the waiting list return to 'normal levels'. We then calculate the additional closed patient pathways required to restore waiting lists to 'pre-Covid-19' levels, over either 3 or 4 years.

Figure 3.5

Scenario projection for total waiting list size with assumptions for "missing" patients returning over 2021-22 and potential waiting list reduction from April 2022 onwards



Source: Statswales (2021) Patient pathways waiting to start treatment by month; see main text for assumptions

²⁰ We calculate 'additions to the waiting list' as the difference between the monthly change in the total waiting list plus the number of patient pathways closed in that month. These implied 'additions to the waiting list' are below the number of monthly referrals in the data – however the two series have a correlation of 98% for the actual data between August 2018 and December 2020. The difference between the two reflects patient pathways that have been nullified, for example, patients who did not attend their first outpatients appointment, as described by the NHS confederation in England, here: https://www.nhsconfed.org/_/media/Confederation/Files/Publications/Documents/Exploring-referral-to-treatment-waiting-trajectories-2021.pdf

Figure 3.5 shows the projected path of the total waiting list under these assumptions. The total number of patient pathways waiting to be treated increases from 540,000 in January 2021, to over 900,000 in April 2022.

Figure 3.6

Cost implication of reducing waiting lists to pre-pandemic levels

<i>3-year recovery period (Apr 2022 - Mar 2025)</i>				
% returning patients assumption	50%	50%	75%	75%
Additional patient pathways closed per year	112,000	112,000	144,000	144,000
Additional level of activity required	11%	11%	14%	14%
Cost per patient assumption	Central	High	Central	High
Cost implication per year (£ millions)	202	304	260	389
<i>4-year recovery period (Apr 2022 - Mar 2026)</i>				
% returning patients assumption	50%	50%	75%	75%
Additional patient pathways closed per year	84,000	84,000	108,000	108,000
Additional level of activity required	8%	8%	11%	11%
Cost per patient assumption	Central	High	Central	High
Cost implication per year (£ millions)	152	228	195	292

Source: Authors' calculations, see main text for methodology; patient numbers rounded to nearest thousand

In our two 'recovery' scenarios, we project the additional activity (as measured by the number of patient pathways closed) required from March 2022 to restore total waiting list size to pre-pandemic levels. We then apply a 'cost per patient' assumption to estimate the financial implications of this additional activity. Following Charlesworth et al. (2020), we assume a cost of £1,800 per patient (central assumption).²¹ This is based on a weighted average cost of an inpatient treatment (£4,200) and an outpatient-based treatment (just over £500), assuming just over a third of the extra patients requiring treatment each year will need to be admitted to hospital. There is also a potential for cases to be more complex and therefore more costly to treat. We therefore assume a 'high-cost' scenario, where the cost per patient is inflated by 50% (£2,700).

²¹ <https://www.health.org.uk/publications/long-reads/returning-nhs-waiting-times-to-18-weeks>

In the scenario outlined in **Figure 3.5** – with 75% of ‘missing’ patients returning – we project reducing the overall waiting list would require approximately 144,000 (14%) more patient pathways to be closed if this occurred over three years, or 108,000 (11%) more if over four years. The extra activity in this analysis is assumed to be above the trend growth of recent years. Over a three-year period, this implies a cost of £260 million a year under the central cost per patient assumption, or up to £389 million a year under the higher cost assumption. Over a four-year period, we estimate the cost to be £195 million a year, or £292 million under the higher cost assumption.

As outlined in the first two columns of **Figure 3.6**, if we reduce the assumed share of ‘missing’ patients returning over the next year to 50%, the extent of additional activity required, as well as the associated costs, fall. Over a four-year period, 8% additional activity would be required, at a cost of £151 million a year (or £227 million under the higher cost assumption).

While these projected financial implications are concerning, perhaps more challenging would be the increase in capacity required to meet this higher level of activity, which would require additional beds, consultants, nurses, and equipment. As such, it may be more realistic to expect to expect the reduction in waiting lists to occur over a much longer time period, perhaps over two full Welsh parliamentary terms.

3.5 Other pressures

This section summarises the potential cost implications from other legacies of the Covid-19 pandemic, namely: additional spending on mental health; staff pay and training costs; the need to build resilience to future health crises; and lastly on the NHS capital budget.

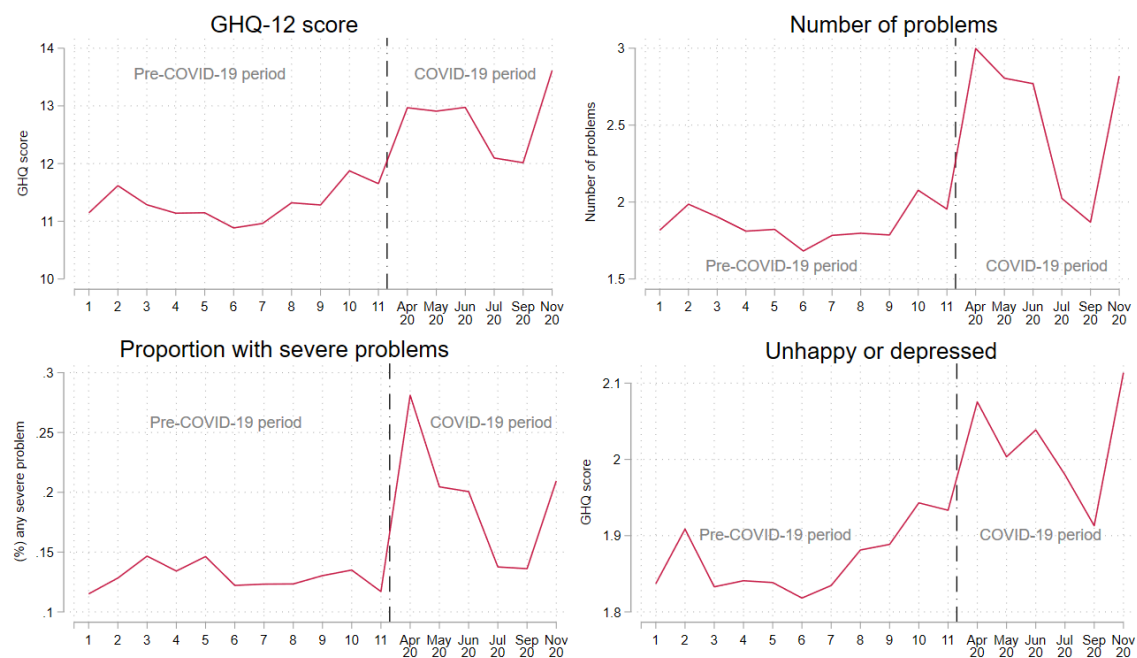
Mental health

The pandemic and the public health restrictions put in place as a response are likely to have affected the mental health and wellbeing of the population. At a Great Britain level, the ONS Opinions and Lifestyle Survey reveal higher levels of anxiety compared with previous years.²² To assess the impact of the pandemic on mental health and wellbeing, we analyse longitudinal data from the Understanding Society Covid-19 Study 2020, relative to data from previous waves. We use the General Health Questionnaire (GHQ-12), a widely-used measure to assess the severity of a mental health problem over the past weeks, with scores ranging from 0 to 36, where higher scores indicate worse conditions. The indicator reflects symptoms such as difficulties with sleep or concentration, problems in decision making, strain, and feeling depressed and overwhelmed.

