

Institute for Public Policy Research



# HEALTH AND PROSPERITY

INTRODUCING THE  
IPPR COMMISSION  
ON HEALTH AND  
PROSPERITY

**Chris Thomas,  
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and Rachel Statham**

April 2022

# The Commission on Health and Prosperity

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# CONTENTS

<b>Summary</b> .....	<b>5</b>
<b>1. The pandemic’s twin shocks</b> .....	<b>6</b>
The health shock .....	6
The economic shock .....	7
The ‘twin shocks’ exposed long-standing structural issues in health and economy.....	8
<b>2. A new approach: Health for prosperity</b> .....	<b>14</b>
Mechanism 1: A third of the missing million workers is due to health related factors .....	18
Mechanism 2: Life sciences, research & development ....	20
Mechanism 3: The role of the NHS and social care.....	21
Creating better lives .....	22
<b>3. Towards a healthier, fairer, more prosperous future</b> .....	<b>25</b>
The IPPR Commission on Health and Prosperity.....	29
<b>References</b> .....	<b>31</b>

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## ABOUT THIS PAPER

This report furthers IPPR's charitable objectives of advancing physical and mental health, relieving poverty, unemployment, or those in need by reason of youth, age, ill-health, disability, financial hardship or other disadvantage.

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# SUMMARY

**Covid-19 has been the most significant health shock in modern history.** So far, the pandemic has cost 180,000 lives across the UK, and millions continue to experience ongoing disruption to their lives. It has taken a toll through record waiting lists, in exacerbating the underlying causes of poor health (eg poverty), and through a massive rise in unmet physical and mental health needs.

**In 2020, Covid-19 also caused the largest fall in economic growth in over 300 years.** Before the roll out of vaccines, we find that countries with higher Covid-19 deaths suffered worse economically as well – with the UK among the worst impacted nations on both counts. Our analysis also shows that the UK labour market has shed over 1 million workers compared to the pre-pandemic trend – with around 400,000 labour market exits related to a combination of long-term ill health and Covid-19. This would mean £8 billion less economic output in 2022 alone.

**A return to the pre-pandemic status quo would be a grotesque injustice to all who have lost their lives and livelihoods.** Covid-19 has exposed and exacerbated the UK's failing approach to both population health and the economy. On the former, it exposed a status quo of poor health, wide inequality, weak action on the determinants of health, and stretched healthcare capacity. On the latter, it exposed an economy characterised by low growth, low productivity, wide inequality, stagnant pay and insecure working conditions. It would be a disservice to the lost lives and livelihoods to return to this broken status quo. We **must** build back better.

**We should create better health – for its own sake, but also to address the biggest weaknesses in the UK economy.** Our analysis shows that correcting our failures on population health could help alleviate key economic challenges facing the UK, including low growth, low productivity, labour market losses and wide inequality. We estimate that if the local authorities with the poorest health had their health outcomes boosted to at least equal the 10th percentile, GVA per hour worked would increase by 1.5 per cent – or 46 pence more for every hour worked, by each worker, on average. This is more than double the average annual increase on this measure since the financial crash (0.7 per cent).

**Other countries are leading the way – it's time to 'boost health like Japan'.** Our analysis shows that, were we to 'boost health like Japan', we could increase UK healthy life expectancy by four years on average. We estimate this could boost productivity by 1.2 per cent.

**To harness the opportunity, IPPR are launching the Commission on Health and Prosperity.** This commission will explore our fundamental hypothesis: that a fairer country is a healthier one, and that a healthier country is a more prosperous one. Over the next two years, the commission will work with businesses, unions, academics, charities, health leaders and politicians to develop a blueprint to boost health for prosperity. Covid-19 demands a new approach. Our commission will create it.

# 1. THE PANDEMIC'S TWIN SHOCKS

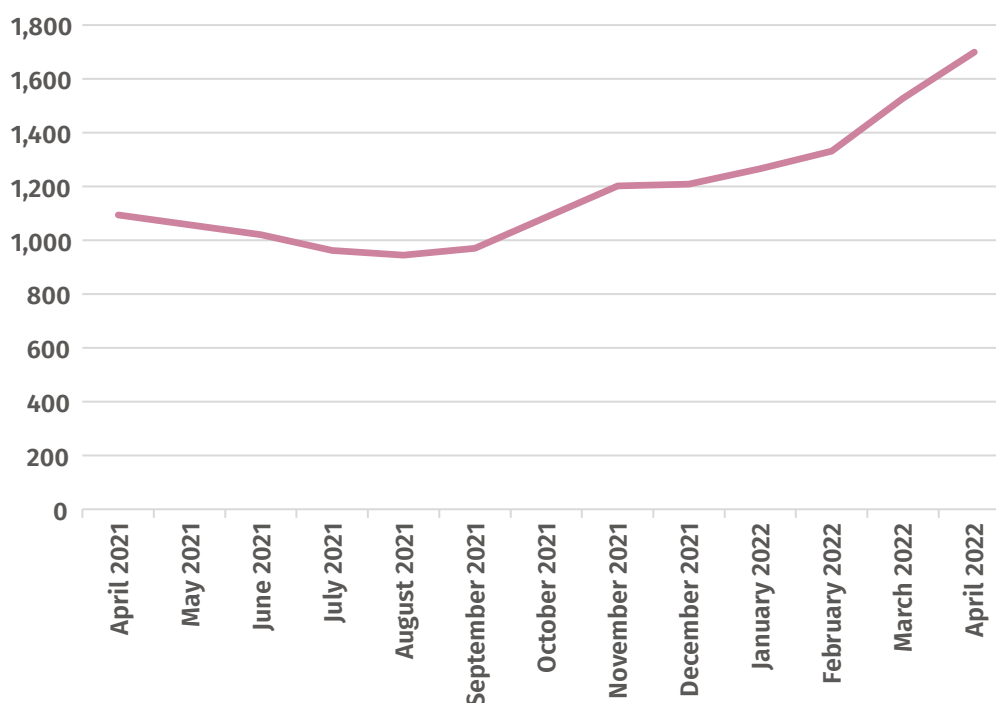
## THE HEALTH SHOCK

The Covid-19 pandemic has been devastating for so many people and families across the UK. According to a study published in *The Lancet* in March 2022, Britain experienced 180,000 more deaths than would otherwise have been expected in a two-year period (2020-21) and has seen average life expectancy decrease by a year (Wang 2022).<sup>1</sup> This is a scale of mortality some other countries have shown to be avoidable (ibid) - and it is a tragedy by any definition.

Even then, excess deaths are far from the only consequence of the pandemic. The Office for National Statistics (ONS) estimates around 1.7 million people are experiencing long Covid symptoms (based on self-reporting), with two-thirds reporting symptoms that interfere with their daily lives (ONS 2022a).

**FIGURE 1.1: LONG COVID RATES ARE RISING**

Number (thousands) self-reporting long Covid symptoms after Covid-19 infection



Source: Authors' analysis of ONS (2022a)

<sup>1</sup> See Wang (2022) for methodology on excess deaths.

Beyond the direct consequences, Covid-19 has accentuated the ecological and environmental conditions that cause ill health (see Marmot 2010). Disruption to education (IFS 2021), an increase in child poverty (DWP 2021) and levels of inequality more broadly are all likely to have consequences for the population's health. This is now combined with a cost-of-living crisis – which the Resolution Foundation predict will push 1.3 million more into absolute poverty (Resolution Foundation 2022).

Moreover, the pandemic's impact on access to and outcomes from healthcare for those people facing non-Covid-19 related ill-health is having a substantial impact. NHS elective care waiting lists are at their longest since records began in 2007 (BMA 2022) – but even this is likely to underestimate unmet need. It has been estimated that, once unmet need is accounted for,<sup>2</sup> around 12 million people were in need of healthcare services in England as of December 2021 (LCP 2021).<sup>3,4</sup>

Ongoing challenges around access to care – combined with rising poverty and the UK's cost of living crisis - are having tangible health consequences, including the following.

- A 25 per cent rise in hospital admissions among young people for self-harm and assault, in the third quarter of 2020. There is an even steeper rise in referrals for eating disorders, which have doubled since the pandemic's onset (Thomas et al 2020).
- A three percentage point fall in the number of cancers diagnosed while still 'highly curable' in the first year of the pandemic, compared to the previous year (ibid).
- Almost 500,000 fewer adults than expected initiated antihypertensive treatment in England between May 2020 and 2021 – which could lead to 13,659 more cardiovascular disease events (Dale and Takhar et al 2022).
- The number of people with dementia receiving a new care plan, or a care plan review, nearly halved in 2021, compared to the average in 2018 and 19 (Thomas et al 2022), while diagnosis rates have dropped by around 7 per cent since January 2020 (NHS Digital 2022).

Without a proactive response from policymakers in health and beyond, we will likely see an increase in avoidable deaths and morbidity for many years yet to come.

## THE ECONOMIC SHOCK

Beyond its immediate human cost, the Covid-19 pandemic has had huge economic consequences.<sup>5</sup> It has undermined both lives and livelihoods.

The scale of the economic cost of Covid-19 is unprecedented in modern times. According to House of Commons analysis, the fall in UK GDP in 2020 was larger than that experienced after the financial crash, or in the wake of the second world war (House of Commons 2021). Historical estimates suggest 1921 saw an equal one-year fall in GDP – while we would need to look to 1709 to find a larger one (ibid).

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2 That is, those with a health condition, but who have not yet come into contact with the health service or been placed on a formal waiting list. This could include mental health, cancer, dementia, cardiovascular or any other category of need.

