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ENDING THE BLAME GAME

THE CASE FOR A NEW APPROACH TO PUBLIC HEALTH AND PREVENTION

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SUMMARY

Too many people in the UK are suffering from preventable ill-health with progress on prevention stalling in recent years. Over half of the disease burden in England is deemed preventable, with one in five deaths attributed to causes that could have been avoided. The UK has made significant progress on this agenda in the past but we appear to have 'hit a wall' with limited progress since 2010. Notably, IPPR's prevention index shows that out of 35 OECD countries:

- we have risen from 26th to 17th position between 1990 and 2010 in terms of the number of disability-adjusted life years (DALYs) caused by preventable illness, increasing by just one to 16th between 2010 and 2017
- we have risen from 29th in 1990 to 21st in 2010 in terms of preventable deaths, increasing by just one again to 20th between 2010 and 2017.

Action on prevention will not only improve health but also lead to increases in economic growth, make the NHS more sustainable and help to deliver social justice. Prevention leads to longer and health lives. There is lots of evidence showing that people intrinsically value this as one component of a good life. But it is also important because improved health drives greater wealth (in particular through higher workforce participation and productivity), makes the NHS and other public services more sustainable, and is a pre-requisite of delivering social justice, given the inequalities in health present across our society.

The government's prevention green paper must deliver a paradigm shift in policy from interventions that 'blame and punish' to those that 'empathise and assist'. To reignite the progress seen in prevention during the 1990s and 2000s the government must learn the lessons of previous prevention agendas. We argue that four key shifts are needed in the years to come, which together make up a paradigm shift in prevention and public health policy that helps move our approach from scattered to comprehensive. This paradigm shift will see policymakers eschew intervention that 'blame and punish' unhealthy behaviours to those that 'empathise and assist' them in making better decisions which result in better health.

FROM CONSOLIDATION TO INVESTMENT

A decade of austerity has resulted in cuts to public health, prevention and mental health budgets in the NHS, and wider national and local government services which help drive better health. For too long policymakers have failed to health and health services as a risk to be managed rather than an asset to be invested in. But the evidence is clear: for every £1 spent on prevention the median return is £14 (Masters et al 2017). We need to move from consolidation to investment.

Policy recommendation: The government should return the public health grant to 2012/13 levels and then grow it at the same pace as NHS spending. This would see an additional £1 billion public health investment by 2023/24.

Policy recommendation: The NHS Long-Term Plan should 'lock-in' spending increases as a percentage of NHS spend on prevention for the duration of the Long-Term Plan. Additional investment in mental health and resilience in particular should be prioritised.

Policy recommendation: All major policies and spending decisions across government should undergo a 'health audit' (similar to initiatives on race and gender) and a new 'health in all policies' strategy to tackle the social determinants which should be overseen by a cabinet committee chaired by the prime minister.

FROM WAITING TO CREATING

The NHS is world-renowned as an excellent system for treating ill health, but the health system has little overall influence on health outcomes (McGovern 2014). From creating a healthy environment during the first 1,000 days of life to early diagnosis and support to enable behavioural change, proactive prevention is essential for achieving better health outcomes throughout life.

Policy recommendation: The government should scale up its child health offer by mandating six health visits for new-born children to ensure proper maternal mental health, full take up of vaccination courses, high quality parental advice and ultimately school readiness.

Policy recommendation: The government should provide every school child who lives in a household in receipt of universal credit with a free school meal. This will cost an estimated £275 million but will have health and economic benefits for children living in a low-income households.

Policy recommendation: The government should return funding for physical education to the initial amount of £415 million which was promised following the implementation of the 'sugar levy'. This should be used to improve facilities and opportunities for sport within the curriculum.

FROM PUNITIVE TO EMPATHETIC

Often the most vulnerable in society are at the greatest risk of developing preventable conditions through personal behaviour which is influenced by social pressures, such as poverty or job insecurity. A compassionate prevention strategy understands the complex causes behind harmful behaviour – especially mental ill-health - and instead of 'punishing' people for bad behaviour, seeks to empower and support them to make better choices

Policy recommendation: Unleash the power of big data and technology to predict and prevent ill-health. This will require government to reform information governance rules in the NHS and mandate dataset integration across the country.

Policy recommendation: Ensure everyone who displays 'risky' behaviour or is newly diagnosed has access to a personal care plan, social prescribing and a peer support network. This will require the creation of a payment mechanism (NHS tariff) for charity sector partners.

Policy recommendation: Introduce opt-out services and treatments for patients who come into contact with the health service. This will include providing vaccines to eligible groups, mental health screenings, vaping prescriptions and other National Institute for Health and Care Excellence (NICE) approved practices.

Policy recommendation: Mandate and regulate access to evidence-based services and treatments. This should include removing the recently introduced affordability threshold for new medicines but also giving NICE the power to enforce uptake of best practise services, treatments and technologies.

FROM INDIVIDUAL TO COLLECTIVE

Despite increasing recognition of the role society plays in shaping health behaviours and outcomes, many prevention policies continue to rely on the agency of the individual to make changes (Savona et al 2017). This approach fails to recognise the vast range of social, environmental and commercial determinants of poor health. Only through collective action to build healthier environments can a prevention strategy achieve lasting success.

Policy recommendation: Create a smoke-free generation by raising the minimum age of smoking to 21 and extending the smoking ban to all public places.

Policy recommendation: End the UK's 'pro-obesity environment' by making the healthy choice, the easy choice. This will include providing free fruit and vegetables in schools, introducing plain packaging for confectionery, crisps and high-sugar drinks, supermarket sponsored community cooking classes and ensuring that no school is adjacent to a fast food restaurant.

Policy recommendation: Reform regulation on advertising on TV, radio and in public spaces to promote healthy lifestyles. Advertising for unhealthy food products should be subject to a 9pm watershed and additional campaign funding for promoting diet and exercise should be made available.

1.
THE CASE FOR PREVENTION

For most of human history, life for the majority was "nasty, brutish and short", as described by Thomas Hobbes. But the last century has seen a transformation in human health which has had a profound and positive impact on the quality and length of life for vast swathes of people. These improvements have been driven by several key factors.

- Advances in our understanding of disease processes expanded the opportunities for controlling and treating a diverse range of conditions (Fielding 1999).
- Scientific breakthroughs such as the discovery of antibiotics (Bud 2007) and the rapid development of new vaccines for infectious diseases (Poland and Barrett 2009).
- Expansion of universal health care across high-income countries made treatment more accessible to the masses (McKee et al 2013).
- Better public health such as sanitation systems and waste disposal led to significant improvements in environmental health conditions (Fielding 1999).

Coupled with the general improvements in economic and social conditions brought about by industrial growth and modern technology, population health has greatly improved in England – as it has across the developed and developing world - over the course of the century.

THE PREVENTION PROBLEM

These developments are undoubtedly a cause for celebration. However, we must not get complacent: we face numerous health challenges in the years to come. Notably, the disease burden has shifted away from infectious diseases to long-term chronic conditions (Muir and Quilter-Pinner 2015). An estimated 15 million people in England live with a long-term condition for which there is no cure and the number of people with multiple conditions is expected to rise significantly (The King's Fund 2013).

A defining feature of chronic conditions and non-communicable disease is that in many cases, they are entirely preventable. Today, over half of the disease burden in England is attributable to 'behavioural, social and environmental' factors that can otherwise be changed before the onset of poor health (DHSC 2018). In total, almost one in five deaths in England could be considered preventable.

Moreover, after years of improvements that curbed the overall impact of preventable disease, progress has started to reverse. Between 1990 and 2012 the number of disability-adjusted life years (DALYs),[1] where a preventable risk factor was an underlying cause, fell from 7.7 million to 5.6 million. By 2017, this had once again risen to 5.9 million (IHME 2019). A similar trend is also observed for deaths attributable to a preventable risk factor. Had the trend from 1990 and 2012 continued, we estimate that there could have been 130,000 deaths averted between 2012 and 2017.

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1   DALYs are a measure of lost years due to poor health, either through the presence of a chronic condition or premature mortality. They are the sum of years of life lost to poor health and years of life lost to disability.

FIGURE 1.1: DALYS IN ENGLAND PER 100,000 PEOPLE, ALL RISK FACTORS
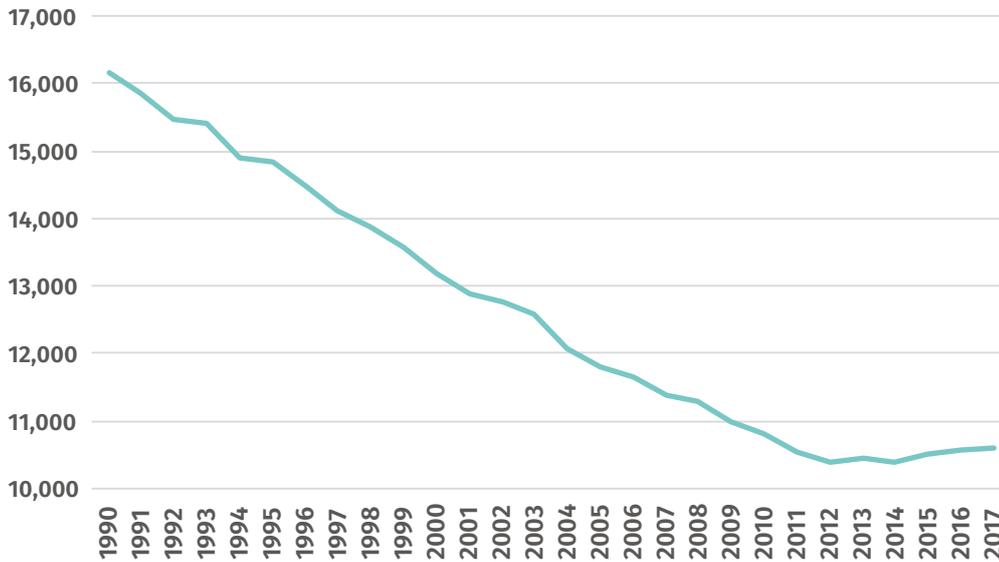
Source: IHME 2019

Finally, if we compare our performance to a group of comparator countries across the OECD, we find that we are underperforming. IPPR created a standardised health index using information on preventable deaths and DALYs with an associated environmental, behavioural or metabolic risk between 1990 and 2017. This shows that for DALYs the UK rose from 26th (out of 35 countries) in 1990 to 17th in 2010, although the UK had only managed to improve by a single position by 2017. Similarly, for deaths, the UK rose from 29th in 1990 to 21st in 2010 and 20th in 2017. The stories are strikingly similar; the UK made large improvements in the two decades from 1990 to 2010 but since then progress has plateaued.