²²<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandthesocialimpactsongreatbritain/5march2021>

Figure 3.7

Mental health scores for Wales, measured by General Health Questionnaire (GHQ-12) score, number of problems reported, and proportion with severe problems



Source: UK Household Longitudinal Survey Waves 1-9 and Covid-19 survey

Figure 3.7 shows the evolution of mental health patterns in Wales over the period between 2009 (wave 1) and 2020 (Covid-19 waves), measured by different indicators that reflect the deterioration of mental health since the onset of the pandemic. The data shows that reported levels of mental health problems rose significantly in 2020 compared with previous years and peaked in April 2020. Overall, mental health problems as measured by GHQ-12 scores increased by 17% between February 2020 and November 2020, despite improving slightly over previous months. The proportion of the sample with severe mental health problems also increased from 11.7% in February 2020 to 28.1% in April 2020.

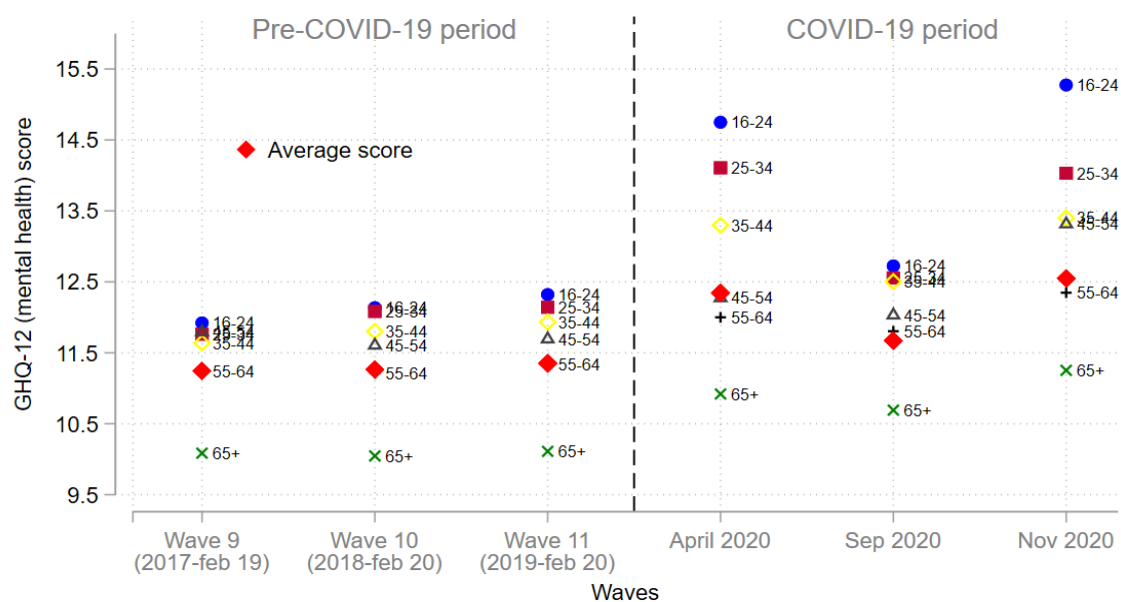
Figure 3.8 shows average GHQ-12 scores for each age group, in pre-Covid-19 waves as well as three post-Covid waves. For each age group, post-Covid-19 waves all show worse levels of mental health. The situation improved somewhat during the middle of 2020; however, there was another increase in November 2020, coinciding with the worsening public health situation and the reintroduction of restrictions. Younger groups appear to have been more adversely affected by the pandemic. In November 2020, the difference between the GHQ score of individuals between 16-24 and those over 65 reached 35%.

This worsening picture for mental health among the population would suggest increased demand for mental health services over the next 3 years. The latest programme budget category for NHS spending showed that £756 million was spent on treating mental health

problems in 2018-19.²³ Spending has increased over recent years, by an average of 3.4% per year in nominal terms since 2012-13. Modelling for England suggests the pandemic may cause a surge in referrals for mental health services, of up to 13% in 2021-22, before falling to 7% in 2023-24.²⁴ These models estimate the cost implication of this post-Covid surge in referrals in England to be between £1.22 billion and £1.75 billion in 2021-22, before falling to between £0.62 billion and £0.88 billion in 2023-24. These additional pressures reflect greater number of cases as well as increased severity of cases, which may further impact both capacity and productivity.

If these trends were replicated in Wales, additional pressures on mental health services would amount to £75 million to £98 million in 2021-22.

Figure 3.8
Mental health scores by age group, measured by General Health Questionnaire (GHQ-12) score



Source: UK Household Longitudinal Survey Waves 1-9 and Covid-19 survey

Staffing and NHS pay

The extent of the overall funding pressures to be faced by the NHS in coming years is also critically dependent on trends in pay. The Agenda for Change staff pay deal means most NHS staff have received real terms increases to their pay over recent years. Most long-term

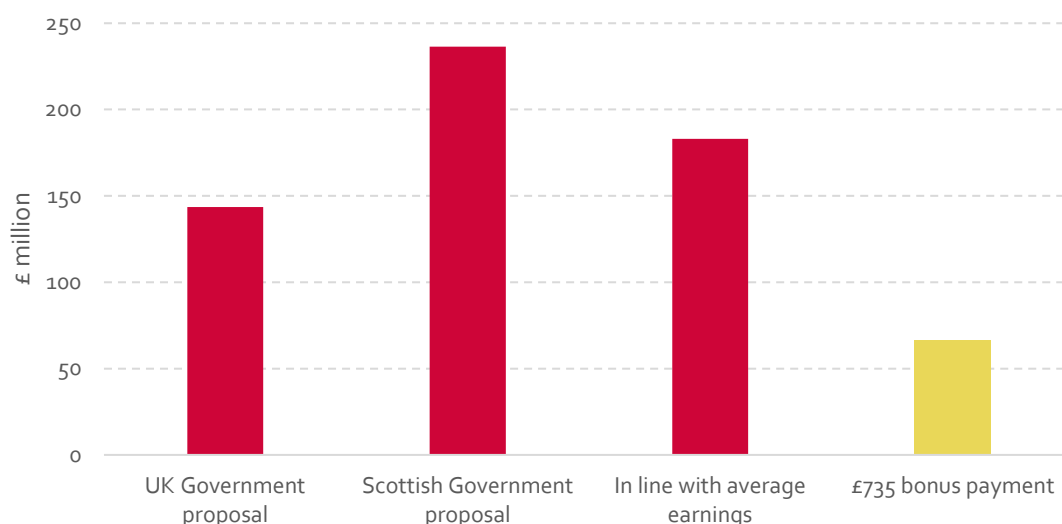
²³ <https://statswales.gov.wales/Catalogue/Health-and-Social-Care/Health-Finance/NHS-Programme-Budget/nhsexpenditure-by-budgetcategory-year>

