Northern Ireland Fiscal Council

Bringing transparency to NI's public finances

Sustainability Report 2022:

special focus - Health

September 2022

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Foreword

The Northern Ireland (NI) Fiscal Council was established in 2021 to bring greater transparency and independent scrutiny to the region's public finances, focusing on the finances of the NI Executive. In doing so we hope to inform both public debate and policy decisions to everyone's benefit.[1]

Within this overall mission, our Terms of Reference (based on the New Decade, New Approach agreement) require us to *"prepare [an] annual report on the sustainability of the Executive's public finances, including the implications of spending policy and the effectiveness of long-term efficiency measures."*.[2] This allows us to look at long-term opportunities and challenges confronting the NI public finances alongside the short- to medium-term issues covered by our reports on the Executive's (Draft) Budgets.

The Council's Chairperson is Sir Robert Chote. The other Council members are Maureen O'Reilly, Professor Alan Barrett and Dr Esmond Birnie.

Having discussed the potential scope of the sustainability report with stakeholders, we have decided to structure the first one in two parts: first, a discussion on sustainability in general terms (and, in particular, how it should be interpreted for a devolved administration with relatively limited control over taxation and borrowing), which was published on 7 September 2022,[3] and, second, more detailed discussion of a special topic. We have chosen health as the special topic for this first report and this volume contains our conclusions.

Early in our thinking on how to approach the topic, we met with a number of outside experts who provided invaluable insight and feedback, including Professor Deirdre Heenan, Anita Charlesworth CBE and John Compton CBE. We are very grateful for their time and expertise.

To inform our conclusions, and to stimulate public understanding more broadly, we have commissioned a study of various aspects of the NI health system related to sustainability from Professor John Appleby and colleagues at the Nuffield Trust, which is published alongside this report.[4] We are very grateful to them for their input and have enjoyed working with them very much. The Nuffield Trust paper, *Future funding and current productivity in Northern Ireland's health and social care system,* expresses the view of its authors and not necessarily of the Council.

As regards this report, the members of the Council are responsible for the content, but we have relied hugely on the hard work and expertise of our colleagues Jonathan McAdams, Karen Weir, Colin Pidgeon, Tamara Ferguson, Philippa Todd and Paul Montgomery. We are also very grateful for the time and patience of officials from the Department of Health (DoH). What follows is our independent

[1] Find out more about the NI Fiscal Council at www.nifiscalcouncil.org
[2] https://www.nifiscalcouncil.org/publications/initial-terms-reference
[3] https://www.nifiscalcouncil.org/publications/sustainability-report-2022
[4] https://www.nuffieldtrust.org.uk/research/future-funding-and-current-productivity-in-northern-ireland-s-health-and-social-care-system

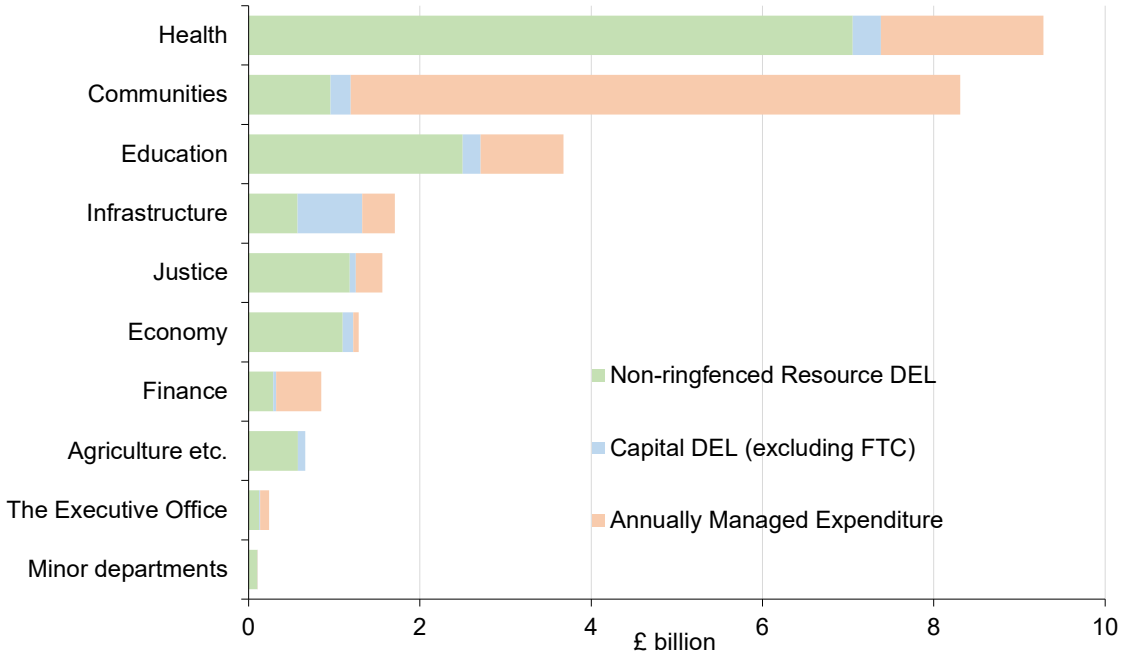
assessment. We have come under no pressure from NI Executive or UK Government Ministers, advisers or officials to include, exclude or change any material.

There are two main reasons why we have chosen to focus on health spending as the special topic for our first *Sustainability Report*:

- First, DoH receives by some distance **the biggest component of the Executive's Departmental Expenditure Limit (DEL) spending** on public services, grants and administration. Chart 1.1 shows that by 2021-22 Provisional Outturn, DoH (which is also responsible for social care in NI) undertook just over £7 billion of day-to-day resource spending in that year, including spending on Covid-19. This was more than £3,700 per person and 49 per cent of the total for all NI departments. DoH was also the second biggest spender on capital investment (after the Department for Infrastructure) and its pension costs give it the second largest budget for Annually Managed Expenditure (AME) after the Department for Communities.

- Second, discussion of healthcare in NI is characterised by **two widespread beliefs** – correct or not – that are relevant to the financial sustainability of the system: first, that NI has a greater 'need' per head for health spending than England (because of the characteristics of its population) and, second, that the health system in NI is characterised by significant inefficiencies. These inefficiencies, if they exist, are making the system more costly than it would otherwise be. In addition, they could lead to increased cost pressures over time, with implications for the financial sustainability of the system or for the capacity of the Executive to fund spending in other areas.

Chart 1.1 - Departmental expenditure for 2021-22 at Provisional Outturn



Source: Department of Finance

There have been several reviews of the health and social care system in NI over the past 25 years (Appendix A) indeed the panel led by Professor Rafael Bengoa, which undertook the most recent major review in 2016, referred to 'review fatigue'. Reform to date has significantly reduced the number of organisations in the sector, as described in Appendix B. However, despite this and higher spending in NI than in England in the past, the system still lags behind the other regions of the UK in many performance measures, including waiting lists. This report is not intended to be a further in-depth review of systems or structures. Instead we focus on issues that may affect fiscal sustainability.

One way to frame this is to ask whether the funding available to the Executive (primarily from its Block Grant from the UK Government) is likely to be sufficient to maintain the quality and quantity of health care provision in NI relative to England, or the rest of the UK, over time. And in addition, whether it would be possible to close any initial gap arising from historic funding levels, potentially greater relative need or inefficiencies? The quantity and quality of healthcare provision depends both on the available resources and the effectiveness with which they are used.

Social care is integrated with healthcare provision in NI and accounts for around 20 per cent of DoH's expenditure. As this report is primarily focused on health, there is about one fifth of the Department's DEL spending (mostly in social care) that is largely excluded from our analysis. Where our analysis touches on other spending, such as that on social care, we try to make this clear.

In the chapters that follow, we structure our discussion along the following lines:

- Chapter 1 provides an **executive summary**.
- Chapter 2 describes the **structure** of the health sector in NI and its evolution.
- Chapter 3 sets out the **governance** of the NI health system and the way in which **funding** flows through it and is recorded for different purposes.
- Chapter 4 compares **health spending per capita** in NI with the rest of the UK. We find that spending has historically been higher in NI and ask whether this is related to **greater need**, before considering **near-term funding pressures** facing the health system.
- Chapter 5 investigates **the relative health of the NI population**, and especially aspects in which **NI's population health characteristics** are significantly different to those in England or elsewhere in the UK.
- Chapter 6 asks whether the higher historic spending in NI results in **higher standards of delivery** and/or **lower levels of efficiency** in the NI system.
- Chapter 7 takes a longer-term, forward-looking perspective and asks what impact the **upward pressures on health spending over time** experienced in most industrialised countries – arising from population ageing, advances in technology and increasing demand as societies get richer – will have on NI.
- Chapter 8 considers the role and impact of **governance and accountability** in the NI health system, and how this may be an important factor in future efficiency and cost containment.
- Chapter 9 summarises our main **conclusions and key findings**.

1 Executive Summary

The structure of the NI health sector

NI operates an integrated model of health and social care provision unlike England where the two are separate. Theoretically, this integration of health and social care should lead to better outcomes, but it is not clear that this is true in practice with data problems making it hard to assess.

DoH is proposing a new Integrated Care System,[5] focused on local partnership models that will bring together health and social care professionals, the voluntary and community sector, local councils and others to plan, manage and deliver care for their local population taking a population health approach. The aim is to strengthen autonomy and accountability of local decision makers with a greater focus on health outcomes and working together more closely. Regional and specialised services would be planned, managed and delivered at a regional level.

Provision of health services might be expected to be more costly than in England since NI is more rural, resulting in a greater proportion of smaller hospitals. This situation is similar to Scotland and Wales.

Governance and funding

DoH holds the budget for health and social care, which accounted for 45 per cent of the Executive's resource and capital spending in 2021-22. Spending by DoH increased by 6 per cent a year on average over the period 2016-17 to 2019-20 due in part to temporary funding as part of the Confidence & Supply political agreement. It jumped a further 20 per cent during the pandemic in 2020-21. Hospital services consume more than half the DoH budget, followed by social care and pharmacies.

HSC bodies are required to demonstrate appropriate financial management by meeting and reporting on specific targets set by DoH. HSC bodies are required by statute[6] to ensure that their income is sufficient to meet their expenditure, taking one year with another, so as broadly to 'break even'. However, this is not the hard budget constraint it might at first appear as DoH routinely provides deficit funding to allow the Trusts to break even. This obscures the underlying pressures.

Each HSC body's board bears primary responsibility for ensuring that it delivers on its functions, statutory responsibilities and the priorities, commitments, objectives, targets and other requirements set for it by DoH.[7] While this may facilitate local decision-making, the systems for recording funding across healthcare bodies and across activities do not lend themselves to effective scrutiny and analysis.

[5] https://hscboard.hscni.net/download/PUBLICATIONS/unnamed-file.ics/Integrated-Care-System-Factsheet-01.pdf
[6] Article 15 (1) The Health and Personal Social Services (Northern Ireland) Order 1991
[7] https://www.health-ni.gov.uk/publications/board-governance-self-assessment-tool

Health spending and need

In 2019-20, per capita health expenditure in NI was 7 per cent (£181) higher than in England, in line with the average over the past 20 years.[8] Health spending per head of population was also higher than in Scotland and Wales but broadly the same as in the North West and North East of England.

The spending plans for DoH in the Draft Budget 2022-25 published by the Minister of Finance in December 2021 imply that the funding available for health spending in NI is growing at a significantly slower rate than for the Department of Health and Social Care (DHSC) in England. As a result, health spending per head of population has fallen below that in England for the first time in 2022-23 and will remain 2-3 per cent lower until at least 2024-25. The relative level of health spending compared with England is also expected to fall below the latest measures of relative health need. Previous independent analysis, in 2005 and 2011, suggested that the overall relative need for health and social care expenditure in NI was between 107 and 109 per cent of that in England, with the relative need for health spending alone, slightly lower.

If these estimates are accurate, this suggests that health spending in NI has previously been broadly in line with relative need. However, the slower growth in health funding more recently means that NI would not be able to afford to deliver the same standard of services as in England unless it ran its services more efficiently than they are run in England.

The drop in relative health spending arises in part due to the conclusion of one-off funding packages under the Confidence & Supply and New Decade New Approach (NDNA) political agreements. However, it is primarily because the NI Block Grant is projected to fall relative to UK Government equivalent spending per head of population in the coming years, rather than because funding is being switched to other areas (as we explain in the main *Sustainability Report*[9]). The fall in NI's relative funding advantage over England for spending as a whole, from 38 per cent in 2017-18 to 25 per cent in 2024-25 will pose a substantial challenge to the Executive. Health spending is expected to be equivalent to 39 per cent of the NI Executive Block Grant in 2024-25 compared with 36 per cent in 2014-15.

With many healthcare inputs bought and sold in a UK or worldwide market, it is likely that cost pressures will be broadly similar across the UK. At the macro level, this suggests that DoH will be faced with generally similar cost pressures as in England but fewer resources with which to fund them. This implies that Ministers will need to make difficult decisions to ensure the sustainability of the health sector, and other public services.

[8] PESA 2022. These data are also shown in Chart 4.1
[9] https://www.nifiscalcouncil.org/publications/sustainability-report-2022

Health characteristics of the NI population

It is often asserted that health spending is higher per head of population in NI than elsewhere in the UK because health outcomes in NI are worse, possibly as a legacy of the Troubles, and therefore the need for spending is greater (although worse health outcomes could be a product of previous policy decisions or of inefficiencies in the NI health system). Conversely, the relative youthfulness of the NI population might reduce the need for spending in relative terms.

There are data challenges, but people in NI do seem to spend more of their life in ill health, on average, suggesting a greater need for health care (and therefore higher spending on it) in later life.

The standard preventable mortality rate (i.e. the proportion of deaths that could be avoided before the onset of disease or injury through effective public health and primary prevention) is notably higher than in England, but similar to Wales and significantly lower than Scotland. Distinguishing between preventable and non-preventable deaths is not straightforward, but the data suggest scope for improving preventive interventions in NI, to reduce the differential with the rate in England. This is supported by data on relative rates of obesity, smoking and alcohol consumption.

In contrast, the NI standard treatable mortality rate (i.e. the rate of deaths that could be avoided through timely and effective interventions after the onset of disease or injury) is on a par with England. One notable exception is in respect of cancer. While incidence rates for all cancers in NI (excluding for non-melanoma skin cancer) are broadly similar to those in England, the cancer mortality rate in NI is higher.

There is a lack of comparable data regarding mental health conditions across the regions. But a small number of proxy indicators suggest that mental health needs may be more significant in NI than in England. Without robust data it is difficult to identify the extent to which specific mental health conditions are more prevalent in NI than England or the degree to which we might expect additional costs to the NI health service.

The efficiency of healthcare delivery in NI

Stakeholders often say that NI's relatively small size (including possibly the sub-scale size of its hospitals) creates potential for inefficient healthcare provision relative to the rest of the UK. And given the political and practical difficulties involved in merging and/or closing health centres, many stakeholders doubted that this scale challenge could be solved easily or quickly.

The Nuffield Trust analysis commissioned by the Council shows that the costs of providing hospital services in NI are higher than those in England. Not all hospital unit costs can be compared on a reasonable like-for-like basis, but those that can indicated a £410 million (or 36 per cent) higher cost for hospital costs including in-patients, out-patients and day cases in 2019-20. As regards scale, hospitals in NI do

generally serve a smaller population than their counterparts in England. But this is also the case in Scotland and in Wales and does not of itself fully explain the cost differential.

NI's cost disadvantage has also been growing. The average unit cost of patients admitted to hospital in NI has increased by 28 per cent in NI between 2015-16 and 2019-20, compared to an 8 per cent increase in England over the same period. Similar findings were identified for outpatient costs.

We agree with the Nuffield Trust analysis, that there is significant inefficiency in the NI health system. For example, the average length of hospital stay in NI remains 1.5 days longer per admission than in England. The reasons why are a matter for further exploration, including the relationship between the health and social care models in the transition from hospital to care in the community.

Comparing waiting lists between NI and England is not straightforward because of differences in definition; NI counts waits for inpatient treatment from the decision to treat, whereas England counts from the point of referral (capturing more patients). That said, the headline figures suggest that people in NI are now 4 times as likely to be waiting for planned care as in England. NI also has the longest waiting times for emergency care; the proportion of patients waiting more than four hours in A&E is currently over 45 per cent in NI, compared to 30 per cent in England. The NI figure has consistently been higher than in England, Scotland and Wales.

In 2020, NI's pharmaceutical spend on drugs per capita was 43 per cent higher than England's, a difference that has remained relatively stable over the past decade. The Nuffield Trust analysis suggests that this is due to a higher rate of prescribing, possibly combined with a more expensive mix of drugs, rather than a higher unit cost for the same products.

DoH consistently spends around half its non-ringfenced resource budget on staffing, making it a very significant cost and an important factor in future sustainability. DoH wants to see a more strategic approach to the training and education of healthcare professionals, with longer term planning, and a move away from temporary injections of funding that do not allow for this. The relatively high proportion of DoH's total paybill (including HSC staff) spent on agency staff over the last 5 years suggests a growing reliance on temporary workers.

Future pressures on NI health spending

As in most advanced nations, there will be pressure in NI for spending on health to continue growing faster than the economy. Key drivers include demographic factors (such as population size, age profile and morbidity rates) and economic factors (new scientific developments in treatment and technology, labour and productivity costs). The Council has produced a set of long-term projections of healthcare spending for NI to 2071-72 based on the latest projections for UK health spending by the Office for Budget Responsibility (OBR) in its *Fiscal risks and sustainability report* in July 2022.[10] They are not intended to be predictions or recommendations,

[10] https://obr.uk//docs/dlm_uploads/Fiscal_risks_and_sustainability_2022-1.pdf

as the actual level of funding allocated to DoH will reflect the spending circumstances and decisions made by the NI Executive at the time of each Budget. Instead, they show the paths spending might take if the Executive were willing and able to accommodate demographic and non-demographic pressures.

It is projected that NI health spending could increase from £5.5 billion in 2024-25 (2020-21 prices) to £15.7-22.2 billion by 2071-72, implying real terms growth of 2.3-3.0 per cent per annum. To put this in context, NI health spending would be equivalent to 54-77 per cent of the NI Executive Block Grant and 14-25 per cent of NI Gross Domestic Product (GDP). In comparison the OBR projections are that UK health spending will reach 12.9-17.5 per cent of UK GDP by 2071-72.

The combination of growing cost pressures (including increased inflation) and slower growth in the available budget compared with DHSC in England, represents a material risk to the financial sustainability of health care delivery in NI over the short and longer term in the sense that we have defined it. This will have serious implications for the delivery of both healthcare and wider public services.

Options to address these financial challenges include: increased prioritisation of health by the NI Executive; increasing the efficiency of the NI health system; additional revenue raising (e.g. from the Regional Rates or the introduction of new or higher service charges); increased funding from the UK Government; and/or deferral of planned service developments. But there are limits to the scope and likely impact of each of these options. Over the longer term there also needs to be a focus on improving public health behaviours to slow growth in the demand for health spending.

Organisation, governance, and accountability

With per capita funding levels in NI prospectively falling relative to England under the proposals set out for consultation (but not agreed by the outgoing Executive) in the Department of Finance's 2022-25 Draft Budget, the health sector needs to make strategic use of the funding it receives. This is especially so given the importance of rebuilding the health service post-pandemic, reconfiguring services and tackling longstanding issues like waiting lists and low productivity.

The DoH sees its current proposals for an 'integrated care partnerships' model as a core part of the solution to provide improved outcomes for individuals and communities, and to reduce health inequalities. It aims to improve local health outcomes by embedding a partnership model of engagement involving representatives from the health and social care, voluntary and community sectors, local government and others to plan, manage and deliver services to local communities on the basis of need.

We would emphasise the importance of longer-term planning (elements of which *are* possible even in the absence of certainty over budget levels), and the importance of returning Trust finances to a sustainable position following the pandemic, including the achievement of targets for recurrent savings.

Conclusions and key findings

Until very recently, NI has had a higher spend per head on health services than in England, which some have argued is due to greater need for health spending. However, the additional need for health spending does not appear to be as high as is sometimes assumed and may perhaps lie in the range of 4-7 per cent.

It remains essential to address system inefficiencies to maximise the quality and quantity of services that can be provided within existing budgets. The Nuffield Trust analysis points to a number of potential inefficiencies in the system. Some may be 'explainable' in terms of economies of scale, but it is still important to identify inefficiencies and to work towards minimising their effects.

Looking ahead, demand and cost pressures in health will continue to grow in NI, just as they will throughout the developed world. For NI, the major additional concern is that the overall Block Grant will not grow at the same rate as spending in England. Under the Department of Finance's 2022-25 Budget proposals, which are likely to form the basis for negotiations under an incoming Executive, health spending is projected to grow more slowly in NI relative to England in the next three years, and for the first time spend per head in NI would fall below that in England. This means that spend will not be addressing NI's higher health spend need. This raises real concerns about health care delivery in NI over the short and longer term and re-enforces the need for delivering greater efficiency. Key to the success of all of this will be appropriate governance and accountability structures, and the funding of transformation and workforce planning.

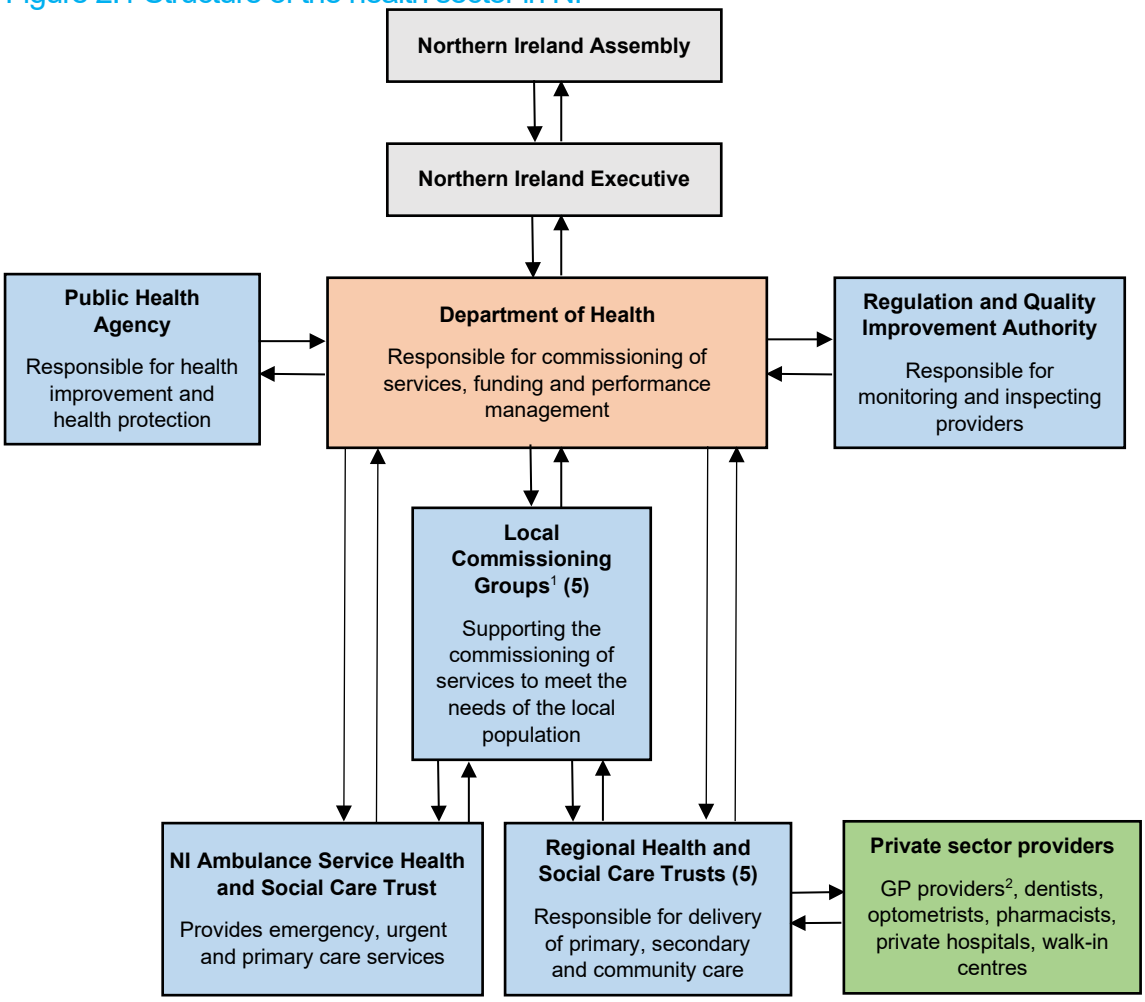
While the level of health spending in NI appears to have previously been broadly in line with relative need, lower rates of efficiency imply that the services delivered to the public were not of the same quality or quantity as in England. This has been reflected in the persistently longer waiting lists for hospital treatment in NI. The recent fall in health spending per head relative to England has exacerbated the situation with both funding and efficiency now lower than in England meaning that action is required on both fronts both over the next three years and the longer term.

2 The structure of the NI health sector

Overview

Unlike the rest of the UK, NI operates an integrated model of health and social care. Under the current structure, shown in Figure 2.1, five regional Health and Social Care (HSC) Trusts (plus the NI Ambulance Service HSC Trust) are responsible for the delivery of Primary, Secondary and Community health care. The Department of Health (DoH) is responsible for the funding of services, performance monitoring and, more recently, the commissioning of services (following the abolition of the Health and Social Care Board, on 31 March 2022).[11]

Figure 2.1 Structure of the health sector in NI



[1] Current proposals for an *Integrated Care System* for NI would see the five Local Commissioning Groups replaced by Area Integrated Partnership Board
[2] GPs in NI receive funding from, and are directly accountable to, the Department of Health rather than the HSC Trusts.

[11] Further information on the Trusts and on the structure of DoH is provided in Appendix C.

Under the Health and Social Care (Reform) Act (Northern Ireland) 2009, DoH has a statutory responsibility to promote an integrated system of health and social care designed to secure improvements in:

- the **physical and mental health** of people in NI;
- the **prevention, diagnosis and treatment of illness**; and
- the **social wellbeing** of the people in NI.

DoH is also responsible for establishing arrangements for fire and rescue services.

DoH discharges these duties both directly and through its 16 Arm's Length Bodies (ALBs) which are accountable to the Minister and Assembly (see Appendix D).

The Department is proposing to move towards a new Integrated Care System,[12] the key focus of which is to address the wider determinants of health and wellbeing through a population health approach. As part of this new model the five Local Commissioning Groups (geographically coterminous with the regional Trusts) will be replaced by Area Integrated Partnership Boards with a wider membership. The goal is for health and social care professionals, the voluntary and community sector and local councils to work more closely together with the aim of:

- **delegating decision-making and funding** for general services to local levels, with increased autonomy and accountability for local decision-makers;
- allowing for the planning, management and delivery of **specialised services at a regional level**; and
- adopting an **outcomes-based approach** at both levels.

Independent sector delivery partners

NI residents are entitled to access healthcare services free of charge. In addition, residents of the Republic of Ireland who work in NI and travel home daily or on a regular basis have the same access to free healthcare services as NI residents, providing they are registered with a General Practitioner (GP) in NI.

GPs, dentists, optometrists and pharmacists are independent providers and they are often the first points of contact with patients. Most are part of the public HSC system, but a small number operate on a private basis in or alongside it. GPs tend to undertake most of their work for the public sector whilst dentists have a greater proportion of income from private insurance and treatments not funded by the public sector. Optometrists receive a fee for sight tests for certain groups and payment for vouchers to reduce the cost of glasses and contact lenses.

[12] https://hscboard.hscni.net/download/PUBLICATIONS/unnamed-file.ics/Integrated-Care-System-Factsheet-01.pdf

Where patients opt for private treatment from an independent sector provider they are required to pay (including for use of the public health service's facilities, if relevant) and are separately billed by the consultant. Where a patient receives treatment from an independent sector provider commissioned by the public sector, the treatment is free. The vast majority of publicly funded health care services in NI are delivered through the public sector, with limited independent sector capacity. As shown in Appendix E, in 2019-20 the HSC system commissioned 9,157 hospital admissions and 14,132 outpatient appointments from independent sector providers, only 1 per cent of all publicly funded admissions and appointments.

Independent sector provision funded by the public sector tends to increase when the demand for certain types of inpatient service is greater than the existing capacity within HSC hospitals. When this results in increases in both the length of time and the number of patients waiting, patients may be admitted for a procedure by an independent sector provider, with the transferring Trust meeting the cost. For example, as part of a 2019-20 waiting list initiative, around 7,900 patients received an elective procedure in the independent sector at a cost of £7.9 million.

Most privately funded activity takes place in private hospitals, but consultants can also provide private services in HSC hospitals with the approval of the relevant Trust.[13] HSC consultants are entitled to undertake private practice provided it is in addition to 10 programmed sessions of public work each week. Most NI consultants who provide privately-funded healthcare services also hold an HSC contract – very few consultants practice exclusively in the private sector.

The majority of residential home places and domiciliary care packages are also provided by the private sector, but payment comes mainly from the public sector.

How the NI system compares to other jurisdictions

The major difference between the health and social care systems in NI and England is that the two services are formally integrated in NI but not in England. When reporting on health and social care for the National Accounts, the DoH makes high-level judgments about the apportionment of expenditure between these two categories. Health and social care are more closely integrated in Scotland and Wales than in England,[14] but less integrated than in the NI system.

Further integration remains a long-term ambition for England, with the Department of Health and Social Care's (DHSC's) White Paper on health and social care integration (February 2022) proposing a joined-up approach to meet needs and provide a higher quality of service.[15] The DHSC aims in particular to reduce inefficiencies or delays at the interface between health and social care, for example when a patient moves from hospital back into a community setting. Greater integration will involve a wider spectrum of stakeholders in planning services.

[13] https://www.niauditoffice.gov.uk/files/niauditoffice/media-files/133933_nia0_health_sector_fnl_low_rs.pdf
[14] https://www.instituteforgovernment.org.uk/publication/devolved-public-services/nhs
[15] https://www.gov.uk/government/publications/health-and-social-care-integration-joining-up-care-for-people-places-and-populations/health-and-social-care-integration-joining-up-care-for-people-places-and-populations

Like England, NI has retained a division between commissioning and delivery of health services. In Scotland and Wales these were divided but have been reintegrated following devolution. But NI is the only jurisdiction where a single commissioning organisation purchases services for the whole population, albeit informed by Local Commissioning Groups (LCGs). The 'internal market' for health services in NI was abolished in 2001,[16] so, although the two functions remain distinct, there is no competitive bidding process.

Prescriptions are free to all in NI, Scotland and Wales. But even in England around 90 per cent are free in practice as hospital inpatients, people under 16 or over 59, and those meeting other eligibility criteria do not have to pay.[17]

Finally, one managerial difference is that NHS England has its own Chief Executive, whereas in NI this role is performed by the Permanent Secretary of DoH.

These structural differences pose some difficulties in comparative analysis, nevertheless we attempt to decouple health and social care in NI where possible to compare like with like. Theoretically, the integration of health and social care should lead to better outcomes, given the need for many people to move between the two sorts of care. But NI does not appear to have maximised the potential benefits of its integrated system – between 2016-17 and 2018-19 139,000 bed days were lost due to delayed discharges from hospital at a cost of £63.5 million.[18] Delays are at least partially caused by workforce shortfalls in domiciliary care and in care homes.[19] However, as we discuss in Chapter 3, this is difficult to assess with confidence given the different bases for allocating and reporting spend applied in both regions (and even within the NI system).

In 2012, the National Audit Office published a comparison of healthcare in England, Scotland, Wales and NI. It set out a series of indicators that it would have liked to be able to use as comparisons and commented:

> "*Much of the data collected by national statistics authorities are not directly comparable, with the data for some measures either not consistently collected across the nations or not available for certain years. We were therefore not able to use all our preferred indicators or to present them over a consistent time period… [There is] no consistent approach to disaggregating spending data by care setting*".[20]

A decade later, understanding the relative positions across the UK nations remains difficult, and the data is still not collected in ways that facilitate direct comparisons.

[16] http://health.org.uk/sites/default/files/TheImpactsOfAsymmetricDevolutionOnHealthCareInFourCountriesUK.pdf
[17] https://www.nao.org.uk/wp-content/uploads/2012/06/1213192.pdf
[18] https://www.belfasttelegraph.co.uk/news/northern-ireland/nearly-48000-delayed-from-hospital-discharge-in-northern-ireland-at-cost-of-635m-38435071.html#:~:text=Almost%2048%2C000%20people%20faced%20delays,%2F17%20and%202018%2F19
[19] https://www.health-ni.gov.uk/news/minister-unveils-support-package-care-sector
[20] https://www.nao.org.uk/wp-content/uploads/2012/06/1213192.pdf (page 5)

3 Governance and funding

The governance structure for the NI health and social care system provides a framework for decision-making, monitoring and management for HSC bodies. It is also intended to provide accountability to service users, stakeholders and the wider community for the way in which they pursue their objectives and manage public money.[21] Yet, it is not always clear to an outside observer exactly where accountability rests. Back in 2014, the Donaldson Review[22] argued that:

> *"Responses reflect the complexity of the governance arrangements at the top of the health and social care system in NI. They show that ambiguity has been created in the minds of people – both clinicians and managers – throughout the system."*

DoH guidance[23] for the board members of its Arm's Length Bodies (listed in Appendix D) notes that the governance framework is related to both the structure of the sector and the flows of money through it. We will look at both aspects in this chapter. The governance requirements for HSC bodies are discussed in more detail in Appendix F, but there have been recent reforms to the structure of the system. The introduction of the Integrated Care System will require a review of existing structures DoH has commissioned a report by consultants Deloitte to inform early thinking of possible funding models in this regard. So the picture remains fluid.

Governance

The Health and Social Care (Reform) Act (Northern Ireland) 2009[24] requires DoH to produce a 'framework document'[25] setting out, in relation to each body:

- The **matters for which the body is responsible**;
- The main **priorities and objectives** of the body in carrying out its functions and the process by which it is to determine subsidiary ones;
- The manner in which the body is to conduct itself and discharge its functions, **its working relationship** with the Department and others; and
- Arrangements for **providing the Department with information** to enable it to monitor and hold the body to account.

Each body's board bears primary responsibility for ensuring that the body delivers its functions, statutory responsibilities and the priorities, commitments, objectives,

[21] https://www.niauditoffice.gov.uk/files/niauditoffice/media-files/general_report_on_the_health_and_social_care_sector_by_the_c_ag_for_ni_2009.pdf
[22] https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/donaldsonreport270115_0.pdf (page 16)
[23] https://www.health-ni.gov.uk/publications/hsc-board-member-handbook
[24] https://www.legislation.gov.uk/nia/2009/1/contents
[25] Health and Social Care (Reform) Act (Northern Ireland) 2009 https://www.legislation.gov.uk/nia/2009/1/section/5

targets and other requirements set by DoH.[26] It also provides formal oversight of how public money is spent by the body.

All HSC bodies are required to conform to the general requirement of good financial management.[27] Additionally, DoH requires them to meet specific financial targets each year and to disclose these in their annual reports. HSC bodies are required by statute[28] to ensure that their income is sufficient to meet their expenditure, taking one year with another, so as broadly to 'break even'. An organisation is considered to have met the breakeven target if: *"its Net Resource Outturn is contained within +/- 0.25 per cent of its agreed Revenue Resource Limit or £20,000, whichever is greater".*[29] If a deficit greater than 0.5 per cent of income arises, an explanation must be provided in the body's published accounts. The five regional Trusts are also required to report management costs and time taken to pay invoices.[30]

Notwithstanding this framework, stakeholders see a lack of transparency in both oversight and funding,[31] perhaps as a result of the complex structure and multiple systems of financial recording. The systems for recording funding across HSC bodies and across activities do not lend themselves to effective scrutiny and analysis. At an operational level, the system is highly decentralised. While local decision-making might be facilitated as a result, there is no single central agency (including DoH) with a clear line of sight on a consistent basis of how resources are allocated throughout the system. This may also have implications for value for money.

Health funding and expenditure

As we outlined in our Guide to NI Public Finances,[32] the NI Executive allocates resource and capital funding between the nine major NI departments and other non-departmental bodies in a process led by the Department of Finance (usually annually, but with allocations then updated periodically through each fiscal year). DoH holds the budget for health and social care and this accounted for 46 per cent of the Executive's total resource and capital allocations in the 2021-22 Budget.

There are at least four different ways in which NI's health funding and expenditure are presented in official reporting and documentation:

- **The expenditure voted to DoH (and other public bodies) that is presented to the NI Assembly in Budgets and the Estimates**: The Draft Budget provides the first indication of the planned allocation of funding to DoH for a given financial year, broken down into 11 'Units of Service' which categorise spend according to the service provided. This is followed by the Final Budget, normally published in advance of the start of the financial year. The presentation of Health and Social Care funding provides only limited

[26] https://www.health-ni.gov.uk/publications/board-governance-self-assessment-tool
[27] The Department of Finance's Managing Public Money NI sets out the main principles for dealing with resources used by public sector organisations: https://www.finance-ni.gov.uk/articles/managing-public-money-ni-mpmni.
[28] Article 15 (1) The Health and Personal Social Services (Northern Ireland) Order 1991
[29] https://www.niauditoffice.gov.uk/files/niauditoffice/media-files/133933_nia0_health_sector_fnl_low_rs.pdf
[30] https://www.niauditoffice.gov.uk/files/niauditoffice/media-files/9044_health_final.pdf
[31] This issue was discussed at some length in the 2014 Donaldson Report (https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/donaldsonreport270115_0.pdf) and so is not repeated here.
[32] https://www.nifiscalcouncil.org/publications/public-finances-ni-comprehensive-guide-november-2021

insight with 80 per cent of the Resource DEL budget allocations in the Final Budget 2021-22 document for only two Units of Service, Hospital services and Social Care services.[33] The Main Estimates (shortly after the start of the financial year) and then Spring Supplementary Estimates again represent departments' planned expenditure broken down into a number of functional sub-head details including, for example hospital services, social care services and family health services. These sub-heads are due to change as a new and hopefully clearer format, linked more closely to the Budget structure (as shown in Table 3.1), for the Estimates is implemented under the Review of Financial Processes (see Appendix I). Spring Supplementary Estimates are typically presented almost at the close of the financial year, with Provisional Outturn published after the financial year end (usually alongside the June Monitoring Round outcome). This gives a clear, near-final picture of departmental spend against the plans in the Estimates, which is scrutinised and debated in the Assembly. However, it is not until Final Outturn (usually around November in the next financial year) that expenditure is recorded in its final form. This makes its way into the Treasury's Public Expenditure Statistical Analyses (PESA), but Final Outturn is not published, scrutinised and debated in the Assembly in the same way as Provisional Outturn. Voted and budgeted expenditure by DoH includes its spending on social care and fire protection, so isolating spending on health can be difficult.

- **Spending by the international Classification of the Functions of Government (COFOG):** This presentation is by functional category (e.g. 'Personal Social Services' or 'Health') and sub category (e.g. 'medical services' or 'health research'), rather than by public body. This data is published by Treasury as part of the PESA publication and their Country and Regional Analysis (CRA) statistical release, which shows public spending that benefits NI. As previously noted, DoH makes some high-level judgements about what expenditure to record in each COFOG functional category.

