

THE WHOLE SOCIETY APPROACH

MAKING A GIANT LEAP ON
CHILDHOOD HEALTH

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SUMMARY

Health improved radically in the 20th century, but progress has since stalled.

Victorian improvements on sanitation, and 20th century introduction of immunisation programmes, catalysed ‘giant leaps’ forward. However, new challenges have since stalled progress. In particular, rising mortality and morbidity from long-term conditions – often caused by factors like poverty, obesity, alcohol use, undiagnosed or untreated mental ill health and tobacco use – are preventing further gains.

The UK has the opportunity to make another ‘giant leap’ forward. Long-term conditions require a more preventative approach to health. The earlier a preventative measure, the better. This means childhood health is one of the most important frontiers in modern health policy. Yet childhood health outcomes in the UK are poor, with rising rates of obesity and mental ill health particular concerns. Addressing this, through comprehensive and sustained policy, would give government the opportunity to make another giant leap forward, comparable to the kind seen in previous centuries.

To achieve this, the government will need to address growing levels of ‘health risk’ faced by children. Threats to childhood health have grown and evolved in just a few short decades. New technologies like social media, the rise of consumer culture, an increase in advertising sophistication, and cuts to national and local government public health services are making it harder to have a healthy childhood. Poor or marginalised people and communities face the greatest risks and challenges. In the past, progress against such challenges has come through collective action, involving government, communities, individuals, businesses, charities and civil society. The same ambition is needed today.

Any progress would be good for health, business and the economy. New IPPR modelling estimates that obesity – among the current cohort of children, over the course of their lifetime – could cost the NHS £74 billion and wider society £405 billion, through lost productivity and reduced workforce participation. Without progress, those costs would be repeated for subsequent cohorts of children. Mental health problems amongst children could cost the NHS £34 billion and wider society £101 billion per year by 2040, when the current generation of children reach middle age. These costs would fall disproportionately on more deprived and urban areas outside the south of England. This makes levelling-up health critical to levelling-up the economy, and should see childhood health put at the heart of our economic recovery from Covid-19.

A recent increase in ambition is good. Until recently, government rhetoric had not been matched by their actions. This made the July 2020 announcement on an obesity strategy very welcome. Measures like junk food marketing restrictions and promotion bans will undeniably kick-start progress. We recommend that these policies are implemented as soon as possible. We also recommend that government lean towards the most extensive regulations wherever possible – for example, a total ban on online junk food marketing and a scale-up in nutritional information on packaging.

But we must still go further and faster. Recent policy has been more of a first step than a giant leap. There is still scope and need to go further ahead of the Comprehensive Spending Review. In particular, we need to a) expand ambition from obesity to all health issues; b) tackle the link between childhood health and issues

like marginalisation, poverty and deprivation and c) ensure we are using the full range of levers offered by a collective approach.

This report outlines what we call a ‘whole society’ approach, designed to make these gains. Central to our argument is the idea ‘it takes a village’ – that we need to ask the range of society’s actors, not just individuals, to play their part. We call this a ‘whole society’ approach. Our recommendations are intended to continue and develop the framing and ambition shown by government in their recent obesity action plan. But they also supplement it by focusing on the inequality and poor childhood health link, through a stronger focus on a range of incentives, and by ensuring issues like mental health get the attention they need. Specifically, we recommend:

NATIONAL GOVERNMENT

We recommend national government use fiscal incentives to drive progress on childhood obesity and mental health. First, we recommend a non-essential food levy – based on energy density and limited to ‘non-essential’ foods. These have been successful in Hungary and in Mexico, where relatively small taxes have driven down consumption in unhealthy food and raised revenue. Adopting Mexico’s model would mean an 8 per cent tax on non-essential foods with a calorie density of greater than 275kcal/100g. We also recommend extended the existing digital tax – with funding used to support mental health provision in schools, and to fund a fit for purpose regulator.

SCHOOLS

We recommend that the revenue generated from fiscal measures be used to subsidise healthy products for low-income families. This should be delivered through a ‘healthy child voucher scheme’ – worth £21 per week, and redeemable for items not covered in the non-essential food tax. This would cost an estimated maximum of £1.5 billion per year, assuming each voucher is used in full – and would disproportionately benefit regions outside the South, where deprivation is higher, in line with government’s ‘levelling-up’ ambitions. Importantly, it should not replace any existing support, from free school meals to welfare payments. In addition, we should overhaul school health services, with government funding allocated to guarantee one school nurse or clinical staff member for every 600 students.

THE NHS

Social prescriptions for physical activity were a positive inclusion in the July obesity strategy. However, there is opportunity to go further on diet and mental health. We recommend NICE and the replacement for Public Health England are commissioned to establish cost effective and effective interventions on childhood obesity and mental health. Examples could include peer support schemes, cooking classes, leisure facilities or a range of hobbies around healthy eating and living.

BUSINESSES

Regulation was an important part of the government’s strategy in July. We endorse the 9pm watershed on junk food marketing advertisement, better labelling on food packaging and regulation of price promotions. They must now be implemented in full. To take regulation further, we recommend government now deliver a social media regulator, as set out in the Online Harms white paper. We further recommend that restrictions are placed on takeaways around schools, particularly in the country’s most deprived neighbourhoods.

LOCAL GOVERNMENT

There should be a strong role for devolution and local funding in our approach to childhood health. In the first instance, we recommend that government restore the public health grant – and rethink changes to local government funding that would see funding allocated away from more deprived local authorities. Restoration of the public health grant should be done in a way that allows local government to invest in mental health and weight management services, which have experienced particular cuts (Thomas 2019). We also recommend a stronger role for health visiting. Families in deprived communities or in vulnerable circumstances should receive seven mandated health visits, to provide additional support during early years development.

1. A GIANT LEAP IN HEALTH OUTCOMES

1.1 THE CASE FOR PREVENTION

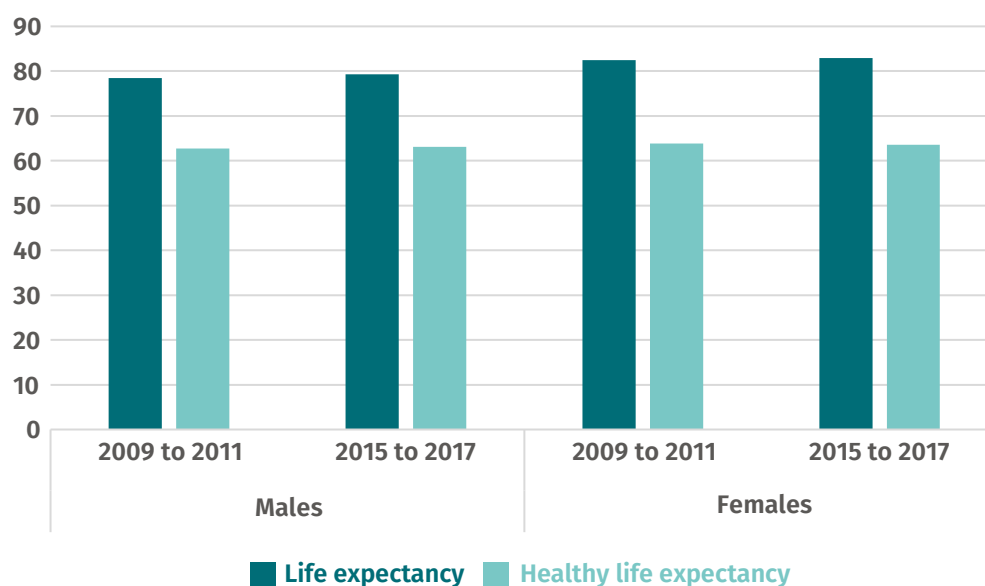
Steadily rising life expectancy is one of the great achievements of the last 100 years. A boy born in 1900 could not expect to live past 50 (ONS 2017a). Today, that boy could expect to live past 90 (ibid).

However, more recently, our progress has stalled. Before 2010, children lived longer than previous generations, as a rule. Over the last 10 years we have observed a “slowdown in longevity improvements” (Raleigh 2018).

For some, life expectancy has moved into reverse. Women born in the most deprived neighbourhoods in England between 2016-18 can expect to die three months sooner than the women born there between 2010-12. Improvements to healthy life expectancy, the years spent free from disease and disability, are also in reverse. Between 2009-11 and 2015-17, female healthy life expectancy declined. Regardless of gender, the number of years a person can expect to live in poor health has increased this decade.

FIGURE 1.1: LIFE EXPECTANCY HAS SLOWLY RISEN IN RECENT YEARS, WHILE HEALTHY LIFE EXPECTANCY HAS STALLED

Life expectancy vs healthy life expectancy, 2009-11 and 2015-17, UK



Source: ONS (2018)

This can be contextualised by how significant improvements in national health outcomes have previously come about. In particular, two giant health leaps defined the 20th century. First, between 1900 and 1950, health outcomes were boosted by significant improvements on infant mortality, for example through childhood immunisation programmes (ONS 2015a). Second, between 1950 and 2000, progress was underpinned by health improvements in the older population, as treatments emerged for conditions that had otherwise been acute and deadly (ibid). In both cases, government identified key health challenges, and put in place bold strategies to tackle them.

There is a clear opportunity for government to do the same in the 21st century, and deliver a third ‘giant leap’. Central will be identification of the challenge, and radical, collaborative and cross-societal action to progress forward.

In the last century, the defining health challenge was acute illness. Today, the challenge we face is more often chronic, long-term conditions, such as cancer, diabetes, dementia, heart disease or mental ill health. Up to 15 million people across the UK have at least one such condition (The King’s Fund 2013).

Progress against their disease burden will require a radical shift to prevention – an approach to health that can be focused on reducing the prevalence of risks that lead to health problems in the first place (‘primary prevention’); reducing the impact of a disease that has already developed (‘secondary prevention’); or softening the impact of on-going illness (‘tertiary prevention’) (Hochlaf et al 2019).

The earlier the intervention comes, the higher impact and more cost-effective it will often be. This makes childhood health one of the most, if not the most, important frontiers in contemporary health policy – and crucial to making a third giant leap in health outcomes.

CASE STUDY: A GREAT HEALTH LEAP

Vaccination and childhood immunisation underpinned one of the UK’s great health leaps. It eliminated, or greatly reduced, the prevalence of acute diseases like polio, diphtheria, whooping cough, measles, mumps and rubella (ONS 2017b). Before, these had been some of the country’s biggest killers (ONS 2017b). The Office for National Statistics highlights immunisation of children as one of the key factors in life expectancy increases in the 20th century – alongside improved public hygiene and the creation of the National Health Service (ONS 2015b). Today, vaccination remains one of the most cost-effective public health interventions in the world for saving lives, protecting up to 3 million deaths worldwide each year.

However, there do remain substantial health inequalities and variation of uptake within the UK and thousands of vulnerable children remain exposed to vaccine-preventable diseases. Low uptake is conspicuous among vulnerable groups, including looked after children/children in care, children with physical or learning disabilities and children not registered with a GP. Against this backdrop, it is clear that we can’t be complacent about vaccinations for children. By promoting good health in children, vaccines help to improve cognitive skills, physical strength and performance at school.

