Obesity and coronavirus – where next for policy?

The case for a Health in All Policies approach to reducing obesity

Scott Corfe Jake Shepherd

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EXECUTIVE SUMMARY

Obesity and overweight have become major public health issues in the UK and indeed elsewhere. In Europe, one in seven premature deaths could be prevented if people had a healthy weight. Obesity is the second largest cause of premature death across Europe and North America, after smoking. We estimate that about a quarter (26%) of the regional variation in health deprivation across England can be explained by differences in overweight and obesity rates.

The Coronavirus pandemic has further highlighted the health consequences of living with an unhealthy weight. Analysis has shown that people with obesity who contract COVID-19 are 113% more likely than people of healthy weight to be hospitalised, 74% more likely to be admitted to an intensive care unit (ICU), and 48% more likely to die.¹

In response to this, the UK Government has unveiled a new obesity strategy to get the country to "lose weight to beat coronavirus (COVID-19) and protect the NHS". A wide range of policies are being explored as part of the strategy, including bans on junk food advertising, restrictions on "buy one get one free" deals on unhealthy food, calorie counts on restaurant menus and an expansion of NHS services.

Getting the obesity strategy right will be crucial if the UK is to reduce the substantial health and economic inequalities that exist in the UK. Obesity is a complex condition – far more so than overly simplistic narratives about diet and exercise suggest. Underlying health conditions, crime, the environment, food formulation and the economy all have an important bearing on our weight – and indeed our health more broadly.

This report explores what the data tell us about obesity, the current policy landscape and the likely effectiveness of policies announced to date in the Government's obesity strategy. As well as drawing on SMF desk research and data analysis, the report has also been informed by a nationally representative survey from Opinium, commissioned as part of this study.

Key findings

Headline statistics

- Since 1980 the proportion of the UK population that has either overweight or obesity has approximately doubled, from 36% to 63% by 2018. This proportion has been broadly stable since the early 2000s, with most of the increase occurring during the 1980s and 1990s.
- Homing in specifically on obesity (Body Mass Index of 30 or more), prevalence increased steeply between 1993 and around 2000, with a slower rate of increase after that. In 2017, the proportion of adults in England living with obesity was 29%. Morbid obesity (BMI of 40 or more) has also increased, from fewer than 1% of adults in England in 1993, to nearly 4% in 2017.

¹ Novo Nordisk provided sponsorship to the Social Market Foundation (SMF) to fund the Opinium survey questions referred to in this report. The SMF finalised these questions with input from Opinium. Novo Nordisk has had no influence over the use of this data, including the selection of the results and analysis of the data. The survey sample was 2,000 UK adults, and the survey was carried out between 11th September 2020 and 15th September 2020.

- Among OECD countries, the UK has a higher-than-average proportion of the population with overweight or obesity significantly above France (46%), Italy (45%), Korea (33%) and Japan (24%). Notably, Anglo-Saxon economies the US, New Zealand, Australia, the UK, Ireland and Canada account for six of the ten OECD countries with the highest rates of overweight and obesity.
- There are important demographic variations in obesity rates across England. Notably:
 - A slightly larger proportion of women than men are living with obesity at 30% compared with 27%. However, a greater proportion of men have overweight at 40% compared with 31%.
 - By age group, obesity rates are greatest among those aged 45-54, at 36% of all adults in this age group. Obesity rates rise with age up to this age group, and then subsequently decline.
 - By income group, obesity rates are greater among lower income households. This is largely driven by women, for whom obesity rates vary much more greatly across income groups.
 - At a regional level, we note some significant variation; while 23% of adults in London have obesity, this rises to 32% of adults in the South West of England. That is to say, adults in the South West are about 40% more likely to have obesity than those in London.
 - Black adults were the most likely out of all ethnic groups to have overweight or obesity, with 74% of adults having excess weight. Adults from the Chinese ethnic group were the least likely out of all ethnic groups to have overweight or obesity, at 35%.

Drivers of the rise in obesity and overweight

- Obesity and overweight are complex problems. Major drivers of the rise in obesity and overweight across multiple countries include the food environment, marketing of unhealthy foods and beverages, urbanisation and reductions in physical activity. The World Health Organisation notes that "changes in dietary and physical activity patterns are often the result of environmental and societal changes associated with development and lack of supportive policies in sectors such as health, agriculture, transport, urban planning, environment, food processing, distribution, marketing, and education".
- In the UK, it has been estimated that increased energy intake (calorie consumption) accounted for the entirety of the increase in body weight in women between 1986 and 2000, but not in men. For men, the increase in body weight over this time period is likely to be due to a combination of increased total energy intake and reduced physical activity levels.²
- A number of health conditions can lead to weight gain or make weight loss difficult. The NHS highlights hypothyroidism ("underactive thyroid"), diabetes treatment, ageing, steroid treatment, Cushing's syndrome, stress, low mood and polycystic ovary syndrome as factors that can lead to weight gain, or make it difficult for individuals to lose weight.
- In the Opinium nationally representative survey commissioned as part of this research, among those self-describing as having obesity, just over a third (35%) said they had a medical condition that makes weight loss difficult.