²⁴ https://www.strategyunitwm.nhs.uk/sites/default/files/2020-11/Modelling%20covid-19%20%20MH%20services%20in%20England_20201109_v2.pdf

projections of funding need assume pay will need to increase by 2% a year above inflation – the long-run average for earnings growth across the economy as a whole – in order to recruit and retain staff. Although lower pay growth may allow higher levels of activity, since pay for many NHS staff has fallen in real terms over the last decade, and given the enormous pressures the pandemic has created for NHS staff, such an approach may likely be incompatible with the need to recruit and retain staff. There is also significant public appetite for higher NHS pay over coming years in recognition of the sector’s herculean efforts during the pandemic.²⁵

An imminent decision will need to be made on pay in 2021-22. In its evidence to the NHS Pay Review Body, the UK government recommended a 1% increase in pay.²⁶ Meanwhile, the Scottish Government has proposed a 4% pay rise for most NHS staff in Scotland.²⁷ Wales’ health minister, Vaughan Gething, said the Welsh Government had “not tried to set a ceiling” on any proposed wage increase.²⁸

Figure 3.9
Estimated increase in total NHS pay bill under different proposals, 2020-21 to 2021-22



Source: Authors’ calculations based on NHS Wales Summarised Accounts 2019-20 and Welsh Government evidence to NHS Pay Review Body

Using our model of the NHS pay bill, we estimate the increase in the size of the total NHS pay bill under these two proposals in 2020-21 and 2021-22. In all scenarios we assume the number of NHS full-time equivalent staff increases in line with pre-pandemic trends between 2015 and 2019.

²⁵ <https://www.theguardian.com/society/2021/mar/06/ministers-face-public-backlash-over-1-pay-offer-to-nurses>

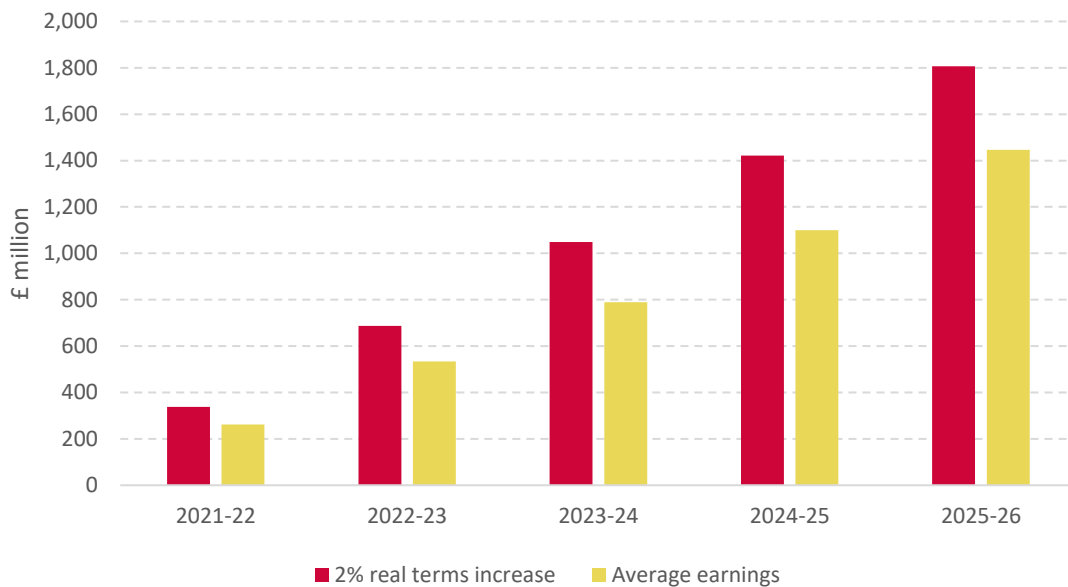
²⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/966702/DHS_C-written-evidence-to-the-NHSPRB-2021-to-2022.pdf

²⁷ <https://www.bbc.co.uk/news/uk-scotland-56518221>

²⁸ <https://www.bbc.co.uk/news/uk-wales-56295427>

Under the UK government’s proposals, we project that the pay bill would increase by approximately £143 million next year, mostly as a result of the increase in the number of staff.²⁹ Meanwhile, we estimate that adopting the Scottish Government’s approach to pay in Wales would cost an additional £93 million next year (£236 million in total).³⁰ Increasing NHS pay by the OBR’s forecast increase in average earnings across the UK implies a cost increase of somewhere between the two pay proposals. Although separate from any pay increase, the Welsh Government has proposed to fund a bonus payment for NHS and social care staff of £735, to be paid in April 2021.³¹ This proposed payment – estimated to benefit 90,000 NHS staff – will cost around £66 million. However, this one-off payment would not form part of the baseline pay bill. Instead, it will be funded through the one-off increases made to the Welsh budget in 2021-22, as shown in **Figure 2.2**.

Figure 3.10
Underlying NHS funding pressures under different scenarios for NHS pay, nominal prices



Source: Authors’ calculations; see Annex 1

Figure 3.10 shows the effect of varying assumptions on pay trends on underlying (pre-Covid-19) funding pressures relative to 2020-21 (in nominal terms). As a baseline scenario, we assume

²⁹ The UK government’s proposals include reducing the number of pay points in bands 5, 6 and 7, which would have the effect of giving a 1.7% pay rise to some NHS workers. Since data on the number of staff in Wales on these points is unavailable, we assume the distribution of staff follows the distribution in England, and that 17% to 20% of staff in these bands in Wales would be affected.

³⁰ Under Scottish Government proposals, staff in Bands 1 to 4 are assumed to receive a pay increase of at least £1,000 next year, meaning pay levels increase by more than 4% for staff in these bands.

³¹ <https://gov.wales/nhs-and-social-care-staff-benefit-bonus-payment>

that pay from 2021-22 onwards grows by 2% above inflation.³² Alongside our assumption for pay growth in 2020-21, this means that NHS pay would grow by an average of 1.7% in real terms between 2019-20 and 2025-26, or 3.6% in nominal terms. To illustrate the impact on funding pressures of varying assumptions on pay, we model the impact of NHS pay growing in line with forecast economy-wide average earnings during this time. This would entail NHS pay growing by an average of 0.7% in real terms from 2019-20 to 2025-26. In both cases we assume NHS productivity increases in line with the UK-wide, long-run average of 0.9% a year. Our methodology for projecting underlying pressures is described in Annex 1.

In the first, higher-pay scenario, funding would need to increase by 2.3% a year in real terms between 2020-21 and 2025-26. In the second, lower-pay scenario, funding pressures would amount to 1.6% per year in real terms between 2020-21 and 2025-26. In nominal terms, the difference in total spending pressures by 2025-26, compared with core spending in 2020-21, amount to £360 million.

Note again that these projected funding pressures are based on pre-pandemic increases in demand. Given the productivity projections and the additional activity required to clear the backlog discussed in previous sections, it is likely a much larger workforce will be required. Competitive pay deals will also be key in recruiting and retaining staff. This suggests another source of spending pressure will be for staff training and recruitment.