1.2 MAKING THE GAINS

First, it is important to identify where the greatest opportunities for progress on childhood health are. Below, we detail the two clearest opportunities: obesity and mental ill health. We highlight them as areas for progress because, beyond the direct impact they have on a given child, they also:

- have a high and rising prevalence amongst children
- are very likely persist into adulthood
- put people at wider risk of poor health outcomes, by predisposing them to a range of serious long-term conditions.

Without intervention, these conditions will impact the health and wellbeing of today's children throughout their lives. In turn, this would mean the direct consequences on life expectancy and quality of life, which would impact UK health outcomes into the early 22nd century.

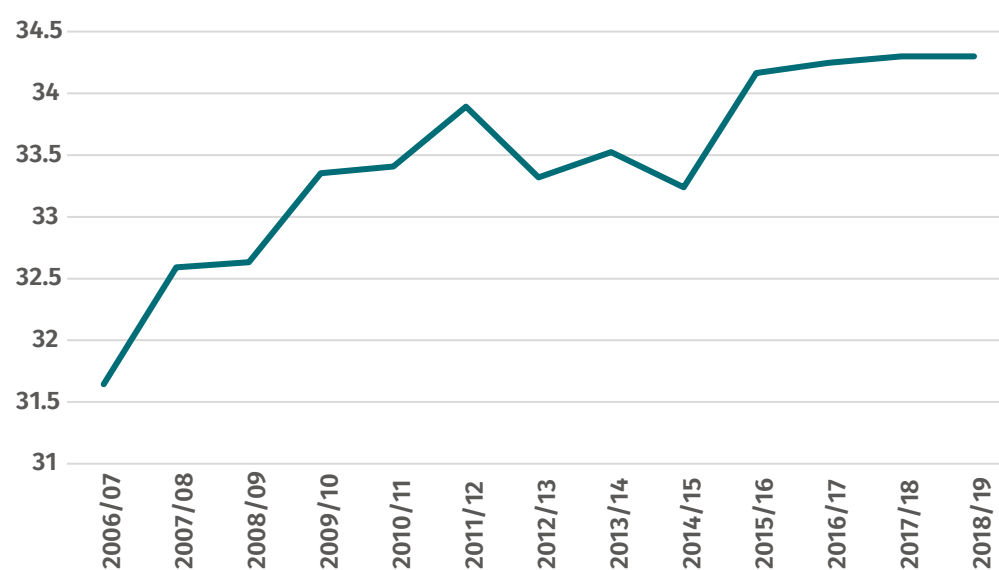
Childhood obesity rates are stagnating, but now we need to push them down

While childhood obesity has now levelled-off, it has done so at an alarmingly high level. While fewer than 2 per cent of children had obesity in the mid-1980s (Stamatakis et al 2005), the most recent evidence shows that one in 10 children now have obesity by the time they begin primary school. For children entering secondary school, 22 per cent of boys and 18 per cent of girls have obesity (Baker 2019).

Obesity during childhood can result in substantial health threats to health and wellbeing throughout their life. Obesity has an adverse effect on “children’s physical health, social, and emotional well-being, and self-esteem” (Sahoo et al 2015). Further, children with obesity are much more likely to have obesity in adulthood, which increases their risk of “premature death and disability” (WHO 2019). Over the life course, obesity is causally linked to type 2 diabetes, many types of cancer, coronary heart disease and stroke.

FIGURE 1.2: CHILD OBESITY HAS CONTINUED TO RISE IN ENGLAND

Proportion of children in year 6 who are either obese or overweight, England



Source: National Child Measurement Programme (2018)

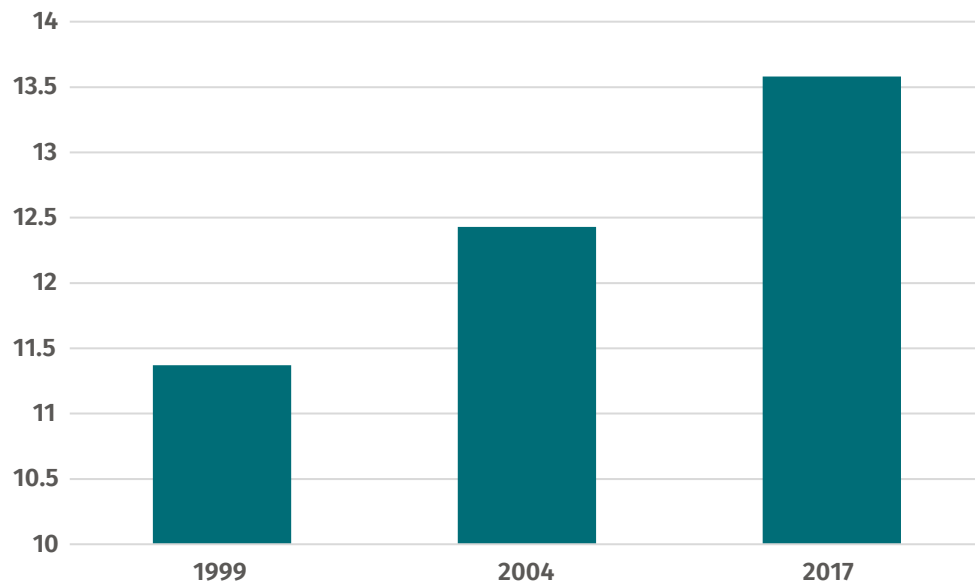
Mental health needs need to be prevented, and treated

Mental health problems are increasingly common in children. An estimated “one in eight” five to 19 year olds in England “had at least one mental disorder when assessed in 2017” (NHS Digital 2018). Mental distress can leave children facing serious hardship in childhood and beyond. Left undiagnosed or untreated, mental health problems greatly increase the risk of children developing “personal and social difficulties” which compound challenges they face at home and in school and the community. This has an adverse impact on their “learning, school attendance, physical health” and can lead to worse behaviour (Sheehan 2017). These problems persist into adulthood with an estimated 75 per cent of all mental health problems “established by the time someone is 18” (The Children’s Society 2018).

Unfortunately, many children do not get the treatment they need. In 2016/17, it was found that “over a quarter of children referred to specialist mental health services” were not accepted for treatment. For those who do receive treatment, there can be long waiting times between referral and treatment (Frith 2017).

Mental health conditions are associated with other risk factors. For example, a third of people with a mental health condition smoke tobacco (PHE 2015). Mental health conditions can also have a mutually reinforcing relationship with alcoholism and poor diet. This puts people at risk of further long-term conditions and goes some way to explaining why people with mental illness die, on average, 10 to 20 years younger (Mind 2014).

FIGURE 1.3: CHILDHOOD MENTAL HEALTH DISORDERS IN ADOLESCENTS HAVE RISEN OVER TIME
Prevalence of mental health disorders in 11–15-year olds (%)



Source: NHS Digital (2018)

Obesity and mental health are often related

Obesity and mental health are often talked about as independent health challenges. However, they can also have a mutually reinforcing relationship. Language, imagery and prejudice – often built on a poor understanding of the social, genetic and economic underpinnings of obesity – has combined to vilify people with a high BMI and to put blame on the individual. This has created significant and unhelpful stigma that, in turn, has been linked to poorer mental health outcomes (Rankin et al 2016). Obesity and weight problems in childhood

are associated with continuous “detrimental effects on the psychosocial domain” such as depression, emotional disorders, and poor self-esteem. “Stigma, teasing and bullying” are just some of the consequences children face in an overtly hostile environment, which has worrying effects on child mental wellbeing (ibid).

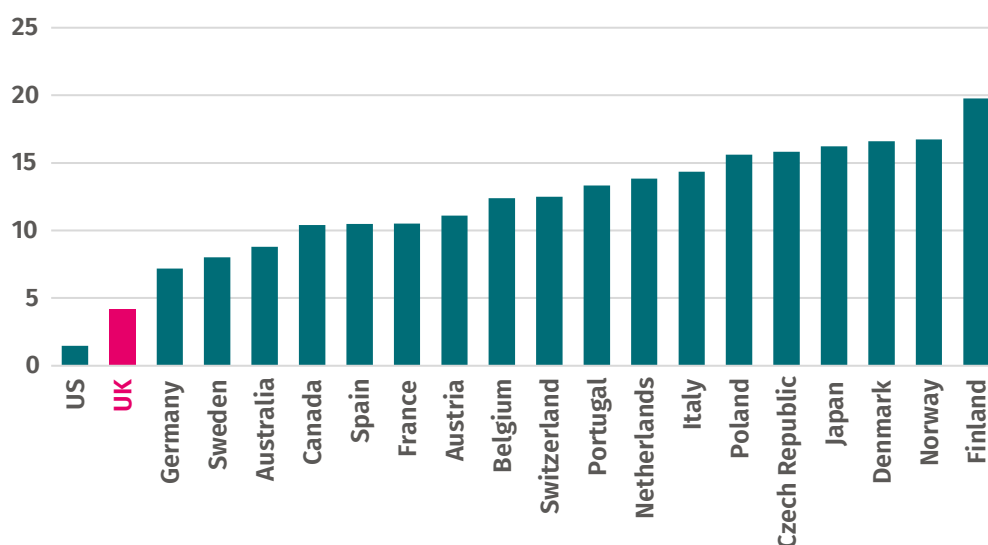
Equally, diet and weight can be negatively influenced by mental health problems. Mental ill health may lead people to eat unhealthy foods. For example, anxiety or depression have been linked to overeating (Polivy and Herman 2005). Through negatively shaping behaviours and encouraging children going through stress to seek comfort in unhealthy diets, mental health problems can be a potential driver of obesity. An empathetic approach that addresses both challenges – and which is cognisant of their relationship – will be crucial to our success.

1.3 THE TIME FOR ACTION IS NOW

The case for action has never been clearer. First, because there has been a slowdown in progress in health – across all European countries, but particularly in the UK (Raleigh 2019). Rather than dwelling on this disappointing trend, government should see it as proof that better is possible – an opportunity to push health improvement across the country.

FIGURE 1.4: HEALTH OUTCOMES IN THE UK ARE STAGNATING, PROVING SIGNIFICANT PROGRESS IS POSSIBLE

Average annual increase in period life expectancy at birth, selected countries



Source: ONS (2019)

Second, because Covid-19 is likely to contribute to a decline in childhood health that we’d need to pre-empt, including the following.

- The socioeconomic impact of the pandemic will likely “exacerbate food insecurity” and the subsequent poverty and disruption to food production is expected to “restrict access to diverse and nutritious diets” (Robertson et al 2020).
- The lockdown restrictions are thought to have “impaired” daily physical activity. Early evidence collected from apps and technologies which track user movement suggests physical activity has decreased (Jakobsson et al 2020).

- Not only are children faced with greater pressures on their mental health as a result of the lockdown, but the closure of schools will “mean a lack of access to the resources” required to support children with mental health conditions (Lee 2020).

While the full effects of Covid-19 on child health and wellbeing will not be realised for some time, it is important to recognise that childhood obesity – leading to adult obesity – was a key part of the country’s poor outcomes in the face of the pandemic.