COVID-19 and weight management

- In the Opinium survey, a fifth (20%) of survey respondents said that they had taken new steps to reduce their weight because of coronavirus. A further 23% said that they were planning to take steps in the future. Over half (52%) have not taken steps nor do they intend to.
- Those self-reporting as having overweight and obesity were more likely to report
 currently taking steps to lose weight in response to coronavirus at 24% and 28%
 respectively. Just over two fifths (41%) of individuals that have overweight and 28% of
 individuals that have obesity reported that they were not taking steps to lose weight, nor
 intending to.
- Among those currently taking steps to lose weight, the most frequently cited steps
 were doing more exercise (42%) and eating smaller portions generally (also 42%). One
 in ten (10%) said they were using the internet to research ways of losing weight, with a
 similar proportion (9%) saying they were seeking or about to use specialist weight
 management support such as weight reduction programmes or psychological
 approaches.
- Close to half (45%) of survey respondents said that the coronavirus pandemic might have had a negative impact on their ability to lose or manage their weight. A quarter (23%) said that the pandemic had led to them getting less exercise, while just under a fifth (18%) said the pandemic had led to them eating more or eating a poorer diet. Those with overweight and obesity are more likely to have reported that the pandemic had led to eating more/a poorer diet and reduced amounts of exercise.
- Further, the pandemic has had a negative impact on access to weight management services and other treatment options. According to a Public Health England survey of weight management service users, 61% of respondents reported that their tier 2ⁱⁱ service had been cancelled or delayed, and 78% of respondents reported that their tier 3ⁱⁱⁱ service had been cancelled or delayed. Only 30% of respondents felt they have received enough support or information from their weight management service during lockdown.
- It is important to note that while individuals may not be taking steps to lose weight in response to coronavirus, they may be taking steps to lose weight for other reasons. In the Opinium survey, over half of those with obesity that expressed an interest in losing weight said that improving self-esteem (58%) and wanting to improve one's appearance (57%) were key drivers of wanting to lose weight. Just under two fifths (38%) said they wanted to lose weight due to having high blood pressure.

Measuring and discussing obesity

 While the Body Mass Index (BMI) is the most widely used measure of the healthiness of an individual's weight, it has inherent flaws. Critically, it does not distinguish between

[&]quot; Primary care with community interventions.

iii A community/primary care based multi-disciplinary team (MDT) to provide an intensive level of input to patients (Tier 3 WMP).

fat and lean body mass, which can lead to misclassification of some individuals as having overweight or obesity.

- Widely used thresholds for overweight and obesity using the BMI may not be appropriate for some ethnic groups. It has been argued that such thresholds are Eurocentric, with Asians twice as likely to be misclassified by the BMI. At the same BMI, Asians are more than twice as likely to develop type 2 diabetes than white populations, and have higher risk of cardiovascular disease. Conceivably, misclassification may prevent individuals from seeking help to lose weight or lead to a lack of health intervention when it would be beneficial.
- More broadly, the discussion of obesity and overweight is often highly stigmatising, with a narrative that often focuses on blaming individuals for their weight, or even labelling individuals as lazy or of poor intelligence purely on the basis of their weight.
- In healthcare, health professionals stereotype and show less time and respect for patients with higher BMI, while individuals who perceive their weight status as overweight are more likely to overeat and gain weight arguably reflecting stigma and the negative impacts of being perceived to be overweight on wellbeing. This highlights how the public discourse around obesity can undermine efforts to improve public health.

The policy landscape

- To date, the Government's obesity strategy contains a number of important policy announcements which could help to reduce obesity rates and improve access to medical help to lose weight. This includes restrictions on the marketing of junk food, improved food and drink labelling and an expansion of NHS weight management services.
- However, we are concerned that too much of the strategy focuses on individual responsibility to lose weight. New policies, such as adding calorie counts to alcoholic drinks and restaurant menus, can be effective only insofar as people have the adequate levels of time, as well as the psychological and material resources to engage with them.
- Other issues with the obesity strategy include:
 - A lack of efforts to shift the rhetoric around obesity and reduce stigma related to the condition. The strategy as it stands will not improve the public portrayal of obesity and the pervasive "blame culture".
 - A lack of detail around how and if the funding that is necessary to reduce obesity will be provided. Without further financial support for local authorities and Clinical Commissioning Groups, it is unclear how local-level policy interventions can be implemented. Notably, the recent Spending Review made no mention of obesity or the Government's obesity strategy.
 - A lack of clarity around who will take the obesity strategy forward following the
 abolition of Public Health England. Due to a shakeup whereby PHE is merged into
 a new body, the National Institute for Health Protection, which will be focus on
 external threats to the UK, such as pandemics and infectious diseases, there is
 concern that staff who specialise in obesity may become peripheral to the debate
 reducing the likelihood of positive change.