3 This is not down to interventions like lockdowns – which protected NHS capacity. Rather, it is down to the impact of the virus on health service capacity, despite these measures.

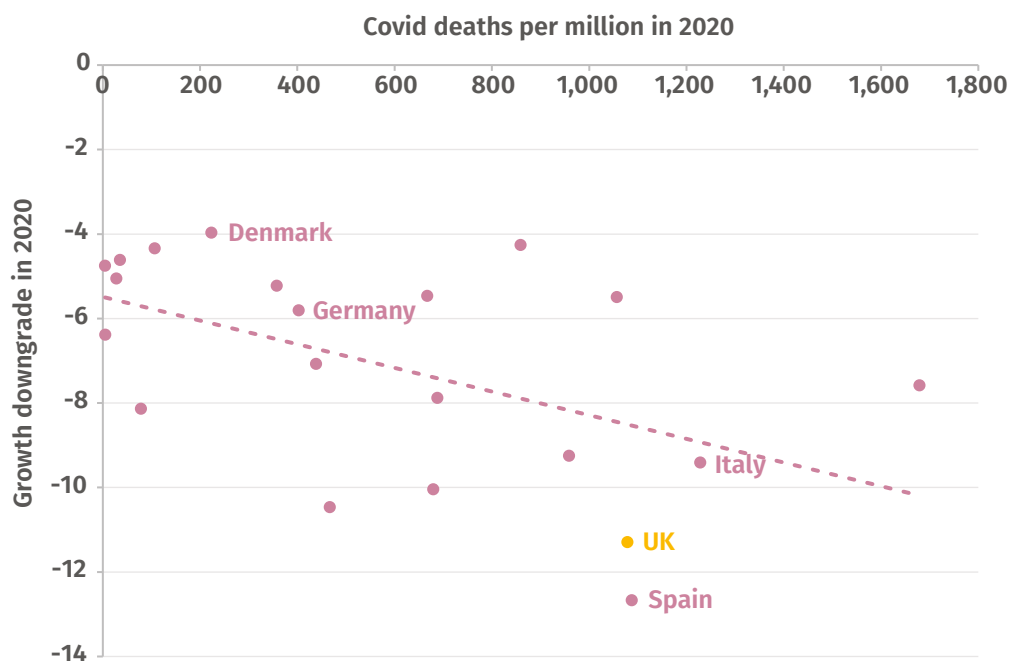
4 There is also significant strain on adult social care. Waiting lists for assessments had reached 400,000 at the end of 2021 according to the Association of Directors of Adult Social Services (ADASS 2021).

5 These are not attributable to lockdown in any simple way. While lockdown did have economic consequences, the result of letting the pandemic proceed unchecked would have been more severe – and would have almost certainly overrun the NHS entirely in the first two pandemic peaks.

Our international analysis, moreover, shows that the size of economic decline was related to Covid-19 mortality in 2020. Figure 1.3 shows the association between Covid-19 mortality rates and lost economic output.

**FIGURE 1.2: HIGHER COVID-19 MORTALITY RATES PREDICTED GREATER LOSS OF GDP IN 2020**

Covid-19 deaths per million in 2020 and GDP loss in 2020, advanced economies



Source: Authors' analysis of IMF (2019, 2020) and outworldindata.org (2022)

As this shows, the UK was among the countries with the highest mortality rates and GDP loss during this first, pre-vaccine year of Covid-19.<sup>6</sup> And beyond this immediate impact, future growth could be slow, too. Most recently, the OBR has estimated year-on-year growth of just 1.8 per cent in 2023, 2.1 per cent in 2024 and 1.8 per cent in 2025 (OBR 2022).

### THE 'TWIN SHOCKS' EXPOSED LONG-STANDING STRUCTURAL ISSUES IN HEALTH AND ECONOMY

The damage done to both lives and livelihoods can be put down to a collision of a major health shock and the structural weaknesses of the UK's approach to both its health<sup>7</sup> and its economy. Table 1.1 helps to explain this collision in terms of the health impact of Covid-19, by categorising the risk factors that determine Covid-19 outcomes. Poor health (underlying health conditions), working conditions, housing conditions, social welfare and government response were all key.

6 Though the invention and distribution of Covid-19 vaccines has now largely broken this link in advanced countries.

7 Throughout, this report takes a broad definition of health – to include healthcare, but also the ecological and environmental factors that determine health.



**TABLE 1.1: A REVIEW OF FACTORS WHICH MEDIATED COVID-19 OUTCOMES AT POPULATION LEVEL**

	Risk factor	Vulnerability to Covid-19
Socio-demographic	Age structure	Old age is the leading risk factor for SARS-CoV-2 infection leading to serious Covid-19 illness or death (Williamson et al 2020).
	Deprivation levels	Greater neighbourhood deprivation levels are a major risk factor for acquiring SARS-Cov2 infection (ibid, Beale et al 2022).
	Housing conditions	Overcrowding, large numbers living within care home facilities and multigenerational households are all risk factors for acquiring SARS-Cov-2 infection (Aldridge 2021).
Health	Obesity and diabetes	Obesity is a risk factor for SARS-CoV-2 infection leading to serious Covid-19 illness or death (Williamson et al 2020).
	Long term conditions and multimorbidity	Common conditions like diabetes and asthma are risk factors for SARS-CoV-2 infection leading to serious Covid-19 illness or death (ibid).
	Healthcare capacity	Capacity to provide adequate and good quality healthcare amidst surges in illnesses requiring medical attention (Thomas 2020b).
Economic	Occupational structure	Being in a public facing occupation or occupation which cannot be done remotely – or with effective social distancing from others – is a risk factor for acquiring SARS-Cov-2 infection (Mutambudzi et al 2020).
	Working conditions	Number of contacts at work, ventilation conditions, dependence on public transport, and ability to social distance in the workplace are risk factors for acquiring SARS-Cov-2 infection (Beale 2021).
	Social security	Income loss due to illness and isolation may amplify SARS-Cov2 transmission. Mechanisms may include greater difficulty isolating or taking time off work when needed (Beale et al 2022).
Governance	Social distancing and other non-pharmaceutical interventions	Timely socially distancing measures such as lockdowns, social distancing and effective mask wearing reduce SARS-COV-2 transmission (Oraby et al 2021).
	Vaccination	Vaccination both reducing transmission of SARS-Cov-2 and reduces risk of serious illness and death (Feikin et al 2022).
	Trust	Interpersonal and political trust is associated with greater adherence to social distancing measures and reduces Covid-19 transmission (Bollyky et al 2022).

Source: Authors' analysis

In turn, table 1.2 demonstrates that the UK had relatively poor population health coming into the pandemic. This suggests where this country had specific and avoidable exposure to a health shock like the pandemic.

**TABLE 1.2: COMPARED TO OTHER COMPARABLE COUNTRIES, HEALTH AND HEALTHCARE RESILIENCE IN THE UK ARE RELATIVELY POOR<sup>8</sup>**

**Ranking (1-7) of G7 nations on selected health indicators**

	Canada	France	Germany	Italy	Japan	UK	USA
Healthy life expectancy	4	2	5	3	1	6	7
Life expectancy	4	3	5	2	1	6	7
Income inequality	3	2	1	4	5	6	7
Diabetes (prevalence)	4	2	1	3	6	5	7
Obesity (prevalence)	5	2	4	3	1	6	7
Hospital beds per capita	6	3	2	4	1	7	5
Number of nurses/doctors per 1,000 people	5	1	3	2	7	4	6
Mortality, cancer	2	7	4	3	1	6	5
Mortality, circulatory diseases	4	1	5	2	3	6	7
Mortality, respiratory disease	4	3	5	1	2	6	7
Mortality, Alzheimer's disease	4	5	1	3	2	6	7
Rank (average rank of ranks)	5	3	4	1=	1=	6	7

Source: Authors' analysis of NCDRisC (2022) and OECD (2022)

Even then, the national picture only tells a partial story. Places within England – a country with high levels of economic and health inequality (see Equality Trust undated) – experienced Covid-19 differently. Table 1.3 shows that exposure to Covid-19 was consistently higher than the England average in the most deprived parts of the country.

<sup>8</sup> The UK also ranks below comparable nations on innovation diffusion (OLS 2021).

**TABLE 1.3: EXPOSURE TO THE PANDEMIC WAS HIGHER THAN AVERAGE IN THE MOST DEPRIVED PLACES IN ENGLAND**

Selected indicators for the ten most deprived parts of England, 2019 data (except for Covid-19 indicators; red is worse than England average, green is better than England average)<sup>9</sup>

	Healthy life expectancy	Obesity and overweight in children (BMI > 30, %)	Unemployment (%)	Covid-19 vaccination rate (three doses, 12 years old + %) <sup>10</sup>	Covid-19 mortality rate <sup>11</sup>
<b>Blackpool</b>	54.51	41.5	5.7	58.0	1501.4
<b>Manchester</b>	58.60	42	6.2	41.2	1517.1
<b>Knowsley</b>	59.84	43.2	2.9	52.3	1395.5
<b>Liverpool</b>	58.56	41.2	4.6	47.1	1455.5
<b>Barking and Dagenham</b>	58.80	44.7	5.9	34.6	1469.3
<b>Birmingham</b>	58.90	39.6	8.6	41.1	1354.1
<b>Hackney</b>	59.69	41.0	4.4	39.9	1316.8
<b>Sandwell</b>	59.38	43.1	5.2	46.9	1443.7
<b>Kingston upon Hull</b>	57.96	37.6	7.8	53.8	1223.7
<b>Nottingham</b>	56.03	40.8	8	43.5	1400.2
<b>England average</b>	63.35	35.2	3.9	57	1082.5
<b>Most deprived places average (unweighted)</b>	58.23	41.5	5.9	46	1407.7

Source: Authors' analysis of HM Government (2022), ONS (2022c) and LCP (2022a)

Notes: Deprivation established using English indices of multiple deprivation 2019 for upper-tier local authorities (rank of average rank) (MHCLG 2019).

