

# **REAL Centre** **The** **unsustainable is** **not sustained**

**Why productivity is fundamental  
to the future of the NHS**

**Diane Coyle**

**REAL Challenge annual lecture • November 2023**

## About the author

Professor Dame Diane Coyle is the Bennett Professor of Public Policy at the University of Cambridge. Diane co-directs the Bennett Institute for Public Policy where she heads research under the themes of progress and productivity. Her latest book is *Cogs and monsters: what economics is, and what it should be* on how economics needs to change to keep pace with the twenty-first century and the digital economy.

Diane is also a Director of the Productivity Institute, a Fellow of the Office for National Statistics, an expert adviser to the National Infrastructure Commission, and Senior Independent Member of the ESRC Council. Diane was Professor of Economics at the University of Manchester until March 2018 and was awarded a DBE in the King's Birthday Honours List 2023 for her contributions to economic policy and practice.

## About the REAL Centre

The Health Foundation's REAL Centre (research and economic analysis for the long term) provides independent analysis and research to support better long-term decision making in health and social care.

Its aim is to help health and social care leaders and policymakers look beyond the short term to understand the implications of their funding and resourcing decisions over the next 10–15 years. The Centre works in partnership with leading experts and academics to research and model the future demand for care, and the workforce and other resources needed to respond.

The Centre supports the Health Foundation's aim to create a more sustainable health and care system that better meets people's needs now and in the future.

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## Acknowledgements

It is a great honour and pleasure to give this lecture, following such distinguished previous lecturers in this series. I'd like to thank Jennifer Dixon and Anita Charlesworth, Icaro Rebolledo, and other colleagues at the Health Foundation who have been incredibly helpful in preparing for the lecture. It was a surprise to be invited because I am not an expert on the health system, but what I have been investigating for some time is productivity, including productivity in public services through the Productivity Institute. This work incorporates, as well as my own research, that of my colleagues there and from others, including at the Health Foundation.

With the 75th anniversary of the NHS in mind, we asked people who attended the REAL Challenge lecture to describe in one word how they thought the NHS would look at 100 to form a word-cloud. 'Broken', 'challenged' and 'tired' were some of the words most prominent in participants' answers. This gives us a picture of the difficulties people think the NHS is facing currently and potentially in the future.

# Introduction

In thinking about the NHS's next quarter century, as it marks its 75th anniversary year, a key issue is productivity – the focus of this paper. First, I describe productivity and why it is fundamental. I then briefly explore some of the pressures being experienced in the NHS at the moment. Most of the paper covers four areas where I hope the lens of an economist can contribute to the debate about the future of the health service:

- framing the health service as part of the national infrastructure and asking what that implies for investment
- thinking about prospects for productivity gains from digital tools and the implications for organisational structures as well as NHS culture and hierarchy
- discussing the demand side and the prospects for easing pressures through demand management
- raising the contentious issue of the boundary between public provision of health care through the NHS and private provision.

While these issues are not new, I'm hoping that the slightly Martian way in which we economists see the world will bring a different perspective.

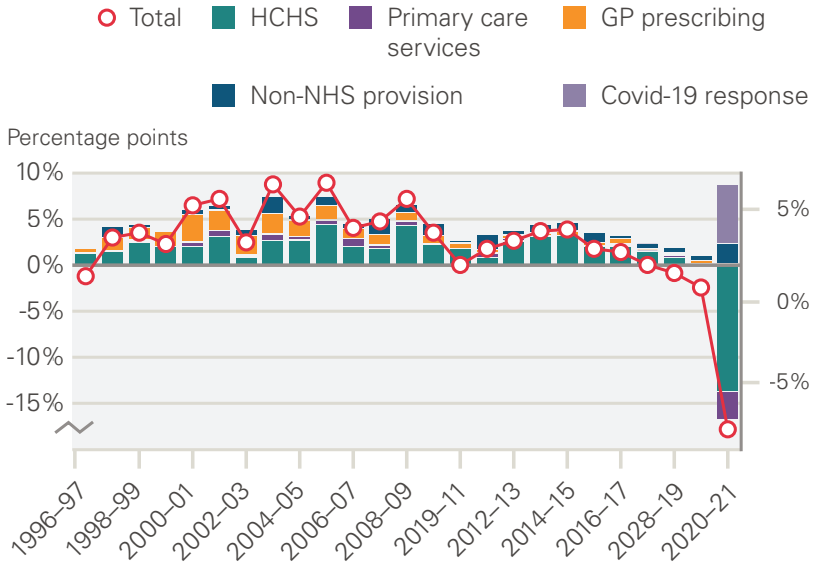
The bottom line is if something is unsustainable, it is not sustained. The only question is *how* a new, and sustainable, trajectory comes about. My argument is that we will only have the kind of NHS we would want in its centenary year if there is organisational and cultural change, because this is at the heart of what the health service needs to capture productivity gains. I start by looking at what is currently happening to health care productivity.

**Productivity is  
fundamental to the  
future of the NHS**

**1**

It is no surprise that the pandemic has had a big impact on NHS productivity. Figure 1 shows that there was an increase in COVID-19-related activities, but a decline in primary care and hospital services that outweighed that increase. So in terms of output and productivity, the pandemic had a very negative effect, about a 25% productivity decline.<sup>1</sup>

**Figure 1: Contributions to annual change in public service health care output volumes by component, England, financial year ending (FYE) 1997 to FYE 2021**



Source: Office for National Statistics

Note: Health care outputs refers to the volume of patients receiving procedures (through some patients may be duplicated if receiving multiple procedures). HCHS refers to hospital and community health services

GP prescribing for 2020-21 was at 0.2%



But if you look at the longer period in the figure, you can see that output has actually been increasing over many years as has health care productivity. In fact, the productivity of the public sector has been growing faster than that of the private sector since around the time of the 2008 financial crisis. This may be surprising and is partly a reflection of how dire productivity growth in the private sector has been. But it is also mixed news. Although, especially once quality adjustments have been taken into account, we have seen some reasonable productivity improvements in the health service, they have not been enough; we are going to need more.