Together, these three trends - a large number of people with preventable health conditions; a reversal in progress in reducing the scale of this challenge; and underperformance when compared with other OECD countries – make a strong case for more and better intervention to prevent ill-health.

THE IMPORTANCE OF PREVENTION

But first we must ask: "why do we care about preventable ill-health?" We argue there are three primary reasons why we would want to intervene to reduce preventable ill-health. Together they set out a compelling case for bold action:

- **People value health:** Health is of intrinsic value to individuals. This is because, as Amartya Sen has long argued, it is a core 'capability' required for human flourishing (Sen 1999). Individuals benefit from good health and can more fully participate in society. Unsurprisingly, polling shows that as a result people prioritise it: aside from Brexit, health has consistently been ranked as one of the most important issues facing the country, even outranking the economy (YouGov 2019), while two in three people have claimed they would be willing to pay more in taxes to support NHS spending (Evans and Wellings 2017).

- **Health creates wealth:** A healthy population supports stronger economic performance through improving the capabilities of the workforce. A higher prevalence of long-term conditions have been found to prevent individuals from participating in the labour market, while further evidence has found such health problems can diminish the productivity of individual workers

and deprive them of opportunities to gain experience or qualifications (Marshall et al 2018). This results in reduced economic growth, less tax revenue but more cost to public services, and also is a shock to personal incomes.

- **Prevention makes our NHS more sustainable:** The NHS is struggling to cope with the growing demand pressures associated with more and older people. Effective prevention can help reduce this by keeping people healthier for longer. For example, it has been found that supporting people to manage health conditions could prevent up to 436,000 emergency admissions and 690,000 A&E attendances each year (Deeny et al 2018). Without realising this potential, the NHS is not sustainable and will not achieve the objectives it has been set in the NHS Long-Term Plan. Prevention also helps to reduce pressures on other public services.
- **Health is a prerequisite of social justice:** Failing to prevent poor health does not impact society equally. The burden consistently falls heaviest on poorer communities who are more likely to live in poor health and die young. A child born in the most deprived areas of England will only have 51 years of good health. In contrast, those born in the most affluent areas will enjoy over 70 years of good health. These health inequities prevent people from deprived community achieve their potential and feed in to economic and social inequalities.

FIGURE 1.2: HEALTHY LIFE EXPECTANCY BY DECILE OF DEPRIVATION IN ENGLAND, 2015-17
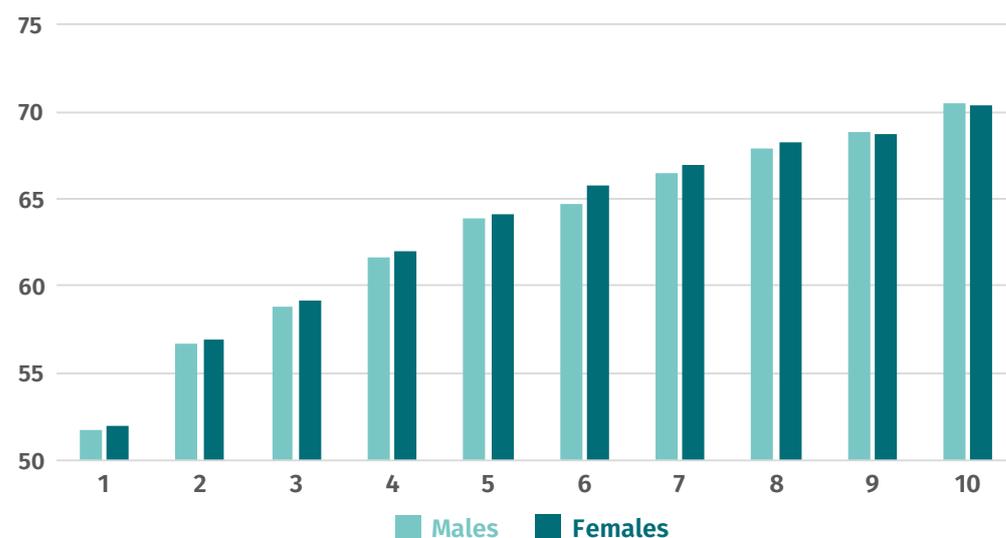
Source: ONS 2019a

THE CAUSES OF PREVENTABLE POOR HEALTH

The causes of preventable poor health are many and complex. However, studies show that close to half of the burden of illness in developed countries associated with the four main unhealthy behaviours: smoking, excessive consumption of alcohol, and poor diet and low levels of physical activity, which together result in obesity (Buck and Frosini 2012).

We see this played out in the UK.

- **Smoking**: Tobacco is the leading cause of preventable death and poor health in England. Tobacco was responsible for over 1.6 million DALYs in 2017 and the biggest single factor responsible for the burden of preventable cancer (IHME 2019). It also heavily contributes to the prevalence of cardiovascular disease and chronic respiratory conditions.

- **Obesity**: Obesity is a growing health issue, especially among children. A high-body mass index and poor diet make significant contributions to the heavy burden of cardiovascular disease, diabetes and kidney disease. However, other metabolic risks such as high blood pressure and hyperglycaemia, also associated with obesity, play a large role in promoting preventable disease.
- **Alcohol and substance abuse**: Consumption of alcohol and drugs is a long-standing societal issue which generates significant costs to individual health and public services. An estimated 940,000 DALYs attributed to alcohol and drug use were recorded in 2017. Alcohol is a major cause of preventable cancer, while substance misuse problems are identified as clinical conditions in their own right.

IN FOCUS: MENTAL HEALTH

The challenge of prevention is not just a physical one. The prevalence of mental health conditions is staggering, with an estimated one in six adults meeting the criteria for a common mental disorder, with one in three people with a condition in receipt of treatment (McManus et al 2016). Not only do mental health conditions have a detrimental impact on personal wellbeing, they have significant societal costs, estimated to be around £100 billion every year (Quilter-Pinner and Reader 2018).

Much like the aforementioned negative health behaviours, many mental health conditions have underlying social determinants and are entirely preventable. These include poverty and deprivation, loneliness and isolation and unemployment or precarious employment. However, one of the most important is adverse childhood experiences (ACEs) including forms of neglect and abuse. A child who experiences four or more ACEs during childhood will be six times more likely to receive treatment for mental illness compared to those who experienced no ACEs (Hughes et al 2018), which is linked to greater propensity to engage in harmful behaviours.

Smoking has been found to be 'substantially higher among people with mental disorders' (RCP 2013). Obesity stigma has been associated with 'increased depression, anxiety and decreased self-esteem' and can encourage eating disorders and avoidance of physical activity (WHO 2017). An estimated 86 per cent of those receiving alcohol treatment have 'co-occurring mental health' condition, with alcohol being used as a 'common response' to cope with mental health challenges (IAS 2018).

Social conditions which allow mental health conditions to fester also play a role in encouraging harmful behaviours. Loneliness for example is associated with weakened willpower, lack of self-regulation and exposure to stress which act to encourage behaviours such as overeating and reliance on alcohol (Griffin 2010). These examples demonstrate the link between social conditions, mental and physical health.

This implies that any effectives strategy to reduce preventable illness and death will have to grapple as much with mental health as physical health. The government has recognised this, committing to 'parity of esteem' between mental and physical health conditions (Border and Millard 2015). This approach must be integrated into prevention. A new strategy should commit to developing individual and community resilience, that 'enables people to thrive in the face of adversity' (Davydov et al 2010), but it must also seek to alleviate the unnecessary social pressures which risk the development of mental health conditions and encourage negative behaviour.