This paper sets out the social, economic, and moral case, presented by the opportunities for improving child health. It covers the long-term costs of chronic disease for the NHS and wider society; how we can alleviate some of the pressures that drive regional inequality; create a healthier environment for children means the creation of a healthier environment for society to flourish. Most importantly, it argues the time for action – to seize the benefits possible through bold childhood health intervention – is now.

2. DEFINING A STRATEGY ON CHILDHOOD HEALTH

2.1 CHILDREN FACE NEW AND EVOLVING RISKS TO THEIR HEALTH

Over the last few years, the health risks experienced by children have changed – and often evolved. Often, this has put them at new or greater risk – visible in long-term trends on outcomes like obesity and mental health explored in chapter one (amongst others). Examples include the following.

- **Personalised advertisements:** Online platforms have allowed in-depth data of its users to be captured. This has helped businesses develop strategic and targeted advertisements that can be broadcast to specific children, intensifying the influence and persuasiveness of advertising campaigns (Tatlow-Golden 2018).
- **Social media:** There is a growing base of evidence showing the impact of social media and digital platforms on young people’s mental health. Moreover, companies can influence unsupervised children through personalised advertisements, on social media and digital streaming platforms. While some regulations do exist, recent evidence has shown them to be insufficient (Critchlow et al 2019).
- **Applied behavioural science:** Product placement has a significant impact on behaviour. The retail environment has a nudging effect on shoppers and on what products we choose. These tactics are used to promote sugary food and drinks disproportionately (Stacey 2018).
- **Consumer culture:** The environment consumption decisions are made in encourage obesity. Unhealthy diets are often embedded into consumption habits and often people “lack insight into how marketing practices” inhibit them from eating health and balanced diets (Cohen and Lesser 2016).
- **Adverse childhood experiences:** Traumatic and adverse experiences in childhood are on the rise. This category includes incidents like neglect, abuse, exclusion, divorce or incarceration. These have a link to a range of mental health needs – in childhood and in later life (See Bellis et al, 2018).

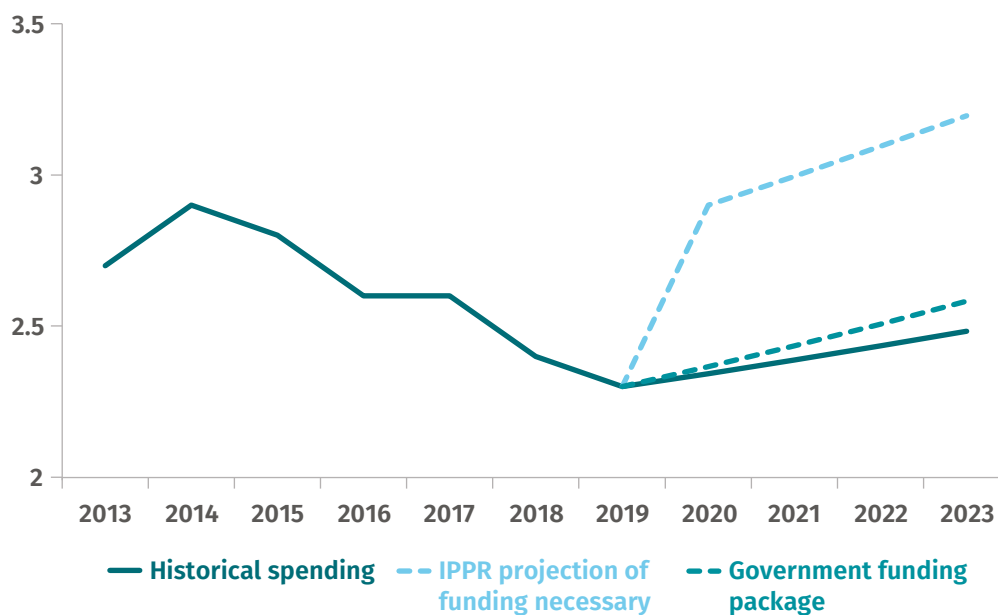
Worryingly, Covid-19 has accentuated some risks, and brought about others. For example, IPPR research has previously highlighted the importance of green space and social contact for children – both to facilitate physical activity, but also to support good mental health – and both of which have been put on hold during lockdown (McNeil et al 2020)

Yet, while these risks and challenges have grown and evolved over the past decade, the support offer from government decreased over the last decade (2010–19). Nationally, the remit of bodies like Public Health England was reduced (even before their abolition) – for example, through a 25 per cent cut to their health marketing budget last year. Elsewhere, public health has been impacted by wider austerity, which has impacted on the welfare state, on education and on poverty rates. All were highlighted by Michael Marmot in his report late last year (Marmot et al 2020).

Locally, there have been substantial cuts to the local public health grant – by our estimate, £850 million since 2014/15 (Thomas 2019).

FIGURE 2.1: CURRENT GOVERNMENT PUBLIC HEALTH SPENDING COMMITMENTS WILL NOT UNDO YEARS OF CUTS

Like for like spend on public health service 2013–2019, compared to projected government spend and IPPR estimates of necessary spend (£bn)



Source: Thomas (2019)

Local authority budgets have faced even more stringing cuts – 60p in every £1 of central government funding by 2020, by Local Government Association (LGA) estimates (LGA 2019).

Children-specific services have seen budgets reduced too. Rising demand for children’s services, coupled with consistent spending cuts has led to a reduction in spending on “non-statutory children’s services (HoC 2019) which often provide meaningful support for healthy development. The same can be said for many preventative services. The local authority budgets for mandated children’s services, children’s health programmes, childhood obesity and substance misuse among young people were all reduced between 2016/17 and 2017/18 (BMA 2018). The decline in services and institutions which young people rely on makes external risks to people’s health all the more dangerous.

At the same time, policies to protect people from external risk to their health have been limited. A clear of example of this is the public health voluntary reformulation scheme. This challenged business to reduce the sugar content of food by 20 per cent by 2020. The final level of reformulation achieved is to be confirmed, but as of 2019, only 2.9 per cent had been achieved. Combined with the roll back of state involvement in prevention and public health, this has maintained the responsibility for increased health risk on individuals throughout the last two decades.

2.2 THIS COMBINES TO FURTHER EMBED INEQUALITY, AND TO REDUCE UK RESILIENCE TO HEALTH SHOCKS LIKE COVID-19

A combination of increasing health threats, combined with a policy focus on stressing personal responsibility, underpins significant health injustice across the UK. Increasing health risks are not distributed evenly. Rather, they fall on those whose capacity to make healthy choices is inhibited by their social and economic circumstances. This compounds disadvantage for vulnerable communities. Instead of action to improve material conditions, such groups have often been left to the mercy of factors beyond their control.

Children are heavily influenced by the environment that surrounds them, with little agency over their own lifestyles or decisions. While there are arguments over the extent to which adults are responsible for personal behaviour, children “are generally assigned lower responsibility and moral status” when it comes to making decisions. This leaves question marks over who is responsible for their health and wellbeing (Goldthorpe et al 2019). For children in vulnerable circumstances, this leaves them exposed to health threats they have little control to prevent.

For those living in deprivation, the environmental risks are exacerbated with little recourse for action. There are over 4 million children living in poverty across the country. Poverty creates stress which triggers mental anxiety and depression. Lack of resources often mean poor, unsafe, overcrowded housing unsuited for a child’s emotional and physical needs. Families struggle with “food insecurity” that deprives children of a nutritional diet (Tucker 2018). In short, poverty establishes conditions in which health problems thrive.

Ethnicity is also an important factor in UK health inequality. A notable level of income inequality exists between groups from black, Asian and ethnic minority (BAME) communities, as compared to white-British groups, in the UK. Out of all ethnic groups in the country, the highest proportion of children living in “low-income families” are in the Bangladeshi and Pakistani communities (Connolly et al 2017). Evidence shows that children from BAME communities are more likely to have obesity (PHE 2019). There are also reports of higher rates of severe mental health problems among certain BAME communities compared to white British people (Grey et al 2013). It is important to recognise how people’s demographic or socio-economic status can compound the health challenges facing children and persist into adulthood.

Inequality on this level cannot be down to poor choices or consumer preference alone. Rather, it is evidence of a system that distributes risk and poor outcomes, systematically, to the most vulnerable.

The consequences of the UK’s unequal distribution of health risk, and poor health outcomes, has been exposed by the Covid-19 epidemic. People with worse underlying health conditions faced, and continue to face, increased risks during the outbreak.

- Obesity: Mortality for people with obesity has been higher during Covid-19, with those with a BMI of over 40 particularly at risk.
- Tobacco users: Mortality of tobacco users has been higher during Covid-19. (Goldacre et al 2020).
- People with underlying health conditions: Including respiratory conditions, some kinds of cancer, heart disease, diabetes, and kidney disease (PHE 2020).
- Those with long-term conditions are “two or three times” more like to have a mental health problem than the general population (Naylor et al 2012) – indicating that people with mental health needs are amongst those most impacted during the Covid-19.

This translated to unacceptable levels of health inequality.

- Compared to previous years, the mortality rates among black males have been four times higher, among Asian males three times higher and among white males two times higher.
- Compared to previous years, mortality rates among black females has been three times higher, among Asian females 2.4 times higher and among white females, 1.6 times higher.
- In the most deprived decile, the Covid-19 death rate was 2.2 times that of the least deprived decile (PHE 2020).

These are exactly the kind of outcomes a stronger approach to public and childhood health would be designed to prevent. As such, Covid-19 has highlighted that good public health is important for our resilience to health shocks. This means government should more actively manage the increasing level of external, environmental risk people face regarding their, and how marginalised groups are systematically and disproportionately exposed to those risk.

2.3 CHANGE WILL RELY ON A SHIFT FROM PERSONAL TO COLLECTIVE RESPONSIBILITY

Historic progress on disease prevention and public health has often come when national and local government, academics, community groups, businesses, civil society and individuals have come together to address the biggest challenges of their times. In the 19th century, a collective focus on vaccinations saw huge progress against infectious diseases, such as smallpox. Similar collaborative efforts can be seen in the 20th century in the rise of food safety standards, the evolution of occupational health standards, improvements in tobacco control and progress in health outcomes on heart disease and many types of cancer. In 2020, making similar progress will require similar ambition on the biggest health challenge of our time. This means addressing the causes of childhood ill health.

In the last decade, 2010 to 2019, the government rhetoric was often welcome. They often demonstrated a good understanding of the problem, and outlined strategies that could make progress. However, that was rarely backed by implementation. Good intentions were derailed by dither and delay.

In 2020, government have indicated a welcome willingness to take much more decisive action. The July obesity strategy, announced by the prime minister, made a clear departure from the previous decade. It announced decisive action on junk food marketing, an expansion of social prescribing services, a focus on cycling and ambitions to take action on online harms. While it only focused on obesity – rather than childhood health more broadly – it will clearly make significant progress (though, only if actually and fully implemented).