## **What is productivity and how do you measure it in the health care sector?**

What exactly do we mean by productivity? Economists have a different understanding to the intuitive one that most people would tend to have. Many will have the impression that higher productivity is about people working harder. Yet NHS staff are already working very hard. Working them even harder is not a feasible way of delivering long-term growth in productivity.

Productivity more broadly defined is what you are getting out for what you are putting in. So the issue becomes, how do you define 'inputs' (what you put in) and how do you define 'outputs' (what you are getting out)?

Economists look at all inputs, not just labour, so in particular capital input (eg, the use of machines and buildings) and any others that are involved, such as natural capital (eg, water, air, soil). We also want to quantify all inputs in terms adjusted for inflation. This involves a lot of complex calculation, because for the most part the public sector cannot be measured using market prices or revenues, unlike the private sector. In the case of labour input, in health we can count the number of full-time equivalent employees and their hours and can look at wage rates, but figuring out the amount and cost of capital equipment is trickier. The task of weighting and adding those up together, along with other inputs such as consumables, represents another challenge.

For outputs, we are trying to bring together a wide range of different activities in the health service, such as GP appointments, emergency interventions, prescriptions, surgeries and outpatient appointments. The current Office for National Statistics (ONS) measure of productivity weights these activities according to cost. That means there is a risk of a lower cost activity that is more productive, such as a technical improvement that makes something cheaper and more reliable to deliver, might seem to decrease productivity. This is because a lower cost activity 'weighs' less and decreases the calculated output when replacing a higher cost activity.

To finish the calculation of total NHS output, we can then do a quality adjustment, as recommended in the landmark 2005 Atkinson Review.<sup>2</sup> It is incredibly complicated capturing what is meant by quality across the range of different services in health.

Recently, the Chancellor announced that public service productivity is an important focus;<sup>3</sup> and there is a lot of work going on with the ONS, the Department of Health and Social Care, and other organisations, such as the Health Foundation, looking at how these productivity measurements are put together. Different countries use different methods, so some countries showed a lesser decline in output during the pandemic than the UK did. That was partly (although not entirely, as I discuss below) due to the differing measurement methods.

Getting the measurement of productivity right is important, but it is not going to solve the productivity problem facing the NHS. We are not going to suddenly find that if only we measured productivity in a different way, we would have a much more robust health service. The approach to measuring productivity I have sketched out is incomplete in thinking about public services such as the NHS.

We therefore need to consider a broader framework to understand the NHS's productivity prospects.<sup>4</sup> This has three components:

- cost-effectiveness in purchasing the things that the health care service needs

- organisational efficiency, which refers to how the health service uses the inputs that it is purchasing to deliver health outputs (treatments, screenings, GP visits etc)
- health outcomes, reflecting the impact of health services and the wider health system in the broader economic and social environment affecting people's health.

Discussions of productivity often focus on the first, based on the idea that there is scope for more budget discipline or using existing resources more cost effectively. But this offers limited prospects for productivity improvement. A cash-strapped public service at some point can only cut costs more by reducing activities or their quality. The core of the challenge is the second of these bullet points – organising activities differently rather than doing the same things the same way but for less money. Organisational change is at the heart of the NHS's productivity question. First, though, it is worth reflecting on the scale of that challenge.

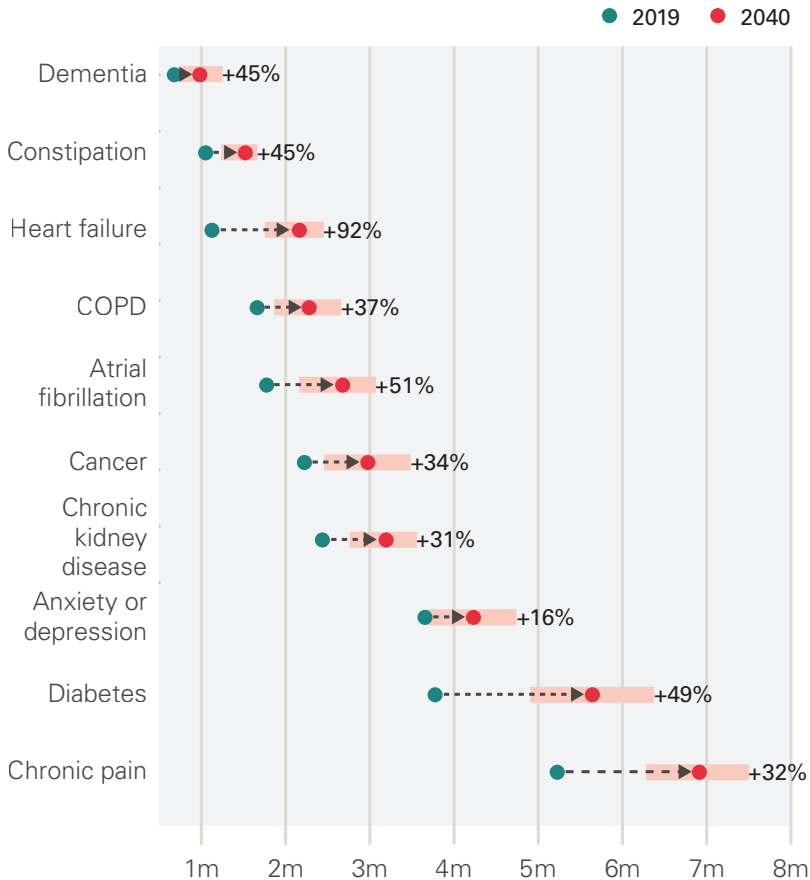
## **Pressures are intensifying – on the demand and supply-side**

Obviously, the NHS is not operating in a vacuum and there are many contributory factors or pressures that are beyond its ability to control. What are these pressures and why

does the state of the NHS currently feel unsustainable or even 'broken', as the word cloud reflected? There are both demand and supply pressures.