One of the UK's strengths – a strong life science sector, alongside effective vaccine distribution infrastructure – has provided some counterbalance. After a difficult 2020, vaccine use helped to substantially reduce Covid-19 mortality in the UK (see

<sup>9</sup> While, due to data splits, this analysis is England only, the same patterns can be found in Scotland and Wales too.

<sup>10</sup> Latest data.

<sup>11</sup> Per 100,000 population, age standardised, March 2020 to March 2021.

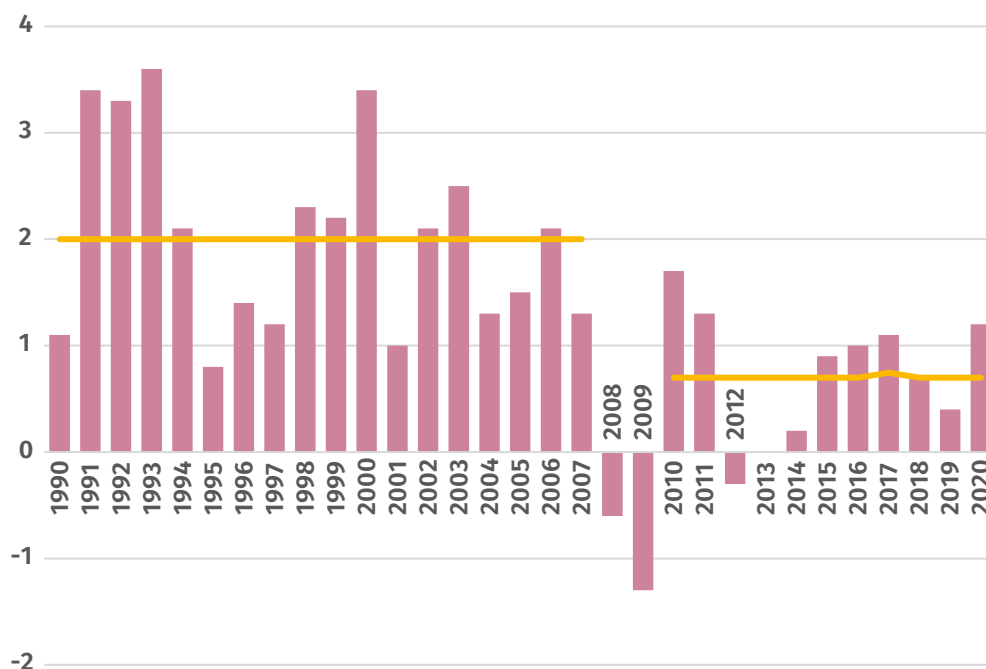
Wang 2022). But this should not lead policymakers and politicians to ignore the fundamental issues exposed by the pandemic in the UK’s pre-pandemic approach to health, both in national, Westminster policy – and in place-level policy making.

Just as Covid-19 has exposed (rather than created) structural weaknesses in our approach to health, it has also exposed and exacerbated structural weaknesses in the UK economy. The public recognise this – recent IPPR research found that just 6 per cent of the population want a return to the ‘pre-pandemic’ economy (Dibb et al 2021). Major causes for concern include low growth, worker insecurity, low wages, poor productivity, and high levels of insecurity. These must be our priorities for change going forward.

The UK’s sustained growth in the 1990s and much of the 2010s has been succeeded by a period of stagnant growth. Analysis by the Institute for Fiscal Studies shows GDP per capita was £5,900 per person lower in 2017/18, than it might have been had pre-crisis growth trends continued (Cribb and Johnson 2018). The same pattern is true of productivity (figure 2.3). The average annual increase in labour productivity between 1990 and 2007 was 2 per cent – following the crash, it has been just 0.7 per cent (figure 2.3).<sup>12</sup>

**FIGURE 1.3: PRODUCTIVITY HAS BEEN A PERSISTENT CHALLENGE THROUGHOUT THE LAST DECADE**

**Labour productivity (output per hour worked) year on year change (%), average before and after the financial crash**



Source: Authors’ analysis of ONS (2022f)

<sup>12</sup> Measured by output per hour worked.

This has an important bearing on peoples' lives. Productivity gains are a key mechanism behind sustained improvements in living standards. Or as Paul Krugman put it: "productivity isn't everything, but in the long run it is almost everything". As we face a historic fall in living standards in 2022, government will need to offer real solutions to the UK's productivity puzzle to deliver sustained improvements over the next decade.

The scale and impact of these challenges vary across places. As the government's levelling up agenda recognises, economic opportunity is not well distributed across the country. Indeed, productivity varies significantly across both countries and within regions – with high productivity concentrated in London and the South East.

**FIGURE 1.4: PRODUCTIVITY IS HIGHEST IN LONDON AND THE SOUTH EAST**

Output per hour worked by region, compared to the average output per hour in the median region, 2019



Source: Authors' analysis of ONS (2022g)

Such challenges are underpinned, and accentuated, by insecure and low paid work. Since the 2007/08 financial crisis, nearly 40 per cent of employees have seen a decline in income, and the majority have seen less than a 2 per cent real increase per year over that period (Dibb et al 2021). This fall coincides with a decrease in trade union membership – which has reduced from a peak of over 50 per cent in the 1980s, to a low of around 25 per cent in 2019 (ibid). It also coincides with a steep rise of in-work poverty (McNeil et al 2021). All made it harder to react to Covid-19 and contribute to the health risk factors of Covid-19 already outlined (table 1.1).

Combined, this analysis of the health and economic impacts of Covid-19 make clear that we urgently need a new approach to protecting people's lives and their livelihoods. If the promises made by politicians to 'build back better' from Covid-19 – as well as national missions to level-up health and economic opportunity – are to mean anything, they must mean creating a better, fairer country, from the pandemic's ashes.

Anything less would be a betrayal of the tens of thousands of people who lost their lives, and the millions who suffered huge hardship, in the last two years.

## 2. A NEW APPROACH: HEALTH FOR PROSPERITY

Health has an intrinsic value. It allows us to do the things that really matter in life: participate in our community and society, maintain flourishing relationships, find meaningful work and hobbies, and attain wellbeing. It is the first wealth.

Good health is also at the heart of a just society. One of the fundamental beliefs of the British public is that everyone should have access to good health, irrespective of their means (see Thomas et al 2022). This is embedded in the principles of the NHS. But despite the existence of the NHS, health remains unequally distributed. This is largely a result of the conditions that we are born into and grow up in (figure 2.1, Marmot 2010): health and economic inequality are two sides of the same coin.

Improving health - particularly for those with the worst health - is a pre-condition of allowing people an opportunity to thrive and reach their potential.<sup>13</sup> This is the lesson the pandemic brought into such sharp relief.

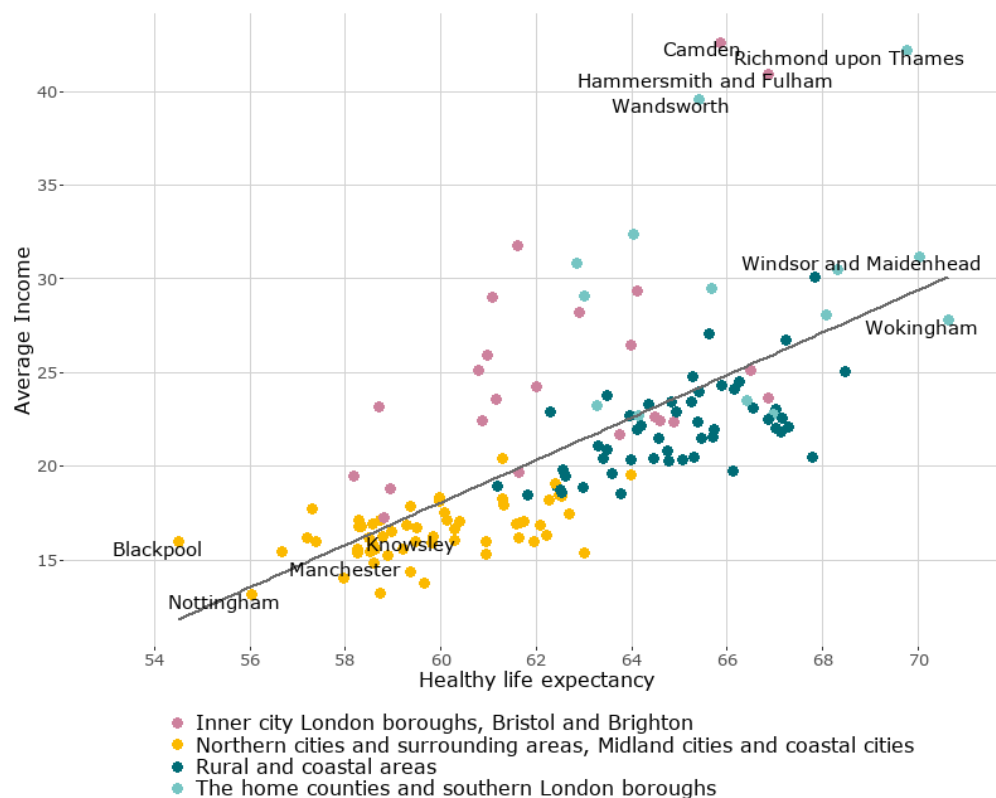
The regional inequality in health and wealth is particularly stark (figure 2.1). For example, someone living in Richmond upon Thames can expect to have an average household income of £42,000 per year, and they can expect to live 70 years without a major illness. By contrast, the average person in Nottingham can only expect to earn £13,000 per year and live 56 years without a major illness. In other words, the typical person living in Nottingham can expect to enjoy just a third of the typical earnings of someone living in Richmond and can expect to enjoy 14 fewer healthy years of life.