- Notably, the obesity strategy does not announce broader sugar taxes, building
 on the Soft Drinks Industry Levy which successfully led to a reduction of sugar
 content in soft drinks. This is despite a widespread belief among health experts
 that such taxes could successfully curb consumption of unhealthy foods either
 through price rises deterring consumption, or taxes encouraging food & drinks
 manufacturers to reformulate products to make them healthier.
- A lack of commitment to ending the uneven access to medical treatment for weight loss across the country. The Royal College of Surgeons in England and British Obesity & Metabolic Surgery Society have argued that patients are being denied access to bariatric surgery because intensive weight loss programmes, which are a prerequisite to surgery, are not being commissioned in some areas. A 2018 Freedom of Information Request found that only 52% of local authorities commission Tier 1 weight management services, while 82% commission Tier 2 services. It also found that just 57% of Clinical Commissioning Groups (CCGs) commissioned Tier 3 services.
- Within the obesity strategy, there is a lack of "whole systems" thinking around how the socioeconomic environment contributes to obesity and overweight. For example, the role that car-dependent urban design can play in reducing rates of physical activity, how crime in deprived areas can act as a deterrent to adults and children engaging in outdoor exercise, or how the mental health impacts of poverty can drive behaviours such as overeating/comfort eating.
- The obesity strategy needs to explore how men can be encouraged to seek medical help for weight loss. While women are more likely than men to be eligible for weight loss surgery (58% of those eligible are women and 42% are men), the proportion of women receiving surgery is significantly higher (76% vs 24%). This is likely to reflect cultural factors that prevent men from seeking medical help.

Where next for policy?

- A "whole systems" approach to reducing obesity is needed. This means considering how all aspects of policymaking can impact overweight and obesity rates in the UK.
- The UK could learn from Finland's "Health in All Policies" approach by ensuring that public health impacts (including impacts on overweight and obesity) are considered in all evaluations of spending, taxation and regulatory policy. By making policymakers in fields as broad as housing, crime, the environment, transport and business think about the health implications of decisions and making this a key factor in deciding whether a policy should go ahead we can gradually move towards a whole systems approach to obesity.
- As well as a commitment to funding, the Government needs to urgently provide clarity around who will drive the obesity prevention and reduction agenda in Public Health England's absence. Similar concerns apply to other health issues including alcohol, tobacco and sexual health.
- The Government should explicitly pledge to eliminate the postcode lottery in access to weight management services as part of its obesity strategy.
- Government should undertake a cost-benefit analysis to set a target for the proportion of the population with obesity that would benefit from bariatric surgery and pharmacological interventions. At present 0.2% of people in England eligible for weight

loss surgery have received it. This is lower than the 0.5% seen in Canada and 1.2% seen in the US.

- Tackling stigma has to form a key part of a whole systems approach to reducing obesity rates. Stigmatization of individuals with obesity threatens health, generates health disparities, and interferes with effective obesity intervention efforts. There is scope for government to explicitly state that weight bias and obesity discrimination should not be tolerated in education, health care and the workplace.
- The Government should consider the case for new taxes on unhealthy products to encourage the consumption and manufacture of healthier food and drinks.

CHAPTER 1 - INTRODUCTION

The past four decades have seen obesity become a significant public health issue. A recent study found that obesity was the second largest cause of premature death across Europe and North America, after smoking. Researchers calculated that, in Europe, one in seven (14% of) premature deaths could be prevented if people had a healthy weight^{iv}, rather than overweight or obesity.³

The Coronavirus pandemic has further highlighted the importance of reducing obesity and overweight rates in the UK. Emerging evidence suggests a link between COVID-19 deaths and obesity, and researchers have expressed concern that a coronavirus vaccine will be less effective among individuals living with obesity.⁴

The apparent link between COVID-19 mortality and obesity has prompted the UK Government to take action. The unveiling of a new obesity strategy in 2020 was driven explicitly by a desire of government to get the country to "lose weight to beat coronavirus (COVID-19) and protect the NHS".⁵ A wide range of policies are being explored as part of the strategy, including bans on junk food advertising, restrictions on "buy one get one free" deals on unhealthy food, calorie counts on restaurant menus and an expansion of NHS services.

Getting the obesity strategy right will be crucial if the UK is to reduce the substantial health and economic inequalities that exist in the UK. It has been shown that being on a low income is associated with higher risks of obesity – particularly among women. Much attention has been given to how poverty can lead to an unhealthy diet or lifestyle, for example due to the relative expensiveness of "eating well" and the mental health implications of poverty which may trigger behaviours such as "comfort eating". A recent study has also suggested that obesity may lead to lower incomes, for example due to individuals being unable to work as a result of poor health, or due to the stigmatisation of those with obesity. Causation between economic inequality and obesity may therefore run in both directions.

With a view to stimulating policy debate, this report explores what the data tell us about obesity, the recent policy landscape, and the extent to which the Government's obesity strategy is likely to be successful. As well as drawing on SMF desk research and data analysis, the report has also been informed by a nationally representative survey from Opinium, commissioned as part of this study. V

The structure of this report is as follows:

- Chapter 2 explores what the data show us about obesity its prevalence, the groups at most risk of obesity and the health consequences.
- Chapter 3 homes in specifically on the emerging evidence base around COVID-19 and obesity.

^{iv} Explanatory note on terminology: this report uses the term "healthy weight" to denote a weight that accords with the NHS definition of healthy weight. We acknowledge that this is a broad definition, based on BMI, that can exclude people whose weight is healthy. The use of this term implies no judgement. Further issues around definition are discussed later in the report.

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- Chapter 4 examines whether conventional measures of excess weight specifically those based on the body mass index - are the right ones. It also discusses public discourse around obesity, and the negative implications of stigmatisation of those living with obesity.
- **Chapter 5** examines the politics of obesity, including how stigma shapes public attitudes towards obesity and efforts to reduce its prevalence.
- Chapter 6 concludes with an exploration of where policymakers need to go next in their efforts to reduce obesity rates and help those living with obesity.

What do we mean by overweight and obesity?