As an illustration of demand pressures, Figure 2 is from the Health Foundation's report *Health in 2040: projected patterns of illness in England*.<sup>5</sup> It shows the projected increase in the 10 conditions with the highest impact on demand for health care, including how they are likely to be impacted by demographic change. The figures are startling. The percentages shown for each condition represents a large projected expected increase over the next two decades. This is quite likely to exceed any conceivable rate of increase in real-terms spending on the NHS that we can imagine under any government. So a key question is how are we going to tackle these future demand pressures? Much higher productivity has to be part of the answer.

**Figure 2: Projected total number of diagnosed cases for the 10 conditions with the highest impact on health care use and mortality among those aged 30 years and older, including demographic changes, England, 2019 and projected for 2040**



Source: Analysis of linked health care records and mortality data conducted by the REAL Centre and the University of Liverpool

Note: Red shaded bars represent uncertainty intervals. COPD is chronic obstructive pulmonary disease.

On the supply side, the pressure stems from what economists' call Baumol's cost disease, a phenomenon that implies that health service spending increases as a share of the economy over time. As countries get richer, they spend an increasing proportion of their GDP on labour-intensive services where there are inherent limits to productivity growth. Yet employees in these sectors need to be paid comparably to their counterparts in sectors with rapid productivity growth.

This is not a theory so much as a matter of logic. There are services where productivity cannot be increased all that much. Will Baumol's original paper gave the example of a string quartet.<sup>6</sup> And as countries get richer, more people will want to go to more live concerts to listen to string quartets, but a quartet has to have four players – not two – and will not increase its productivity by playing the Mozart twice as fast. Yet people working in industries whose productivity gains are limited still expect to be paid commensurately with people working in the productive sectors of the economy. The same bitter medicine applies to any service where the scope for substituting machines for people to increase productivity is limited. There may be some scope for technology to help but the share of spending on such services will climb over time.

Indeed, health care system spending as a share of GDP in all key Organisation for Economic Co-operation and Development (OECD) countries has been trending upwards for decades. The question on the supply side is whether Dr Baumol's bitter medicine is an inexorable complaint?

The answer is yes. Can it be alleviated? The answer to that is yes as well. Again, on the supply side as on the demand side, higher productivity has to be part of the answer.



**What can be done?**

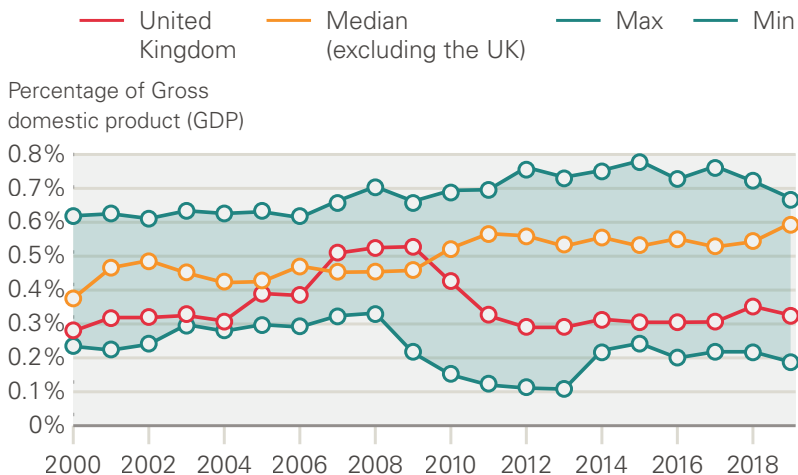
**2**

The solution is likely to be multifaceted and there are four areas that could have a real impact on NHS productivity. The first is thinking about the health care system as part of the country's critical infrastructure. The second is investing in digital capabilities. The third is about demand management and the fourth is interrogating what kind of model of health provision we may want in future.

## **The health system as infrastructure – implications for investment**

There is no question in my mind that there has been long-term underinvestment in capital equipment and buildings in the NHS. Figure 3 shows the range and average health care investment in OECD economies as a share of their GDP, as well as the UK.<sup>7</sup> With a brief exception in 2007/08, UK capital investment has been about half the average rate of OECD countries. Recall that productivity is not getting people working harder – one of the most powerful ways to improve productivity is giving them better equipment to work with. An analogy is to think of a construction site where a worker is going to become more productive if they have a mechanical digger rather than a spade. In economics, this is known as 'capital deepening': investment in more capital equipment per worker will improve labour productivity.

**Figure 3: Fixed capital formation in health care, 2000–2019, selected OECD countries**



Source: Organisation for Economic Co-operation and Development (OECD) data for OECD countries for which data for all years were available: Austria, Canada, Denmark, Finland, France, Greece, Ireland, Norway, Sweden, USA.