- **Spending by Programmes of Care:** This presents expenditure in a thematic way that is meaningful across the HSC bodies, rather than designed to facilitate international comparison. This includes categories such as 'Mental Health', with the spend programmed for this category distributed across numerous public bodies. Spending on a particular PoC category can be difficult to isolate in the estimates of public bodies and they cannot easily be reconciled to COFOG data. The PoC framework only covers the activity of the HSC Trusts, so spending is split between Hospital Services and Community & Personal Social Services. Family Health Services are out of scope.

- **HSC Trusts' presentation of their expenditure by operational directorate:** Trusts provide this breakdown in their Annual Reports and Accounts. These are a further distinct presentation of expenditure data, using different

[33] https://www.finance-ni.gov.uk/sites/default/files/publications/dfp/Final%20Budget%202021-22%20document%2021.04.21%20-%20accessible.pdf (page 65)

categories to both COFOG and PoCs, although there is some overlap. The classification is designed to provide useful management information.

Table 3.1 - Presentations of health and social care spending 2021-22

Budget (DEL Unit of Service)	Estimates[1] (DEL Request for Resources subhead)	Programme of Care
Hospital Services	**Voted expenditure**	PoC 1 - Acute
Social Care Services	Hospital, Paramedic and Ambulance Services	PoC 2 - Maternity & Child Health
FHS - General Medical Services	Social Care Services	PoC 3 - Family & Child Care
FHS - Pharmaceutical Services	FHS – General Medical Services	PoC 4 - Elderly Care
FHS - Dental Services	FHS – Pharmaceutical Services	PoC 5 - Mental Health
FHS - Ophthalmic Services	FHS – Dental Services	PoC 6 - Learning Disability
Health Support Services	FHS - Ophthalmic Services	PoC 7 - Physical & Sensory Disability
Public Health Services	Health Support Services	PoC 8 - Health Promotion & Disease Prevention
Paramedic Services	Public Health Services	PoC 9 - Primary Health & Adult Adult Community
Food Safety Promotion Board (N/S Body)	Public Safety	
Fire & Rescue Services	**Non-voted expenditure**	
	Health Services Financed by National Insurance Contributions	
	Consolidated Fund Extra Receipts National Insurance Contributions	

Note[1]: Estimates presentation based on intended format following implementation of Review of Financial Process. Further information is in Appendix I

Each method of presentation is used for a particular and valid purpose. But, taken together, these presentations have created an ecosystem of financial information that is difficult to navigate and reconcile – one cannot easily trace the money from the *ex ante* Budget and Estimates presentations through to the *ex-post* functional, thematic or accounting presentations. This decreases transparency and arguably hampers the effectiveness of scrutiny and level of accountability in the sector.

We have had to take a pragmatic approach in this report and use whichever presentation seems most useful or accessible for the issue under consideration. COFOG presentations are more useful for comparisons beyond NI but the estimates

and outturns presentations shed light on how health spending fares in the budget process and is managed through the system.

Spending by the Department of Health

Table 3.2 below contains a matrix that shows the reconciliation between the DoH Budget and the COFOG system of reporting spending, as recorded in the PESA and CRA presentation of spending for NI. This shows how DoH's spending is mapped across the three COFOG categories and sub categories of health, social care and fire protection. Just over four fifths (81 per cent) of the Department's Resource DEL is recorded under the Health COFOG, the primary focus of this report. Social care makes up most of the rest with fire protection accounting for a very small fraction.

The Table also shows that some expenditure recorded in the Health COFOG (about 5 per cent of the total) was incurred directly by the UK Government in, or on behalf of, NI. This was not the case in previous years and appears to relate to Covid-19.

Table 3.2 - Reconciliation between DoH Budget and COFOG presentation

£ million

Bodies doing the spending / NIE DoH budget [2]	Identifiable spending for N Ireland included in the COFOG analysis [1]									
	NI Executive DoH				Other NI public sector bodies		UK Government departments			Total identifiable spending for NI by COFOG
	RDEL	CDEL	AME	Total	Other NI depts	Local govt	DCMS	DHSC	BEIS	
DoH DEL and AME included in TES,[1] by COFOG function:										
Health	5,812	351	0	6,163	8	43	0	327	19	**6,560**
Social care	1,274	0	-	1,274	3	-	-	-	-	**1,276**
Fire protection	86	8	0	94	-	-	-	-	-	**94**
Total included in TES	**7,172**	**360**	**0**	**7,531**	**10**	**43**	**0**	**327**	**19**	**7,931**
Other DoH DEL and AME not included in TES [3]	-3	-5	170	162						
Total DoH DEL and AME	**7,169**	**355**	**170**	**7,694**						

Note:[1] Identifiable spending is spending that can be identified as benefitting particular countries or regions. In PESA and the CRA statistical release, this is measured using the spending aggregate 'Total expenditure on services' (TES).

[2] The NI Executive (NIE) DoH DEL budget contains DEL and AME. The data for DoH DEL shown here excludes depreciation, because depreciation is excluded in the measurement of total DEL and TES.

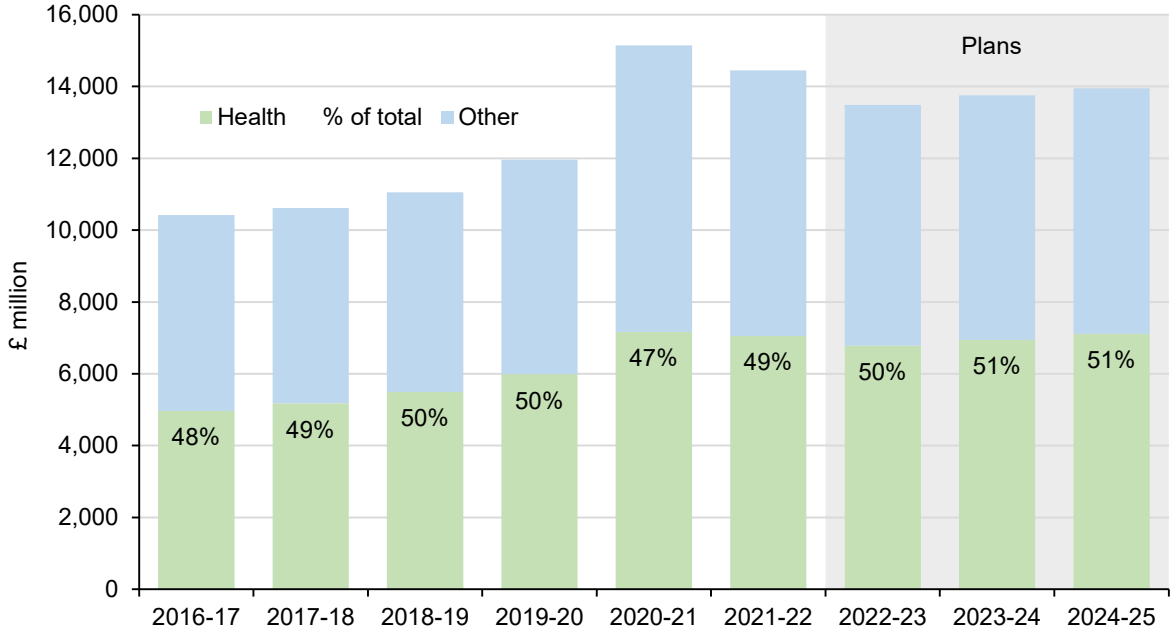
[3] The spending in DoH AME not included in TES contains non-cash items (mainly changes in provisions recorded on the balance sheet, and depreciation).

Source: November 2021 Country and Regional Analysis statistical release, and underlying PESA data for NI Executive.

One difficulty with analysing COFOG figures is that this can only be done retrospectively as they are not used for planning. To look at planned allocations to health in longer-term context, or to consider how the money flows through the HSC system, we have to use budget data. However, we know from the analysis presented above that this will mean we are looking at some spending not on health by DoH and missing some spending on health by the UK Government, although this is expected to be minimal outside of the 2020-21 and 2021-22 financial years.

Chart 3.1 looks at the non-ringfenced RDEL allocations made to DoH in the Department of Finance's Draft Budget for 2022-25. These were not agreed by the parties in the Executive, and only published as a basis for consultation, but it is still likely to be the basis for negotiation for a new Executive. The chart shows that by 2024-25 DoH would be receiving funding equivalent to 51 per cent of NI's total non-ringfenced RDEL.

Chart 3.1 - Department of Health and NI resource outturn and plans



Notes: ¹2016-17 to 2020-21 based on Final Outturn. ²2021-22 based on Provisional Outturn ³2022-23 to 2024-25 based on Draft Budget

Source: Department of Finance

The chart shows that final resource expenditure on health rose by two percentage points in the four years leading up to the pandemic, before dropping in 2020-21 a result, in part due to the removal of time limited funding from political agreements (Table 3.6 below). It returned to the pre-pandemic share in 2021-22 and is planned to rise a little further.

Table 3.3 - In-year additions to DoH non-ringfenced RDEL

					£ million
	2017-18	**2018-19**	**2019-20**	**2020-21**	**2021-22**
Opening Budget Position	4,871	5,306	5,701	6,158	6,522
In-year allocations, technical adjustments & retractions	**319**	**212**	**293**	**1,003**	**542**
Final Budget Position	5,189	5,519	5,994	7,161	7,064
Final Outturn	5,182	5,493	5,989	7,168	

Source: Department of Health

Table 3.3 shows that the opening budget position for DoH tends to be topped up through the financial year (and not only in years of additional Covid-19 support). Table 3.4 spells out in more detail how this happened in 2021-22 via the three 'in-year monitoring rounds' (which are described in our *Guide*[34]) and a modest extra Covid-19 funding allocation in May 2021. Even though the Covid-19 response was less extensive than in 2020-21, DoH received an extra £542 million during the year.

[34] https://www.nifiscalcouncil.org/publications/public-finances-ni-comprehensive-guide-november-2021

Table 3.4 - The evolution of DoH non–ringfenced RDEL through 2021-22

		£ million
	In-year additions	**Total**
Opening Budget Position (including post-budget exercise)		6,522
May Covid-19 allocations	*51*	6,572
June monitoring round	*222*	6,795
October monitoring round	*197*	6,991
January monitoring round	*72*	7,064
Final Budget Position		**7,064**

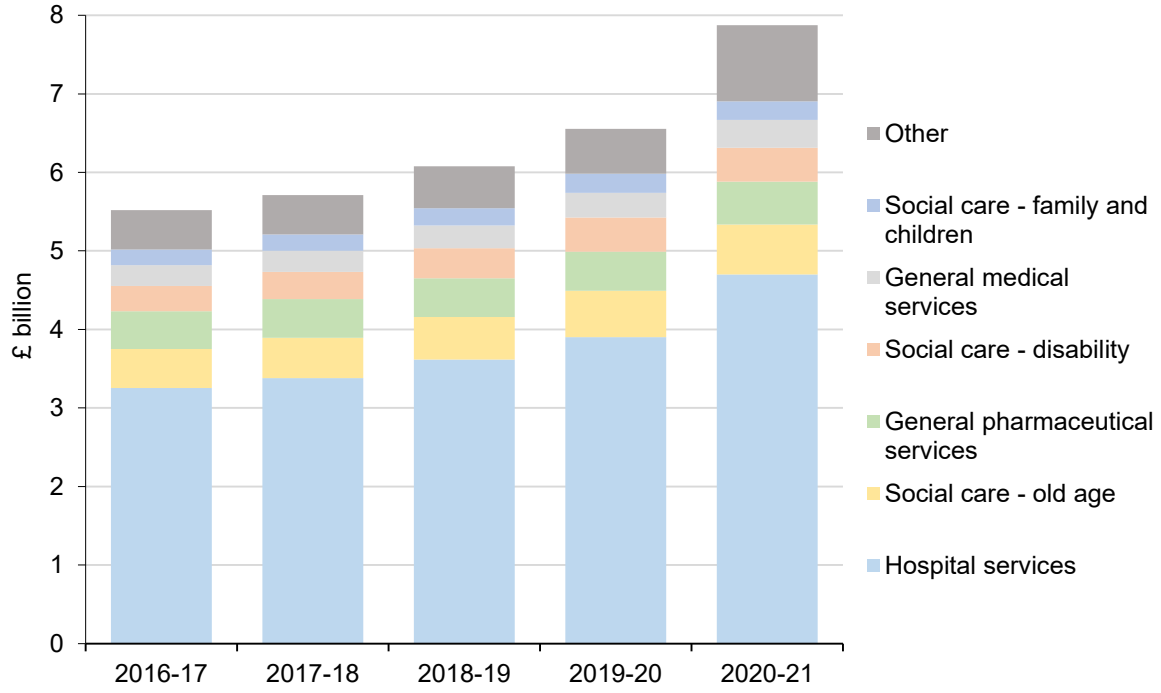
Source: Department of Finance

So how does DoH spend these allocations? To answer this, we return to the PESA data. These are outturn data, and so present a robust way of looking at past expenditure because, unlike the plans data presented in Budgets, the numbers do not change from one point in the fiscal year to the next.

Chart 3.2 shows DoH gross DEL spending as recorded in the data underlying PESA 2021.[35] DoH gross spending increased by 6 per cent a year on average from 2016-17 to 2019-20 (compared to a longer-term growth rate of nearer 4 per cent for net health and social care spending), but jumped by 20 per cent during the pandemic in 2020-21. Hospital services consume more than half the DoH spending, with social care and pharmacies the next largest items.

[35] This view of DoH gross spending comes from our analysis of spending and financing that we presented in our Guide to NI Public Finances. We have not updated this analysis yet to reflect updated data from PESA 22, but when we do so, then we will also want to try to improve on the methodological limitations that we flagged with these analyses. See the section on 'Data sources and judgements' in https://www.nifiscalcouncil.org/files/nifiscalcouncil/documents/2021-11/the-public-finances-in-northern-ireland-final-version_0.pdf pg 75

Chart 3.2 - Gross DEL spending by the Department of Health



Source: HM Treasury data underlying PESA 2021

Allocation of funding to HSC bodies

To see how funding moves through the HSC system, we move back to the budgets framework to see how the DoH 'pie' is sliced and distributed. Until its recent abolition, DoH allocated funding to the HSC Trusts and other ALBs via the HSC Board (HSCB) and, to a much lesser extent, the Public Health Agency (PHA), which continues. The HSCB then allocated resources to the regional Trusts and other entities, supported by the Local Commissioning Groups (LCGs) and using a regional capitation formula based on population, age/gender and additional needs weightings. The HSCB's functions are now subsumed into DoH and the LCGs are to be replaced. But we understand that the capitation formula (in reality a suite of formulae across DoH's nine Programmes of Care) will be retained.

The 2021-22 distribution by body is shown in Table 3.5. Around three quarters of total DoH funding was allocated to the five regional Trusts. Of these, Belfast is by far the largest, receiving almost a quarter (24 per cent) of the DoH total. The next largest allocation (17 per cent) was to the HSCB for the services it managed (primarily Family Health Services i.e. GPs, dentists, opticians and pharmacists), its running costs and services purchased from Trusts. DoH's own centrally managed expenditure on programmes and administration was very small (2 per cent). With DoH taking over the HSCB's commissioning functions, the funding it previously allocated will instead be distributed by the Department.

Table 3.5 - How DoH spending was allocated by body 2021-22

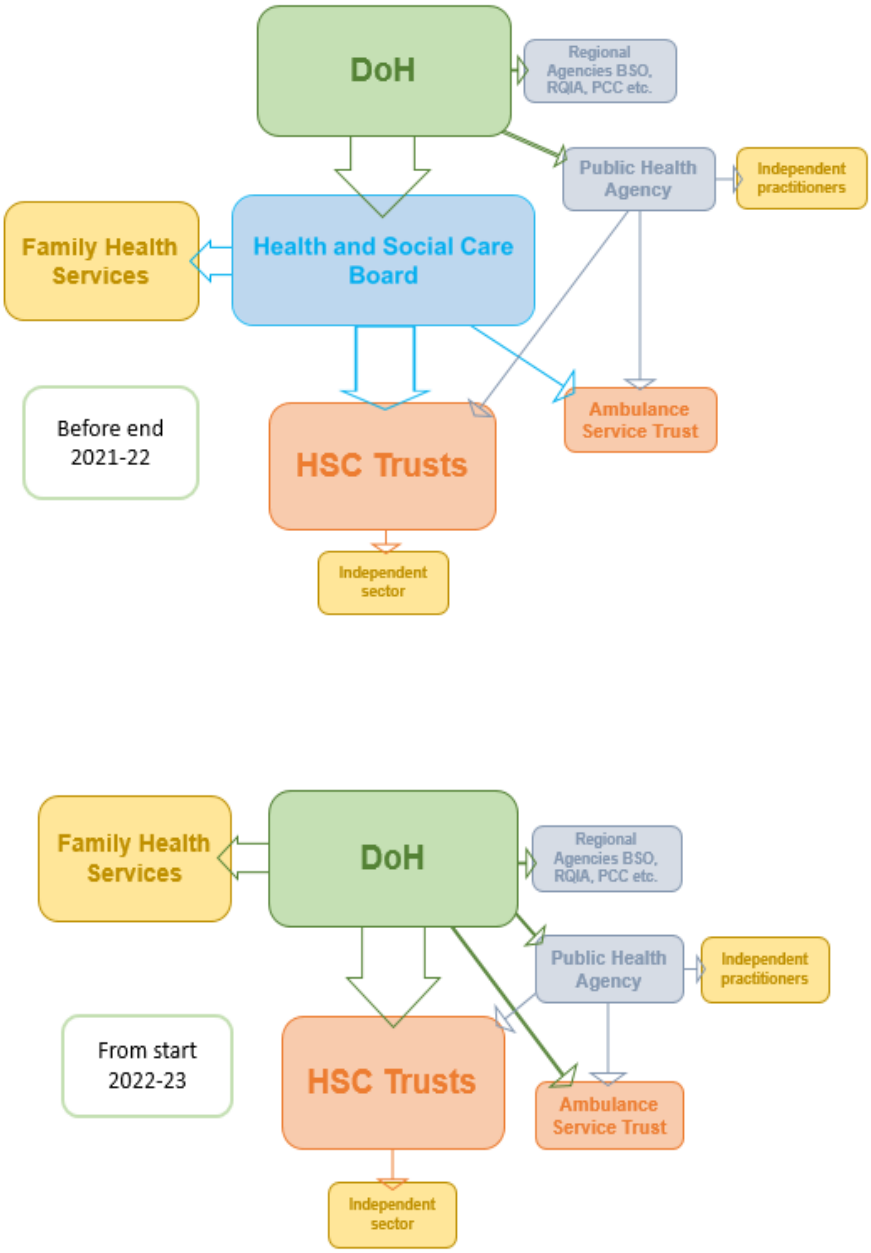
Body		£ million
HSCB managed services - for FHS, running costs and services purchased from Trusts		1,209
PHA - for running costs and services purchased from Trusts		78
Allocations to 6 Trusts from PHA and HSCB (split by Trust as per below):		5,367
Belfast HSC Trust	*1,755*	
Northern HSC Trust	*935*	
South Eastern HSC Trust	*886*	
Southern HSC Trust	*853*	
Western HSC Trust	*820*	
NI Ambulance Service Trust	*118*	
Business Services Organisation		49
NI Fire and Rescue Service		86
NI Guardian Ad Litem Agency		5
NI Medical and Dental Training Agency		73
NI Practice and Education Council		1
NI Social Care Council		4
Patient Client Council		2
Regulation Quality and Improvement Authority		7
Institute of Public Health in Ireland		0
Food Safety Promotion Board		2
DoH Admin		38
DoH Programme/ Centrally Managed		141
TOTAL[1]		**7,063**

Note: [1]total does not match Final Plan in Tables 3.3 and 3.4 due to rounding

Source: Department of Health

Figure 3.1 summarises how funding flowed through the HSC system in 2021-22 and how it will do so following the HSCB's abolition.

Figure 3.1 - Flows of money through the NI health system



Non-Barnett funding for health

The vast majority of funding for health and social care spending in NI comes to DoH from the core Block Grant and can be spent as the Minister of Health wishes. But there are also some small amounts of funding earmarked for particular purposes as part of various political agreements with the UK Government (Table 3.6).

Table 3.6 - Non-Barnett funding for health

								£ million
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Confidence and Supply								
Transformation		100	100					
Mental Health		10	10	10	10	10		
Health & Education pressure	20	80						
of which allocated to DoH	*15*	*60*						
New Decade New Approach								
Transformation				44	49	49	49	49
of which allocated to DoH [2]				*44*	*49*			
NDNA Graduate Medical School[1,2]					7.8			
Total available to Executive	**20**	**190**	**110**	**54**	**66.8**	**59**	**49**	**49**
of which:								
allocated to DoH	*15*	*170*	*110*	*54*	*59*	*10*		
allocated to other depts	*5*	*20*			*7.8*			

Note: [1]Allocated to Department for the Economy.

[2] No future profile currently agreed.

Source: Department of Finance

This non-Barnett funding included £100 million a year in 2018-19 and 2019-20 followed by around £50 million a year in 2020-21 and 2021-22 earmarked for health 'transformation'. DoH recently published an update on its transformation programme including funding and delivery to date.[36] It said that it had (by December 2021) spent almost £300 million since 2018, and it reported using this primarily to *"stabilise, reconfigure and transform our services"*. The report said that 92 transformation projects were running in the 2020-21 financial year, with much spent to develop pilots or proof-of-concept activities.

While the report mentions many positive results of the pilots, the funding provided in political agreements and as part of in-year monitoring is typically on a non-recurrent basis, i.e. it is time-bound and not available to DoH in subsequent years. In addition, as we shall see in Chapter 6, there are cost and operational challenges related to short-term staffing. In health, and especially in the health transformation context, the benefits of having an agreed multi-year Budget are strong. Indeed, the funding for the health transformation projects was conditional on sustainability plans being put in place for those that were successful. New services could be funded through efficiency savings from the transformed service or from the rundown of the original service that the transformed service was replacing. Alternatively, the project could have been deemed a higher priority than an existing service. The next step in the transformation programme, post Covid-19, is called Rebuilding Better, and is designed to mainstream some of the positive learning from these pilots.

[36] https://www.health-ni.gov.uk/sites/default/files/publications/health/doh-progress%20-report-full-document.pdf

Other presentations of health spending

So far in this Chapter we have discussed and examined health expenditure from the perspective of the budgets and COFOG datasets. At the beginning of this Chapter, we highlighted two further methods of presentation than can be informative.

Programmes of Care

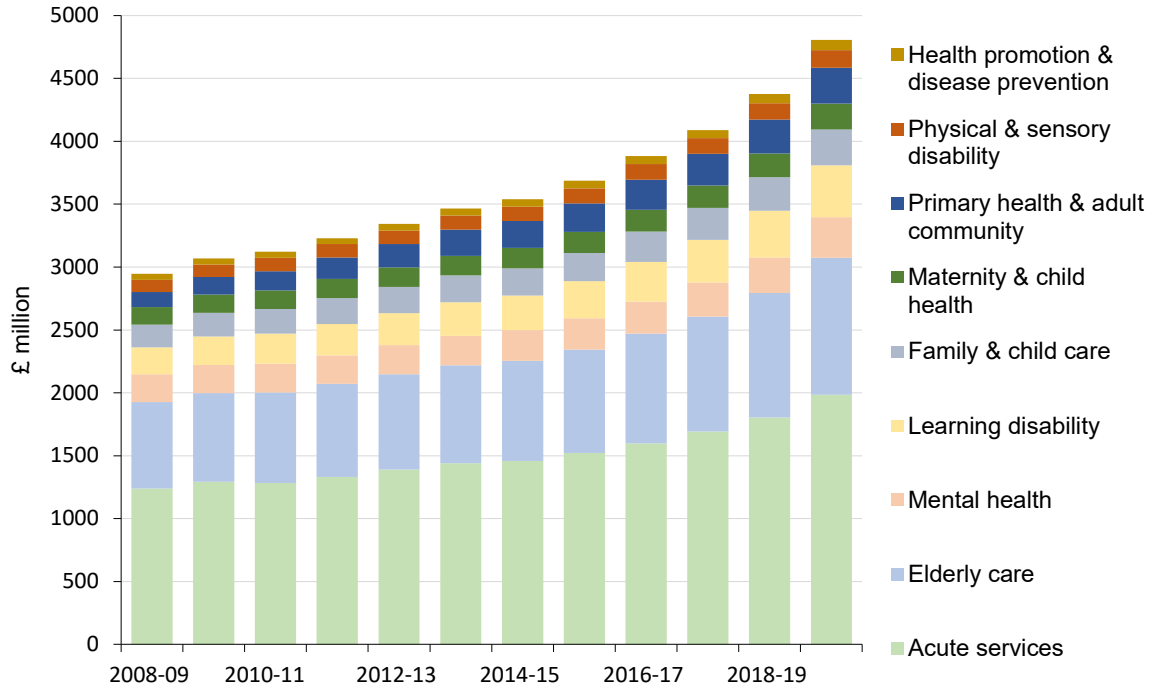
DoH uses the Programmes of Care (PoC) framework to plan and monitor the operation of the health service, to allow performance to be measured, targets to be set and services managed on a comparable basis. As noted above, the PoC framework only covers HSC Trust expenditure. Therefore it does not cover some other significant areas of spending, such as the Family Health Services budget.

PoCs within the NI health service are nine divisions of healthcare as shown in Table 3.1, into which activity and finance data are assigned, to provide a common management framework. Funding for each Trust, by PoC, is calculated by use of a capitation formula. The basis of the formula is to develop age and needs weightings for each of nine POCs and then to adjust for unavoidable cost differences between Trust areas, for example differences in the proportion of elderly people.

Chart 3.3 shows the distribution of spending by PoC from 2008-09 to the latest pre-Covid year. DoH informed us that

> "*HSC Trusts are in the process of replacing the current cost collection system with a patient-level costing system which* aims *to provide a greater level of detail and analysis. In light of the distortions caused by* Covid-*19 to Trust activity and spending patterns in 2020-21, and in order to release capacity within Trust finance teams, it was agreed that unit cost collection should be suspended for 2020-21*."

Chart 3.3 - Spending by Trusts, by PoC 2008-09 to 2019-20

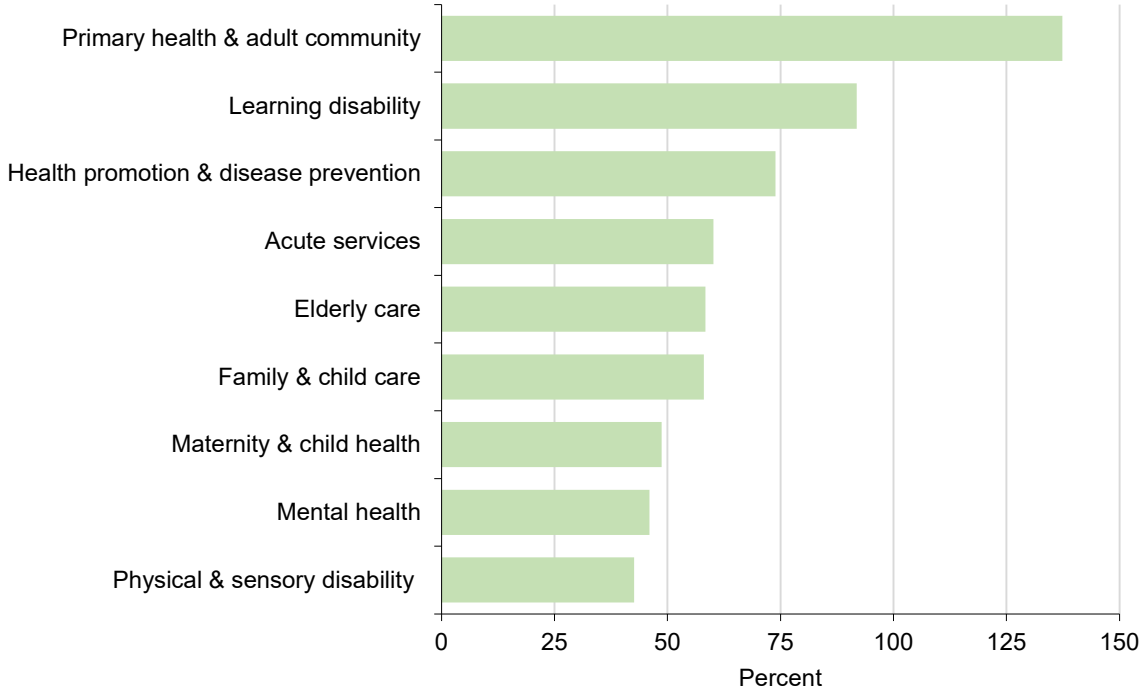


Source: HSC Trust Financial Returns

We can see that the biggest share of the health and social care funding goes towards Acute Services, followed by Elderly Care. The latter is particularly significant in relation to health spending because, as we discuss in Chapter 5 of this report, NI's population is aging, and spending under this PoC would be expected to continue to rise as the complications of very old age (e.g. dementia and arthritis) increasingly fuel demand for relevant services and care.

To illustrate how the PoC trends have developed over time, Chart 3.4 focuses on the percentage change in each PoC over the same period.

Chart 3.4 - Change in Trust expenditure by PoC 2008-09 to 2019-20



Source: HSCTrust Financial Returns

The PoC with by far the largest growth (137 per cent) is primary health and adult community. This is significant for sustainability because treating health problems in the community is generally less expensive and better for the patient than doing so in an acute setting. The increase in this spending is consistent with emphasis over the years on 'shifting left' the focus of health interventions into prevention and primary care rather than relying so much on secondary care in acute settings. Also notable from a sustainability perspective is the relatively significant increase (74 per cent) in spending on health promotion and disease prevention.

A final observation is that growth in mental health spending (46 per cent) is the second lowest of the PoCs. This is despite increasing public prominence around the importance of treating mental health over the last decade or so. But, as we saw in Table 3.6, mental health has received headline non-Barnett additions of £50 million from the Confidence and Supply financial package and the drawdown only partially falls into the period shown in the chart (i.e. to 2019-20), so not all of the temporary boost from this source is reflected in the chart data. We consider the issue of relative prevalence of mental health conditions in NI in more detail in Chapter 5.

Reporting in HSC Trust accounts

The final presentation that we cover here is that available from the HSC Trusts' accounts. This is of interest because one might expect spend to be publicly reported against PoCs. From a transparency perspective, this is sadly not the case. Trusts report their spending against their own internal management information categories, based on their operational needs. For illustration, the categories of

spending reported in the Belfast and Northern HSC Trust accounts for year ending 31 March 2021 are shown below in Table 3.7. This makes comparisons difficult between HSC Trusts and across the region as a whole.

Table 3.7 - Categories of spending reported by Trusts

Belfast HSCT	Northern HSCT
Surgery and specialist services	Community Care
Adult Social and Primary Care	Surgical & Clinical Services
Children's Community Services	Medicine & Emergency Medicine
Unscheduled and Acute Care	Medical Directorate
Specialist Hospitals and Women's Health	Women, Children and Families
Patient and Client Support Services	Mental Health, Learning Disability & Comm. Wellbeing
Research and Development	Nursing User Experience
Other Trust Service / Corporate Group	Other Trust Directorates

Source: HSC Trust Accounts

Nonetheless, the overall financial position of the Trusts sheds some light on performance and governance. As noted above, HSC bodies are required broadly to 'break even' each financial year. Table 3.8 shows the financial balances reported by the five Trusts in recent years – modest surpluses for the Belfast, Northern, South Eastern and Southern Trusts and large deficits for the Western Trust.

The DoH argues that the deficits recorded by the Western Trust are symptoms of specific financial control problems rather than an underlying sustainability issue. They arose initially from various cost pressures, including medical locums and Looked-after Children, as well as a shortfall on the delivery of savings targets. The Trust agreed to a three-year Recovery Plan in February 2019, but this was blown off course by the pandemic, as the Department recognised. With financial recovery an issue across the whole of the HSC post-pandemic, the WHSCT's specific recovery plan was concluded at the end of 2021-22 - the remaining deficit at that time will be managed as part of a more general system-wide process in 2022-23 and beyond.

Table 3.8 - Trust surpluses and deficits

					£000s
	2016-17	2017-18	2018-19	2019-20	2020-21
Belfast	51	584	37	150	182
Northern	9	659	53	62	237
South Eastern	54	76	88	49	45
Southern	91	40	43	43	31
Western	75	73	-24,374	-21,647	-12,305

Source: HSC Trust Accounts

The position of the Western Trust is an outlier, but the finances of the others have not been as robust as the reported headline numbers suggest. The surpluses shown in Table 3.8 reflect significant amounts of 'non-recurrent deficit support' provided

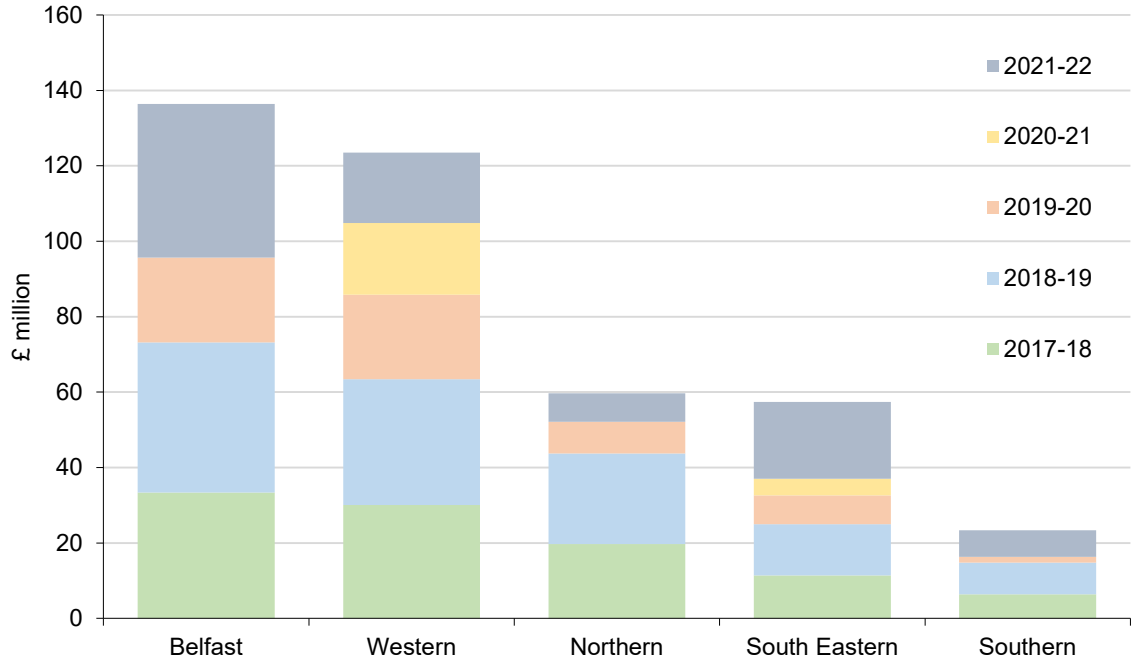
by the Department in-year in most years (Chart 3.5). Non-recurrent here means the deficit support is one-off, and not baselined for future years' allocations.

Table 3.8 above showed that Belfast HSC Trust recorded a surplus of £0.6 million in 2017-18, but Chart 3.5 shows that in that same year it received £33.4 million of deficit support. Indeed, all the 12 surpluses recorded by the four non-Western trusts in Table 3.8 in the three years prior to Covid 19 would have been deficits but for non-recurrent deficit support. In other words, DoH is regularly covering the financial costs needed for the HSC Trusts to meet their statutory breakeven target. As DoH explains the process:

> *"Opening deficits are forecast by Trusts at the start of each year and subsequently the HSC Board [...] undertook a comprehensive review of these positions through scrutiny and challenge, including proposing areas for demand or expenditure management and setting savings targets. Projections are continuously refined and deficit funding is provided or held centrally to ensure breakeven across the HSC system.*[37]

It is not obvious that those outside the HSC funding system are aware that such payments are routinely made and the requirement on Trusts to break even is not as binding as it sounds. There is a case to be made for greater transparency around the financial relationship between the Department and the Trusts. The abolition of the HSC Board is an opportunity to reframe this relationship to achieve that.

Chart 3.5 - DoH deficit funding of Trusts



Source: Department of Health

[37] Correspondence from DoH 11/06/2022

In addition to the so-called 'requirement' to break even, up to 2020-21 DoH set annual savings targets for Trusts. Financial reports claimed that over the five years to 2016-17 savings averaging £163 million per year were delivered which represented around 3.6 per cent of the Trust budgets. From 2018-19 it became evident that Trusts were struggling to deliver additional savings on a recurrent basis. Savings targets of £100m were set for Trusts across 2019-20 and 2020-21 but they only delivered on a non-recurrent basis. Since then, the demands of Covid-19 have understandably reduced the focus of DoH and the Trusts on recurrent savings, cost reductions and efficiency measures. The Department has indicated that it will take some time before Trusts can restore the levels of productivity that were achieved in 2019-20 and again be in a position to develop savings plans.

The NIAO has argued that:

> *"Whilst appropriate in accounting terms, this form of reporting does not take account of other financial and operational pressures facing the Trusts. In practice, savings have had to be made to ensure the ongoing provision of services within the available funding and in the face of rising demand. The current reporting arrangements also mask operational pressures created by the requirement to `break even'."*[38]

[38] https://www.niauditoffice.gov.uk/files/niauditoffice/media-files/205418%20NIAO__General%20Report%20in%20Health%20and%20Socla%20Care_Lwres%20PDF_FINAL.pdf

4 Relative spending and need

Having examined the structure of the NI health system and the ways in which the funding flowing through it are recorded, we turn to the question of whether (and if so why) spending per capita is higher in NI than elsewhere. We also consider whether the projected funding over the Draft Budget / Spending Review period to 2024-25 continues this trend. We deal with longer-term projections in Chapter 7.

Is health spending higher in NI than elsewhere?

In order to compare spending on health in NI with the other regions/nations of the UK, it makes sense to start with the data organised by the international Classification of the Functions of Government (COFOG) and published in the Treasury's *Country and regional analysis* statistical release.

In this chapter we focus on comparisons between NI and England, because spending in England is the main determinant of the NI Block Grant (via the Barnett formula) and so differences with England are an important factor in the sustainability of NI's health spending as we interpret it. But contrasts between NI and England in areas such as population age and geographical distribution, scale, and health sector structures mean that the two jurisdictions are not directly comparable, so we provide other comparisons where useful and feasible.

Data comparisons in this area are not straightforward, in large part because of the integration of the health and social care systems in NI. COFOG distinguishes between Health and Personal Social Services (i.e. Social Care) as categories of spending, but for many years a large amount of DoH spending has been split in fixed proportions between them rather than allocated on the basis of a detailed bottom-up assessment. In our projections in this chapter, we have also assumed that the overall proportions of the splits between COFOG functions remain fixed, except for the additional spending on Covid which is predominantly spent on Health.

Aggregate health and social care spending

Table 4.1 shows all expenditure within the Health COFOG category for both England and NI and which bodies undertake it. Most of the Health spending for both NI and England comes from central government departments, with just a small amount from local government (1 per cent in NI and 2 to 3 per cent in England).

In NI, almost all central government Health spending comes from the Department of Health (DoH). The proportion was just below 100 per cent pre-Covid, but fell to 95 per cent in 2020-21 when a sizeable amount of Covid-related spending in NI was funded by the Department of Health and Social Care (DHSC) in Whitehall. In England, almost all government Health spending comes from DHSC. Other

departments and public bodies undertake some very modest Health spending in both NI and England.

