

LEVELLING UP HEALTH FOR PROSPERITY

**Chris Thomas, Anna Round
and Sarah Longlands**

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CONTENTS

Summary	3
1. Health and prosperity	5
1.1 The ambition for health improvement	5
1.2 How the economy of place shapes health: The social determinants of health.....	6
1.3 How health shapes the economy of place: The importance of health for prosperity.....	7
2. How the economy of place shapes health	10
2.1 Health and (in)equalities	10
2.2 Looking ‘upstream’: The economic and social determinants of health	11
2.3 Swimming ‘downstream’: How health risks vary between places	12
2.4 The landing place: Health outcomes.....	13
2.5 Focus on obesity	18
3. How health shapes the economy	20
3.1 Health, work and productivity	20
3.2 Productivity and long-term conditions.....	21
3.3 Regional inequalities in health-related withdrawal from the labour market.....	23
3.4 What greater regional health equality could offer the economy.....	25
4. Three paradigm shifts	27
4.1 From siloed health and economic policy to health as a national mission	27
4.2 Give local leaders the funding they need to make progress	30
4.3 Give local leaders the powers they need.....	34
Appendix 1:	38
References	40

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SUMMARY

The government's manifesto contained ambitious pledges on the economy and health. On health, the government have undertaken to build more hospitals, reduce obesity, hire more staff and improve healthy life expectancy. On the economy, they have promised to 'supercharge' the UK and to 'level up' the nation, distributing investment and economic opportunities more equitably between places and communities.

However, to achieve these aims we need a coordinated approach to health and the economy, nationally and locally. Local government leaders have long realised that health and the economy are intimately linked. The places where we live, work, grow up and grow old all play a fundamental role in shaping our health. And health underpins our economy; productivity, growth and labour market participation are all closely linked to health and wellbeing. Economic and health policy cannot be set apart in silos.

The economic gains from reducing place-based health inequality could be significant. Analysis in this report estimates that closing the health gap between the north of England and the rest of England could generate almost **£20 billion in gross value added (GVA)**. This would be a significant boost to the economy and to recovery from Covid-19, particularly given the severe impacts of the pandemic in the north of England.

Reducing inequalities in health is crucial for our national economy, local prosperity, and our recovery from Covid-19. Covid-19 has brought the link between health and economy into sharp focus. The pandemic had devastating impacts across the country, but these have been disproportionately high in areas with high levels of deprivation and ingrained health inequalities. A stronger and more local approach to health investment, taking account of the role of health in driving prosperity and economic inclusion, will be integral to a fair recovery.

Local government has a pivotal role in achieving these gains. Nationally, the government holds unique levers – taxes, legislation, regulation and funding – to improve health. Building on a long-term commitment in local government to reducing health inequalities, local leaders should be empowered to lead programmes, interventions and collaborations to address the specific needs of their populations and pursue inclusive growth. This report outlines policy to make health improvement a joint enterprise between local and national government.

We recommend three 'paradigm shifts' for a new approach to health and prosperity. These set up health as a national mission, place local action is at the heart of our strategy, and back that strategy with adequate funding. Together they would deliver *both* health improvements *and* significant and progressively distributed economic gains.

First, we should move from considering health as siloed, to viewing health as a new national mission. As we recover from the Covid-19 pandemic, health security and economic recovery are essential, but we will not achieve these if health is left solely to the 'health sector'. As such, we recommend that health improvement be made a national mission – on a par with the priority given to the economy, growth and GDP. Government should implement policy to ensure health is prioritised – across places, and across policy areas. Options include redefining definitions

of economic performance to include wellbeing goals, expanding the economic development remit of devolution deals, introducing a new 'health security and inequality council', and mandating health impact assessments for all public spending decisions.

Second, we should give places the funding they need to make progress. Covid-19 has demonstrated that our current approach makes it difficult to put health and wellbeing first, meaning that neither health nor economic outcomes are as good as they could be. We recommend the government empower novel approaches to wellbeing economics locally and put in place the infrastructure needed to do the same nationally. The government should restore the public health grant, which has been cut three times as much in the North East as the South East, and establish an ambitious "invest to save" programme.

Third, we should give local leaders the powers they need, moving towards genuine empowerment and devolved ownership of health. Further rounds of devolution should consistently give local leaders powers over the social determinants of health. This is especially important for the future of health improvement following the abolition of Public Health England (PHE).

1. HEALTH AND PROSPERITY

1.1 THE AMBITION FOR HEALTH IMPROVEMENT

In the 2019 general election, the Conservative party's manifesto made ambitious pledges on both the economy and health. A promise to prioritise the NHS came with a commitment to recruit thousands of extra medical staff and increase funding. They also committed to reduce health inequalities, and to increase healthy life expectancy by five years by 2035. These are bold commitments that need holistic action across multiple policy areas.

On the economy, the government committed to 'run an ever stronger and more dynamic economy' that achieves a new 'levelling-up' between places and regions, and an expansion of opportunity across the country. Boris Johnson wrote in his introduction to the manifesto:

"There are parts of this country that feel left behind. Talent and genius are uniformly distributed throughout the country. Opportunity is not. Now is the time to close that gap – not just because it makes such obvious economic sense, but for the sake of simple justice"

This position builds on a long history of successive government commitments to regional rebalancing, such as the 'Northern Powerhouse' and 'Midlands Engine' projects, and the programme of regional development agencies between 1999 and 2010. The forthcoming white paper on devolution and Covid-19 recovery will address how changes to investment and governance can come together to achieve change.

These commitments should not be considered in isolation. The health of the population and the health of the economy are inextricably linked, a relationship which has been cruelly emphasised by the Covid-19 pandemic. Alongside its impacts on health and healthcare, Covid-19 has brought extraordinary economic challenges, with a 20.4 per cent drop in GDP in April 2020 and ongoing hardship and uncertainty as infection control measures are put in place.

Health improvement has long been a high priority for local government, alongside a strong remit for local and combined authorities to address regional economic development. In many areas of the UK, local government has enthusiastically embraced the recommendations on widespread action to improve public health that are set out in Sir Michael Marmot's 2010 review and used these as the basis for policy and practice, with the stated aim of reducing health inequalities (Marmot 2020). Over 75 per cent of local authorities had *already* incorporated the approach into their health and wellbeing strategies in 2011. Coventry adopted actions across all of the council's work in 2013, and Greater Manchester in 2019 declared itself a 'Marmot region', recommending as part of its independent economic review that:

"Health needs to feature far more prominently in discussions of human capital, labour market participation, and productivity"

Greater Manchester independent economic review 2020

Tackling health inequalities must be a joint enterprise of local and central government. The former should use its funding, regulatory, taxation and convening powers to drive transformational change and enable the implementation of local

policies. The latter should be recognised and trusted to lead local interventions and to forge partnerships with communities, public services, businesses and civil society (see Finch 2019).

1.2 HOW THE ECONOMY OF PLACE SHAPES HEALTH: THE SOCIAL DETERMINANTS OF HEALTH

The relationship between socioeconomic inequality and health is well-established. In the introduction to his 2010 review, Sir Michael Marmot wrote that:

“People with higher socioeconomic position in society have a greater array of life changes and more opportunities to lead a flourishing life. They also have better health. The two are linked: the more favoured people are, socially and economically, the better their health.”

Marmot et al 2010

Health is widely recognised, informally and formally, as something people *should* be able to enjoy regardless of how much money they have. For example, the WHO constitution envisages: "the highest attainable standard of health as a fundamental right of every human being" (WHO 1946). In the UK, the NHS is pivotal in reducing health inequalities by providing high quality treatment free at the point of need, as well as screening and prevention.

But even the best-funded health service cannot achieve health equity by itself. Estimates suggest that the proportion of health and wellbeing determined by health care is less than 50 per cent, and possibly lower yet (King's Fund and LGA 2014). In the UK, access to health care may account for as little as 10 per cent of a population's health and wellbeing (Health Foundation 2017).

The '**social determinants of health**' are the multitude of social, economic, physical and geographical factors that influence how we live our daily lives. These impact continually on our activities, behaviours, opportunities and – inevitably – our physical and mental wellbeing (CDC 2010). Social determinants include friends, family and community; money and resources; housing; education and skills; work; transport; food; and our surroundings (Lovell and Bibby 2018).

People encounter different social determinants depending on where they live and work, their material resources, and their circumstances. Their effects start before birth (Larson 2007) and build up throughout the life course. It is never too late to address them, but it is never too early to start.

The social determinants of health can be broadly separated into two groups.

- **Upstream determinants**, including economic and social frameworks and resources, and living and working conditions in homes and communities. The quality of housing, the nature of work, income levels and policy frameworks across diverse areas outside the health sector are all upstream determinants. They influence access to living and working conditions that support health, and to healthy choices. They in turn shape:
- **Downstream determinants**, including personal health-related behaviours and access and receipt of medical care.

Braveman, Egerter, and Williams 2011

Upstream determinants include "things such as income and wealth, family and household structure, social support and isolation, education, occupation, discrimination, neighbourhood conditions, and social institutions" (McGovern 2014). Stressors of various kinds are especially important in linking wider systematic social inequalities, discrimination and prejudice to health (Thoits 2010).

The social and physical features of the places where we live are vital in determining health (Elwell-Sutton et al 2018, Jarrett 2018). Key factors include the following.

- The nature, design, quality and affordability of housing (Taylor 2018). Poor quality housing damages health. Over 44 per cent of housing stock in the North was built before 1944 and one-third of all non-decent owner-occupied homes in England are in the North (Hackett 2018).
- Transport and travel systems, including opportunities for active travel such as walking, cycling, and connecting to public transport (Mueller et al 2016, Flint and Cummins 2016, Götschi, Garrard and Giles-Corti 2015).
- Access to green and outdoor spaces for recreation and social life (Buck 2019, Belsky et al 2019, Jarrit 2018).
- Opportunities to participate in community and social life, including the design of high streets and the use of community, neighbourhood and social assets.
- Easy access to affordable and healthy food (Sustrans/Soil Association 2015); this is shaped by numerous factors, including taxation frameworks.
- Good quality work designed and managed in ways that support worker health (Johns, Hunter and Raikes 2019, Benach et al 2013).
- An income that makes life affordable, access to work, and a living wage, or adequate social security for people who cannot work. Poverty damages health through many routes. It creates stress and makes it difficult to access other resources, puts many healthy behaviours out of reach, and leaves people without a 'safety net' if anything goes wrong (Elwell-Sutton et al 2018).

The relationships between the factors that create health are complex, reflecting the individuality and minutiae of people's lives rather than falling neatly into categories of risk factor or condition. This complexity means that the most effective interventions are collaborative. Health services need to work with other stakeholders, including local government, central government departments and agencies, charities, businesses and civil society (see for example Naylor 2019).

1.3 HOW HEALTH SHAPES THE ECONOMY OF PLACE: THE IMPORTANCE OF HEALTH FOR PROSPERITY

Social and economic conditions underpin health, but a growing body of evidence shows that health is also a vital input to prosperity. During the Covid-19 pandemic, health and economic outcomes have sometimes been represented as *competing rather than complementary* priorities. However, it is not a zero-sum game. Tackling the causes of preventable health conditions could reduce as much as 40 per cent of the burden on health services in England (Marshall 2016), but the costs of illness are only part of the story.

Health is an asset that contributes to the prosperity of individuals and their households, businesses, and local and national economies:

“A workforce that remains fit, healthy, and working for longer can both increase tax revenues and decrease the costs of supporting an ageing society. However, health inequalities undermine these benefits.”

Marshall et al 2018

Good health supports higher earnings for individuals and households. It enables people to work and to avoid premature retirement. At the macroeconomic level, population health is a 'robust and sizeable predictor of subsequent economic growth' and a major contributor to human wellbeing (Suhrcke et al 2005). Measures of population health such as life expectancy,

adult survival rates and infant mortality are positively associated with economic growth (Cooray 2013, Blázquez-Fernández et al 2015, Shastry and Weil 2003).