The most widely-used gauge of the healthiness of someone's weight is the body mass index (BMI). The BMI calculation divides an adult's weight in kilograms by their height in metres squared.

For children and young people aged 2 to 18, the BMI calculation takes into account age and gender as well as height and weight.

According to the NHS, for most adults, an ideal BMI is in the 18.5 to 24.9 range. If your BMI is:

- Below 18.5 you are categorised as having underweight
- Between 18.5 and 24.9 you are categorised as having a healthy weight
- Between 25 and 29.9 you are categorised as having overweight
- Between 30 and 39.9 you are categorised as having obesity
- 40 or above you are categorised as having morbid obesity

For the purposes of this report, unless otherwise specified, we use these definitions of overweight and obesity. However, as we acknowledge within the report, there are some issues with the BMI, which mean that healthcare professionals may take other factors into account when assessing whether someone is a healthy weight. For example, BMI might not work well for very muscular individuals, as muscle is much denser than fat. Ethnicity can also affect the healthiness of a given weight; adults of Asian origin may have a higher risk of health problems at BMI levels below 25.

CHAPTER 2 - WHAT DO THE DATA SHOW US ON OBESITY?

Headline statistics – the growth in obesity rates since the 1980s

Since 1980 the proportion of the UK population that has either overweight or obesity has approximately doubled, from 36% to 63% by 2018. As the chart below shows, this proportion has been broadly stable since the early 2000s, with most of the increase occurring during the 1980s and 1990s.

Figure 1: Proportion of UK population aged 15+ with overweight or obesity, %

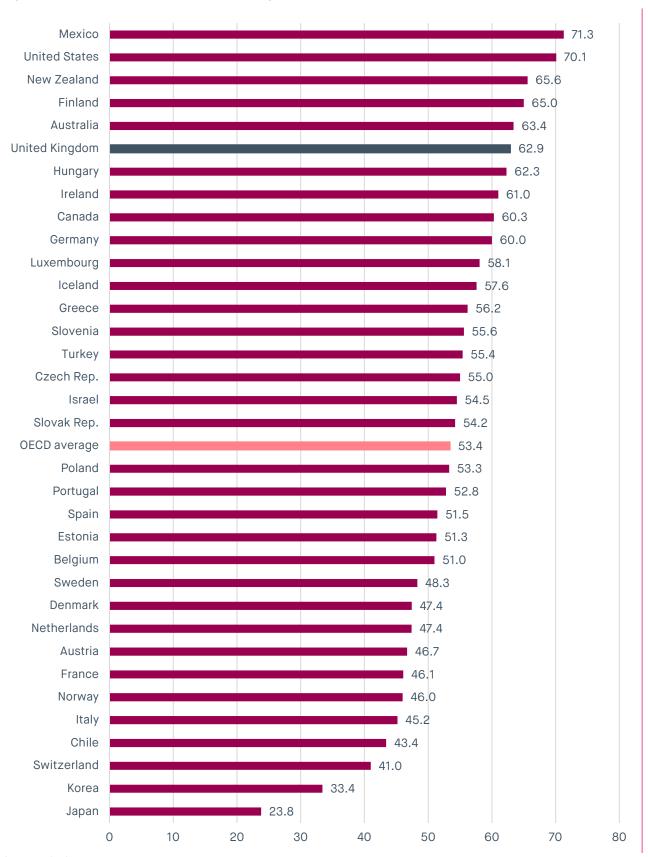
Source: OECD

Homing in specifically on obesity (BMI of 30 or more), prevalence increased steeply between 1993 and around 2000, with a slower rate of increase after that. In 2017, the proportion of adults in England living with obesity was 29%. Morbid obesity (BMI of 40 or more) has also increased, from fewer than 1% of adults in England in 1993, to nearly 4% in 2017.⁷

How the UK compares with other countries

Among OECD countries, the UK has a higher-than-average proportion of the population with overweight or obesity – significantly above France (46%), Italy (45%), Korea (33%) and Japan (24%). Notably, Anglo-Saxon economies – the US, New Zealand, Australia, the UK, Ireland and Canada – account for six of the ten OECD countries with the highest rates of overweight and obesity. This raises questions around the extent to which the Anglo-Saxon economic model, with its focus on light regulation, a relatively contained government and emphasis on individual responsibility – may drive higher rates of obesity compared with economic models where state involvement and regulation are more prominent. Ted Schrecker and Clare Bambra, in their book *How Politics Makes Us Sick*, have argued that the insecurity and inequality resulting from 'market fundamentalist' economic models are hazardous to our health, including with respect to obesity-related poor health.⁸

Figure 2: Proportion of adults with overweight or obesity, %



Source: OECD

Why are overweight and obesity on the rise?