Table 4.1 - COFOG total identifiable expenditure for Health for England and NI

	2016-17	2017-18	2018-19	2019-20	£ million 2020-21
England					
Spending by government departments[1]	**114,603**	**118,762**	**123,753**	**133,434**	**180,863**
of which:					
Department for Digital, Culture, Media and Sport	17	5	5	5	0
Department of Health and Social Care	114,038	118,188	123,572	133,293	180,153
Department for Business, Energy and Industrial Strategy	549	570	176	135	709
Spending by local government	**3,498**	**3,375**	**3,298**	**3,248**	**3,815**
Total COFOG Health spending in England	**118,101**	**122,138**	**127,051**	**136,682**	**184,678**
Northern Ireland					
Spending by government departments[1]	**4,121**	**4,260**	**4,531**	**4,887**	**6,517**
of which:					
Northern Ireland Executive	4,115	4,256	4,530	4,886	6,171
of which:					
Department of Health (DoH)	4,108	4,250	4,523	4,878	6,163
Minor departments	7	7	7	8	8
Whitehall departments:					
Department for Digital, Culture, Media and Sport	1	0	0	0	0
Department of Health and Social Care	0	0	0	0	327
Department for Business, Energy and Industrial Strategy	5	3	1	1	19
Spending by local government	**55**	**51**	**51**	**54**	**43**
Total COFOG Health spending in NI	**4,176**	**4,311**	**4,582**	**4,941**	**6,560**

Note: [1] Identifiable expenditure is spending that can be identified as benefitting particular countries or regions. In PESA and the CRA statistical release, this is measured using the spending aggregate 'Total expenditure on services'.

Source: HM Treasury November 2021 Country and regional analysis statistical release, and underlying PESA data for NI Executive.

Under normal circumstances almost all DHSC spending benefits England (99 per cent in 2019-20), with a tiny remainder benefitting people outside the UK and none benefiting the other UK nations. But 2020-21 was an exception, with DHSC incurring additional Covid-related expenditure (vaccine procurement and Test & Trace) that benefitted NI, Scotland and Wales and which was not therefore subject to the Barnett formula. However, the amount of DHSC expenditure attributed to Scotland, Wales and NI in 2020-21 was the same per head of population, broadly in line with the outcome if it had been subject to the Barnett formula. Table 4.2 shows in more detail how DHSC spending is allocated by function and country, including the recent Covid spending.

Table 4.2 - UK Department of Health and Social Care spending by function and country

					£ million
	2016-17	2017-18	2018-19	2019-20	2020-21
Identifiable expenditure on Health[1]	**114,774**	**119,105**	**124,287**	**134,075**	**182,672**
of which:					
England	114,038	118,188	123,572	133,293	180,153
Scotland	-	-	-	-	944
Wales	-	-	-	-	548
NI	-	-	-	-	327
Outside UK	736	917	715	783	699
Total DHSC identifiable expenditure	**114,774**	**119,105**	**124,287**	**134,075**	**182,672**

Note: [1] Identifiable expenditure is spending that can be identified as benefitting particular countries or regions. In PESA and the CRA statistical release, this is measured using the spending aggregate 'Total expenditure on services'.

Source: HM Treasury November 2021 Country and regional analysis statistical release, and underlying PESA data for NI Executive.

Table 4.2 also shows that all DHSC spending is allocated to the Health COFOG function, which may appear surprising given the name of the Department, but it is consistent with what we find when we look at the COFOG category of 'Personal Social Services' in Table 4.3. There we can see spending on Personal Social Services by DoH in NI, but no similar spending in England by DHSC. Instead, local government is the primary source of funding in England, as we explain in our *Guide*.[39] To put it another way, DHSC does not record any of its own spending as 'Social Care' via the COFOG Personal Social Services function,[40] whereas DoH records around four-fifths of its money as Health and one fifth as Social Care.

[39] https://www.nifiscalcouncil.org/files/nifiscalcouncil/documents/2021-11/the-public-finances-in-northern-ireland-final-version_0.pdf pg 114

[40] This is the case in respect of the COFOG data recorded by DHSC on the Treasury's spending database for the PESA and CRA statistical releases. However, DHSC does record some spending as on social care in its Annual Report and Accounts.

Table 4.3 - COFOG expenditure for Personal Social Services for England and NI

	2016-17	2017-18	2018-19	2019-20	£ million 2020-21
England					
Spending by central government departments[1]					
of which:					
Department for Education	118	150	137	141	180
Ministry of Housing, Communities and Local Government	6	7	6	6	14
Spending by local government	25,097	25,879	27,354	28,752	31,492
Total COFOG PSS spending in England	**25,221**	**26,036**	**27,497**	**28,899**	**31,685**
Northern Ireland					
Spending by central government departments[1]					
of which:					
Northern Ireland Executive	1,016	1,067	1,145	1,245	1,276
of which:					
Department of Health (DoH)	1,013	1,065	1,143	1,242	1,274
Department for Communities	2	2	2	2	3
Total COFOG PSS spending in NI	**1,016**	**1,067**	**1,145**	**1,245**	**1,276**

Note: [1] Identifiable expenditure is spending that can be identified as benefitting particular countries or regions. In PESA and the CRA statistical release, this is measured using the spending aggregate 'Total expenditure on services'.

Source: HM Treasury November 2021 Country and regional analysis statistical release, and underlying PESA data for NI Executive.

Table 4.4 below shows how DoH spending is split between Health and Personal social services (i.e. social care) – and a much smaller allocation to fire protection services. As we saw from Table 3.2 in Chapter 3, almost all of this DoH spending that is included in this analysis of spending by COFOG is made up of DoH DEL.

Table 4.4 - NI Department of Health spending by function

	2016-17	2017-18	2018-19	2019-20	£ million 2020-21
Health	4,108	4,250	4,523	4,878	6,163
Personal social services	1,013	1,065	1,143	1,242	1,274
Fire protection	83	92	91	92	94
Total DoH identifiable expenditure[1]	**5,205**	**5,406**	**5,758**	**6,212**	**7,531**

Note: [1] Identifiable expenditure is spending that can be identified as benefitting particular countries or regions. In PESA and the CRA statistical release, this is measured using the spending aggregate 'Total expenditure on services'.

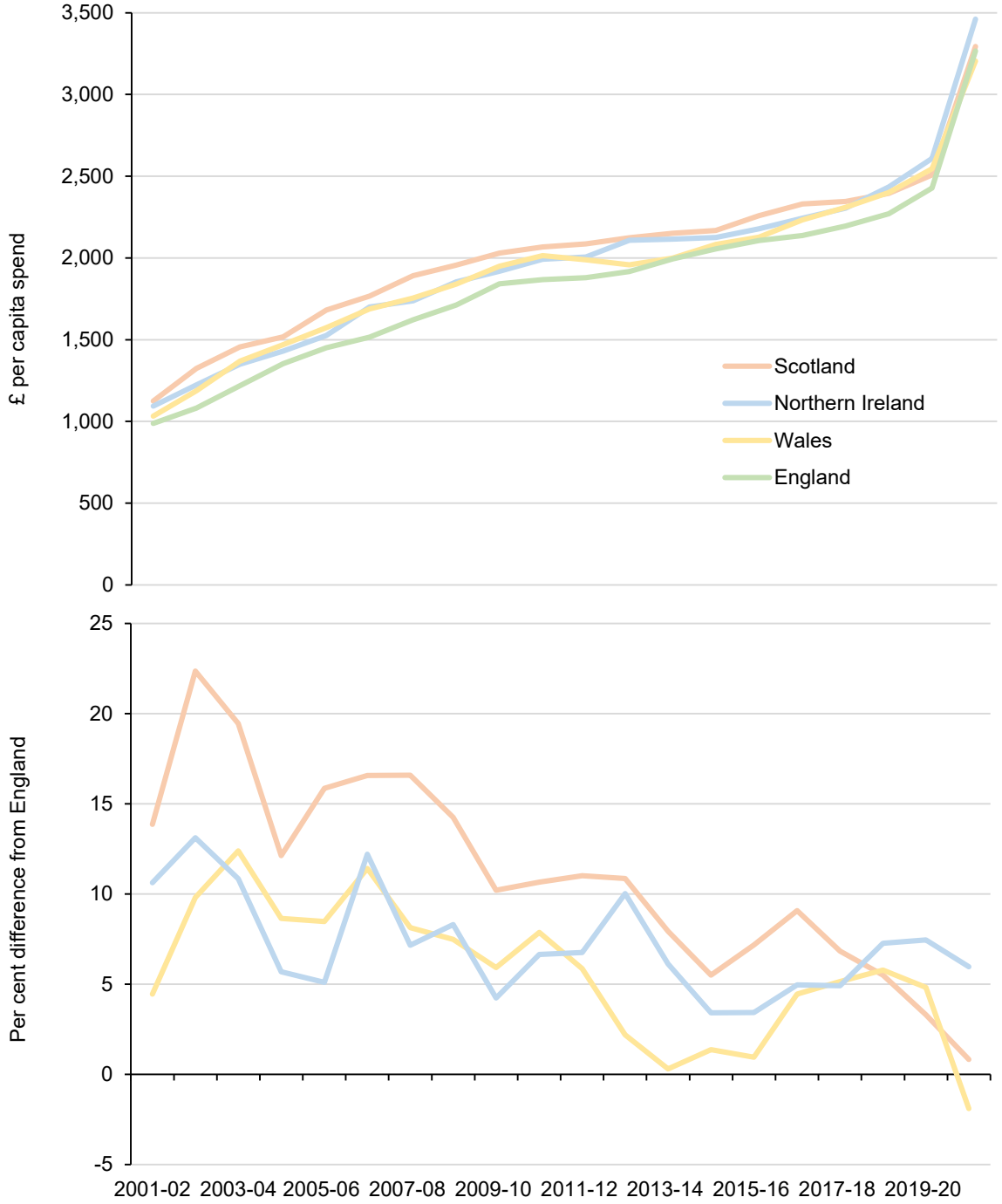
Source: HM Treasury November 2021 Country and regional analysis statistical release, and underlying PESA data for NI Executive.

Health spending per head

Chart 4.1 shows health spending per head (as classified by COFOG) in the four nations of the UK since 2001-02, and the percentage difference with England for the other three. The common trends across the nations over this period reflect four distinct phases at the UK level:

- Relatively rapid increases in health spending growth during the administrations of Prime Ministers **Blair and Brown**, prior to 2010;
- Noticeably slower growth during the **'austerity years'** under the coalition administration of Prime Minister Cameron, after 2010, in response to the decline in government revenue following the 2007-2008 financial crisis and recession;
- A renewed acceleration in spending under Prime Ministers **May and Johnson**, as fiscal policy was relaxed following the Brexit vote in 2016; and
- Finally, the initial spike in health spending in response to **Covid-19** in 2020-21.

Chart 4.1 - Per capita spending on health in the UK nations, and percentage difference with England



Source: HM Treasury PESA

Looking at the trends for the individual countries, NI (like Wales) has historically had consistently greater expenditure per capita on health than England, but less than Scotland. Spending in England remains the lowest of all nations throughout the period. Spending per head in NI in 2019-20 was 7 per cent (£181) higher than in England, and the highest of all the UK nations. Chart 4.1 shows that all the Devolved Administrations have consistently spent more per capita than in England (until 2020-21 when Wales per head spend dropped below England's). The lower deck of

the chart shows the percentage difference between devolved spending per head compared to England. Across the whole period, NI spending per head was, on average, 7 per cent higher than in England.

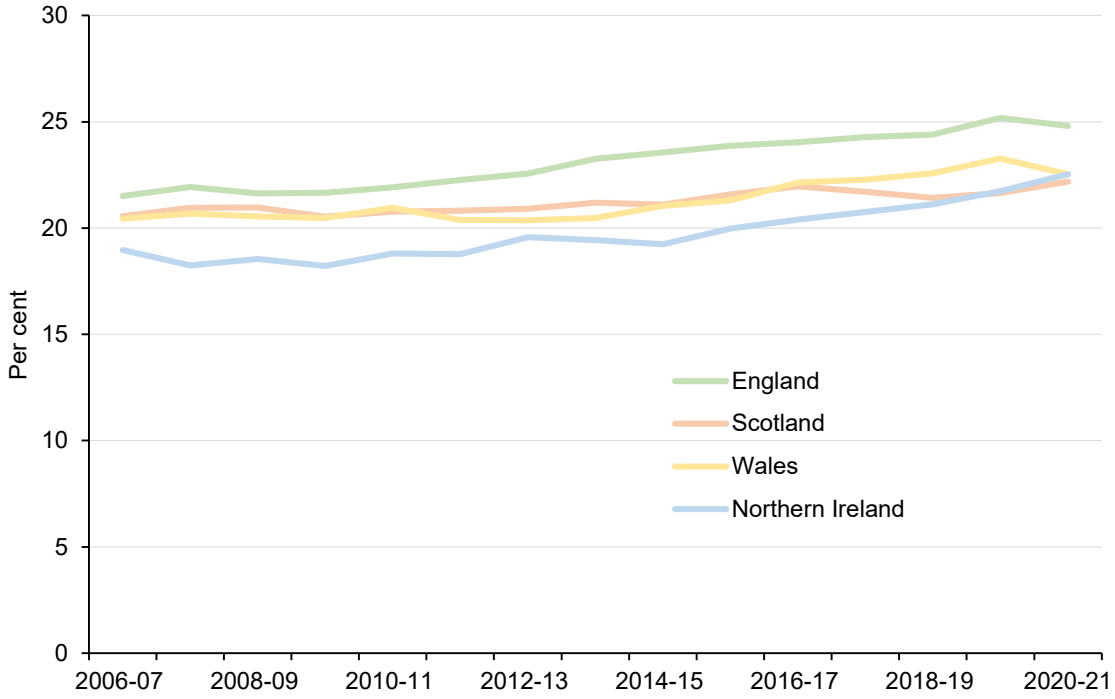
NI's additional spend, compared to England, is in the region of 3 to 13 per cent throughout the period, but on a gradual downward trend. Although this is a small percentage figure, it represents very significant sums of funding in the context of the budget for health services in NI. For example, health spending in NI would have been £340 million lower in 2019-20 if spending per capita was in line with England.

The upturn in relative NI health spending in 2018-19 and 2019-20 may relate to the various financial packages attached to political agreements noted in Chapter 3. But this funding is non-recurrent and so the jump may be temporary unless similar packages are agreed in future, which history suggests is far from impossible.

The Nuffield Trust analysis that informed this report showed that real per capita health spending has increased by around 54 per cent across the whole of the UK since 2002-03. The increase of 63 per cent in NI is above the UK average and greater than the 33 per cent increase in Scotland, 50 per cent in Wales and 57 per cent in England. However, the finding of higher growth in health spending per capita in NI depends on the period chosen. For example, changing the starting point to 2003-04 results in England having experienced a larger increase than NI.

Chart 4.2 shows the proportions of 'identifiable' public spending in NI (i.e. that which explicitly benefits the residents of particular nations/regions rather than the whole of the UK) devoted to health since 2006-07. It shows a modestly rising trend for all regions, currently in the range of 22-25 per cent. The proportion for NI is consistently around 2-3 percentage points below England. This reflects various factors, including higher spending on policing and justice, and the fact that water is funded from the Block Grant in NI, rather than by householders as in England.

Chart 4.2 - Health spending as a percentage of total identifiable spending (2006-07 to 2020-21)



Source: HM Treasury PESA & Country and Regional Analysis

Comparing NI with the English regions

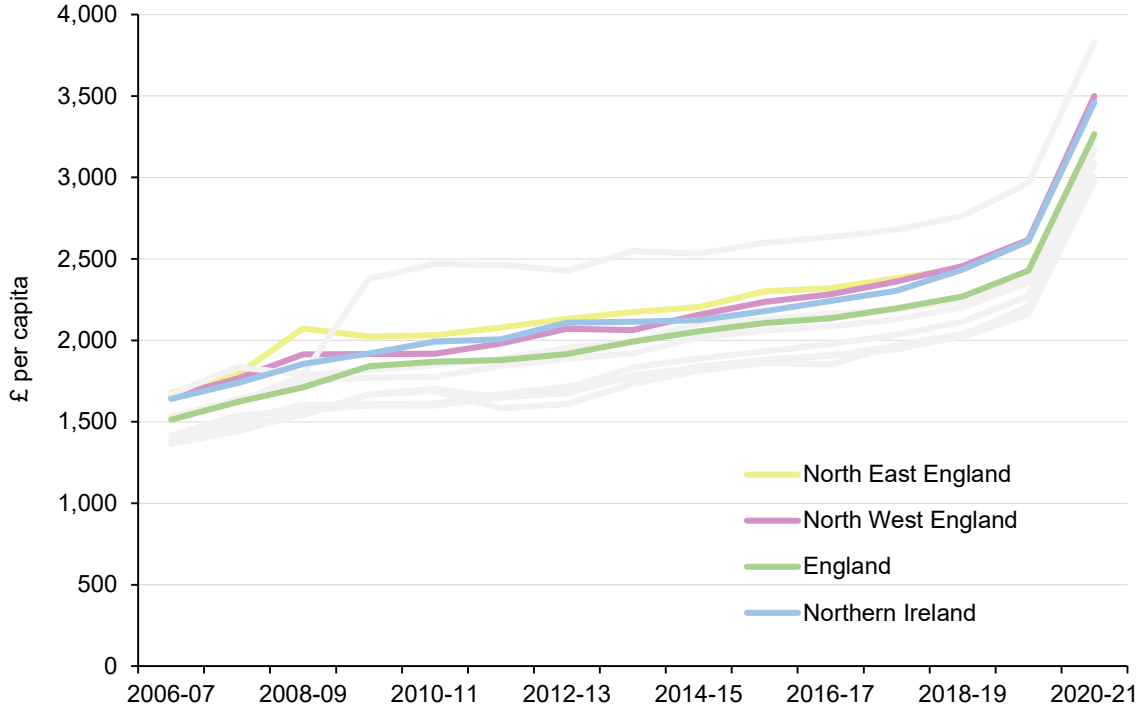
As we noted earlier, England is a natural comparator for NI because of the way in which spending by the UK Government on public services in England affects the resources available to spend in NI via the Block Grant thanks to the Barnett formula. But it is often argued that the North East and North West of England, for example, are more suitable in terms of the characteristics of their populations and what public services have to deliver. This is for a number of reasons, among them:

- NI is much more **rural** than England on average, so the health system has to serve a more widely spread population with different types of needs.
- The **average wage** in NI is much closer to North East and North West of England than England as a whole, with the English average lifted considerably by London.
- Measures of **deprivation** in NI are closer to the North East and North West of England than England as a whole, in part because of relatively low levels of deprivation in regions like the South East.

Chart 4.3 shows NI expenditure on health per capita, plotted against England as a whole, and against the nine English regions. To make this chart easier to read, only the North East and North West English regions are highlighted. The chart shows

that levels of health spending in NI are closer to the North East and North West of England than to the average for England as a whole. In fact, over at least the past 5 years health spending per capita has been higher in the North East and North West of England than in NI.

Chart 4.3 - Health spending in Northern Ireland, England, and English regions



Source: HM Treasury PESA & ONS

But there are limitations to using North East and North West England as comparators. For example, neither is a distinct operational unit in terms of health services, which limits the availability of management or other data on health service outputs or outcomes. The North East is also very different from NI demographically. It is one of the oldest populations in the UK, whereas NI is one of the youngest. So the health needs of the two populations are likely to be very different, even if deprivation levels and overall health spending levels per capita are similar.

Assessing relative need

In our general discussion of sustainability, we describe how Needs Assessment Studies (NAS) initially coordinated by the Treasury and subsequently (but not recently) updated have consistently identified a higher relative need for spending on public services in general in NI compared with England. These studies also find a greater need for spending on health services specifically, but by a smaller margin than for social care and some other areas. So the higher levels of health spending we see in the outturn data may in part simply be a response to higher need.

The needs assessment studies consider a range of demographic and other factors in order to measure the relative levels of need in one population compared to another. The ideal indicator would be morbidity, or the rate of illness in a population, but this is difficult to measure, so indicators of mortality and deprivation are used instead as proxies. Many of the factors relevant to such a study are ones where NI's population does have distinct differences from that of England. For example:

- The age distribution of the population
- The incidence of social deprivation e.g. poverty, isolation and poor housing
- Estimated cost of healthcare by age group (see Chart 7.1)
- The mortality rate (adjusting for differences in the age structure)
- Fertility rates
- Population density/sparsity.

In a NAS, need per head of population is expressed as a number with England set at 100 or 1. So, for example, if NI health need is determined to be 105 or 1.05, this means NI has 5 per cent greater need for spending on health services than England. It is worth noting that population health indicators are not the main factors determining health spending needs in these models. Social deprivation and other factors are included rather than, say, the prevalence of specific diseases or smoking. Across most of these factors, NI has a greater need than England. And as we saw above, in relation to even the two potentially closest comparators among the English regions, NI differs significantly in many of these factors, including the age and fertility of its population. As part of the Needs and Effectiveness (NEE) studies in 2002 the NI Executive proposed changes to the NAS model as well as highlighting the impact of the lower level of private provision in NI and higher levels of community tension from a divided society on the implied need indicator.

In 2005 the *Independent Review of Health & Social Care Services in Northern Ireland*,[41] - led by Professor John Appleby, who has led the Nuffield Trust work commissioned for this report – calculated the relative need for health and social care expenditure in NI relative to England using a range of models, some of them updating or extending the earlier Treasury-coordinated work. As set out in Table 4.5, they indicated additional need of between around 4 and 17 per cent. Models that weighted deprivation more highly tended to suggest higher relative need. The review concluded that "*…a reasonable need differential between England and Northern Ireland should be around 7 per cent*", towards the bottom of the range.

[41] https://www.researchgate.net/publication/265577588_Independent_Review_of_Health_and_Social_Care_Services_in_Northern_Ireland

Table 4.5 - Estimates of relative need for Health and Social Care in NI (England =1)

Approach	Need Indicator (To 2 decimal places, England = 1) 2005 Review	2011 Review
Basic update of HMT NAS model- updated data to populate HMT model with no changes to the indicators or weightings	1.04	1.06
Update of NAS model with changes previously proposed by NI Executive - changes to structure of model including greater weight given to deprivation factors	1.13	-
NAS NI Executive Update +- NI Executive update plus adjustment for private provision and community tensions	1.17	-
EQ5D health status model- estimate of need based on results from survey of self-reported health	1.04	-
NI allocation model- model used to allocate funding within NI adapted to include data for England	1.10-1.12	1.12
English allocation model- population of the allocation formula for England with data for NI	1.13	1.13-1.17
Review assessment of overall relative need	**1.07**	**1.09**

Source: Independent Review of Health and Social Care Services in Northern Ireland (2005)
Rapid review of Northern Ireland Health and Social Care funding needs and the productivity challenge: 2011/12-2014/15 (2011)

In 2011 Professor Appleby was commissioned by the predecessor department to DoH to update the 2005 analysis including the assessment of the relative need for health and social care spending in NI. His final report was published in 2011,[42] and it modestly increased estimated relative need. It concluded: "*…the judgement of this current review is that an additional needs factor of +9 per cent might be considered a reasonable needs differential between England and Northern Ireland*".

Professor Appleby has confirmed that "*Since the 2011 Review there have been no need estimates. Although changes in population and other factors will have changed over the last decade, there seems little to suppose these will have radically altered the judgement of the 2011 Review about NI's healthcare needs relative to England's".*

The estimates of need set out above are inflated by the inclusion of social care where NI has a higher level of relative need than for health. The need for the health-related elements of the Treasury NAS model is estimated to be 2.2 per cent higher in NI than England under the basic update to the NAS model and 7.4 per cent higher if additional changes were incorporated (Table 4.6).

These estimates are based on population data for 2002. Since then, the NI population has aged more quickly than England. Updating for 2020 population data and leaving the other factors in the NAS model (morbidity, deprivation and sparsity) unchanged, increases the estimated NI health need to 4.4 per cent higher

[42] https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/appleby-report-2011.pdf

than England under the basic update and 9.8 per cent higher if the additional changes are incorporated.

Table 4.6 - Needs Assessment Study Model estimates of additional need for Health spending in NI compared with England

	Basic Update (%)	NI Executive Update (%)
Health & Social Care (2002 Population)	3.9	13.2
Health (2002 Population)	2.2	7.4
Health (2020 Population)	4.4	9.8

Source: Northern Ireland Fiscal Council calculations

Planned spending under the 2021 Draft Budget

Having considered historic spending patterns on health in NI, and the level of relative need compared to England, we look now at the short-term plans for DoH spending through to 2024-25 that were set out for consultation by the NI Minister of Finance in his *2022-25 Draft Budget* on 13 December 2021.

Table 4.7 below shows that the plans would increase day-to-day DoH resource spending to £7.1 billion by 2024-25, an 18.7 per cent increase compared to the pre-Covid outturn of £6.0 billion in 2019-20. DoH's share of total spending by the Executive would only marginally increase from 46.5 per cent to 46.7 per cent.

The rise in DoH resource spending would be significantly lower than the planned increase in DHSC spending in England of 32.9 per cent over the same period. The scale of the difference is highly unusual and represents an unprecedented challenge to the financial sustainability of the health and social care sector in NI in the sense that we interpret it, namely its ability to deliver a comparable service to that deliverable in the rest of the UK.

Although the Draft Budget allocations to DoH are greater than the Barnett consequentials resulting from the 2021 Spending Review allocations to DHSC, this may not cover DoH's additional role in respect of social care[43]. The main reason for the slower growth in funding appears to be that the baseline position for the DoH Resource DEL budget is only 1.4 per cent higher than the outturn for 2019-20 whilst that for DHSC is 10.2 per cent higher.[44] Additional funding of around £850 million from reprioritising spend from other departments, or from additions to the Block Grant funding for 2024-25[45] would be required for DoH to match the growth in Resource DEL funding for DHSC between 2019-20 and 2024-25.

[43] The implied draft Budget 2022-25 allocations for DoH in terms of Resource DEL are £713/878/1,039 million for the years 2022-23, 2023-24 and 2024-25 respectively. If 20 per cent of this amount is allocated to Social Care in line with the baseline budget position this would imply NI health spending allocations of £570/702/832 million. These are lower than the Barnett consequentials of £603/709/957 million received by the NI Executive as a consequence of the additional funding to DHSC in the 2021 Spending Review. If a greater proportion (92 per cent in 2024-25) of the DoH allocation was distributed to health spending then the DoH draft Budget allocation would be in line with the level of Barnett consequentials.

[44] The Resource DEL budget for DoH increased by 17.7 per cent between 2019-20 and 2021-22 compared with 35.4 per cent for DHSC. The baseline position for DoH in the NI 2022-25 draft Budget (£6.1 billion) was 13.9 percent lower than the 2021-22 outturn (£7.1 billion) while the baseline position for DHSC in the 2021 UK Spending Review (£147.1billion) was 18.6 per cent lower than the 2021-22 outturn (£180.7 billion). The 2024-25 planned Resource DEL for DoH is 17.1 per cent higher than the baseline position while that for DHSC is 20.6 per cent higher.

[45] £755 million for 2022-23 and £835 million for 2023-24

As regards the other Devolved Administrations, the Scottish Government has only published plans for 2022-23, but the Welsh Government has published an indicative draft budget for 2024-25. This implies an increase in Welsh resource spending for health and social services of 11.7 per cent between 2021-22 Final Plan and 2024-25.[46] The equivalent increase for DoH is just 0.6 per cent although different definitions of health and social care services may have been used.

Table 4.7 – Comparison of allocations to DoH (NI Draft Budget 2022-25)[47] and DHSC (UK 2021 Spending Review)[48]

					£ billion
	Outturn	Plans			% change
	2019-20	2022-23	2023-24	2024-25	2019-20 to 2024-25
Department of Health (NI)					
Resource	6.0	6.8	6.9	7.1	18.7
Capital	0.2	0.3	0.4	0.4	67.3
Total	**6.2**	**7.1**	**7.3**	**7.5**	**20.4**
DoH as a % of NI Planned Spend	46.5	46.1	46.0	46.7	0.2pp
Department of Health and Social Care (England)					
Resource	133.5	167.9	173.4	177.4	32.9
Capital	7.0	10.6	10.4	11.2	60.0

Note: Resource DEL excluding deprication and Capital DEL excluding Financial Transactions Capital

Source: Draft Budget 2022-25, Department of Finance (NI) 2021 Spending Review, HM Treasury

Chart 4.4 below shows that NI spending per head on health normally moves broadly in line with that in England (as you would expect). Spending spikes in 2020-21 and 2021-22 in response to Covid-19, but returns to broadly the underlying trend from 2022-23 onwards. (We assume for the purpose of this calculation that for years without a PESA outturn health spending in NI is equal to roughly 80 per cent of the planned DoH budget and health spending in England is roughly 97.5 per cent of the DHSC budget, as has been the case on average historically. The exception for NI is 2021-22 when it is assumed that 83 per cent of the DoH budget was allocated to health compared with 80 per cent in 2019-20 and 87 per cent in 2020-21.)

We showed earlier that spending on health per head of population has been consistently higher in NI than in England, with an average advantage of 7 per cent since 2001-02. The Draft Budget plans imply that it will fall below that in England for the first time in 2022-23 and remain below for the next two years. The historic average health spending premium is broadly in line with Professor Appleby's 2005

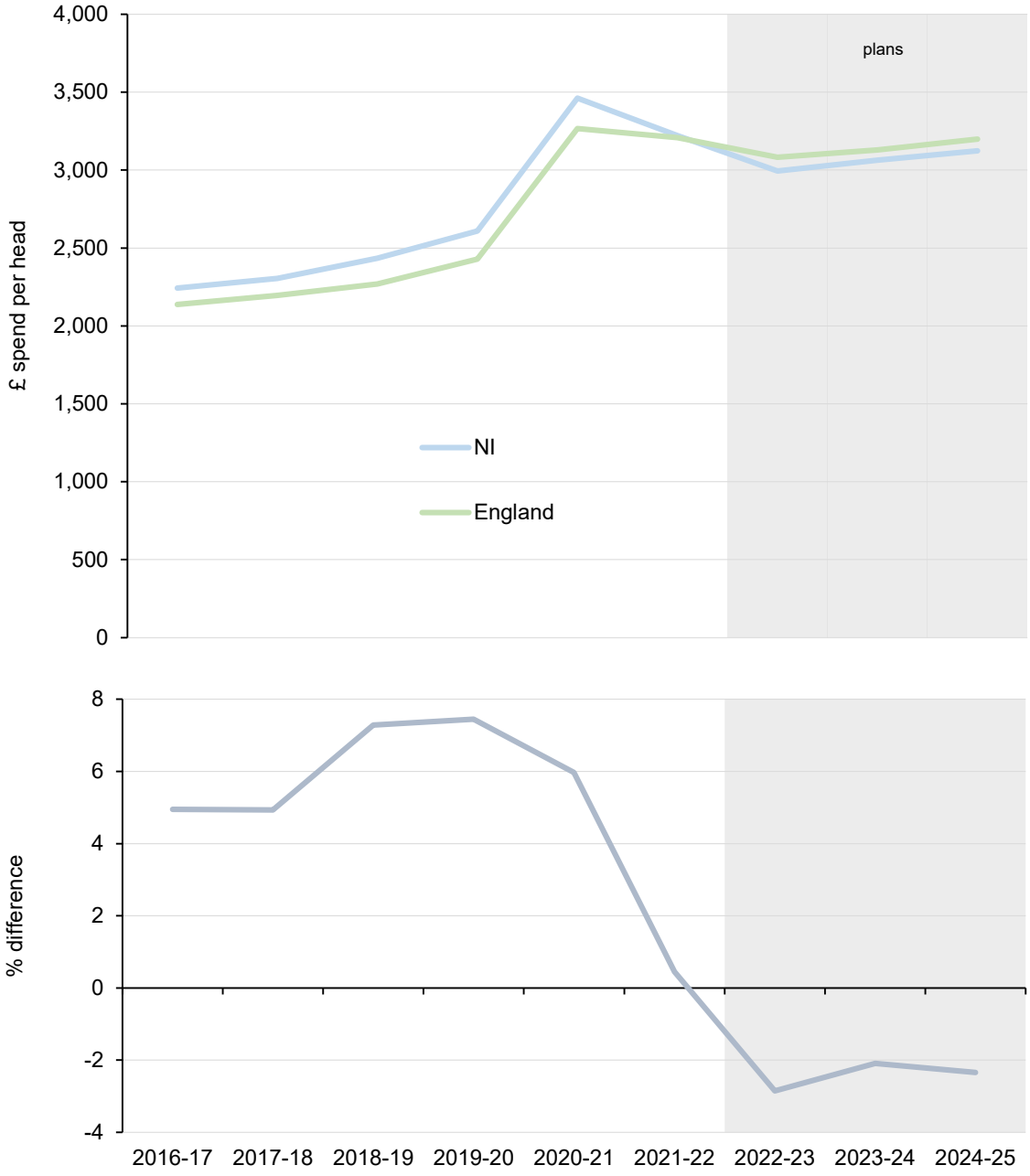
[46] https://gov.wales/draft-budget-2022-2023 Final Plan Budget Resource spend of £9.2 billion for 2021-22 compared with indicative draft Budget allocation of £10.3 billion. The much smaller reduction for Wales (4.8 per cent) compared with NI (14.1 per cent) in setting the baseline position for the draft Budget compared with 2021-22 Final Plan means that if the comparison is instead made between the draft Budget baseline and the 2024-25 allocation, the rate of increase in spending is broadly similar for NI (17.1 per cent) and Wales (17.4 per cent).

[47] https://www.finance-ni.gov.uk/sites/default/files/publications/dfp/Northern%20Ireland%20Draft%20Budget%202022-25_0.pdf Table 5.3 and 5.4

[48] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043689/Budget_AB2021_Web_Accessible.pdf Table 4.1

and 2011 estimates of relative need for health and social care spending (adjusted to remove the latter element) so if actual health spending in NI is going to fall significantly below actual health spending in England then it is also going to fall below these latest (albeit not recent) estimates of relative need. It must be re-emphasized though that there are considerable difficulties in comparing both actual spending and need in a robust way.

Chart 4.4 - Health spending per head in NI and England



Notes:
1: Figures for 2016-17 to 2020-21 are outturn taken from HM Treasury PESA 2022
2: English plans are based on applying the ratio of outturn DHSC spend to Identifiable Health spend for England to DHSC funding from HM Treasury PESA 2022
3: NI plans are based on applying ratio of Identifiable spend on Health to DoH budget for 2019-20 to the DoH spending plans from the draft Budget 2022-25 (2021-22 to 2024-25)
Source: HM Treasury, NI Draft Budget 2022-25 and Northern Ireland Fiscal Council calculations.

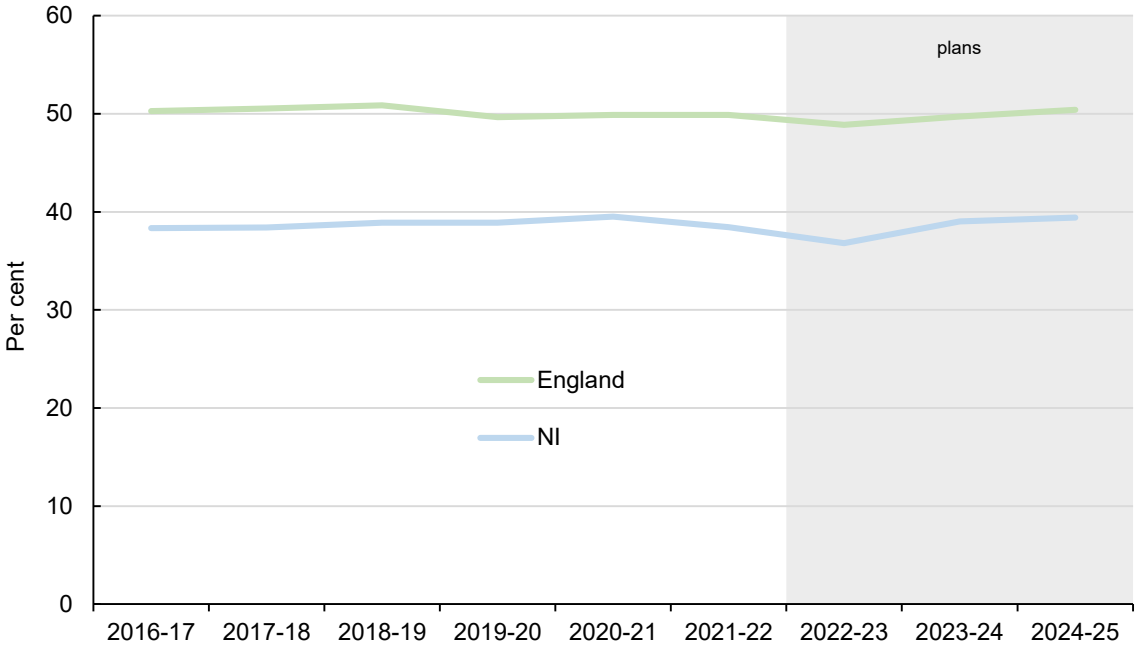
The main reason for the reduction in the level of spending per head on health in NI relative to England is that the primary source of funding available to the NI Executive, in the form of the Block Grant or DEL, is projected to fall relative to UK Government equivalent spending per head of population in the coming years. This is discussed in greater detail in our general analysis of sustainability. In addition, the planned freeze in the domestic and non-domestic Regional Rates means that the

Department of Finance has not proposed to offset the impact of the relatively slow growth in the Block Grant through increased fiscal effort.

Chart 4.5 shows NI health spending as a share of the Executive's DEL and compares it to health's share of the UK Government equivalent DEL (with the Barnett formula comparability factors applied to the UK Government spending programmes). This shows that health accounts for a smaller proportion of the DEL for the NI Executive than it does of equivalent UK Government spending in England. This is in part because of the Executive's responsibility for policing and education, where the relative spending per head premium in NI compared with England is greater than for health. In addition, the policy decision not to introduce water charges for domestic customers means that 2 per cent of the Block Grant in NI is used to fund water supply, which is not the case in England.

The figures in Table 4.7 show a higher share of total NI spending than Chart 4.5 because they also include expenditure on social care. Although there was an increase in health spending due to Covid-19, additional funding was also provided to other departments as part of the response to the pandemic. As a consequence, the share of total DEL allocated to health is not expected to change significantly in NI and UK Government equivalent spending between 2016-17 and 2024-25.

Chart 4.5 - Health spending as a percentage of comparable DEL spending



Source: HM Treasury PESA 2021 and 2021 Spending Review, Department of Finance Budget 2022-25

DoH's estimate of growth in health spending need

DoH argued in the Executive's Final Budget document for 2021-22 that health costs are estimated to be rising by 6.5 per cent a year, as a consequence of "*...an increasing ageing population with greater and more complex needs, increasing costs for goods/service and growing expertise and innovation which means an increased range of services.*" The Health Minister then told the Assembly on 16 June 2022 that *"...longer term demand and cost pressures are estimated to add to a 6 per cent additional funding requirement each year, just to stand still."*[49]

These estimates are in cash terms and appear to be based on analysis produced by the consultants McKinsey[50] to inform the Department's response to the 2010 UK Spending Review. McKinsey estimated that the need for health and social care expenditure would grow by 5.7 per cent per annum between 2010-11 and 2014-15, comprising 1.5 per cent growth due to demographic factors, 1.9 per cent due to unit price inflation and 2.2 per cent due to 'residual growth'.