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<sup>13</sup> This does not mean the goal has to be avoiding illness or impairment. Improving health, for us, is equally about creating the conditions in which disabled people or people with health conditions can lead brilliant lives.

**FIGURE 2.1: LOCAL AUTHORITY AREAS WITH THE HIGHEST INCOMES IN ENGLAND WERE ALSO THOSE THAT RANKED HIGHEST ON HEALTH OUTCOMES**

**Correlation between household income (latest) and healthy life expectancy (2017–19) by local authority areas**



Source: Authors' analysis of LCP (2021)<sup>14</sup>

Notes: Local authority areas were clustered by their health, wealth, welfare, education and healthcare capacity. See Thomas 2021 for original methodology.

In short, the unhealthiest local authority areas suffer from a clustering of multiple inequalities – which limit the prosperity, opportunity and security of those places. We find that if the unhealthiest 50 per cent of local authorities had the same outcomes as the healthiest 50 per cent of local authorities, then there could be significant progress towards greater fairness (table 1.2).

<sup>14</sup> While data available limits analysis to England here, similar patterns are observable across the UK.

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**TABLE 1.2: SOCIAL AND ECONOMIC DISADVANTAGE CLUSTERS AROUND HEALTH INEQUALITY**

**Estimated national improvements if select outcomes in 50 per cent unhealthiest local authority areas were equal to 50 per cent healthiest local authority areas**

	Change to national average (percentage point)	Reduction in number of people affected (nearest thousand)
Disability in daily living	-1.80	500,000
Childhood obesity	-2.42	10,000
Child poverty	-4.00	430,000
Unemployment	-0.74	420,000

Source: LCP analysis

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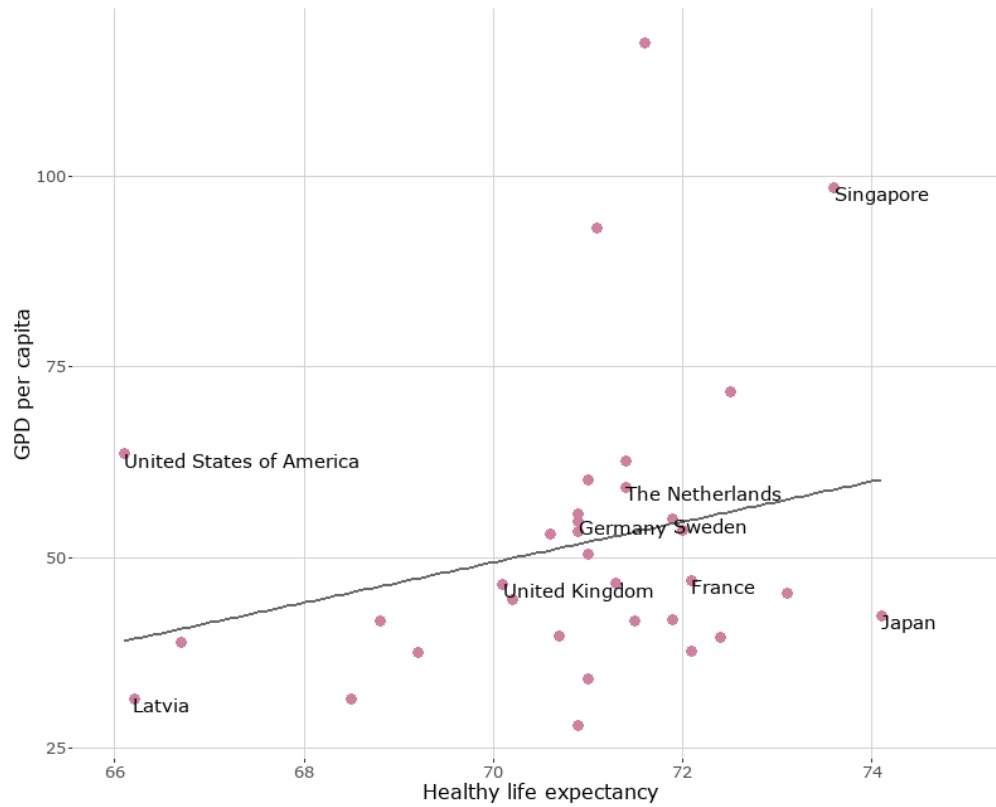
The relationship between these factors is likely to go both ways. Ensuring children live in homes that can afford heating and nutritious food – or that people are able to get good jobs – will improve health. And improving health is likely to increase access to jobs, and reduce poverty (see Lawson 2018).

However, the case for prioritising better health goes beyond simple justice, as important as that is. Health is also the foundation of a just and equal economy. In fact, solving the historic health challenges outlined in chapter 1 can help resolve the major economic challenges we have already highlighted. Better health can provide much needed productivity gains, in the face of the UK’s long-standing productivity problems. It can support levelling up, by ensuring productivity gains extend across the country, it can support national income (figure 2.2), and it can ensure that gains on national economic measures do translate into better, more meaningful lives. Better health can deliver prosperity across the UK.



**FIGURE 2.2: HEALTHY LIFE EXPECTANCY IS CORRELATED WITH GDP PER CAPITA IN ADVANCED ECONOMIES**

**GDP per capita (USD) and healthy life expectancy at birth, advanced economies**



Source: LCP analysis of WHO (2020) and World Bank (2020)

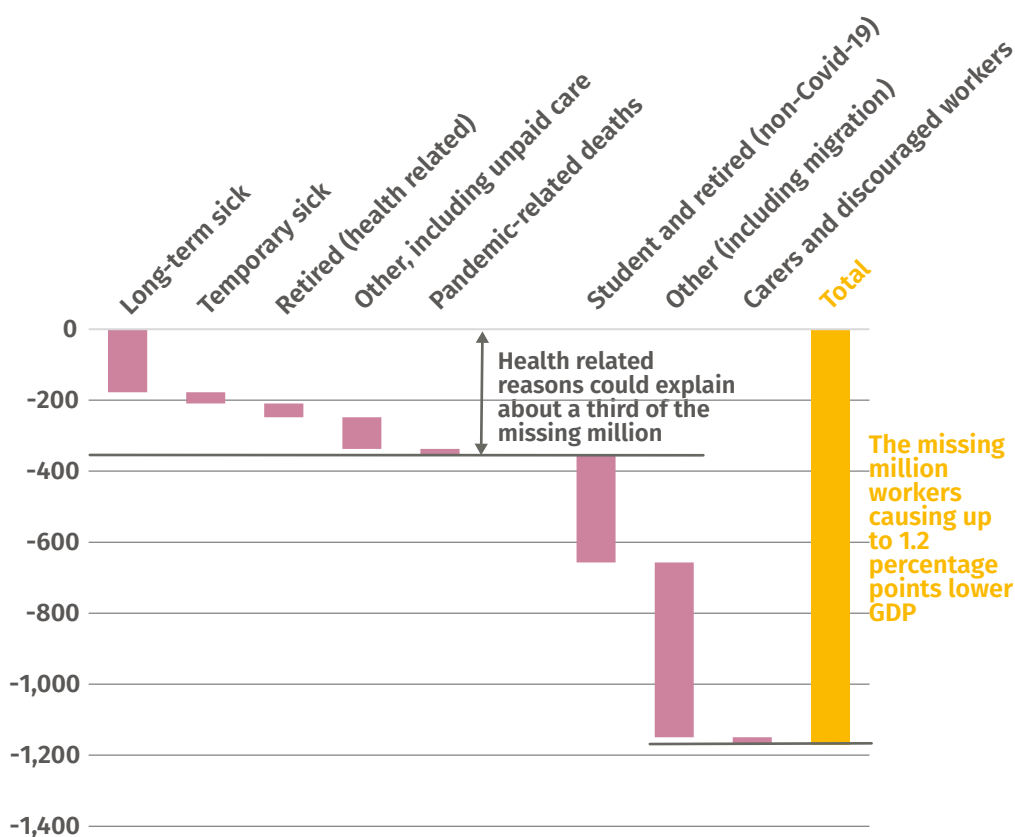
There are several mechanisms that shape the relationship between health and prosperity – including through better work, the life sciences, and health and care services themselves. We explore some of these below.

## MECHANISM 1: A THIRD OF THE MISSING MILLION WORKERS IS DUE TO HEALTH RELATED FACTORS

Previous IPPR research has demonstrated a loss of more than 1.1 million workers from the UK labour market compared to the pre-pandemic trend (Patel and Jung 2021). New analysis below establishes why these workers are ‘missing’.

**FIGURE 2.3: THE MISSING MILLION WORKERS**

Causes of the loss of workers from the labour market during the pandemic (thousands), compared to pre-pandemic trend



Source: Authors' analysis, Patel and Jung (2021).

Note: The contributing factors are calculated compared to pre-pandemic trend, building on IES (2022) methodology and drawing on ONS surveys.