Building resilience

As described in section 2, funding increases allocated to the NHS since 2012-13 have been well above the overall growth in the Welsh budget, after a short period in which they fell in real terms during the first years of austerity. However, despite this prioritisation of the NHS, overall trends over the last decade point to only modest growth. In the year before the pandemic, adjusted for inflation, spending was 15% higher than in 2010-11. After accounting for growth in the population, spending was 11% higher per person. If we use an age-adjusted population measure – which captures ageing in the population and the varying levels of health spending by age group – spending was just 8% higher. In the latest year for which we have data (2018-19), spending had fallen by 0.5 percentage points as a share of the economy compared to pre-austerity levels.

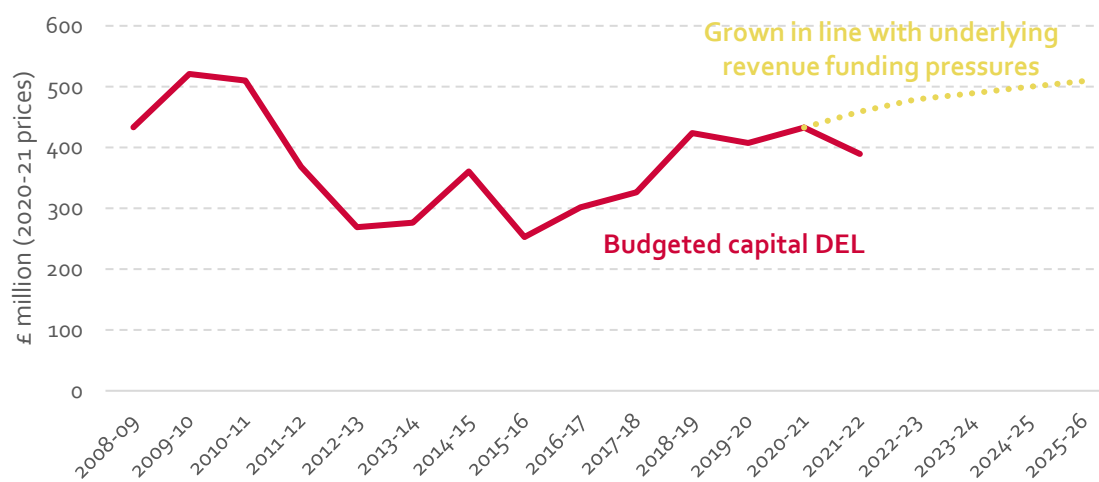
The overall average growth in NHS spending (excluding Covid-19 allocations) from 2010-11 onwards has been 1.5% a year in real terms – just one-quarter of the 6% a year growth average seen over the first decade of devolution in Wales and lower than the UK-wide historical average of 3.7% a year.

The Covid-19 pandemic has shown the need to build resilience in the NHS to future health emergencies. A report by the IPPR notes how the UK was in a poor position to resist a health

³² To accommodate for the volatility in forecast GDP deflator due to lockdown restrictions, we take an average of inflation from 2019-20 and 2025-26 – see annex 1.

shock, compared to international comparator countries, in terms of capacity, resources and public health.³³ As an example, Wales reportedly had the lowest number of critical care beds per person in Europe in 2014,³⁴ and had much lower levels compared to elsewhere in the UK before the pandemic.³⁵ Eventually building capacity to respond effectively to future health emergencies may require funding increases in excess of the underlying, “stay still” funding pressures discussed in this report.

Figure 3.11
NHS capital spending budget allocations (2020-21 prices)



Source: Welsh Government budget documents – last supplementary budgets for each year used.

Finally, while the focus of this report has been on the NHS day-to-day budget, recovering from Covid-19 is likely to require significant additional capital investment in infrastructure, facilities, and equipment, over and above pre-Covid-19 plans. As shown in **Figure 3.11**, capital budget allocations to the NHS have increased significantly since 2015-16 but remain well below the levels seen in 2009-10 in real terms. Across the UK, capital investment in health is low by international standards.³⁶ In 2017-18, the reported total maintenance backlog in the Welsh NHS stood at £561 million.³⁷ The dotted yellow line in **Figure 3.11** projects capital budget allocations if they grown in line with underlying revenue spending pressures from 2020-21. This would entail spending £100 million more per year by 2025-26. Given the likely need for significantly higher levels of activity over coming years to deal with the after-effects of Covid-19, capital investment in the NHS will need to be significantly higher than this.

³³ Thomas, C. (2020) 'Resilient health and care: Learning the lessons of Covid-19', Institute for Public Policy Research, Available at: <https://www.ippr.org/research/publications/resilient-health-and-care>

³⁴ <https://gov.wales/sites/default/files/publications/2020-12/nhs-wales-health-system-position-report-21-december-2020.pdf>

³⁵ https://gov.wales/sites/default/files/publications/2019-07/task-and-finish-group-on-critical-care-final-report_o.pdf

³⁶ <https://www.health.org.uk/publications/reports/failing-to-capitalise>

³⁷ <https://www.bbc.co.uk/news/uk-wales-49661434>

4 Total NHS funding pressures and the outlook for the Welsh Budget

4.1 Outlook for the Welsh budget

At the UK Budget in March, Chancellor Rishi Sunak neglected to set firm new fiscal rules, although he also stated that the UK “in normal times should not be borrowing to pay for everyday public spending”. The OBR’s current forecasts suggest this target would be met by 2025-26. However, this projection of a current budget balance by 2025-26 relies on medium-term spending plans which have been significantly reined back compared with pre-pandemic plans. The plans contain no Covid-19 related funding for years after 2021-22, assume NHS and schools spending returns to pre-Covid-19 multi-year spending plans, and imply cuts for other areas of the budget. In cash terms, spending on “unprotected” departments in 2022-23 will be around £9 billion, or 8.5%, lower than under pre-pandemic plans.³⁸

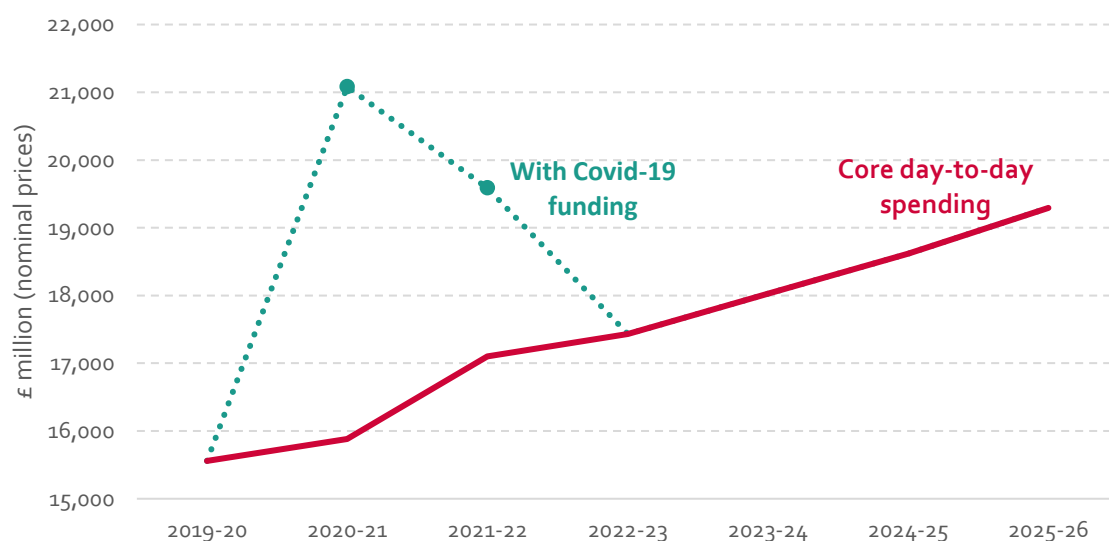
Despite the significant devolution of taxes to the Welsh Government over recent years, the largest determinant of the Welsh budget is still the block grant coming from the UK government, which changes according to spending on devolved areas in England. No firm spending plans have been set for UK departments beyond 2021-22, which makes the outlook for the Welsh budget enormously uncertain. To illustrate the potential impact of the UK government’s spending plans, we assume core NHS and schools spending in England grow in line with multi-year spending plans – to 2023-24 and 2022-23, respectively – and in line with projected UK economic growth thereafter. While defence and foreign aid spending grows in line with existing commitments, we assume all other departmental spending grows in with total “unprotected” UK government spending. We then estimate the projected additional consequentials passed on to the Welsh budget under these spending plans.