In the UK we have probably been seeing capital shallowing, meaning that the capital available to each member of NHS staff has been decreasing; more MRI machines, perhaps, but fewer beds, crumbling buildings and insufficient investment in IT hardware and software. It is hard to say what the right investment quantity number would be, but the figure of 0.2% of GDP, at the bottom of the OECD ranking, suggests it is sufficiently low to reduce productivity in the face of the demand and supply pressures.

So it seems clear to me that capital underspending has limited the potential for NHS productivity. In fact, as I argue in a forthcoming publication,<sup>8</sup> we need to regard capital spending in health care in a different way – as part of the national infrastructure.

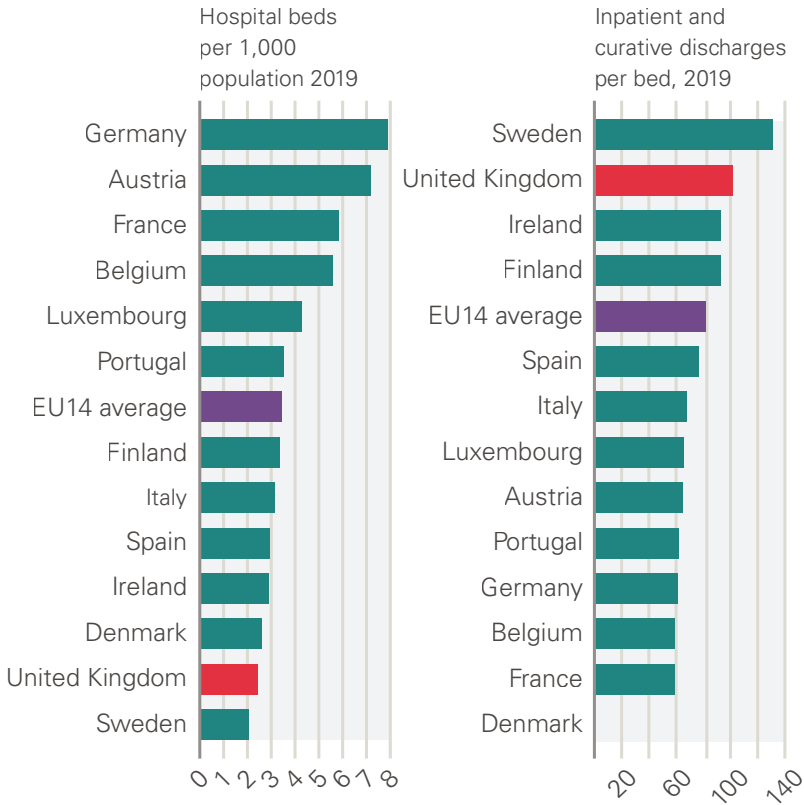
Infrastructure is the kind of capital that a country's economy cannot operate without. It is non-optional investment. We generally think of infrastructure in terms of roads and railways and power stations. The demand for this infrastructure is derived demand. We do not want to buy a train ticket just for the experience of the journey, although that might be part of the reason – we mainly want to go somewhere. Similarly, we do not want to buy units of electricity for their own sake – we want the electricity to be able to do something else. We should think about the health service in that way as well. Nobody wants to consume the service of an operation or appointment for its own sake; what they want is improved health. What's more, the health (or otherwise) of the population affects the functioning of the economy; health forms part of the human capital fundamental to economic outcomes.

There are many lessons from the economics of infrastructure that could be applied to thinking about the right level of investment in capital and hence the right level of capacity in the NHS in particular. The experience of the COVID-19 pandemic makes it clear that, considered as core infrastructure, the NHS did not have enough spare capacity. While measurement methods partly explained the difference between the UK's health output and that of

other countries, as discussed earlier, a key driver was the large contraction in non-pandemic NHS activities shown in Figure 1.

Looking at hospital beds provides a good example of the issue of capacity, with Figure 4 showing that the UK is well below the European average.<sup>9</sup> Germany has the highest number of beds and has had its own debate about whether this is efficient. It would be interesting to know what conversation Sweden has been having given it has fewer hospital beds than the UK.

**Figure 4: The UK has fewer hospital beds than other EU14 countries, which are used more intensely**



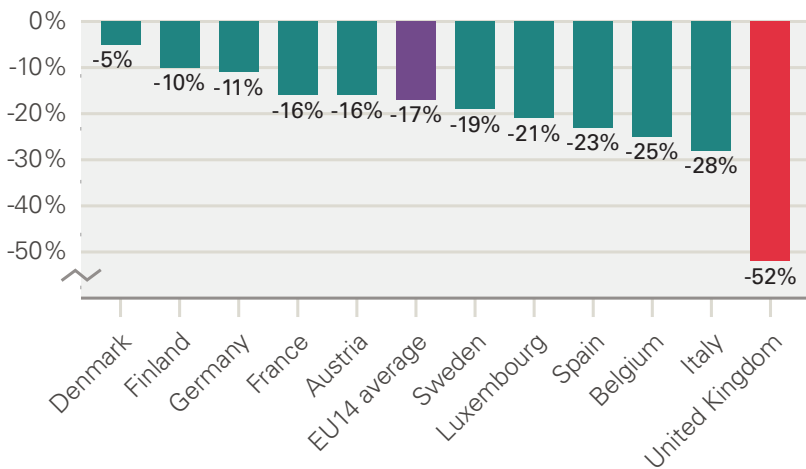
Source: OECD Statistics (2021)

Data unavailable on Denmark's inpatient and curative discharges per bed, 2019.

During the COVID-19 pandemic the UK was running the system so hot in terms of beds that it experienced one of the steepest declines in hospital activity overall (Figure 5). Insufficient capacity in any area, including beds, has a wider effect on the health service. If there is a bottleneck in one place that has knock-on effects through the whole

system. It also means that there is no resilience in the system for emergencies – like the pandemic. Then there are much wider effects on productivity across the whole economy, just as an electricity blackout has wider effects on the economy as well as on electricity output. This is a clear example of the trade-off between running a ‘lean’ system and its potential lack of resilience when a shock hits.