Healthy people are also more productive at work (Black 2008, McKee et al 2009, Monterubbianesi et al 2017). On the other hand, 'presenteeism', or working while sick, reduces productivity (Black and Subel 2020, Schultz and Edington 2007, Loeppke et al 2009, Bryan, Bryce and Roberts 2020, De Vol and Bedroussian 2007).

Compared to other European and high-income countries, the UK has some of the biggest inequalities between its regions in both health *and* economic outcomes (Raikes et al 2019). It is the most regionally unequal country of its size and level of development in relation to productivity and disposable household income, while regional inequality in age-adjusted mortality rates is among the most severe for comparable nations. Within England, the North and parts of the Midlands are generally at the wrong end of these inequalities, with poorer economic indicators and higher mortality (ibid).

Analysis shows that these trends are closely related. Investment in health in the north of England would help to close gaps not only in wellbeing, but in economic prosperity and productivity:

- improving health could reduce the £4 billion gap in productivity between the North and the rest of England by 30 per cent, generating an additional £13.2 billion in GVA.
- reducing long-term health conditions among working-age adults in the North by 10 per cent would reduce economic inactivity by 3 percentage points.
- people in the North who experience a spell of ill-health are 39 per cent more likely to lose their job compared to people in the same circumstances elsewhere in England; if they do return to work their wages are 66 per cent lower than those of comparable workers elsewhere.

Bambra et al 2018

The idea that wellbeing should be a central goal for economic development is gaining traction (Colebrook 2018, Stiglitz, Sen and Fitoussi 2009). In 2018 New Zealand became the first country in the world to set out a 'wellbeing budget' as its central economic policy (New Zealand Government 2018). In the UK, Scotland and Wales have joined an international 'wellbeing coalition'.

In addition, many local and combined authorities have embraced an 'inclusive economy' agenda (LGA 2020), seeking routes to prosperity that distribute economic and social benefits across communities, and proactively reach out in order to address inequality. Some areas, such as Greater Manchester, have moved towards a through integration of social outcomes with all aspects of economic policy (see Round and Longlands 2020). The focus on economic development in devolution deals and other aspects of local policy means that local government is often well-placed to foster important partnerships with businesses (see Health Foundation 2018).

In 2020, the UK faces its greatest health and economic challenges in almost a century; it also faces a crisis of inequality which has been exacerbated by Covid-19. In July the age-standardised mortality rate for deaths involving Covid-19 in the most deprived areas of England was more than double that of the least deprived areas (ONS 2020b). Mortality rates from the virus are significantly higher among black, Asian and minority ethnic people than among white ethnic groups (ONS 2020b).

The economic impacts of the crisis may also be felt more even more harshly by people who were already worse off (Burström and Tao 2020). Multiple vulnerabilities to the health and economic impacts of Covid-19 'cluster' in places and communities that have historically had poorer economic and health outcomes. For example, coastal areas are vulnerable both because their populations are older, and because their economies depend on tourism and hospitality. Many cities have high rates both of deprivation and employment in sectors that have suffered in lockdown (Davenport et al 2020).

CASE STUDY: GREATER MANCHESTER – HEALTH AND SOCIAL CARE DEVOLUTION

In 2016, control of the health budget for the Greater Manchester city region was transferred to the combined authority and elected mayor as part of the devolution deal. This has allowed local control of commissioning of primary and specialised care, and to pool budgets for social care, health and public health at local authority level, with a single accountable officer in each area. It remains accountable to the Secretary of State, while organisational and statutory responsibilities to the centre (eg from CCGs and foundation trusts) are maintained (Quilter-Pinner 2019).

The approach has facilitated the integration of services within health, the integration of health with social care, and ambitious public health programmes involving integration with other services. Stakeholders have "adopted a culture of devolution in the way the work together", developing agreements and protocols to facilitate this (Hope 2019). The Greater Manchester Health and Social Care Partnership brings together local NHS organisations, local authorities, the Mayor and civil society. Spending plans by the Mayor can be rejected or amended if two-thirds of combined authority members approve this action, ensuring that all local authority areas have a voice in policy. Public servants work together through a mix of formal governance boards and informal arrangements for sharing information, collaboration, and best practice.

Greater Manchester has succeeded in establishing a place-based and system-wide approach to health that supports localised working within a strong strategic vision for the wider city region. It is working towards new governance arrangements to deliver integrated public services, including single commissioning functions that will eventually cover all relevant public services, and commissioning for health and care based on shared geography rather than individual service basis.

A strong focus on health and wellbeing informs the *economic* vision for Greater Manchester, which frames the purpose of economic prosperity as improving lives, with the health, skills and capabilities of its citizens as key assets. The GM Health and Social Care Partnership has explicitly committed to following the principles of the 2010 Marmot Review. While recognising that these will have an impact over the long- rather than the short-term, a 2020 evaluation of outcomes in the city region found progress in several areas, including: levels of good development in the early years, attainment at Key Stages 2 and 4, and rising employment rates.

(This account draws throughout on Codling and Allen 2020.)

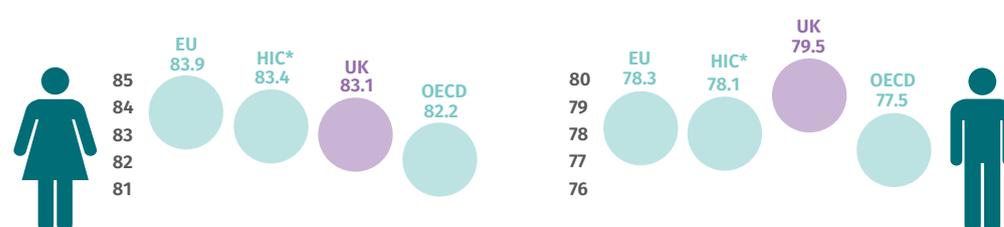
2. HOW THE ECONOMY OF PLACE SHAPES HEALTH

2.1 HEALTH AND (IN)EQUALITIES

Overall rates of health in the UK are good compared to similar countries. For example, life expectancy for both sexes is close to the rate for comparable nations.

FIGURE 2.1: AVERAGE LIFE EXPECTANCY IN THE UK IS IN LINE WITH COMPARABLE NATIONS

Average life expectancy, UK, EU, OECD and high-income countries group



Source: World Bank 2020

Note: *HIC = high income countries group

These averages mask considerable inequalities within the country. In his 2020 review of progress on the social determinants of health in the UK, Sir Michael Marmot found that inequalities had deepened, rather than improving.

- Overall increases in life expectancy have slowed since 2010, most markedly in the most deprived areas; increases are low compared with most other European and high-income countries.
- Inequalities in life expectancy have increased, especially for women; female life expectancy actually *fell* in the most deprived 10 per cent of neighbourhoods and male life expectancy in these areas saw only 'negligible' increases.
- Regional inequalities in life expectancy are increasing, with the lowest life expectancy in the north east of England.
- Mortality rates had increased for people aged 45–49, with a likely association between the this increase and social and economic conditions.
- A steep gradient in *healthy* life expectancy that means people in more deprived areas live shorter lives but spend more of their life in poor health.

Marmot 2020

Existing health inequalities have shaped the impact of Covid-19. Writing in October 2020, the editor of the *Lancet* reported a large-scale international study of population health that showed how a heavy burden of chronic disease, unevenly distributed between places and social groups, meant the UK was unusually poorly prepared for Covid-19 compared to other wealthy countries:

“The pandemic is not the making of a single coronavirus, but the combination of three epidemics: the virus, the chronic conditions that make people more susceptible to it, and a situation of deepening poverty and inequality”

Horton 2020

The factors that impact on health frequently ‘cluster’ in ways that are highly specific to particular communities and places. Local intelligence and sensitivity to experiences and relationships are essential in responding to this complexity (Evans and Buck 2018).

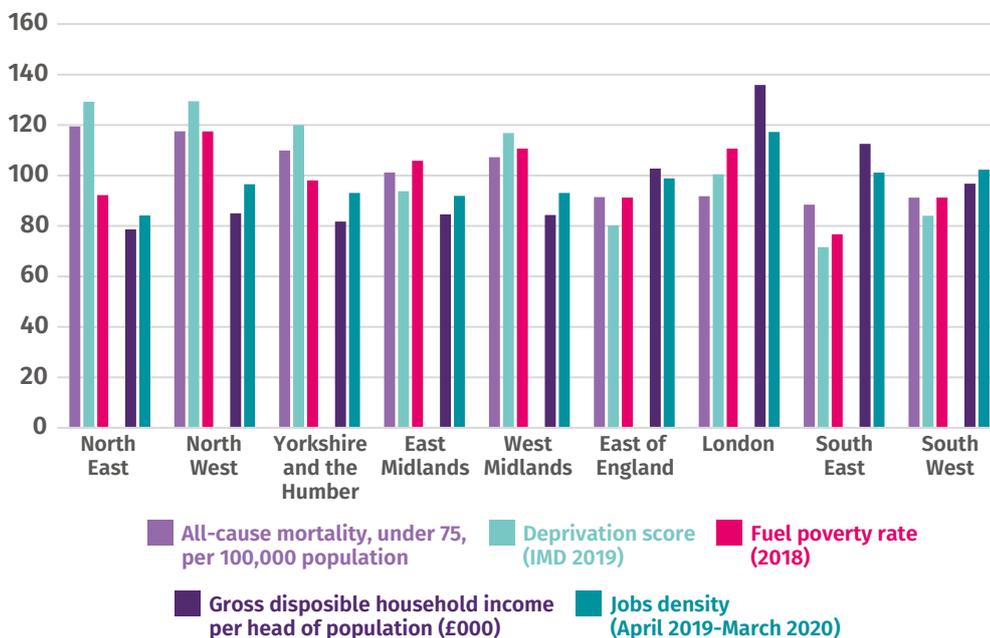
In the following sections we explore inequalities between England’s regions in the distribution of ‘upstream’ factors that determine health, and also the ‘downstream’ behaviours that stem from those fundamental social conditions.

2.2 LOOKING ‘UPSTREAM’: THE ECONOMIC AND SOCIAL DETERMINANTS OF HEALTH

As discussed above, both economic and social inequalities between regions are relatively high in the UK. They are also closely related, as shown in figure 2.2.

FIGURE 2.2: REGIONS WITH THE HIGHEST MORTALITY RATES ARE MORE EXPOSED TO FACTORS THAT CAN NEGATIVELY AFFECT HEALTH, INCLUDING LOWER RATES OF INCOME AND EMPLOYMENT.

Calculated indices (where English rate = 100) for: deprivation measures (using the IMD 2019), all-cause mortality, fuel poverty, gross disposable household income per capita and jobs density, English regions.



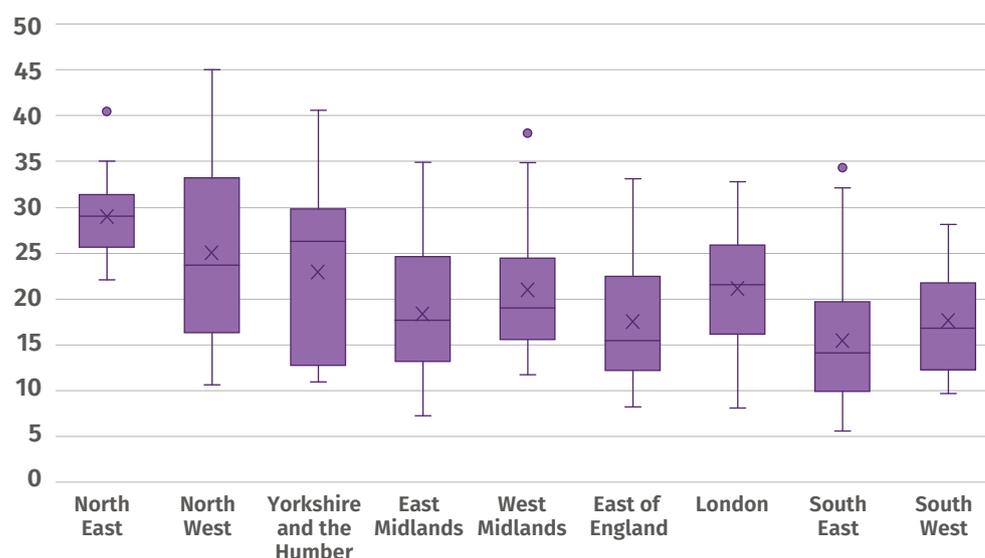
Sources: PHE 2020, ONS 2020e, ONS 2020f, authors’ analysis

The distribution of social disadvantage within regions also varies markedly (figure 2.3). In the North East, even the local authority area with the lowest rate of deprivation has a score just above the English average. In the North West and Yorkshire and the Humber the range is much greater, including at the upper end the highest rates in England. In the South and East, the majority of local authority areas have average or relatively low levels of deprivation, with a ‘tail’ of higher

rates in the east of England and the South East and relatively high rates in some London boroughs.