The projected path of the Welsh Government budget for day-to-day spending is shown in **Figure 4.1**. We assume the Welsh Government keeps devolved tax policy unchanged and that revenues grow in line with the latest forecasts. The projection reflects the Welsh Government’s decision to move a portion of Covid-19 funding from 2020-21 to 2021-22 and the additional consequentials announced after the UK budget. This scenario suggests the core Welsh budget for day-to-day spending on public services will grow by an average of 1.6% per year in real terms between 2021-22 and 2025-26.

³⁸ Zaranko, B. (2021) ‘The Chancellor’s spending plans are even tighter than they seem’, IFS Observation, Available at: <https://www.ifs.org.uk/publications/15365>

Figure 4.1

Welsh Government budget for day-to-day spending, 2019-20 to 2025-26 (nominal terms)



Source: Authors' calculations based on HM Treasury (2021) UK Budget 2021 documents; OBR (2021) Economic and Fiscal Outlook March 2021

Note: Core day-to-day spending in 2020-21 reflects drop in Non-Domestic Rates revenue and budget switch to capital spending.

The outlook for the Welsh budget is therefore better than before the two previous Senedd elections. At the time, the UK government had pencilled in significant cuts to departmental spending. However, in the face of significant pressures for many public services in the wake of the pandemic, the outlook is still an austere one for many of Wales' public services. This final chapter sets the funding pressures discussed in chapters 2 and 3 in the context of this overall projection for the Welsh budget, and discusses the choices facing the next Welsh government.

4.2 Total NHS spending pressures

The outlook for funding pressures on the NHS over coming years is highly uncertain. In chapter 2, we pointed to the significant underlying pressures before the pandemic hit, resulting from a growing and ageing population, and the increasing prevalence of chronic conditions. In chapter 3, we presented some of the ways in which the pandemic will have exacerbated funding pressures. While the extent to which these pressures will materialise is unknowable, we present three scenarios, assuming a 'baseline' impact, along with an 'upside' scenario with lower funding pressures and a 'downside' scenario with higher funding pressures. These scenarios are outlined further in **Figure A.3** in the annex.

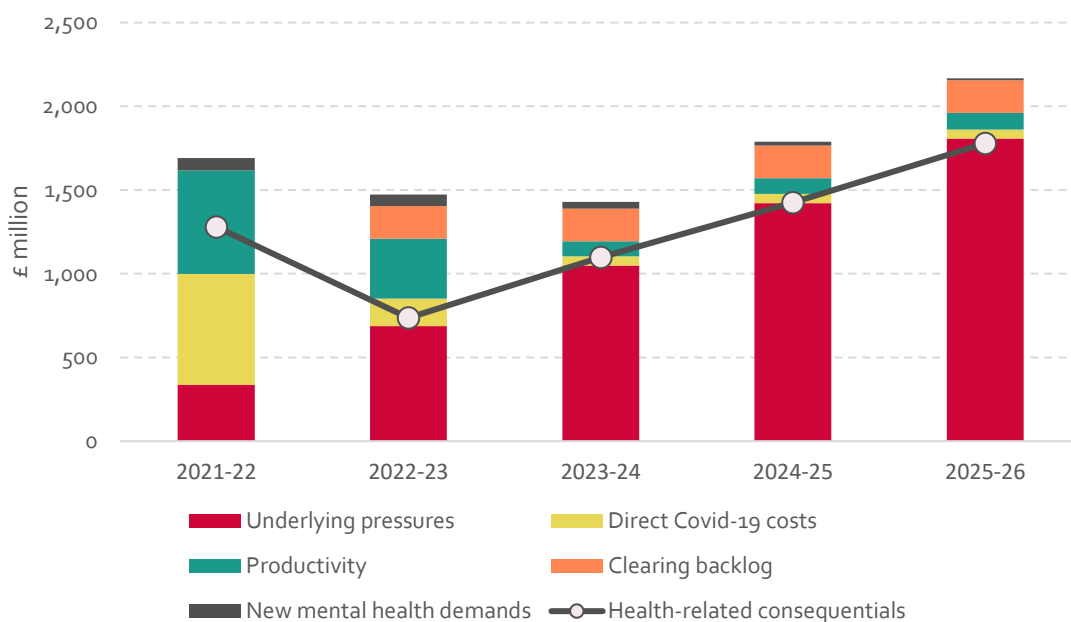
Our baseline scenario for NHS funding pressures over coming years is as follows:

- **Underlying pressures** – pre-pandemic trends in demand, 2% real-terms growth in NHS pay, 0.9% per year growth in NHS productivity.
- **Direct Covid-19 costs** – direct costs of Covid-19 halve every 6 months (from the £440 million allocated for the first half of 2021-22) before stabilising in 2023-24 at £55 million a year.
- **Productivity hit** – NHS productivity falls by 10% in 2020-21 recovering to 1% below pre-pandemic trends by 2023-24.
- **Clearing backlog** – assuming a 4-year ‘recovery period’ from April 2022 and March 2026, with 75% of ‘missing’ patients returning over the next year, and under the central cost-per-patient assumption.
- **New mental health demands** – in line with projections in England discussed in section 3.5.

Figure 4.2 presents these overall funding pressures from 2021-22 to 2025-26. We also show the total projected health-related consequentials from the UK government over the same time period, including Covid-19 consequentials in 2021-22.