FIGURE 1.3: DISABILITY ADJUSTED LIFE YEARS BY RISK FACTOR PER 100,000 PEOPLE, ENGLAND, 2017
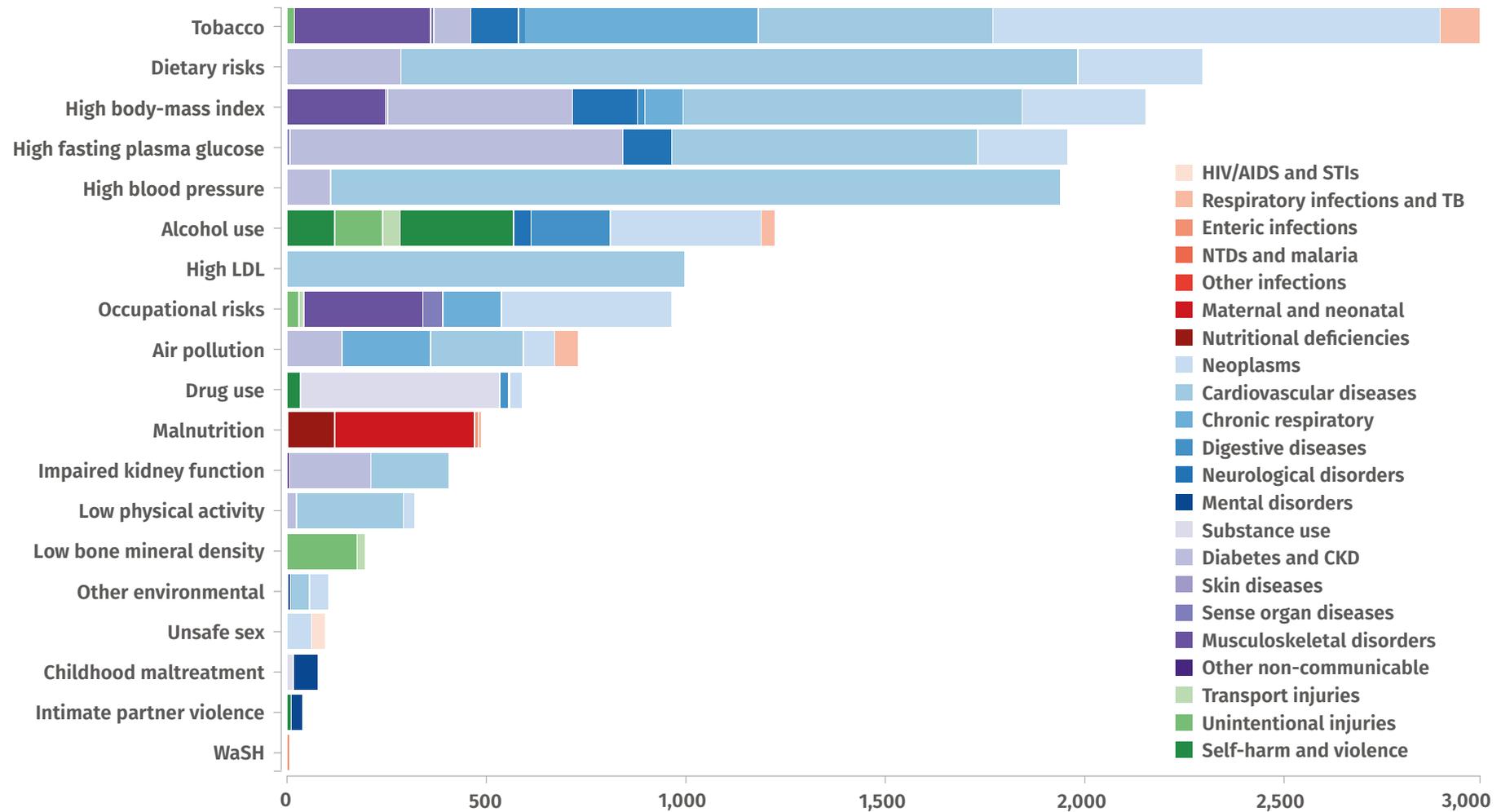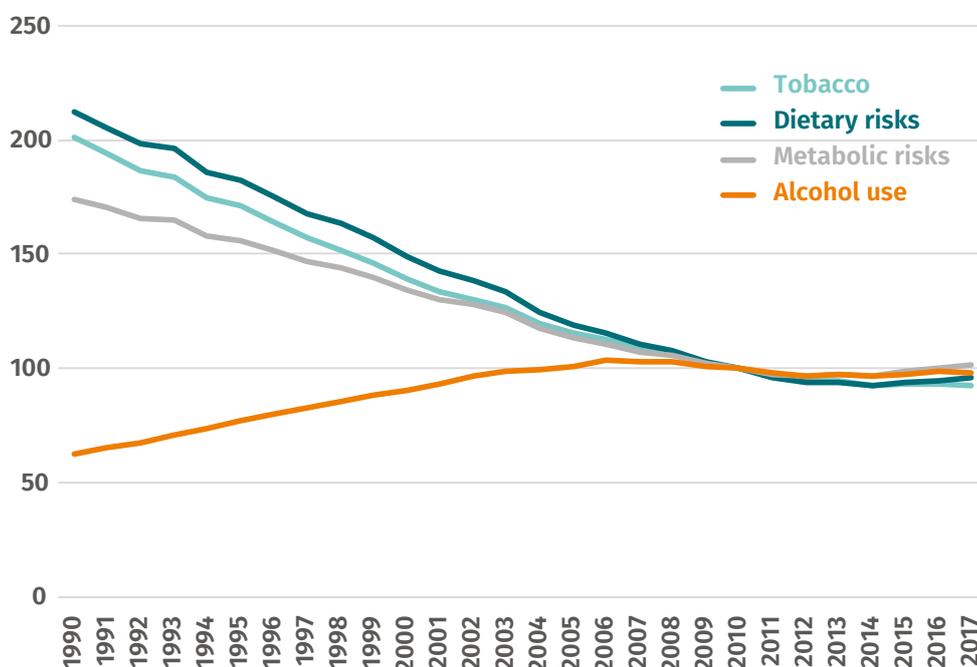

Source: IHME 2019

While these challenges are significant, we have seen progress in recent years. In particular, the number of DALYs associated with both tobacco and dietary risks were halved between 1990 and 2010, though it is worth noting that these declines were not shared equally across the population. For example, it was reported that those with no qualifications were more than five times as likely to engage in multiple adverse behaviours than those with high qualifications in 2008, compared to only three times as likely in 2003 (Buck and Frosini 2012).

Unfortunately, as set out earlier, improvements have stalled. Since 2010, there has been a reversal in the decline of DALYs associated with dietary and metabolic risks. The rate of smoking-associated DALYs has continued to decline but at a much lower rate than in previous years. Unlike the other major risks, alcohol-related DALYs rose from 1990 onwards, but have flatlined since 2006. Across all these areas, there is a need to return to the period of steady, continued decline.

FIGURE 1.4: INDEX OF DALYS PER 100,000 BY RISK FACTOR (BASE YEAR=2010)

Source: IHME 2019

THE 'CAUSES OF THE CAUSES'

While it is correct to attribute much preventable ill-health to these behaviours, it does not tell the full story. We must go one step further and analyse the 'black box', which is human decision making. This will help us to better understand why people make the decisions they do, and therefore how we can ensure they make better ones in the future.

This is crucial because in the past the evidence presented about personal behaviours causing ill-health has fuelled a narrative about personal responsibility as both cause and solution to ill-health. However, research is increasingly clear that these decisions are not made in a vacuum: social and environment factors shape the decisions people make.

Notably, there is strong evidence showing that the social pressures and stress created by poverty, deprivation and inequality are powerful influencing factors which stimulate and encourage adverse health behaviours (Lawson 2018). This plays out across the behaviours we are focussing on.

- The likelihood of smoking is up to four times higher in the most deprived areas of England compared to the most affluent (ONS 2018). Significant reductions in smoking prevalence were reported among every group in England between 2001 and 2008, except among those facing multiple disadvantages such as unemployment, low incomes or insecure housing tenure (Hiscock et al 2012).

- People with lower incomes or who live in deprived areas are more likely to be obese. Almost 13 per cent of children living in the most deprived areas were either overweight or obese, as opposed to only 5 per cent of those raised in the least deprived areas (CSJ 2017), while adults living the most deprived areas where up to 46 per cent more likely to be obese than those living in the least deprived areas (Baker 2018).

- Disadvantaged adults are also more likely to face graver health consequences as a result of alcohol and drug abuse. Men and women in routine occupations were found to be 3.5 and 5.7 more likely to suffer an alcohol-related death respectively, than their counterparts in the highest level occupations (Jones and Sumnall 2016). Poverty, deprivation and inequality have all been found to have strong links with problem drug use (Shaw et al 2007).

Moreover, whilst these behaviours are challenges in their own right, there is often overlap between them. Smoking, excessive alcohol consumption, obesity and inactivity have all been found to cluster, with an estimated one in three (36.9 per cent) adults displaying at least two or more of these behaviours (Birch et al 2018). Nor is the challenge exclusively physical, with growing recognition of how mental health is a cause of adverse health behaviours. Unhealthy diets, smoking, alcohol and drug use, alongside their adverse health consequences have all been found to have higher prevalence rates among people with severe mental health conditions than the general population (Scott and Happell 2011).

CONCLUSIONS

Too many people, especially those at the bottom of society, are suffering unnecessarily from preventable ill-health: we can and should have a robust prevention strategy to stop people falling ill. This is important, not only because people value their health and wellbeing, but because it is an essential part of creating a more prosperous and fairer society.

There is now an opportunity to change this. The NHS has recently published its Long-Term Plan which makes prevention a core objective (NHS 2019). Meanwhile, the government has also committed to publishing a green paper on prevention – building on its already published Prevention Vision (DHSC 2018) – to set out action across government more generally.

In chapter 2 we examine the tools available to government in looking to deliver on the promise of prevention and in chapter 3 we assess why current efforts have stalled and how policy can shift to correct this. In chapter 4 we put forward policy recommendations to make our vision of a progressive prevention strategy a reality.

2.
TOWARDS A PREVENTION FRAMEWORK

The primary aim of any prevention strategy is to change the behaviours of individuals - in this case, whether they smoke, drink alcohol, take drugs, overeat or fail to take exercise - in order to achieve a longer and healthier life. To help establish how we can affect behaviour change we have set out a prevention framework. This will allow us to understand the best policy interventions to form part of a prevention strategy.

THE ELEMENTS OF PREVENTION
Based on the existing health literature we can identify three core components of a health prevention strategy.
1. The type of intervention.
2. The policy lever utilised.
3. The institution through which we will impact on behaviour.

TYPE OF INTERVENTION
Preventative interventions are separated into three categories.

TABLE 2.1: THREE TYPES OF PREVENTION

Primary	Secondary	Tertiary
Interventions designed to ensure risks and health problems do not develop in the first place. From vaccination to banning harmful substance, primary prevention alters the surrounding environment and is the first defence against preventable poor health.	**If a disease or risk does develop, it is important to stop it before more complex health problems emerge.** Secondary interventions include screenings, to catch disease early and support services to help people change their behaviour.	Inevitably, some people will develop a chronic condition or disease. **Tertiary interventions are used at this stage as a means of helping people manage their conditions to prevent further deterioration and maintain some semblance of normality in their daily lives.**

Source: Institute for Work and Health 2015

A comprehensive prevention strategy will blend multiple interventions together and target different groups based on their need for support.