**Figure 5: Change in hospital activity during the pandemic, percentage change in total procedures, 2019–20**



Source: OECD Statistics (2023)

I am arguing not just for more capital spending, which I think is clear from Figure 5,<sup>10</sup> but also for reframing the way we think about capital spending in the NHS, and using the lessons from a large body of economics literature to inform what the right level of spare capacity in our key infrastructure ought to be. We should not invest to

meet every peak in demand, but clearly we need more investment in capital in the NHS than we have now or have had for years.

## **Digitisation as process innovation – implications for NHS culture and hierarchy**

So far I have described the pressures, the increase in demand for high-impact activities and conditions, and the Baumol cost disease pressures. A first step is to determine what level of ongoing investment the NHS needs in its buildings and capital equipment, considering the service as part of the nation's infrastructure and therefore as a foundation for productivity across the whole of the economy.

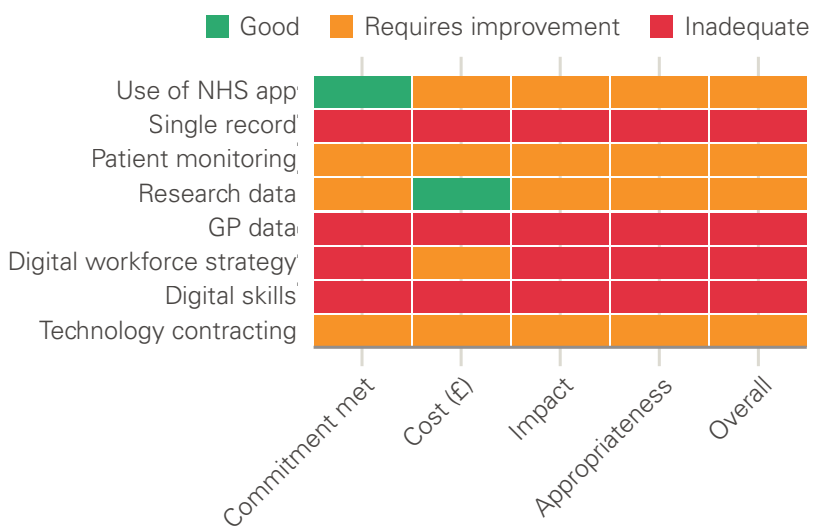
The second element in addressing the NHS productivity question lies in digitalisation and innovation. Anybody with any experience either as a patient or as an expert on the health system knows that investment in digital has been a fraught journey and that digital tools are not being used effectively in the health service for all kinds of reasons. There is some amazing digital innovation going on in the economy as a whole, and in health in particular – but is this innovation alone enough to save the NHS, as some of the tech hype would suggest?

Table 1 shows a summary rating of experts' evaluations of progress on digital innovation in the NHS so far.<sup>11</sup> The evaluation asks if the commitment from policymakers



has been met ('Commitment met' column in Table 1); whether the money promised has been spent ('£' column); what kind of impact it has had ('Impact' column); and whether the approach was appropriate ('Appropriateness' column), before providing an overall rating. A green rating means that experts felt 'good' progress was being made; amber means 'required improvement'; and red means 'inadequate'.

**Table 1: Health and Social Care Select Committee evaluation of government commitments made on the digitisation of the NHS**



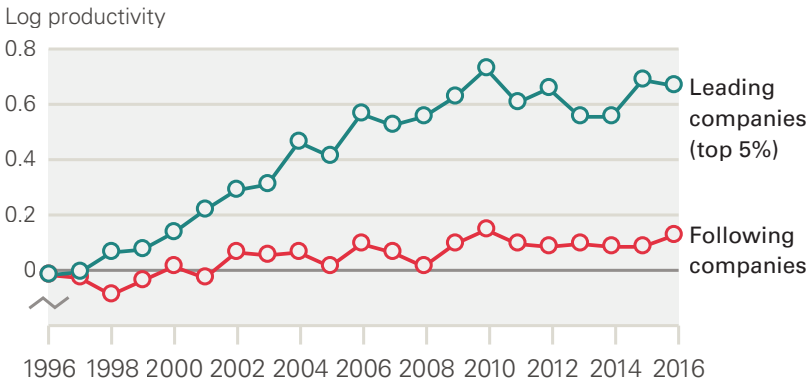
Source: House of Commons Health and Social Care Committee Fourth Special Report of Sessions 2022–23

These results do not give grounds for optimism about the progress of applying digital technology in the NHS. New tools may be able to deliver some cost efficiencies

or some process improvements. It may be that some new AI tools enabling us to interact with computers through natural language will make it easier for people to use digital technology, and the Chancellor's recent productivity statement heavily emphasises digitalisation.<sup>12</sup>

But at the moment, the skills needed to introduce digital are in short supply, and the experience of using digital in the NHS so far has not been a happy one. However, the use of digital tools has proven difficult in the private sector as well. Looking at the UK, Figure 6 (add source) shows that only the top 5% of firms in the private sector have been able to improve productivity.<sup>13</sup> This is true across the OECD. A growing body of evidence looking at firm-level data strongly indicates that only those on the productivity frontier are able to use digital tools effectively, and they are therefore pulling ever further ahead of the rest.