Figure 4.2

Total projected NHS funding pressures, 2020-21 to 2025-26



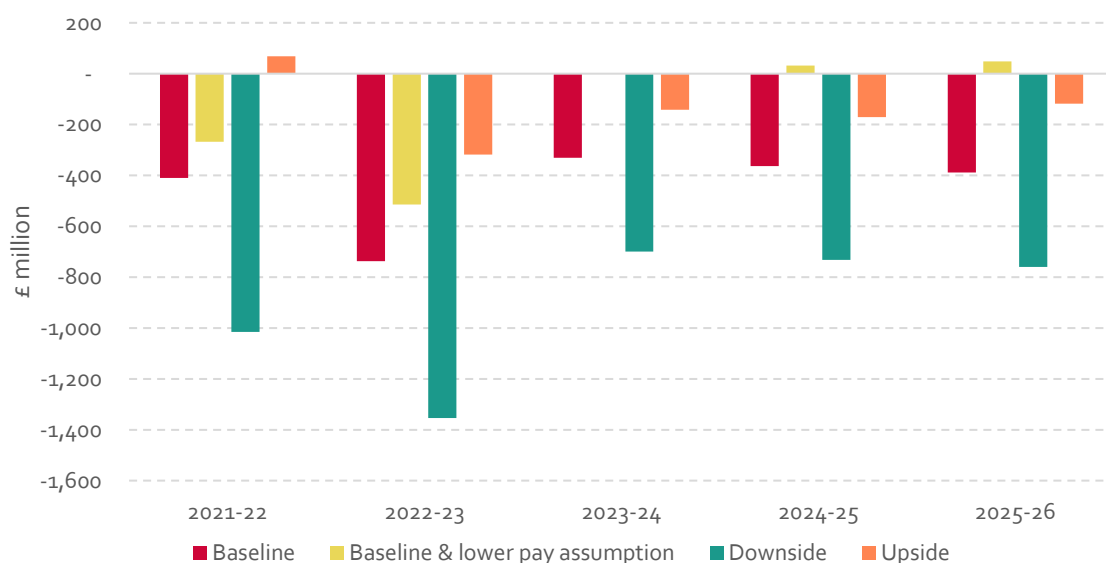
Source: Authors' calculations; see section 3 and Annex 1

As discussed in chapter 2, health-related consequentials look likely to broadly match pre-pandemic, underlying spending pressures to 2025-26. Alongside the Covid-19 funding moved from 2020-21 to 2021-22, the Welsh Government would also be in a position to meet the

funding pressures for 2021-22. However, a significant projected funding gap of £740 million between health consequentials and funding pressures opens up in 2022-23, driven primarily by our assumptions on productivity relative to pre-pandemic trends and the cost of clearing the elective care backlog. This funding shortfall would average £360 million a year (in cash terms) between 2023-24 and 2025-26.

This projected shortfall in projected health-related consequentials depends on several assumptions about underlying pressures and the legacy costs of Covid-19. **Figure 4.3** shows the projected shortfalls under the 'upside' and 'downside' scenarios discussed in chapter 3. The downside scenario would entail significant direct Covid-19 costs through 2022-23, a slower recovery in NHS productivity, and higher costs for clearing the backlog in elective care. This scenario would see a shortfall of £1.35 billion in 2022-23, before falling to an average of £730 million a year from 2023-24 to 2025-26. Meanwhile, an 'upside' scenario would see no direct Covid-19 costs after 2021-22, a faster recovery in productivity (returning to pre-pandemic trends by 2023-24), and fewer 'missing' patients returning over the next year. The shortfall in this scenario would amount to £320 million in 2022-23 falling to around £140 million a year from 2023-24 to 2025-26.

Figure 4.3
Projected shortfall between health consequentials and total funding pressures



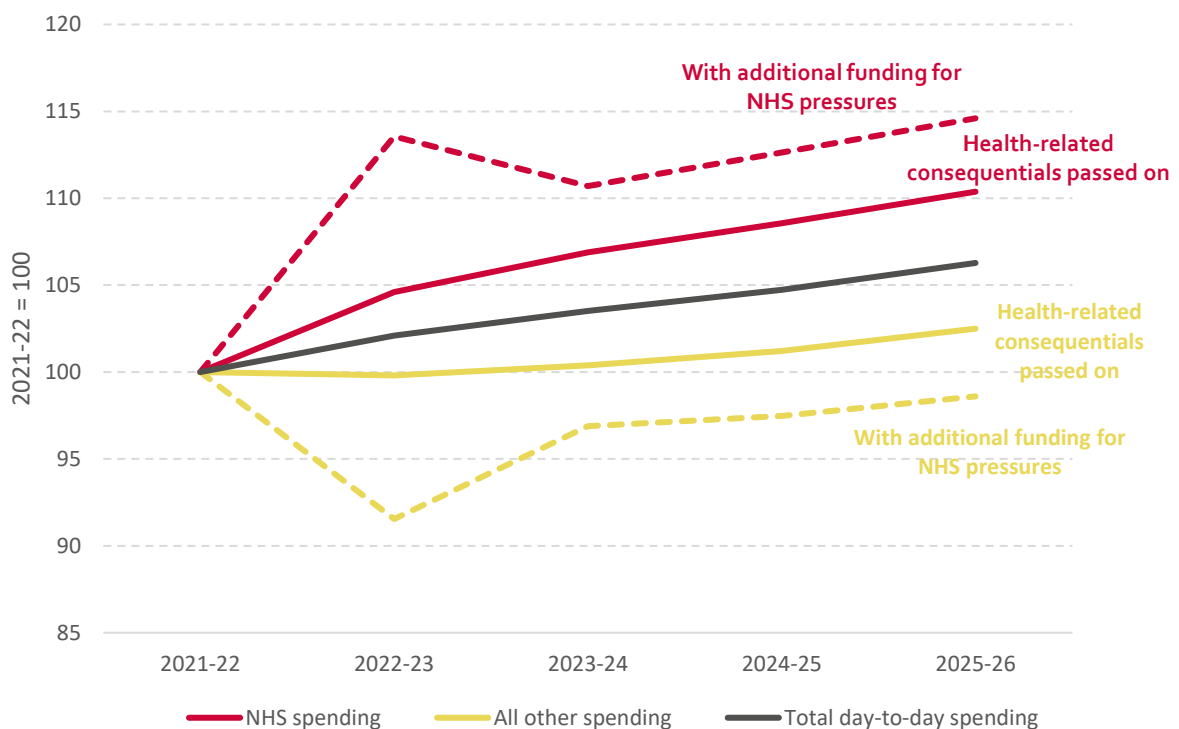
Source: Authors' calculations based on NHS Wales Summarised Accounts 2019-20 and Welsh Government evidence to NHS Pay Review Body

These scenarios illustrate the sensitivity of projected pressures to our assumptions. Another key assumption is relates to NHS pay in the coming years. As shown in **Figure 3.10**, if we assume NHS pay grows in line with UK government proposals for 2021-22, and in line with average earnings thereafter (rather than 2% per year growth in real terms), then underlying funding

pressures are reduced significantly. As shown in the 'baseline & lower pay assumption' in **Figure 4.3**, this lower pay assumption has enough of an impact on underlying pressures to close the shortfall in total funding pressures compared with health-related consequentials by 2023-24.

If the post-pandemic pressures discussed in this report materialise, the current UK government spending plans suggest tough decisions and trade-offs for the next Welsh Government. **Figure 4.4** shows the projected real terms change in the core Welsh Government budget (excluding Covid-19 funding) between 2021-22 and 2025-26. Firstly, we show the change in NHS spending if only health-related consequentials are passed on to the NHS budget (solid red line). This decision would imply cuts to all other areas of the budget for 2022-23, and growth of around 0.9% per year in real terms thereafter (solid yellow line). However, the Welsh Government could decide to fund additional NHS pressures from within its own budget (dotted red line). However, this would result in steep – and probably unachievable – cuts in non-NHS spending (dotted yellow line). As we will discuss in a forthcoming election briefing, other areas of the budget are facing their own huge funding challenges over coming years - including the need to catch up on lost learning in schools, supporting the economy and public transport, to fixing social care.