Alongside immigration, health is a key factor – with long-term illness driving the loss of around 200,000 people from the labour force, and other pandemic factors (including people that have dropped out of the workforce for no specified reason and have not yet returned to it since) explaining a further 200,000. Based on this, we estimate that the health component could explain around a third of the lost workers during the pandemic. If unresolved, this would equate to **£8 billion less production in 2022 alone**.<sup>15</sup> This is in addition to the innate value of good, secure work – as a source of income, meaning, security and dignity in people's lives.

This relationship is not unique to the pandemic. For example, a 2017 study by the Institute for Fiscal Studies shows that health explains up to 15 per cent of the

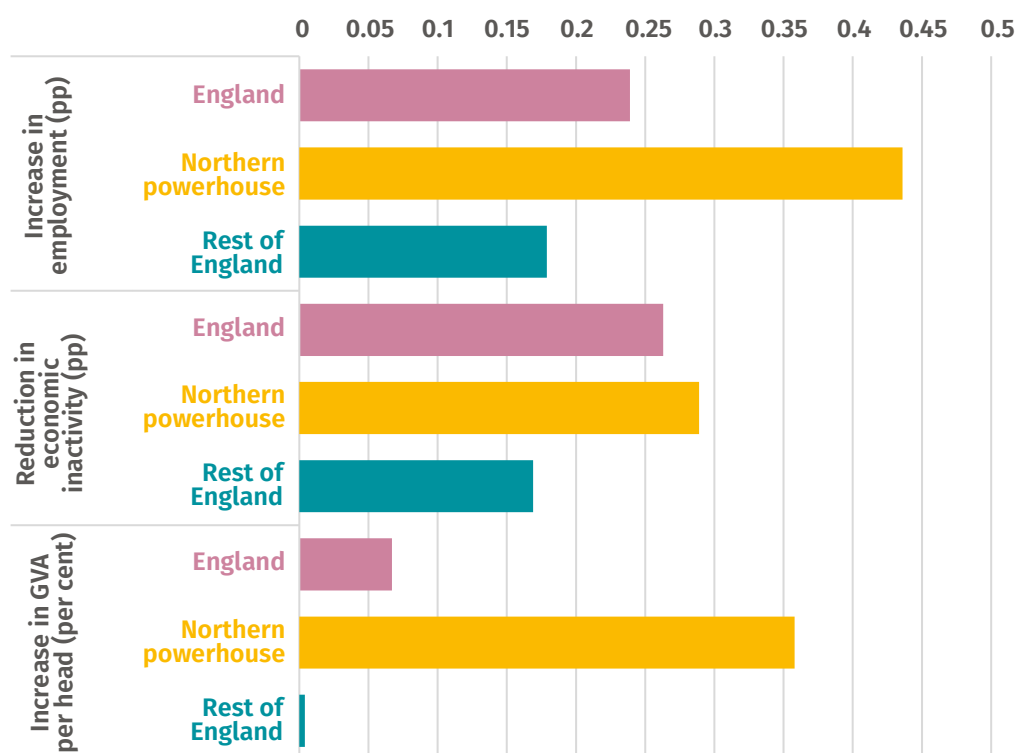
<sup>15</sup> This is based on the OBR (2022) March projection of how much a reduced labour force contributes to economic scarring from the pandemic. We apply our estimated share of health-related decrease in the labour force to this estimate of the size of scarring.

decline in employment between ages 50 and 70 – and higher among those with the lowest levels of education (Blundell et al 2017). Further research has shown that personal ‘health shocks’<sup>16</sup> decrease overall working hours at the household level – while increasing the amount of unpaid care provided by close family members (Ginquinto Macchioni et al 2021). In turn, people providing greater informal care are more likely to leave their job – with Carers UK research showing that almost 500,000 people left their job to care for an older, disabled or seriously ill friend or family member, between 2017 and 2019 (Carers UK 2019).

Moreover, the relationship between health and work goes beyond just the size of the labour market. It is also a determinant of how productive workers are. Figure 2.4 shows the prospective benefits of a 1 per cent drop in the number of people with morbidity, with a particular focus on the benefits possible in the northern powerhouse region<sup>17</sup>, where health tends to be worse (Bambra et al's 2018 report for the NHTA). The benefits would include better economic outcomes – from higher productivity to lower economic inactivity.

**FIGURE 2.4: WITHIN THE UK, BETTER HEALTH SUPPORTS A STRONGER, MORE PRODUCTIVE ECONOMY**

Estimated impact of a 1 per cent drop on morbidity on select economic indicators



Source: Recreated from Bambra, Munford and Brown (2018) with permission of the author

A remarkable finding here is that the biggest gains from better health are possible in places where health and productivity have historically been lower (eg the north of England). Building on this, our analysis of all local authority areas shows a link between productivity and health (figure 2.5). In many places in the UK low health outcomes go hand-in-hand with poor economic opportunities. We estimate that if

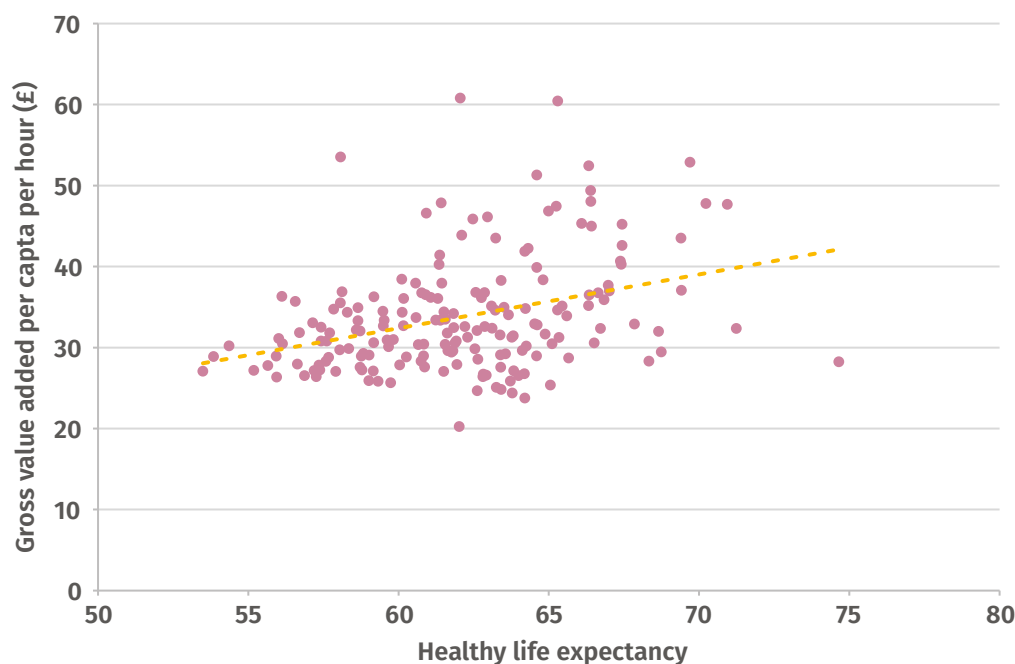
16 That is, a surprise health event experienced by an individual, such as a cancer diagnosis.

17 Covering ‘core cities’ of Hull, Manchester, Liverpool, Leeds, Sheffield and Newcastle.

all local authorities were to reach the health outcomes of the 10th percentile place, we would see the UK's total productivity per hour worked increase by 1.5 per cent.<sup>18</sup> This is equivalent to a 46 pence boost for every hour worked, by every worker, on average.

**FIGURE 2.5: LOCAL AUTHORITY AREAS WITH BETTER HEALTH TEND TO BE MORE PRODUCTIVE**

Healthy life expectancy (latest) and worker GVA (£/hour, latest)



Source: Authors' analysis of ONS (2022d, 2022f)

Note: The chart shows male healthy life expectancy at birth.

This relationship between improving health and improving economic opportunity makes greater health equity one of the clearest opportunities within the government's levelling-up agenda.

### **MECHANISM 2: LIFE SCIENCES, RESEARCH & DEVELOPMENT, AND INNOVATION**

Beyond services, the wider health sector – including life science businesses, med-tech, the voluntary sector<sup>19</sup> – is also a major driver of economic prosperity in the UK. This was demonstrated during the pandemic: according to one valuation, the economic value of the vaccine to the US alone has been estimated at \$5 trillion (confidence interval: 1.8 to 9.9 trillion dollars) (Kirson et al 2022).

The life sciences are also among the fastest growing sectors in the UK: with high productivity rates, approximately 300,000 employees and over 7,000 sites (BEIS et al 2022). Encouragingly given levelling up aspirations, many high potential life science clusters are outside the South East – such as Greater Manchester's health data cluster, Liverpool and Cheshire's infectious disease cluster, and Newcastle's public health and healthy ageing clusters (Thomas and Nanda 2020).