TABLE 2.1: BETWEEN 2010 AND 2019, CHILDHOOD HEALTH POLICY ANNOUNCEMENTS WERE FORTHCOMING, BUT IMPLEMENTATION LACKING

Initiative	Timeframe	Description
Creation of Public Health England	2013	Public Health England (PHE) was established as an executive agency within the Department of Health and Social Care (DHSC) with a specific remit of protecting the nation's health and addressing health inequalities.
Ring-fenced public health budget	2013	For local authorities, the public health grant had been ring-fenced in 2013 to support the provision of local prevention services. However, since 2015, the value of the ring-fenced funding has been diminished through cuts to the grant, as well as wider cuts to local government. This is despite local authorities expected to take on more responsibility in the provision of children's health services, leading to a general shortage of resources.
The childhood obesity strategy	2016	Composed of three chapters, the childhood obesity strategy has established a target to reduce child obesity in half by 2030 and has put forward a series of proposals to tackle the consumption of excessive calories through changing the regulatory environment. The majority of the proposals remain undelivered. The final chapter was released most recently, integrated into the prevention green paper.
Five-year forward view for mental health	2016	Alongside a commitment to deliver parity of esteem between mental and physical health, the NHS committed, over a period of five years, to enhance the availability and accessibility of mental health services.
Prevention is better than cure	2018	A vision of prevention put forward by the health secretary. This document promised a Green Paper on the topic and highlighted the importance of addressing the social, behavioural, and environmental roots of poor health.
The Prevention green paper	2019	The subsequent Green Paper contained a series of policy recommendations on how to address some of the most pernicious preventable health threats that face the UK today. Among public health bodies, the reception was mixed.
The NHS long-term plan	2019	The long-term plan set out a greater role for prevention within the NHS to help combat the growing burden of chronic conditions which are putting a strain on the service. Within this, there was a focus on improving the quality of mental health services availability to children.

Source: Authors' analysis

Underpinning many of their policies are a shift from a 'blame and punish' paradigm, focused on personal responsibility and individual action, to a more empathetic engagement with the environment people live in (figure 2.2). This kind of approach asks a broader range of societal actors to play their part, and recognises that individuals do not gain weight in a vacuum – they do so in a way defined by marketing, food prices, economic circumstances, social pressures, societal norms and health education. We now need to push that further on obesity, and extend it to childhood health as a whole.

TABLE 2.2: TAXONOMY OF HEALTH RESPONSIBILITY

Type	Level	Example
Personal responsibility	Individual	While outlining his vision for prevention, current secretary of state for health and social care made clear that “individuals’ responsibility is at the heart of health policy”. The prevention green paper, released for consultation in July 2019, also had an underlying focus on individual responsibility and on empowerment.
	Parental	The Change 4 Life campaign was a mass-media effort to increase awareness among parents about what constitutes a healthy lifestyle. An evaluation of the programme found that the campaign had success in improving parental awareness of the value of physical activity and healthy eating but had “little impact on attitudes or behaviour” (Crocker et al 2012).
Collective responsibility	Business	While the soft drink industry was subject to a levy based on sugar content, the wider food manufacturing industry were instead given voluntary targets to reduce sugar in their products. This had a very minimal impact on food formulation. The average reduction was just 2.9 per cent between 2015 and 2018, despite a target of 20 per cent (PHE 2019). This is especially concerning, given the role this industry has in shaping desirable food choices and diet.
	Community	The creation of a ring-fenced public health grant shows an understanding of the important role of community services and local government in prevention and childhood health. However, subsequent cuts to the budget have significantly curtailed the service offer – including for childhood obesity and mental health (Thomas 2019)
	National government	The soft drink industry levy was followed by a 28 per cent reduction in the sugar content of soft drinks, with many manufacturers avoiding the charge through re-formulation. However, government have not implemented other potentially effective childhood health interventions – for example, a commitment to restrict junk food marketing to children made in 2017.

Source: Authors’ analysis

2.4 WE NEED TO GO FURTHER AND FASTER

The government’s understanding of the need for societal action is welcome. However, alone, their obesity action remains a first step rather than a bold leap forward. We still need three things to maximise progress. Firstly, it does not address the link between deprivation and childhood health. Obesity and mental health are tied to socioeconomic and other types of inequality. Secondly, it leaves levers on the table. Fiscal measures are one example of a lever that can create positive change – the sugary drinks industry levy providing a case in point – but which were not brought forward. Finally, it has a narrow focus, and does not include other childhood (and adult) health priorities – such as mental health, but also alcohol and addiction, vaccination uptake, and tobacco control.

There remains a need to go further and faster, to bring about the kind of progress the Victorians made on sanitation, or the progress made on vaccines in the 20th century. This paper turns to defining what action should be taken. It first outlines the size of the prize – the economic and business gains possible if action on childhood health is truly scaled up. It then outlines policies for action. We strongly recommend these are put in progress between now and the spending review, to take advantage of a well optimised moment for bold action.

WHY NOT FOCUS ON PERSONAL RESPONSIBILITY?

The twin challenges of obesity and mental health are endangering the health of future generations. Society will bear a heavy cost if it doesn't intervene to protect from poor health outcomes. Efforts to curb the prevalence of poor health in children have been stifled by a focus on personal responsibility. This focus misses the complex social, cultural, and commercial factors which have repeatedly been shown to influence behaviour and, subsequently, our health. Here, we outline some of the clear problems with this viewpoint.

The choices children and parents make are linked to their lived environments

Poor health often exists in a generational cycle – implying it is not individual choices that determine it, but the places we are born and in which we grow up (NHS Digital 2018). For many, those environments will come with higher levels of risk than for others.

- The poorest areas have up to five times as many fast food stores as the most affluent (PHE 2018).
- Food costs are a driving factor in decisions regarding what people purchase. The cost of junk food has fallen over time and large differentials in cost exist between healthy and unhealthy products (Belon et al 2016).
- Half a million food emergency food packages were distributed to children between April 2018 and March 2019 according to the Trussell Trust charity.

Interventions which help to reduce the negative role of the social environment on children's food habits (or, create an environment that supports the healthy choice) help level the playing field across different social groups and ensure that those born into more deprived areas have just as much choice as those born into the most affluent areas.

Children's choices are not independent of marketing

Marketing has a powerful influence on health. An estimated £134 million was spent advertising junk food in 2018, 30 times that the government spent on its healthy eating campaign (O'Dowd 2017). Moreover, junk food advertisements can contain misleading health messages which imply foods with low nutritional value are part of a healthy diet. This confuses and misleads children (Whalen et al 2017).

Previously, advertisers had argued that marketing is about allowing brands to compete, rather than increasing consumption of unhealthy products. Put another way that it is about getting a consumer to choose product A over product B. However, the most recent evidence suggests marketing is strongly associated with increased calorie consumption and lower fruit and vegetable consumption amongst children (Thomas 2018)

Government intervention can protect liberty, not just constrain it

Often, government intervention is presented as an imposition on liberty. However, this is often over-simplistic. Policy, and even regulation, can protect liberty. The Declaration of Human Rights, or constitution of the USA, are two famous examples. They often constrain what individuals or corporations can do – they cannot enslave others, cause duress, or administer excessive fines. Yet, they do so to protect individual freedom. Health interventions can work on the same basis – to protect people's ability to lead a healthy life.

Simplistic views of personal responsibility are discriminatory

We know who, demographically speaking, is most likely have obesity. To suggest they have chosen this, and are personally responsible, is often to make a moral judgement – including on children who are neither affluent, nor white. A range of factors we have little control over can impact our health. For example:

- children living in overcrowded housing have been found to be up to three to four times more likely to experience mental health problems than other children (Harker 2006)
- stress can have a physiological effect that induces cravings and encourages over-eating as a coping mechanism (Harvard University 2012)
- food deprived, which in childhood has been found to encourage some people to actively avoid food insecurity in adulthood (Olson et al 2007).

In short, individual behaviours are a consequence of materially deprived social conditions that can induce a physiological and emotional reliance on unhealthy behaviours. Without collective action to redress the poor social conditions that encourage harmful behaviours, it is left to the individual, despite their control being naturally inhibited by their social circumstances.

Reasonable intervention on the basis of health has always been a part of a free society

The notion of liberty, outside of some extreme libertarian accounts, has always had scope for proportionate intervention on the ground of health. Covid-19 provides an example. Faced with 500,000 deaths (in the worst case scenario), a full lockdown was enacted in the UK. It was a highly popular policy (Smith 2020). Less invasively, seat belts were made compulsory in cars to achieve a reduction in traffic-related deaths. Few would now argue that seat belts infringe on either a) the drivers right to endanger themselves or b) the level of responsibility they take for driving dangerously. In short, the public – now and historically – are supportive of collective action that remains in proportion to the health gains it achieves (Pell et al 2019).

3. THE ECONOMIC OPPORTUNITIES FOR BOLD ACTION

3.1 CHILDHOOD HEALTH IS IMPORTANT FOR SOCIAL JUSTICE, NHS FINANCES AND NATIONAL HEALTH OUTCOMES

There is much to recommend a strong approach to childhood health. Public health research has established the benefits associated with childhood health improvements. From a social justice perspective, it has shown that that good childhood health improves health and economic equality. Health economists have shown it can reduce the costs felt by the NHS. Others have shown that public health interventions are cost effective (Martin et al 2019). This supports the famous adage that ‘an ounce of prevention is worth more than a pound of cure’.

Good health in childhood is a prerequisite for social justice. Health inequities are “avoidable” and reflect the “social circumstances in which children are conceived, born, live, develop and grow”. Children who live in deprived conditions face greater exposure to risks and health threats which follow them through their life (Spencer et al 2019). Addressing the determinants that are responsible for poor health can expand opportunities for all children and reduce both health and wider inequalities.

This chapter adds to the evidence base. It puts forward three key points. First, it highlights the gains possible to the national economy and public finances from strong progress on childhood health. It establishes productivity gains, but also costs the NHS could avoid. Second, it shows that levelling-up childhood health could help government deliver their levelling-up agenda, by benefitting urban areas in the North most of all.¹ Finally, we show the benefits businesses could expect from a healthier nation.

3.2 A STRONG NATIONAL ECONOMY

There are severe economic consequences for allowing child health problems to persist into adulthood. Poor childhood health has been found to have a large negative impact on the trajectory of key social indicators, including earnings, labour supply and household wealth (Smith 2009). The onset of health conditions in later life can lead to lost productivity, which at an aggregate level can be substantial (Mitchell and Bates 2011).