The rate of residual growth pressures was based on growth in actual activity between 2004-05 and 2008-09. But this was a time of significant growth in the resources available to the health and social care sector which will have boosted the level of activity. The demographic growth factor was based on expected growth and ageing of the population, but the studies set out above have found that this approach overstates the impact of demographic change on the need for health spending. Moreover, while McKinsey estimate that the NI population was growing at 0.7 per cent each year, the latest projections suggest that population growth will slow to 0.2 per cent each year between 2020 and 2030, before turning negative over the longer term. Therefore, one might expect a repeat of the McKinsey analysis and an update of the methodology used to result in a significant reduction in the estimate of the growth in the need for NI health and social care expenditure.

It is worth bearing in mind that health and social care spending has increased by 6 per cent or more a year in cash terms on only two occasions between 2009-10 and 2019-20, in 2018-19 and 2019-20. As we will discuss in Chapter 6, this additional funding may have reduced the incentive to constrain costs rather than improving outcomes, as shown by the increase in unit costs and the upward trend in the number of people on elective waiting lists. If spending on health and social care had risen by 6 per cent per annum over the past decade then its share of the Executive's Block Grant funded spending would have increased from 46 per cent to an implausible 69 per cent in 2019-20, compared with its actual share of 49 per cent.

Sustainability and sufficiency in the near term

During the years covered by the 2021 UK Spending Review (2022-23 to 2024-25) the spending plans for DoH in the NI *2022-25 Draft Budget* imply that funding available for health spending in NI will grow at a significantly slower rate than for England. However, the market for many healthcare inputs operate on a UK-wide basis and there is an expectation that the standards of diagnostics and treatment

[49] https://www.health-ni.gov.uk/sites/default/files/publications/health/doh-wms-160622.pdf
[50] https://wayback.archive-it.org/11112/20110829075427/http:/www.dhsspsni.gov.uk/index/mckinseyreport.htm Page 22

will be at least as good in NI as the rest of the UK. This means that cost pressures should be broadly similar in England, Scotland, Wales and NI (with some additional transport costs for NI). At the macro level this suggests that DoH will be faced with broadly the same scale of cost pressures as in England but not the same resources with which to fund them.

The macro position on healthcare spending set out above will be reflected in a range of individual cost pressures, including:

- **Pay**: With around half the health budget spent directly on pay, this is expected to be the largest pressure facing the NI health and social care sector in the coming years. Its intensity will depend on the recommendations each year from the UK Pay Review Bodies and the response from DHSC. DoH will be under significant pressure to at least match the outcome in other parts of the UK given previous commitments such as in the New Decade, New Approach document.[51] The latest reports by the health Pay Review Bodies were published on 19 July 2022, recommending the equivalent of a 4-9 per cent increase for NHS staff in 2022-23(estimated to increase the respective paybill by 4.8 per cent) and 4.5 per cent for doctors and dentists. The recommendations are significantly in excess of assumed uplift (2 per cent plus 1 per cent contingency) when the DHSC budget for 2022-23 was being set (as reflected in the NI Executive Block Grant) as part of the 2021 Spending Review. In its submission to the NHS staff Pay Review Body, DoH advised that it was probable that there would be insufficient funding within its budget allocation for 2022-23 to fund a pay uplift.[52] This is in the context that gross weekly earnings for full-time NI Health Professionals[53] increased from being 25 per cent higher than the economy average in 2015 to 36 per cent higher in 2021. Gross weekly earnings for NI Health Professionals were also 2 per cent higher than the UK average in 2021. The longer-term risk is that pay pressures persist as current inflation levels feed into expectations going forward;

- **Non-Pay Inflation**: In addition to the severe pressures in respect of Energy costs, drugs and other consumables are all likely to have increased in price as part of the general increase in inflation;

- **Service Developments**: There have been several strategies and reviews initiated or completed in recent years with finalisation and/or implementation delayed due to Covid-19. These would be expected to lead to improvements in outcomes and efficiency, but they will also have significant upfront costs. There will also be revenue consequences from the completion of capital projects;

[51] Under NDNA the UK Government committed to the following: "*Providing additional funding for the Executive in 2020/21 to give the Executive time to place Northern Ireland's finances on a sustainable footing, and address its priorities, such as delivering parity with England and Wales for nurses' pay - bringing an end to the ongoing nurses' pay dispute.*"
[52] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1092270/NHSPRB_2022_Accessible.pdf Paragraph 5.5
[53] Standard Occupational Classification (SOC) code 22 which is comprised mainly of nurses and medical practitioners.

- **Service gaps**: In addition to the widely publicised waiting lists for hospital treatment, there are other areas across the NI health service with excessive waits for care or delays in the introduction of new services. There are therefore pressures for temporary funding to alleviate these, such as the £46 million announced by the Minister of Health in May 2022;[54]

- **Residual costs from Covid-19**: Although Covid-19 remains in general circulation, the threat level was reduced from three to two at the end of August 2022 with direct Covid-19 healthcare pressures and transmission declining or stable. However, there have still been residual costs in respect of testing and contact tracing in the early months of the year. In addition, there are significant costs associated with rebuilding health services, as well as an ongoing increase in the cost of delivering services due to the need for enhanced infection control measures, including enhanced Personal Protective Equipment (PPE) requirements. There is also the cost of treatment of people with long Covid. The threat from emerging new variants of the virus remains, particularly from those which would have greater resistance to current vaccines.

As part of an exercise commissioned by the Department of Finance (DoF) to inform the 2022-25 Draft Budget, DoH identified spending pressures of approximately £550 million in 2022-23, £620 million in 2023-24 and £786 million in 2024-25, but these assume pay and non-pay inflation of only 3 per cent in 2022-23. DoH estimates that every one percentage point on inflation and pay increases above 3 per cent would cost a further £13.2 million and £46 million respectively. In addition, further funding pressures rising to £240 million by 2024-25 were identified in respect of the transformation of services and unfunded commitments from the New Decade, New Approach agreement. These include non-health pressures such as higher demand for children's social care and domiciliary care for older people as well as increased payment rates for the independent care sector to retain and improve staffing levels.

More recently, the Minister of Health is reported to have written to the Finance Minister indicating that DoH may overspend its budget by £400 million to continue delivering effective services. The spending pressures listed were £80 million to address waiting list pressures; £200 million to cover recommended salary increases for staff; and £120 million created by issues such as energy price inflation. Estimates such as these are produced partly with an eye to bargaining with the Department of Finance, of course, but it does seem clear that there are substantial funding pressures in respect of the delivery of healthcare over the next three years. The overspend projection is reported to have subsequently been increased to £450 million, due to an increase in energy and pay costs.[55] The inclusion of hospitals and other parts of the public sector in the plans published by the UK Government on 21 September 2022 to help cut energy bills for businesses should in theory reduce some of the additional energy cost pressures.[56]

[54] https://www.health-ni.gov.uk/news/minister-announces-further-waiting-list-initiatives
[55] https://www.bbc.co.uk/news/uk-northern-ireland-62986648
[56] https://www.gov.uk/government/news/government-outlines-plans-to-help-cut-energy-bills-for-businesses

DoH often starts the financial year with unfunded cost pressures. Table 4.8 shows that the Department's estimated level of net cost pressures at the start of the 2017-18 to 2021-22 financial years was around £425 million on average, equivalent to around 8 per cent of the opening baseline level of funding for DoH. The funding pressures typically included pay and non-pay inflation, Family Health Services and new Drugs and Therapies, but the largest have been the impact of non-recurrent funding from previous years and, more recently, the cost of implementing political agreements such as New Decade New Approach. Demographic pressures have amounted to only around 0.5 per cent of the baseline compared with the 1.5 per cent estimate by McKinsey discussed above. The net position reflects estimated cash releasing savings in most years equivalent to around 1.4 per cent of the baseline funding.

Table 4.8 - Opening net financial pressures for Department of Health

	£ million	% of Baseline
2017-18	320	6.6
2018-19	425	8.4
2019-20	437	8.3
2020-21	479	8.3
2021-22	471	7.7

Source: Department of Health, Nothern Ireland Fiscal Council Calculations

As we saw earlier, unfunded cost pressures at the beginning of the year tend to be addressed through the year from a mixture of additional funding, pro-active action by the Department and them turning out lower than originally expected. But the starting point in 2022-23 (with health spending per head slightly lower than in England for the first time), slower growth in the available budget compared with DHSC and the impact of higher inflation all suggest that DoH is facing a genuinely challenging period from 2022-23 to 2024-25. In order to address these challenges the Department and Executive have a number of possible options including:

- **Increased prioritisation of health by the Executive**: The spending plans in the Draft Budget 2022-25 (which the parties could not agree upon) imply that DoH will receive a marginal increase in its share of total departmental spending in NI over the next three years, but the uplift is significantly lower than for DHSC in England. So the NI Executive could go further in its prioritisation of health as part of the Final Budget, particularly in respect of funding that has not already been allocated to departments. However, it is evident that the other main NI departments are facing slower growth in their funding than their nearest UK Government equivalent, reducing the scope for health to be further prioritised.[57] There is also

[57] Between 2019-20 and 2024-25, DoH Resource DEL spending is planned to increase by 14 percentage points less than its nearest UK government equivalent (18.7 per cent versus 32.9 per cent for DHSC). In contrast the Department of Justice budget is projected to increase by 30 percentage points less than its nearest UK government equivalent; the Department of Education is projected to have a shortfall of 10 percentage points; and the Department for the Economy has a projected shortfall of 20 percentage points.

pressure to provide financial support to households and businesses in response to increasing energy costs.

- **Efficiency savings**: As we will see in Chapter 6, despite the hard work and dedication of individual doctors, nurses and other staff, the current structure, systems and practices in the health system seem to be generating persistent inefficiencies. There is scope to put challenging targets in place for the Trusts and other providers to deliver cash releasing savings, but there also needs to be realism about what can be achieved in a short period of time. It is unclear what savings were planned and will now be delivered as a result of the previous investment in the transformation of health services. The pressures set out above assume that £150 million in cash releasing savings can be delivered in 2022-23. If this level of savings is not delivered, then the pressures would be greater still.

- **Revenue raising:** There are limits on the amounts of revenue that can be raised within the health system in the short term. Existing charges are required to reflect costs of delivery while most new charges would require legislative approval. But these could still be considered by DoH in the medium-term. The main potential source of additional short-term funding would be through an increase in the Regional Rate by the Executive.

- **Increased funding from UK Government**: As many of the pay and inflation pressures in NI will be common to the rest of the UK, it is possible that the UK Government will provide more funding to the DHSC which would then increase the Block Grant via the Barnett formula. Even if the Government provided additional funding to DHSC to cover costs, this is unlikely to be sufficient to meet the full costs in NI due to the operation of the Barnett formula with additional adjustment or bypass required.

The scale of the financial pressures facing DoH and other NI departments means that other up until now politically unpalatable options may need to be considered:

- **Constraining cost increases and deferring service developments** - with the scale of challenges facing DoH, an alternative to removing funding from existing services could be to delay funding new or additional costs. There is significant pressure to implement new or reformed services as soon as possible, but these could be deferred until future years to save money given the priority afforded to maintaining existing services. Although the market for many healthcare inputs operates on a UK wide basis, DoH still has some control over the timing and scale of the cost increases, to reflect local circumstances. Taking a robust approach to new cost pressures and service developments may provide more time to plan and implement efficiency measures.

- **Focusing resources on the most effective and highest priority interventions**- although health services are generally extremely valued, there are differences in their effectiveness and priority for society as a

whole. DoH could review its existing programmes and interventions to identify any that could be stopped or scaled back to ensure that adequate funding is available for other health services. Difficult decisions need to be made, and focusing resources on those services which yield most benefit relative to cost may preserve the highest possible levels of service. This approach is normally considered for all new services, but in the current financial environment, existing services may also need to be brought into scope.

Conclusions

We have seen that NI has historically had a higher need for spending on health services than England, reflecting the characteristics of the NI population, its geography and arguably its past. Previous independent analysis suggests that health and social care expenditure needs to be around 5 to 10 per cent higher than in England to deliver an equivalent service, with relative need for social care higher than for health.

NI's per capita health spending has historically been of a similar order of magnitude higher than England (3 to 13 per cent) as the estimates of additional need for health and social care. Indeed, the higher level of relative need for social care compared with health might indicate that funding levels in NI have been more than sufficient to reflect need for the latter. This is consistent with the conclusion in Professor Appleby's 2005 Review that "*...the NI health & social care sector does not appear to have been significantly under-resourced up until now...*" as well as the finding from the Nuffield Trust work for this review that "*...there is little prima facie evidence from the headline comparative spending figures that NI has or does suffer from any significant shortfall in spending*."

But needs assessments are imprecise and do not reflect all the local circumstances in NI. Indeed, Professor Appleby cautioned in his 2005 review that the overall estimate of relative need can be skewed significantly higher by the weighting put on a small number of indicators, particularly in respect of the higher average levels of deprivation in NI and the needs associated with mental health conditions.

Relatively slow growth in public spending across the UK as a whole over the past decade has meant that there has been less focus than previously on the level of spending per head in the Devolved Administrations compared with England and therefore the relative need for public spending. As a result, the most recent estimates of relative need are now at least ten years old. However, as we have discussed above, you would not necessarily expect the individual indictors of need and the overall assessments to have changed significantly over that timeframe.

Turning to the near-term outlook, the Department of Finance's Draft Budget (which the parties in the last Executive did not sign off, but which remains the most likely basis for negotiation when a new one is formed) proposed to increase DoH's resource budget by 18.7 per cent between 2019-20 and 2024-25. This would increase DoH's share of total Executive spending by a small amount but would nonetheless be much smaller than the 32.9 per cent increase in the UK DHSC's resource budget over the same period. The scale of this difference would pose a

serious challenge to the Executive's ability to deliver comparable health service quality to that in England, including the funding of additional cost pressures. It would take health spending per head in NI below that in England and therefore obviously also below the most recent estimates of relative need.

Against this backdrop, there will also need to be a rapid change in emphasis and culture within DoH and the wider health and social care sector in NI regarding its finances. During the past two years it has been necessary to adopt a "whatever it takes" approach with decisions taken at pace in response to the Covid-19 pandemic, arguably with less consideration of value for money and affordability than would normally be the case. This was a reasonable and proportionate short-term approach in response to the critical threat to society. However, there is now a need to restore normal levels of financial accountability to help ensure resources are deployed where they are most needed.

5 The health of the NI population

A common narrative from stakeholders in explaining higher health spend per head of population in NI is that health outcomes are worse than elsewhere in the UK and therefore the need for spend is greater. As we noted in the previous chapter, the health spending needs assessment studies summarised and further developed by Professor John Appleby in his 2005 and 2011 studies were based more on population characteristics like demography, deprivation and density/sparsity than directly on the health of the population. But this is still worth examining, even though health characteristics are a reflection not only of the underlying need for healthcare but also of the effectiveness with which it is currently being delivered.

In this chapter we review available evidence on the health status of people in NI relative to those elsewhere in the UK. We consider a number of different measures, including life expectancy, mortality and disease prevalence, looking at both mental and physical health outcomes. As discussed in Chapter 4, we focus primarily on comparisons with England because of the way in which health spending there feeds through to the Block Grant via the Barnett formula. If people in NI are consistently less healthy than in England then the Barnett consequentials of higher English health spending may not adequately reflect increases in NI's health care needs.

Life expectancy and mortality

Life expectancy at birth is perhaps the simplest indicator of population health. In 2018-20 it stood at 78.7 years for males and 82.4 for females in NI[58], slightly lower than in England (79.3 and 83.1 years respectively), similar to Wales but higher than in Scotland. Over the last decade NI has seen the biggest improvement in life expectancy of the UK nations although not by any significant margin.

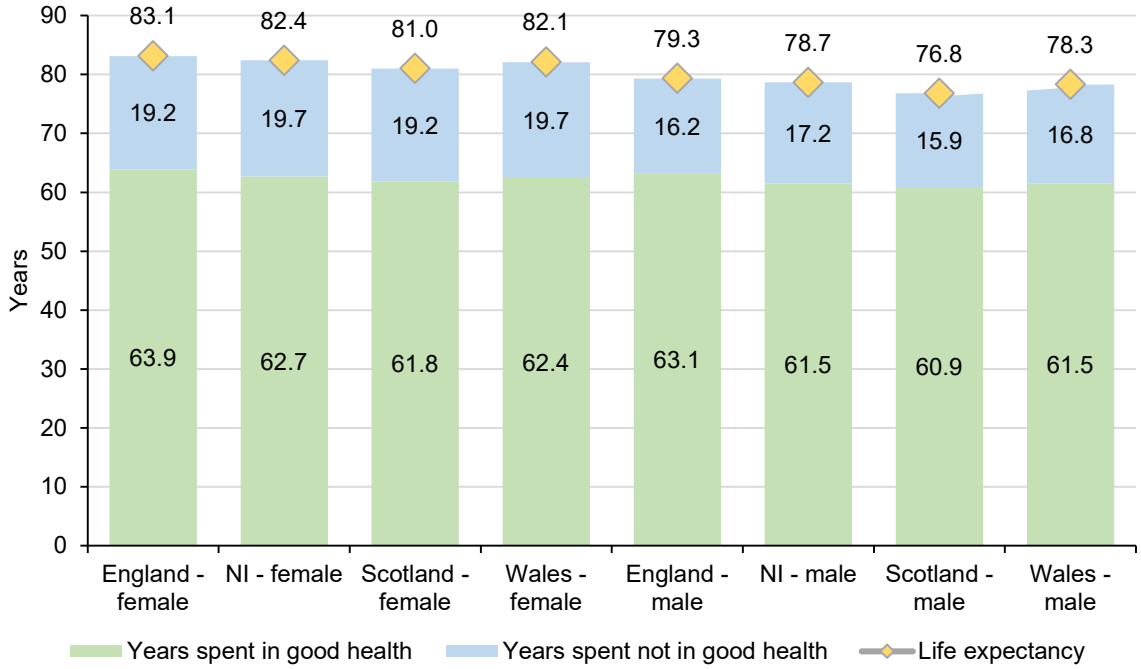
But in terms of demand for healthcare, it is perhaps more useful to look at how overall life expectancy is predicted to divide into years of good (self-assessed as good or very good) and poor health. Chart 5.1 shows the figures for 2018-20, with NI residents expected to have the largest number of years in poor health for males (17.2) and joint largest (with Wales) for females (19.7). The fact that in NI males can expect an additional year in poor health and females an additional half year, relative to their counterparts in England, suggests potential greater need for health care (and therefore spending). Given the greater degree of population ageing expected in NI than England in coming years, this would likely exacerbate financial pressures.

That said, there have been no significant changes in healthy life expectancy for both males (+0.3 years) and females (-0.1 years) in NI in recent years. [59] In contrast, the opposite has occurred in England with changes to healthy life expectancy of -0.2 years for males and +0.1 years for females. In Scotland the changes are more significant with bigger falls for males and females than in any other nation.

[58] https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/bulletins/nationallifetablesunitedkingdom/2018to2020#life-expectancy-at-birth-in-uk-countries

[59] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/healthstatelifeexpectanciesuk/2018to2020#healthy-life-expectancy-in-the-uk

Chart 5.1 - Expected years in good and poor health at birth, 2018-20



Source: ONS

Looking at data across the 215 local authority areas in the UK for 2018-20, NI local areas tend to come lower down the healthy life expectancy league table for males than females. Comparing the poorest NI performers, Belfast had the 5th lowest male healthy life expectancy in the UK at 55.5 years while Causeway Coast and Glens had the 40th lowest female life expectancy at 59.5 years. Lisburn and Castlereagh recorded the 11th highest female healthy life expectancy, at 68.9 years.[60]

Disability-free life expectancy is an alternative metric to healthy life expectancy – a self-assessed estimate of the average number of years in which an individual can expect to carry out day-to-day activities without being constrained by a long-lasting physical or mental health condition. Not surprisingly it paints a broadly similar picture – NI scores worse than England but better than Scotland and Wales for males and ranks highest of the four nations for females.[61]

One significant indicator of health status that is included in the needs assessment studies described above is mortality, measured as the frequency of deaths each year per 100,000 persons in a given population. Table 5.1 shows ONS estimates for age-standardised mortality rates (ASMR), which adjust for both the size and age structure of a population. The frequency of deaths in NI is higher than the average across the whole of England, but significantly less than in Scotland, with the pattern holding for both males and females. Of course, such a simple comparison should be used with caution, as it does not tell the full story. There are many factors, such as public behaviours and other non-health factors, which can influence mortality rates.

[60] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/healthstatelifeexpectanciesuk/2018to2020#healthy-life-expectancy-in-the-uk
[61] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/healthstatelifeexpectanciesuk/2018to2020

Table 5.1 – Age-standardised mortality rates across UK, 2020

Area of usual residence	Persons	Males	Females
England	1,042.7	1,231.1	888.9
Wales	1,114.6	1,297.3	963.5
Scotland	1,212.0	1,422.8	1,041.7
Northern Ireland	1,072.4	1,256.2	930.9

Source: ONS Deaths registered by area of usual residence, UK 2020

Table 5.2 compares ASMRs across the five HSC Trust regions in NI and the nine English regions. It shows that while mortality is higher in NI than England on average, it is higher still in more than half the English regions. Again Belfast stands out as the worst performer in NI. It has a higher ASMR than all the English regions for males (by some margin), but lower than North East England for females.

Table 5.2 - Age-standardised mortality rates by NI and English region, 2020

Area of usual residence	Persons	Males	Females
North East	1,204.3	1,399.0	1,044.7
Belfast HSC Trust	1,204.0	1,439.0	1,026.9
North West	1,191.5	1,392.4	1,024.4
Yorkshire and The Humber	1,139.5	1,357.6	968.2
West Midlands	1,122.5	1,335.6	950.1
East Midlands	1,080.5	1,277.3	921.4
NORTHERN IRELAND	**1,072.4**	**1,256.2**	**930.9**
Western HSC Trust	1,070.4	1,241.6	941.0
Northern HSC Trust	1,069.1	1,247.2	931.8
ENGLAND	**1,042.7**	**1,231.1**	**888.9**
South Eastern HSC Trust	1,022.9	1,169.1	910.1
Southern HSC Trust	1,012.2	1,213.6	853.5
London	975.2	1,171.0	812.0
East	968.8	1,144.4	826.0
South East	940.9	1,106.0	806.7
South West	927.2	1,098.3	791.4

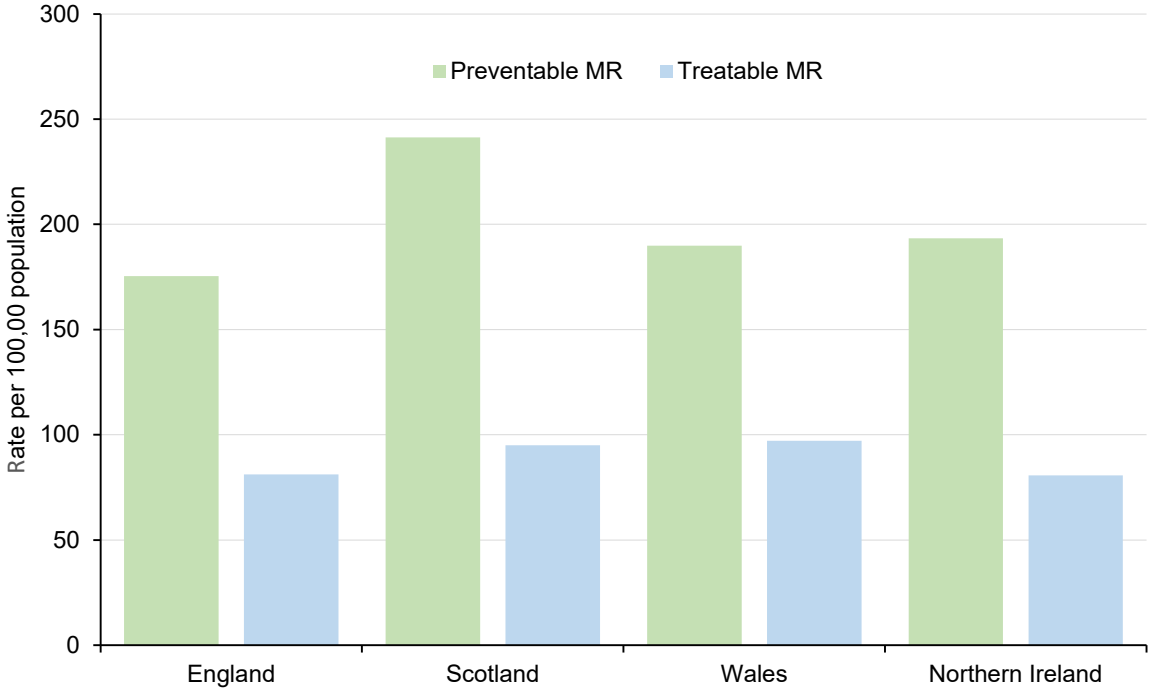
Source: ONS Deaths registered by area of usual residence, UK 2020

When looking at mortality, it can be helpful to distinguish between 'preventable mortality' (from causes that can be avoided through effective public health and primary prevention interventions *before* the onset of disease or injury), and 'treatable mortality' (from causes of death that can be avoided mainly through timely and effective treatment and other interventions *after* the onset of disease or injury). For example, all alcohol related deaths are considered preventable and sepsis deaths are considered treatable, while deaths due to cervical cancer are considered both preventable and treatable.

Chart 5.2 shows that the standardised preventable mortality rate in NI is notably higher than that in England, in line with Wales and significantly lower than Scotland. This suggests that the public behaves less healthily in NI than in England

(from example smoking more), and that there is a greater need for preventative interventions. The difference may also be partly attributable to certain physical health indicators, which we consider later in this Chapter.

Chart 5.2 - Standardised treatable and preventable mortality rate across the UK



Source: ONS for England, Scotland and Wales, Department of Health for NI

In contrast, the standardised treatable mortality rate in NI is on a par with that in England, suggesting that the local health sector is as effective and timely in responding to treatable conditions as the English one is, although the literature highlights that indicators of avoidable mortality are only starting points in assessing the effectiveness of public health and care systems.[62] It is possible that the NI population is prone to a different and more treatable range of diseases and illness.

Chronic disease and co-morbidity

As discussed later in this chapter, the UK nations each conduct their own self-assessed population health survey, asking questions on various health-related issues. The sampling methodologies and wording of the questions differ, so caution must be used when drawing comparisons. That said, 43 per cent of respondents to the *Health Survey Northern Ireland 2019-20*[63] reported a long-standing physical or

[62] https://www.oecd-ilibrary.org/sites/3b4fdbf2-en/index.html?itemId=/content/component/3b4fdbf2-en#:~:text=Treatable%20(or%20amenable)%20mortality%20is,to%20reduce%20case%2Dfatality).
[63] DoH has published results for 2020-21 however this report uses 2019-20 findings (https://www.health-ni.gov.uk/sites/default/files/publications/health/hsni-first-results-19-20.pdf) to align with the most recent survey in England (2019) https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2019.

mental health condition or illness, with 30 per cent saying it limited their ability to carry out day-to-day activities. These percentages increase with age and deprivation, with 41 per cent of respondents in the most deprived areas reporting an activity-limiting long-term condition compared to 27 per cent in the least deprived. In overall terms, the number of respondents with long-standing illness was equal to that in England, but less than Scotland and Wales (Appendix G).

Disease prevalence

To further understand differences in health status between NI and England it would be useful to compare the prevalence of particular diseases and conditions. But there is a lack of comparable data across the UK as a result of different methodologies for data collection and analysis and variations in the definitions used.

Some information on prevalence by nation can be derived from statistics collated by GPs in NI, England and Wales to aid Quality and Outcomes Framework (QOF)[64] assessments. These are shown in Table 5.3, but should be treated with caution, as measuring disease prevalence was not the purpose of collection (see Appendix H). That said, rates of coronary disease appear to be higher in NI than England, whereas rates of cancer, diabetes and asthma appear to be lower.

[64] The Quality and Outcomes Framework (QOF) is a voluntary annual reward and incentive programme for all GP surgeries providing an indication of the overall achievement of a practice through a points system.

Table 5.3 - UK disease prevalence (% of GP registered population) comparison March 2021[65]

Disease Area		Northern Ireland	England	% Wales
Cardiovascular				
Atrial Fibrillation		2.1	2.0	2.4
Coronary Heart Disease		3.7	3.0	3.6
Cardiovascular Disease – Primary Prevention		3.3	-	-
Heart Failure		1.0	0.9	1.1
Heart Failure due to LVD		0.4	-	-
Hypertension		13.9	13.9	15.9
Peripheral Arterial Disease		-	0.6	-
Stroke/TIA		1.9	1.8	2.2
Respiratory				
Asthma		6.1	6.4	7.4
Chronic Obstructive Pulmonary Disease		2.1	1.9	2.4
High Dependency & Long-term Conditions				
Cancer		2.8	3.2	3.3
Chronic Kidney Disease (18+)		-	4.0	-
Diabetes	All	5.2		
	17+	6.6	7.1	7.8
Mental Health & Neurology				
Mental Health		0.9	0.9	1.0
Dementia		0.7	0.7	0.7
Learning Disabilities		-	0.5	0.5
Epilepsy	All	-		
	18+	-	0.8	1
Diagnosis of Depression	All	9.2		
	18+	11.8	12.3	-
Lifestyle				
Obesity	All			
	16+	-	6.9	10.1
Musculoskeletal				
Osteoporosis	All	0.4		
	50+	1.0	0.8	0.6
Rheumatoid Arthritis	All	0.7		
	16+	0.8	0.8	0.9

Note: QOF was retired in Scotland on 31 March 2016 and replaced in Wales in 2019-20 with the Quality Assurance & Improvement Framework.

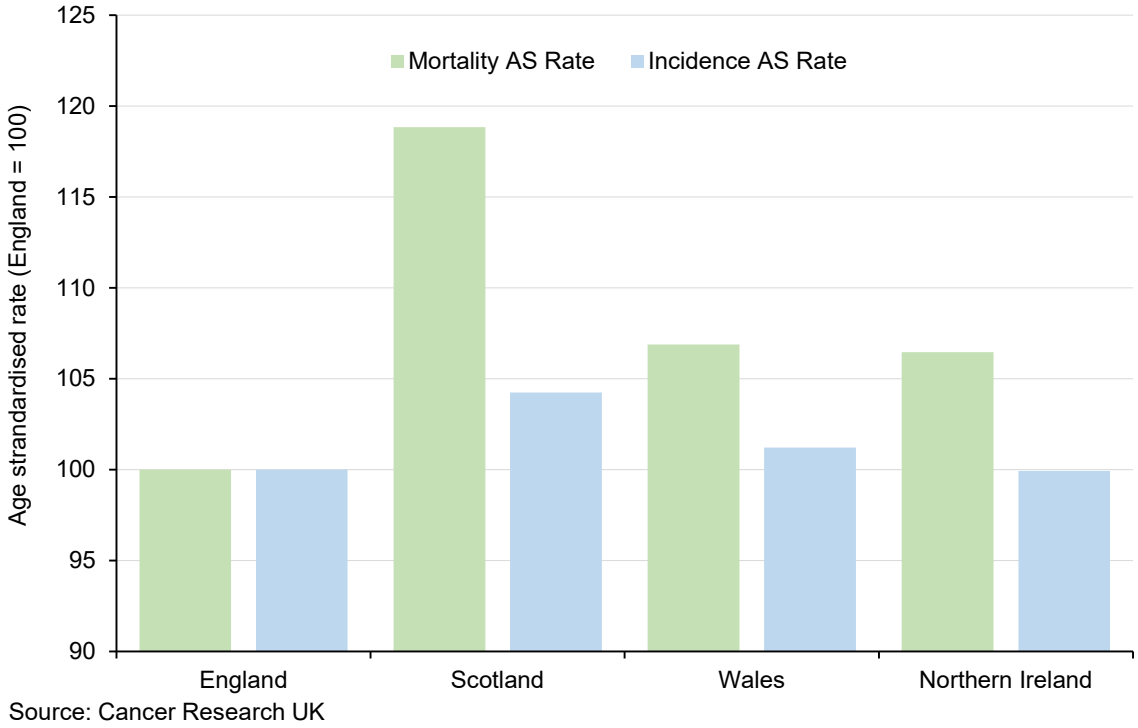
Source: Department of Health

According to Cancer Research UK, and as shown in Chart 5.3, incidence rates of all cancers (excluding non-melanoma skin cancer) are lower in NI than Scotland, but similar to those in England. But the age-standardised cancer mortality rate in NI is

[65] DoH NI has published March 2022 data; however this report uses March 2021 data to align with the latest data available for England and Wales.

higher than in England, suggesting that this is an area where the NI health system is less effective in providing successful treatment than in England.

Chart 5.3 - Age-standardised incidence and mortality rates of new cancer cases across the UK (2016-18) (excluding non-melanoma skin cancer)[66]



Source: Cancer Research UK

Comorbidity

Comorbidity refers to someone suffering more than one disease or condition at the same time. These conditions are often chronic or long-term which can complicate overall disease management and treatment. For example, a drug used to treat one condition can sometimes interact with another treatment, lowering the effectiveness of certain drugs or even causing a negative reaction.

Comorbidities are associated with poorer health outcomes and more complex cost profiles. For example, a patient with dementia who has suffered a fall will require significantly more support in a hospital setting than someone without dementia. Similar issues may arise in the case of a person with diabetes, who may experience complications from other conditions that would otherwise be less severe. This increases the cost of treating them.

[66] https://www.cancerresearchuk.org/health-professional/cancer-statistics-for-the-uk?_gl=1%2A10ocz9h%2A_gcl_dc%2AR0NMLjE2NTUxOTk0NDYuMWNkOGZmMDVkNGIwMWFlYWJhYjY5ZGFkODI3ZWQzNjE.%2A_ga%2AMjQ5OTIwOTYwLjE2NTUxOTk0NDY.%2A_ga_58736Z2GNN%2AMTY1NTE5OTQ0Ni4xLjEuMTY1NTIwMDAxNC41NQ..#heading-Zero

Age UK has found that in England, as people age, the number of co-existing conditions and/or major diseases tends to increase[67] and presumably the same would be true in NI. With the NI population projected to age more quickly than that in England, a higher proportion are likely to have comorbidities which will lead to increased pressure on the NI health system and more complex cost profiles. There is a lack of data on comorbidity rates across the UK, but we can look at the incidence of conditions often associated with it – diabetes and dementia as noted above.

Diabetes UK estimates that there are over 105,000 people in NI living with diabetes, around 90 per cent of whom have the Type 2 form. HSC figures show that diabetes medication and products were dispensed to 97,352 people in 2020-21, an increase of 2.3 per cent on the previous year but at 5.1 per cent of the NI population for now the lowest rate of incidence in the four UK nations.[68] As shown in Table 5.4, the percentage of the population receiving diabetes medication and products increases significantly at the older age groups.

Table 5.4 - Percentage of population receiving diabetes medication and products 2020-21

	% Male	% Female	% Overall
Under 18	0.4	0.4	0.4
18-24	0.9	1.3	1.1
25-34	1.2	2.8	2
35-44	2.5	2.9	2.7
45-64	8.5	5.4	6.9
65-74	17.3	10.6	13.9
75-84	21.5	13.7	17.2
85+	19.5	12.3	14.9
All Ages	**5.8**	**4.5**	**5.1**

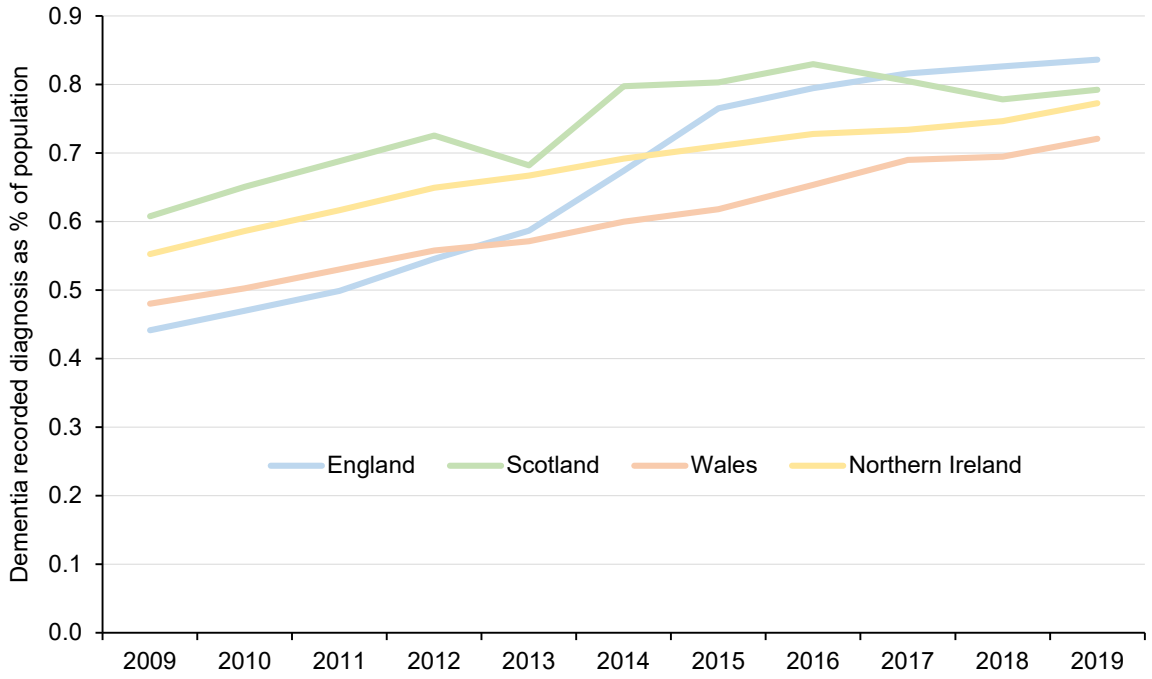
Source: General Pharmaceutical Services Annual Publication 2020/21

Data from Alzheimer's Research UK suggests that a smaller proportion of the NI population has received a dementia diagnosis than of Scotland and England since 2014 (although not everyone living with dementia will have received a diagnosis). One contributor to the lower prevalence in NI may be the relative youthfulness of the NI population, a trend that is set to diminish in the coming years.

In the case of both diabetes and dementia, prevalence rates are relatively low compared to the rest of the UK but this may be a temporary phenomenon reflecting its relatively young population.

[67] https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/health--wellbeing/age_uk_almanac_final_9oct15.pdf
[68] https://hscbusiness.hscni.net/pdf/Annual%2020-21%20General%20Pharmaceutical%20Services%20Report.pdf

Chart 5.4 - Dementia prevalence across the UK (2009-19)



Source: Alzheimer's Research UK

Mental health

As with disease prevalence, it is hard to find robust data on rates of poor mental health across the UK. Table 5.3 above would suggest that NI is broadly on a par with England for the incidence of mental health conditions, however there is a widely accepted narrative that NI has worse mental health outcomes that in part reflect the legacy of the Troubles. A 2015 report on the transgenerational impact of the Troubles[69] estimated that 28.5 per cent of NI's adult population appeared to have mental health issues and half of those (13.9 per cent or 213,000 adults) appeared to be directly related to the Troubles.

As before, in the absence of comparable measures, we can look at possible proxy indicators of the respective incidence of mental health conditions.