FIGURE 2.3: DEPRIVATION RATES VARY CONSIDERABLY BETWEEN LOCAL AUTHORITY AREAS WITHIN REGIONS

Index of Multiple Deprivation 2019 scores for English local authorities by region



Source: PHE 2020, authors' analysis

2.3 SWIMMING 'DOWNSTREAM': HOW HEALTH RISKS VARY BETWEEN PLACES

Rates of behaviours that can damage health are generally higher in areas with high rates of social and economic risk factors for poor health (figure 2.4) (Whitley et al 2014, Kvaavik et al 2010). This observation can fuel an unhelpful 'blame game' narrative that focusses narrowly on individual choices as the drivers of ill health, leading in turn to ineffective and punitive policies (Hochlaf, Quilter-Pinner and Kibasi 2019).

However, higher rates of risky behaviours in more deprived communities do *not* fully explain health inequalities:

"the association between low income and higher mortality rates remain after controlling for major behavioural risks"

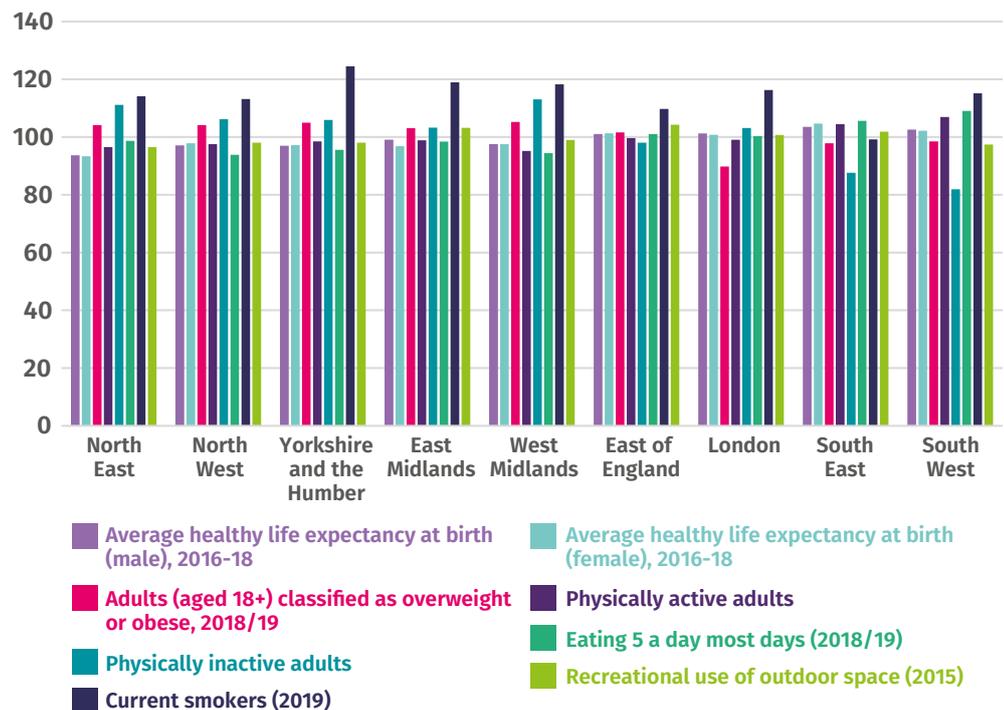
Lantz et al 2010; see also Lantz et al 1998.

Social and structural factors are *directly* associated with poor health, and the constant pressures of living on a low income, with a job and in a neighbourhood that reflect that income, can make healthy choices difficult – if not impossible (Marmot 2015). Healthy options may be hard to access geographically for poorer communities or cost too much in money and time.

For example, families in the two lowest income deciles in the UK would need to spend **42 per cent** of their disposable income after housing on food in order to follow the official 'Eatwell Guide' for a healthy diet (Scott, Sutherland and Taylor 2018). And some healthy choices can be impractical alongside some of the constraints associated with deprivation, such as limited control over one's working hours and circumstances, or the need to provide unpaid care.

FIGURE 2.4: RATES OF HEALTH RISK FACTORS ASSOCIATED WITH DIET, EXERCISE, SMOKING, AND PHYSICAL ACTIVITY ARE HIGHER IN THE ENGLISH REGIONS THAT HAVE HIGHER RATES OF DEPRIVATION AND POOR SCORES ON THE UPSTREAM SOCIAL DETERMINANTS OF HEALTH

Calculated indices (where English rate =100) for: healthy life expectancy, alcohol-related hospital admission among people aged 40–64 (per 100,000 of population), percentage of adults who are physically active/inactive, percentage of adults who eat five portions of fruit and vegetables a day on a regular basis, current smokers and rates of regular use of outdoor space for recreation, English regions



Sources: PHE 2020, authors' analysis

2.4 THE LANDING PLACE: HEALTH OUTCOMES

Like the upstream and downstream determinants of health, mortality rates from common conditions vary substantially between English regions. Table 2.1 shows mortality rates for people under 75 from major chronic diseases.

These – like overall mortality – are generally higher in the north of England and the midlands. The North East and North West have the highest rates, followed by Yorkshire and the Humber, and the West Midlands. And the differences are pronounced. Mortality rates in the local authority areas¹ with the highest death rates from respiratory disease are more than twice the national rate. They are a little over two-fifths higher than the national rate in the areas with highest mortality from cardiovascular disease and about one-third higher in the areas with the highest mortality rates from cancer.

When we considered which local authority areas had the highest mortality rates from cardiovascular, heart and respiratory disease, cancer and stroke, a number of areas are among those with the highest mortality rates for four or even all five conditions for people aged under 75. The vast majority of these are in the north

¹ We did not analyse data for geographical units below the local authority level, but it is highly likely that had we done so, we would have found clusters at these smaller scales.

of England. Relatively few appear on the list for just one condition; as the social determinants of health cluster in places, so does illness.

Mortality rates vary within as well as between local authority areas, and the patterns for this are – not surprisingly – relatively similar to those for deprivation. Figure 2.5 shows mortality rates from cardiovascular disease among people under 75.

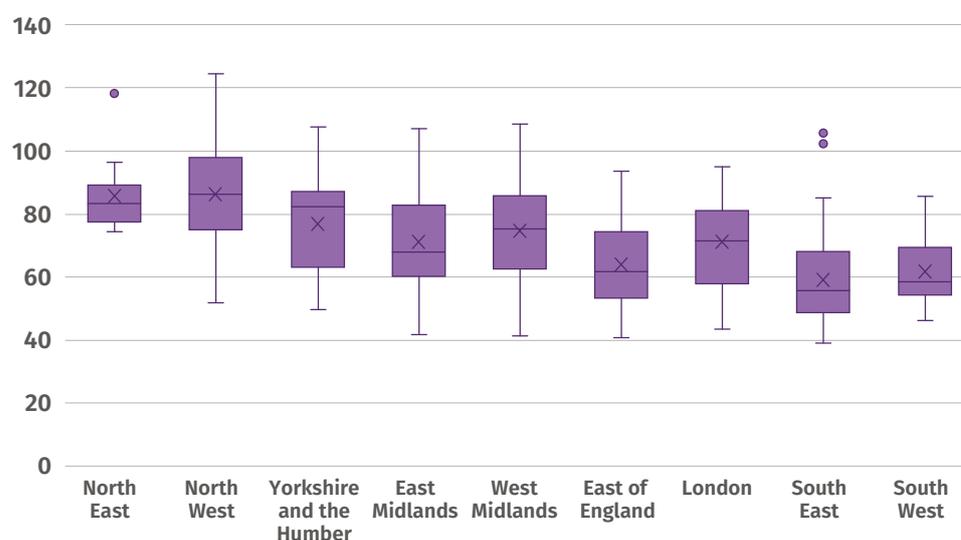
TABLE 2.1: UNDER 75 MORTALITY RATE PER 100,000 POPULATION FOR DIVERSE CONDITIONS, ENGLAND, 2016/18

	All causes	Cardiovascular disease	Heart disease	Cancer	Respiratory disease	Stroke	Liver disease
North East	394.74	82.80	45.51	152.60	44.20	16.31	25.5
North West	388.39	86.60	48.82	145.60	46.30	15.20	25.7
Yorkshire and the Humber	363.18	82.00	44.97	141.20	41.20	14.29	19
East Midlands	334.42	73.50	39.11	133.40	34.90	12.62	17.5
West Midlands	354.41	78.40	43.35	138.30	36.30	13.28	21.3
East of England	302.12	63.40	31.97	126.00	29.80	11.56	15
London	303.32	70.50	36.60	120.10	30.30	13.13	16
South East	292.31	59.00	29.54	123.60	28.70	10.72	15.7
South West	301.46	61.90	32.07	125.60	28.10	11.19	15.9
England	330.49	71.70	38.18	132.30	34.70	12.83	18.5

Source: PHE 2020

FIGURE 2.5: VARIATION IN MORTALITY RATES WITHIN REGIONS IS GREATEST IN THE NORTH WEST AND THE MIDLANDS, WITH HIGHER RATES EVEN IN THE AREAS WITH LOWEST MORTALITY IN THE NORTH

Mortality rates for people aged under 75 from all cardiovascular disease, 2016/18, English regions.



Source: PHE 2020

These inequalities are not inevitable. A proportion of mortality from cardiovascular, respiratory and liver disease, as well as stroke and cancer, is considered 'preventable' through interventions to reduce risk factors. Over half of the UK's disease burden is considered attributable to 'behavioural, social and environmental factors' (DHSC 2018). And the UK *underperforms* compared to similar countries in reducing the impacts of preventable disease on people's lives. Rates of preventable deaths and illness *improved* markedly compared to 35 similar nations between 1990 and 2010, but since then progress has stalled (Hochlaf, Quilter-Pinner and Kibasi 2018).

Across England, the mortality rate for people under 75 from all causes that are considered preventable is **180.8 per 100,000 people** (equivalent to over one-quarter of a million deaths over the period 2016-2018). And rates of preventable mortality, like mortality rates overall, vary markedly between different places.

Of the 10 local authority areas with the highest rates of *mortality considered preventable* from cardiovascular, respiratory and liver disease, stroke and cancer, six areas are among the 'top ten' for all five conditions, two for four conditions, and one for three of these conditions. Just three local authority areas appear in only one of these lists. Similar 'clustering' occurs throughout the length of the list.

There are also large differences in the rates of mortality and disease associated with specific risk factors, behavioural and environmental. Some examples include the following.

- Across England, **5.15 per cent of all mortality** is associated with particulate air pollution. Between areas, the rate varies from 2.5 per cent to over 7 per cent, in central London and parts of the West Midlands).
- For all age groups, the rate of mortality attributable to smoking is **250.2 per 100,000 of population**. This includes deaths from respiratory disease, cardiovascular disease, and cancer. In the areas with the highest rates, the figure for all smoking attributable mortality is over 475 per 100,000; this is more than three times the figure for areas with the lowest rate.
- For all age groups, the rate of alcohol-related mortality is **46.5 per 100,000 of population**. Alcohol-related mortality is more than twice as high in the areas with the highest rates compared to those with the lowest rates.
- The incidence rate of cancer related to alcohol (for all age groups) is **37.82 per 100,000 people**. In areas with the highest rate, it is just under 50 per 100,000

All figures from PHE 2020, authors' analysis

Rates of long-term and chronic illnesses that damage both quality of life and productivity vary – once again – between England's regions. Table 2.2 shows the incidence of depression or anxiety, long-term musculoskeletal problems, diabetes and overweight or obesity. As with mortality from the diseases discussed above, these chronic conditions follow patterns of economic and social deprivation across the country. Investment in the upstream social determinants of health, along with action by local and central government, is essential to address these inequalities.