Obesity and overweight are complex issues. Major drivers of the rise in obesity and overweight across multiple countries include the food environment, marketing of unhealthy foods and beverages, urbanisation and reductions in physical activity.⁹

The World Health Organisation (WHO) notes that "the fundamental cause of obesity and overweight is an energy imbalance between calories consumed and calories expended" and that globally there has been an increased intake of energy-dense foods that are high in fat and sugars. This has combined with an increase in physical inactivity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanisation. WHO recognises the complex drivers of these trends, noting that "changes in dietary and physical activity patterns are often the result of environmental and societal changes associated with development and lack of supportive policies in sectors such as health, agriculture, transport, urban planning, environment, food processing, distribution, marketing, and education." ¹⁰

In the UK, it has been estimated that increased energy intake (calorie consumption) accounted for the entirety of the increase in body weight in women between 1986 and 2000, but not in men. For men, the increase in body weight over this time period is likely to be due to a combination of increased total energy intake and reduced physical activity levels.¹¹

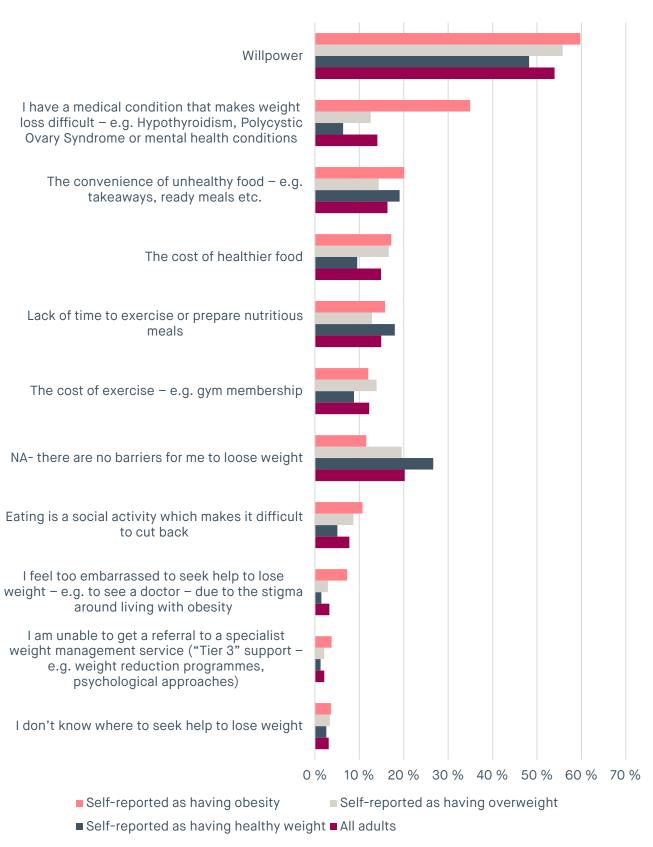
Adding further complexity is the role that other health conditions can play in weight gain. The NHS, for example, highlights hypothyroidism ("underactive thyroid"), diabetes treatment, ageing, steroid treatment, Cushing's syndrome, stress, low mood and polycystic ovary syndrome as factors that can lead to weight gain, or make it difficult for individuals to lose weight.¹²

Conceivably, the rise in obesity rates in recent decades may also reflect trends in other conditions. For example, studies have suggested a bidirectional relationship between obesity and depression, with depression raising the risk of obesity and vice versa.¹³

In the Opinium nationally representative survey commissioned as part of this research, we asked those wanting to lose weight what they thought the main barriers to doing so were. Willpower was by far the most-commonly cited barrier across the sample, with just over half (54%) of survey respondents reporting this as a barrier. The next most frequently cited barrier was the convenience of unhealthy food (16%) followed by the cost of healthier food and lack of time to exercise or prepare nutritious meals (both 15%).

Among those self-describing as having obesity, just over a third (35%) said they had a medical condition that makes weight loss difficult. This highlights the need for the debate around obesity reduction to go beyond an overly simplistic narrative of diet and exercise change; for many, medical intervention and treatment of other health conditions may be necessary.

Figure 3: You mentioned earlier that you would like to lose weight. What are the main barriers to you losing weight?



Source: Opinium survey

What are the health and social implications?

As mentioned earlier, obesity and excess weight are estimated to account for about one in seven premature deaths in Europe – the second largest driver of premature death after smoking. This reflects the fact that overweight and obesity are linked to a number of potentially serious health problems, including:

- · Heart disease and strokes
- Type 2 diabetes
- Certain cancers, such as cancer of the uterus, cervix, endometrium, ovary, breast, colon, rectum, oesophagus, liver, gallbladder, pancreas, kidney and prostate. Cancer UK has reported that keeping a healthy weight could prevent around 22,800 cases of cancer every year in the UK.¹⁴
- Gallbladder disease
- Liver problems
- Sleep apnea¹⁵

Morbid obesity is a serious health condition that can interfere with basic physical functions such as breathing or walking.¹⁶

The health implications of overweight and obesity place significant financial strain on public services. It was estimated that the NHS spent £6.1 billion on overweight and obesity-related ill-health in 2014 to 2015, and that annual spend on treatment of obesity and diabetes is greater than the amount spent on the police, the fire service and the judicial system combined. The overall cost of obesity to wider society is estimated at £27 billion per annum. By 2050, the annual NHS costs of treating overweight and obesity-related ill health are forecast to rise to £9.7bn by 2050, with wider costs to society expected to reach close to £50bn. ¹⁷

Analysis by the McKinsey Global Institute showed that obesity is the second-largest human-generated cost to the UK, after smoking – standing at 3.0% of GDP in monetary terms. This analysis captured the cost of human-generated impacts in terms of disability-adjusted life years lost, lost productivity due to disability and death, costs to the healthcare system and investment by government to mitigate these costs. The societal cost of obesity in the UK was estimated to stand above armed violence and war, alcoholism, drug use and outdoor air pollution.¹⁸

SMF analysis of ONS measures of deprivation also suggests that excess weight explains a significant proportion of health inequalities across local authorities in England. About a quarter (26%) of the regional variation in health deprivation across the country can be explained by regional variations in overweight and obesity rates. That is to say, overweight and obesity explain a significant proportion of the health and life expectancy disparities seen across the country.