Disability benefits

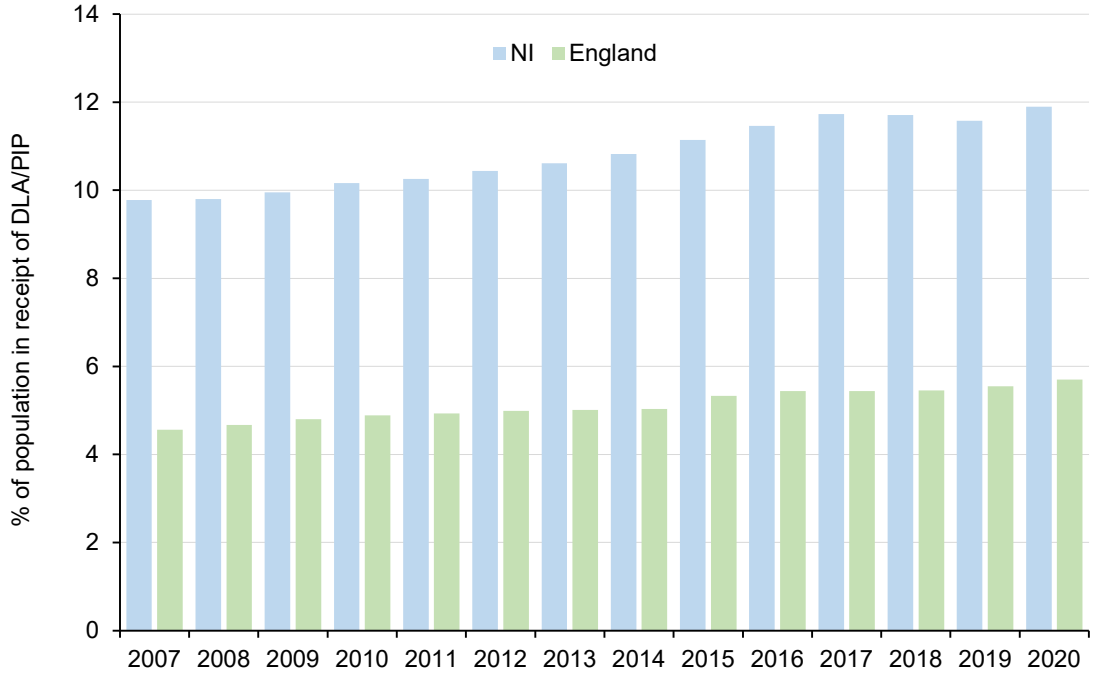
In April 2013, the UK Government replaced the existing Disability Living Allowance (DLA) with the Personal Independence Payment (PIP) for those aged 16 to 64, to help with the extra costs caused by long-term ill health or a disability. Like DLA, PIP provides non-means-tested, non-taxable cash benefits to those in or out of work. But it is assessed against different criteria, with a score-based system relating to help needed with a list of daily living and mobility activities. NI was later than other regions in making the transition to PIP, in June 2016, which complicates the following comparisons slightly.

Overall, NI's uptake of PIP and its predecessor is typically around twice as high as in England as shown in Chart 5.5. In January 2022, there were 1,391 PIP claimants per

[69] https://www.researchgate.net/publication/280933415_Towards_A_Better_Future_The_Trans-generational_impact_of_the_Troubles_on_Mental_Health

10,000 working age population in NI compared to 667 for England, 877 for Scotland and 1,074 for Wales. This means that 14 per cent of the working age population in NI is currently claiming PIP, compared to 7 per cent in England. The main disabling conditions reported in NI are psychiatric disorders (i.e. mental health issues) which make up 43 per cent of PIP claimants in January 2022 (compared to 36 per cent in England), followed by musculoskeletal disease (general) at almost 20 per cent. Because medical evidence forms part of a PIP assessment, this long-term trend suggests that there may be a greater number of people with mental ill health in NI.

Chart 5.5 - Percentage of population in receipt of PIP / DLA in Northern Ireland and England 2007-2020



Source: Department for Communities

The use of DLA data as a proxy for health need was considered as part of Professor John Appleby's 2011 *Rapid review of Northern Ireland Health and Social Care funding needs and the productivity challenge 2011/12-2014/15.*[70] He highlighted the fact that NI had a significantly higher rate of DLA claimants (133 per cent higher than England) than would be expected given the proportion of the population with a self-assessed limiting long-term illness (14 per cent higher than in England). So when calculating the level of health and social care need in NI, he reduced the NI DLA claimant rate in line with research which estimated that one-third of the difference in rates between NI and England was not due to health factors. [71]

Professor Appleby's review also highlighted the fact that while DoH estimated that mental health needs were 44 per cent higher in NI than England, spending on mental

[70] https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/appleby-report-2011.pdf
[71] https://pureadmin.qub.ac.uk/ws/files/513483/Should%20uptake%20of%20state%20benefits%20be%20used%20as%20indicators%20of%20need%20and%20disadvantage%20-%20Health%20Soc%20Care%20Community%202006%20-%20Rosato%20M,%20O_%27Reilly%20D..pdf

health was 10-30 per cent lower (at only 7 per cent of total health and social care budget spend). The main driver for the estimated higher mental health need was the 'psycho-social morbidity index', the proportion of the population with a score of more than 4 from the Short General Health Questionnaire.[72] This was significantly higher for NI than for any of the 150 Primary Care Trusts in England. Professor Appleby argued that "*If this lower spending is a better reflection of actual need [than the survey-based measure], then reducing the mental health relative need measure to reflect lower per capita spending implies an overall relative need of between 6.2 per cent and 7.6 per cent [compared to 11.5 per cent otherwise]*". This is a large impact on the overall estimate of need given mental health's small share of the budget.

Prescriptions

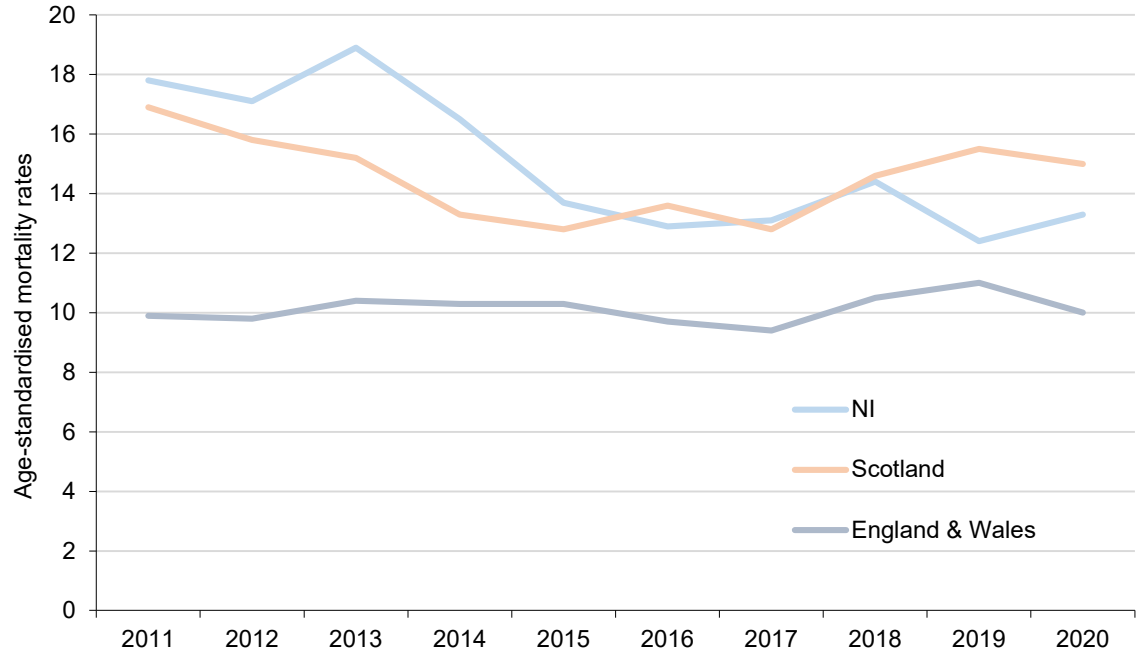
We discuss prescriptions in more detail in Chapter 6. The Nuffield Trust analysis found that NI appears to prescribe significantly more items relative to population size than England, most particularly in relation to nervous system drugs (including those for mental health). Anti-depressants were dispensed to 372,134 people in NI during 2021-22, almost 20 per cent of the population (24.5 per cent of females and 14.5 per cent of males).[73] But a higher rate of anti-depressant use cannot be used to conclude that NI has poorer mental health outcomes than England. It may indicate that mental health conditions are better treated or relate to the differences in prescription charging policies across the two regions. But looking at this in conjunction with the DLA / PIP data does support the received wisdom that NI may have a higher rate of poor mental health than England, but perhaps not to the extent that the headline statistics would suggest.

Suicide

A recent review by NISRA[74] found that NI had an age-standardised rate of 13.3 suicides per 100,000 population in 2020, lower than Scotland's 15.0 but higher than England and Wales's 10.0[75] (Chart 5.6). It is important to note that suicide is a highly complex and sensitive matter and there are multiple factors that can lead to suicide, of which poor mental health is just one. The review highlights that NI's most deprived areas had a suicide rate almost twice that of the least deprived ones. While there is a clear association between deprivation and suicide, the link between suicide and poor mental health is less clear and for this reason suicide rates alone cannot be accurately considered a proxy for the mental health of a population.

[72] The General Health Questionnaire (GHQ) is a self-administered questionnaire for identifying non-psychotic and minor psychiatric disorders. It was first developed by David Goldberg in 1970 as a screening tool to detect those likely to have or be at risk of developing a psychiatric disorder. There are four versions of the GHQ available, differing in terms of the number of items, with the short GHQ-12 (question) version commonly used in surveys.
[73] https://hscbusiness.hscni.net/pdf/Annual%2020-21%20General%20Pharmaceutical%20Services%20Report.pdf
[74] https://www.nisra.gov.uk/system/files/statistics/Suicide_Review_Report.pdf
[75] NISRA note that cross country comparisons will build in differences in different data collection and collation processes in the separate jurisdictions.

Chart 5.6 - Age-standardised suicide mortality rates by country



Note: NI 2015-17 data subject to change following coroner review into deaths of undetermined intent
Source: NISRA

Other physical health indicators

The Health Survey Northern Ireland[76] suggests that fewer NI residents were positive about their **overall level of health** in 2019-20 than in England (with the caution that these surveys are not completely comparable). For example, 71 per cent of the NI respondents stated that they had good or very good general health compared to 75 per cent in England. NI appears to be broadly in line with the other Devolved Administrations, with 72 per cent in Scotland and 71 per cent in Wales.

The Health Survey found a mixed picture on weight problems. 27 per cent of adults in NI were **obese/morbidly obese** in 2019 (28 per cent in England), but a further 38 per cent were overweight (36 per cent in England). The picture was more clear-cut for children, with 12.8 per cent of those aged 4-5 in NI considered to be obese or severely obese in 2017-2020, compared to 9.7 per cent and 9.9 per cent in England in 2018-19 and 2019-20 respectively.[77]

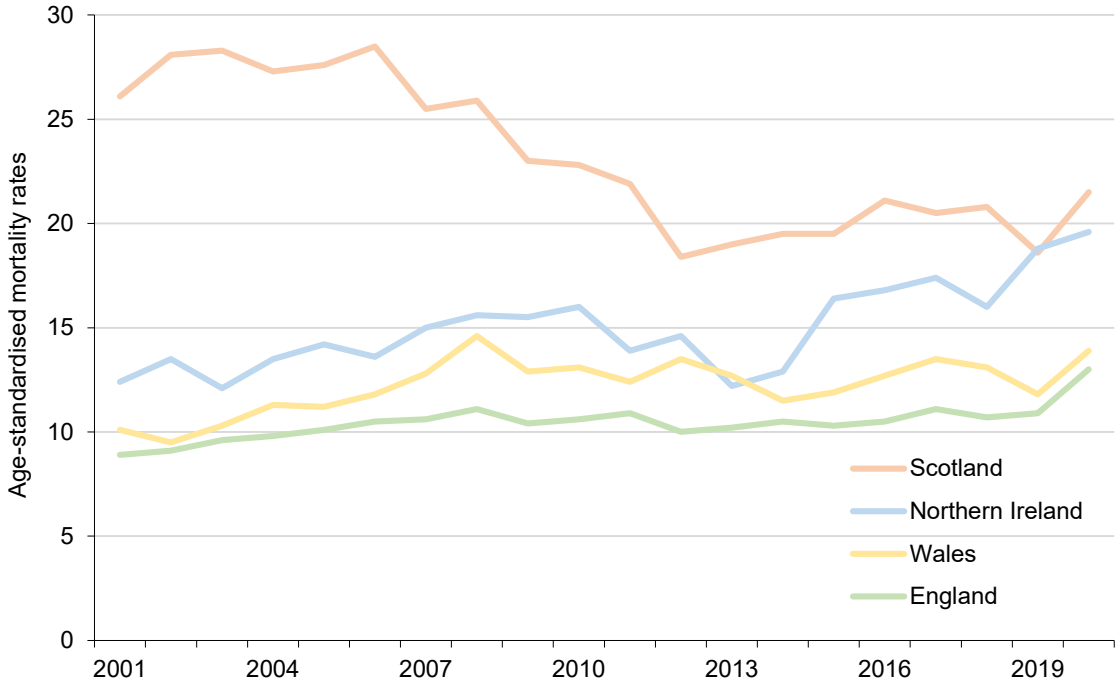
Evidence on relative rates of **smoking** is somewhat mixed. The Health Survey found no significant difference between NI (17 per cent of people smoke), England (16 per cent), Scotland (17 per cent) and Wales (18 per cent). But figures published by the

[76] The Department of Health in Northern Ireland has published results for 2020-21 however this report uses 2019-20 findings https://www.health-ni.gov.uk/sites/default/files/publications/health/hsni-first-results-19-20.pdf to align with the most recent survey in England (2019) https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2019 .
[77] Sources: DoH and https://fingertips.phe.org.uk/profile/national-child-measurement-programme/data#page/4/gid/8000011/pat/159/par/K02000001/ati/15/are/E92000001/iid/90319/age/200/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1

ONS[78] put the proportion smoking in NI at 15.6 per cent, similar to that in Scotland and Wales and higher than in England (13.9 per cent).

As regards excessive drinking, there were 19.6 alcohol-specific deaths (age standardised) per 100,000 people in NI compared to 13.0 for England in 2020.[79] The NI rate had been falling from 2010 to 2014, but has risen since, widening the gap because the rate in England has remained fairly stable. Scotland has historically had a significantly higher alcohol related death rate than the other nations/regions, at 21.5 in 2020, around two thirds greater than the English rate of 13.0. However, the NI rate has been converging in recent years and matched Scotland in 2019.

Chart 5.7 - Alcohol specific death rates across the UK 2001-2020



Source: ONS

The differences in the health indicators set out above reflect differences in expenditure patterns between NI and the rest of the UK. Households in NI spend less on fish, and fresh fruit and vegetables than the UK average but more on cigarettes, soft drinks and take-away meals as well as buns, cakes, biscuits etc.[80] Expenditure on alcoholic drinks in NI is broadly in line with the UK average, perhaps due to a higher rate of temperance in NI offsetting the rates of excess drinking, and/or the purchase of lower priced products.

[78] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/adultsmokinghabitsingreatbritain/2019

[79] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/alcoholrelateddeathsintheunitedkingdom/registeredin2020#alcohol-specific-deaths-by-uk-constituent-country

[80] https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/datasets/familyspendingworkbook3expenditurebyregion Between 2019 and 2021, average weekly household expenditure in NI on fish and fish products was £2.30 (£3.20 UK average) compared with £3.50 for fresh vegetables (£4.60), £4.00 for fresh fruit (£4.20), £5.70 for cigarettes (£3.50), £3.30 on Soft drinks (£2.40), £13.90 on take-away meals (£9.70), £5.10 on buns, cakes, biscuits etc (£4.00) and £9.40 on alcoholic drinks (£9.90).

These indicators point towards some degree of poorer health status in NI in a number of areas, and a need for an increased focus on public health and primary prevention interventions, to address the differentials in outcomes. These behavioural and lifestyle indicators are consistent with the earlier finding that the preventable mortality rate in NI is significantly higher than that in England.

Conclusion

In this Chapter we have considered some of the health characteristics of the NI population, to see if there is evidence that the health of the NI population is worse than elsewhere in the UK. This could be an indicator that there is a greater need for health spending in NI and/or that the health system is less effective.

The lack of comparable data across the UK makes it difficult to draw definitive conclusions. But analysis of measures such as healthy life expectancy, obesity and mortality rates, as well as survey results on behavioural and lifestyle health indicators, point toward poorer health status in NI as compared to England. In particular, preventable mortality is an area where there may be room for improvement for NI. This implies more emphasis on effective public health and primary prevention interventions to encourage healthy behaviours and reduce incidence of disease or other long-term chronic conditions before onset.

A finding of poorer relative health status in NI is not as clearly supported by the (very limited) data on relative rates of chronic disease prevalence and comorbidity. It is hard to find conclusive evidence that poor mental health is a greater problem in NI than elsewhere, as people often claim, but a number of proxy measures, from the numbers of PIP claimants to data on prescription items, point in that direction.

Improvements to statistics and greater data comparability would enable a much more robust analysis of these issues and provide a better sense of the relative health status of the NI population. That might enable better targeting of funding, which is important for the sustainability of future funding arrangements.

6 The efficiency of healthcare delivery

Having considered whether the health characteristics of the NI population may result in higher demand for (and spending on) healthcare, we now examine aspects of health service delivery that may also contribute to NI's higher spend per capita.

In this chapter we explore how the NI health service differs to that in England in various important aspects that affect its cost, such as treatment, prescriptions and staffing. In doing so we draw heavily on the Nuffield Trust analysis. A recurring theme in our discussions with stakeholders is that NI (and its hospitals) are relatively small, and therefore higher costs in part reflect greater difficulties in exploiting economies of scale and specialisation. Given the particular political and practical difficulties that are reputed to be involved in reconfiguring health centres in NI, tackling scale challenges may be even here harder than elsewhere.

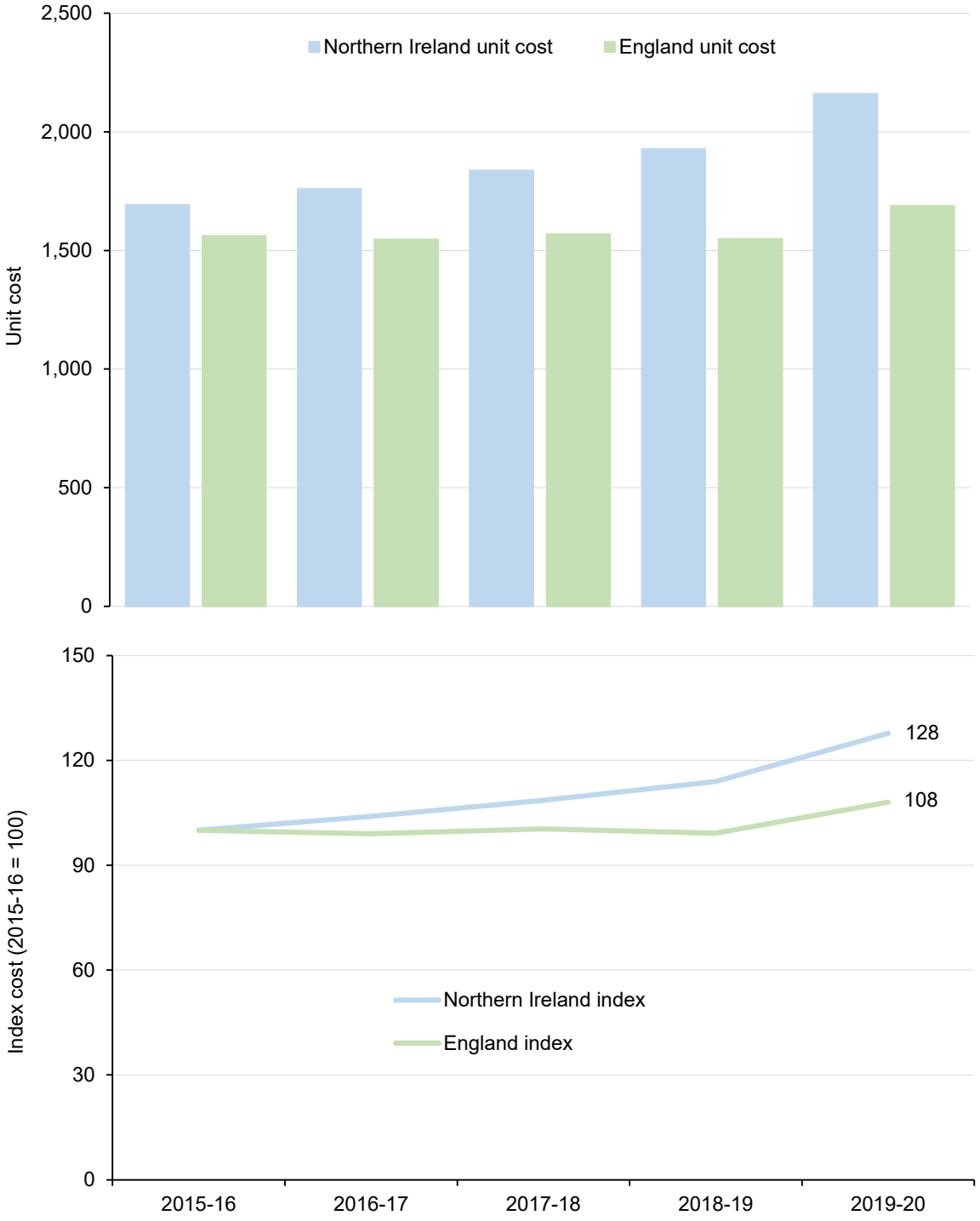
But evidence on current inefficiencies in the system has both negative and positive implications. Negatively, it suggests that future increases in the Block Grant arising from increases in English spending may not stretch as far in NI. Positively, there may be scope to deliver a better service for each pound spent by successfully addressing those relative inefficiencies that are not inevitable for reasons of scale.

In the remainder of the chapter, we begin by looking at the evidence on relative hospital costs, before looking in more detail at two important components of health spending and costs – prescriptions and staffing.

Relative hospital costs

The Nuffield Trust analysis shows at a summary level that acute in-patient care is much more costly in NI than England (Chart 6.1). Looking at the combined average cost of elective and non-elective patient admissions in 2019-20, unit costs were 28 per cent higher in cash terms in NI (£2,161) than England (£1,688). This difference has been growing in recent years, with the average unit cost increasing by 28 per cent in NI since 2015-16 compared to an 8 per cent increase in England.

Chart 6.1 - Unit costs for all patient care episodes



Source: Nuffield Trust using Department of Health and NHS England data

Nuffield reports that the average cost of day cases has also risen more quickly in NI than England (by 25 per cent compared to 11 per cent between 2015-16 to 2019-20), with the average cost of a day case in NI being £901 in 2019-20, 11 per cent higher than the £813 figure in England. Nuffield calculate that if the cost of day cases in NI had risen at the same rate as those in England, they would have cost

£152m rather than the £172m actually spent. The higher level of unit costs in NI has been a longstanding issue with the 2005 *Independent Review of Health and Social Care Services in Northern Ireland* estimating that the unit cost of acute hospital activity (elective, non-elective and day cases) in NI was 6 per cent higher than in England in 2002-03 rising to 9 per cent higher adjusting for differences in case-mix. This implies that the relative performance of NI has deteriorated, not only during the 5 years represented in Chart 6.1 but also over the longer term. The 2005 Independent Review also found that there were significant differences in unit costs between the NI HSC Trusts.

Looking beyond these headline numbers, comparing unit costs and their implications for spending on hospital services between NI and England is not straightforward, thanks among other things to differences in the mix of cases, procedures and treatment practices and the way in which episodes are coded. To get a sense of potential relative inefficiency in the NI system, and its aggregate cost, the Nuffield study identifies the relative unit costs of different types of treatments and the impact of differences in the length of hospital stays, based on data from the NI Department of Health (DoH) and NHS England.

In exploring relative costs of elective and non-elective acute NI hospital admissions that could be matched to near-identical activity in England,[81] Nuffield Trust's analysis found that spending on this hospital activity in NI totalled £1,145 million in 2019-20, just over half of all expenditure on acute services shown in Chart 3.3 and this was the focus of the Nuffield analysis due to data availability. (This is much smaller than the £4 billion quoted for spending on hospital services in NI in Chart 3.2 which is a gross measure including both Resource DEL (including depreciation) plus Capital DEL for both acute and non-acute hospital services, and less RDEL and CDEL receipts.).

Matching NI acute patient care activity at the level of individual treatments or procedures to that in England reveals an excess cost in NI of £254 million (29 per cent). Table 6.1 shows how this total breaks down between elective (i.e. pre-planned) and non-elective (i.e. emergency) care. These two sub-groups are then divided further into elective day cases (when the patient does not stay in hospital overnight) and in-patient cases (when they stay overnight), and non-elective short stay (when the patient stays up to two days) and long stay (where they stay longer than two days). As the Table shows, unit costs are at least 20 per cent higher in NI across all four categories, partly because of longer hospital stays for in-patient and long stay cases ('excess bed days').

Non-elective long stay care is not only the largest of the four components accounting for more than half the total cost, but also that for which the unit cost excess is greatest at 33 per cent. Furthermore, with NI's unit cost excess higher for non-elective care (33 per cent) than elective care (25 per cent) and the balance of hospital activity shifting from elective to non-elective care across the UK, the overall cost differential with England would continue to increase if this trend persists.

[81] Nuffield Trust examined admissions which had been coded according to a precise procedure or treatment that could be matched to near-identical activity in England.

Table 6.1 - The cost of in-patient and daycase hospital care in NI, 2019-20

Hospital activity	Total costs[1]	Total costs at English unit costs	£ million 'Excess costs' (cash)	'Excess' costs (per cent)
Elective: day case	171	141	30	21
Elective: in-patient	231	185	46	25
of which: excess bed days			*13*	
Non-elective: short stay	131	104	26	25
Non-elective: long stay	613	461	152	33
of which: excess bed days			*95*	
Total	**1,145[2]**	**891**	**254**	**29**

Note[1] Northern Ireland's total costs have been adjusted to include 'excess bed day' costs to make commensurate with English reporting of HRG costs

Note[2] Total NI spend on admitted patient care excludes around £120m of elective and non-elective care which relates either to obstetrics or is uncoded, as this activity cannot be satisfactorily matched to England costs.

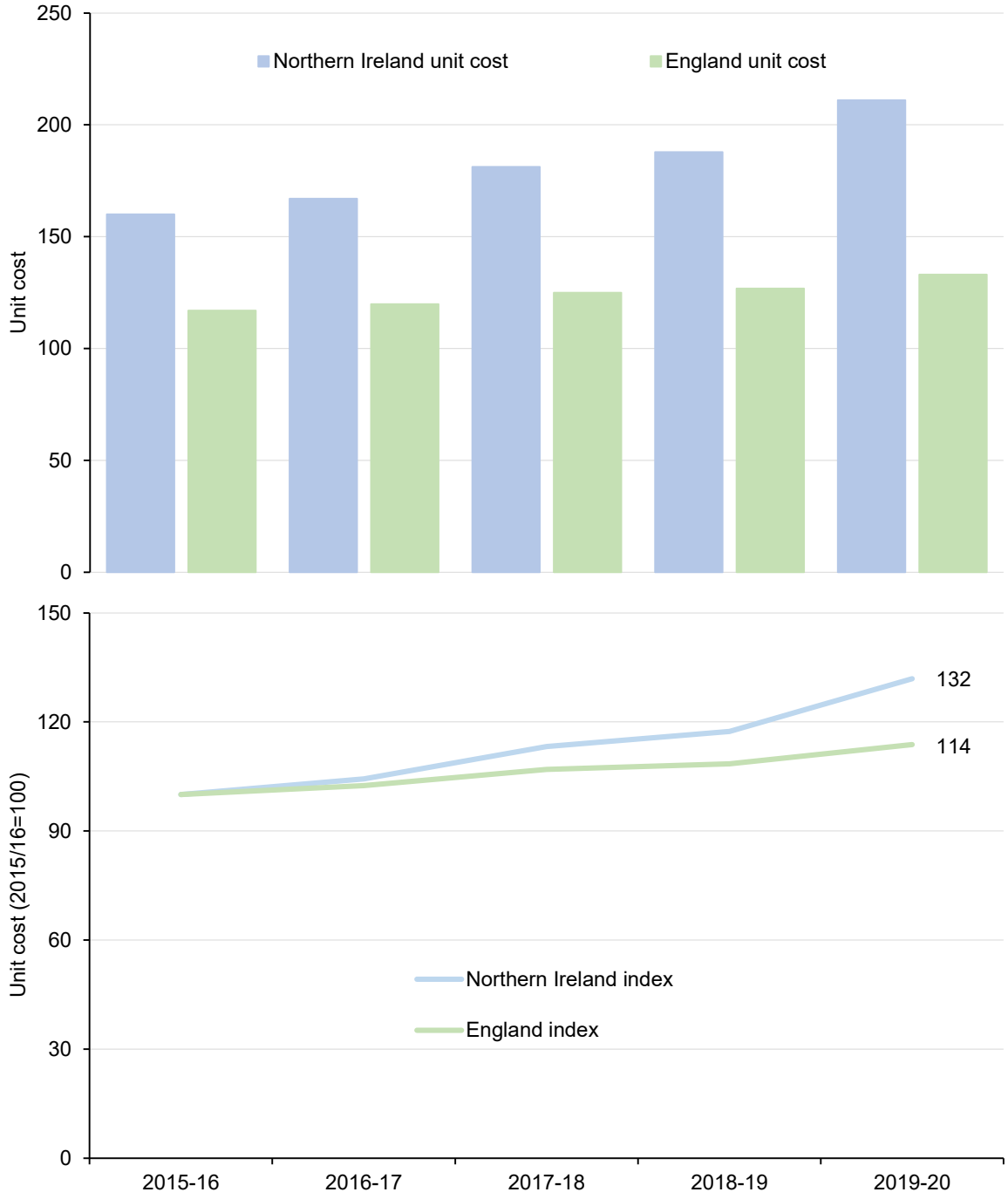
Source: Nuffield Trust

Continuing to use this equivalent case mix, Nuffield Trust also found further potential excess costs in NI driven by a tendency to keep patients in hospital for longer. The analysis found that the 10 per cent lower non-elective short stay ratio in NI added a further £35 million to non-elective costs, and the 6 per cent lower elective day case ratio added a further £19 million to elective costs compared to England. This increases the total estimated excess cost of £254 million noted in Table 6.1 to around £310 million (or around 37% higher than the England equivalent), in the sense that this money could be saved if the NI health system delivered the same treatments at the English unit costs.

Turning to out-patient care, Nuffield shows that costs here have also been rising more quickly in NI than England (by 7 per cent per annum versus 3 per cent since 2015-16) and have reached £211 per out-patient attendance in NI compared to £133 in England. Nuffield's analysis suggests that if NI out-patient volumes and activities were completed at England's unit costs, total NI expenditure on out-patient treatment in 2019-20 would have been £298 million compared to £400 million actually spent.

This implies that the case-mix adjusted unit cost of out-patient activity in NI is 34 per cent higher than in England and that the total unit cost of hospital activity (in-patients, out-patients and day cases) is 36 per cent higher. The expenditure included in the unit cost analysis conducted by Nuffield Trust was equivalent to under one third of total NI health spending of £4.9 billion in 2019-20. If unit costs were of a similar magnitude higher than England in other parts of the NI health sector there would be the potential for NI health activities and volumes to be delivered at a £1.3 billion lower cost if they were completed at England's unit costs. Even if the unit cost difference was lower in the other parts of the NI health sector, at around 10 per cent, then there would be the potential for services to be delivered at a £0.8 billion lower cost, although this would take many years to achieve. This funding would then be available to offset the impact of slower growth in NI health spending compared with England as set out in Chapter 4 or to provide additional healthcare for patients.

Chart 6.2 – Unit costs of outpatient activity



Source: Nuffield Trust using Department of Health and NHS England data

Lengths of hospital stay

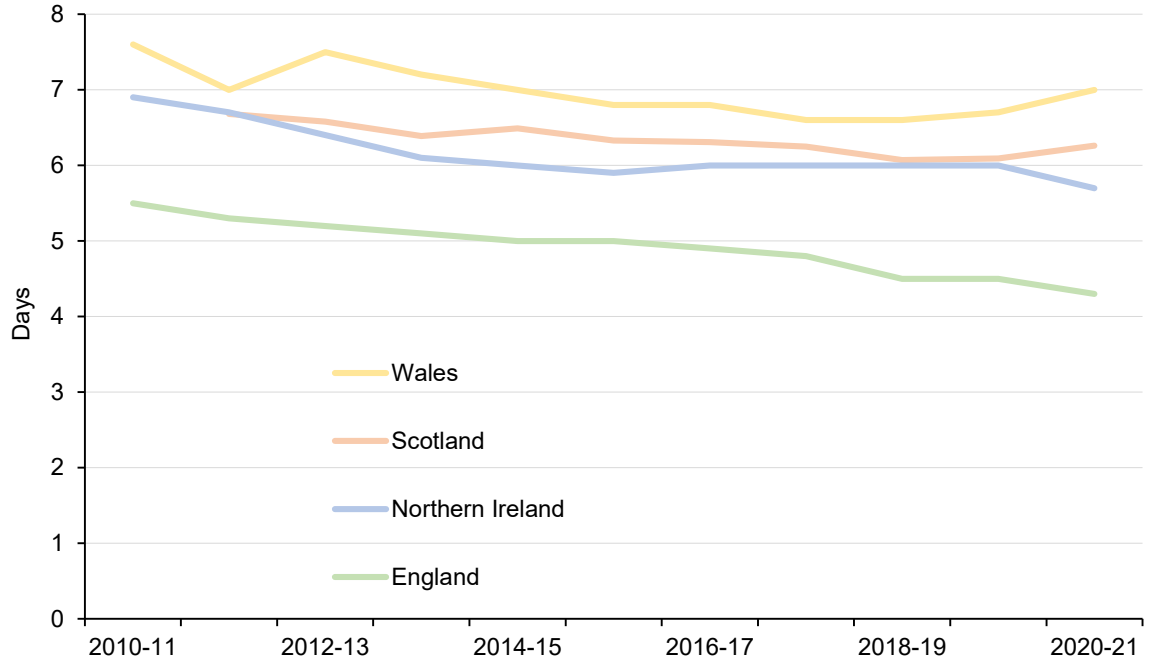
One important source of excess cost identified by the Nuffield study is excess bed days, where patients' length of stay in hospital is longer than expected. For the last year where comparable data is available (2017-18), excess bed days accounted for 10 per cent of all admitted patient costs in NI, compared to only 5 per cent in England. NI and England both show higher excess bed costs for non-elective

patients than elective, but with a marked difference in their respective proportions of all non-elective costs. In NI, excess bed days for non-elective patients account for 13-15 per cent of total non-elective costs (2015-16 to 2019-20), compared to 7 per cent in England (2015-16 to 2017-18). As noted earlier, all other things being equal, these cost differentials will tend to increase pressure on the overall sustainability of the NI health and social care system. For elective excess bed days, the differential is less stark: 3 per cent in NI, and 2 per cent in England.

The average length of stay can be used as an indicator of hospital performance and efficiency. Nuffield found that although the average length of stay in NI has shortened from 7 days in 2010-11 to 6 days in 2019-20, it is still 1.5 days (i.e. a third) longer than in England (Chart 6.3). Nuffield estimate that if the average length of stay was reduced to match that in England, NI hospitals would be able to accept a further 200,000 admissions per year. If a quarter of these were for planned care, the NI admissions waiting list of 120,000 could in theory be eliminated within two years. But reducing lengths of stay has to be considered cautiously and balanced with any risk of adverse impact on health outcomes. At the same time the gap between NI and England in terms of length of stay appears to have increased over time with the 2005 Independent Review estimating it to be only 6 per cent higher in NI in 2003-04, mainly due to improvements in the 1990s. In terms of bed occupancy rates, Nuffield also point to a consistent lower occupancy rate in NI compared to England (excluding 2020-21 when occupancy rates were pushed up by the Covid pandemic), suggesting that there is scope for NI could use beds more intensively. Nuffield do point towards risks with this approach, citing evidence from the National Institute for Health and Care Excellence (NICE) that higher bed occupancy may be linked with higher mortality.[82]

[82] https://www.nuffieldtrust.org.uk/research/future-funding-and-current-productivity-in-northern-ireland-s-health-and-social-care-system, Page 52

Chart 6.3 - Average length of stay of patients in hospital



Source: Nuffield Trust using Department of Health, Public Health Scotland NHS Digital and NHS Wales data

In 2021-22, NI had 5,804 hospital beds,[83] approximately 3 for every 1,000 people compared to 2.1 for every 1,000 people in England. It should be noted however that the allocation of beds continues to change with acute care seeing an increasing trend over the last 5 years offset by a decreasing number of beds for maternity and child health, elderly care, mental illness and learning disability care.

Scale

Hospitals in NI (and Scotland) generally serve a smaller population than their counterparts in England, reflecting in part their more rural populations. England is home to 84 per cent of the UK population but only 71 per cent of its hospitals. The proportion of UK hospitals in Scotland and Wales is significantly greater than their populations, whereas NI has about 3 per cent of both the population and the hospitals.[84] NI has a greater number of hospitals per capita than England, but Scotland and Wales have even more.

NI's population means that the volume of procedures across individual hospitals may not reach a high enough level to maximise economies of scale. This has been acknowledged in a number of health reviews and plans, and DoH is working towards a regional service delivery model aimed at centralising high volume, low capacity work through elective care centres to help reduce waiting times for planned care.[85] Implementing this will involve additional costs in the near term.