These different interventions often map onto the human lifecycle.
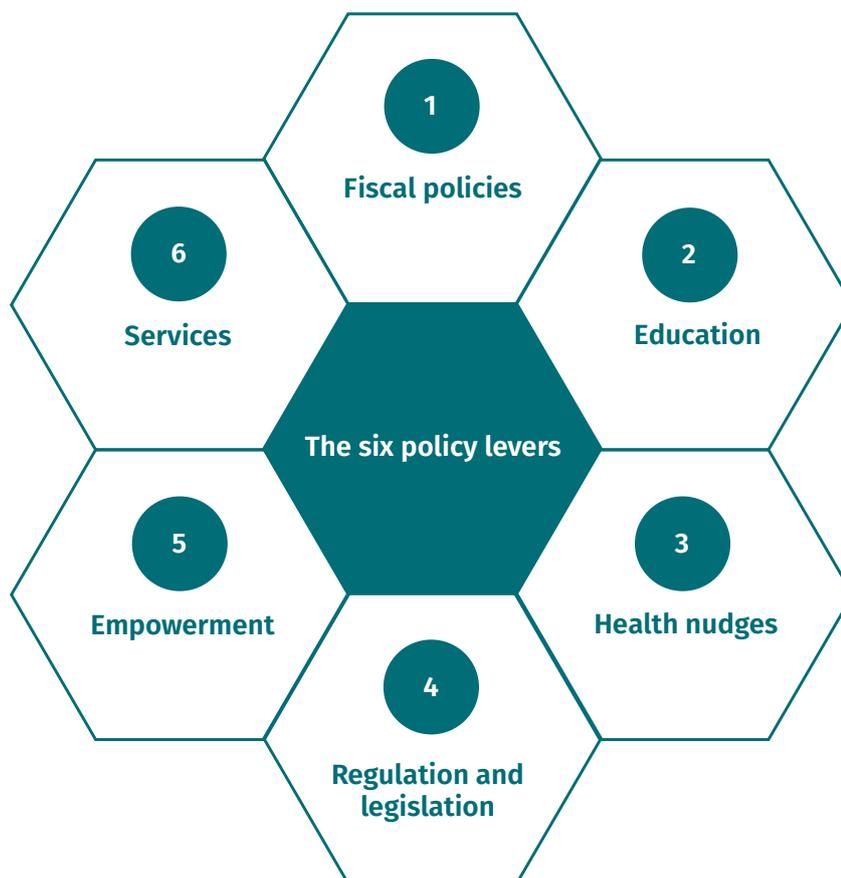- **Early life:** Primary prevention is often used as a means of laying the 'foundations of a healthy lifestyle' (Licence 2004). It is vital that child development occurs in a healthy environment. Providing an emotionally stable home, ensuring they receive their vaccinations and providing education on harmful behaviours are all ways in which early steps can be taken to promote better health in later life.

- **Mid-life:** During working age, many pressures start to manifest which may encourage the adoption of negative behaviours. Interventions that help people maintain control over their work, provide financial security and engage in emotionally satisfying relationships can all play a role in supporting better choices. However, should negative behaviours or potential health conditions emerge, it is important that services that are effective in changing behaviour (Lafortune et al 2016) or receiving treatment that can prevent conditions worsening are readily available
- **Later life:** In later life, again it is important that primary interventions continue to play a role, with vaccinations for the flu, pneumococcal disease and shingles serving as some examples of ways in which good health can be maintained. However, it is important to also recognise that many older people will develop chronic conditions and often co-occur. Diabetes and hypertension for example are often found together, with severe health risks for the individual (Epstein and Sowers 1992). Ensuring that older patients are receiving appropriate medicines and treatments and are being supported with tailored care plans is essential for ensuring their condition does not deteriorate.

POLICY LEVERS

Government has a range of levers available to enact interventions. We identify six categories in which can broadly group different policy initiatives. These are investigated in more detail in table 2.2.

FIGURE 2.1: SIX POLICY LEVERS TO DRIVE PREVENTION

Source: Authors' analysis

TABLE 2.2

Lever	Purpose	Examples
Fiscal policies	Fiscal policies involve using taxation, subsidies and government spending to influence the price of goods and services. While fiscal policies can be applied in many ways, the 'most widely used measure' in a prevention context are commodity taxes, which 'influence individual consumption' through raising the cost of harmful goods (Sassi et al 2013). Alternatively, subsidies can be used to lower the cost of healthy goods and services, which can often be a 'formidable barrier' to those on low incomes from engaging in better health behaviours, such as maintaining a good diet (An 2013). Fiscal policies can equally be levied on producers in an attempt to influence the supply and production of goods and services (Knaul and Nugent 2006).	• Excise duty on tobacco and alcohol • 'Sugar tax' levy on producers
Education	Improving people's understanding and awareness of health risks has long been an 'essential component' in the efforts to prevent (Nutbeam 2000). Health literacy is influenced by 'health systems, culture and society and the education system' (D'Eath et al 2012). Informing people of risks and what they can do to maintain good health can be a powerful motivator which shapes behaviour. Education also helps target some of the underlying social determinants of health outcomes.	• Sex education lessons in school • Public Service Announcements
Regulation and legislation	Regulations manifest as 'restrictions, prohibitions and penalties for unsafe or risky behaviour' intent on 'manipulating the incentive structure' that health-related decisions are made in (Blankenship et al 2000). They act as powerful mechanisms, enshrined in law, to allow the government to set 'new standards for the public good' (Jochelson 2006). Regulations can apply to individuals to reduce harmful or encourage positive health behaviours and can similarly apply to producers to ensure they comply with standards established by the government.	• Age restrictions on tobacco and alcohol • Banning smoking indoors and other public places • Required warning labels on cigarette packets
Nudges	Nudges are a means of steering individuals to better choices, 'without limiting their freedom of choice'. This can be done via simplifying available information, positioning goods in stores and alternative message framing (Reisch et al 2017). Nudges exclusively focus on changing patterns of behaviour without affecting available choices (Griffith et al 2014). However, concerns have been raised that this approach is built on the assumption that individuals are 'wholly responsible' for their personal lifestyle, while ignoring the complex roots behind behaviours, which complicates the question of who nudges should be aimed at (Irish Department of Health 2015).	• Removing advertising from cigarette adverts • Listing calories on food and drink products
Services	The provision of services to prevent health problems can be personal and direct interventions to help change negative behaviours or encourage individuals to adopt healthier lifestyles. They can also involve intervening earlier in individual's health problems so that they can get support and treatment, prior to the onset of potentially worse conditions. Traditionally, many preventative services include diagnostic tests and screenings, which have predominantly been used by those who are 'relatively better educated and have higher incomes' (Rosenstock 2005). However, new technologies and growing awareness of the importance of prevention mean that services can reach broader audiences in both clinical and community settings to help address a wider array of preventable conditions.	• Smoking cessation services • Screenings and sexual health clinics • Local exercise classes
Empowerment	Empowerment is concerned with helping individuals and communities develop their personal agency through improving confidence and providing people with control over their surroundings, but also involves addressing structural barriers such as 'poverty and unemployment' while enacting change through 'partnerships, participation and collective action' (Woodall et al 2010). Empowerment must have broader aims than typical health interventions. For example, 'poverty is a pervasive risk factor underlying poor health' yet is 'rarely targeted directly to improve health' despite the benefits this would have for prevention (Silverman et al 2016). Ultimately, empowerment involves alleviating the social pressures which potentially encourage poor health.	• Social support such as housing benefits • Working regulations to provide security

Source: Authors' analysis

Each category is distinct; however, it is worth noting that some policies may fall into more than one category. These levers offer policy makers a wide range of tools to effectively promote public health.

THE INSTITUTIONS

The final element of our framework is the institutions which different policies target. Enacting change requires influencing the individual and their surroundings, either directly, through their personal relationships and through the major institutions which people engage with. We have identified six targets for policies to enact change.

TABLE 2.3: INSTITUTIONS THROUGH WHICH CHANGE HAPPENS

The individual	Family and friends	The NHS
Influencing the individual is an overarching - and the ultimate - aim of public health policy. However, for too long policy has made the individual the locus of prevention policy, without enough recognition of the context in which they make decisions and the impact of the wider social and environmental determinants.	The people we engage with on a daily basis have a role in shaping our health throughout our lives. A strong social network can help people avoid spiralling into negative behaviours and ensure that there is a safety net should people require care needs or emotional support.	The NHS is at the forefront of delivering secondary and tertiary interventions. The NHS plays a crucial role in diagnosing and treating illness, and also offers a range of services, such as sexual health screenings and smoking cessation support to help promote better population health. The NHS can contribute to better primary prevention by communicating necessary information to individuals and helping them make better decisions.
Local communities	**Schools**	**Business**
Our local communities are the people places, services and society that we engage with on a daily basis. The living environment which surrounds us can impact our health and help guide us to make healthier choices. From the availability to local services to the shops on highstreets, many health behaviours can be encouraged or mitigated.	Schools are the first point of education for young people during the crucial stages of their development. They can help make young people aware of dangerous health risks and positive behaviour long before they are a concern. They can also promote a healthy and active lifestyle through physical education lessons, cooking classes and general efforts to improve awareness.	Business plays a dual role in the promotion of population health. As producers, businesses are responsible for the flow of goods and services throughout society While ass employers, businesses play a key role in shaping the health, wellbeing and attitude of their workforce. Work related stress and dissatisfaction can heavily influence personal behaviour. Through supporting better working conditions, employers can play a positive role on the health outcomes of their workforce.

Source: Authors' analysis

CONCLUSIONS

This framework establishes the purpose of policy intervention, the available tools to help deliver change and the institutions through which change can occur. We can now use this to better understand the motives and aspiration of public health policy. In the next section, we utilise this framework to establish the strengths and weaknesses of existing prevention strategies and the shifts in policy needed to deliver a more effective prevention strategy in the future.

3.
A PARADIGM SHIFT IN HEALTH AND PREVENTION

FIVE SHIFTS IN PREVENTION: LEARNING FROM THE PAST

Better prevention has long been an objective of government, with numerous strategies and green papers targeting a "radical upgrade in prevention" (NHS 2014) and action to "improve the health of the poorest, fastest" (HM Government 2010). Furthermore, there has been some progress in delivering on this promise. In particular, we have seen falling smoking and alcohol consumption.

However, as we set out in chapter 1, this progress on healthy behaviours and related health outcomes has slowed down or gone into reverse more recently, and we are still consistently outperformed by other countries in terms of preventable ill-health. To put it more simply: too many people are still affected by entirely preventable ill-health.

It is therefore right that the government has made prevention one its main priorities going forward. This can be seen in the recent NHS Long-Term Plan which makes prevention core objective (NHS 2019). Meanwhile, the government has also committed to publishing a Green Paper on prevention – building on its already published Prevention Vision (DHSC 2018) – to set out action across government more generally.

In this context this chapter looks to learn the lessons of the last few decades of prevention policy to ensure any future government strategy delivers more and better health for the people in the UK. In particular, we identify five key shifts that are needed in prevention policy.

We argue that we need to move from an approach that:

1. **prioritises financial consolidation to one that enables financial investment**
2. **waits for illness to occur to one that intervenes early to 'create better health'**
3. **punishes people for making 'bad' choices to one that is empathetic and assists them to make better ones**
4. **targets support on the individual to one that recognises the collective responsibility for health**
5. **is scattered to one that is comprehensive.**

These shifts are set out in more detail below. Together they hail a shift from a 'blame and punish' paradigm to one which 'empathises and assists' people to make better choices.