**Figure 6: Productivity dispersion (OECD method), log (value added per worker) growth**



Source: OECD statistics

What does this tell us? Why are only the frontier firms enhancing their productivity? On the one hand, this finding gives cause for optimism because it shows big gains from deploying digital tools are possible. On the other hand, it is gloomy because 9 in 10 companies have not been able to realise the productivity benefits of digital tools.

There may be several reasons for this. It may be that many companies have not made the investment needed to buy the tech, subscribe to the cloud services and hire the skills, which are sometimes complex systems analysis skills. But an important part of the explanation is a lack of what is sometimes referred to as organisational capital, or in other words, organisations investing the thought, time and energy needed to change their activities and processes permanently in order to use digital tools effectively. Think of this as the middle stage of the productivity equation described earlier. The issue is not what inputs are being purchased and how cost effectively, but rather how the organisation uses the resources available to deliver the activities it is engaged in.

What does this mean? Many digital technologies enable the flow of more information, so organisations need to think about how this information is used and what is created. What are the data records? To what extent can different data records be joined up with each other to create useful insights? How should the data flow be organised – is it around activities, organisational units or patients? Adopting and implementing new technology requires the replumbing of how all the data that is created

is structured, joined up and used. Experience would suggest that the joining up of information does not happen enough in NHS.

Crucially, the creation of useful information made possible by using digital tools also needs to be accessed and above all used. So there are questions about who has the authority to access data and make decisions with it. And here we get into questions of NHS culture, which seems, to an outsider like me, quite hierarchical and controlling. One minor example of this is the community diagnostic centres, which were meant to be located in communities to give more place-based, person-centred care. A blog from The King's Fund maps the location of centres, in hospitals, primary care sites or in a community location; a surprising number have been located in hospitals.<sup>14</sup> This speaks, perhaps, of the top of the hierarchy not wanting to let go, not wanting to have the restructuring of authority that is needed to enable a health service worker in a high street to see patients and make decisions and have the authority to make decisions about what should happen next.

Yet this is one of the key lessons of the private sector productivity story: not only have you got to create the data, and make it usable in new ways, but also empower people to make decisions using that flow of information. The jargon in the corporate sector for the empowering process needed to make the most out of technology has been 'delayering': taking out layers of hierarchy, speeding up the ability of people to make decisions using the data that available to them with the hardware and software.

How significant is this issue of organisation and authority? I worked with a colleague in the Engineering Department in Cambridge to look at what happened in Addenbrooke's Hospital and some of the Manchester hospitals during the pandemic.<sup>15</sup> The hospitals were able to quickly re-engineer processes to improve patient flow, incorporate the donning and doffing of PPE and so on. We interviewed those involved in that redesign, and a strong message came through that those changes were possible during the pandemic because normal procedures were suspended. People did not have to go through the layers of meetings and committees to be able to make decisions and reorganise the flow of activities, but they feared then (in 2021) that the treacle would come back in when the emergency was over. Empowering staff to make decisions is a key lesson about the need for organisational structures and reduced hierarchies of decision making that can help to achieve higher productivity using digital tools.

This example speaks to the promise of digital technology in process re-engineering. This is not just a technical change. It also requires a cultural change and strategic management. People talk about the NHS having too many managers. To me it seems that there are too few strategically empowered senior managers and too many people engaged in all the administration and procedure that we label 'management', but is actually very different. This is a key potential area where there is hope of responding to the pressures that the NHS is facing over the next 25 years by improving productivity.

# Demand management

There are two other hopes for easing NHS pressures before its centenary, the next being demand management. This is considered by some to be a cure for the NHS's sustainability troubles. The benefits of demand management can be overstated, as people who are healthier and live longer are going to need more care at some point. But reducing demand for health care services would certainly alleviate some of the pressures the NHS is facing.

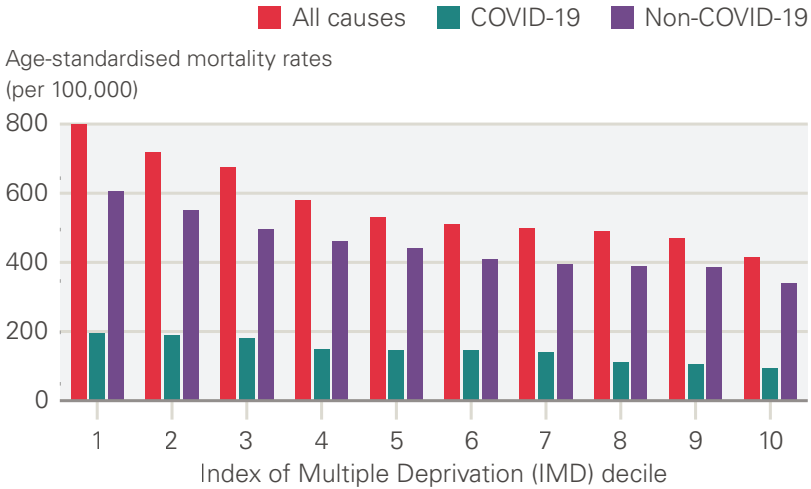
Much of the discussion centres on preventive care and changing individual behaviour. For example, can we stop people smoking or eating too much sugar by influencing their consumption behaviour. But it seems to me that if you want to affect demand, the systemic and societal influences will have a bigger impact.