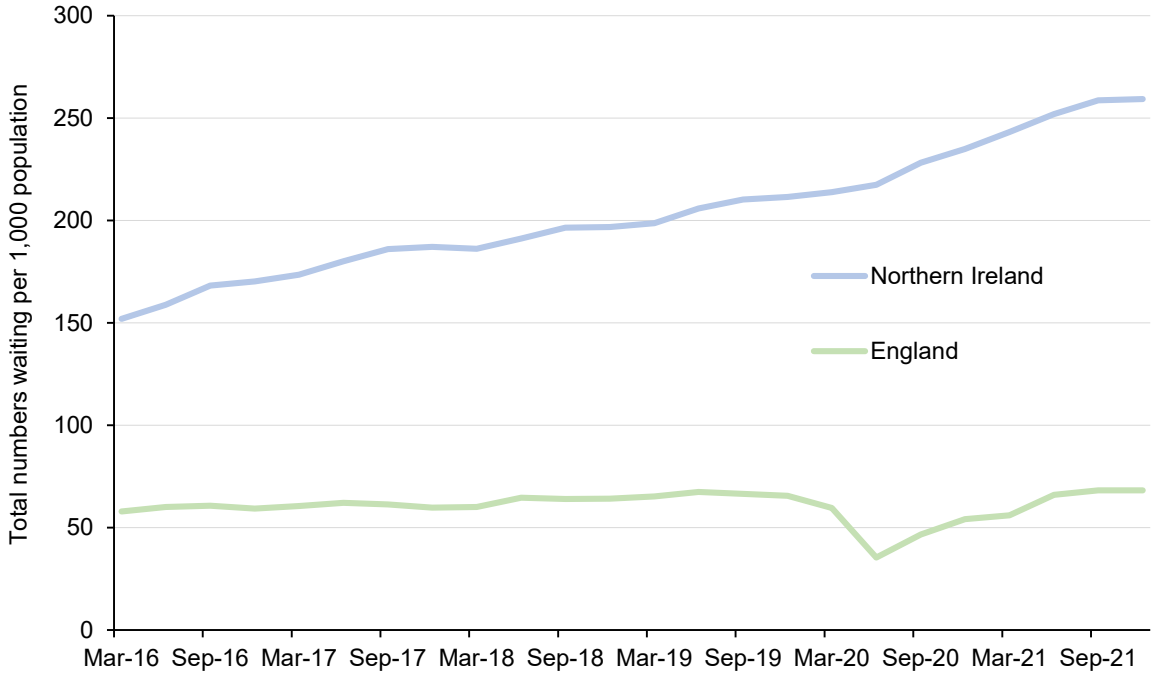
[83] https://www.health-ni.gov.uk/sites/default/files/publications/health/hs-inpatient-day-case-stats-21-22.pdf
[84] https://www.interweavetextiles.com/how-many-hospitals-uk/
[85] https://www.health-ni.gov.uk/publications/regional-service-delivery-model

In terms of the potential benefits, the unadjusted unit cost of non-elective long stay admissions ranged from £2,240 to £8,240 by NI hospital provider in 2019-20 while the unit cost of elective inpatient admissions ranged from £1,620 to £7,120.[86] If, at the very minimum, all providers at least matched the 2019-20 NI average unit cost, it is estimated that the cost of non-elective long stay admissions would be 12 per cent lower with the cost of elective inpatient admissions 16 per cent lower.

Waiting lists

Waiting lists are arguably the most visible and politically salient indicator of the pressure on the NI health service, be they from inadequate funding and/or unnecessary inefficiencies. The headline figures suggest that people in NI are now four times as likely to be waiting for planned care as those in England. But the comparison is clouded somewhat by differences in how the data are collected.

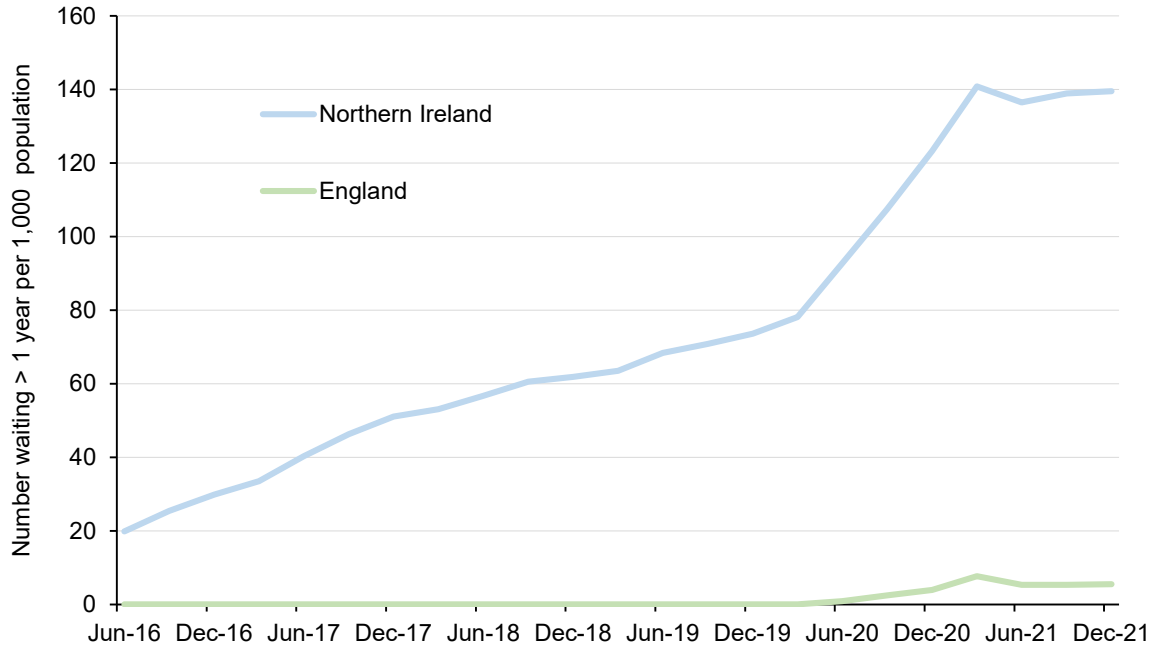
Chart 6.4 - Number of people waiting for elective surgery



Source: Nuffield Trust using NHS England and Department of Health data

[86] https://www.health-ni.gov.uk/publications/hrg-unit-costs-by-provider

Chart 6.5 - Number of people waiting more than a year for elective surgery



Source: Nuffield Trust using NHS England and Department of Health data

Chart 6.5 shows that, by December 2021, 53 per cent of those waiting for a first consultation were waiting for more than a year compared to only 5 per cent in England. The percentage in NI jumped in response to the Covid outbreak but was already much higher and on a rising trend beforehand. NI also has the longest waiting times for emergency care, with the proportion of patients waiting more than four hours in A&E consistently higher than elsewhere in the UK and currently over 45 per cent in NI compared to 30 per cent in England.

Prescriptions

As another potential source of NI's higher hospital costs, Nuffield has examined the drugs budget. This is affected by the volume prescribed, their unit cost (which partly reflects willingness to prescribe generic rather than branded versions) and therapeutic substitution (using more specific and often more expensive products).

HSC statistics show that around 43.2 million prescription items were dispensed in NI in 2021-22, a 4 per cent increase from 2020-21, but very similar to dispensing levels for 2019-20, prior to the Covid-19 pandemic.[87] But the total cost of £456.2 million was only 0.4 per cent higher than in the previous year, lower than the percentage increase in the number of items dispensed.

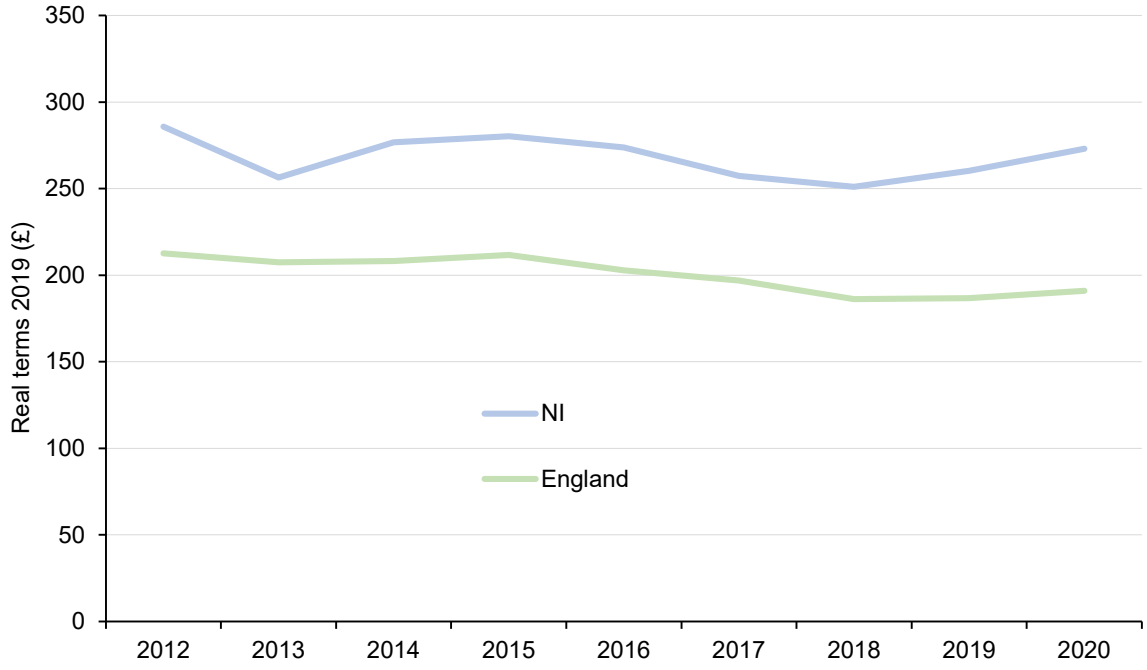
Prescription items relating to the central nervous system (including those for mental health conditions) accounted for one quarter (25 per cent) of the total ingredient cost in 2021-22, broadly similar to the previous year. As we saw in

[87] https://hscbusiness.hscni.net/services/3176.htm Tables 2.1a and 2.1b

Chapter 5, approximately 20 per cent of the NI population received anti-depressant medication during 2021-22, and around 25 per cent in the most deprived areas.[88]

As noted in Nuffield's report, in 2020, NI's pharmaceutical spend per capita was 43 per cent higher than that in England's, a difference which has remained relatively stable over the past decade, as shown in Chart 6.6. NI's average cost per prescription was also considerably higher than England's, at £9.49 compared to £7.79. Nuffield's analysis suggests that the significantly higher spend is due to a higher rate of prescribing, possibly combined with a more expensive mix of drugs, rather than a higher unit cost in prescribing the same products.

Chart 6.6 - Per capita spending on drugs



Note: Figures relect 'prescribing costs' plus 'pharmaceutical services for England
Source: Nuffield Trust using Department of Health and Department of Health and Social Care data

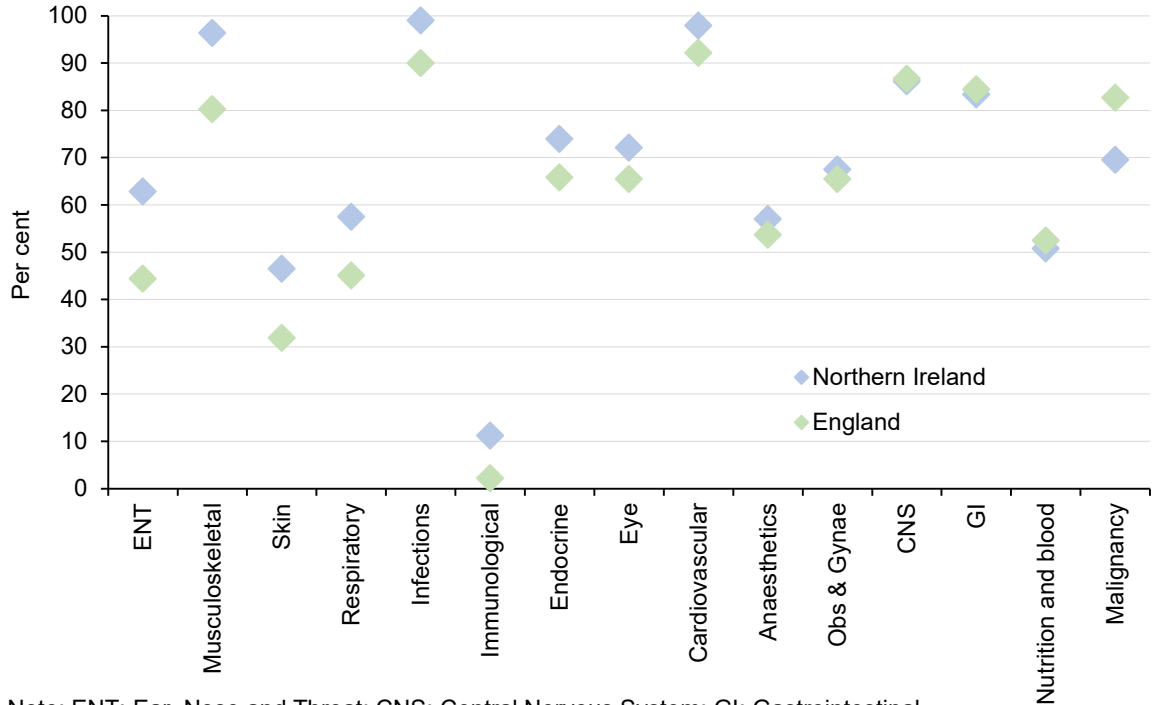
Nuffield cited HSC Statistics showing that the number of items prescribed per head of population in 2020 was 12 per cent higher in NI than in England.[89] NI appears in particular to prescribe more nervous system drugs, including those for mental health. This is consistent with the (not entirely conclusive) evidence cited in the previous chapter that mental health problems are more prevalent in NI than elsewhere in the UK in part because of the legacy of the Troubles. But comparing volumes meaningfully is difficult as measures used across liquid and solid drugs of different types are counted differently across the two countries, and prescriptions may also be for different amounts of drugs. An NI Audit Office report in 2014[90]

[88] https://hscbusiness.hscni.net/services/3176.htm Tables 3.2b and 3.4b
[89] https://hscbusiness.hscni.net/services/3176.htm Table 2.11d
[90] https://www.niauditoffice.gov.uk/files/niauditoffice/media-files/primary_care_prescribing-2.pdf

found that GPs in NI wrote prescriptions for larger volumes of some of the roughly equivalent and more expensive drugs (e.g. statins) than GPs in the rest of the UK.

A key indicator of drug budget efficiency is the proportion of prescribed medicines which are generic as opposed to their branded equivalents, which are chemically identical but come at a higher cost. As noted in the Nuffield report, the UK as a whole is a relatively high user of generic medicines and a comparison of NI and English prescription patterns in November 2021 showed a slightly greater proportion of generic medicines being prescribed in NI, as shown in Chart 6.7. The current situation represents a significant improvement on that reported in the 2005 Independent Review which found that 41 per cent of prescriptions dispended in NI were for generic drugs compared with 55 per cent in England. Looking at the amount of money spent on generic versus branded drugs in each system, Nuffield concluded that there was relatively limited scope for saving money in NI by further increasing generic prescribing substitution alone, but that this is unlikely to close the gap with England. The Nuffield report in any event warned that higher average prescription costs could reflect to some extent a more clinically appropriate mix of drugs being prescribed, in other words that they result from a stronger focus on 'therapeutic substitution' in NI. This needs to be set in the context that expenditure on prescription drugs in NI could be £75 million lower each year if the NI average cost per prescription matched England.

Chart 6.7 - Generic prescribing as a proportion of all prescribing

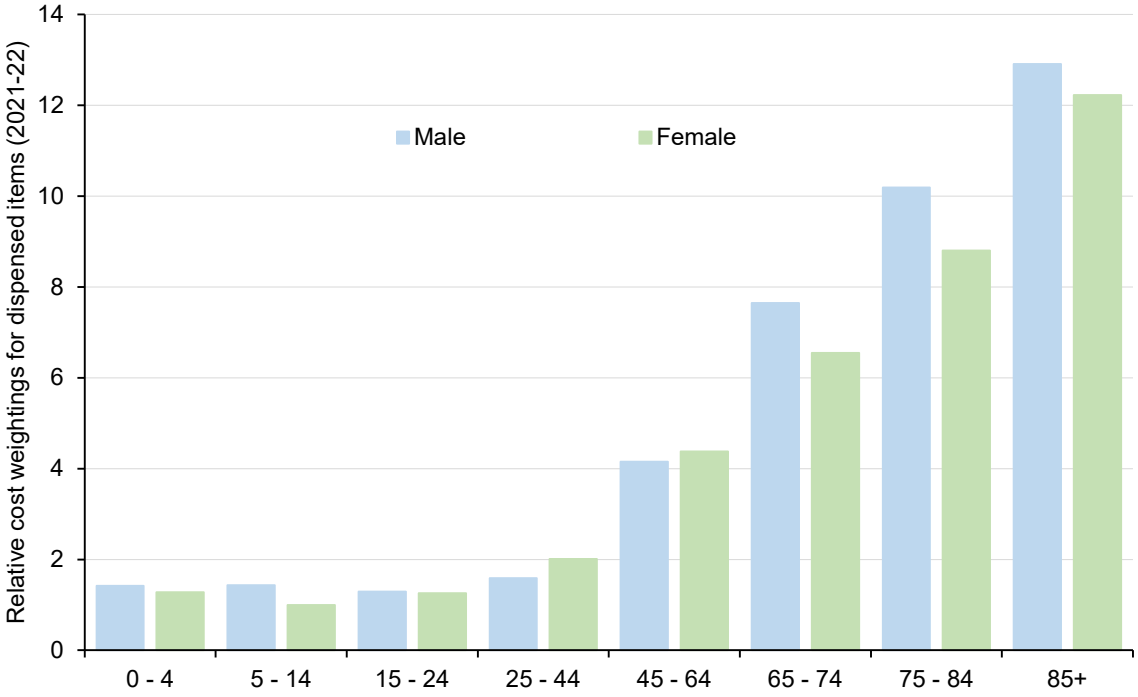


Note: ENT: Ear, Nose and Throat; CNS: Central Nervous System; GI: Gastrointestinal
Source: Nuffield Trust using Health and Social Care Board and NHS Business Services Authority data

As we have noted in various reports, the absence of prescription charging in NI is an example of super-parity – where policy is more generous and expensive than in England. But this is unlikely to be a significant contributor to cost differences, as in practice the vast majority of prescriptions dispensed in England are also provided free of charge (around 90 per cent in 2018) due to various charge exemptions. This relative generosity costs the Executive about £20 million per year.

Looking forward, NI is projected to have an ageing population compared to England which should put further upward pressure on prescription spend. For example, NISRA calculate that in 2021-22 a male aged 85+ will typically have a cost index value[91] 12.9 times higher than a female aged 5-14[92] as shown in Chart 6.8.

Chart 6.8 - Relative cost index values for dispensed items by age and gender, 2021-22



Source: General Pharmaceutical Services Annual Publication 2021/22

The Nuffield report argues that a further review conducted by a team qualified to determine which prescribing options are most effective and efficient could help to identify whether NI could reduce its higher spend without negatively affecting patient care. If so, the gains could be significant: NI would have spent (at least) £165 million less in 2019-20 if its prescribing cost per head was the same as in England.

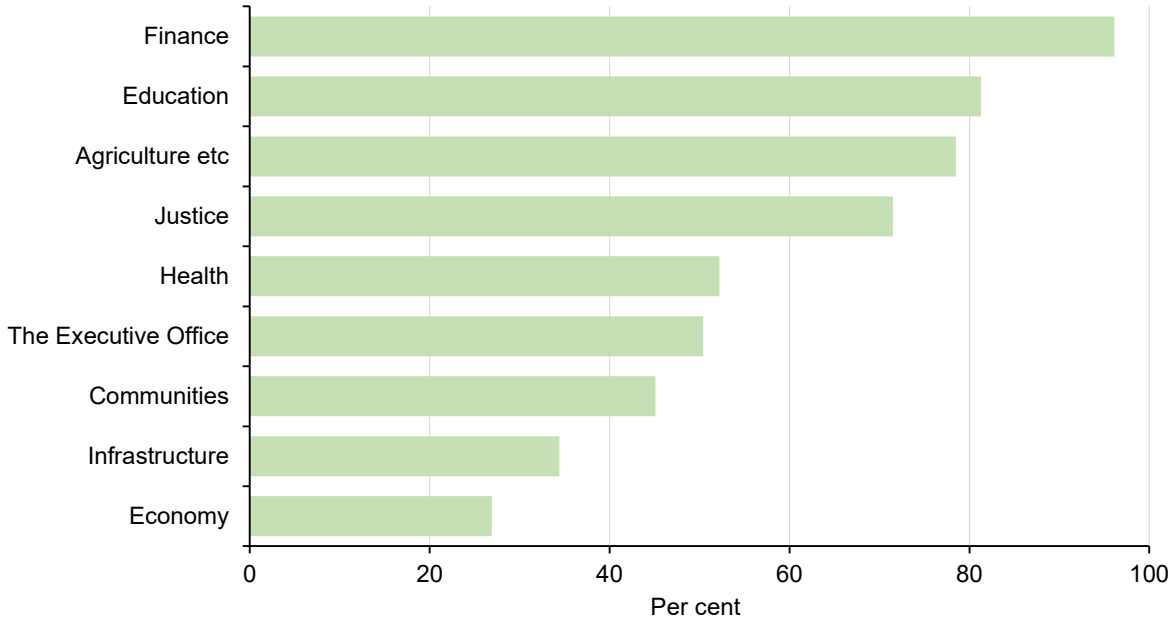
[91] The relationship between age/gender and prescribing cost can be examined through the use of a relative cost index. The index values are calculated by dividing the total ingredient cost of items dispensed to each age and gender group by the equivalent mid-year population estimates.

[92] https://hscbusiness.hscni.net/pdf/General%20Pharmaceutical%20Services%20Report_2122.pdf

Staffing

Staffing is the main cost for any health service, although many other NI departments' staff costs are proportionally higher. Chart 6.9, shows that DoH spent just over half of its non-ringfenced resource budget on staffing in 2019-20[93] and this was the case each year from 2016-17 to 2020-21 so is an important factor in future sustainability.

Chart 6.9 - Pay as a proportion of non-ringfenced RDEL spend for NI departments, 2019-20



Note: DoF is higher than other departments as it brings in receipts on shared services which score as economic category B0102 - Sale of goods and services
Source: Department of Finance

Comparing staff numbers for many groups in the NI health system to those in the rest of the UK is impossible in aggregate because of the integration of health and social care services in NI, which makes it unclear to which category many staff should be allocated. But Nuffield did look at particular sectors of the system and found, for example, greater numbers of medical and dental staff, GPs, and registered nurses and midwives[94] per 1000 population in NI than in England. This would suggest a larger workforce per capita in NI overall, but caution is still required as the numbers do not compare whole time equivalents or adjust for the mix of grades. In September 2021, the full-time equivalent number of people directly employed in the NI health and social care workforce (all HSC organisations) was 63,666 (excluding bank and domiciliary care staff), or 34 full time equivalent, directly employed HSC staff per 1000 population (Table 6.2).

[93] We use 2019-20 here to avoid the possibility of presenting a distorted picture due to abnormal Covid-related spending by departments.
[94] Registered nurses and midwives does not equate to the number of currently practising or employed nurses and midwives

Table 6.2 - Full time equivalent staff employed in NI HSC organisations in September 2021

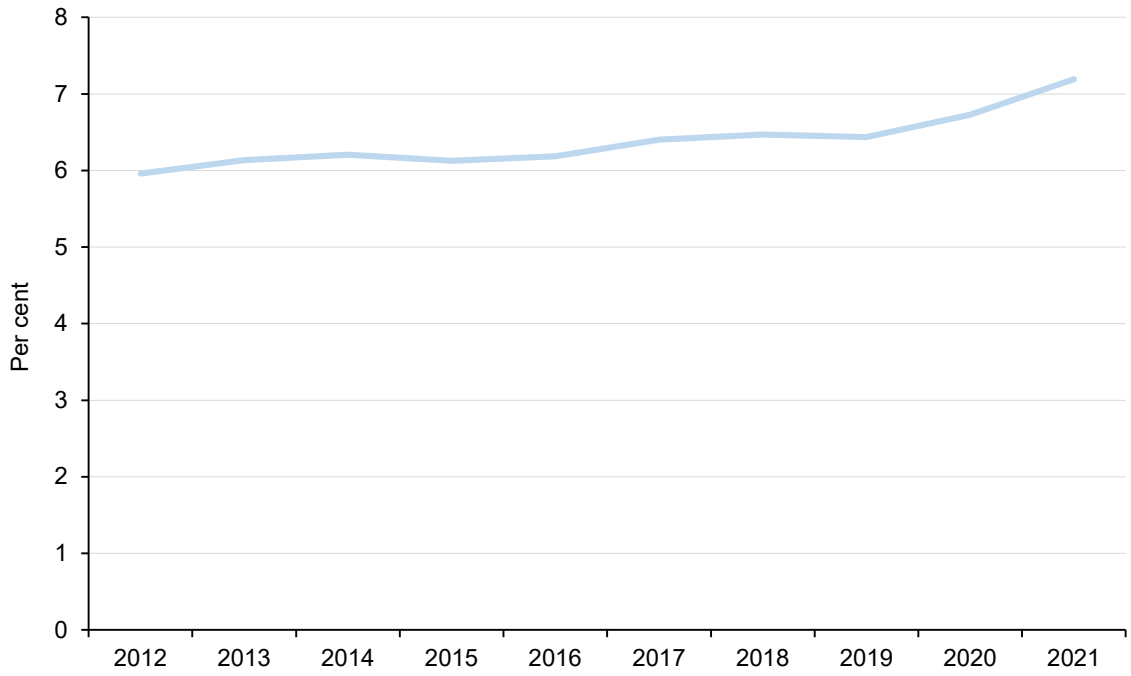
Staff group	September 2021
Registered Nursing & Midwifery	16,450
Admin & Clerical	12,549
Professional & Technical	9,473
Social Services (excluding Domiciliary Care)	8,274
Support Services	5,224
Medical & Dental	4,932
Nurse Support Staff	4,651
Ambulance	1,321
Estates Services	793
Total	**63,666**

Note: staff numbers are for directly employed HSC staff, excluding bank and domiciliary care staff

Source: Department of Health

Nuffield present data from the NI workforce census[95] showing that around 1 in 14 of NI's economically active population (including the unemployed) are directly employed in health and social care (Chart 6.10). This excludes bank and domiciliary care staff, and those in the independent sector. The Quarterly Employment Survey shows that approximately 12.5 per cent – 1 in 8 – of QES employees were involved in health and care activities in 2021 Q4, up from 10.3 per cent in 2001 (Q4).[96] Chart 6.10 shows a marginally bigger increase since Covid-19, which could be temporary.

Chart 6.10 - Health and care staff as a share of all economically active

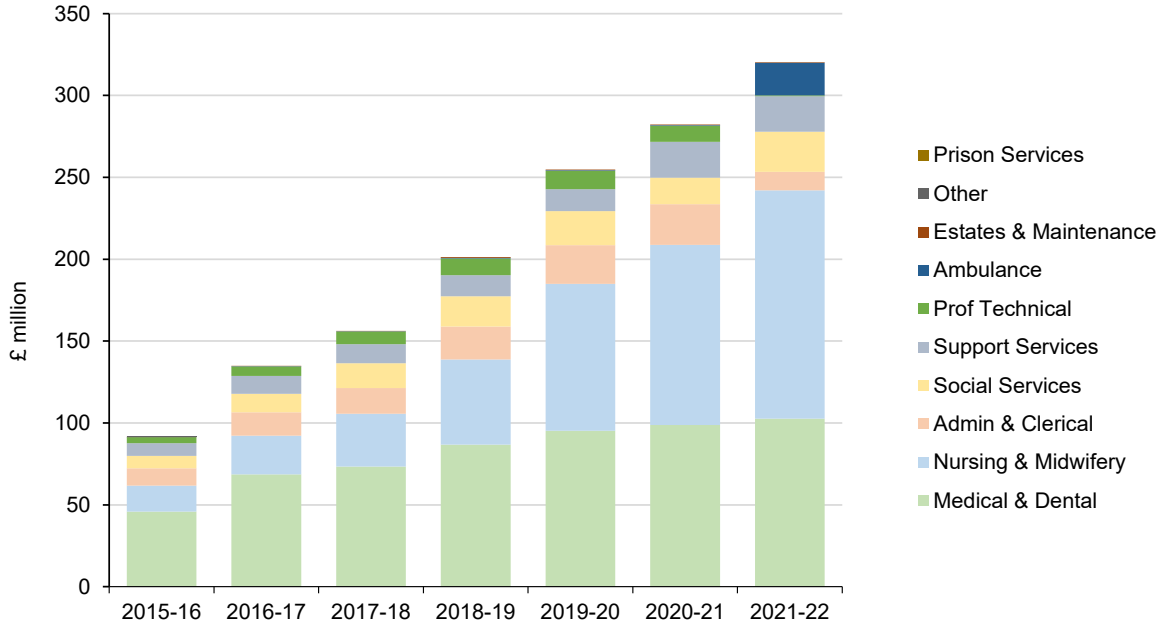


Source: Nuffield Trust using NISRA and Department of Health data

[95] https://www.health-ni.gov.uk/sites/default/files/publications/health/hscwc-march-21.pdf
[96] https://www.nisra.gov.uk/system/files/statistics/20221_table_5.10.xlsx.xlsx

A number of health stakeholders told us that funding was increasingly less of a constraint than the availability of trained staff. They wanted a more strategic approach to the training and education of healthcare professionals and longer-term workforce planning - including a move away from temporary injections of funding that can only be used on temporary hires. Chart 6.11 shows increasing spend on HSC agency staff over time, accounting for an increasing proportion of the overall DoH paybill[97] (Chart 6.12). This has implications for sustainability as daily rates for agency staff can be considerably higher than for permanent staff.[98] Agency staffing can increase flexibility and help fill rotas at times of high demand, but it also complicates pay cost control in the long run.

Chart 6.11 - Agency spend by category

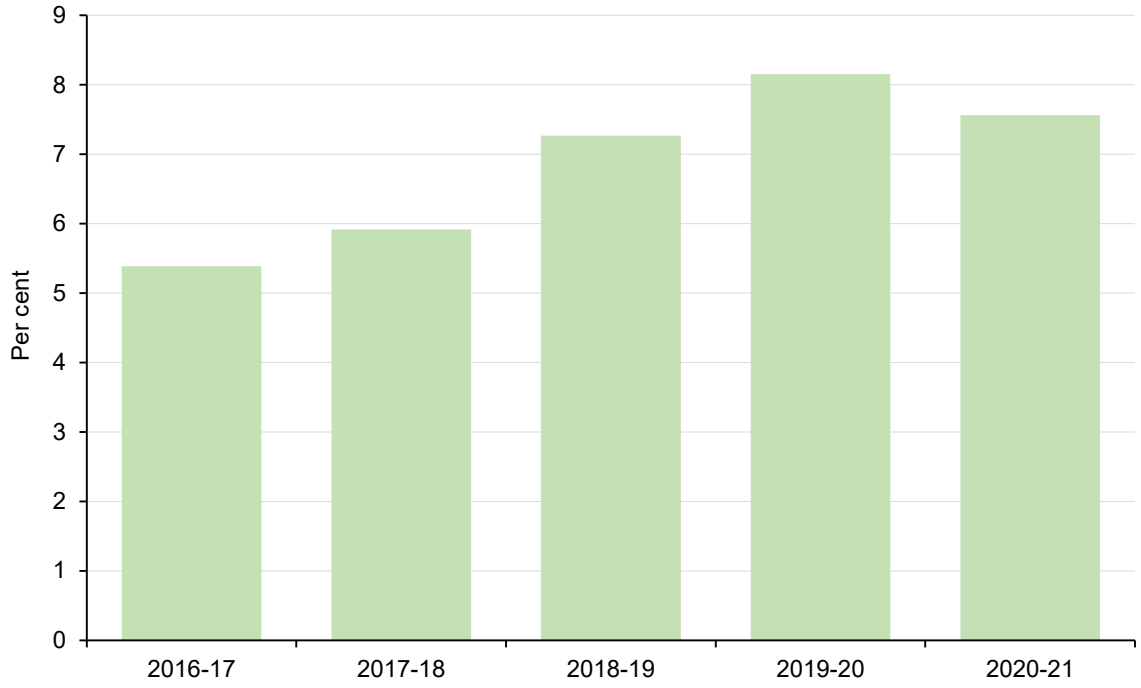


Source: Department of Health

[97] Some staff costs not included in DoH paybill for example capitalised staff costs or staff costs charged to specific ringfenced projects.

[98] https://www.nurses.co.uk/blog/a-quick-overview-of-nurses--salaries-in-the-uk-in-2022/#agency

Chart 6.12 - Agency spend as a proportion of total spend on pay by Department of Health



Source: Agency spend Department of Health and Total pay Department of Finance

The Nuffield report notes that DoH does have a strategy to increase GP staff, quoting an increase of training places from 65 in 2015-16 to 121 in 2022-23. This may begin to address stakeholder concerns around longer-term workforce planning.

At the same time, it is important to note the progress which has been made over the past decade with the number of Whole-time Equivalent staff in the Health and Social Care workforce increasing by 12,000 or 23 per cent between 2012 and 2022. The number of Registered Nurses and Midwives increased by 21 per cent over this time with a 27 per cent increase in Medical & Dental staff. In comparison, the number of inpatient admissions and day cases increased by only 3 per cent between 2009-10 and 2019-20 while the number of outpatient attendances fell by 6 per cent. This is consistent with the increase in unit costs shown in Chart 6.1 and highlights the need to ensure that the provision of additional resources translates into additional activity. Outside of the Health Social Care workforce the number of independent GPs increased by 21 per cent between 2012 and 2022.

Conclusion

In this chapter we have drawn heavily from the research conducted for us by Nuffield Trust which concludes that, while acknowledging evidence of greater need in NI, there are a number of inefficiencies in the NI health and social care system. This seems to be widely accepted among both official and outside stakeholders.

These inefficiencies may in part be explained by lack of economies of scale, where NI has smaller hospitals performing a wider range of activities than in England. The issue of scale is less relevant in explaining why unit costs have risen at a faster rate

in NI than England. Creating more centres of excellence seems a sensible response and plans to develop elective care centres in NI were set out by DoH in 'Health and Wellbeing 2026 Delivering Together'. DoH has also published a policy statement proposing the establishment of a regional service delivery model.[99]

NI has much higher waiting lists than England yet appears to have more medical staff per person. This would appear to be prima facie evidence of greater relative inefficiency. NI has more beds per head of population, and the average stay in hospital is 1.5 days longer in NI than England, with the amount spent on unexpectedly long stays in NI twice that in England. However, as noted in Chapter 5, NI is on a par with England in terms of treatable mortality rates, a key measure of quality. While it is clear that NI needs to increase the efficiency of bed usage in its health system and tackle the growing waiting list issue, it must try to do so in a way that retains good performance and improves on it where it can.

We have also seen an increase in health and social care staffing levels over the past decade, and in particular increasing use of (generally more expensive) agency staff.

The drugs budget is significantly higher in NI than England per head. This seems to reflect the fact that GPs prescribe more items (especially anti-depressants) and more expensive items, rather than that the NI system pays significantly more for the same drug than the English (for example this could happen if there were much greater reluctance to prescribe generic drugs in NI, which does not seem to be the case although there may be some limited savings to be made here). The Nuffield report notes that a further, more detailed review conducted by a team qualified to determine which prescribing options are most effective and efficient could help to identify whether NI could reduce its higher spend without negatively affecting patient care.

Ensuring greater efficiency across the system and using this to help address waiting lists would be a win-win for NI. Otherwise ever-growing waiting lists will increase the risk that people who would have initially been considered elective become more expensive non-elective admissions, exacerbating NI's cost problems even further.

[99] https://www.health-ni.gov.uk/publications/regional-service-delivery-model

7 Health spending in the long term

For any government or administration, the outlook for health spending over the long term depends on the budget that it is likely to be available to spend in total and on the competing demands on it from other public services. At the end of the day, these decisions are political ones – constrained by the administration's external funding (in the case of a body like the Executive that receives grant income from central government) and its ability and willingness to raise tax revenue and/or borrow.

Governments in the UK and elsewhere have chosen to accommodate increased spending on health as a share of national income in recent decades and pressure from public demand and rising costs is likely to continue pushing in the same direction. But this cannot go on forever. At some point rising health spending would crowd out other public services to an unacceptable degree within the budget or require unacceptable levels of tax-raising and borrowing to increase the budget.

In practice, the ability of the NI Executive to accommodate future demands for higher health spending will depend primarily on how far the UK Government decides to do so, as changes in health spending per head in England increase the NI Block Grant by broadly the same amount via the Barnett formula. And the Executive has relatively little ability to top its Block Grant income up as its borrowing and tax raising powers are tightly constrained.

We have argued that the sustainability of the NI public finances can be interpreted in terms of sufficiency – in other words, whether the Executive is likely to have the resources to deliver a quality and quantity of public services broadly equivalent to that which the UK Government chooses to fund in England (taking into account any need for greater spending per head to achieve that). Taking that approach, sustainability depends on where spending stands currently relatively to need, how efficiently spending is converted into activity and outputs, whether the Block Grant will rise in line with English spending and whether demand and cost pressures are likely to be greater over time in NI than in England or other parts of the UK. In most jurisdictions health is the area where such pressures are thought most significant, hence our focus on it in this report. But whether they are accommodated or not is a political decision depending on many other factors.

In this chapter we examine:

- The long-term **drivers** of health spending in most administrations
- Long-term projections of health spending for the **UK and the Republic of Ireland**
- Long-term projections of health spending in **NI and the financial implications for the NI Executive**.

Long term drivers of health spending

Health spending has been rising in the UK in recent decades, both in absolute terms and as a share of the economy (where it has increased from 4.0 per cent of GDP in 1970 to 9.9 per cent in 2019 before rising further to 11.9 per cent in 2021 due to Covid-19[100]). This reflects a general trend across the industrialised world, with the extreme example being the United States of America (USA) where health spending has increased from 6.2 per cent of GDP in 1970 to 16.7 per cent in 2019. Given that GDP per head is 22 per cent lower in NI than the UK average[101] and health spending per head was 7 per cent higher in 2019, this suggests that health spending in NI was equivalent to 14 per cent of GDP, higher than all the countries in the Organisation for Economic Co-operation and Development (OECD) except for the USA. Of course, spending as a share of GDP varies region-by-region within other nations.

The Republic of Ireland (RoI) has seen a somewhat smaller increase in health spending than the UK, rising from 4.9 per cent of GDP in 1970 to 6.7 per cent in 2019. Health spending per capita in 2019 was 13 per cent higher in the RoI than in the UK, but the health and social care workforce was 11 per cent smaller,[102] suggesting that healthcare inputs are more expensive in the RoI.

The persistent growth in UK health spending since the National Health Service

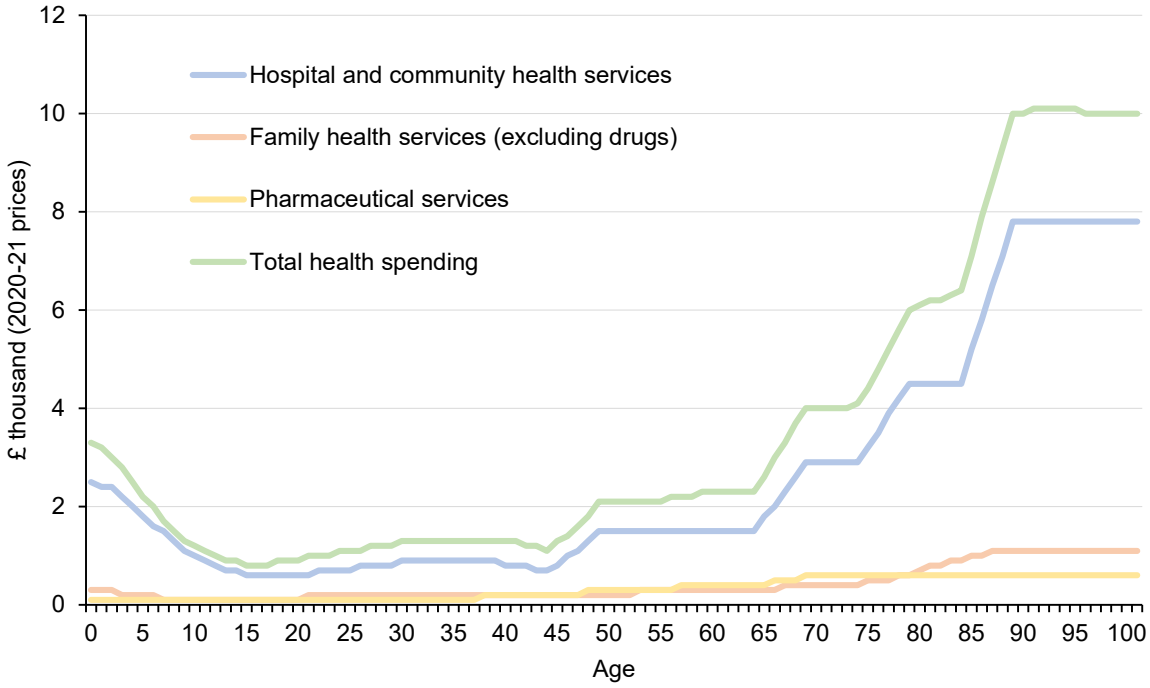
(NHS) was first established raises the question as to how high it could go and how this could be funded. In seeking to answer these questions, several factors have been identified as impacting on the projected future demand for healthcare spending as set out below.[103]

Demographic factors

At the most basic level, the need for healthcare is based on the number of people in a population and their level of morbidity (illness), with the latter strongly linked to age. Chart 7.1 below shows an age-cost curve produced by the Office for Budget Responsibility (OBR)[104] in 2016. Spending on pharmaceutical services and Family Health Services (FHS) rises only slightly with age, while spending on Hospital and Community Health Services (HCHS) remains broadly steady for adults until they reach their mid-40s when it starts to rise in a series of increasingly large steps. As a result, average health spending in 2020-21 prices was £1,100 per annum for a 25-year-old, but rising to £2,200 for a 5-year-old and £10,000 for a 90-year-old.