FROM CONSOLIDATION TO INVESTMENT

Prevention services and public health has been severely impacted by a decade of austerity. Like-for-like spending has fallen, as the public health grant has been separated into a core budget and additional budget for children's services. Whilst the public health grant has consistently been ring-fenced, the additional responsibilities of providing children's services means like-for-like spendingbetween 2014/15 and 2019/20 will have fallen by up to £600 million (Finch et al 2018), from £2.9 billion

to £2.3 billion. These cuts have not fallen equally across different local authorities with those with poorer communities facing bigger cuts (BMA 2018).

Local authorities have been forced to respond to this squeeze by cutting public health services. The burden of these cuts has not fallen equally smoking cessation, sexual health and substance misuse services experiencing a substantial decline in their budgets (see figure 3.1). This has led to severe rationing of services. Sexual health clinics, substance misuse support and services to help stop smoking have all endured significant reductions in recent years, which have often not reflected the changing needs of the local population (ibid).

FIGURE 3.1: DISTRIBUTION OF CUTS ACROSS PUBLIC HEALTH FUNCTIONS
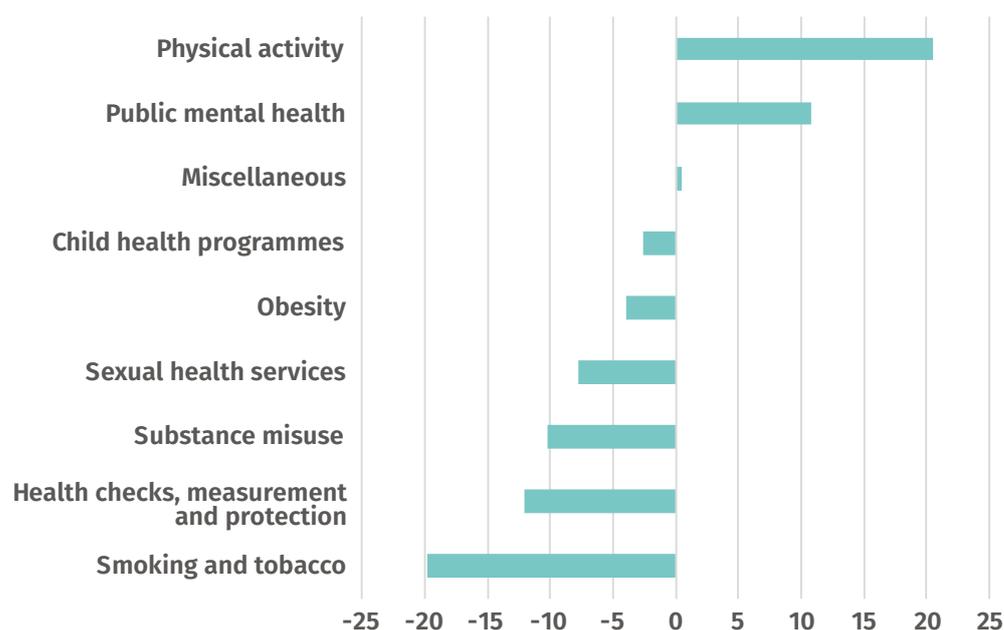
Source: MHCLG 2018

The NHS has also endured significant budget cuts during this period, hampering the do more to help keep people healthy. The NHS has experienced the "most prolonged funding squeeze in its history" with spending increasing by 1.1 per cent a year between 2009/10 and 2020/21, far below its long-term average of around 4 per cent (The King's Fund 2017a).

This has disproportionately impacted the NHS services that tend to lead on preventative care, in particular primary and community care. This is because funding originally allocated for investment in these services was actually used to fill provider deficits in the acute sector (NAO 2018). Despite this, preventative care remains a minor benefactor of public funding, with only 5 per cent of public funding for healthcare being allocated towards it (DHSC 2018).
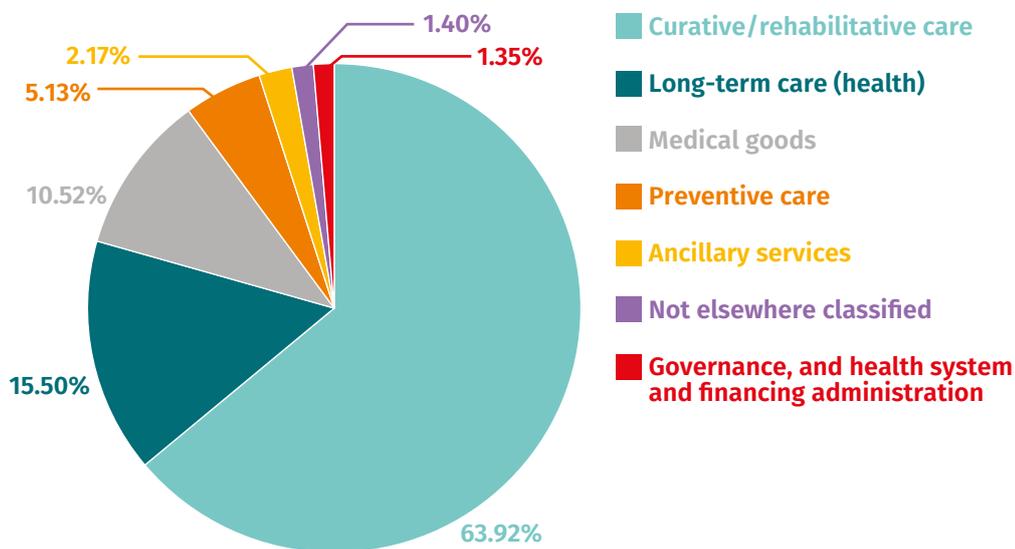
Source: ONS 2019b

Furthermore, prevention is not just the responsibility of the health service and public health. Most public spending departments have an impact on people's health. Particularly important is the wider spend of local authorities which fund green space, public assets and youth services amongst other things. However, these services have experienced significant cuts as. Likewise, childcare and education services and the benefits system, all of which are crucial to good health, also face severe funding shortages (Emmerson 2017).

Whilst it is "too early to assess the long-term effects" that austerity – and the associated increases in poverty and social distress - will have on population health (BMA 2016), our understanding of the link between poverty, deprivation and low incomes and health suggest that challenges will emerge in the future. This suggests that these funding cuts are likely to have been a false economy, with cuts now storing cost up for later, as well as delivering worse outcomes.

In future, we need to move from an approach which sees spending on health and prevention as a risk to be manged, to recognise that it is an opportunity to be seized. Notably, it has been estimated that for every £1 spent on public health, the median return is £14 (Masters et al 2015. Investing in prevention generates clear economic benefits through reducing the potential demand on health and social care services and through supporting people to fully participate in the labour force and their wider communities.

With the end of austerity promised, it is now time to reassess how much is spent on public health and provide adequate investment for local authorities, health and social care services and welfare to improve social conditions and provide accessible services that can promote better health outcomes. In the next chapter we set out a range of funding asks that will allow us to move from a consolidation paradigm to one focussed on investment.

FROM WAITING TO CREATING

There has long been a recognition that whilst we have an excellent system to treat ill-health - the NHS - we have failed to create a system that helps people stay healthy. This is clear in the scale of preventable illness set out earlier but also in the number of preventable hospital admissions, with an estimated 1.5 million admissions that could have been avoided in 2016/17 (Torjesen 2018). This is not only putting more and more pressures on NHS, and in particular our hospitals, but also results in worse outcomes. We need to move from health-care to health-creation.

Whilst the NHS undoubtedly has a role to play in this, such a shift will require us to look at policy beyond the traditional health systems. The evidence is clear that health systems determine less than 10 per cent of health outcomes (McGovern 2014) with wider services able to achieve far more. Previous prevention strategies have often failed because they have asked ever-more of the NHS but failed the utilise the wider policy levers available to us.

The most obvious place to start is early years. Evidence suggests the first 1,000 days from conception is the most crucial for development and that active intervention can improve "children's health, development and life chances" (HoC 2019). Supporting parents and families is one of the most effective ways of improving child health. A number of interventions have proven effective, notably:

- health visitors, who work as part of a team in primary and community care to take care of the health needs of young children and their parents, have been found to play a vital role in reducing 'perinatal mental health problems', improve infection control and identify at-risk families in need of targeted support
- parental support programmes such as Families and Schools Together and the Family Nurse Partnership, which reach out to vulnerable parents and offer sessions on how to manage stress and more actively support healthy behaviours have been found to have a strong impact on improving social skills, reducing anxiety and generating cost efficiencies through improving health and development (PHE 2014a)
- vaccinations and immunisations, which are an essential component of any public health strategy and have been consistently found to play a central role in preventing premature mortality. The majority of these should be completed during a child's early years. It is a cost-effective means of supporting good health, through raising parental productivity and reducing healthcare costs through childhood and beyond (Kaufman et al 2018).

However, these services have been strained due to funding cuts, with health visitor numbers declining from 10,309 in October 2015 to just 7,723 by December 2018 (NHS Digital 2019) and over seven in 10 (72 per cent) health visitors reported feeling pressure from increased workloads to provide adequate support and protection to children (Fagan et al 2017). Likewise, the evidence suggests that the majority of parents do not get support to develop parenting skills and whilst vaccination rates are high they fell across "nine of the 12 routine vaccinations" between 2016/17 and 2017/18 (NHS Digital 2018a).

Likewise, schools also offer a good opportunity to improve to intervene early and 'lock in' better health behaviours. A number of interventions have found to effective, including the following.

- School nurses: Engagement with school nurses has been found to have a positive impact on engagement with services, reduced stress and anxiety and positive behavioural change (Turner and Mackay 2015).
- Free school meals: A number of programmes have been found to have a significant impact in reducing overweight prevalence among boys (Miyawaki et al 2018) and have been found to partially helped support those from poorer backgrounds improve their dietary intakes (Yamaguchi et al 2018).

- Compulsory physical activity: In a comprehensive study, it was found that daily compulsory physical education during school led to persistent increases in physical activity even after schooling had finished (Lahti et al 2018).