Andy Cox, the Metropolitan Police officer responsible for road safety, tweeted in September 2023 'In the UK during 2022, 1,711 people died and 28,031 people were seriously injured in road crashes. There is no other transport method in which society would accept this level of harm. So why is there not extensive coverage and debate about this appalling level of road harm?'. Similarly, poor air quality has highly adverse effects on health, widely documented. Car use causes accidents and air pollution. And yet we now see policies to tackle road transportation issues being framed as an assault on motorists. Rather, the evidence suggests that motorists are an assault on people's health. But this is a societal change and individual decisions will

make little difference. Public intervention or incentives are required to make such changes possible – such as 20-mile-an-hour zones and ULEZ. You could think of the food system showing similar dynamics. Henry Dimbleby's excellent report<sup>16</sup> made clear that aspects of the structure of the UK's food system are damaging people's health, contributing to diabetes and obesity. It should not be all down to individual consumption decisions given what is supplied in the supermarket.

Poverty is another issue that has an impact on demand for health. The socioeconomic gradient in health outcomes was particularly dramatic during the pandemic. Figure 7 is taken from the Marmot COVID-19 report. It shows mortality rates from all causes and from COVID-19.<sup>17</sup> The Treasury's decision not to pay people enough sick pay to incentivise them not to go into work looks with hindsight like a false economy. The government may have saved itself some upfront spending, but people on low incomes cannot afford to stay at home and not get paid. More got more sick and ended up infecting more people around them.

**Figure 7: Age-standardised mortality rates by level of deprivation**



Source: Marmot M et al (2020)

On the IMD-decile: 1 is most deprived and 10 is least deprived.

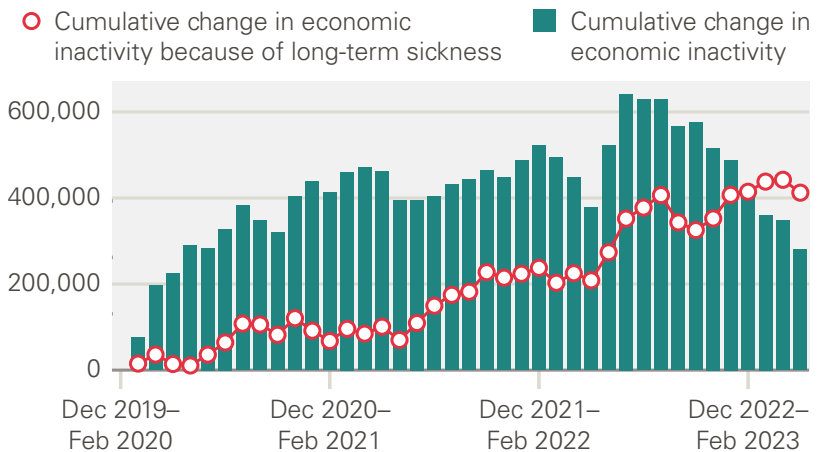
In general, poverty is strongly associated with worse health. And the socioeconomic impacts of deprivation on health cascade down the generations. They can be concentrated in specific geographies with less social mobility and health conditions themselves reinforce deprivation outcomes. There are difficult to dislodge clusters of poverty and inequality, with ill health of all kinds, bad housing, worse air quality, access to green spaces and so on. Individual behaviour cannot address this.

This reinforcing vicious circle between deprivation and ill health feeds into the economy as a whole through its effect on long-term inactivity. In Figure 8, the dotted line shows



the level of long-term inactivity because of long-term sickness in the UK labour force.<sup>18</sup> It has continued to increase, even as overall inactivity levels have started to decrease. This reduction in activity to due to ill health is a reduction in the economy’s available human capital. If we want to increase productivity to improve overall living standards in the economy as a whole, we need higher human capital; and for this we need a healthier population. A healthier society will help moderate the pressures of demand on the NHS, but much of that will be down to things individuals themselves have little power to influence.

**Figure 8: Cumulative change in economic inactivity (seasonally adjusted), people aged 16–64 years, December to February 2020 to March to May 2023**

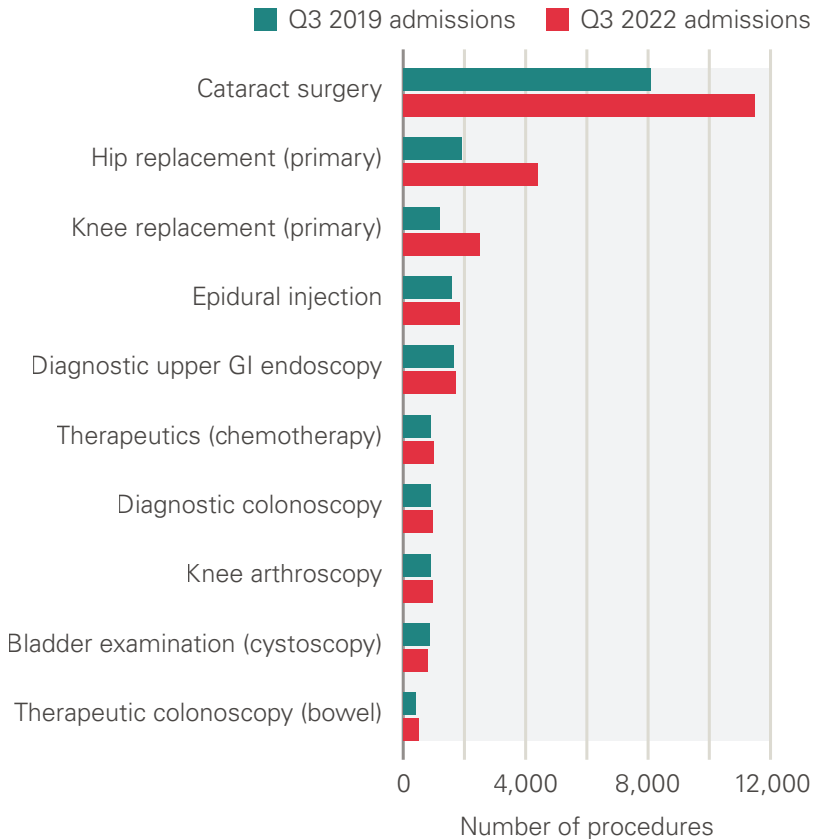


Source: Labour Force survey from the Office for National Statistics.