TABLE 2.2: PROPORTION OF ADULTS REPORTING OR DIAGNOSED WITH DEPRESSION OR ANXIETY, LONG-TERM MUSCULOSKELETAL PROBLEMS, DIABETES OR OVERWEIGHT/OBESITY

	% of adults reporting depression or anxiety	% of people reporting a long-term musculoskeletal problem	Diabetes: QOF prevalence, adults	% of adults as affected by overweight or obesity
England	13.74	16.90	6.90	62.30
North East	16.69	21.90	7.40	64.90
North West	15.84	19.10	7.20	64.90
Yorkshire and the Humber	15.12	18.10	7.20	65.40
East Midlands	14.07	17.80	7.30	64.20
West Midlands	14.12	18.20	7.80	65.60
East of England	12.49	16.70	6.70	63.30
London	12.45	12.40	6.60	55.90
South East	12.48	15.90	6.20	60.90
South West	13.06	17.30	6.60	61.30

Source: PHE 2020

TABLE 2.3: DIABETES PREVALENCE ESTIMATES, ENGLISH LOCAL AUTHORITIES

Area	Prevalence	Area	Prevalence
Lowest		Highest	
Kingston upon Thames LB	6.8%	Rochdale MD	10.0%
York UA	7.0%	Dorset CC	10.1%
Brighton and Hove UA	7.1%	Cornwall UA	10.1%
Bracknell Forest UA	7.1%	Blackburn with Darwen UA	10.2%
Richmond upon Thames LB	7.3%	Walsall MD	10.3%
Wandsworth LB	7.3%	Luton UA	10.4%
Southampton UA	7.3%	Bradford MD	10.4%
Bristol UA	7.3%	Birmingham MD	10.5%
Newcastle upon Tyne MD	7.4%	Waltham Forest LB	10.5%
Portsmouth UA	7.4%	Slough UA	10.6%
Islington LB	7.5%	Isle of Wight UA	10.7%
Reading UA	7.6%	Torbay UA	10.8%
Bath and North East Somerset UA	7.6%	Croydon LB	10.8%
Wokingham UA	7.6%	Newham LB	10.9%
Manchester MD	7.7%	Redbridge LB	11.0%
Oxfordshire CC	7.7%	Sandwell MD	11.0%
Central Bedfordshire UA	7.8%	Leicester UA	11.1%
South Gloucestershire UA	7.8%	Harrow LB	11.2%
Surrey CC	7.9%	Wolverhampton MD	11.3%
Cambridgeshire CC	7.9%	Brent LB	12.0%

Source: PHE 2020

Diabetes prevalence varies considerably between local authority areas, with the highest diabetes rate 5.2 points above the lowest. Around 90 per cent of people with diabetes have type 2 diabetes² (Diabetes UK 2020a), which unlike type 1 diabetes is usually acquired as an older child or adult. The risk factors for type 2 diabetes are multiple. They include age, ethnicity and genetics, as well as various factors that relate to health environment and behaviours, including blood pressure and weight (Diabetes UK 2020b). The role of the age and the ethnic mix of the population re-emphasises the importance of localised responses. The role of factors such as weight and blood pressure shows the importance of interventions to change behaviours and environments, and to work on the social determinants of health.

Of the 20 local authorities with the lowest diabetes prevalence, 17 are in the south of England, while of the 20 local authorities with the highest prevalence eight are in the North and Midlands.

CASE STUDY: THE LEICESTER DIABETES CENTRE

The Leicester Diabetes Centre is one of the largest research, education and training facilities of its type in Europe. It brings together world-class research with clinicians working in one of the UK's most diverse cities. Around 9.4 per cent of Leicester's population have a diagnosis of diabetes (the fourth highest rate in the UK), and 59 per cent of people diagnosed with Type 2 diabetes are aged under 65, compared to 47 per cent across England (PHE 2020, authors' calculations).

The Centre is formed through a unique collaboration between the NHS and academia. Evidence from multi-disciplinary research studies directly informs the Centre's education programmes for people with diabetes and the healthcare professionals who work with them to prevent and manage diabetes and related conditions. In turn, learning from frontline practice and the voices of people living with diabetes and its risk factors inform both the development of programmes and ongoing research.

The Centre hosts a number of specialist units and programmes, including: the Centre for Black and Minority Ethnic Health, whose aims is 'to reduce ethnic health inequalities nationally' by working with communities and practitioners; the Leicester Real World Evidence Unit, where experts in modelling, evidence synthesis and review and epidemiology work to generate evidence for treatment/prevention models using innovative analytical and data methods; and several research groups supported by the National Institute of Health Research. It is also affiliated with national and global programmes such as: the Cities Changing Diabetes programme, which encourages cities worldwide to set goals and establish interventions to address the specific health challenges that affect their populations; and the National Diabetes Prevention Programme. Its findings and programmes are used across the UK and beyond.

The Leicester Diabetes Centre is an example of how a collaboration between clinicians across a range of disciplines and 'anchor institutions' such as hospitals and universities can form the basis for multiple partnerships, including grassroots and community ones, to address specific place-based issues and generate findings and innovation that are relevant well beyond the local area.

(This account draws throughout on Leicester Diabetes Centre 2020.)

2 Around 8 per cent have type 1 diabetes and 2 per cent have rarer forms of the condition.

2.5 FOCUS ON OBESITY

Around 62.3 per cent of adults in the UK are classified as affected by overweight or obesity (PHE 2020), and 28 per cent are affected by obesity (NHS 2020). Rates are higher than in many comparable countries. In 2016, the UK figure for adults affected by obesity was 27.8 per cent, compared to rates between 19.9 per cent in Italy and 23.8 in Spain. However, it is lower than in the USA (36.2), Canada (29.4), New Zealand (30.8) or Australia (29) (WHO 2020).

More people are affected by overweight and obesity in areas of high deprivation. In the most deprived 10 per cent of areas in England, over two-thirds (67.3 per cent) of adults are affected by overweight or obesity. In the 10 per cent of areas with the lowest rates of deprivation, the figure is 57.6 per cent.

Successful interventions to reduce obesity reflect the complexity of its causes, and take time to work. Most effective are ‘multisector, multilevel, “whole of community” approaches’, with coordination and connections between sectors, levels and initiatives (Economos and Hammond 2017), and partnerships that address different aspects of the built, commercial, cultural and food environment (Townshend and Lake 2017). For example, the Guys and St Thomas’s Charity in London works at the neighbourhood and ward level to identify social, environmental and cultural factors that shape choices about food and activity (Guys and St Thomas’ Charity 2018, Hickey 2019).

Following his recovery from Covid-19, Boris Johnson acknowledged the link between obesity and increased risk of complications from the virus and launched a new strategy to address weight issues in the UK (DHSC 2020). This includes:

- campaigning to encourage people to lose weight, using technological support such as weight-loss apps
- planned expansion of weight management services through the NHS; this includes revised dietary and exercise advice
- legislation on promotions and online or TV advertising of unhealthy food, including restrictions on in-store promotions
- revision of food labelling, including legislation to require large catering businesses to add calorie labels to meals, and consultation on food and alcohol labelling.

The plan has been welcomed as a way to engage people with weight loss, particularly through health services, and as a reversal of previous unwillingness to legislate on the determinants of health. However, some commentators have suggested that its effectiveness could be increased were its focus on behavioural factors accompanied with action on local issues such as active transport and the density of fast food outlets, (Briggs 2020), as well as poverty, deprivation and unemployment.

Across England, the proportion of adults who are affected by overweight or obesity in the areas with the lowest rates is around 35 percentage points lower than in the areas with the highest rates. Of the 20 least overweight local authority areas, 14 are in London (Boris Johnson, a Westminster resident, was actually in a minority).

However the figure is under 50 per cent in just six local authority areas across England, and in the local authorities with the highest rates, almost three-quarters of adults are affected by overweight or obesity.

TABLE 2.4: PERCENTAGE OF ADULTS CLASSIFIED AS AFFECTED BY OVERWEIGHT OR OBESITY; 20 LOCAL AUTHORITIES WITH THE HIGHEST AND LOWEST RATES IN ENGLAND

Area name	Overweight/obese adults	Area name	Overweight/obese adults
Camden	41.66%	Thurrock	75.95%
Westminster	48.63%	Hartlepool	75.74%
Haringey	48.66%	Rotherham	75.61%
Hammersmith and Fulham	48.86%	Knowsley	73.73%
Kensington and Chelsea	49.41%	Walsall	73.16%
Brent	49.47%	Barking and Dagenham	72.71%
Lambeth	50.17%	Shropshire	72.45%
Brighton and Hove	50.54%	Redcar and Cleveland	71.89%
Bath and North East Somerset	51.13%	Dudley	71.55%
Southwark	51.49%	Telford and Wrekin	71.50%
Hackney	51.65%	Kingston upon Hull	71.36%
Wandsworth	52.53%	Sandwell	70.94%
Waltham Forest	52.87%	Peterborough	70.60%
Richmond upon Thames	53.59%	Halton	70.57%
West Berkshire	53.68%	Wigan	70.52%
Windsor and Maidenhead	54.27%	Tameside	70.52%
Harrow	54.78%	North East Lincolnshire	70.34%
Bristol	54.83%	Plymouth	69.80%
Merton	55.10%	Doncaster	69.67%

Source: PHE 2020

3.

HOW HEALTH SHAPES THE ECONOMY

3.1 HEALTH, WORK AND PRODUCTIVITY

As the Covid-19 pandemic has shown, health and the economy are inextricably linked. Inequalities in income, housing quality and deprivation levels are associated with widely divergent health outcomes, and also different impacts from Covid-19. The success of our economic recovery depends on our commitment to reducing health inequalities between different places.

As discussed above, poor *general* population health is associated with poorer economic indicators. Research *also* shows a relationship between the prosperity of individuals, firms and economies, and the incidence of particular diseases. Some examples include the following.

- Cardiovascular disease is associated with major productivity losses in advanced economies, due to absenteeism, presenteeism and demands for care (Patel et al 2020, Kotseva et al 2018, Kotseva et al 2019, Gordois et al 2016). People who recover from these conditions are less likely to return to work or may earn less when they do (Vyas et al 2017).
- Respiratory diseases such as COPD limit the amount and type of work that people can do, affecting earnings and economic activity (Patel et al 2014). These complex conditions have both direct costs through absence from work (Ford et al 2015), and indirect costs (Lisspers 2018), which are hard to quantify (Toy et al 2017).
- Musculoskeletal conditions are the second most common cause of lost working days in the UK (PHE 2017). They reduce earnings and employment as well as quality of life (Cribb et al 2018), and damage productivity through absenteeism and presenteeism, affecting product and service quality (Crawford et al 2020). Prevention in the workplace, through adaptation of working conditions and practices, is especially important as work can potentially aggravate problems (Summers et al 2015, Lang et al 2012).
- Mental health conditions are the third most common cause of lost working days (PHE 2017), with major productivity impacts (Hazo et al 2017). Again, work itself interacts with these issues in complex ways. Working can help reduce mental health problems, but work-related stressors and poorly-managed work can exacerbate conditions (Bubonya et al 2017, Doran 2013).
- Diabetes is associated with productivity loss, absence from work and early retirement (Marcellusi et al 2016, Magliano et al 2018), although the chronic and complex nature of the condition makes these hard to quantify precisely. In high income countries, people with diabetes – in particular men with diabetes – are less likely to be employed, although this can be mitigated by good management of the condition (Seuring, Archangelidi and Suhrcke 2015, American Diabetes Association 2018). An American study found that around 28 per cent of the estimated total cost of diabetes could be attributed to lost workplace productivity (Schofield et al 2017).