However, across all of these areas we are still not doing enough. It is therefore unsurprising that across a range of key indicators, progress to improve child health and wellbeing has worsened or been reversed. Accident and emergency attendances increased from 483 per 1,000 children aged four or younger in 2010/11 to 619 in 2017/18. Obesity rates among children aged between 10 and 11 years old rose from 17.5 per cent to 20.1 per cent between 2006/07 and 2017/18 (PHE 2019). An estimated one in eight children between the ages of five and 19 had 'at least one mental disorder when assessed in 2017' (NHS Digital 2018b).

Of course, health-creation is not just about younger people: there are opportunities for improved prevention to be made across the life course. But a growing stock of evidence that supports early intervention, especially in childhood, must be acted upon to improve health outcomes of all age-groups across future generations. A proactive health-creation system would take this seriously utilising the NHS, other public institutions such as schools, but also parents and families, to 'lock in' better health behaviours from a young age. The next chapter sets out policy recommendations to help make this happen.

FROM PUNITIVE TO EMPATHETIC

Prevention policy and public health strategies have historically relied disproportionately on punitive interventions to deliver improvements in unhealthy behaviours and health outcomes. In particular, policymakers have:

- restricted choice – regulating the individual can potentially be seen as intrusive. Restricting choice could involve outright bans, such as those imposed on illicit drugs or just restricting options, such as banning smoking in public buildings (HoL 2011)
- imposed regressive taxation – taxes, such as the recently introduced sugar levy on soft drinks and high excise duty on cigarettes, place a higher relative cost burden on the poor, especially if demand is insensitive to the change in price (Wright 2017)
- restricted access to support services – in recent years access to support services and treatment has been cut as set out earlier. Furthermore, there have even been reports of rationing access to people based on their personal health behaviours, such as whether or not they smoke or are obese (RCS 2017).

These approaches often implicitly (and sometimes explicitly) buy into a blame culture, putting the responsibility for poor health on the individual. This fails to recognise that decisions are made in a context and shaped by a wider range of factors. Inadequate incomes can be a source of extreme stress, deprive people of access to valuable resources, deter investment for the future and also make it difficult to adopt healthy behaviours (Lawson 2018). Likewise, such an approach fails to recognise that behaviours are often driven by mental ill-health. For this group, a punitive approach will compound existing stigma, reduce the likelihood that they engage with treatment or support and ultimately reduce the possibility of changing behaviour (Henderson et al 2013).

A more progressive response would look to support people who make poor health choices to make better ones. It would not see health professionals and government 'do things to them' but 'do things with them' – helping people take back control of their own lives. There is a growing set of wider policy interventions, with significant evidence supporting their efficacy that can help achieve this. For example, social prescribing, peer support networks, digital technological solutions and supporting self-management-and personalising care plans.

A shift from a 'blame and punish' to an 'empathise and assist' paradigm would put these interventions front and centre.

- **Social prescribing:** Allows primary care professionals to refer patients to community-based services for 'holistic' support that engages them with various activities aimed at meeting social emotional or practical needs. There is emerging evidence of positive health effects from social prescribing, with higher level of satisfaction reported by participants, primary care professionals and commissioners, however more research is required to determine best-practice and the full extent to which social prescribing can be used for improving health outcomes (The King's Fund 2017b).

- **Peer support networks:** Networks of individual experiencing similar health concerns can play an invaluable role in providing motivation and support to others in their circumstances. Peer support has been found to be a low-cost, effective way to 'improve complex health behaviours' with the aim of disease prevention and helping individuals self-manage different conditions, such as diabetes (Fisher et al 2017).

- **Digital technologies:** With a rise in use of smartphones and the internet, there is increasing focus on making use of digital media and apps to effect behavioural change and manage health conditions. Digital technologies are widely accessible, help convey relevant information, allow for self-monitoring and can set pragmatic goals. While more trials are needed to gauge the effectiveness of different apps, there is scope for making better use of digital technologies to deliver behavioural change in the future (Rose et al 2017).

- **Supported self-management and care plans:** Personalised care plans are essential for helping individuals monitor their own wellbeing and adhering to treatment. Health professionals can play an active role in engaging patients with information and advice on how manage conditions and improve their behaviours, while patients can benefit from developing a technique that meets their personal needs and expectations.

However, this does not mean that bans, regulation or taxes should not be used. They are often very effective: the years following the smoking ban in England saw significant declines in hospital admissions for heart attacks and other cardiovascular related conditions, reductions in exposure to second-hand smoke and a sizeable increase in the number of people attempting to quit (Bauld 2011). However, if these policies are used, then they should be designed to limit any punitive outcomes and should be introduced in combination with empowerment initiatives and support to help people to make better choices.

FROM INDIVIDUAL TO COLLECTIVE

As we have already highlighted, existing prevention strategies often place much of the onus for change on the individual. For example, a recent study found that 'downstream interventions' such as food labelling, which places a "high agency on individuals" are still preferred to policies which would place more emphasis on government and corporations to take responsibility for the creation of a healthy environment (Savona et al 2017).

This is despite growing recognition of the of the social determinants of poor health such as poor housing, a lack of or low-quality work, a lack of social capital and low incomes (PHE 2017). Providing people with the means to make better choices by addressing these basic socioeconomic needs is crucial in driving better health outcomes (Wilkinson and Marmot 2003).

Meanwhile, we are also gaining a deeper understanding of how the commercial environment influences behaviour. Private companies, driven by a profit motive, play a central role in making unhealthy products widely available, improving

their cultural desirability and setting their prices (Kickbusch et al 2016). This often enables and incentivises poor health choices – resulting in negative health outcomes – rather than helping people to make better choices.

Moreover, deprived areas are more likely to have a commercial or social environment conducive to poor health behaviours. The poorest areas of England have significantly more fast food outlets (PHE 2018) and less access to gyms and sporting activities (Farrell et al 2013). Unhealthy foods have been consistently cheaper than healthier products, making them less of a viable option for poorer households (Jones et al 2014). Moreover, among higher-income groups, it is "often less socially acceptable to smoke" (Benzeval et al 2014). Across all health behaviours, it is harder for those who are worse off to make the right choice.

We must now embrace a strategy that sees government intervene more in order to shape the social and commercial determinants of health. We have done this effectively for smoking - and to some extent alcohol - over recent years including through high levies on cigarettes and alcohol, as well as greater regulation on the sale and advertising of both produce. We must continue to build on both cases to deliver further improvements in people's health. However, we have made much less progress on obesity (food products and exercise).

The recent strategy outlined by the Department of Health and Social Care (DHSC) confirmed that tackling the social determinants of poor health was a priority. This is to be welcomed: without going beyond individual solutions and embracing collective ones, the governments prevention strategy will fail to deliver better health. But we make the argument that this must also embrace the commercial determinants of health and requires us to take bold action to help ensure that the healthy choice is also the easiest and cheapest one.

FROM SCATTERED TO COMPREHENSIVE

Delivering a comprehensive strategy for public health and prevention is challenging. The policy levers required to tackle ill-health sit in numerous departments across Whitehall: DHSC controls the NHS, the Department for Education runs our schools, the Department for Work and Pensions runs our welfare system and the Treasury controls the fiscal levers. This creates a coordination problem that government is historically bad are overcoming nationally despite multiple attempts (Buck and Frosini 2012).

This same fragmentation is often experienced at a local level in terms of commissioning. For example, since 2012, many statutory public health duties have been moved from the NHS to local authorities. Research has found that this has had an effect: there are coordination issues across the organisations responsible for prevention, while 'lack of clarity' regarding responsibilities have led to delays in the commissioning of services and sometimes exacerbated tensions due to the cultural differences between organisations (Gadsby et al 2017).

This is one of the reasons – though only one – that our public health and prevention strategy across these four behaviours has been scattered rather than comprehensive. This is particularly clear for obesity, where few of the levers have been utilised and interventions are either sparse or inadequate. This has been recognised both by Public Health England (PHE), who have argued that there is no overall accountability or leadership and as a result pathways are disjointed (PHE 2015) and the Health and Social Care Select Committee (HoC 2018).

TABLE 3.1

	Smoking	Obesity
Fiscal policies	Consistently high taxation placed on packs of cigarettes, including excise duty, VAT and an additional surcharge. Excise duties increase at 2 per cent above inflation, while an additional 5 per cent increase in duty tax was place on hand rolling tobacco in 2016.	A sugar levy was introduced on soft drink manufacturers, which did lead to re-formulation of some products to include less sugar, but the overall tax was relatively small, with a maximum of 24 pence placed on every litre of drink containing excessively high sugar levels. Aside from this, many products such as cakes and some biscuits have a zero-rate for VAT.
Education	Teaching students about tobacco is part of PSHE lessons, with tailored guidance provided to teachers. In addition, there have been numerous local and mass media campaigns that have been implemented, such as 'Stoptober', led by Public Health England, which received a total campaign budget of £2.1 million in 2017.	There has been a reduction in physical education reported in schools and no direct control over the curriculum of academies to make it compulsory. In 2016, an estimated £5.2 million was spent on the flagship Change for Life campaign to encourage more physical activity and healthier eating.
Health nudges	Many laws serve as nudges to help discourage smoking. The indoor smoking ban, the display ban in stores, standardised packaging and warning label requirement all serve as ways of removing the temptation of smoking, without explicitly removing smoking as an option.	There are no obligations for health food placements in stores. Nutritional information is required on pre-packaged food, but the traffic light system to alert people to health risks is not mandatory. Restaurants are required to provide calorie information if they are part of a chain of 20 or more.
Regulations and legislation	Stricter regulation on tobacco include prohibited advertising for virtually all tobacco products, age restrictions both on smoking and tobacco purchase and penalties for proxy purchasing and on the illicit trade.	Advertising is rife, with up to £143 million spent on adverts for crisps, confectionary and sugary drinks. Junk food can be purchased by anyone regardless of age. Schools are required to provide healthy meals and limited in the number of times they can provide fried food, but again this does not apply to pre-existing academies. There is no restriction in what can be sold in the vicinity of schools.
Services	NHS smoking cessation services are offered, but all health professionals are expected to receive training and tools to help support people quitting. This is driven by co-operation between Public Health England and local authorities.	There are available obesity services, but recommendations of implementing a medical, multidisciplinary, multicomponent weight management service have yet to be realised. Generally the commissioning of comprehensive services has been found to be limited (Hughes 2015).