## The economics of the public–private boundary

The final area I want to discuss is where to locate the boundary between public provision of health care through the NHS and private provision. This is a contentious issue because people default to strong beliefs about what they see as privatisation. But it is an important issue to discuss, especially as the pressures in the NHS are leading to a growing demand – possibly enforced – for private health care.<sup>19</sup> Figure 9 shows the top ten self-pay procedures (not covered by insurance) in quarter 3 2019 and quarter 3 2022.<sup>20</sup> There has been a big increase in people paying for themselves, particularly for what you might call the complaints of old age, hip and knee replacements and cataracts.

**Figure 9: Top ten self-pay procedures by admission volumes Q3 2019 and Q3 2022**



Source: PHIN (2022)

This means the people represented in this chart do not have insurance plans, so they likely have not planned to have private care. This seems unfair, not only on the people who are not able to pay for themselves, but also on the people who can. The latter feel under such a strong need to access or accelerate treatment that they

are dipping into their savings or their pensions to pay for it. We already of course have widespread private care in optical and dental treatment, which has failed to keep pace with demand in some cases: good luck finding somebody to treat you on the NHS as a dental patient in many areas of the UK now.

So how might we avoid this payment by necessity for private health care and think about it in a more structured and fairer way? One way to approach this question is to ask what should the NHS contract out to the private sector – where ought the boundary to be? We do not worry about the NHS not making its bandages or MRI scanners. They are purchased from the private sector to no concern at all. Cleaning has generally been contracted out in NHS hospitals as well, and again this seems to cause little concern. But you cannot entirely tell how clean a hospital is just from looking; testing is needed to monitor effectively.

In an article some years ago, Oliver Hart, the Nobel Prize winner, and co-authors argued that in public services, just as in private companies, you should only think about contracting out activities that are sufficiently routine that the contract can be clearly specified, and where it is easy to monitor activity and quality. In principle, you can monitor the cleanliness of a facility by doing frequent testing. But systems under pressure are not going to do so. Can we think about other activities that the NHS does currently that could securely be contracted out? Well, some of them, such as cataract and hip operations or routine screening, are being contracted out to private-sector

providers. I do not see that as privatising the NHS, any more than its buying in medical supplies. It is a tool to help the efficient and cost-effective provision of care to patients, as long as there is effective contracting and monitoring.

What about the demand side? How are we going to stop people having to dip into their savings to get such routine but currently hard-to-access treatments – the hip replacements and cataract operations? Well, perhaps there are parallels with the basic provision of Nest pensions or basic bank accounts. Can we think of a kind of savings product whereby people who are going to get old, which is hopefully all of us, can in a planned way, and in a regulated and low-cost framework, having cover for the kind of treatments we know we are likely to need at some stage?

I do not have a strong view about this, but I think it is a conversation worth having, and a conversation about efficiency as well as ethics. On the ethics, I believe it is important both to ensure people at all levels of income can access the health care they need and also to make sure that demand for private treatment by those with enough money or credit to pay is not driven by desperation. Many other countries, such as France and Germany, include an insurance element in funding their health systems.

**The unsustainable  
is not sustained**

**3**

It is time to think in a systematic way about what we want the NHS to do. Its current state is a sign that we are asking for too much from it given how it is structured and run at the moment. Unless there is change, these pressures will continue given the low likelihood of an adequate increase in real-terms resources to continue as we are.

What change is required? There is certainly a need for more investment. The UK has underinvested for a long time in NHS capital equipment and buildings. It is time to recognise the health service as part of the national economic infrastructure and investigate what level of capacity is needed and, as part of the evaluation of investment spending, take into account the broader impacts on productivity and the economy.

Rapid changes in the profile of future demand, or in how to fund health care, are unlikely. So my main conclusion for practical (although still difficult) and faster improvements in NHS productivity is the need to change organisational structures and decision-making processes. This requires enough strategic senior management as it involves reformed accountability mechanisms more than it requires new IT systems. This kind of change implies the need for more fundamental change in the culture and hierarchies of the NHS.

Big productivity increases in history have come about through process change. An example would be the just-in-time revolution in manufacturing, which did not change the components needed to make a car, but did dramatically increase the productivity of the auto sector

by devolving decision-making power to workers on the shop floor. This is not easy to achieve in a hierarchical and risk-averse structure. But if we want to see a productive NHS serving the population in another 25 years' time, fundamental process re-engineering, with all that implies for people's responsibilities and skills, will be essential.



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## About the Health Foundation

The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK.

Our aim is a healthier population, supported by high quality health care that can be equitably accessed. We learn what works to make people's lives healthier and improve the health care system. From giving grants to those working at the front line to carrying out research and policy analysis, we shine a light on how to make successful change happen.

We make links between the knowledge we gain from working with those delivering health and health care and our research and analysis. Our aspiration is to create a virtuous circle, using what we know works on the ground to inform effective policymaking and vice versa.

We believe good health and health care are key to a flourishing society. Through sharing what we learn, collaborating with others and building people's skills and knowledge, we aim to make a difference and contribute to a healthier population.

## The Health Foundation

8 Salisbury Square, London, EC4Y 8AP

+44 (0)20 7257 8000

e [info@health.org.uk](mailto:info@health.org.uk)

✕ [@HealthFdn](https://www.instagram.com/HealthFdn)

[www.health.org.uk](http://www.health.org.uk)

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