This chapter focusses on building on this evidence base, considering the links between regional economies and regional health inequalities.

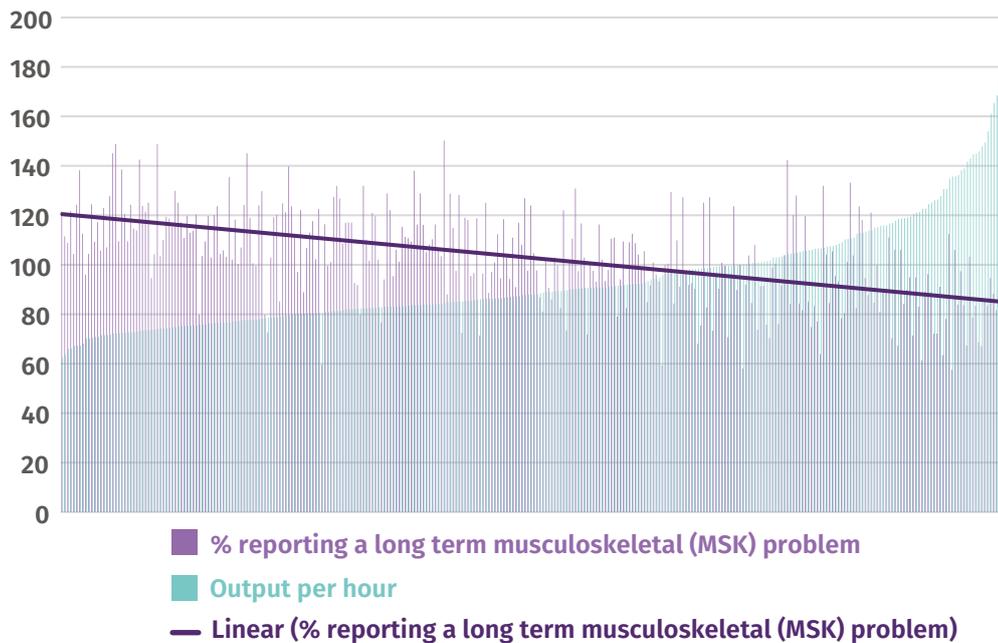
3.2 PRODUCTIVITY AND LONG-TERM CONDITIONS

The relationship between productivity and long-term health conditions is extremely complex. Multiple factors *apart from* health drive productivity and calculating productivity rates for local authority areas is itself a complex matter. Nevertheless, a relationship can be seen. Figures 3.1a and b show indices for the percentage of adults reporting a musculoskeletal disorder and for the mortality rate from causes considered preventable, alongside output per hour for English local authority areas.

Overall, productivity is higher in areas where these chronic and preventable conditions are less prevalent. Of course, these charts indicate co-occurrence, *not* causation. But at the very least they indicate the challenges that some areas will face when seeking to improve their economic outcomes.

FIGURE 3.1A: PRODUCTIVITY TENDS TO BE RELATIVELY LOWER THAN THE NATIONAL RATE IN AREAS WITH RELATIVELY HIGHER RATES OF ADULTS REPORTING A MUSCULOSKELETAL DISORDER

Calculated indices for the percentage of adults reporting a musculoskeletal disorder and for productivity measured as output per hour, English local authority areas

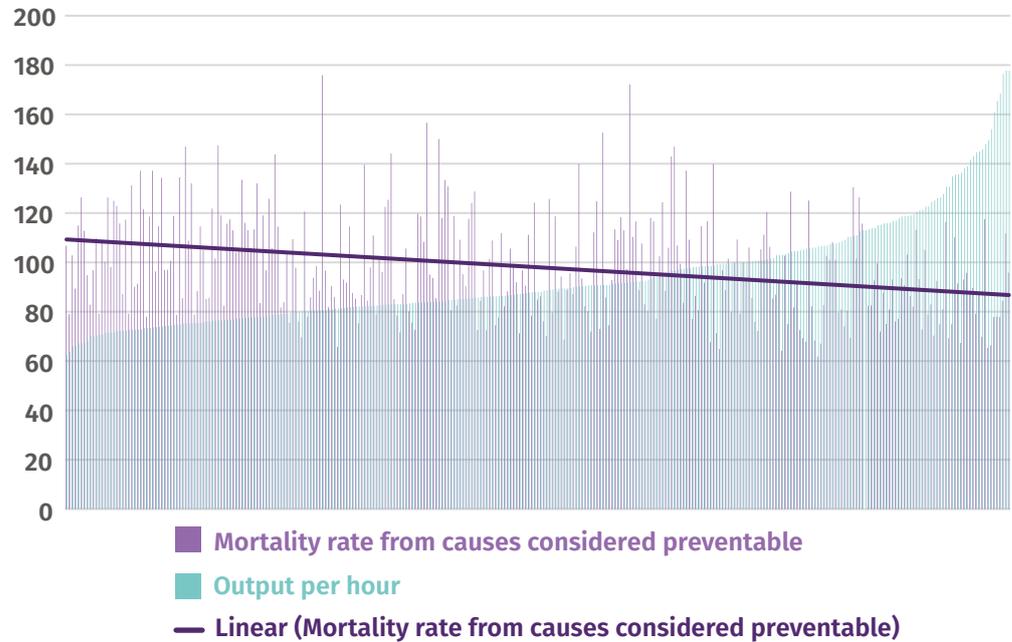


Source: ONS 2020d and PHE 2020, authors' calculations

England's regional economic imbalances are also marked. Figure 3.1 shows under 75 mortality and productivity rates (GVA per hour worked) for England's regions. Overall London, the South East and the East of England have higher productivity rates but lower mortality, while mortality is higher and productivity generally lower in the Midlands and the North. Two regions – the North West and the South West – sit outside this trend. The latter has a productivity rate comparable to that of the Midlands, but mortality similar to that of the East of England, while the latter has relatively high productivity but also high mortality.

FIGURE 3.1B: PRODUCTIVITY TENDS TO BE RELATIVELY LOWER THAN THE NATIONAL RATE IN AREAS WITH RELATIVELY HIGHER RATES OF MORTALITY CONSIDERED PREVENTABLE

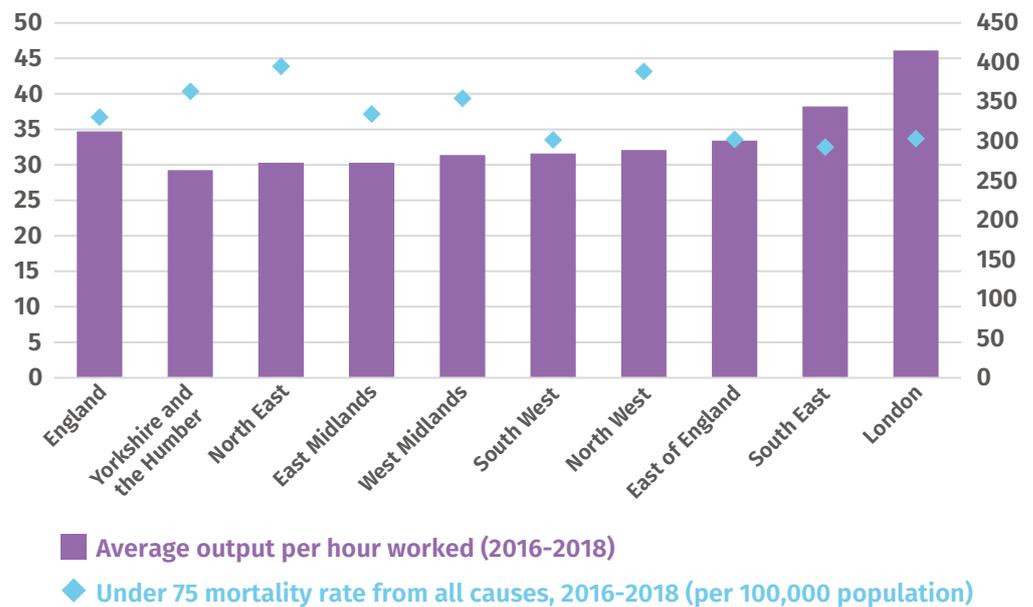
Calculated indices for the mortality rate from all causes considered preventable and for productivity measured as output per hour, English local authority areas



Source: ONS 2020d and PHE 2020, authors' calculations

FIGURE 3.2: THE NORTH AND MIDLANDS HAVE LOWER PRODUCTIVITY AND HIGHER MORTALITY, WHILE THE SOUTH EAST AND EAST OF ENGLAND HAVE HIGHER PRODUCTIVITY AND LOWER MORTALITY RATES

Average nominal (unsmoothed) GVA per hour worked (£), 2016–18 and under 75 mortality rate from all causes, 2016–18 (per 100,000 population), English regions



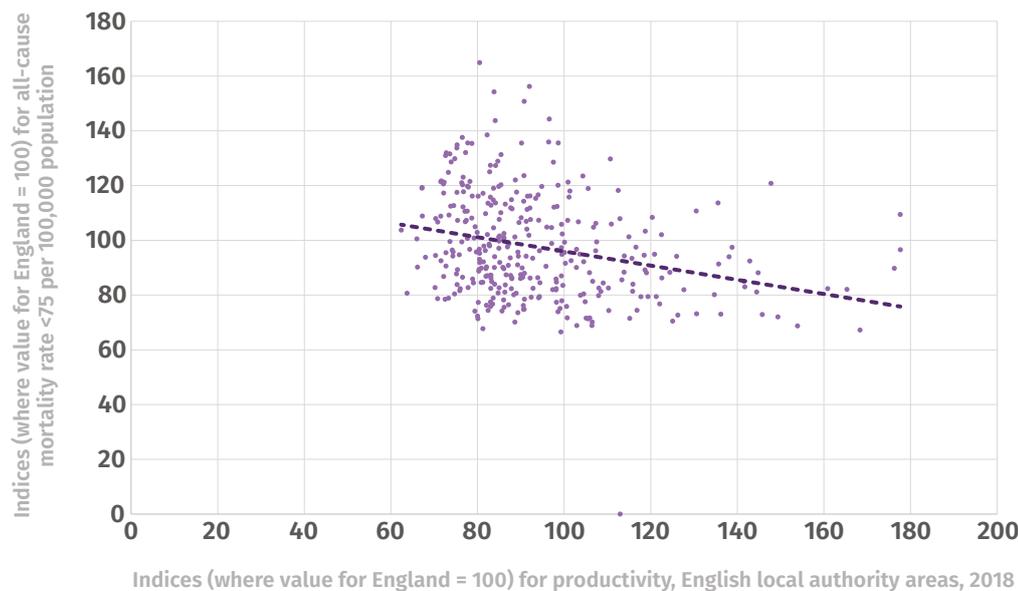
Sources: ONS 2020d and PHE 2020 (authors' calculations)

There are also marked variations *within* regions. In Yorkshire and the Humber in 2018, productivity for local authorities varied between £22.70 and £35.40 per hour; in the North East the lowest output per hour was £25.70 and the highest was £37.10, equivalent to the figure for mid-performing London boroughs. Rates in highly productive London in fact vary between £28 and £63.20. The lowest rates of productivity in the South East are around £25.50, while the highest are above £40.

For local authorities, the relationship between productivity and mortality is not statistically significant. However, there is a weak association between all-cause mortality and productivity measured as output per hour for local authority areas in England (figure 3.2). Across England, very few areas with a mortality rate markedly above the English average have rates of productivity that substantially exceed the English one. Relatively low mortality rates are found right across the productivity spectrum, reflecting the range of factors that contribute to regional productivity.

FIGURE 3.3: THERE IS AN ASSOCIATION BETWEEN MORTALITY AND PRODUCTIVITY FOR LOCAL AUTHORITY AREAS

Calculated indices for productivity (average nominal smoothed GVA per hour worked, 2018) and for under 75 mortality rate from all causes, 2016-18 (per 100,000 population), where English rate = 100, English district/UA local authority areas.