[100] https://www.oecd.org/health/health-data.htm
[101] https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/regionaleconomicactivitybygrossdomesticproductuk/1998to2019#:~:text=Of%20the%20ITL1%20regions%2C%20London,per%20head%20at%20%C2%A324%2C068.
[102] RoI Health spending per capita of $4,947.2 in current prices PPP compared with $4,385.5 for the UK, Health and Social Care workforce per 1,000 population was 53.73 in the RoI compared with 60.25 for the UK. OECD Health Statistics 2022.
[103] https://www.sciencedirect.com/science/article/pii/S0168851012001352
[104] https://obr.uk/frs/fiscal-sustainability-analytical-papers-july-2016/ Chart 2.3

Chart 7.1 - Estimated healthcare cost by age band

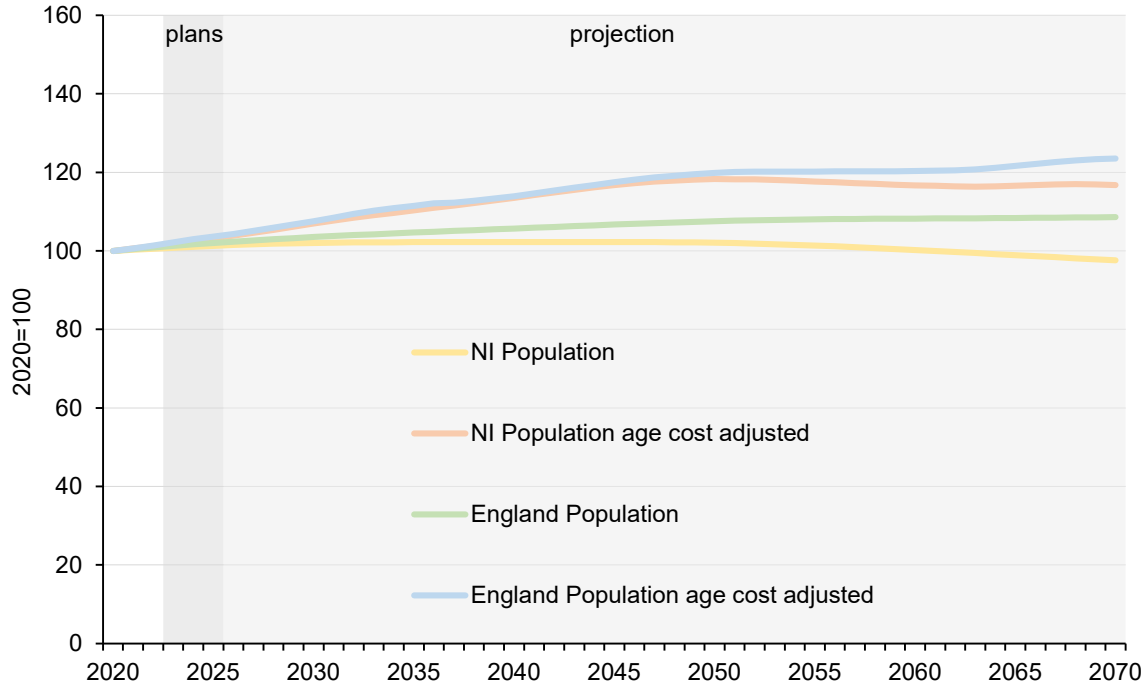


Source: OBR

Chart 7.2 below, based on the most recent population projections from the ONS (prior to the 2021 census), shows that the population of NI is projected to increase until 2045 and then start to fall while that for England is projected to rise at a faster rate and then stay broadly stable. As a result, the NI population is expected to fall by 2.4 per cent by 2070 compared with 2020. In contrast, the population of England is projected to rise by 8.6 per cent between 2020 and 2070 while the population of Wales is projected to increase by 4.8 per cent and that of Scotland is expected to fall by 7.8 per cent.

However, the age structure of the NI population will also change with the proportion aged 85 and over increasing from 2.1 per cent of the population in 2020 to 6.7 per cent by 2070. By multiplying the population in each age band by the figures in the age-cost curve above, we can get a rough estimate of how costly the population will be in terms of health spending (assuming, heroically, that the age-cost curve does not change). The 'age cost weighted population' rises more than the raw population because it is ageing. NI's age cost weighted population grows broadly in line with England's up until 2045, and then stabilises. The age cost weighted population in NI is expected to increase by 16.8 per cent overall between 2020 and 2070 compared with 23.5 per cent for England, partly because England's population is projected to grow while NI's is projected to fall.

Chart 7.2 - Population and age cost weighted projections



Source: OBR, ONS, NISRA and Northern Ireland Fiscal Council Calculations

The relative ageing of the NI population has implications for its relative need for health spending. The needs assessments discussed in Chapter 4 concluded that NI's younger population meant that it had a lower relative need compared with England, other things being equal, but that this was outweighed by factors such as morbidity, deprivation and sparsity for which the need for health spending in NI is greater. However, the population projections suggest that need based on population structure will move from being lower in NI than England to higher over time.

In addition, it is proximity to death rather than old age *per se* that explains most of the increase in healthcare costs in Chart 7.1. The number of deaths per head of population in NI was 6 per cent lower than in England in 2020 but is expected to be 1.3 per cent higher than England by 2040 and 10.6 per cent higher by 2070.

The impact of rising life expectancy on the demand for health spending depends crucially on whether additional years of life are spent in good or poor health. At the UK level, the evidence suggests that increases in health life expectancy are not keeping pace with the gains in overall life expectancy, particularly at later ages. This would place upward pressure on health spending.[105]

Income per head

As advanced economies have developed and grown, governments have tended to spend more on health services, reflecting increased public expectations of the diagnostics and treatments that will be provided, as well as more revenue from

[105] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/464275/gs-15-13-future-ageing-trends-life-expectancy-er12.pdf

taxes and duties being available. The relationship between percentage changes in income and health spending is termed the income elasticity of health spending, with a value of 1 implying that a 10 per cent rise in incomes results in a 10 per cent increase in health spending. In the absence of other factors, an income elasticity of 1 would result in health spending as a percentage of GDP remaining constant over time. There is mixed evidence on the precise value of the income elasticity for the UK. The OBR's long term baseline projection assumes that it is 1 and that rising income does not put further upward pressure on health spending as a share of GDP. The OECD projections assume an income elasticity of 0.8.

Technological progress

Throughout human history advances in medical understanding and science have allowed illness to be diagnosed and treated in ways that were not previously possible, spurred in the modern era both by public funding and the pursuit of financial returns in the private sector. But while the development of new drugs, equipment and processes have led to cost reductions and greater efficiency, they have not in general led to lower spending as societies have chosen to pay to secure the improved patient outcomes that they offer. The development of stents as an alternative to open heart surgery is a classic example, where the reduction in unit cost has been more than offset by far wider use of the treatment.[106]

The Congressional Budget Office has estimated that approximately half of the growth in healthcare spending in the USA in recent decades has been due to technological advances.[107] However, it is widely recognised that it is difficult to measure the effects of new technologies on healthcare spending accurately due to the complexity of the science as well as the impact of other changes. As a result, when health economists try to explain changes in health spending they often use technological progress as a residual to explain that which demographic and economic factors cannot. Technological advances will no doubt continue to be made in healthcare, and societies will no doubt wish to avail themselves of them but judging how much impetus this will give to spending is hard to be confident about.

Health prices and productivity

The price of healthcare provision has been found to rise faster than prices for goods and services in general.[108] This is in part because a large proportion of healthcare expenditure is on direct staff costs alone, with healthcare more labour-intensive and highly customised than in the general economy. It is harder to improve productivity in such sectors through increased capital investment or technological improvements. But the salaries of healthcare workers still need to increase broadly in line with the wider economy to recruit, retain and motivate sufficient staff.

The resulting tendency, for the unit cost of healthcare services to rise faster than general prices, is known as the 'Baumol cost disease'. As with technological

[106] https://obr.uk/docs/dlm_uploads/Health-FSAP.pdf Box 2.2
[107] https://www.cbo.gov/sites/default/files/110th-congress-2007-2008/reports/01-31-techhealth.pdf
[108] https://ifs.org.uk/uploads/publications/bns/BN201.pdf Figure 6

advances, the increase in the headline price of some health inputs may reflect improvements in quality rather than pure inflationary pressure. The OBR's long term health spending projections assume that healthcare productivity grows at the same rate as for the wider economy, although it recognises that the available estimates suggests that it has grown more slowly in the past.[109]

Relative importance of explanatory factors

Different studies give different relative importance to these factors in explaining past health spending, in part simply reflecting the order in which they are considered, although residual effects tend to have the largest impact. The OECD, for one, estimates that the annual average growth in UK spending per capita on health between 1995 and 2009 of 4.6 per cent in real terms reflected 0.2 percentage points from demographic effects, 1.5 percentage points from income effects (assuming an income elasticity of 0.8) and 2.8 percentage points from residual effects, including relative prices and technology.[110]

The European Commission also found that residual effects (including technology) had the largest impact on health spending for EU countries.[111] The OBR agreed that demographic effects are *"…likely to remain a relatively small, although growing, driver of spending in the future*" while *"…other cost pressures (for example, increasing relative health care costs and technological advancements) have been bigger contributing factors over the past and are likely to remain important drivers of spending in the future*".[112]

Projected health spending in the OECD, UK and RoI

Drawing on the decompositions of past spending, several studies have tried to estimate future growth in demand for health spending. Among them:

OECD

The OECD has produced projections of health spending for its member countries up until 2060 under cost-pressure and cost-containment scenarios. Under the cost-pressure scenario – where the residual growth element is assumed to be 1.7 per cent per annum for all OECD countries, based on econometric analysis of past spending[113] - OECD average health spending is projected to increase from 5.5 per cent of GDP in 2006-10 to 11.8 per cent in 2060, from 6.5 per cent to 12.4 per cent for the UK and 5.5 per cent to 11.9 per cent for the RoI. Under the cost-containment scenario, where the residual growth element starts at 1.7 per cent but converges to

[109] https://obr.uk/docs/dlm_uploads/Health-FSAP.pdf Box 2.1
[110] https://www.oecd.org/economy/growth/Health%20FINAL.pdf Table 1
[111] https://ec.europa.eu/economy_finance/publications/economic_paper/2010/pdf/ecp417_en.pdf
[112] https://obr.uk/docs/dlm_uploads/Health-FSAP.pdf
[113] https://www.oecd-ilibrary.org/economics/a-projection-method-for-public-health-and-long-term-care-expenditures_5k44v53w5w47-en;jsessionid=aMgB-CmbxzHS4bu7LXaOLhWlcX1MuUPeRRpKmgOZ.ip-10-240-5-132 Box 3

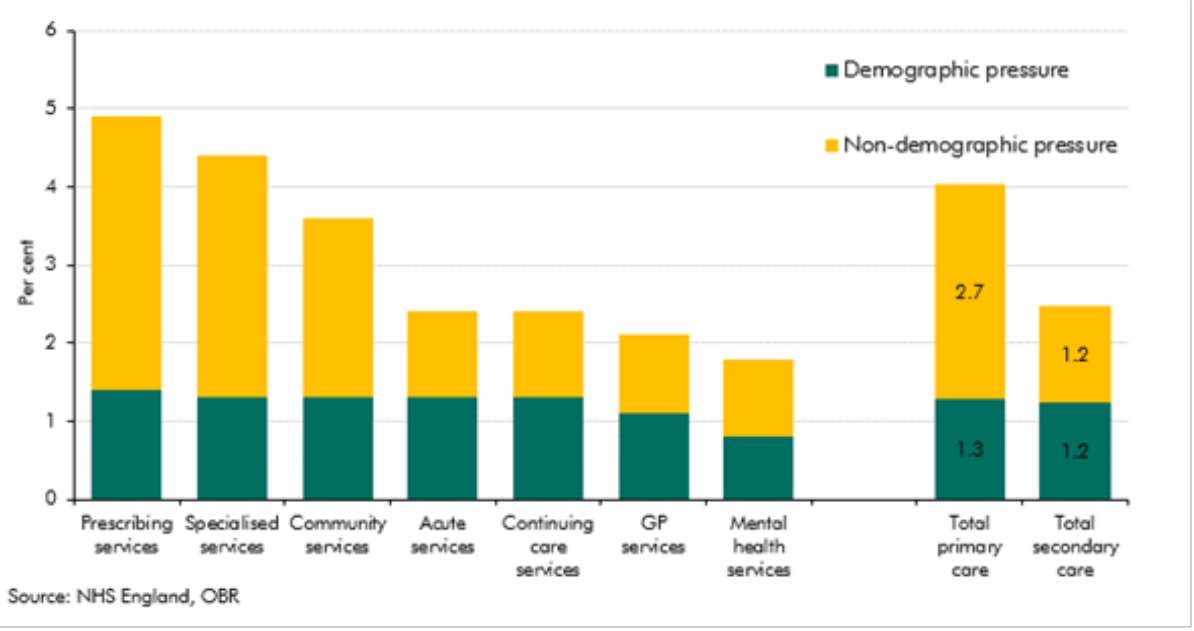
zero by 2060, the level of spending in 2060 would be held to 8.0 per cent of GDP for the OECD, 8.5 per cent for the UK and 8.0 per cent for the RoI.

Office for Budget Responsibility

As described in Chapter 2 of the general volume of our *Sustainability report* the OBR published long-term health (and social care) spending projections for the UK through to 2072 in its *Fiscal risks and sustainability* (FRS) report on 7 July 2022.[114] This was based on slightly lower population projections than most recently published by the ONS (to reflect the impact of the post-Brexit migration regime).

Based on a study by NHS England for 2015-16,[115] the OBR assumes that non-demographic cost pressures will initially push primary care spending up by 2.7 per cent a year and secondary care spending by 1.2 per cent a year, but in both cases dropping gradually to 1 per cent a year from the early 2040s as health spending takes up an ever-larger share of national income. The ageing of the population is expected to increase spending by 1.3 per cent a year for Primary Care and 1.2 per cent for Secondary Care, giving a total increase of 3 per cent a year falling to 2.2 per cent a year by the horizon in 2072. (This is on top of the increase that would keep health spending constant as a share of GDP.)

Chart 7.3 - The OBR's assumptions on spending pressures in health



The OBR projections 'jump off' from its latest five-year forecast, published in March 2022, when health spending was expected to stand at 8.3 per cent of GDP in 2026-27. The OBR's baseline projection sees this rise to 15.0 per cent in 2071-72 (assuming that the Government accommodates the various pressures), contributing

[114] https://obr.uk//docs/dlm_uploads/Fiscal_risks_and_sustainability_2022-1.pdf Table 4.9
[115] NHS England (2016), 'NHS Five Year Forward View: Recap briefing for the Health Select Committee', May 2016. https://www.parliament.uk/globalassets/documents/commons-committees/Health/CSR0107-NHS-England-TTCSR0107.pdf

6.7 percentage points of the 9.7 per cent of GDP increase in non-interest spending overall. But the projection overall is unsustainable with both debt and debt interest on a persistent upward trajectory. So the OBR is clear that policy could not remain unchanged on this basis and the health budget would presumably have to contribute some of the adjustment to keep the public finances under control.

Irish Fiscal Advisory Council

The Irish Fiscal Advisory Council has projected that public spending on Health in the RoI would increase from 8.3 per cent of gross national income (GNI) in 2019 to 13.2 per cent by 2050[116] broadly in the same ballpark as the OBR projected for the UK. Unlike the projections by the OECD and OBR, the Council's projections are driven more by population ageing which accounts for two-thirds of the estimated increase in health spending with the other one third due to price and wage pressures. This followed analysis by the Economic and Social Research Institute (ESRI) which projected that demand for gross expenditure on public acute hospitals in the RoI would increase by an annual average of 1.2-1.7 per cent a year in real terms between 2018 and 2035.[117]

Projecting demand for health spending in NI

Having looked at the way in which changes in health spending have been decomposed over the past and projected into the future for the UK and other countries, we make an initial attempt at some projections for NI. Crucially, these are not a forecast of how health spending will evolve, but, like the studies described above, an indication of the path that health spending might follow if the Executive were willing and able to accommodate demographic and non-demographic pressures to broadly the extent that governments have done in the past. In the case of the Executive, with limited tax-raising and borrowing powers and other public services to pay for (with their own pressures), the path of health spending in practice will be dictated primarily by the path of the Block Grant from Westminster, as well as the funding allocated to health given the pressure for NI health services and salaries to match those in the rest of the UK.

Health spending scenarios

The OBR's latest UK health spending projections to 2071-72 from the 2022 FRS report have been used as the basis of the projections for NI health spending. The projections of NI health spending are presented in 2020-21 prices using the latest GDP deflator data from Treasury and the OBR long term projection of 2.3 per cent per annum.[118] The starting position is the estimated level of planned health spending in NI for 2024-25 as explained in Chapter 4.

[116] https://www.fiscalcouncil.ie/wp-content/uploads/2021/11/The-path-for-Irelands-health-budget.pdf
[117] https://www.esri.ie/system/files/publications/RS117_1.pdf Table 8.2.
[118] https://obr.uk/docs/dlm_uploads/Fiscal_risks_and_sustainability_2022-1.pdf Table 4.2

Our baseline (**Scenario 1**) is based on the implied Barnett consequentials from the OBR projections of UK health spending. The OBR projections for the growth in UK health spending each year between 2024-25 and 2071-72 are first applied to the DHSC spending plans for 2024-25. The implied Barnett formula consequentials for NI are then added to the level of NI health spending in 2024-25 to produce the projections of NI health spending up until 2071-72 under this scenario. In broad terms, Scenario 1 implies that there is the same increase in health spending per head of population in NI as in England each year.

Scenarios 2 and 3 assume that NI health spending rises more quickly than under Scenario 1 to reflect the greater need for resources to deliver given service outcomes in NI compared with England. As set out in Table 4.6 above, the need for expenditure on health care services in NI per head of population is estimated to be 4.4 per cent higher than England under the basic update of the Treasury Need Assessment Study (NAS) and 9.8 per cent higher if the additional changes previously considered by the NI Executive are incorporated. In light of the concerns regarding these additional changes to the NAS model,[119] the mid-point between the estimated need under basic update and the additional changes to the model (i.e. 7 per cent) is taken as a reasonable upper limit.

In these two scenarios the additional needs adjustment is applied only to the increase in spending and not to the baseline level. For example, if DHSC spending increases from £190 billion to £200 billion under the OBR baseline projections, the NI population share of the £10 billion increase in health spending in England would deliver approximately £323 million for NI under Scenario 1.[120] Applying the 4 per cent and 7 per cent additional need factors under Scenarios 2 and 3 would increase the additional NI health spending by £336 million and £346 million respectively.

Scenario 4 is based on the continuation of the actual nominal growth in NI health spending between 2003-04 and 2017-18 of 4.6 per cent per annum.[121]

Scenarios 5 and 6 are based on alternative assumptions regarding the strength and persistence of non-demographic cost pressures used by the OBR in its 2018 *Fiscal sustainability report*. We noted above that the OBR's 2018 (and July 2022) projections assumed that the increase in spending to reflect non-demographic factors falls gradually to 1 per cent a year as health spending takes up an ever-larger share of national income. In line with the OBR's 'lower other costs' and 'higher other costs' variants respectively, Scenario 5 assumes a decline towards 0.5 per cent a year increases starting in 2029-30 while Scenario 6 assumes a decline towards 1.5 per cent.

Table 7.1 summarises the NI health spending scenarios.

[119] Annex E of Independent Review of Health and Social Care Services in Northern Ireland (2005) https://www.researchgate.net/publication/265577588_Independent_Review_of_Health_and_Social_Care_Services_in_Northern_Ireland

[120] £10 billion times 99.5% (comparability factor for DHSC) times 3.327% (NI population as a % of England) times 97.5% (VAT abatement factor) equals £323 million.

[121] Sources: PESA 2009 and 2022. The year 2017-18 was chose as the end point to remove impact of Covid-19 and temporary additional funding due to political agreements.

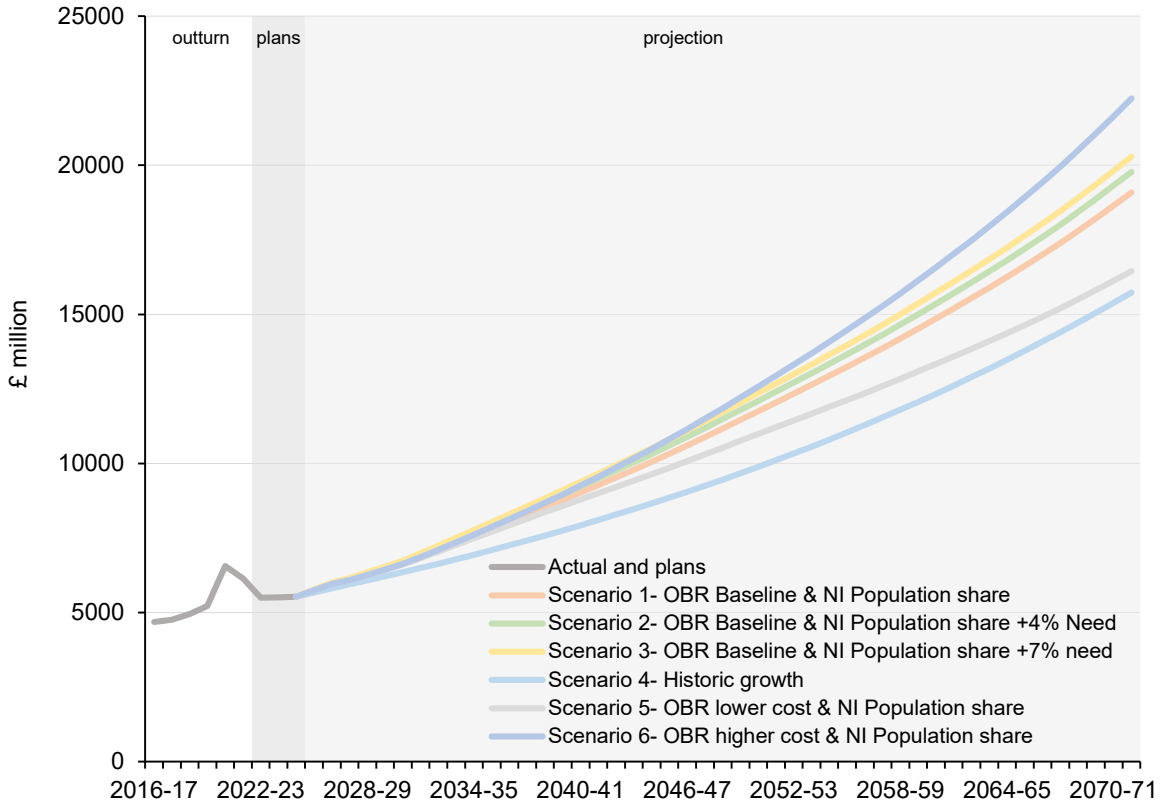
Table 7.1 - Summary of scenarios for long-term projections for health spending in NI

Scenario	Description
1	NI population share of OBR Baseline projections for increase in UK Health spending
2	Scenario 1 plus 4% needs adjustment
3	Scenario 1 plus 7% needs adjustment
4	Simple extrapolation of nominal growth in NI health spending between 2003-04 and 2017-18
5	NI population share of OBR Lower Other Cost Pressures projections for increase in UK Health spending
6	NI population share of OBR Higher Other Cost Pressures projections for increase in UK Health spending

There are plenty of caveats and cautions around projections of this sort and around these in particular. Most fiscal projections, particularly those extending beyond the short term, are subject to significant uncertainty. And other than need and population it has not been possible to make any further changes to the UK projections to reflect the specific circumstances in NI. That said, we would expect cost pressures to be largely the same for NI as in England. Crucially, UK Government DEL and the NI Executive Block Grant are assumed to decrease or increase if cost pressures do evolve as shown in Scenarios 5 and 6.

Chart 7.4 shows that NI health spending was approximately £5.2 billion in 2019-20, but then spiked due to Covid-19 in 2020-21 and 2021-22 and is planned to be £5.5 billion by 2024-25 (2020-21 prices). Under Scenario 1 spending is expected to increase to £19.1 billion by 2071-72, with a higher level of spending under Scenario 2 (£19.8 billion), Scenario 3 (£20.3 billion) and Scenario 6 (£22.2 billion). These all represent an increase on the historic trend as shown by Scenario 4 (£15.7 billion). Even adjusted for inflation, these cash sums are not particularly meaningful at that time horizon. Perhaps more so is the average real terms growth rate per year, which is 2.7 per cent in Scenario 1, 2.8 per cent for Scenarios 2 & 3, 2.3 per cent for Scenarios 4 & 5 and 3.0 per cent for Scenario 6. In each case this is significantly faster than the long-term growth rate of the UK economy projected by the OBR of 1.4 per cent per annum.

Chart 7.4 - Projected long-term NI health spending (2020-21 prices)



Source: HM Treasury, Department of Finance, OBR and Northern Ireland Fiscal Council calculations

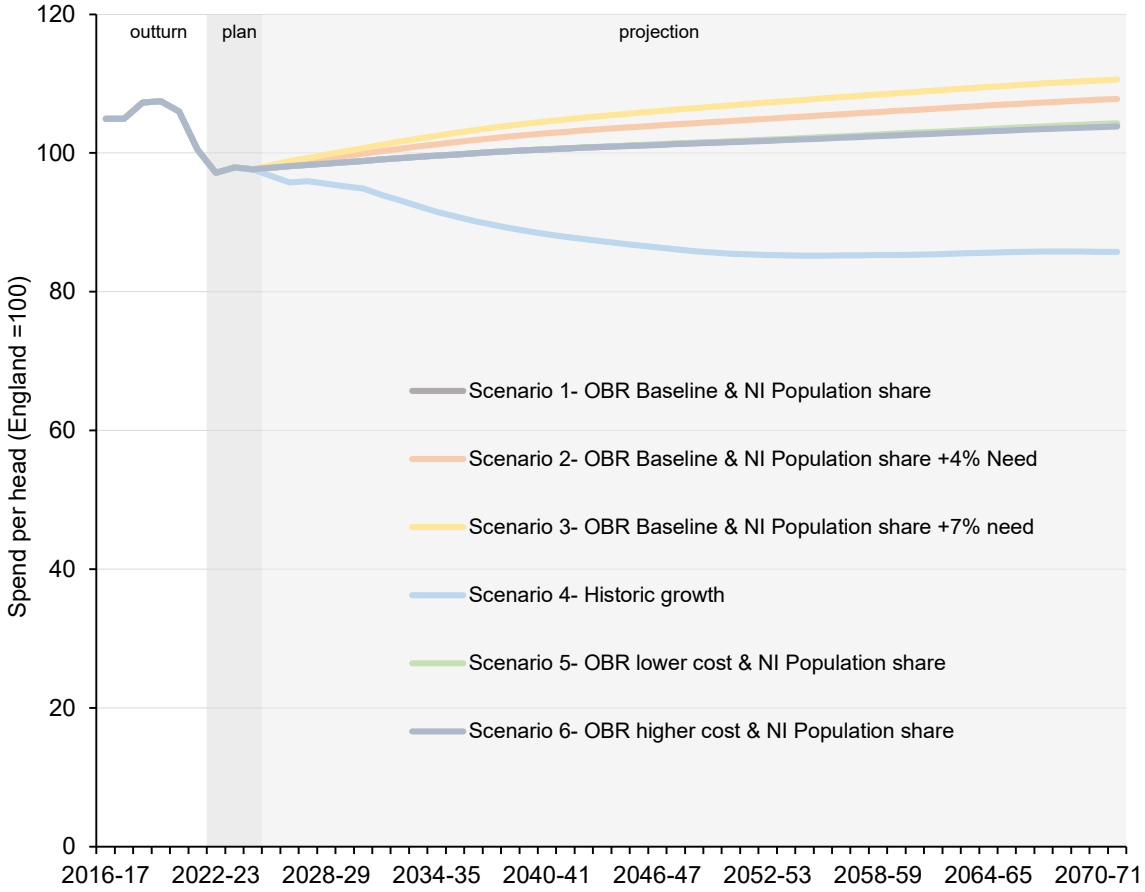
As set out in Chart 4.5, the latest spending plans for the UK Government and Department of Finance's 2022-25 Draft Budget for the NI Executive imply that the level of health spending per head of population in NI will be 2 per cent lower than in England at the starting point for the projections in 2024-25. The slower projected growth in NI's population means that health spending in England is expected to grow slightly faster than in NI over the period to 2070-71 under Scenario 1. However, this is outweighed by the impact of slower population growth on the comparisons of spending per head of population as set out in Chart 7.5 below.

This shows that health spending per head of population in NI would be expected to increase above that for England through the period to 2071-72 for Scenarios 1-3 and 5-6 (ranging from 4 per cent to 11 per cent higher by 2071-72). However, under Scenario 4 it would be expected to fall significantly below that of England, because the historic growth in NI health spending is slower than the projected growth in UK health spending. Scenarios 5 and 6 are broadly in line with Scenario 1 with the UK Government and the Executive both assumed to make the same adjustments to the level of health spending in response to the weaker or stronger cost pressures.

On the assumption that the 22 per cent per head of population GDP gap between NI and the UK average does not change significantly, the spending projections set out

in Chart 7.5 imply that health spending would increase to 14-25 per cent of GDP by 2071-72 compared with the range of OBR projections for the UK as a whole of 12.9-17.5 per cent. This would not be sustainable without radical action if NI was a sovereign nation collecting its own taxes and with the ability to incur debt to fund resource spending. But as noted the main financial constraint facing the NI Executive is in respect of the funding available from the Block Grant and the need to ensure that there is sufficient funding also available for other public services.

Chart 7.5 - Projected NI health spending per head (relative to England)

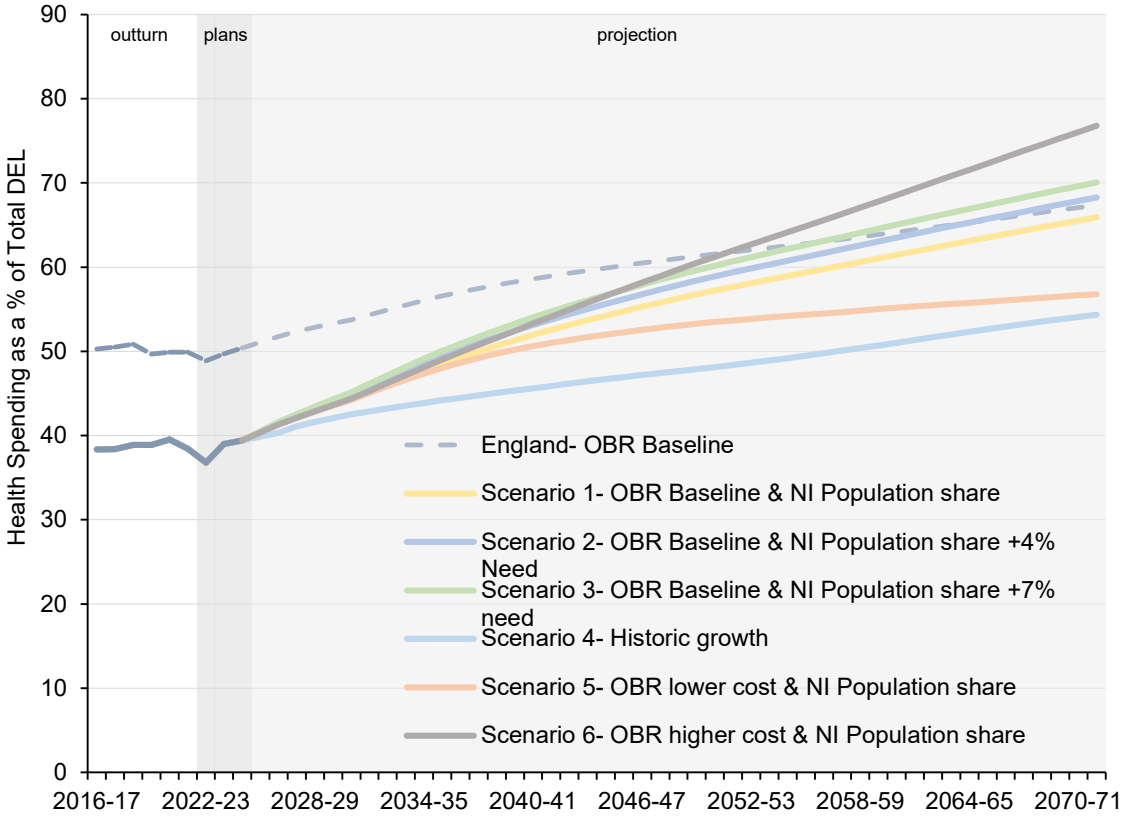


Source: HM Treasury, Department of Finance and Northern Ireland Fiscal Council calculations

Given the financial envelopes within which the UK Government and the NI Executive are assumed to operate, health would continue to increase as a proportion of the total UK Departmental Expenditure Limit and the NI Block Grant respectively (Chart 7.6). The implied squeeze on other departments is another reason why the outlook in both jurisdictions is unsustainable and that either demands for higher health spending will not be fully accommodated or significantly more revenue will need to be raised where feasible – or most likely both. The Executive, like the UK Government, has long wrestled with the squeeze that health puts on other priorities within any spending envelope. As the NI Executive 2008-11 Budget document stated: *"....the key strategic issue for us, as elsewhere, is how much*

more of our available resources should be redeployed to health and social services and away from other public services."[122]

Chart 7.6 - Projected health spending as a share of NI Block Grant and UK Government DEL



Source: HM Treasury, Department of Finance, OBR, Northern Ireland Fiscal Council calculations

As set out in the general volume of the *Sustainability report*, the NI Executive Block Grant is expected to grow at a slower rate than spending in England on the equivalent services that it funds in NI. As a result, the health share of total spending would increase at a faster rate in NI than in England, rising above 50 per cent of the NI Executive Block Grant by the late 2030s and then to 54-77 per cent by 2071-72 on the basis of Scenarios 1-6. If the rest of the DoH budget (mainly personal services) increased at the same rate then it is projected that the Department would implausibly account for 68-96 per cent of the Block Grant by 2071-72.

The projections of health spending set out in this report are on a different basis to those produced by the Nuffield Trust as part of the accompanying report *Future funding and current productivity in Northern Ireland's health and social care system.* In particular, the Nuffield Trust projections include social care and have an earlier starting point of 2019 that does not include the impact of the draft Budget 2022-25 spending plans. In addition, the Nuffield Trust projections are based on assumed rates of growth over and above demographic pressures as opposed to the OBR's latest projections, while the comparison Nuffield Trust makes is with total

[122] https://cain.ulster.ac.uk/issues/politics/programme/2010-01-22_final-budget.pdf Paragraph 3.29

identifiable spend, including expenditure outside of the control of the NI Executive, rather than the NI Block Grant. However, both sets of projections present the same finding, that Health spending is projected to account for an increasing share of total public spending in NI.

Conclusion

Long-term projections of the public finances and of particular categories of public spending are much more useful for the direction of travel they show rather than the precise figures derived at some distant time horizon – except in so far that changes in these figures can tell you whether the outlook has become more or less challenging than it appeared to be when you last undertook the exercise.

The increase in health spending projected by the OBR for the UK is very unlikely to occur as projected, because it is a large part of an unsustainable overall fiscal scenario that would see debt and debt interest rise relentlessly. And as the US economist Herb Stein put it in the law that bears his name: "If something cannot go on forever, it will stop." And long before the 50-year projection horizon.

For the UK Government, the main lessons of the projections are that demographic and non-demographic demand and costs pressures are likely to increase the amount of health spending beyond that which society would ideally like to see relative to the size of the economy. But there is probably limited scope to pay for this by continuing to squeeze other services (some of which have their own strong upward pressures) or by borrowing more. So society will have to decide how far it is willing to pay higher taxes in order to accommodate the desire for more health spending. A betting person might assume that taxes will go up somewhat more than the projections assume and the health spending will rise somewhat less.

For the Executive, the landscape is somewhat different. Given its current limited tax and borrowing powers, the trajectory for health spending in NI will depend largely on the path of health spending by the UK Government in England via its consequences for the Block Grant through the Barnett formula. There might be scope to raise Regional Rates or to extend charging for services, but the proportionate impact on the health budget would be modest. This underlines the need to extract as much service quality and quantity for every pound of available spending by tackling inefficiencies where they can be found and reduced. And also to encourage changes in behaviour that might reduce demand on the system.

8 Organisation, governance and accountability

There are a number of ongoing and planned reforms of the Health and Social Care sector in NI, which we have discussed briefly in Chapters 2 and 3. In this chapter we consider those aspects of reform that look critical to health delivery, especially those with a potential impact on future sustainability.

In the context of falling per capita funding in NI (as a result of the 'Barnett squeeze'), the health sector needs to be able to make more strategic use of the funding it receives. As described above, NI was previously spending more per person on health than England, but in many respects is not receiving a better service. As well as rebuilding the health service post-pandemic, implementing the Minister of Health's planned reconfiguration of services, and tackling longstanding issues like waiting lists, there will need to be an overall focus on doing more with less.

Given the future funding position, the structures and governance of the health service need to enable prioritisation and deliver efficiencies if it is to be sustainable. The current level of waiting lists is seen by some as an indicator that the NI health service has already passed a 'tipping point' into unsustainability. However, the evidence in this report suggests that more is possible within current funding. If NI utilised its funding as efficiently as England, almost 200,000 more patients could be seen every year, and waiting lists could be maintained at more appropriate levels.

Future delivery model

Some reform of health service structures is already under way. In Chapter 3 we saw that DoH has earlier this year abolished the Health and Social Care Board. Last year it consulted on an 'integrated care partnerships' model, defined by DoH as "*collaborative partnerships between organisations and individuals with a responsibility for planning, managing, and delivering sustainable care, services and interventions to meet the health and wellbeing needs of the local population*."[123]

Elements of the model include:

- A **Regional Group** responsible for governance and accountability, and the coordination of the planning and delivery of regional and specialised services. This was intended be in place before the closure of the HSCB, but due to Covid, and the requirement for underpinning legislation it has been delayed.