Smoking 3.6 3.0 Obesity Armed violence, war and terrorism 2.5 Illiteracy (inc. functional illiteracy) 2.0 Alcoholism 1.8 Drug use Outdoor air pollution Climate change Workplace risks 0.6 Road accidents 0.6

1.5

2

2.5

3

3.5

Figure 4: Societal cost of human-generated issues on the UK, % of GDP

Source: McKinsey Global Institute

Child and maternal undernutrition

Poor water and sanitation

Unsafe sex

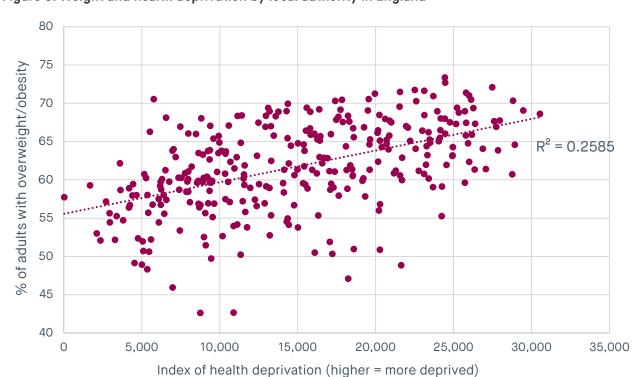


Figure 5: Weight and health deprivation by local authority in England

0.5

0.1

0.1

0.0

0

Source: SMF analysis of ONS and Public Health England data

Obesity risk across the population

Obesity risks are not the same across the population, with certain groups much more likely to have obesity or overweight.

Public Health England data show that a slightly larger proportion of women than men are living with obesity – at 30% compared with 27%. However, a greater proportion of men have overweight – at 40% compared with 31%.

By age group, obesity rates are greatest among those aged 45-54, at 36% of all adults in this age group. Obesity rates rise with age up to this age group, and then subsequently decline.

By income group, obesity rates are greater among lower income households. This is largely driven by women, for whom obesity rates vary much more greatly across income groups.

At a regional level, we note some significant variation; while 23% of adults in London have obesity, this rises to 32% of adults in the South West of England. That is to say, adults in the South West are about 40% more likely to have obesity than those in London.

45 40 35 30 25 20 15 10 5 0 16-24 25-34 35-44 45-54 55-64 65-74 75+ Men Women ■ Overweight, % ■ Obesity. %

Figure 6: Obesity and overweight rates by sex and age, England, 2017, %

Source: Public Health England

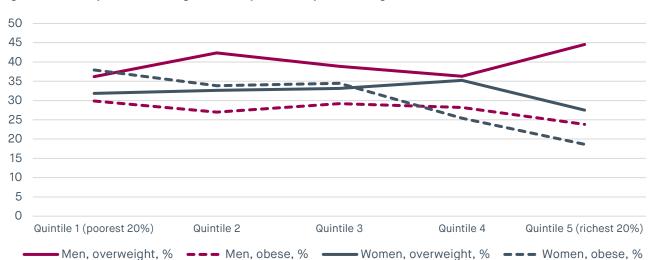


Figure 7: Obesity and overweight rates by income quintile, England, 2017, %

Source: Public Health England

80 70 60 50 40 30 20 10 0 London North West Yorkshire & South East East East of West North East South West the Humber Midlands **England** Midlands ■ Obese, % ■ Overweight, %

Figure 8: Obesity and overweight rates by region, England, 2017

Source: Public Health England

Data from the Active Lives Adult Survey show that there is also a variation in rates of overweight and obesity across ethnic groups in England. Black adults were the most likely out of all ethnic groups to have overweight or obesity, with 74% of adults having excess weight. Adults from the Chinese ethnic group were the least likely out of all ethnic groups to have overweight or obesity, at 35%.

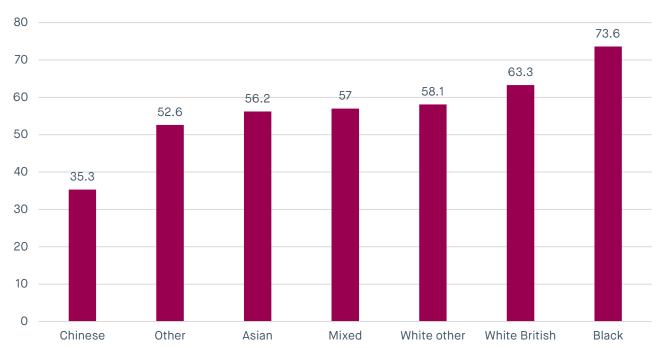


Figure 9: % of adults in ethnic group living with overweight or obesity, 2018/19

Source: Active Lives Adult Survey

CHAPTER 3 - COVID-19 AND OBESITY

There is an emerging evidence base showing that obesity increases the risk of being seriously affected by COVID-19.