Sources: ONS 2020d and PHE 2020 (authors' calculations)

3.3 REGIONAL INEQUALITIES IN HEALTH-RELATED WITHDRAWAL FROM THE LABOUR MARKET

Ill-health impacts on the economy through absence from work, short- or long-term. The sickness absence rate (expressed as the percentage of working hours lost due to illness) across England was 1.9 per cent in 2018. There is some regional variation, but all regional rates are within 0.5 percentage points of the national one. The lowest rate is in London, at 1.4 per cent; this may reflect the age of London's population.

The percentage of working days lost to different conditions was:

- minor illnesses (coughs, colds, etc) – 27.2 per cent
- musculoskeletal problems – 19.7 per cent

- other illnesses including diabetes, injuries, infections etc – 13.7 per cent
- mental health conditions – 12.4 per cent
- gastrointestinal problems – 6.1 per cent.

Other conditions account for under 5 per cent each of working days lost.

TABLE 3.1: ECONOMIC INACTIVITY RATES FOR DIFFERENT GROUPS, ENGLISH REGIONS, APRIL 2019–MARCH 2020

	Economic inactivity rate as % of workforce (exc students)	Economic inactivity due to long term sickness, as % of workforce	Economic inactivity due to retirement pre-65, as % of workforce
England	15.0	4.7	2.6
North East	18.9	7.0	3.2
North West	16.2	6.1	2.8
Yorkshire and the Humber	16.8	5.5	3.0
East Midlands	15.0	4.8	2.7
West Midlands	15.8	5.0	2.6
East	15.0	4.4	3.1
London	14.3	3.9	1.4
South East	13.0	3.5	2.8
South West	13.8	4.6	2.9

Source: ONS 2020 via NomisWeb, authors' calculations

Rates of long-term economic activity also vary. Across the country, around 15 per cent of people aged 16-65 are economically inactive for reasons other than being a full-time student. 4.7 per cent of people aged 16-64 are economically inactive due to long-term illness, and 2.6 per cent are retired (before reaching the state pension age).

Economic inactivity due to long-term sickness is highest in the North and the West Midlands, and substantially lower in London and the South East. It is under 2 per cent in a small number of areas, and over 10 per cent in six of those where data is available.

Employment rates also vary for by type of long-term condition. The table below shows aggregated employment rates for people with long-term health conditions, defined as conditions that persist for more than one year. These rates, not surprisingly, are relatively low overall. Just over half of all people with a long-term health condition are in employment in London and the South East, compared to 44-46 per cent in the North.

People with musculoskeletal conditions and mental health conditions appear to have particularly low rates of employment in the North East (the former may reflect the type of job available in this region), while people in London with mental health issues have a lower rate of employment than nationally. In the South East and South West people with mental health conditions have comparatively high rates of employment.

TABLE 3.2: EMPLOYMENT RATES (AS A PERCENTAGE OF PEOPLE OF WORKING AGE RECORDED AS HAVING THE CONDITION) FOR PEOPLE WITH DIFFERENT KINDS OF LONG-TERM CONDITION, ENGLISH REGIONS, APRIL 2019–MARCH 2020

	People with a health condition lasting more than 12 months	People with conditions connected with arms, legs, hands, feet, back or neck	People with blood, circulatory, stomach, liver, kidney or digestive problems	People with depression, learning problems, mental problems and nervous disorders
England	48.0	38.4	44.3	44.5
North East	44.3	32.8	39.7	36.6
North West	46.9	36.2	43.5	42.3
Yorkshire and the Humber	47.0	38.8	44.6	42.2
East Midlands	46.5	36.6	41.7	45.3
West Midlands	46.7	37.5	43.8	40.6
East	46.7	37.1	41.4	45
London	51.5	41.5	49.0	40.3
South East	50.1	40.7	45.5	53.4
South West	49.1	40.8	45.8	48.3

Source: ONS 2020 via NomisWeb, authors' calculations

Note: Terminology reflects the usage of the APS reporting.

3.4 WHAT GREATER REGIONAL HEALTH EQUALITY COULD OFFER THE ECONOMY

Reducing regional inequalities in rates of obesity, long-term conditions such as diabetes, and avoidable mortality from non-communicable diseases could provide a significant boost to the national economy – which in turn would create the ‘headroom’ to invest in the social determinants of health, and thus improve health outcomes.

Modelling of the relationship between productivity and health shows that in 2017, health inequality explained around 30 per cent of productivity gap between the north of England and the rest of England (Bambra et al 2018).

Using this as an assumption of the productivity gap explained by health inequalities in 2020 allows us to estimate the potential value of reducing health inequalities between the North and the rest of England. Our methodology is as follows.

- We establish GVA/person/hour estimates from the ONS.
- We calculate the GVA/person/hour for the Northern Powerhouse region and the rest of England.
- We identify the working population and the average working hours from NOMIS and ASHE data.
- We identify the potential economic gains, in GVA per annum per year, that could be achieved by closing this gap by 30 per cent.

This gives a result as follows.

GVA GAIN PER YEAR POSSIBLE THROUGH REDUCING HEALTH INEQUALITIES BETWEEN THE NORTH AND THE REST OF ENGLAND

GVA/head/hour	Employed population	Hours worked (paid/ per week)	GVA gain possible
30.59	1.2 million	33.0	3.6
32.23	3.4 million	33.2	7.6
29.68	2.5 million	33.1	9.0
£20.2 billion/annum			

Source: Authors' analysis

This estimate does not include the health impacts of Covid-19, which are discussed below.

In November 2020, an updated analysis found that 12.4 *more* people per 100,000 population had died of Covid-19 in the North than in the rest of England between March and July 2020. Over the same period, the North had seen 57.7 more deaths per 100,000 people than the rest of England from all causes (and 63.2 per 100,000 people than the rest of England excluding London). The potential impact of these extra deaths on the UK economy is estimated as **an additional £6.86 billion of lost productivity** (all figures from Bamba et al 2020).

Yet productivity is precisely what England's regions need to support its recovery from Covid-19. Investment in health and a new approach to narrowing 'health gaps' is essential for building resilience and building a future in which health gaps do not threaten our wellbeing and our economy.

4.

THREE PARADIGM SHIFTS

Health goes far beyond the health system. No matter how many hospitals we build, public health will not improve without improvements in its social determinants - including housing, income, work and neighbourhood deprivation. Nor will we achieve our economic potential without investing in people and the places that shape their lives.

The recommendations in this chapter propose three 'high-level' policy paradigm shifts for place-based health policy. Specific details are largely absent, precisely because these are the kinds of issue that are best managed locally, learning from within and beyond the area about evidenced best practice and options for innovation. Therefore, for example, ways to address aspects of inequality associated with ethnicity, rurality, gender etc are not discussed – although these must be priority considerations for individual areas. For the same reason we do not address particular activities that might make up part of a programme; the point is to let local and combined authorities (and, ideally, wider civil society) decide what will best work.

Rather, we set out policies that central and local government should put in place to enable precisely that sort of place-based working. This includes recommendations that will protect in policy activities such as co-creation and neighbourhood or ward-level working, alongside partnerships that harness assets at the regional or national level (for example, opportunities to share intelligence and data).

4.1 FROM SILOED HEALTH AND ECONOMIC POLICY TO HEALTH AS A NATIONAL MISSION

Covid-19 has shown the link between economy and health – and between the economy and health of places. This report has shown stronger local economies can improve health, and that stronger health can improve local economies. As we move to recover from Covid-19, health should become a national mission and key policy goal both locally and nationally. Health should be core to our definition of prosperity.

This was not the case in the recovery from the 2008 financial crisis. At that date, government sought to boost growth through reducing investment in public services including the NHS, public health and local government, an idea that has since been debunked (Quilter-Pinner and Hochlaf, 2019). While NHS funding was not cut, the service was required to make severe efficiency savings, which impacted its overall resilience and sustainability (Thomas, 2020). Overall, lower investment did *not* achieve improvements in health and wellbeing. We cannot afford another such decade, economically or socially.

 **Recommendation 1: The government should establish new infrastructure to prioritise public health outside the Department of Health and outside Whitehall, both in the Covid-19 recovery period and beyond.**

The government should make health improvement and progress on health equity a national mission, in which health becomes everyone's business – across policy

agendas and across the country. This is line with a health in all policies approach (Greszczuk 2019), which has already been embraced by several local authorities.

Such a national mission needs a dedicated infrastructure to make health a key objective for our economy, society, policy makers and politicians. We recommend that government consider a range of options to make health everyone's business.

Option 1

A National Health Council: Real progress on population health needs dedicated leadership at the highest level. The prime minister could create a new Health Security and Inequality Council, based on the National Security Council model. This would be chaired by the prime minister, alongside local experts (eg directors of public health, local government CEOs) and have responsibility for overseeing national progress on health inequalities. This council would be located in the cabinet office to reflect and facilitate its cross-department remit.

Option 2

Develop a 'shadow' wellbeing budget: In the UK attempts to gauge quality of life, 'happiness' or wellbeing go back more than two decades. To date, however, they have not been integrated wholesale into economic policy at the national level. Meanwhile other countries have taken up this theme, with New Zealand delivering its first wellbeing budget in 2019. To evaluate the approach in the UK, the government could commission a shadow wellbeing budget, for purposes of comparison at the next fiscal event.

Option 3

Improve GDP as a measure: GDP has long been criticised for measuring everything except that which makes life worthwhile. IPPR has previously proposed a dashboard of five metrics for more holistic evaluation of economic performance. This includes economic factors but also builds in new core considerations for policymakers, such as wellbeing, income inequality and the gap between the richest and the poorest (Colebrook 2018).

Option 4

Health Impact Assessments: Every aspect of policy impacts on health in some way, but policymakers outside the field of health may not take this into account. One way to change this would be to extend the use of 'health impact assessments' across all policy areas. Approaches of this kind are already in place in a number of local and combined authority areas in the UK (LGA 2016, PHE 2016, Raikes 2017). A system of health impact assessments would require all national and local decision makers to use a single, rigorous framework to assess the impact of all spending decisions on health, identifying potential negative outcomes and taking action to address these.

Option 5

Put inclusive regional economies at the heart of devolution deals: Many local and combined authorities have adopted the aim of creating *inclusive* local economies, using their economic remit to redefine the goals of economic prosperity. To support this, central government should put a commitment to building genuinely inclusive regional economies at the heart of devolution deals in England, and of proposals for other devolved and regional funding including the shared prosperity fund. Again, this should be grounded in clear definitions and metrics for economic inclusiveness and wellbeing and accompanied by frameworks to strengthen this across all programmes and investment (see Round and Longlands 2020). The white paper on devolution deal should ensure that strategies for regional economic development include robust and well-defined 'wellbeing' goals, following international best practice.



Recommendation 2: The new ‘obesity strategy’ should be expanded and matched with targeted prevention programmes on other factors associated with health inequalities, integrated into initiatives on the social determinants of health.

Highly targeted programmes like the obesity strategy raise awareness of health challenges and provide clear pathways and frameworks for action. As such, the government’s July 2020 obesity strategy is welcome – in particular for its recognition that the personal responsibility narrative is inadequate as a way to reduce obesity rates. The acceleration of the NHS Diabetes Prevention Programme, junk food advertising restrictions, and actions to protect children online are particularly positive.

Action could, however, go further, especially in relation to the link between socioeconomic disadvantage and weight. For example, food subsidies have not been used extensively in the UK, but are supported by a significant evidence base. As IPPR have recommended elsewhere, a £21 per week voucher for people in food poverty would have significant impacts on obesity, quality of life and inequality. Other options could include the clinically-appropriate expansion of options such as bariatric surgery (NICE 2014). And – following option 4 above – policymakers should consider the impacts on obesity of decisions in fields such as transport, planning, education and trade.

The ‘invest to save’ logic of the obesity strategy, recognising the cost savings as well as the wellbeing benefits of prevention, should be applied across interventions on issues such as smoking, physical inactivity, loneliness, etc. To maximise their effectiveness, behavioural interventions should be integrated wherever possible with action on the structural, environmental, economic and social factors that drive disease rates. This again involves recognising the health implications of a broad range of policy areas, including taxation, social security, housing, planning, education, and others.