- Five **Area Integrated Partnership Boards**, one per HSC Trust area. These will have responsibility for strategic area planning and local delivery to meet local population needs and their work will be guided by a

[123] https://www.health-ni.gov.uk/sites/default/files/consultations/health/doh-future-planning-model-annex-a.pdf

regional strategic outcomes framework. Membership is to include a wider range of public bodies and health professionals than in the current model.

- Local area structures will be based around **existing GP Federations and Integrated Care Partnership areas**. These will deliver interventions and programmes as agreed by Area Integrated Partnership Boards.

- Community level structures will be focused on **GP practices, Multi-Disciplinary Teams (where established), and community pharmacies** in individual towns and local districts. There will be the potential to align District Electoral Areas, and the exact size and number of communities in each Area will be for the Area Integrated Partnership Board to determine.

The Public Health Agency (PHA) will continue to deliver its statutory duty in relation to commissioning. The PHA will also have a lead role in the development, implementation and operation of the model.

Sustainability of future delivery

The main objectives of these changes, as set out by DoH, are to improve health outcomes and redress inequalities. The Fiscal Council is not in a position to comment on these aspects, but we note that similar objectives and models are being trialled by NHS England and elsewhere.

However, as we have identified in this report, NI has not yet fully exploited the advantages of its higher level of health and social care integration than other parts of the UK. The proposed model would widen involvement of multi-disciplinary professionals and may therefore provide an even greater opportunity to take advantage of health and social care integration than before.

We saw earlier that each body involved in the new model already has existing governance and accountability structures, which we discussed in Chapters 2 and 3. The Department says that changes to the existing governance system will be considered. While aiming for collective accountability, DoH has acknowledged that accountability that crosses organisational and sectoral boundaries is complex.

DoH will need to set a clear vision for an efficient and high-performing health system, and systems of governance and accountability need to support the implementation of that vision, or NI citizens will not receive the health care they are entitled to or that the Executive is paying for, compared to citizens elsewhere.

The ‘Transformation Agenda’

‘Investing in our Workforce’ is a theme of the Transformation Agenda launched by DoH in October 2016. *Health and Wellbeing 2026: Delivering Together* set out a 10-year approach to transforming health and social care. It sought radically to reform the way services were designed and delivered with a focus on person-centred care rather than the existing emphasis on buildings and structures.

However, in our meetings with stakeholders, concerns have been raised over the funding model (and particularly reliance on non-recurrent funding) to deliver transformation and the need for longer-term budgets. A key point made to us was that the issue is not necessarily a lack of funding but an inability to deliver the outcomes of reform. The work carried out by Nuffield tends to support the conclusion that NI could make much better use of the funding it spends on health, and that reforms that harness greater efficiency will be key.

While DoH reports many positive results emerging from the pilots it has carried out, non-recurrent transformation funding typically provided in political packages does not provide a stable basis for service reconfiguration. To be sustainable, a reconfigured system would ideally have a clear and longer-term financial footing on which to stand. Short-term, one-off injections of cash, sometimes in the middle of a fiscal year, do not provide that stable basis for implementing longer-term reforms of the nature that the NI health system will need.

Budgeting and planning

Longer term planning

NI has had a succession of single year Budgets since 2015-16, which many stakeholders believe has encouraged short-termism in policy development and inefficient use of resources. For example, one-off sums allocated through In-year Monitoring Rounds fund short-term pilot projects that then have to end when the funding ceases. We saw in Chapter 3 that DoH receives significant levels of in-year funding even in a typical year, i.e. prior to Covid. This reliance on injections of funding mid-year may be adding to difficulties in longer term planning.

However, stakeholders also believe that it is possible to plan longer-term even without absolute certainty over budget levels. In Scotland three-year health planning takes place regardless of Budget timeframes, and NI could benefit from a similar approach, perhaps over an even longer timeframe.

Health Trust savings

As we saw in Chapter 3, the management and control of HSC Trust finances could be improved. Sensibly enough, savings targets were removed during the pandemic, but it will be important to return to routinely setting targets for recurrent savings. DoH needs to incentivise the Trusts to improve the efficiency of the current system so that the health service makes the most of the funding it receives.

In this regard, regular deficit funding of the Trusts appears to work counter to the aim of improving the financial sustainability and efficiency of the health system. It may also be masking potential underlying sustainability issues. As we reported in Chapter 3, in the same years that the Trusts post relatively small savings (e.g. Belfast's £0.6 million in 2017–18) they can receive tens of millions of 'non-recurrent deficit support' from DoH in in-year funding (£33.4 million for Belfast in the same

year). This would appear to call into question not just the levels of savings being made by Trusts, but also their ability to meet their statutory breakeven duty, were DoH not routinely stepping in to cover Trusts' liabilities. This is an area the Council would recommend DoH and the Health Committee consider in more detail.

Transparency

In Chapter 3 we remarked on the difficulties posed by the variety of ways health expenditure is recorded and presented. While each has a valid purpose, the combination of a multi-layered system and multiple ways of presenting expenditure data, makes scrutiny and accountability more difficult than it could be.

The Review of Financial Processes (see Appendix I) should alleviate this to some extent, by aligning the presentations at budgets and estimates. This is welcome, but the Department and the MLAs that scrutinise health spending would be better served by a more consistent method of recording and presenting expenditure data. Perhaps a single system across the various layers could be developed. In any case, it needs to be more straightforward to trace funding from allocation by the Assembly, through the Department and its ALBs, to final expenditure.

Potential governance changes

One administrative difference between the NI and English health systems is that NHS England has its own Chief Executive, whereas in NI this role is performed by the Permanent Secretary of DoH.

Some stakeholders suggested to us that splitting these roles might put some distance between responsibility for policy and delivery that would help the process of delivering reforms. Some stakeholders also felt this could also reduce political conflict around some decisions if these did not have to be taken by an Executive Minister, for example to enable decisions on health transformation to carry on even in the absence of a functioning Executive. Finally, it was suggested that there could at times be conflicts of interest between the roles of Permanent Secretary and Chief Executive of the health service, which could be mitigated by their separation. But we were not given any concrete examples. Overall, splitting the roles looks like an option that the Executive might wish to consider, but decisions about local health services will always be of intense public and political interest. Executive-level buy-in is essential to deliver whatever transformation is needed.

9 Conclusions

Historically, public spending per head on health in NI has been higher than England. The evidence we have reviewed suggests that this is in part justified (and thus presumably in part explained) by higher 'need' for spending related to characteristics such as demography, population density and deprivation. However, at 4-7 per cent higher than England, it is not as high as generally thought.

Some have argued that higher spending on health mirrors the poorer health of people in NI. Finding definitive evidence is hampered by a lack of comparable data, but that which is available suggests that NI's health status is worse than England, similar to Wales and better than Scotland.

We have noted that health spending and its composition is reported in a number of different ways, for different purposes. This reduces transparency, ease of understanding, and likely the effectiveness with which spending is scrutinised. Where possible, it would be desirable to use common measures or at least ones that users can reconcile without undue difficulty. Better data on staff by area of work would also help achieve a better understanding of costs in health and social care.

The effectiveness of the healthcare system in NI is also an important consideration as well as the underlying need for spending on it. The Nuffield Trust's analysis suggests that spending on health is less efficient than in England, based on various metrics. For example, the average length of stay in hospital is 1.5 days longer in NI than in England. Some inefficiencies may be explained by lack of economies of scale. But even these could be improved by increased specialisation and service consolidation on single sites of expertise.

Another contributor to higher spending is prescribing behaviour. NI's pharmaceutical spend per capita was 43 per cent higher than that in England in 2020, with Nuffield's analysis strongly suggesting that this is due to a higher rate of prescribing (and perhaps a more expensive mix of drugs), rather than a higher unit cost in prescribing the same products. (Reluctance to use generic rather than branded drugs is not a significant factor as NI performs well in the use of generic drugs.) It is not clear whether higher drug spending constitutes inefficiency as opposed to a clinically more appropriate mix of prescribed medicines, but a study of the efficiency and effectiveness of the different prescribing options used in NI and in England could help to identify if NI could reduce prescribing costs without negatively affecting patient care.

Given the increasingly constrained resources available to finance health spending, DoH will be under greater pressure to identify and minimise inefficiencies. The structural integration of health and social care services in NI should generate efficiencies, facilitate more joined-up care planning and lead to better outcomes, but it is not clear this has been fully achieved to date. Looking ahead, health pressures in NI will grow, just as they will throughout the developed world. We expect NI health costs to grow by-and-large in line with those of the rest of the UK.

For NI, the major funding risk around health (and other public services) is that the Block Grant might not grow in line with needs. Indeed this risk already appears to be crystallising, with health spending in NI projected to be lower per head of population than in England in the current financial year and at least the next two years. This takes spend per head in NI below the most recent estimates of 'need'.

This is due to a combination of:

- the **'Barnett squeeze'** effect, which constrains growth in the whole NI Block Grant (of which the DoH budget is the largest single recipient) and to a lesser extent, the **reduced fiscal effort** by the NI Executive to top up the Block Grant, with Regional Rates income falling;

- the scale of the 2022-25 Draft Budget **baseline adjustments** for DoH to reflect previous temporary spending allocations related to Covid-19 and political agreements; and

- the Draft Budget proposals, which do not radically change the funding position for DoH even though it would fare slightly better on average than other NI departments. Although the proposed additional budget allocations to DoH are greater than the Barnett consequentials as a result of the additional funding allocated to DHSC in England, DoH may not be able to deliver the same spending increase per head of population across its portfolio because it is also responsible for **social care** spending.

This resulting drop in per capita funding raises real concerns about the longer-term trajectory and re-enforces the need for efficiency measures throughout not only the health system, but wider public services in NI to extract as much service quality and quantity out of every pound of available spending.

Key to success in navigating the increasing cost pressures will be:

- appropriate governance and accountability structures;
- the delivery of greater efficiencies across the health system;
- the effective use of future funding for transformation; and
- effective long-term workforce planning.

Appendix A - NI health service reviews[124]

1989	Government white paper	introduced the concept of an internal market. In Northern Ireland, this led to the establishment of 19 Trusts
1998	Fit for the Future - Department of Health	proposed the abolition of the internal market with commissioning decisions taken as close as possible to patients and clients and centred on primary care
2001	The Acute Hospitals Review – led by Maurice Hayes	recommended the establishment of a single Strategic Health and Social Services Authority to replace the four HSS Boards, reducing the number of hospitals to 9, and integrating health and social care
2002	Developing Better Services – Department of Health	supported the creation of a single regional authority and replacement of 15 acute hospitals with 9 acute and 7 local hospitals, and. Also recommended the 15 Local Health and Social Care Groups (LHSCGs) should be brought together
2005	Independent Review of Health and Social Care Services in Northern Ireland - led by John Appleby	focused on the need for rigorous performance management and greater incentivisation of strong performance
2007		The then Minister decided against a regional Health Authority. He confirmed the creation of 5 new integrated Trusts, 5 Local Commissioning Groups, a smaller Health and Social Care Board (HSCB) focused on commissioning, financial and performance management, and a Public Health Agency
2011	Rapid review of Northern Ireland Health and Social Care funding needs and the productivity challenge 2011/12-2014/15 - led by John Appleby	reviewed finances and efficiency and concluded that the health service in Northern Ireland needed significant additional funding, but also had considerable room to improve productivity
2011	Transforming Your Care – led by John Compton	concluded that the current system was not fit for purpose and there was an unassailable case for change. It identified a mismatch between the need for a proactive model based on prevention and the needs of patients, and the reality of a system focused on hospital care. The report made 99 recommendations, called for a major shift in the design of services and set out a broad new model of care, moving away from hospitals and into primary, community and social care services
2014	The right time, the right place - led by Sir Liam Donaldson	reviewed the governance in the NI HSC service and called for more flexibility and room for innovation, a reduction in the number of hospitals, and better responsiveness to patients. It endorsed the policy behind Transforming Your Care, expressed concern that the TYC vision was not being implemented, and recommended the appointment of an impartial panel of experts to deliver the right configuration of HSC services
2015	Review of the HSC Commissioning Arrangements – Department of Health	The then Minister launched a consultation on a review of the HSC administrative structures. The review recommended abolition of the HSCB.
2016	Systems not structures – Changing health and social care – led by Professor Rafael Bengoa	called for the development of an accountable care system that aimed to manage people's health and keep them well. It concluded that the system had the capability to deliver on key objectives, but stressed that realistically this would be a long-term 10-year plan.

[124] List comprised from detail included in https://www.health-ni.gov.uk/sites/default/files/publications/health/expert-panel-full-report.pdf and https://www.nuffieldtrust.org.uk/news-item/health-and-social-care-in-northern-ireland-critical-care

Appendix B - History of NI health sector structural reform

The National Health Services Act (NI) of 1948 introduced a comprehensive health service in Northern Ireland along the same lines as in England, Scotland and Wales in the same year. This system included structures for hospitals, general practice and public health.[125] Due to differences in the devolved system of government in NI, the NI Ministry of Health and Local Government (later to become the Department of Health) was not empowered to provide services directly (as in England) but instead to procure them from other statutory bodies.[126] Consequently, the NI system included the Northern Ireland Hospitals Authority, the General Health Services Board and a network of local and county health committees and authorities.

In 1973-74 the existing health authorities and committees were abolished and replaced by four health and social services boards[127] - eastern, western, northern and southern – based around newly created council districts. Each was to have a minimum population of 200,000 and contain a medium-sized hospital, divisional offices of existing health and welfare authorities and a number of health centres, residential homes, hostels and day centres. In contrast to the rest of the UK, this structure in effect integrated health and social care. Local government ceased to have responsibility for services such as health, personal social services, housing and youth education. General Practitioners (GPs) remained as independent contractors.

The UK Government's 'Health of the nation' reform in 1991 established an internal market within the NHS. For NI, this meant that the four boards became commissioners[128] of services, purchasing them from a range of health providers such as GPs and hospitals.

Further reform in 2009, following the Review of Public Administration in NI in 2007, reduced the number of bodies in the health and social system and formed a single commissioning body - the Health and Social Care Board (HSCB). Six Health and Social Care Trusts (five regional Trusts plus the NI Ambulance Service Health and Social Care Trust) were established under the Health and Personal Social Services (Northern Ireland) Order 1991 and made responsible for the delivery of Primary, Secondary and Community health care. Five Local Commissioning Groups (LCGs) were created.[129]

In partnership with the Public Health Agency (PHA), the HSCB commissioned and paid for services from providers including the Trusts, and managed performance. It was underpinned by five LCGs responsible for ensuring that the health and social care needs of local populations are addressed. The groups are geographically coterminous with the five regional Health and Social Care Trusts that directly provide services to the community. LCG membership is made up of a range of

[125] https://www.euro.who.int/__data/assets/pdf_file/0019/95140/Northern-Ireland.pdf
[126] https://www.publichealth.hscni.net/sites/default/files/Fourdecades.pdf
[127] https://publications.parliament.uk/pa/cm201919/cmselect/cmniaf/300/300.pdf
[128] "Commissioning" is a technical term for a process which involves the assessment of need, planning, purchasing and monitoring delivery of health services. Evaluation then feeds into a revised baseline for a new commissioning cycle.
[129] https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/integrated-care-in-northern-ireland-scotland-and-wales-kingsfund-jul13.pdf

professions such as GPs, nurses, dentists, pharmacists and representatives from the PHA and local government.

The HSCB was abolished earlier this year, and from March 2022 these functions are now instead being delivered by the Department of Health. The decision to close the HSCB was taken in 2015 by then Health Minister Simon Hamilton. This followed a Department-led Review of HSC Commissioning Arrangements[130] that identified a number of weaknesses in the system, including complex and bureaucratic structures and a lack of clarity of accountability and decision making. Proposals to reform planning and administration, including the closure of the HSCB, were subject to public consultation later in 2015. The consultation report affirmed the need for change.[131]

Table B.1 – Changes to NI health system structures over time

Pre RPA	Post RPA	Current model
DHSSPS (previously NI Ministry of Health and Local Government)	DHSSPS	DoH
4 HSC Boards	1 HSC Board plus 5 local commissioning groups	HSCB functions merged into DoH 5 LCGs – intended to reform these further into Area Integrated Partnership Boards
11 Community and social services trusts, 7 Hospital trusts, 1 ambulance trust	5 HSC Trusts plus 1 Ambulance Trust	5 HSC Trusts plus 1 Ambulance Trust
4 Health and social service councils	1 Patient and Client Council Public Health Agency	1 Patient and Client Council Public Health Agency

[130] https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/review-hsc-commissioning2015.pdf
[131] https://www.health-ni.gov.uk/publications/health-and-social-care-reform-and-transformation-consultation-analysis-report

Appendix C - Current structure of the NI health sector

The **Department of Health (DoH)**, is one of nine departments in the Northern Ireland Civil Service (for more on the NICS, see our Guide to NI's public finances).[132] DoH is organised into seven main groupings:

- the Healthcare Policy Group
- the Social Services Policy Group
- the Resources and Corporate Management Group
- the Chief Nursing Officer Group
- the Chief Medical Officer Group
- the Chief Digital Information Officer Group; and
- the Transformation, Planning and Performance Group

There are five professional groups within the Department, each headed by a Chief Professional Officer:

- the Chief Medical Officer Group
- Office of Social Services
- Nursing, Midwifery and Allied Health Professions (AHP) Directorate
- Dental Services
- Pharmaceutical Advice and Services

The five regional **Health and Social Care Trusts** and the **Northern Ireland Ambulance Trust** are the main providers of health and social care services to the public. The regional Trusts are responsible for health and social care facilities and services in their respective areas:

[132] https://www.nifiscalcouncil.org/publications/public-finances-ni-comprehensive-guide-november-2021

Table C.1 - Health Trusts[133]

Trust	Area covered	Annual budget[1] (£m)	Staff employed (2021-22)[2]	Population served[3]	Main hospitals
Belfast Health and Social Care Trust	Belfast and Castlereagh	1,800	20,215	348,204	Belfast City Hospital, Mater Infirmorum Hospital, Musgrave Park Hospital, The Royal Hospitals (Royal Belfast Hospital for Sick Children, Royal Victoria Hospital)
South Eastern Health and Social Care Trust	Newtownards, Down, North Down and Lisburn	912	10,527	346,911	Downe Hospital, Lagan Valley Hospital, Ulster Hospital
Northern Health and Social Care Trust	Coleraine, Moyle. Larne, Antrim, Carrickfergus, Newtownabbey, Ballymoney, Ballymena, Magherafelt and Cookstown	961	10,320	463,297	Acute services - Antrim Area Hospital, Causeway Hosptial. Mental Health - Holywell Hospital. Community - Mid Ulster, Whiteabbey, Moyle, Robinson, Dalriada
Southern Health and Social Care Trust	Dungannon, Armagh and Craigavon	878	11,575	365,712	Craigavon Area Hospital, Daisy Hill Hospital, South Tyrone Hospital
Western Health and Social Care Trust	The north west, Omagh and Fermanagh	841	10,194	294,417	Altnagelvin Area Hospital, Tyrone and Fermanagh Hospital, Omagh Hospital and Primary Care Complex, South West Acute Hospital
Northern Ireland Ambulance Service Trust	All Northern Ireland	119	1,379 (2020-21)	1,800,000	300 ambulance vehicles and Helicopter Emergency Medical Service (HEMS). They are based across 46 stations and sub-stations, two control centres (emergency and non-emergency) and a Regional Ambulance Training Centre

Note:[1] Resource 2021-22 budget at March 2022

[2]: Total average number of persons permanently employed

[3]: Population Census 2011

Source: Northern Ireland Statistics and Research Agency (NISRA), Department of Health, HSC Trust Annual Reports and Accounts

[133] Detail taken from https://www.health-ni.gov.uk/publications/hsc-board-member-handbook

Appendix D - Health and Social Care bodies

Body	Status	Purpose
Health and Social Care Trusts	Budgeted for as NDPBs	
Business Services Organisation	Budgeted for as a NDPB	provides business support and specialist professional services to other health and social care bodies, as directed by the Department. This includes: administrative support, financial services; human resource and corporate services, estates; IT; procurement of goods and services; legal services; internal audit and fraud prevention.
Northern Ireland Blood Transfusion Service	Budgeted for as a NDPB-Special Agency	responsible for the collection, testing and distribution of blood donations. It aims to supply the needs of all hospitals and clinical units in Northern Ireland with safe and effective blood, blood products and other related services. This includes a commitment to the care and welfare of blood donors.
Northern Ireland Fire and Rescue service	Executive NDPB	
Northern Ireland Guardian ad Litem Agency	Budgeted for as a NDPB - Special Agency	appointed to safeguard the interests of children in family and adoption court proceedings. The Northern Ireland Ad Litem Agency is a special agency which maintains the NI register of Guardians ad Litem and ensures the independence and objectivity of safeguarding the interests of the child.
Northern Ireland Medical and Dental Training Agency	Budgeted for as a NDPB	a special agency that ensures that doctors and dentists are effectively trained by funding, managing and supporting postgraduate medical and dental education
Northern Ireland Practice and Education Council for Nursing and Midwifery	Executive NDPB	an NDPB that supports the development of nurses and midwives by promoting high standards of practice, education and professional development. The NIPEC also provides advice and guidance on best practice and matters relating to nursing and midwifery.
Northern Ireland Social Care Council	Executive NDPB	a non departmental public body designed to protect those who use social care services, and to promote confidence and competence in the social care workforce. It registers and regulates the social care workforce, sets and monitors the standards for professional social work training and promotes training within the social care workforce.
Patient Client Council	Budgeted for as a NDPB	aims to provide an independent voice for patients, clients, carers, and communities on health and social care issues. It engages with the public and HSC organisations to ensure the needs and expectations of the public are engaged with and it promotes the involvement of patients, clients, carers and the public in the design, planning, commissioning and delivery of health and social care. It also assists individuals with a complaint relating to health and social care.
Public Health Agency	HSC Body	aims to protect and improve public health and well-being, and to reduce health inequalities. The PHA also assists the commissioning process by providing professional input on how services should meet safety and quality standards and support innovation. It also has responsibility for promoting improved partnership between the HSC sector, the wider public sector and the voluntary and community sectors.
Regulation and Quality Improvement Authority	Executive NDPB	responsible for reviewing and reporting on clinical and social care governance in the HSC. RQIA keeps DoH informed about the provision, availability and quality of health and social care services; it provides advice on good practice and standards. It regulates (registering and inspecting) a wide range of health and social care services such as nursing and residential care homes; children's homes, and clinics. It also conducts a rolling programme of hygiene inspections in HSC hospitals.

Appendix E - Hospital statistics

Table E.1 - Inpatient and Day Case Activity 2016/17 to 2020/21

Programme of Care	Activity Indicator	2016/17	2017/18	2018/19	2019/20	2020/21	% Change 19/20-20/21	% Change 16/17-20/21
All POC's	**HSC Hospitals**							
	Average available beds	5,909.9	5,830.4	5,830.4	5,779.8	5,672.6	-1.9	-4.0
	Average occupied beds	4,955.7	4,922.5	4,870.1	4,829.4	3,965.6	-17.9	-20
	Inpatients	302,008	298,361	295,088	292,086	227,035	-22.3	-24.8
	Day Cases	313,263	310,177	317,006	305,294	200,697	-34.3	-35.9
	Total Admissions	**615,271**	**608,538**	**612,094**	**597,380**	**427,732**	**-28.4**	**-30.5**
	Average Length of Stay	6	6	6	6.1	6.4	5.4	6.4
	% Occupancy	83.9	83.5	83.5	83.6	69.9	-16.3	-16.6
	Independent Sector Independent Sector Admissions	14,943	4,276	11,408	9,157	8,565	-6.5	-42.7

Source: Department of Health

Table E.2 - Outpatient Activity 2016/17 to 2020/21

Programme of Care	Activity Indicator	2016/17	2017/18	2018/19	2019/20	2020/21	% Change 19/20-20/21	% Change 16/17-20/21
All POC's	**HSC Hospitals**							
	New attendances	484,635	46,623	482,284	449,797	221,533	-50.7	-54.3
	Review attendances	1,023,100	989,828	1,016,785	956,579	481,158	-49.7	-53.0
	Total new & review attendances	1,507,735	1,456,651	1,499,069	1,406,376	702,691	-50.0	-53.4
	Total did not attends (DNAs)	132,288	128,407	126,326	127,423	54,952	-56.9	-58.5
	Total could not attends (CNAs)	189,374	191,803	190,353	182,600	64,167	-64.9	-66.1
	Total Hospital Cancellations	155,084	166,238	173,883	210,930	180,471	-14.4	16.4
	DNA rate	8.1	8.1	7.8	8.3	7.3	-1.1	-9.9
	CNA rate	11.2	11.6	11.3	11.5	8.4	-3.1	-25.0
	Hospital cancellation rate	9.3	10.2	10.4	13.0	20.4	7.4	119.4
	Ward attendances	58,178	55,016	53,871	56,049	50,664	-9.6	-12.9
	Regional assessment and surgical centre attendances			132	2,416	1,747	-27.7	-
	Independent Sector Independent Sector Admissions	24,445	10,643	15,053	14,132	13,727	-2.9	-43.8

Source: Department of Health

Appendix F - Health governance framework

The Department of Health's handbook for the boards of those organisations delivering services or otherwise involved in health or social care (HSC boards),[134] updated last in May 2021, describes that the governance framework is related to both the structure of the sector and the flows of money through it:

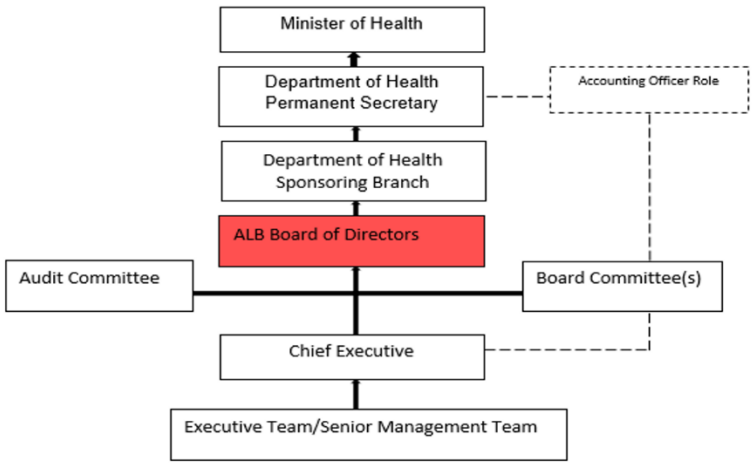
- The Northern Ireland **Assembly and its Health Committee** hold to account those who have governance roles in health and social care;

- The **Minister for Health and his/her Accounting Officer** are ultimately accountable for the quality and safety of health and social care;
    - The Minister is responsible and answerable to the Assembly for all the policies, decisions and actions of the Department and its ALBs.
    - The Permanent Secretary is the departmental Accounting Officer and is personally responsible and accountable to the Assembly for the organisation and quality of management of the Department, including its use of public money and the stewardship of its assets.

- The various HSC organisations are arm's length bodies of the Department underpinned by legislation.[135] Each **is overseen by a board, responsible for its performance**. The legislation sets out high-level functions and the parameters within which each body must operate. It also describes the governance and accountability arrangements required.

- Within this framework, the **HSC organisations have autonomy but are accountable** to the Department as shown in the diagram below:[136]

Figure F.1 – Accountability within the HSC sector



[134] https://www.health-ni.gov.uk/publications/hsc-board-member-handbook
[135] Health and Social Care (Reform) Act (Northern Ireland) 2009
[136] https://www.health-ni.gov.uk/publications/dhssps-framework-document-september-2011

The Department prescribes codes of accountability and conduct and requires the boards of HSC bodies to establish a system of internal control and to disclose their effectiveness in an annual Governance Statement or Statement on Internal Control. This covers the risk and control issues facing the organisation, and how the organisation maintains and reviews its internal controls.[137] Boards must focus not only on ensuring that there is effective and robust accountability for corporate governance - financial management, risk management, internal and external audit arrangements - but also on staff governance and, uniquely in public sector boards, clinical governance. In other words, in addition to normal governance arrangements, the board manages clinical risks and has legal responsibilities that are not usual on public sector boards.

HSC bodies are required to establish audit committees as sub-committee of their boards. The Department requires HSC audit committees and boards to monitor, report on and account for their performance in a range of areas including:

- governance
- risk management
- human resources
- medical equipment and devices
- medicines management
- buildings, plant, land and non-medical equipment
- decontamination of medical devices
- environmental management
- fire safety
- health and safety
- infection control
- ICT
- waste management
- financial management

[137] https://www.niauditoffice.gov.uk/files/niauditoffice/media-files/financial_auditing_and_reporting_2003-04___2004-05.pdf

Appendix G - Comparison of health surveys across the UK[138]

Topic	Health Survey Northern Ireland 2019/20	95% confidence intervals	Health Survey England 2019	Scottish Health Survey 2019	National Survey for Wales 2019/20
Good or very good general health (%) - All	71	70 to 72.8	75	72	71
Good or very good general health (%) - Male	72	69.6 to 73.8	75	74	73
Good or very good general health (%) - Female	71	69.3 to 73	74	70	69
Long-standing illness (%) - All	43	41.2 to 44.2	43	47	48
Long-standing illness (%) - Male	41	38.4 to 43.1	40	46	45
Long-standing illness (%) - Female	45	42.5 to 46.5	45	49	51
Current cigarette smoker (%) - All	17	16.3 to 18.6	16	17	18
Current cigarette smoker (%) - Male	18	16.6 to 20.3	18	19	18
Current cigarette smoker (%) - Female	16	15 to 18	15	16	17
Currently using e-cigarettes (%) - All	6	5.4 to 6.8	6	7	7
Currently using e-cigarettes (%) - Male	7	5.5 to 7.9	7	7	7
Currently using e-cigarettes (%) - Female	5	4.6 to 6.4	5	7	6
Obese (%) - All	27	25.9 to 29	28	29	25
Obese (%) - Male	28	25.4 to 30.1	27	29	26
Obese (%) - Female	27	25 to 29.2	29	30	24
Overweight (%) - All	38	36.1 to 39.5	36	37	35
Overweight (%) - Male	43	40.7 to 45.9	41	40	40
Overweight (%) - Female	33	30.4 to 34.8	31	33	31
Obese & Overweight (%) - All	65	63.6 to 66.9	64	66	61
Obese & Overweight (%) - Male	71	68.6 to 73.4	68	69	67
Obese & Overweight (%) - Female	60	57.4 to 62	60	63	55
GHQ12 score of ≥4 (%) - All	19	18.2 to 20.8		17	
GHQ12 score of ≥4 (%) - Male	18	15.7 to 19.5		15	
GHQ12 score of ≥4 (%) - Female	21	19.6 to 23		19	

Source: Department of Health

[138] As these surveys have different methodologies and may differ on question wording, estimates are considered partially comparable.

Appendix H - Data qualifications in respect of Table 5.3[139]

General notes

1. QOF was retired in Scotland on 31 March 2016.
2. QOF was replaced in Wales in 2019-20 with the Quality Assurance & Improvement Framework (QAIF).
3. While the Welsh QAIF disease register data is comparable with previous QOF data, QAIF data is taken at a different point in time compared to QOF; QAIF registers comprise of patients who are on the register at the end of the QAIF year i.e. 30th September, while for QOF it is 31st March. As the QAIF cycle runs from 1st October to the 30th September, the data will not align exactly with that for QOF. The Welsh 2019/20 QAIF data, which is the position at 30th September 2020, is within the 2020/21 financial year, the time period as used by NI and English data. Therefore although the Welsh data is published as '2019-20', this does not equate to a financial year, but to the QAIF year of October to September.
4. The CVD-PP indicator group was retired in England.
5. Asthma prevalence has fallen slightly since last year, although is still higher than pre-Covid levels. The increase last year was noted to be related to the Covid pandemic. General practices experienced patient concern for previously resolved asthma and responded to this by reinstating the prescribing of inhalers for these patients, where asthma was resolved and they were no longer on medication. The nature of the business rules for asthma is such that, prescribing of this medication has resulted in these patients being picked up again in the asthma register. Their diagnosis code remains on their patient record but they would have dropped off the register if not prescribed medication within the last 12 months.
6. Note that Wales does not publish the prevalence rates for 'all population' when a register is age specific; these can be calculated using data at Quality Assurance and Improvement Framework (QAIF) disease registers by local health board (gov.wales)
7. In England, the clinical codes used to define the Learning Disabilities register changed significantly for QOF 2018-19, meaning the register is not comparable between years.

Notes Covering NI, England and Wales

1. National prevalence is calculated as at 31st March. This has been the case since 2009; previously, national prevalence day (2005 to 2008) was 14 February each year.
2. Rate calculations use practice list sizes as at 1st January each year.
3. Prevalence of palliative care has not been presented, as an Adjusted Disease Prevalence Factor is not required; indicators within this area are weighted by 1.0.
4. England chose not to publish figures on heart failure due to LVD (which is a subset of the main heart failure register).
5. The rheumatoid arthritis register is based on patients aged 16+; the diabetes register is based on patients aged 17+; the diagnosis of depression register is based on patients aged 18+; and the osteoporosis register is based on patients aged 50+, with an amended definition for those aged 75+.

[139] Source: Department of Health

6. For Wales and Northern Ireland, prevalence rates are calculated using both the whole population and also separately using the appropriate age-specific population denominator. Note that Wales does not publish the prevalence rates for the whole population when a register is age specific; these can be calculated using data at Quality Assurance and Improvement Framework (QAIF) disease registers by local health board (gov.wales)
7. For England, prevalence rates are only calculated using the age specific population denominator.
8. England, Wales and Northern Ireland present prevalence rates for the age specific registers based on the appropriate population denominator. QOF prevalence within PCAS (NI) and QMAS (England) does not include a breakdown by age; it is therefore necessary to use another external data source. This is possible in N Ireland using list sizes from the NHAIS System (known as Exeter System), while in Wales, ONS population estimates are used. In England, age-banded list sizes were obtained from the Prescription Services Division (PSD), NHS Business Services Authority (formerly the Prescription Pricing Division, NHS BSA). Note, where PSD age bands did not match those required, proportioning was necessary and therefore English rates for these age-restricted diseases should be considered estimates. NI age-specific prevalence is shown in the table, allowing comparison with England and Wales.

Notes Specific to NI

1. 5 registers have remained unchanged since 2004/05: asthma, cancer, coronary heart disease, hypertension and stroke/TIA.
2. 3 registers which were introduced in 2006/07 have remained unchanged since then: atrial fibrillation, dementia and heart failure.
3. Cardiovascular disease – primary prevention was introduced in 2009/10; there was a change to the indicator definition in 2014/15 and it has remained unchanged since; however, note this is a cumulative register and counts the number of patients with a new diagnosis of hypertension since 1st April 2014, excluding those with pre-existing CHD, diabetes and stroke/TIA. Similarly, the cancer register only includes those patients with a diagnosis since April 2003.
4. The following registers are comparable for the following years:
   a. COPD from 2004/05 to 2005/06 and then from 2006/07 onwards.
   b. Diabetes and epilepsy for 2004/05 and 2005/06 and then from 2006/07 onwards. Mental Health and Heart failure due to LVD from 2013/14 onwards.
5. Two new QOF registers were introduced for 2012/13, osteoporosis and peripheral arterial disease. Peripheral Arterial Disease was then removed from 2015/16 onwards. A new register for rheumatoid arthritis was introduced in 2013/14.
6. The diagnosis of depression register was amended in 2012/13 and is no longer comparable to previous years.
7. Heart failure due to LVD is a subset of the main heart failure register.

Reliability of QOF Prevalence Estimates

Prevalence data within the QOF are collected in the form of practice registers. A register may count patients with one specific disease or condition, or it may include multiple conditions. There may also be other criteria for inclusion on a register, such

as age or time of diagnosis. The QOF data does not provide information on comorbidities and some patients may be recorded on more than one register.

QOF registers are collected for several reasons:

- to enable payments to practices to reflect the workload for particular conditions;
- to encourage GPs to assess and monitor particular conditions.

While registers are not primarily collected to collate statistics on how many people have a particular condition, they do provide a useful source of estimates. However, it must be remembered that their primary reason for collection is not to measure prevalence, but rather to aid QOF payments. They are constructed to underpin indicators on quality of care provided; they do not necessarily equate to prevalence as defined by epidemiologists.

They may differ from other sources of prevalence data due to coding or definitional issues. It is also difficult to interpret year-on-year changes in the size of QOF registers, as a gradual rise in patients on a register could be partly due to epidemiological factors such as an ageing population, or due partly to increased case finding.

New registers should be treated with caution in the first few years of reporting, as they are still being established and validated. QOF registers may be more likely to give reliable estimates of prevalence for conditions which are managed mainly by a GP or practice nurse, e.g. asthma, hypertension, CKD and CHD. QOF registers do not give reliable prevalence estimates for depression, learning disabilities and obesity. QOF registers are likely to underestimate prevalence for conditions where people do not always consult their GP, e.g. COPD, dementia and osteoporosis.

Appendix I - Estimates presentation and the Review of Financial Processes

After the budget planning and allocation process is completed, the NI Estimates submitted by departments to the Assembly as part of the legislative budget process for authorisation, show expenditure in a different way. For example, following the Review of Financial Processes[140] it is expected that the Department of Health's of Estimates will be presented as follows:

Voted expenditure

- Hospital Services
- Social Care Services
- Family Health Services - General Medical Services
- Family Health Services - Pharmaceutical Services
- Family Health Services - Dental Services
- Family Health Services - Ophthalmic Services
- Health Support Services
- Public Health Services
- Ambulance and Paramedic Services
- Food Safety Promotion Board

Non-voted expenditure

- Health Services Financed by National Insurance Contributions
- Consolidated Fund Extra Receipts

Until the Review of Financial Processes, the Estimates were presented in a very different format from what is now proposed, which made where the money was going less transparent. For example, in the section reporting outturn against Estimates, the DoH Annual Report and Accounts for 2020-21 recorded £5.4 billion (84% of the total) simply as 'Grant in Aid to HSC Bodies'.[141] It is expected therefore, that the new format of Estimates will represent a transparency gain.

Family Health Services

Family Health Services (FHS) is the umbrella term for many of the primary health services that citizens access of a regular basis for routine healthcare, eye tests and dentistry.

Following the closure of the HSCB, the FHS budget will be managed directly by the DoH. Over £1 billion was spent on Family Health Services in 2020-21 – 16.4% of total DoH expenditure (£6.5bn) in that year. Expenditure under Family Health Services will be approved and accounted in the Estimates for under four headings:

[140] The implementation of the Executive's Review of Financial Process (the equivalent of the UK 'Clear Line of Sight' project) should align the various frameworks of presentation and reporting more closely.

[141] https://www.health-ni.gov.uk/sites/default/files/publications/health/doh-annual-report-accounts20-21.pdf (see page 73)

- General Medical Services;
- General Dental Services;
- General Pharmaceutical Services; and,
- General Ophthalmic Services

The planning, authorising, recording and reporting of health and social care finances is therefore complex and it is difficult to follow the flow of money due to the lack of transparency and multiple approaches used. The proposed Estimates format may help add transparency but the Northern Ireland Estimates (usually introduced in May/June to the Assembly) show the initial planned allocation. As the financial year unfolds, the Executive's In-year monitoring process updates plans and reallocates money around the system.