Source: Authors' analysis

In contrast, the approach to smoking was characterised by a comprehensive policy agenda that had a tangible, long-term impact. Successive tobacco control plans have built on legislation to 'curb advertising', standardise packaging, ban proxy purchasing, smoking in cars with children and in public buildings and ensure that PHE professionals have the information and training to help people quit. Over the course of the last tobacco control plan, adult smoking rates fell from 20.2 per cent to 15.5 per cent, the "lowest level since records began" (DHSC 2017).

In this paper, we argue that we need to rebalance our use of punitive and regressive levers - such as bans, regulation and sin taxes – towards more empathetic and assistive interventions to help people make better decisions and manage their health more effectively. However, we are not arguing that there is no role for these tools. The evidence is clear that the best public health and prevention strategies draw on all the levers we have available to drive better health behaviours and outcomes. We argue that going forward we need to learn the lessons from our successes on smoking and move from a scattered to a comprehensive health strategy.

4.
A NEW PREVENTION STRATEGY

POLICY RECOMMENDATIONS

The renewed focus on prevention across the NHS and DHSC provides us with an opportunity to deliver the desired paradigm shift laid out in the previous chapter. Using the overarching policy framework available to enact change, this section puts forward a series of ambitious, practical recommendations that can achieve a successful and compassionate prevention strategy. Together they help us shift the prevention strategy from a scattered approach to a comprehensive one. This means we must draw on all the policy levers available to us and aim to influence behaviours through the individual but also all the other institutions they engage with (eg school, the NHS and workplaces). But it also means that delivering on this should be a partnership between the state, business and industry, and civil society. Only then can the promise of prevention be realised.

FROM CONSOLIDATION TO INVESTMENT

Establish an increased funding settlement for the public health grant

The public health grant is essential for local authorities to deliver high-quality preventative services and support vulnerable communities. The combination of cuts to the grant and other sources of local authority funding, alongside increasing responsibilities and demand for services such as social care has put undue pressure on prevention efforts.

The impact of austerity on prevention services must be mitigated. We recommend that the grant should be immediately restored to its 2014/15 peak, meaning an increase of £600 million (Finch et al 2018). Once this has been achieved we propose that funding increases in line with the current NHS funding settlement (3.1 per cent every year until 2023/24) (The King's Fund 2018). This would see the grant rise to £3.2 billion by the end of that period, an estimated £1 billion more than we currently spend.
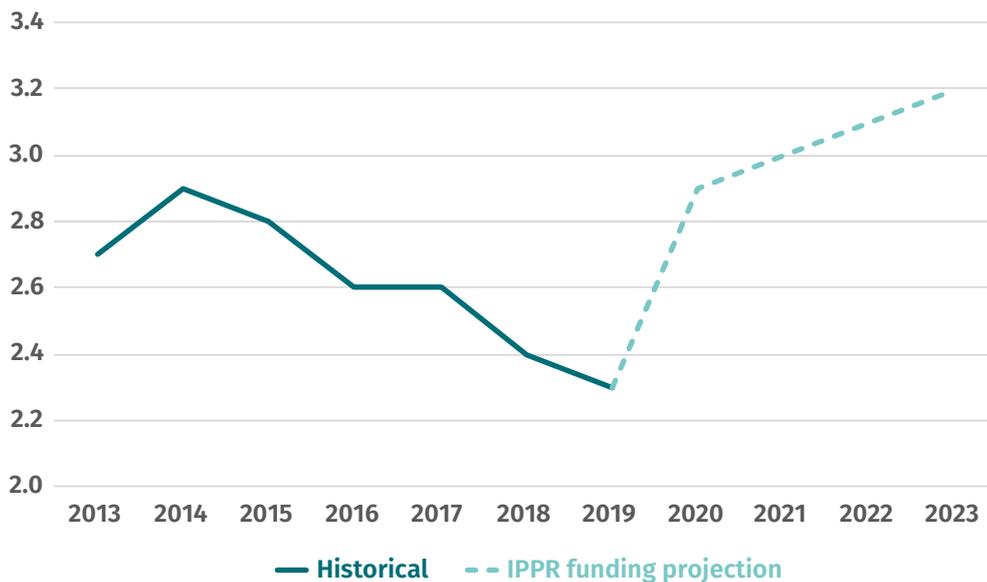
Source: Authors' calculations

The recent funding deal for the NHS - worth £20.5 billion by 2022/23 - and Long-Term Plan provide an excellent opportunity for a move towards 'radical prevention'. As it stands, 5 per cent of public health funding is spent on prevention. In 2016, the proportion of public health spending going to prevention in the UK was the second highest across the OECD, which provides a good base. But it is important that we maintain progress. The Long-Term Plan has committed to year-on-year spending increases as a share of total spending for primary and community care. We propose the same for prevention spending.

Likewise, although more funding was provided for mental health as part of the NHS Long-Term Plan, previous IPPR analysis has found an additional £1.2 billion per year will need to be spent on mental health by 2023/24 to set us on track to achieve parity of esteem (Quilter-Pinner and Reader 2018). Only then can we ensure that services are properly resourced to meet increasing demand and help support people with mental health conditions to address these This is important in its own right, but is also crucial in reducing negative health behaviours.

FIGURE 4.2: SPENDING ON PREVENTATIVE SERVICES AS PERCENTAGE OF OVERALL HEALTH SPENDING
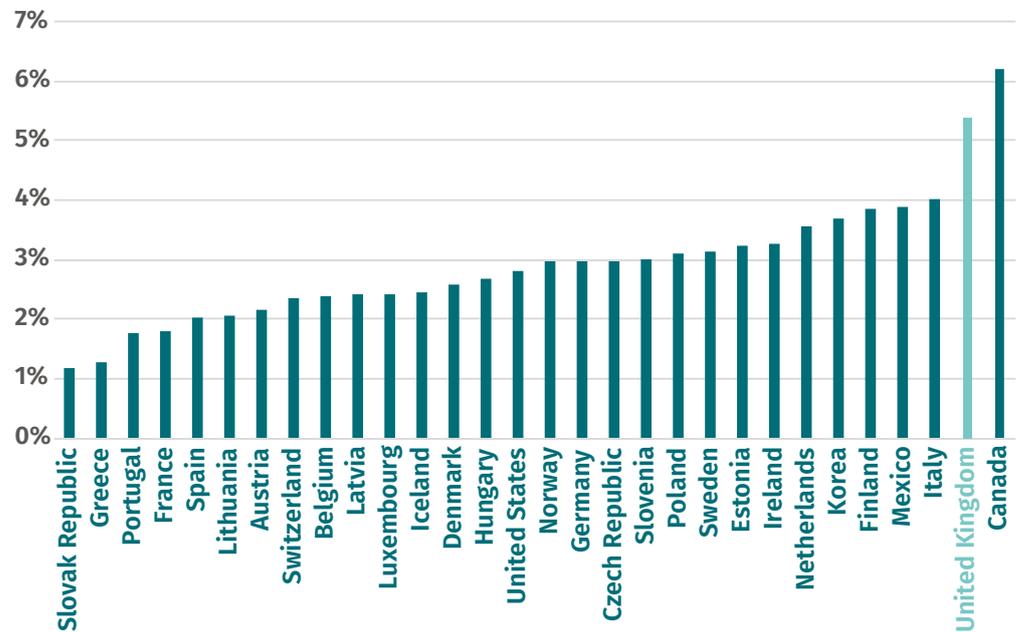
Source: OECD 2019

We also need to encourage action and investment across government. We therefore believe that all major policies and spending decisions should undergo a 'health audit' (similarly to initiatives on race and gender) to determine their impact on health outcomes. In addition, we reiterate the recommendation made by the Lord Darzi Review, which called for a new 'health in all policies' strategy to tackle the social determinants which should be overseen by a cabinet committee chaired by the prime minister (Darzi 2018).

FROM WAITING TO CREATING

Expand early intervention and public health initiatives for children to ensure everyone gets the best start in life

Childhood is a key stage of development which lays the foundation for personal health throughout the rest of life. We therefore propose a series of measures to promote healthier environments in the home and in school, not just for children, but their families too.

We should do the following.

- **Better support parents through universal perinatal mental health screenings and access to parental advice and training.** It is estimated between that maternal mental health problems occur in "between 15 and 25 per cent of all pregnancies" and that this can an adverse impact on the development of the child in the womb and continue after birth, especially when the mother lacks adequate social support (Asmussen and Brims 2018). Providing universal mental health screenings for new parents and access to treatment where appropriate can help address this. Parental advice and training programmes have also proven to be effective (PHE 2014b). NICE should investigate best practice to develop a series of programmes that can be used to effectively support different groups.

- **Mandate five health visits during early childhood, with an additional visit scheduled six months prior to starting nursery school.** These should be carried out by a trained professional. Health visitors should be provided with additional training to collect vital information on key health indicators and be prepared to offer support and guidance to encourage breastfeeding based on clinical evidence and ensuring that parents are vaccinating their children. However, an estimated two in five (44 per cent) of health visitors reported caseloads in excess of 400 children, well above the recommended level of 250 per visitor to deliver a safe service (IHV 2018). To this end, PHE should work alongside Health Education England to create an additional 5,100 training places for health visitors to address recruitment issues.[2]

- **Provide every child in a household receiving universal credit with free school meals.** Free school meals have been found to "improve educational and health outcomes" for children from low income families (Farthing 2012). Recent reforms linked free school meals to an earning threshold, which if exceeded means a significant increase in costs for low-income families to provide their children with nutritious food (CPAG 2018). This should be replaced by providing every child living in a household receiving universal credit with a free school meal. This would mean providing free school meals to an additional 700,000 children, at a rough cost of an extra £275 in 2020,[3] generating significant health and economic benefits to low-income households.

- **Provide extra funding for physical education in schools.** Physical education (PE) has been reduced in schools across England, with a 5 per cent reduction at key stage 3 and 21 per cent reduction across key stage 4 reported between 2011 and 2017 (TES 2018). This is despite noted benefits of physical education, not simply on physical development, but also through promoting healthier lifestyles and helping enhance cognitive and social skills (Bailey 2006). Schools have a responsibility to look after the wellbeing of their pupils and the promotion of better physical and mental health creates a "virtuous circle reinforcing children's attainment and achievement" (PHE 2014a). Funding for physical education – supposedly coming from the sugar tax revenues - was reduced in 2017 from £415 million to £100 million to part fund an increase in the core school budget (Foster 2018). The lost funding should be replenished, potentially funded by an expansion of the sugar levy to other drinks and confectionary with high sugar content.