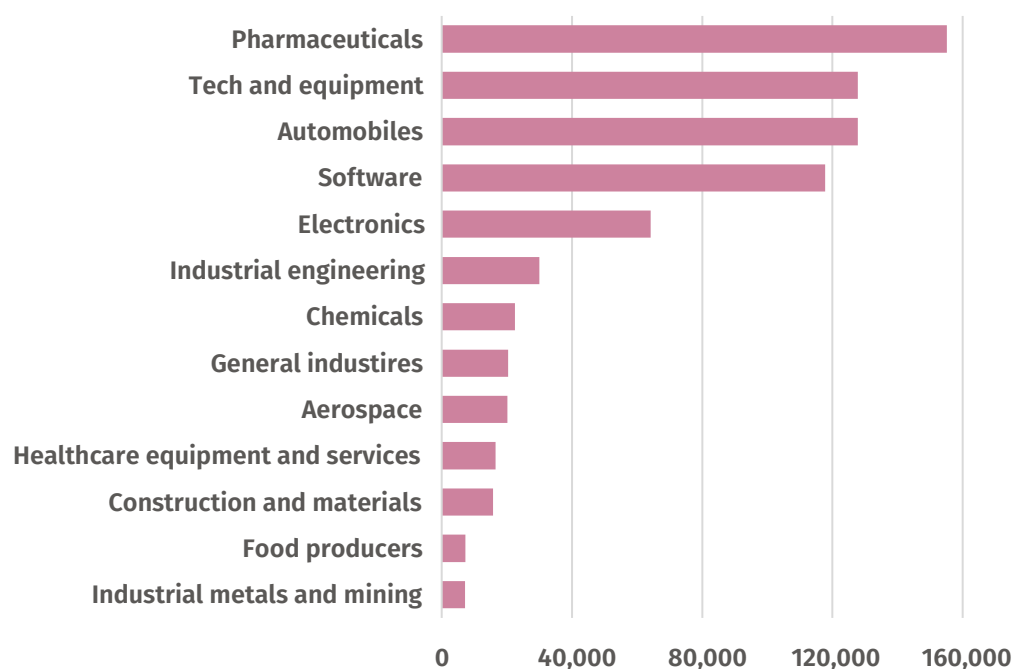
18 We estimate the productivity impact of a healthier workforce building on the regression results of Bambara et al (2018) who provide an estimate for the impact of reduced morbidity on GVA per head.

19 Including a major medical research charity sector.

Figure 2.6 shows that, globally, life sciences is the sector which invests the most (private) money into R&D. Given this country's strong life sciences history, its academic infrastructure, and its high-quality data – we should be looking to increase our national share of global investment. At present, the UK attracts around 7 per cent of global private R&D investment, down from a peak of 10.5 per cent in 2011 (Thomas 2019). This indicates an opportunity to capitalise on the value of life sciences in the coming years.

**FIGURE 2.6: THERE IS NO SECTOR THAT INVESTS MORE IN GLOBAL R&D THAN THE LIFE SCIENCES**

Global private global R&D investment by sector, £m



Source: Recreated from Thomas and Nanda (2020)

The potential gains are not limited to R&D as an industrial activity, either. The spread of innovation, resulting from R&D, can also come with distinct and sizable economic, health and public finance benefits. Analysis by IPPR and Carnall Farrar has previously shown that, should innovation diffusion in the UK match levels seen in other countries, it would generate £20 billion for the UK economy – through reduced mortality and morbidity in the working age population. A further £10 billion could be saved from NHS budgets as a result, providing increased headroom to address large waiting lists and levels of unmet need (Thomas et al 2020).

### MECHANISM 3: THE ROLE OF THE NHS AND SOCIAL CARE

The NHS and social care are also key to UK growth and prosperity. Human health and care activities were the area of greatest GDP growth between 2020 and 2022 in the UK economy (ONS 2022e). While the fact GDP measures avoidable illness shows the limits of a sole focus on this particular measure,<sup>20</sup> at least some of this rise was

<sup>20</sup> Growth in health and care services can indicate positive activity – like diseases being curable, or care becoming more accessible. It can also indicate negative activity – like avoidable mortality, or inefficient healthcare activity (multiple appointments when one would do). For more on GDP, see Thomas (2021).

driven by desirable activities: including our capacity to test and vaccinate people for Covid-19.

Beyond this, NHS and social care services are a major player in the UK labour market. The NHS is the biggest employer in the UK – and the eighth biggest employer in the world. The relative importance of these sectors is, furthermore, likely to grow: in a future defined by increasing health vulnerability, automation, ageing and climate change, health and care jobs are likely to become an even greater source of good quality, low-carbon employment (Jung and Murphy 2021).

### HEALTH AND THE HIGH STREET

One highly tangible opportunity of the NHS' role in prosperity is around the highstreet. As NHS Confederation have previously shown, locating health services on the high street – including, in vacant real estate – can have positive health and economic benefits. Health improves from being closer to communities, and the places they live. High streets benefit from direct investment and increased footfall (Wood and Finlayson 2020)

This speaks to the potential for the NHS to play a far larger role in both national and local economies, beyond simply providing healthcare. A 2019 Health Foundation report highlighted a range of tactics the NHS could better use to support local growth, and take action on the social determinants of health (Reed et al 2019):

- purchasing more locally
- using social value measures in commissioning and procurement
- developing local partners, from charities, to cooperatives, to social enterprises
- ensuring access to work, and helping make sure that work is high quality
- supporting families to live healthy, sustainable lives
- integrating healthcare and research better
- supporting the wider transition to a net zero economy.

The new integrated care agenda explicitly focuses on the NHS' role in this broader conception of value. Ideas on how it can be achieved, in practice, will be vitally important in the coming years.

Finally, the economic benefit of optimal care is also important. Indicatively, one 2018 study found that optimal management of type 1 diabetes had a significant net-economic benefit, not regularly accounted for in policy and investment decisions (McEwan et al 2018). More recent LSE analysis found that adolescents who experience conduct mental health disorder<sup>21</sup> faced a cumulative earnings loss of almost £300,000 (women) and £600,000 (men), by age 42 (see Thomas et al 2022). While other institutions, from schools to employers, will have a role, this indicates a significant economic benefit from making the right healthcare interventions at the right time, for the right populations.

### CREATING BETTER LIVES

While economic growth and productivity are important indicators of our economic success as a nation, it is important that economic progress results in better, more meaningful lives for people. This is just as important a goal as growth or productivity, and integral to realising true prosperity. As recent IPPR work with citizens across the

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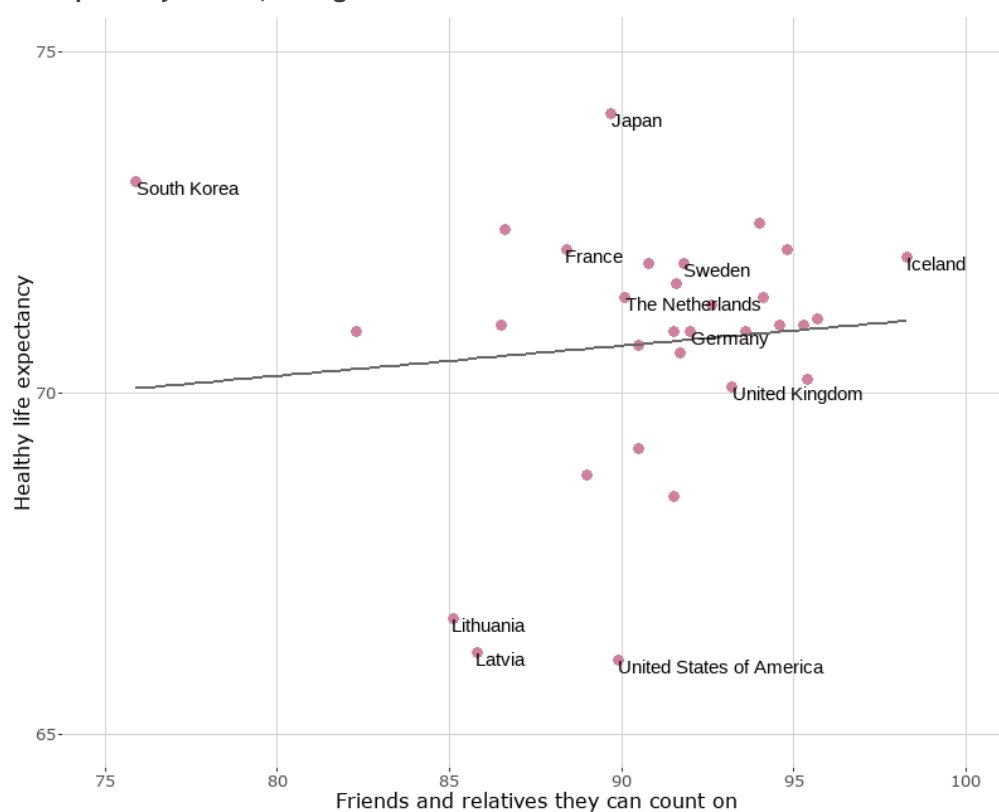
21 A type of mental disorder diagnosed in childhood or adolescence, that may lead to patterns of destructive behaviour.

country has shown, people’s priorities here include feeling secure; having purpose and meaning; being connected to others; and having control over their own lives (Murphy et al 2021).

These things are likely to exist in a mutually enforcing relationship with better health. Better wellbeing, strength of society, capacity for strong relationships with others, and equality are likely to improve health. However, we hypothesise that health is also likely to improve wellbeing, social fabric, agency, and equality in turn – by ensuring we can take part in the community, in local events and organisations, or in family and social events. These correlations were clear, at an international level, in our analysis. Figure 2.7 shows the link between health and social bonds, and figure 2.8 with regional inequality.