Figure 4.4
Real terms change in core day-to-day funding for NHS and all other Welsh Government spending, 2021-22 to 2025-26



Source: Authors' calculations based on NHS Wales Summarised Accounts 2019-20 and Welsh Government evidence to NHS Pay Review Body

These projections suggest that fully meeting all the additional NHS funding pressures outlined in this report will be difficult. This brings into sharp relief the need to focus on alternative ways of working after the pandemic; for example, by continuing the increased use of technology brought about by the pandemic.

Of course, the UK government could change course ahead of this autumn's Spending Review. For example, the Chancellor could decide to reverse the cuts to pre-pandemic spending plans made at November's Spending Review and the March budget. Alternatively, the UK government could decide to extend Covid-19 funding over a number of years to meet post-pandemic pressures in the years after 2021-22. However, doing so would require either further tax rises or higher UK government borrowing. Given the Chancellor reiterated his commitment not to raise the main rates of income tax, VAT or national insurance, the scope for large revenue raising measures remain limited. This suggests that meeting these additional spending pressures would require the Chancellor to drop his aim for a current budget balance by 2025-26.

In contrast to the start of the 2010s, the Welsh Government will have some scope to change the size of its budget over coming years. In the context of huge funding pressures and an austere outlook for the budget, discussions around the use of the Welsh Rates of Income Tax should also play a part in meeting future challenges. These possibilities will be discussed in more detail in a forthcoming pre-election briefing on the overall Welsh budget outlook.

Annex 1

Estimating consequential from Department for Health and Social Care spending in England

Data from consequential for Wales from Department for Health and Social Care are taken from Honeysett, L. and Brien, P. (2020)³⁹ and Honeysett et al. (2021), based on the UK supply estimates.⁴⁰ They estimate Department for Health and Social Care spending in England led to £2,484 million for the Welsh Government in consequential funding in 2020-21. This means 'England-only' spending by the department would amount to £42.2 billion, out of total Covid-19 spending of £59.1 billion. This implies UK-wide Covid-19 spending by the department of around £16.9 billion in 2020-21. The only breakdown of consequential by source of spending in England is for PPE, which led to £800 million for the Welsh Government, which implies £13.6 billion of spending in England. We assume all of the other UK-wide spending related to the reserved element of Test and Trace. Our estimated consequential by source used in section 3.1 is set out in **Figure A.1**.

Figure A.1
Increase in funding pressures from 2019-20, nominal terms

Measure	H&SC Covid-19 RDEL	Assumed UK-wide	Assumed England only	Implied consequential
Test and Trace	20,403	15,577	4,826	284
NHS emergency response to COVID-19	17,995	0	17,995	1058
Purchase of PPE	14,925	1,320	13,605	800
COVID-19 vaccine deployment	3,045	0	3,045	179
Infection Control grants to local authorities	1,139	0	1,139	67
Research, development and purchase of therapeutic COVID-19 treatments	946	0	946	56
Ventilators and Critical Care National Stockpile	145	0	145	9
Depreciation of assets purchased in response to pandemic	290	0	290	17
Adult social care	120	0	120	7
Other COVID-19 related costs	127	0	127	7
Total	59,135	16,897	42,238	2,484

Source: Honeysett et al. (2021) and Honeysett, L. and Brien, P. (2020)

³⁹ Honeysett, L. and Brien, P. (2020), 'Main Estimates: government spending plans for 2020– 21', House of Commons Library Briefing Paper 08926, Available at:

<https://commonslibrary.parliament.uk/research-briefings/cbp-8926/>

⁴⁰ Knight, A., Broughton, A. and Brien, P. (2021), 'Revised government spending plans for 2020/21', House of Commons Library Briefing Paper 09149, Available at:

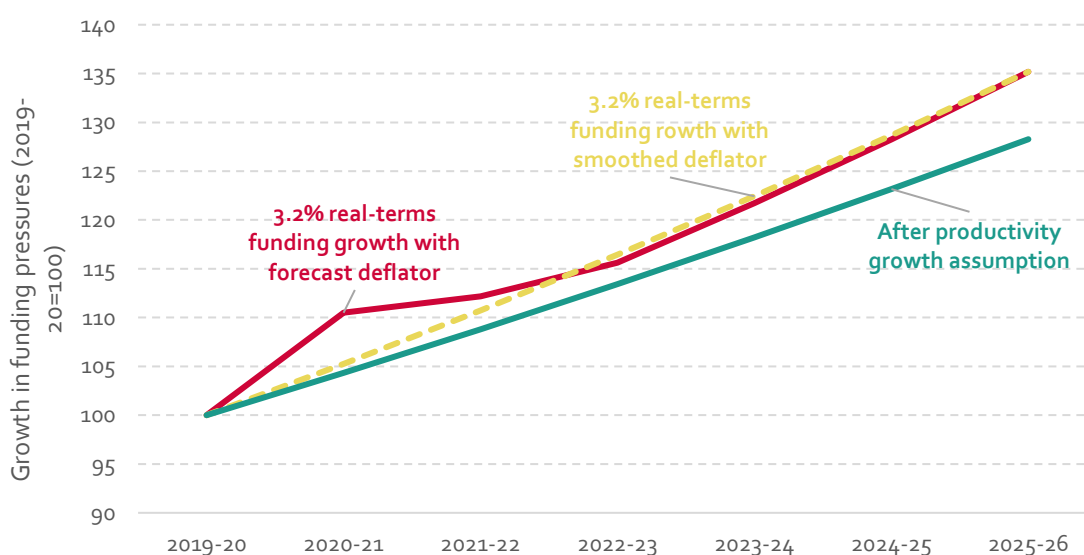
<https://commonslibrary.parliament.uk/research-briefings/cbp-9149/>

Underlying funding pressures methodology

As a baseline for projecting funding pressures, we use the projections from the Health Foundation (2016) report on the sustainability of the NHS in Wales.⁴¹ The report's headline finding was that, from 2019-20 to 2030-31, future health care needs could be met if Welsh NHS funding rises by 2.2% above inflation each year, and there was continued efficiency growth of 1% a year.

Taking 2019-20 budgeted NHS spending as our baseline, we project funding pressures growing by 3.2% a year in real terms, from 2019-20 to 2025-26 (red line in **Figure A.2**).

Figure A.2
Increase in funding pressures from 2019-20, nominal terms



Source: Authors' calculations

The measure of prices in the economy usually used to compare public services spending across years is the GDP deflator, which reflects the prices of all goods and services included in GDP, including those relating to private and government consumption and investment and the relative price of exports to imports. The GDP deflator forecasts published by the OBR have been very volatile during the Covid-19 pandemic. It increased by 5.9 per cent in 2020, almost entirely driven by a rapid rise in the government consumption deflator. This mainly reflects the sharp fall in measured real government output over the lockdown period, set alongside sharply rising nominal expenditure. For example, despite extra health spending, recorded real health output fell, leading to a sharp rise in the implicit price deflator.