To illustrate the economic damage associated with poor childhood health, we have conducted analysis on the potential costs associated with the current cohort of children who will have obesity by the time they leave school in England.² Using data collected from Public Health England, we estimate the number of children in each local authority currently living with obesity. We then take life expectancy data

1 Areas where the cost of obesity is, currently, disproportionately felt

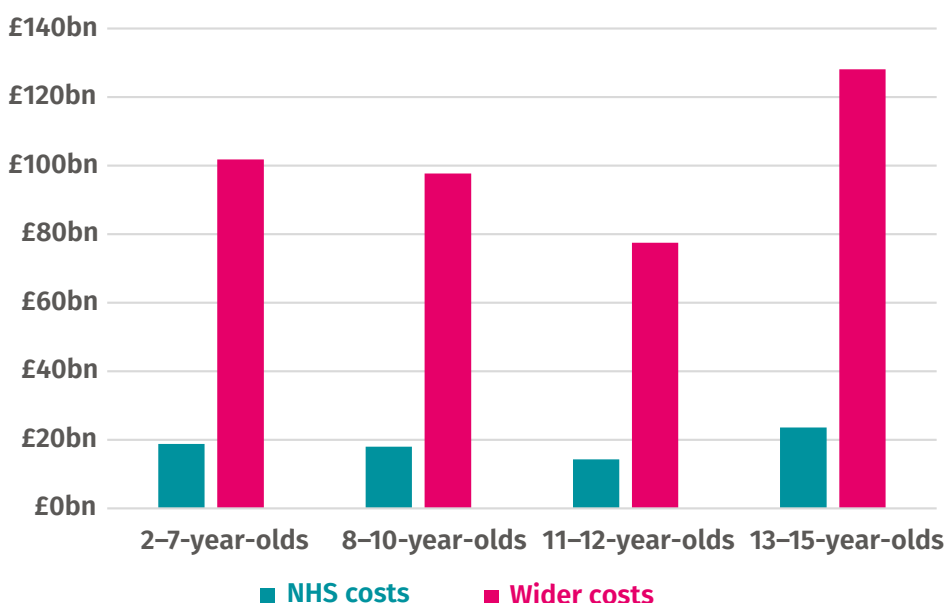
2 We estimate this based on current trends of rising obesity throughout childhood. This amounts to 3 million children overall, evenly distributed across different age groups

to estimate the potential number of years the current cohort of children will live for, controlling for the reduced life expectancy associated with obesity.

The likelihood of an obese adolescent being obese at the age of 30 is 70 per cent (Simmonds et al 2016). We use this information to determine the number of obese children who will have obesity as an adult. Finally, using an approximation of the annual unit cost of obesity to the NHS and wider society, as well as evidence on life expectancy, we have produced aggregate lifetime cost estimates of child obesity. We estimate that the current cohort of children will generate up to £74 billion in NHS costs over the course of their lifetime and £405 billion for wider society through lost productivity and sickness. This is almost £480 billion, a substantial sum considering the recent, Covid-19 induced economic downturn.

FIGURE 3.1: WITHOUT ACTION, OBESITY WILL COST HUNDREDS OF BILLIONS FOR EVERY COHORT OF CHILDREN, OVER THE COURSE OF THEIR LIFETIME

Costs associated with no further action on childhood health, over the lifetime of the current cohort of children

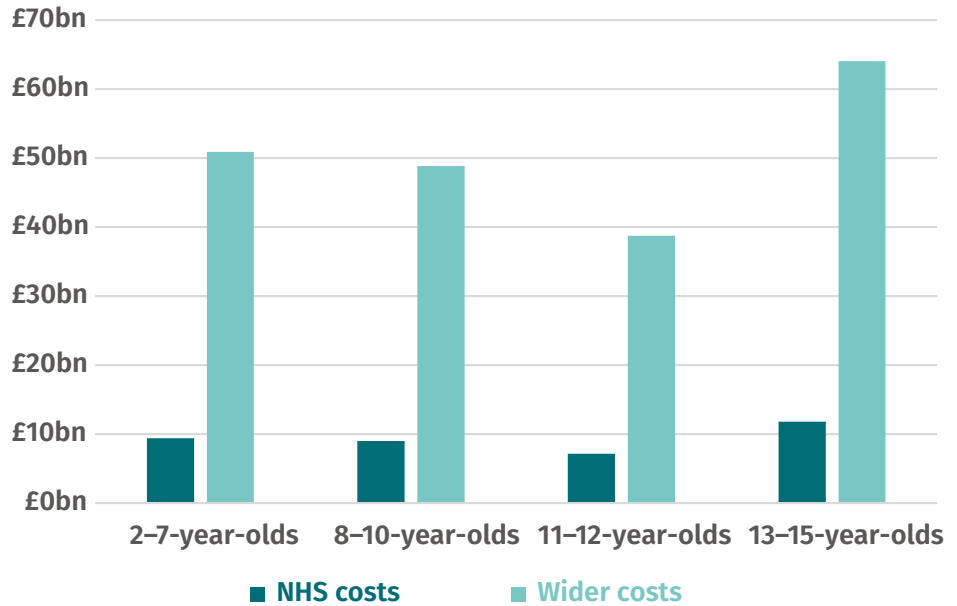


Source: Author’s calculations based on data collected from National Child Measurement Programme (2018) and PHE Fingertips (2020)

However, this also means that there are significant economic opportunities and gains to be made from more ambitious action on childhood obesity. To illustrate these, we look at what would happen if childhood obesity were reduced by half. This is the current target set by government for 2030, as part of its childhood obesity strategy. Meeting it would generate savings of over £37 billion for the NHS and £202 billion for wider society, from the current cohort alone. Further cohorts of children would increase these benefits further, due to their own decreased risk of obesity. Over time, these benefits would stack to provide even more significant returns than in the single cohort analysis undertaken here. However, it should be noted that current trajectories do not indicate we will achieve this without significant intervention beyond the current limited ambition of July 2020’s obesity announced and the 2019 Prevention green paper.

FIGURE 3.2 MEETING GOVERNMENT’S AMBITION TO HALVE CHILDHOOD OBESITY BY 2030 WOULD GENERATE HUGE SAVINGS

The cost of childhood obesity if government targets to halve childhood obesity are met



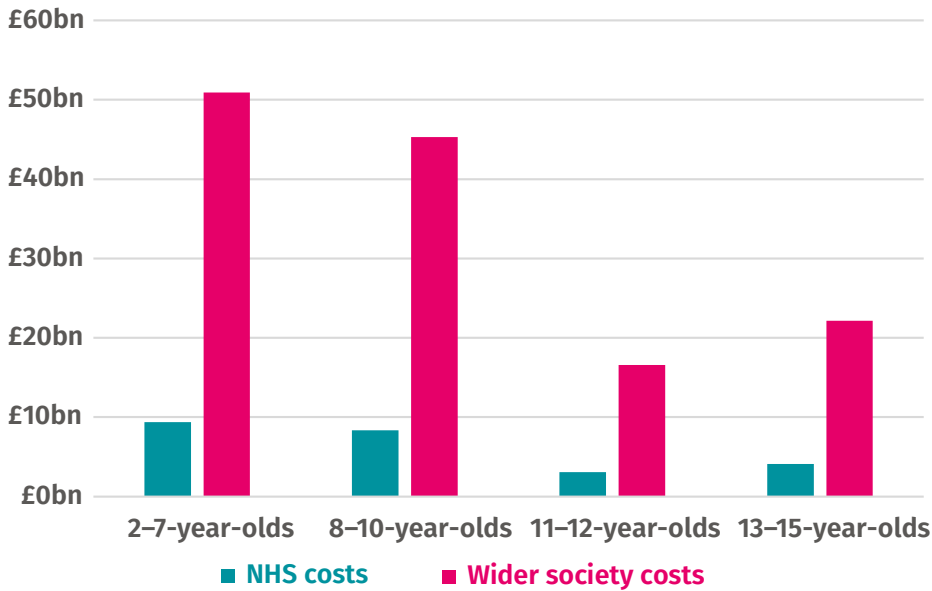
Source: Author’s calculations based on data collected from National Child Measurement Programme (2018) and PHE Fingertips (2020)

A more ambitious target might be setting a ceiling of 10 per cent on childhood obesity rates across all ages. This would mean targeting areas where child obesity is especially prevalent and may have important benefits from a perspective of social justice and reducing regional health inequalities. We estimate under such a scenario, the cost savings to the NHS would be a further £12 billion on the current target of halving child obesity, and to wider society the savings would be an additional £68 billion. This means they would total, for our current cohort of children alone, £320 billion.

To demonstrate the potential savings from a yet more ambitious target, we model what would happen if we could return to the 1980s. This would require no more than approximately 2 per cent of children to have obesity – a substantial reduction. As expected, the most ambitious target would generate the greatest benefits and would reduce the cost of childhood obesity by almost £425 billion. This means obesity, amongst our current cohort of children, would cost just over £50 billion over the course of their lifetime.

FIGURE 3.3: IF CHILDHOOD OBESITY WERE BELOW 10PC IN EVERY LOCAL AUTHORITY, SAVINGS WOULD BE BIGGER STILL

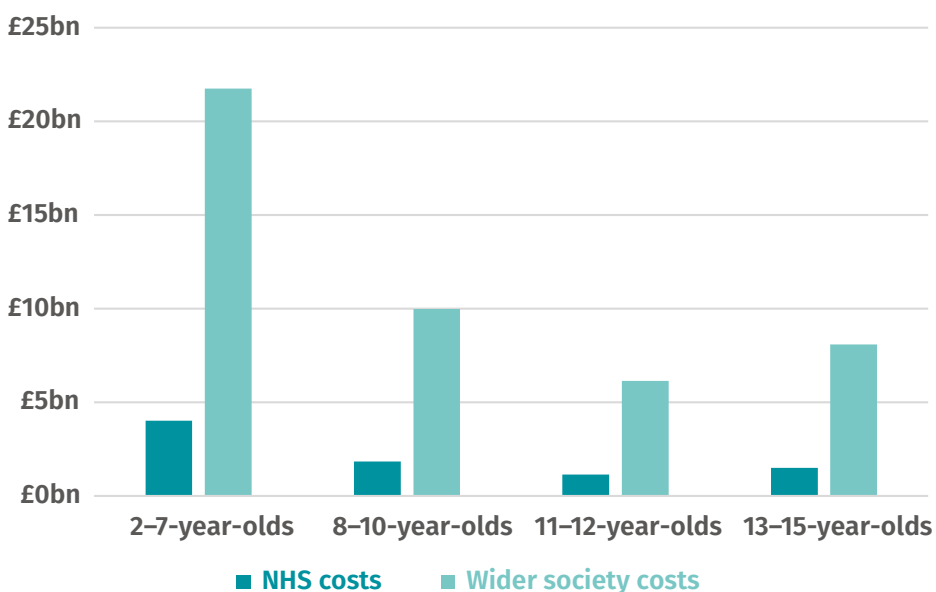
The cost of childhood obesity if child obesity is curbed at 10 per cent, current cohort



Source: Author's calculations based on data collected from National Child Measurement Programme (2018) and PHE Fingertips (2020)

FIGURE 3.4: RETURNING TO LEVELS OF OBESITY SEEN IN THE 1980S WOULD GAIN HUNDREDS OF BILLIONS FOR THE ECONOMY

The cost of childhood obesity if we return to 1960s levels of 2 per cent, current cohort



Source: Author's calculations based on data collected from National Child Measurement Programme (2018) and PHE Fingertips (2020)

In all cases, the economic gains from tackling childhood obesity are clear. Further, it is likely our estimates understate the potential benefits. While we only look at the cost of childhood obesity, any policy designed to deliver the gains we outline is likely to have a benefit on the adult population. This would serve to increase benefit significantly.