In the first meta-analysis of its kind, published in August 2020 in Obesity Reviews, a team of researchers pooled data from peer-reviewed papers capturing 399,000 COVID-19 patients. The analysis found that people with obesity who contracted COVID-19 were 113% more likely than people with a healthy weight to be hospitalised, 74% more likely to be admitted to an intensive care unit (ICU), and 48% more likely to die.¹⁹

People living with obesity are more likely than individuals with healthy weight to have other diseases that are independent risk factors for severe COVID-19, including heart disease, lung disease, and diabetes. They are also prone to metabolic syndrome, in which blood sugar levels, fat levels, or both are unhealthy and blood pressure may be high.²⁰ A recent study of 287 hospitalized COVID-19 patients found that metabolic syndrome substantially increased the risks of ICU admission, ventilation, and death.²¹

The emerging evidence around COVID-19 suggests that poverty and ethnicity are also linked to risk of being seriously impacted by the virus. ²² ²³ With obesity rates varying across income groups and ethnic groups, as the previous chapter shows, it is likely that obesity explains at least some of the variation in COVID-19 mortality rates across these demographics.

How are individuals responding to the links between COVID-19 and excess weight?

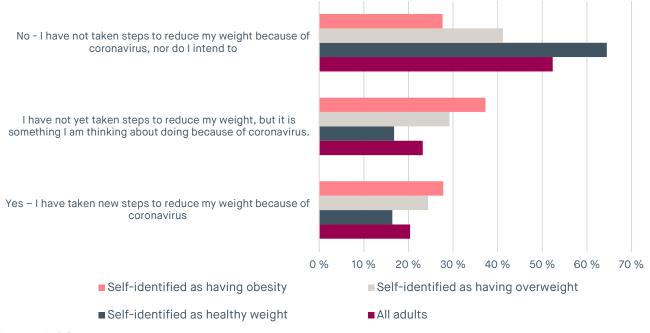
In the Opinium survey commissioned as part of this study, we asked individuals whether news about the links between obesity & overweight, and risk of being seriously impacted by COVID-19, had led to them taking steps to reduce their weight.

A fifth (20%) of survey respondents said that they had taken new steps to reduce their weight because of coronavirus. A further 23% said that they were planning to take steps in the future. Over half (52%) have not taken steps nor do they intend to.

Those self-reporting as having overweight and obesity were more likely to report currently taking steps to lose weight in response to coronavirus – at 24% and 28% respectively. Just over two fifths (41%) of individuals who have overweight and 28% of individuals who have obesity reported that they were not taking steps to lose weight, nor intending to.

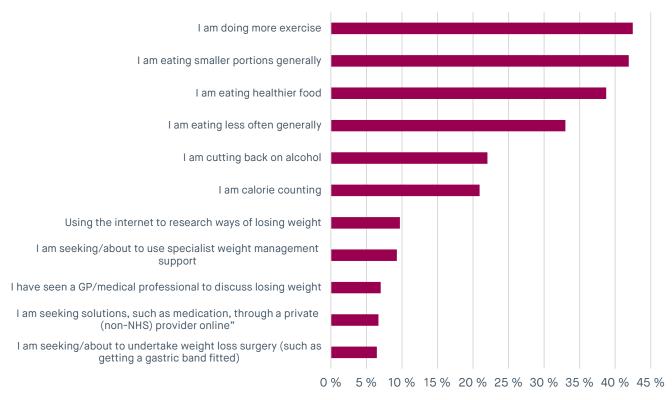
Among those currently taking steps to lose weight, the most frequently cited steps were doing more exercise (42%) and eating smaller portions generally (also 42%). One in ten (10%) said they were using the internet to research ways of losing weight, with a similar proportion (9%) saying they were seeking or about to use specialist weight management support such as weight reduction programmes or psychological approaches. Some 7% said they were seeking solutions, such as medication through a private provider online. With news stories highlighting the purchase of unsafe "diet drugs" on the internet²⁴, this latter statistic might be a cause for concern.

Figure 10: Some of the news recently has mentioned that coronavirus, COVID-19, more seriously impacts people who have obesity or overweight. Has the coronavirus pandemic led to you taking action to reduce your weight?



Source: Opinium

Figure 11: You mentioned that coronavirus has led to you taking steps to reduce your weight. What steps have you taken?

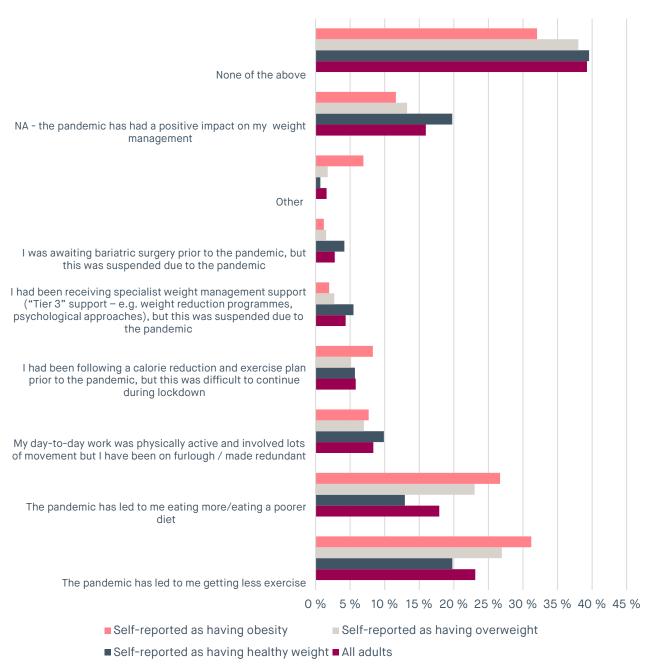


Close to half (45%) of survey respondents said that the coronavirus pandemic might have had a negative impact on their ability to lose or manage their weight. A quarter (23%) said that the pandemic had led to them getting less exercise, while just under a fifth (18%) said the pandemic had led to them eating more or eating a poorer diet.