**FIGURE 2.7: STRONGER RELATIONSHIPS BETWEEN PEOPLE ARE CORRELATED WITH BETTER HEALTH**

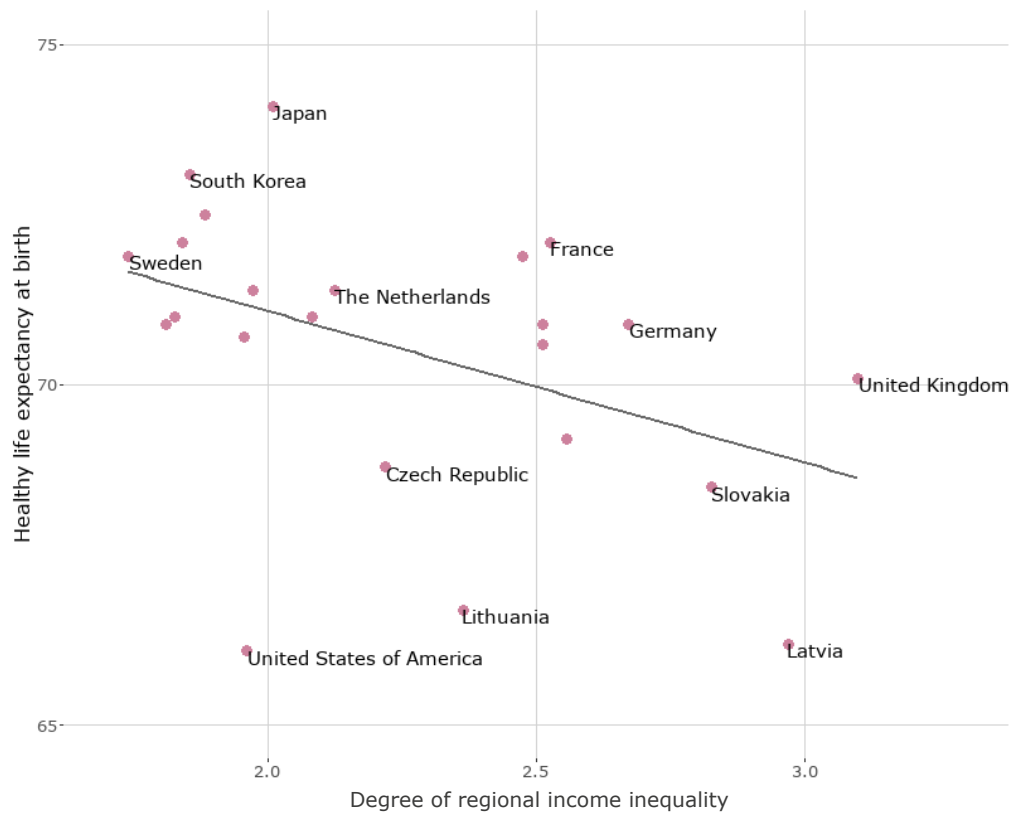
**Correlation between number reporting friends and relatives they can count on (%), healthy life expectancy at birth, among advanced economies**



Source: LCP analysis of WHO (2020) and OECD (2017)

**FIGURE 2.8: LOWER LEVELS OF REGIONAL INCOME INEQUALITY ARE CORRELATED WITH BETTER HEALTH**

**Correlation between healthy life expectancy at birth, degree of income inequality, advanced economies**



Source: LCP analysis of WHO (2020) and OECD (2017)

Note: Regional income inequality is measured by the ratio between the top 20 per cent to the bottom 20 per cent.



### 3.

## TOWARDS A HEALTHIER, FAIRER, MORE PROSPEROUS FUTURE

We've demonstrated that health is an important – and often inadequately considered – determinant of economic and societal prosperity. We've also demonstrated that on many measures the UK is lagging behind other countries on health, and stagnating by its own historic performance.

There is clearly significant room for improvement on UK health outcomes, and on narrowing health inequalities. It is also evident that delivering on the promise of better health could in turn drive greater prosperity. We believe that the UK is at a crossroads: between a continuation of the status quo, or an alternative trajectory toward greater health, and greater prosperity.

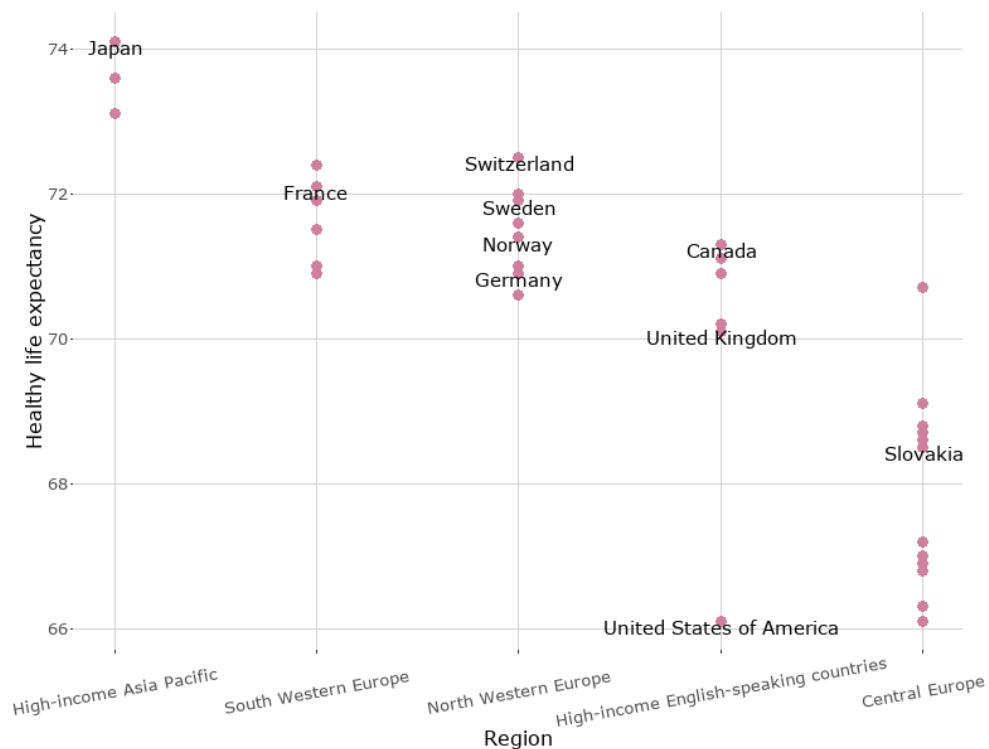
Looking at health across countries, we see geographic clusters of good health. Most notably, there is a trend of better health within North West Europe<sup>22</sup> and high-income Asia Pacific nations as compared to high-income English speaking countries, which lag behind (figure 3.1).

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22 For the purposes of this analysis, the UK is categorised as high-income, English-speaking country rather than a North West European nation.

**FIGURE 3.1: HEALTHY LIFE EXPECTANCY BY GEOGRAPHIC REGION**

Healthy life expectancy at birth (latest) and international geographic region



Source: LCP analysis of WHO (2020) and OECD (2020)

Beyond geography, these groups could also be grouped by degree of economic coordination. On the one hand, high-income English-speaking countries can be categorised as liberal market economies. On the other, nations in North West Europe and Japan are often categorised as more coordinated market economies. This is suggestive of a set of hypotheses worth exploring: that better health is linked to the institutions of, and investment made by, the state – and to how the state and business interact (table 3.1).

**TABLE 3.1. CLASSIFYING ECONOMIES BY THEIR DEGREE OF COORDINATION**

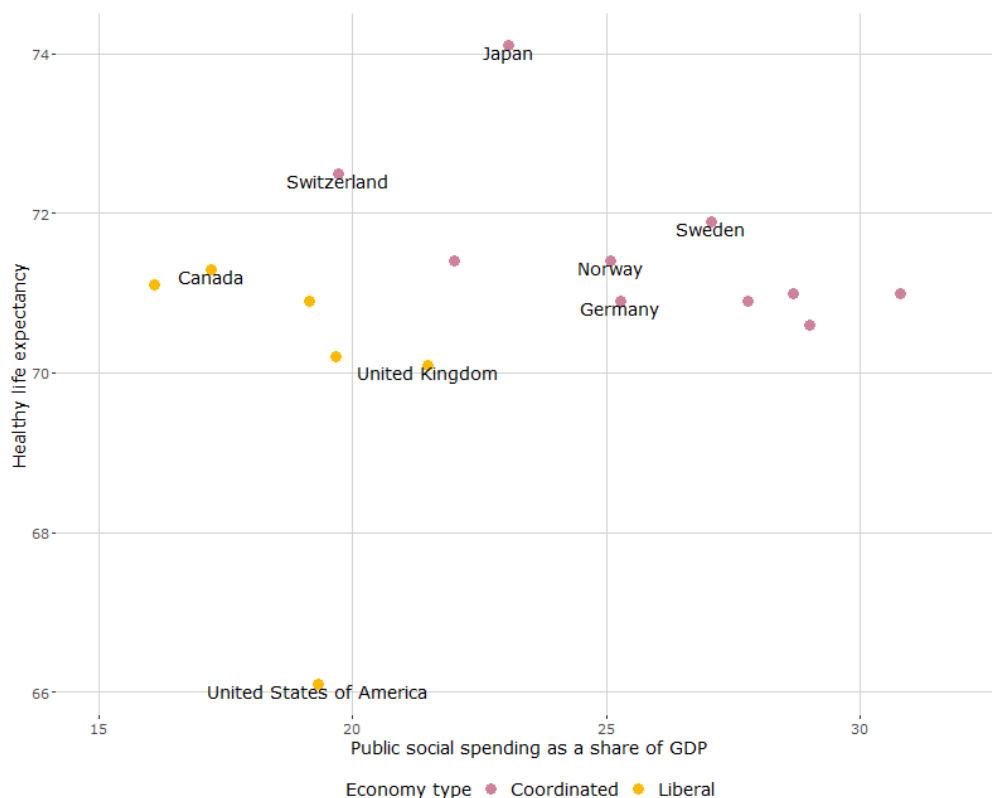
Type	Nations
Liberal market economies	Australia, Canada, Ireland, New Zealand, UK, USA
Coordinated market economies	Austria, Belgium, Denmark, Finland, Germany, Netherlands, Norway, Sweden, Switzerland, Japan

Source: Witt et al (2018)

The priorities, level of investment and approach to the role of the state are likely important factors, here. Indicatively, figure 3.2 shows both that coordinated market economies tend to have higher social spending – and that higher social spending is positively correlated with healthy life expectancy among advanced economies.