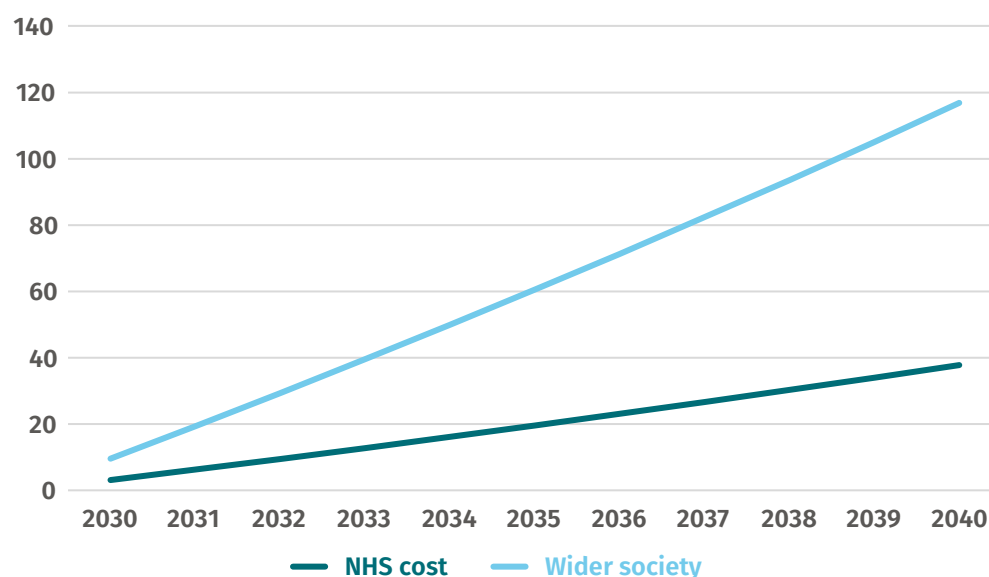
Mental health

We have adopted a similar approach to examine the consequences of identifying mental health problems in childhood and providing support and counselling to alleviate the trajectory of mental health problems in later life.

The evidence indicates that 75 per cent of mental health problems in adulthood manifest at earlier ages. With mental health problems costing the NHS up to £34 billion each year and wider society £105 billion, we estimate that the potential gain from targeting and addressing 10 per cent of the mental health burden among children today could generate a cumulative saving of £37 billion for the NHS and £116 billion for wider society by 2040, if this could correspond to a subsequent decrease in the adult mental health burden.

FIGURE 3.5: RATES OF MENTAL ILL-HEALTH AMONGST CHILDREN WILL COST HUNDREDS OF BILLIONS WITHOUT FURTHER INTERVENTION

Estimated annual cost of childhood mental ill-health, 2030-40



Source: Authors' calculations based on NHS Digital (2016)

As society increasingly comes to term with the adverse impacts mental health can have, this provides a clear economic incentive to intervene early. Through identification and appropriate treatment of children, the full impact of their mental health problems may never be realised. They will have the opportunity for healthy development, perform better at school and avoid a deterioration in their mental health in the future.

3.3 LEVEL UP HEALTH TO LEVEL UP INCLUSIVE GROWTH

In their manifesto, the government made significant pledges to 'level-up' the country – that is, to provide people with more equal opportunity, regardless of what part of the country live in. This will only be more important in the Covid-19 recovery, given the unequal distribution of the virus' impact. Expanding equality of opportunity will require a firm foundation of health everywhere – something that is not currently the case.

TABLE 3.1: THERE IS SIGNIFICANT INEQUALITY IN CHILDHOOD HEALTH MEASURES IN ENGLAND, INCLUDING A NORTH/SOUTH DIVIDE

Measure	England	North East region	North West region	West Midlands region	Yorkshire and the Humber region
Infant mortality rate	3.9	3.3	4.6	5.8	4
Child mortality rate (1–17 years)	11	12.6	13.3	12.5	11.9
Hospital admissions caused by unintentional and deliberate injuries in children (aged 0–14 years)	96.1	127.5	129.5	108.8	103.2
Children in low income families (under 16s)	17	22.6	18	20.3	19.7
School readiness	71.8	71.8	68.9	70.1	70
Prevalence of obesity: Reception	9.7	10.8	10.6	10.6	10.2
Prevalence of obesity: Year 6	20.2	22.8	21.5	22.9	21
A&E attendances (0–4 years)	655.3	967.4	776.3	629.7	624.5
Hospital admissions for mental health conditions	88.3	105.7	104.3	90.2	69.9

Source: PHE Fingertips (2020)

These inequalities come with tangible economic costs. The highest costs are focussed on North and West Midlands areas – and are often higher in urban, deprived areas. The distribution of the cost of childhood obesity follows this pattern very closely.

TABLE 3.2: LIFETIME AGGREGATE COSTS OF CHILD OBESITY (CURRENT COHORT OF CHILDREN): TOP 10 LOCAL AUTHORITIES WITH THE HIGHEST COSTS

Local authority	Cost of obesity for cohort (£bn)	IMD Average Rank (/151)
Birmingham	13.9	6
Leeds	6.3	65
Bradford	6.3	18
Manchester	5.4	2
Sheffield	4.9	66
Newham	4.6	11
Enfield	4.6	46
Croydon	4.5	72
County Durham	4.4	50
Kirklees	4.2	61

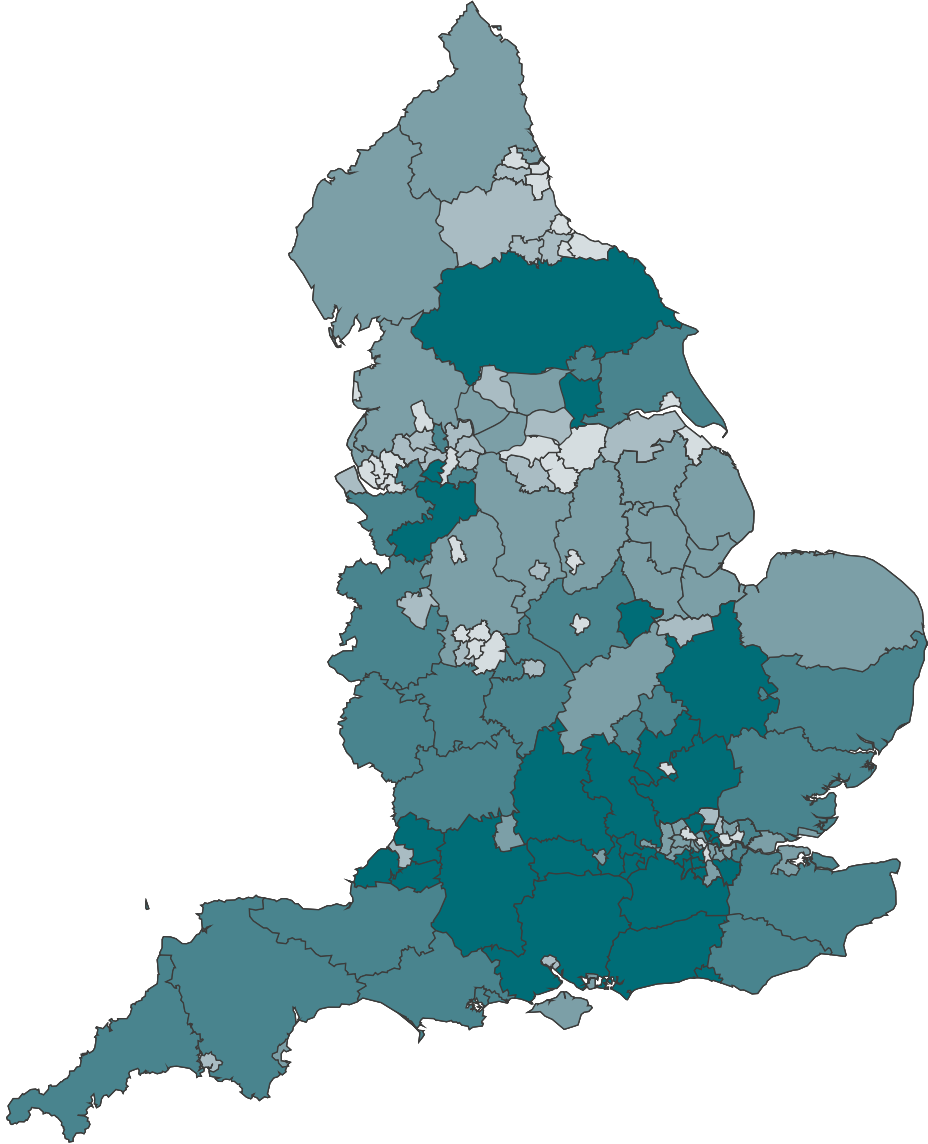
Source: Author's calculations based on data collected from National Child Measurement Programme and PHE Fingertips

In particular, the costs fall on deprived and urban parts of England (each is more deprived than the average). In Birmingham alone, the cost of childhood obesity will be more almost £14 billion over their lifetime. With obesity more likely to impact poorer communities, this is likely to entrench health inequalities and seep into wider social and economic disparities. This is worrying – inclusive growth and levelling-up were a key pledge in the Conservative manifesto, but this will not be achievable if millions of children are left to the mercy of poor health.

This pattern replicates itself when it comes to mental health problems. Areas in the north of England and urban centres including London document widespread mental health problems and emotional disorders in children. The map below illustrates how child mental health problems have clustered. Tackling these health challenges is key for bridging the regional divide.

FIGURE 3.6: MENTAL HEALTH PROBLEMS AMONG CHILDREN ARE CLUSTERED IN URBAN CENTRES, PARTICULARLY IN THE NORTH OF ENGLAND

Estimated prevalence of mental health problems in children aged 5–16 (% , 2015)



Source: PHE Fingertips (2020)

3.4 A HEALTH DIVIDEND FOR UK BUSINESS

Covid-19 has shown the extreme impact that poor health can have on business, with almost 20 per cent of businesses having to stop trading in the wake of the epidemic, while of those who continued to trade, 62 per cent reported lower turnovers (ONS 2020). However, it is not just global pandemics that impact businesses. A wide variety of bad health impacts on productivity and human capital.

There are plenty of opportunities for businesses to play a role in building a healthier society. From developing and promoting healthier snacks to supporting the branding and marketing which define our food culture, there are ways in which businesses can pave the way for a healthier environment (Cornelsen et al 2018). The pursuit of profit and social responsibility can be tied together.

Our modelling demonstrates there are clear economic benefits for business to help tackle obesity and mental health problems in children. Without action, the future costs associated with children struggling with health problems today could be as much as £10 billion for business, in the form of lost productivity. It is also likely that these costs will get worse, as the unhealthy environment which harms people in childhood will persist. Even those who might get through childhood unaffected may succumb to poor health later, because the underlying social and environmental conditions remain. If businesses take an active role in shifting this environment today, the gains for the future can be immense.

Helping the nation to achieve a significant reduction in child obesity and mental health problems will improve the outlook for business. A generation of healthier children will likely perform better at school and achieve greater educational attainment, which will enhance the skills and abilities of the next generation. Improving outcomes will also reduce the future disease burden. Given that 141 million workdays are lost to ill health every year through absenteeism and reduced capacity, meeting the targets on obesity and mental health we have outlined in our analysis could result in 129,000 and 1.8 million days of additional contributions each year, respectively. There are sizeable workforce gains to be made through early intervention.