⁴¹ Watt, T. and A. Roberts (2016) 'The path to sustainability', Health Foundation, Available at: <https://www.health.org.uk/publications/reports/the-path-to-sustainability>

This volatility in the data is unlikely to reflect the actual cost pressures faced by public services. We therefore “smooth” the GDP deflator series, by taking the average annual increase between 2019-20 and 2025-26. The resulting nominal terms increase in funding pressures is shown by the dotted yellow line in **Figure A.2**.

We apply our productivity growth assumption – of 0.9% a year, reflecting the historic UK-wide average over the last two decades – to get a notional projection of funding pressures.

Modelling NHS pay pressures

The Health Foundation projections assumed increases in NHS pay of 2% above inflation from 2019-20 onwards.

Baseline figures on the NHS pay bill are taken for 2019-20 from the NHS (Wales) Summarised Accounts.⁴² The total employee costs for all permanent staff in 2019-20 was £3.97 billion. We therefore assume 53% of NHS unit costs are directly influenced by NHS pay deals. We also assume non-staff costs increase by a weighted average of the GDP deflator (75%) and our assumptions on pay (25%). This means 64% of modelled NHS unit costs are influenced by our pay assumptions – this in line with the assumptions made by the Nuffield Trust report from 2014.⁴³

For the implications of pay awards for 2021-22, we assume doctors and dentists (not covered by the Agenda for Change pay deal) account for 21% of the pay bill, in line with published figures from 2018-19. For other NHS staff, we use published data on the share of (full-time equivalent) staff in each band multiplied by the top salary point in each band, to get an estimated share of the pay bill accounted for by staff in each band. We grow the number of staff in each band by the pre-pandemic average from 2015 to 2019 and grow assumed average salaries in each band by the different proposals discussed in section 3.5.

Modelling impact of productivity changes

In our main projections of NHS funding pressures, we assume productivity in the NHS increases by 0.9% a year, the long-run average for health public services across the UK.

In modelling the effects of Covid-19 on productivity and funding pressures, we model three scenarios (described in section 3.2):

We model the impact of this effect on funding pressures from the following scenarios for productivity trends:

- **‘Baseline’ scenario:** productivity hit of 10% in 2020-21, falling to 1% by 2023-24 (relative to pre-pandemic trends)

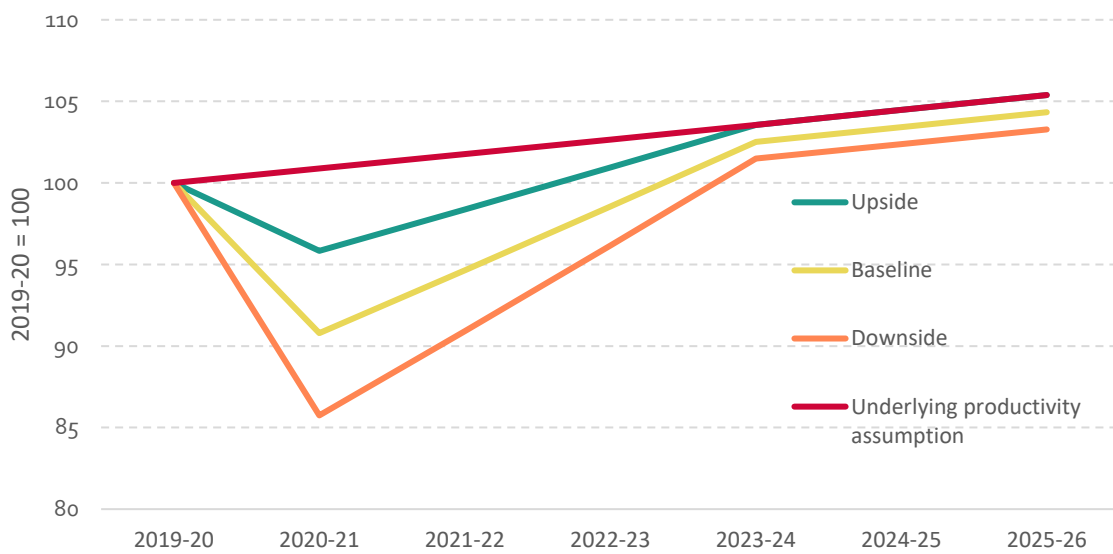
⁴² Available at: <https://senedd.cymru/laid%20documents/gen-ld13422/gen-ld13422-e.pdf>

⁴³ See page 15: <https://www.nuffieldtrust.org.uk/files/2017-01/decade-austerity-wales-web-final.pdf>

- 'Upside' scenario: productivity hit of 5% in 2020-21, and no effect by 2023-24
- 'Downside' scenario: productivity hit of 15% in 2020-21, falling to 2% by 2023-24.

Figure A.3 shows the path of NHS productivity under these scenarios relative to the 2019-20 baseline. The impact of these scenarios on funding pressures is calculated as the difference between our projections of funding pressures under our underlying productivity assumption and funding pressures in other scenarios.

Figure A.3
Change in NHS productivity relative to 2019-20 levels, under various scenarios



Source: Authors' calculations

Total funding pressures under different scenarios

Figure A.4 shows the funding pressures modelled by source in section 4, under the different scenarios.

Figure A.4

	2021-22	2022-23	2023-24	2024-25	2025-26
Health related consequentials	1,281	736	1,098	1,425	1,779
	2021-22	2022-23	2023-24	2024-25	2025-26
Baseline scenario					
Underlying pressures	338	687	1,048	1,421	1,807
Direct Covid-19 costs	660	165	55	55	55
Productivity	618	357	90	94	98
Clearing backlog	0	195	195	195	195
New mental health demands	75	70	40	23	13
Total pressures	1,691	1,473	1,428	1,788	2,168
<i>Consequentials less projected pressures</i>	<i>-410</i>	<i>-737</i>	<i>-330</i>	<i>-363</i>	<i>-389</i>
Upside scenario					
Underlying pressures	338	687	1,048	1,421	1,807
Direct Covid-19 costs	440	0	0	0	0
Productivity	283	145	0	0	0
Clearing backlog	76	152	152	152	76
New mental health demands	75	70	40	23	13
Total pressures	1,212	1,054	1,240	1,596	1,896
<i>Consequentials less projected pressures</i>	<i>69</i>	<i>-318</i>	<i>-142</i>	<i>-171</i>	<i>-117</i>
Downside scenario					
Underlying pressures	338	687	1,048	1,421	1,807
Direct Covid-19 costs	880	440	220	220	220
Productivity	981	579	182	190	198
Clearing backlog	0	293	293	293	293
New mental health demands	98	91	53	31	18
Total pressures	2,297	2,090	1,796	2,155	2,535
<i>Consequentials less projected pressures</i>	<i>-1,016</i>	<i>-1,353</i>	<i>-698</i>	<i>-730</i>	<i>-757</i>

Source: See main text (sections 3 and 4)

Note: cost of clearing backlog in 'upside' scenario assumed to start from September 2021, and last until September 2025 (rather than April 2022 – March 2026 as in other scenarios)

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