FROM PUNITIVE TO EMPATHETIC
Improve strategies to identify at-risk individuals and communities and provide accessible support

Once someone's health behaviours have become more entrenched, it is harder for people to transition towards a healthier lifestyle. But it is far from impossible: people can make better decisions if they are supported through access to services and evidence-based support programmes. Equally, it is crucial that once people are diagnosed with a long-term condition that they are supported to properly manage this to prevent it getting worse. We recommend a number of policies to help make this shift from 'blame and punish' to 'empathise and assist' happen.

We should do the following.
- **Utilise technology and data to better identify and support people at risk of ill-health.** Big data and artificial intelligence can help the NHS detect disease earlier, identify causal risks and monitor population health needs to deliver

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2   Based on future 2020 projections of children between the ages of 0 and four, and current health visitors numbers of an estimated 2,800.
3   Based on government projections that 1.1 million pupils would receive free school meals should the current criteria of eligibility based on receipt of universal credit were to continue. We use a cost of £2.30 per meal across the required 190 days of schooling mandated and assuming a 90 per cent uptake rate.

better preventative care.. Advancing technology has also made it possible to implement geo-spatial mapping as a means of identifying local features which determine health outcomes. This has a diverse range of applications, from determining the causes of local vaccination coverage to the relationship between fast food prevalence and obesity (Jacobs 2012). This creates new opportunities for tailored prevention strategies, risk-stratification and early interventions. Efforts are already being made to effectively utilise data for public health benefits in the UK. One initiative across Kent and Medway has used integrated data sets to track health progression and gain new 'epidemiological insights' into the wider determinants of health (Lewer et al 2018). We recommend a new information governance scheme that resolves issues around privacy which have hindered NHS efforts to adopt best practice. We also recommend that NHS providers within each local area should be mandated to integrate data sets, building on successful examples such as the initiative in Kent.

- **Ensure everyone exhibiting risky behaviour or with a newly diagnosed condition has access to a personal care plan, social prescribing and peer support networks.** The NHS Long-Term Plan commits to delivering many of these interventions. In particular, they promised to roll out 'universal personalised care' – a package of six empowerment interventions including social prescribing, care plans and support networks – to 2.5 million people by 2023/24 doubling it to 5 million people by 2028/29. We support this pledge but argue that an entitlement to these interventions should be put into the NHS Constitution to ensure that people get access to them. More importantly we also argue that to deliver on these promises government must act to support civil society to help deliver these interventions, particularly in areas with a smaller charity sector. This should include a funding mechanism – akin to a social prescribing tariff - for those organisations delivering social prescribing in a local area. In areas with less active civil society (and therefore less choice in terms of social prescribing), the NHS and local authorities should come together with local charity partners to co-design and fund new activity.

- **Introduce opt-out services and treatments for patients who come into contact with the health service**. We recommend the introduction of opt-out services designed to better prevent poor health from developing, which will shift the onus of responsibility from the individual onto the health service. This will include opt-out vaccinations provided for any patient who enters the health service and is eligible for a free NHS vaccine as recommended by NICE. These should not just target children but people of all ages with evidence that vaccination for flu and pneumococcal disease in later life are also effective (Burke 2018). We also argue for the introduction of opt-out smoking cessation referrals for anyone entering the health service who smokes. In addition, more efforts should screen people who require mental health treatment. We recommend that those who come into contact with mental health services should be screened for tobacco, alcohol and drug use. Referrals should be made to appropriate services if co-existing harmful behaviours are found. This will include a range of support measures including vaping prescriptions, therapy and other approved methods that induce behavioural change.

- **Mandate and regulate access to evidence-based services and treatments.** The health system is notoriously bad at spreading best practise services and treatments. The rationing associated with austerity has made this even more challenging. This can be seen in the cuts made to drug and alcohol services, smoking cessation services (BMA 2018) and the slow adoption of ground-breaking new treatments and services for HIV and hepatitis C (Baylis et al 2017). We recommend a new NHS-wide effort to prioritise early and appropriate treatment for chronic conditions which place a burden on the health service, including an end to the recently introduced affordability

threshold for new medicines. We also argue that NICE (in partnership with CQC) should be given more power to not just regulate access but also enforce uptake of best practise services, treatments and technologies. In addition to treatments, screening services should also be expanded for at-risk groups. Good practice such as Manchester's Lund Health Check Pilot, which was found to be effective in reaching out to local community (Macmillan 2016) should be rolled out across the country, to encourage and increase screening uptake.

FROM INDIVIDUAL TO COLLECTIVE

Transform the commercial and social environment to shift public health responsibilities

The commercial and social environment plays a central role influencing behaviour. Collective efforts to shape the environment to be more conducive for better health must be entrenched in a modern prevention strategy. We must embed societal responsibility into prevention strategy to address the core health challenges previously mentioned. To do this we recommend a number of measures.

- **Create a smoke-free generation by raising the minimum age of smoking to 21 years.** Smoking during adolescence is associated with a greater likelihood of dependence through later life (Breslau et al 1993). To normalise a smoke-free generation, we recommend that the minimum age to smoke and purchase tobacco be raised to 21. This is in line with evidence from the United States that found counties which raised the minimum smoking age to 21 saw a 'greater decline in youth smoking' relative to those counties that did not (Schneider et al 2015). The smoking ban should also be extended to all public places. Finally, efforts should be made to crack down on illicit tobacco trade which affects people from lower socioeconomic backgrounds more (ASH 2017).

- **Create a new 'social contract' between government and food businesses to make the healthy choice the easy one.** We currently live in a 'pro-obesity society', where the unhealthy option is cheaper and easier to access. We must reduce the visibility and availability of harmful food products whilst increasing relative cost. We put forward several recommendations to achieve this.
    - Plain packaging for confectionery, crisps and high-sugar drinks: This would level the playing field between confectionary products and fruit and vegetables which do not benefit from the same level of branding and product recognition. This mirrors the action taken against smoking without reducing the availability of confectionary.
    - Providing free fruit and vegetables for children: With over 4.5 million tonnes of edible fruit and vegetables wasted every year for aesthetic reasons (Porter et al 2018), there should be stricter regulations to re-purpose this to deliver free fruit and vegetables to schools and other community organisations.
    - Extending the 'sugar levy': The sugar levy should be extended to cakes and confectionary, with the proceeds again being earmarked for investing into physical education and local sports facilities.
    - Provide community cooking classes: Supermarkets with over 5 per cent of the share of the grocery market should be compelled to fund community cooking classes through a small levy on profits. This would engender greater social responsibility and community engagement,
    - Ban fast outlets near schools: Local authorities should use their powers to "limit the opening of additional fast food outlets" near schools to reduce obesity (DHSC 2016) (Pathania et al 2016). By 2025 there should be no fast food restaurants with 0.1 miles of schools in England. Additional support and financial incentives that compensate local authorities for

the potential lost business tax revenue should be considered to help ease any financial pressures.
- Food board for children: A food board should be created to monitor and regulate the formulation of foods to cut down on salt and sugar content, starting with foods aimed at children under the age of five who have no agency over what food and drink they consume.

- **Reform regulation on advertising on TV, radio and in public spaces to help promote healthy lifestyles.** Changing the ways in which unhealthy goods are marketed is crucial. A systematic review of evidence found that screen advertising for unhealthy food resulted in an increase in food consumption among children (Russell at al 2018). Previous research has found that a general reduction in advertising exposure can "significantly lessen household purchasing" of unhealthy foods (Huang and Yang 2013). Based on this evidence, we recommend that advertising for fast food, soft drinks, confectionary and other processed food be subject to a 9pm watershed. Advertising in public spaces should be similarly regulated. In the space of commercial advertising, the government should create a new advertising campaign – similar to previous ones on smoking and alcohol - on diet and exercise.

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APPENDIX

DALYS, OECD RANKING 1990-2017

	1990 rank	2000 rank	2010 rank	2017 rank
Israel	1	1	1	1
Iceland	3	2	2	2
Ireland	13	15	4	3
Norway	17	14	7	4
Australia	6	4	3	5
Sweden	15	12	11	6
New Zealand	10	6	5	7
Switzerland	11	11	15	8
Luxembourg	21	16	13	9
France	5	7	14	10
Spain	9	13	8	11
Chile	4	3	6	12
Canada	7	8	9	13
South Korea	8	9	12	14
Japan	2	5	10	15
United Kingdom	26	21	17	16
Finland	20	17	18	17
Netherlands	12	19	19	18
Austria	18	20	22	19
Mexico	22	10	16	20
Italy	19	22	20	21
Belgium	24	25	25	22
Turkey	33	29	23	23
Denmark	28	27	26	24
Portugal	25	26	24	25
United States	16	18	21	26
Slovenia	23	28	28	27
Germany	27	24	27	28
Greece	14	23	29	29
Estonia	31	33	31	30
Slovakia	30	30	30	31
Poland	29	31	33	32
Czech Republic	34	32	32	33
Hungary	35	35	34	34
Latvia	32	34	35	35

Source: OECD 2019

DEATHS, OECD RANKING 1990–2017

	1990 rank	2000 rank	2010 rank	2017 rank
Israel	5	5	1	1
South Korea	2	3	2	2
Chile	1	1	3	3
Iceland	6	4	4	4
Ireland	19	16	6	5
New Zealand	8	7	7	6
Mexico	3	2	5	7
Norway	21	18	13	8
Australia	9	8	8	9
Luxembourg	20	14	11	10
Canada	7	10	10	11
Switzerland	14	13	14	12
Turkey	12	9	9	13
Sweden	22	19	20	14
France	10	11	15	15
Japan	4	6	12	16
Spain	11	17	16	17
Finland	17	12	18	18
United States	13	15	17	19
United Kingdom	29	26	21	20
Netherlands	18	21	19	21
Austria	24	22	23	22
Slovenia	15	20	22	23
Denmark	30	30	25	24
Portugal	23	24	24	25
Belgium	26	29	26	26
Italy	25	27	27	27
Germany	28	25	28	28
Slovakia	31	31	31	29
Estonia	32	33	33	30
Poland	27	28	30	31
Czech Republic	34	32	32	32
Greece	16	23	29	33
Hungary	35	35	34	34
Latvia	33	34	35	35

Source: OECD 2019

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