We recommend that the government outline plans to do this in their response to the prevention green paper, with similar levels of ambition translated to childhood health, alcohol use, drug addiction, mental-ill health, pollution, tobacco control and other important frontiers of prevention.

CASE STUDY: COVENTRY

“Why treat people and send them back to the conditions that made them sick?”

Michael Marmot

The 2010 ‘Marmot Review’ of health inequalities (Marmot 2010) set out an ambitious programme for action on the social and economic conditions that shape health. Three years later a group of English local authorities came together to put its principles into practice and work to develop a ‘Marmot’ approach to tackling health inequalities. Coventry, one of these original ‘Marmot Cities’, embarked on the programme with a life expectancy gap between its most and least affluent areas of over 10 years (for healthy life expectancy it is over 17 years). Rates of preventable illness were high, and the city faced multiple social challenges in relation to the principles of the Marmot review:

- give every child the best start in life
- enable all children, young people and adults to maximise their capabilities and have control over their lives
- create fair employment and good work for all

- ensure a healthy standard of living for all
- create healthy and sustainable places and communities
- strengthen the role and impact of ill health prevention.

The city's strategy uses extensive partnership working between the local authority, health services, emergency services, civil society, community groups and businesses. Maximising the city's established assets, the approach is one of 'proportionate universalism', seeking common outcomes but targeting action and resources where there was greatest need. This includes identifying and working with 'high risk' populations and empowering communities. Early interventions and reducing vulnerability are core principles, as is a model of change that recognised the importance of culture and social networks. The project encompasses all policy areas, from health prevention to planning, transport and economic policy.

No additional resources were allocated when Coventry became a Marmot city, and the work began during the first years of austerity. Shifting the dial on ill-health is a long-term project and seven years is an early stage at which to look for progress; the children who got a better start in life because of it have not yet completed primary school. Nevertheless the number of neighbourhoods that are among the most deprived 10 per cent in England has fallen from 18.5 to 14.4 (against national trends), while education and employment outcomes have improved, as has life satisfaction. The city saw stable rates of life expectancy inequalities for women and a small fall in inequality for men, defying national trends of widening inequality; improvements in healthy life expectancy for men went against trends for the rest of the West Midlands region.

Based on Munro (2020), Coventry City Council (2019, 2016)

4.2 GIVE LOCAL LEADERS THE FUNDING THEY NEED TO MAKE PROGRESS

The Covid-19 pandemic and the looming recession threaten the social determinants that help to create good health. Investment in health care, prevention services, and the social determinants are all vital to both recovery from the pandemic and future resilience. Countries that invested in good health after the 2008 financial crisis have done better since (Stuckler and Basu 2013) while countries that introduced austerity have seen rising mortality and health inequalities (Alston 2018). The impact on local government funding is especially severe; analysis indicates that reductions in the core spending power of local authorities in the North by £1 per head cost £3.17 per head in lost productivity (Bambra et al 2020). A lack of investment in health, targeted towards place-based policies, threatens our economic outcomes and future prosperity.

The NHS funding formula includes an adjustment for health inequalities. Between 2010 and 2013, the possibility of dropping this and instead allocating all health funding on the basis of age was considered but rejected. However the weighting given to deprivation (a proxy for inequality) was reduced, despite evidence that the formula to date had achieved some progress in reducing health inequalities – which has since halted (Barr, Bambra and Whitehead 2014).

Funding premiums designed specifically to reduce inequalities have received relatively little attention in health funding, despite their prominence in other policy areas. For example, in education, the 'pupil premium' is considered crucial in efforts to reduce the attainment gap between students from poorer and more affluent backgrounds. A similar approach in health funding should be explored.

As discussed above, though, the NHS is not the only (or even the most important) factor in reducing health inequalities. We need to invest in creating health as well as treating illness, but funding that affects the social determinants of health has been cut extensively over the past decade. This includes local government budgets, where cuts from central government led to a 17 per cent fall in spending on local public services across the UK between 2009/10 and 2019 (Harris, Hodge and Phillips 2019), and even deeper constraints in the north of England (Raikes, Millward and Longlands 2018).

New analysis of local government expenditure data shows that cuts to public health hit some regions harder than others. The public health grant, ringfenced funding for critical local prevention activities, has been cut significantly since 2014. This is despite evidence that it represents excellent value for money (Martin, Lomas and Claxton 2019). Our new analysis shows that the real-terms like-for-like cut now stand at £750 million, between 2014/2015 and 2020/21. Again, these cuts have not fallen equitably across regions.

TABLE 4.1: CUTS TO THE PUBLIC HEALTH GRANT, 2014–21

Region	Population (million)	Public health cut (£, real terms, like for like, 2014–21)	Cut per person (£)
East	6.2	52,000,000	8.27
East Midlands	4.8	73,000,000	15.25
London	9.0	145,000,000	16.23
North East	2.7	62,000,000	23.24
North West	7.3	111,000,000	15.13
South East	9.2	81,000,000	8.81
South West	5.6	50,000,000	8.93
West Midlands	5.9	106,000,000	17.80
Yorkshire and the Humber	5.5	63,000,000	11.44

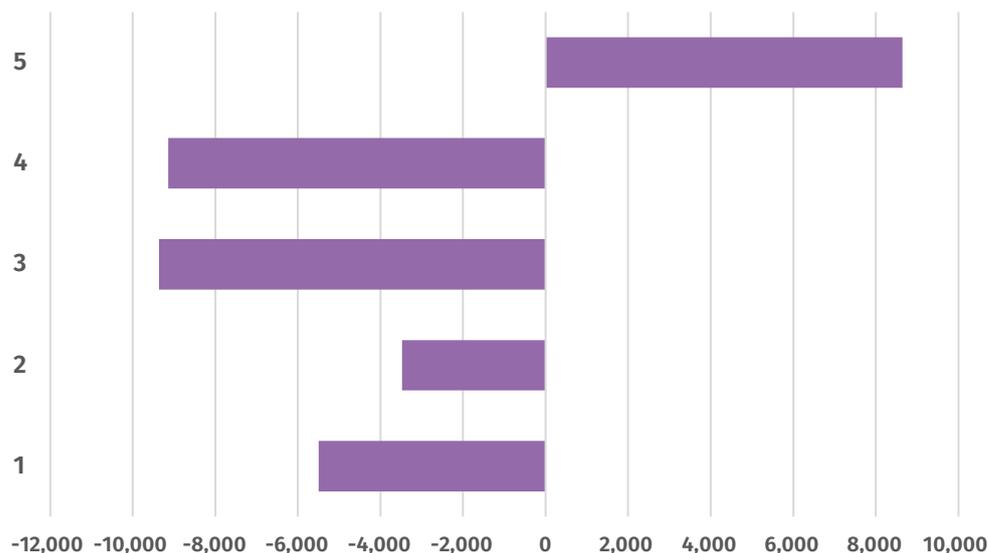
Source: Authors' analysis of MHCLG (2020) and PHE (2020)

Cuts per person to public health services were almost three times higher in the North East than in the South East. The second largest per person cuts were in the West Midlands, while the east of England, South East and South West saw the smallest relative cuts (although even then, funding has fallen by almost 10 per cent).

These reductions in funding have also in some cases shifted investment *away* from the areas where need is highest. For example, obesity services have seen a net cut in funding, but the 20 per cent of local authorities where rates of obesity are lowest have in fact been able to *increase* obesity service provision. Local authorities in each of the other quintiles (where obesity rates are higher) have faced significant cuts. And all this follows a long period of austerity that has impacted on 'upstream' health determinants.

FIGURE 4.1: REAL TERMS CHANGE IN EXPENDITURE ON OBESITY SERVICES IN LOCAL AUTHORITIES

Real terms change in expenditure on obesity services in local authorities. 1 = 20 per cent local authorities with highest obesity rates, 5 = 20 per cent local authorities with the lowest rates



Source: Authors' analysis of MHCLG 2020 and PHE 2020

Note: 1 = 20 per cent local authorities with highest obesity rates, 5 = 20 per cent local authorities with the lowest obesity rates

This also means weight management services – for children and adults – are more likely to be cut in areas where a higher number of people are diagnosed with diabetes. Again, the trend is for the 20 per cent of places where diabetes prevalence is lowest to have increased provision, while areas where the health need is higher have been forced to cut back provision. In fact, the quintile of local authorities with the highest diabetes incidence lost more than £1 in every £3 that has been from local obesity services between 2014 and 2021. By contrast, the quintile with the lowest diabetes rates have increased provision (very slightly) over that period.

➤ Recommendation 3: Reverse changes made to the NHS funding formula, so that more money is allocated based on 'unmet need'

The technical advisory board which determines the NHS funding formula has recommended that the amount of NHS funding designed to address inequality is about the political priority of health inequalities. In 2010, a political decision was made to reduce the amount allocated to clinical commissioning groups on the basis of area deprivation, with a greater weight given instead to average population age. This effectively led to a redistribution from poorer areas to those with the highest life expectancies.

The experience of Covid-19 should make health inequalities once again a political priority. For example, the excess death rate from Covid-19 among black, Asian and minority ethnic people relates not to genetics, but to inequality – social, economic, and in access to and experience of health services (Patel 2020). It demonstrates ongoing inequalities both in the social determinants of health and in the healthcare system.

In the first instance we recommend that the government restore the terms of the funding formula used between 1997 and 2010. This would mean at least 15 per cent of the NHS budget allocation should reflect levels of deprivation within an area, and with the explicit goal of reducing health inequalities. The period 1997-2010 saw falls in health inequality, including reductions in mortality amenable to healthcare (Barr, Higginson and Whitehead 2017, Barr and Taylor-Robinson 2014).

Over the longer term, NHS England and the Department of Health and Social Care should commission a full review into NHS funding flows. This should provide clear evidence on the impact of funding that addresses inequitable access to healthcare, and health inequality based on the health system itself. The analysis should include shadowing the impact of allocating 20 per cent, 40 per cent and 60 per cent of NHS funding on the basis of deprivation rather than age.

 **Recommendation 4: Restore local authority funding, after a decade of austerity, and uplift regional funding to deliver on the potential of the whole country**

Local authority funding is crucial in shaping the social determinants of health. It both enables the creation of healthy places, and accounts for numerous aspects of ‘investment in people’ including spending on education, skills, learning and employment, provision of early years education, numerous aspects of community life and local economic development. Austerity has had a severe impact on all of these over the past decade and across England (Johns 2020, Raikes, Millward and Longlands 2018).

The government has pledged to ‘level up’ the country, improving opportunities and investing for the long-term. This funding should be substantial and strategic, allocated with the aims of creating jobs, achieving decarbonisation, reducing poverty and unlocking regional potential (see Johns et al, forthcoming 2020).

 **Recommendation 5: Restore the public health grant to its 2014/15 level and increase funding in line with the NHS funding settlement, as part of an ambitious ‘invest to save’ programme**

This recommendation follows other authors including Hochlaf, Quilter-Pinner and Kibasi 2019, Finch 2018 and Buck 2019. There is general agreement that effective prevention and place-based working to improve health needs adequate funding. A sustainable long-term funding commitment allows for planning on the kind of horizon that is realistic for many of the ‘slow burn’ interventions that over time can be effective in preventing disease and addressing the social determinants of health. Without this kind of input, ‘levelling up’ health will simply not be possible.

We also recommend that public health funding should be discussed explicitly as an ‘invest to save’ measure. The location of savings should be identified, in order to balance this with the costs to organisations and authorities that must make a substantial investment ‘up front’. Such investments should take account of factors across the board including the potential of prevention programmes and the health impacts of improvements in areas such as work quality, income maximisation, etc.

This funding should underpin a national strategic plan on the social determinants of health and health inequalities, as envisaged by Marmot 2020. Key elements include national commitment and a strong role for local areas, funding and resources targeted to the areas of greatest need, early intervention on key issues, and a drive for stakeholder buy-in by supporting professionals across sectors and engaging with the public.