**FIGURE 3.2: STATE SOCIAL SPENDING IS HIGHER IN COORDINATED MARKET ECONOMIES, WHICH TEND TO HAVE BETTER HEALTH OUTCOMES**

**Public social spending as a share of GDP in advanced economies, and healthy life expectancy**



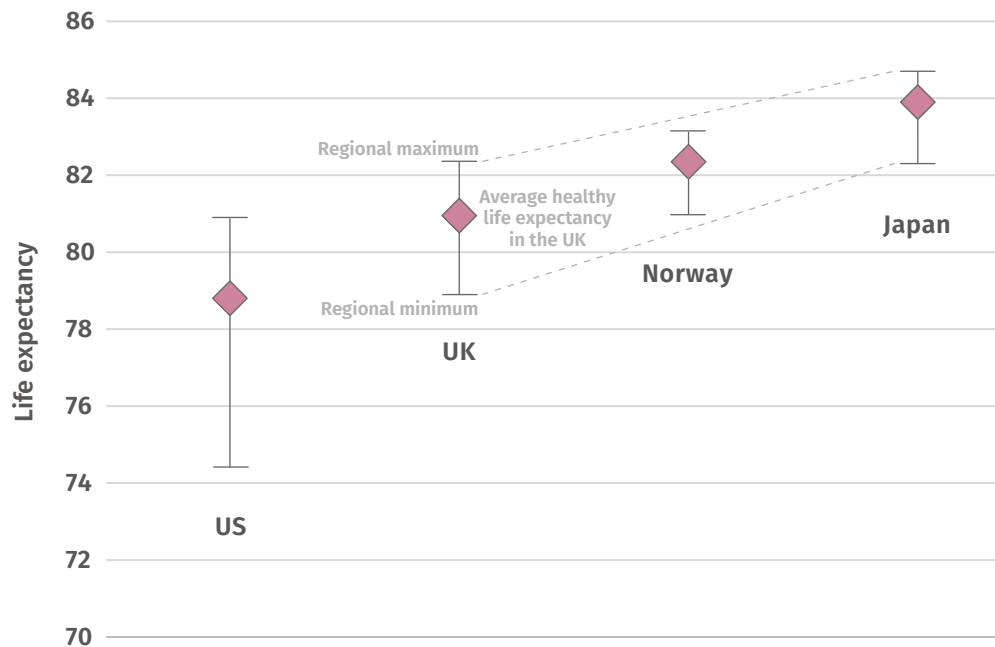
Source: LCP analysis, Witt (2018)

The opportunity for the UK to harness health for prosperity can be quantified through more direct comparison with individual countries in the liberal/coordinated market economy groupings. This is explored in the below figures. In a thought experiment, they show that if the UK were able to ‘boost its health like Japan’ – the nation with the highest healthy life expectancy<sup>23</sup> – The average citizen would live three years longer (and spend three more years in good health). A citizen in the least healthy parts of the country – Scotland, and the North West – would live 3.4 and 2.7 years longer, respectively (figure 3.3).

23 Having had the worst health in the G7 as recently as the 1960s (Tsugane 2021).

**FIGURE 3.3: IF THE UK WERE TO MATCH HEALTH OUTCOMES IN JAPAN, THE AVERAGE CITIZEN WOULD LIVE THREE MORE YEARS – AND THE AVERAGE CITIZEN LIVING IN THE LEAST HEALTHY REGION WITHIN THE UK WOULD GAIN 3.4 YEARS LIVED IN GOOD HEALTH**

Average and minimum/maximum life expectancy in selected countries, latest



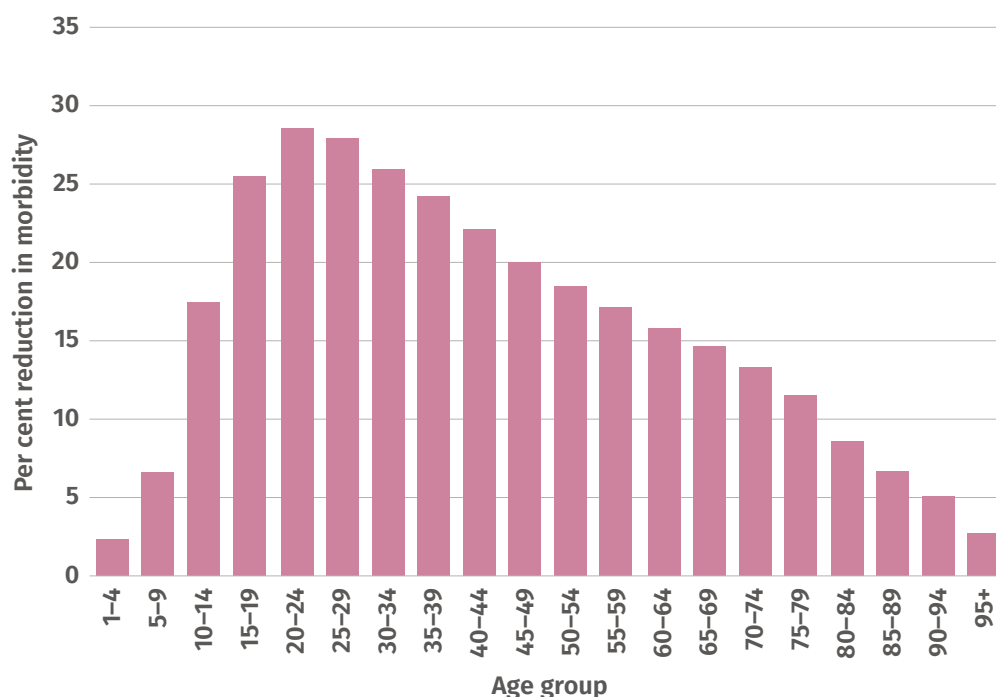
Source: Authors' analysis of Ministry of Health, Labour and Welfare of Japan (2015), CDC (2019), ONS (2022d) and NIPH (2016)

Notes: Comparisons cover USA states, UK regions, Norwegian counties and Japanese prefectures.

Moreover, if the UK were to match Japan's health performance it would have huge benefits across the population. Figure 3.4 shows that young people in their 20s would be the biggest beneficiaries in terms of reduced illness (Figure 3.4). More than half of those with reduced illness are estimated to be below the age of 50, and a third younger than 35.

**FIGURE 3.4: YOUNG PEOPLE WOULD BE THE MAIN BENEFICIARIES OF A HEALTH BOOST IN THE UK**

Reduction in morbidity by five-year age bands from mirroring morbidity rates found in Japan (%)



Source: Authors' analysis of IHME (2020)

Drawing on the relationship between health and productivity already established in this report, we estimate that this increase in healthy life expectancy would boost UK productivity by 1.2 per cent.<sup>24</sup> Assuming this could take place over 10 years<sup>25</sup>, annual productivity growth would be boosted by about 0.12 percentage points. This would bring the UK from towards the bottom of the G7, towards the levels seen in the US over the last decade.

**THE IPPR COMMISSION ON HEALTH AND PROSPERITY**

As we begin to emerge from the pandemic, we can continue with a trajectory of low health, low public investment, and low growth. Or we can commit to driving a rapid improvement in total health (see Davies and Pearson-Stuttard 2021) – and, in turn, leverage that health for greater prosperity.

In light of that challenge, IPPR is launching a new *Commission on Health and Prosperity* that will grapple with these questions over the next two years. The commission will question the status quo, in which health is seen as a cost to be contained – when in it could be seen a keystone in a society and economy that delivers both prosperity and justice.

24 We estimate the productivity impact of a healthier workforce building on the regression results of Bambara et al (2018) who provide an estimate for the impact of reduced morbidity on GVA per head. We derive morbidity reduction for the UK by assuming a scenario in which it mirrors Japan's morbidity rates, as shown in figure 3.4.

25 In a similar scenario, the UK government has committed to improving the UK's health by an extra five healthy life years by 2035. See: <https://www.gov.uk/government/publications/levelling-up-the-united-kingdom>.

The commission will draw from a wide array of expertise. Our commissioners come from the health and care sector but also from economics, business, politics, the life sciences, the voluntary sector, and academia. The commission will represent a broad coalition of those with expertise in the benefits of – and policies that support – better health for all.

And this will be a commission that looks beyond Whitehall, Westminster and England. Our commissioners bring expertise from across the devolved nations. And our work will include deliberation with citizens and people beyond Westminster village.

In 2023, we will present our final plan for a healthier and more prosperous country. In the intervening months, we will undertake major programmes and interim reports on the following.

- How we use wider economic and social policy to drive improvements in health – and how, in turn, this can answer major economic challenges and drive prosperity.
- How a transition from our current ‘illness service’ to a genuine ‘health service’ can enable individual prosperity - and how we can leverage the NHS and social care as major economic actors, to benefit both national and place-based economic outcomes.
- How good health can be built into the places people live in across the whole country and how communities themselves can take control of their health and wellbeing.
- How partnership on innovation and science can meet the nation’s biggest health and economic challenges, and how we can finally ensure the best innovations are available to everyone.

Each will explore our fundamental hypothesis: that a fairer country is a healthier one, and that a healthier country is a more prosperous one – the final report a full policy blueprint to unleash the potential of better health for all.

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