4. A ‘WHOLE SOCIETY APPROACH’

Achieving these gains will not be easy. While implementation of the recent obesity strategy – including junk food marketing restrictions, consultations on food and drink labelling and regulation of junk food promotions - will certainly have an impact, it is unlikely to achieve anything like the maximum gains outlined in our new modelling. That level of reward needs bolder, more cohesive ambitions. That is, we need to move even further towards a collectivist approach. This chapter outlines policies to that end, that could be implemented ahead of the Comprehensive Spending Review. We call it a **whole society approach**.

The core principle would be action across different settings, institutions and actors. Everyone should play their part – and not just individuals, but businesses, schools, local authorities and national government. Often, that will rely on funding, powers or regulation coming from the centre, but delivery and action in other places. Any holistic strategy should, at the very least, work across each of the following actors.

TABLE 4.1: WHO MAKES UP A WHOLE SOCIETY APPROACH?

People, individuals and families	The NHS	Schools
People have a role in their diet. However, far too much policy has focused on personal responsibility in recent years. Too often, that leads people to forget that people’s choices are not made in isolation of their socio-economic circumstances.	While few children need clinical intervention, the NHS provides mental health services and oversees social prescribing – tools that can target obesity and mental health.	Schools have a huge impact on health. They are a site for health education, a key determinant in mental health, and often have a key role in children’s diets through their food offer.
Local communities	National government	Businesses
Local government and community have a key role in mental health and weight management. They oversee the lived environment people live in – their access to green space, communal areas and commons. They also have oversight of some direct service provision, through the ring-fenced public health grant.	National government has a key role. It can regulate, incentivise and mandate change. It can also fund and empower actors, to work on their behalf. Put simply, the government have an absolutely critical role in shaping food environments and addressing the rising health risks faced by children today.	Children interact with a huge range of business, Marketing may make products appealing, or define norms that impact their mental health. They use shops and supermarkets, who work hard to appeal to them and their parents. And they often have autonomy over lunch and snack choices.

Source: Author’s analysis

Collaboration between these groups is crucial if we hope address the changing and evolving health risks faced by children today – and defines our ‘whole society approach’ recommendations below. In doing so, it would offer the opportunity for a giant leap forward in health – effects of which would be felt over the next 100 years, and into the 22nd century.



We recommend that national government use incentives, to create the healthy environment they want to see

Ask digital giants to pay for the mental health costs of their platforms, using the ‘polluter pays’ principle

Social media is an increasingly important aspect of a child’s life and can have an adverse impact on mental health outcomes. Cyber bullying and online harassment affects almost one in 10 children aged 10 to 15 in England (DfE 2018) and can induce severely negative “psychosocial outcomes” for victims such as depression and anxiety. Social media use can also fuel social isolation, intensify peer pressure and leaves children to their own devices to search for or view unsuitable or inaccurate content (O’Keeffe and Clarke-Pearson 2011).

Obesity can also be driven by social media. Not only do the potential mental health effects increase the risk of developing unhealthy coping mechanisms, the use of technology has also been found to result in “increased energy intake” while promoting a sedentary lifestyle. Further, unhealthy food products are regularly advertised on social media, often as part of sponsorship deals, and can encourage children to consume such goods (Khajeheian et al 2018).

Covid-19 has been extremely damaging for many types of businesses, but it has increased profits for some of the largest digital companies. This is driven by increasing use of social media, online marketplaces, gambling websites and streaming services by UK users. Moreover, there has been suspicion that social media companies are not working towards the common good. For example, research by the Centre for Countering Digital Hate (CCDH) and charity Restless Development found that social media companies were failing to tackle 90 per cent of Covid-19 misinformation (CCDH 2020).

Social media firms, many of which generate large profits thanks to their younger users, should be expected to contribute to services that can support children online. In 2018, the chancellor did announce plans to introduce a new ‘digital services’ tax, aimed at established technology giants – with the budget red book confirming an implementation date of 1 April 2020. This is expected to raise over £500 million by 2024/25 – a relatively small imposition on a sector that accounts for 7.7 per cent of the UK economy (DCMS 2020).

We should go further still. In light of Covid-19, and to support childhood health, we recommend the remit be expanded. The government should put forward plans to double the current levy by 2024/25. This would ensure that the level of taxation is proportionate to turnover, social harm and the growing role of the digital economy in defining our health. This would raise the chancellor up to a further £515 million by 2025.

This money should be considered part of a ‘polluter pays’ approach. While it is impossible to ascertain the exact impact on childhood mental health, it is clear from the evidence that social media and digital companies do have a negative impact. Moreover, some business models even profit from activity linked to poor mental health. This extra digital services tax would ask for a fair (and, compared to sector profits, very affordable) contribution to costs. It should be reviewed regularly by the chancellor, and adjusted based on evidence of either better or worse behaviour.

Importantly, this policy should be pursued in combination with wider digital reforms. IPPR have recently argued that a lack of tax revenue is far from the only problem with digital services and the data economy (Meadway 2020). Tax should not be a substitute for bolder moves towards a digital commons, for example. However, as part of a broader strategy, it does constitute a viable way to ensure

that we collectivise the risk associated with digital technology, rather than allow it to fall on the individual.

Use fiscal incentives to drive reformulation of food and drinks beyond sugary beverages through a non-essential food levy

The “ready availability of calorie dense foods” has played a central role in rising child obesity (Raychaudhuri and Sanyal 2012). Recent evidence has found that there has been a small reduction in the purchase of “less healthy food products” across the UK, but this would need to be rapidly accelerated in order to “substantially reduce the health risks of poor diets” (Berger et al 2019).

Previous research found that during the 2008 financial crisis and subsequent recession, British households increased their purchasing of calorie dense food (Griffith et al 2013). This may reflect the cost-effectiveness of unhealthy options. As the country faces a Covid-19 induced economic downturn, we may expect to see another increase in demand for calorie dense food products, which will further fuel the obesity crisis among children.

Fiscal policies, such as increased taxes, have been found effective in curbing demand for unhealthy food products and nudging re-formulation. As Adam Smith remarked, “sugar, rum and tobacco are nowhere necessities of life ... and which are therefore extremely proper subjects of taxation” (Smith 1776). In the UK, proof of his concept is available from evaluations of the sugary drinks industry levy. This led to soft drink companies decreasing sugar content by 29 per cent, on average, in their beverages.

In 2011, Hungary implemented a public health tax on a wider range of products, such as pre-packaged goods with added sugar, chocolates, salted snacks, and energy drinks. Within three years, up to 73 per cent of consumers “sustained reduced consumption” of the products subject to tax and health literacy improved. Further, it was found that people with excess weight were more than “twice as likely to change their consumption behaviour” suggesting a targeted benefit. Over 90 per cent of tax was paid by the top 50 tax-paying firms in their sector, which should alleviate concerns that this would negatively impact smaller businesses (Martos 2015).

CASE STUDY: THE MEXICAN ‘NON-ESSENTIAL FOOD’ TAX

Mexico has excess weight levels similar to those seen in the UK. Moreover, like the UK, Mexico has a sugary drinks levy – of 1 peso per litre on any beverage with added sugar. However, they concurrently institute an 8 per cent sales tax on a wide range of non-essential foods that are high in sodium, added sugar or fat. The tax covers foods with greater calorie density than 275kcal/100g.

Evaluations have highlighted the speed of the impact this has had on diets. A 2016 evaluation found that household purchases of non-essential, energy-dense food declined in the first year after implementation (Batis et al 2016). A second evaluation found that the impact of the tax actually increased in the second year – while the first year saw 5 per cent less unhealthy products purchased per household, the second year saw a decline of around 7 per cent. Those who had previously purchased more unhealthy food reported bigger drops (Taillie et al 2017) suggesting a positive impact on health inequality (Smith et al 2019).

We recommend a similar approach is adopted in the UK, with a tax applied on a wider range of pre-packaged products, beverages, snacks, and confectionary which contain excessive levels of sugar, fat, and salt. First, a UK equivalent of the 'non-essential' categorisation should be established. Beyond live information from Mexico (or Hungary), the UK is in a good position to make this differentiation – through the Nutrient Profiling Model, the Scientific Advisory Committee on Nutrition and the Food Standards Agency. This will avoid taxing healthy foods that happen to be healthy – such as avocados or nuts.

The UK should adopt the Mexican tax to maximise reformulation potential – in line with government messaging around being world leaders on obesity policy. We recommend the same level of 8 per cent on non-essential foods with a calorie density greater than 275kcal/100g. This would target cakes, sweets, crisps, ready meals and takeaways – but not healthy products that happen to be high in one of fat, salt, sugar or fat. Sugary beverages are subject to their own levy, so could be excluded from this policy. Anticipated outcomes would include reduced consumption but, as with the SDIL, efforts by companies to prioritise reformulation of their products to avoid the tax.

➤ We recommend government work with schools to address food poverty and begin to break the deprivation/obesity link

Use tax revenue from the non-essential food levy to fund a healthy food incentive scheme

We have talked about financial incentives for businesses, but there is also scope to provide financial incentives for people too. There is a clear link between poverty and obesity. Between 2014 and 2019, 25.8 per cent of children in the most deprived quintile were obese, compared to 12.8 per cent of children in the least deprived quintile (PHE 2020).

Yet, choice over food is often lowest in this group, too. According to the Food Foundation, nearly 4 million children live in families where income is too low to meet Public Health England's dietary recommendations. The children's commissioner – using a slightly different definition – estimates almost 2 million children experience moderate or severe food insecurity (Children's Commissioner, 2020). The clear conclusion is malnutrition and obesity are problems that go hand in hand – with the cause not bad choice, or eating the wrong thing, but a lack of access to any alternative. A solution to childhood obesity must break the link between childhood obesity (and health more generally) and deprivation. We recommend this is where government target financial incentives.

It is tempting to make incentives conditional on progress. However, we believe this would be a mistake. Trials have often been unsuccessful in the UK – with those who make progress in the short-term often unable to make it in the long-term. Instead, government should provide an unconditional incentive through schools – called the 'Healthy Schools' scheme. The voucher should be available to all children receiving school meals. It should be eligible for all grocery items not covered by the 'non-essential food' tax highlighted above. It should be linked to the top rate of child benefit – currently, £21.05 a week. Importantly, this should not replace the current provision of school meal vouchers or any welfare provision, such as child benefit.

In reality, the voucher would be as much about incentivising business change as individual change. Provision of £20 a week would generate competition on healthy items, currently only really seen on unhealthy products. A likely impact would be greater emphasis on promotion, and more companies entering the category. This was the outcome from the Special Supplemental Nutrition

Program for Women, Infants and Children in the USA – which stimulated grocery stores to increase the availability and variety of healthy foods (Hawkes et al, 2015). The impact was highest in low-income neighbourhoods. In this case, we estimate the absolute maximum cost of the scheme – assuming all vouchers are used, fully, by all eligible individuals – would be £1.5 billion per year.