4.3 GIVE LOCAL LEADERS THE POWERS THEY NEED

The places where we live, work, grow up and grow old are have a huge impact on our health and wellbeing. Places also bring together the multiple and complex interacting factors that determine health. The Covid-19 pandemic has cruelly highlighted health inequalities between places and communities, but the response has demonstrated the value of devolution and localism in responding to health challenges:

“we have... been taught invaluable lessons about the importance of working locally as a health and care system in a place around individual and families rather than around the silos of separate organisations and their national hierarchies”

(Hall 2020)

Local government is well placed to facilitate collaboration between the NHS and other partners to address the intensely place-based determinants of health (Naylor et al 2019), as discussed in section 2.1. By contrast health policy as conceived in Westminster and Whitehall still places too much focus on national intervention and centralised decision making. As such, health is often detached from other economic and social agendas – from levelling-up to the Northern Powerhouse.

➤ Recommendation 6: Local government should be funded to lead on health improvement, including action on the social determinants of health. Local areas should have the freedom to work innovatively and creatively, and to learn from best practice within and beyond their borders.

The abolition of Public Health England means that a large element of health improvement responsibilities are left effectively homeless. We recommend that these should be passed to local authorities, along with commensurate funding calculated on an ‘invest to save’ basis and allocated within a framework of ‘proportionate universalism’. This should be a key element of the government’s commitment to ‘levelling up’.

This should come with clear short, medium and long-term goals for reducing health inequalities, along with proportionate requirements for evaluation and measurement that take account of the complexity of the issues and are designed to foster ongoing learning to improve policy and practice. The proposed institute (see recommendation 7) should be a key partner for local and combined authorities.

Partnership working should be the standard approach for health-related projects, following best practice in areas where there have been notable successes and effective innovation. Local government should work with primary, secondary and community care providers, social care providers, and relevant organisations within their areas including businesses, charities, communities and civil society, as well as central government. It should also co-ordinate work within the local/combined authority portfolio, establishing frameworks with regular communication, shared objectives and high levels of trust. These may include decision-making bodies.

Further rounds of devolution should include devolution of powers relating to health and the social determinants of health, learning from deals and arrangements already in place. Current devolution deals should be extended offering regions additional fiscal and regulatory freedom to improve health in their areas (Naylor and Buck 2018).

Following the practice of combined authorities such as Greater Manchester and North of Tyne, local and combined authorities should consider framing their economic development functions in terms of wellbeing (including health). This should include:

- a thorough and current understanding of local issues, driven by high quality data and local intelligence gathered in collaboration with communities
- committed leadership and a strong long-term vision
- engagement with citizens and communities to develop locally tailored policy and practice, including where practical elements of co-creation
- use local assets (physical and social) to help create healthy places
- adopt and promote social value as a major principle for commissioning processes, in commissioning by local authorities, anchor institutions, partners etc
- prioritise work quality and labour market participation, particularly at times of high unemployment or economic difficulty (eg by offering tailored support for people facing redundancy or affected by structural shifts in the economy).

Following Naik 2020

 **Recommendation 7: Local and central government should take action to increase the health benefits of work and reduce the health impacts of poor-quality work.**

In general, work is a contributor to health. People tend to be healthier if they have a job that lets them earn enough to live decently and supports their social and mental wellbeing. However, these positive impacts depend on the quality of the work. Poor working conditions can damage physical or mental health. Low pay can leave people trapped in both economic and time poverty; over half of people who live in poverty are in working households.

Building on their economic development portfolios and links to local businesses, we recommend that local government (supported by Westminster) should drive programmes to help people get jobs that support their health and wellbeing. At the local level, this could include:

- ‘modelling’ good employment practices, requiring these of formal partners and contractors, and encouraging businesses in the area to sign up to ‘good work pledges’ (Johns, Hunter and Raikes 2019, North of Tyne 2019)
- policies to link deprived communities and individuals to job opportunities, including outreach, training and coaching, transport support, etc
- seeking to include ‘good work’ elements in new economic projects.

National government should act on rates of pay, training, and job creation, as well as poor quality and precarious work.

 **Recommendation 8: A new England ‘health creation institute’ should be launched, to help scale, embed and develop local ownership of health improvement and health creation**

As the case studies in this report show, many parts of the UK are innovating – and place based approaches to health in the UK and beyond can have a significant impact. The challenge we face is providing the resource, conditions and permission for these to be expanded, scaled and spread, and ensuring that busy leaders in policy and practice have opportunities to share best practice, learning, and evidence.

The government should announce a new institute for health creation, headquartered in a UK region where population health is current poor. The institute should bring together expertise from across the UK and should foster strong links with international expertise in health services, local and national government, academia and civil society. A key function of the institute would be to bring together cutting-edge evidence and research with grassroots projects in the regions.

Its remit should include the relationship between health and both ‘upstream’ and ‘downstream’ determinants, as these are shaped by local and national policy and practice. Its permanent staff should include a team with expertise in evaluating health interventions over the short- and long-term, with a focus on economic and productivity impacts and on the relationship between health, wellbeing and the economy. As such, the new institute should sit alongside the new institutes of technology and other bodies established in the industrial strategy.

The institute should manage a new ‘health for prosperity fund’. This should provide city regions and local authorities with access to funds to pilot new models of health promotion, or experiment with successes achieved elsewhere. This fund should be equal to the funding lost from the public health grant over the last five years – approximately £500 million. This would allow places in areas where cuts have been hardest, and where health is worse, to catch-up with progress lost during austerity. Even at this level, the fund would only equal about 2 per cent of the £17 billion GVA boost that would be achieved by closing the North/South health inequality gap.

CASE STUDY: WIGAN AND INVESTING IN PREVENTION

In Wigan, the local authority responded to austerity by developing a new approach to public services that sought to make the most of local assets, work with communities to understand needs and potential and to manage demand, invest in transforming public services, and to reduce demand. This latter involved investment in prevention. Wigan’s ‘deal’ with its officers and communities is widely acknowledged as a successful example of public service innovation. Key features include the following.

- Integration of services through place-based working, fostering close partnership and multi-agency working in service delivery footprints. These are ‘natural communities’ in local areas that reflect the ways in which people live in places.
- ‘Healthier Wigan Partnership’, a local care organisation that brings together health and social care providers. These include the council, GPs and acute care providers in hospitals, mental health and community services. Frontline teams are empowered to work together, and community-based care uses local assets (including green spaces, housing, opportunities for active transport, screening, diagnostic and prevention services, learning and training, and opportunities for community connection). The partnership is based on a ‘non-binding alliance’ agreement, with a formal board including local GPs and political representation.
- Integrated commissioning facilitated by the Greater Manchester structures.
- Investment in prevention and early help, with ‘early intervention’ treated as an invest-to-save approach with long-term gains. This required strong leadership and an acceptance that results might *not* be demonstrable in the initial years. Effective local intelligence and communication, and accessibility of services are also important.

Wigan has benefited from being part of the Greater Manchester region, and the opportunities of wider devolution. Vivality, since the introduction of the programme it has seen a significant *increase* in healthy life expectancy, against national trends and more quickly than the majority of similar boroughs; premature mortality from cardiovascular disease and cancer have fallen more quickly than in similar areas; and physical activity rates among adults have increased. A decade ago Wigan was going in the *opposite* (and wrong) direction on many of these indicators.

Based on Naylor and Wellings 2019.

APPENDIX 1:

THE IMPACT OF COVID-19 AND THE PUBLIC HEALTH GRANT

Much of the analysis undertaken for this report uses data released before Covid-19. This is both because the full impact of a pandemic is unknown, and also because of data availability. However, some Covid-19 context is available.

First, it is clear that mortality was higher in the north of England during the first peak of England’s Covid-19 outbreak. This is likely to be down to a number of reasons – population density, age profile, diversity and socioeconomic status. It is also notable that this report highlights that the kind of underlying conditions that put people at greater risk cluster in the north of England.

TABLE A1: COVID-19 MORTALITY BY REGION, MARCH TO JULY 2020 (FIRST PEAK)

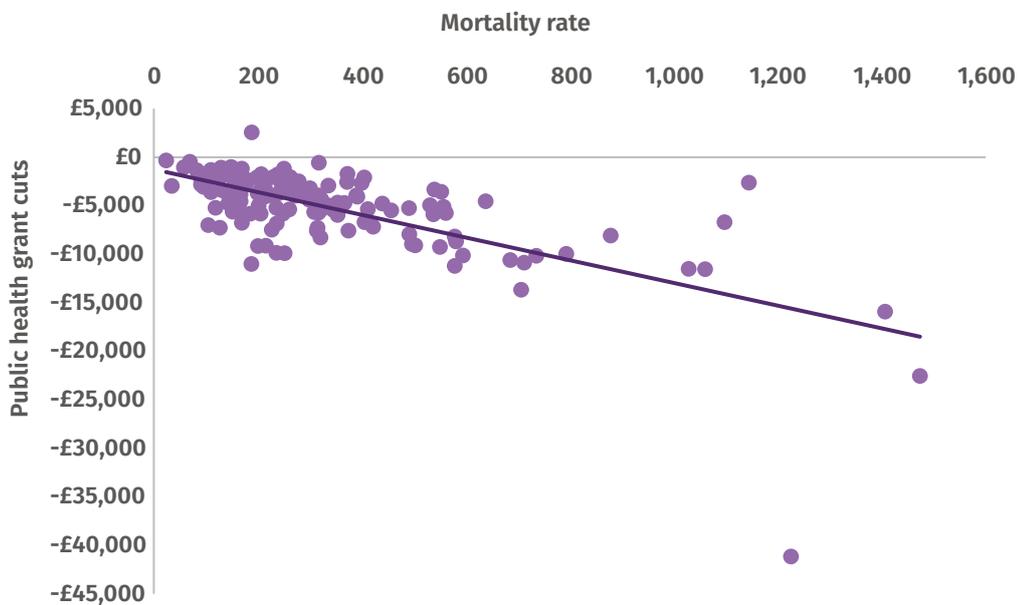
Region	Rank (deaths per 100 people involving Covid-19)	Percentage of local authorities in top 50% of Covid-19 mortality rate	Deaths per 100 people (March to July 2020)
West Midlands	1	85	0.11
North East	2	25	0.11
North West	3	61	0.11
London	4	45	0.10
East Midlands	5	70	0.09
Yorkshire and the Humber	6	64	0.08
South East	7	37	0.08
East	8	50	0.06
South West	9	21	0.06

Source: ONS 2020h

It is also clear that Covid-19 mortality was correlated to cuts from the public health grant. Again, this is one of many variables – and correlation does not equal causation. However, as public health services are designed to address underlying health conditions that otherwise put people at risk of Covid-19, it may constitute a risk factor.

FIGURE A1: THE 20 PER CENT OF LOCAL AUTHORITIES WITH THE HIGHEST COVID-19 MORTALITY RATES EXPERIENCED £1 IN EVERY £4 CUT FROM THE PUBLIC HEALTH GRANT BETWEEN 2014 AND TODAY

Correlation between public health grant cuts (£, real terms, like for like) and Covid-19 mortality rate, March to July 2020



Source: MHCLG 2020, ONS 2020

In fact, the 20 per cent of local authorities with the highest Covid-19 mortality rates experienced £1 in every £4 cut from the public health grant between 2014 and today. That is twice as much as was cut in the 20 per cent of local areas with the lowest mortality rate (£1 in every £8). As IPPR have previously highlighted, public health budgets are key to resilience against health shocks (Thomas, 2020).

TABLE A2: COMPARISON OF COVID-19 MORTALITY (MARCH TO JULY 2020, FIRST PEAK) AND PUBLIC HEALTH CUTS (2014/15–2020/21, REAL TERMS, LIKE FOR LIKE)

Quintile (Covid-19 mortality)	Estimated public health cut	% Public health cut
1 (lowest)	80,000,000	11
2	110,000,000	15
3	125,000,000	17
4	140,000,000	19
5 (highest)	290,000,000	39

Source: MHCLG 2020, ONS 2020

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