Studies have shown that food vouchers are effective. A 2015 systematic review concluded that using food vouchers to support healthy eating amongst low-income families was more impactful to other interventions, such as menu labelling (Mayne et al, 2015). One of the world’s more ambitious reviews into obesity – by the New Zealand Select Committee in 2007 – called for increased use of targeted vouchers. A Lancet Review, led by Professor Corinna Hawkes, concluded: “food subsidies are generally implemented as a way of overcoming affordability barriers to healthy foods for people with low incomes. Vouchers, financial incentives and fruit and vegetable boxes have all been established to have a positive effect on the consumption of the targeted [unhealthy] foods among low income families” (Hawkes et al 2015).

CASE STUDY: THE ROSE VOUCHERS FOR FRUIT AND VEG PROJECT

The UK has a successful trial of food subsidies in place. Rose vouchers give families on low incomes money to buy fresh fruit and veg. The voucher provides £3 per week (£6 if a child is under 1 year old) to be spent on fresh fruit and veg at local markets. The idea is to support the local economy, while also providing health gains to children.

The impact has been substantial. Evaluation shows:

- a 95 per cent increase in fruit and veg consumption
- a 75 per cent decrease in takeaway consumption
- a 65 per cent increase in meals cooked from scratch.

The strong indication is that giving people food security is key to enabling healthy lives and childhoods.

Scaling up this scheme would require extra considerations. First, we recommend a higher payment, as an opportunity to help eradicate high levels of food insecurity in the UK. Second, we recommend that vouchers can be exchanged in shops as well as at markets, on the basis that many people will not have access to farmer’s markets or similar. To avoid stigma, the vouchers could be provided on pre-paid cards.

Build greater health capacity in schools

Improving the provision of health services in schools can be extremely beneficial to children’s health. Not only are schools integral to promoting health education and ensuring children have the skills and knowledge to lead healthier lives, they provide opportunities for identifying children in need and providing them support in a nurturing environment. Unfortunately, school health services have seen their budgets cut significantly.

This has led to a considerable drop in the school-based health workforce in recent years. A 2019 survey showed that 83 per cent of teaching staff believed the mental health of their pupils had deteriorated in the past two years, while more than half said they worked in a school without a counsellor to offer mental health support to children (BACP 2019). We recommend rectifying this by ensuring every school has the ability to provide a professional mental health offer. Funding should come from

government – recognising that recent pay rises for teachers came from existing departmental budgets and will constrain schools’ ability to upgrade their health offer this year.

We further recommend, in line with previous IPPR research (Hochlaf and Quilter-Pinner 2020), that legislation be introduced to guarantee a ratio of one school nurse or qualified professional for every 600 students. This would equal the mandatory level in Finland, where health professionals in a school environment has helped to improve wellbeing and academic performance (Fagan et al 2017).

We estimate that this would require a further 11,500 school nurses, which would require training costs of £805 million and a wage cost of £445 million. However, we acknowledge that this cannot be done overnight and recommend that this take place over the following decade with £80 million a year invested into training schemes for school nurses, with schools in deprived areas the first to receive additional health staff.

 **We recommend that local government is empowered to deliver a wide range of health services within their community**

Restore the public health grant

Local authorities have endured sustained cuts to their public health budgets over the past five years. Since 2014, there has been an estimated decline of £850 million in “net expenditure” on public health services across England. These cuts have fallen disproportionately on the most deprived communities. Almost £1 in every £7 cut came from the 10 most deprived areas in England. In contrast, only £1 in every £46 were cut in the least deprived places. This means the relative cuts for the poorest areas have been six times larger than in the least deprived, leading to the collapse of preventive services for those who need it most (Thomas 2019). Inequalities have been entrenched thanks to these cuts and some of the most vulnerable groups in England have been excluded from support. Children born into deprived communities will have to make do with inadequate services and face unnecessary, unjust hardship.

These cuts have impacted services that are important to children (Hochlaf et al 2019). For example, in some instances, weight management programs received such limited funding that “reducing the prevalence of obesity was frequently seen as an unrealistic goal”. The lack of resources to even assess such programmes means that there is very little meaningful analysis of how cost-effective such programmes are, how effective they can be or a guide to best practice (Mears et al 2019). Funding cuts for public health have left local authorities struggling to meet the demands of the local population. With Covid-19 pushing more local authorities to the brink, action is needed to protect public health services now and in the future.

The government should reverse the cuts and increase the public health budget by a minimum of £850 million to deliver preventative services, in addition to any extra funding which has been provided to cope with the Covid-19 crisis. The priority should be to restore the budgets for the most deprived communities first. In addition, we recommend that the budget for public health continue to rise by 3.4 per cent, in line with NHS spending increase, for the next five years. A portion of this replenished funding should be used to return spending on child health programmes and obesity services back to the levels they were.

Even if the grant is restored, more money is come out of the most deprived communities from 2020 onwards. This is because of a change in how funds are allocated between places – ironically named the ‘fair funding review’. Evaluating the impact of the new formula, the Institute for Fiscal Studies concludes: “[Local] Spending changes have led to significant changes in the relationships between

spending and needs indicators. Most notably, the positive relationship between levels of deprivation (as measured by the index of multiple deprivation) and spending has become weaker". They go on to demonstrate that councils in the most deprived 10 per cent would need 38 per cent more funding than the average to meet associated need but will receive between 5 per cent and 21 per cent below the average (Phillips and Harris 2018).

IPPR has previously been clear that central government should increase funding to local government – as part of a long-term and sustainable settlement including devolution of tax-raising powers, and within a fair system of redistribution between areas. Achieving this fair redistribution between areas requires an urgent review of government formulas.

More health visits

Health visitors can have a positive impact on health outcomes for young children and their families. Development in the first 1,001 days is "recognised as a crucial period" for the rest of a child's life. Health visitors provide mental health support to new mothers, provide advice on nutrition and other health promotion activities, help to manage minor illnesses and monitor to the wellbeing of children to ensure they are "ready for school" (LGA 2017).

However, the number of health visitors fell from over 12,000 in 2015 to just over 9,100 in 2019. This reduction has led to caseload sizes increasing well beyond recommended levels and left staff unable to deliver the personalised service that helps address the specific concerns of families (IHV 2020). In England, there are five mandated health visits for a new-born child but given there are noted benefits for those in disadvantaged areas (LGA 2017), this offer should be expanded. We recommend that the number of mandated health visits should increase for children born into poverty, who live in temporary accommodation or whose parents face acute social and economic difficulties, from five visits to seven before a child is five year's old. We also recommend that during the perinatal period, the mother receives two visits to help them prepare for the birth and to identify any areas in which additional health support would be necessary.

 **We recommend government work with the NHS to expand access to social prescribing further and faster**

Significant expansion of social prescribing

In their obesity drive, government expanded access to social prescription of 'social activities to help people keep fit'. They also unveiled plans to increase cycling in areas with poor health outcomes and physical activity rates. This is welcome. IPPR have previously called for the expansion of social prescribing elsewhere.

Whilst making activity cheaper is helpful from both a mental health and obesity perspective, it is not the whole solution. Other factors are more important. In particular, it is important to recognise that diet – and the food environment – is far more important than physical activity levels in determining obesity (Wilks et al 2011).

For wholly medical conditions, NICE provides a clinical basis for intervention. However, there is no defined process for social prescriptions to be a) commissioned and b) prescribed in personal care. A joint working group from NICE and the replacement for Public Health England should be formed to establish the evidence on social interventions on childhood obesity and mental health. Their review should examine the efficacy of interventions including new technology, digital tools and apps, peer support (both individual and group), exercise, food subsidies, education and skill building programmes and professional coaching.

Where interventions are found to be cost effective and effective – at normal NICE thresholds – they should be guaranteed for patients. Implementation will then require three steps.

- First, staff will need to be trained in best practice and on the evidence base.
- Second, capacity will need to be built, including in local government, community and voluntary sectors, to ensure availability of interventions.
- Third, interactions with patients will need to be carefully managed. Decisions should be shared, choice maintained and stigma avoided.

This process should be equally applicable for adults and children. However, for the former, guidance and training should also consider specific requirements around safeguarding.

Social prescribing can and should include a range of activities including “arts activities, group learning, gardening, cooker, healthy eating advice” and a whole host of other community-based initiatives. While more pilots and research is clearly needed, emerging evidence has shown there are a range of potential benefits for health and wellbeing, including reduced anxiety and an improvement in personal feelings towards health (The King’s Fund 2017).

We recommend government work with businesses to create even-handed regulation of harmful behaviour

Online harms

The Online Harms white paper was published in April 2019, but still has not been implemented. There are several intentions set out by the government that could support efforts on childhood mental health – by setting clear standards for online behaviours. The white paper points to a range of online dangers that threaten children’s mental and physical wellbeing. From providing an online platform for abuse and bullying to exposing children to harmful content that encourages everything from self-harm to eating disorders, an unregulated online space can leave children vulnerable.

We recommend that government urgently implement an online harms regulator. Regardless of who takes the role, they must ensure powers are extensive. This means:

- Fines should be part of the regime, and cover bullying, child abuse, terrorism, and fake news. France have recently implemented fines for hate speech which is not removed in a certain time-period.
- A regulator with capacity and workforce necessary to keep up with the changing practices and growing size of the digital sector.
- So-called ‘super complaints’ are allowed by designated bodies. This is already a part of the Enterprise Act 2002. Designated bodies should include mental health charities, amongst others.
- A code of conduct developed for senior managers, making those who commit acts of gross negligence, or work to intentionally cause harm, legally liable. This would be similar to the code seen in the financial services sector.
- A legally enforceable duty of care should be included, which asks digital platforms to identify and act on ‘reasonably foreseeable risks’, including mental health risks.
- Data sharing by social media companies is made compulsory, so that children can be protected as the sector evolves.

Outside the white paper, we recommend government follow through on their intention to ban all advertisement of high fat, salt, sugar foods online. Evidence shows this is the next frontier in obesogenic advertising. A large proportion of

children are exposed to “marketing activity of HFSS foods” which are a core feature of obesogenic environments. There is an association between awareness of HFSS marketing and calorie consumption (Critchlow et al 2019).

Place-based protections

The prevalence of fast food restaurants near areas where children congregate is fuelling the childhood obesity epidemic. Evidence has shown that schools next to fast food outlets results in increased obesity among its students and can increase the calorific intake of children by up to 300 calories per school day (Pathania 2016). With the poorest areas in England “fast food hotspots” with up to five times as many restaurants than in affluent areas (PHE 2018), there are increased pressures that result in the very poorest being exposed to wide scale obesogenic environment. Helping to reduce the prevalence of fast food restaurants and create healthier alternatives in deprived communities is integral for promoting healthier lifestyles.

We recommend that support is provided to local authorities to make this a reality. While the Child Obesity Action Plan explicitly states that local authorities have powers to limit the opening of fast food outlets (DHSC 2016), we need to consider that these are often an important source of revenue for struggling local authorities.

To ensure that local authorities can take bold action in reducing the prevalence of fast food restaurants, we recommend additional financial support should be made to the most deprived local authorities in the country to compensate the potential lost revenue. In return, the most deprived local authorities should look to ensure that there are no fast food restaurants within a mile radius of local schools.

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