As the chart below shows, those with overweight and obesity are more likely to have reported that the pandemic had led to eating more/a poorer diet and reduced amounts of exercise.

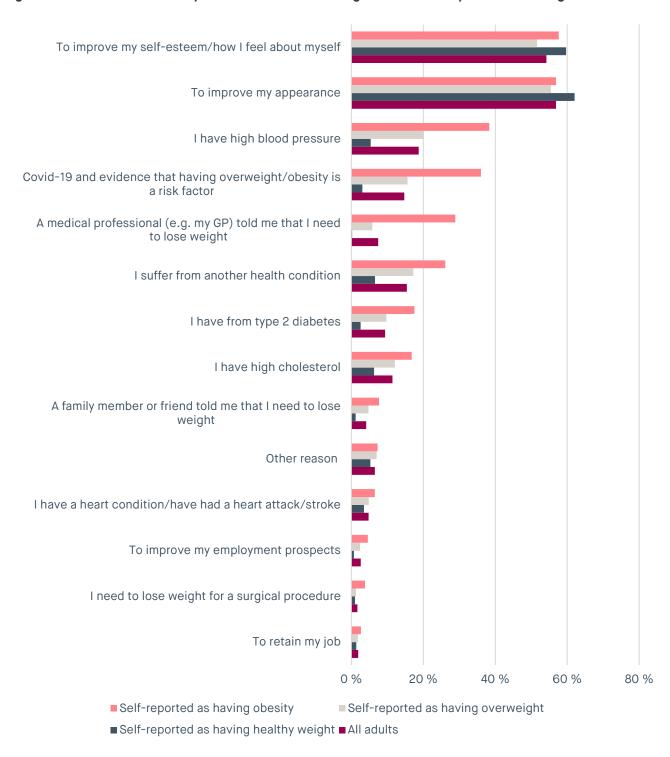
A different study found that two in three British people gained weight in lockdown, highlighting the likely negative impact of the pandemic on diet and exercise patterns.²⁵

Figure 12: Has the pandemic had any of the following negative impacts on your ability to lose weight / manage your weight?



It is important to note that while individuals may not be taking steps to lose weight in response to coronavirus, they may be taking steps to lose weight for other reasons. In the Opinium survey, over half of those with obesity that expressed an interest in losing weight said that improving self-esteem (58%) and wanting to improve one's appearance (57%) were key drivers of wanting to lose weight. Just under two fifths (38%) said they wanted to lose weight due to having high blood pressure.

Figure 13: You mentioned that you would like to lose weight. Is this for any of the following reasons?



COVID-19 and access to obesity treatment

For those receiving or seeking treatment for obesity, the Coronavirus pandemic has had a negative impact on access to treatment. Social distancing has reduced access to weight management services at a time when COVID-19 is leading to a range of detrimental behaviours such as individuals using food to manage their emotions during the pandemic. ²⁶

According to a Public Health England survey of weight management service users, 61% of respondents reported that their tier 2^{vi} service had been cancelled or delayed, and 78% of respondents reported that their tier 3^{vii} service had been cancelled or delayed. Only 30% of respondents felt they have received enough support or information from their weight management service during lockdown. 72% of respondents reported to have used food to manage their emotions, 71% reported their diet had changed at least moderately, and 80% reported that their physical activity levels had changed at least moderately.²⁷

While this survey data outlines challenges, Public Health England has also noted some opportunities from emerging developments – particularly the shift towards remote services delivered online or over the phone. In their report, Public Health England note that "remote services provide the potential to reach a large population and engage populations who cannot, or do not wish to engage with face-to-face groups or sessions, by removing travel barriers and providing an approach that can more easily fit around other commitments".²⁸

Given the stigma around obesity, which may inhibit individuals' willingness to seek help, remote service delivery could reach a broader section of the population. Having said that, remote services cannot, in the long term, be the *only* option available.

Summary

There is evidence that obesity is a significant risk factor with respect to COVID-19. News about this has prompted a significant proportion of the population to take steps to lose weight, and this proportion is higher among those with overweight or obesity.

At the same time, however, a significant proportion of those who have excess weight – about two fifths of those who have overweight and just under three in ten of those who have obesity – report taking no steps to lose weight, and do not intend to do so in the future. Furthermore, those living with obesity and overweight are more likely to report that the COVID-19 pandemic has made it harder for them to manage their weight – for example in terms of getting exercise or eating a balanced diet.

vi Primary care with community interventions.

vii A community/primary care based multi-disciplinary team (MDT) to provide an intensive level of input to patients (Tier 3 WMP).

CHAPTER 4 - ARE WE MEASURING AND TALKING ABOUT OBESITY IN THE RIGHT WAY?

Definitions of obesity and the Body Mass Index

The conceptual definition of obesity is unambiguous and is commonly accepted across geographies and cultures. The World Health Organisation (WHO) describes it as being an "abnormal or excessive fat accumulation that presents a risk to health". ²⁹ Here in the UK, the NHS say the term "describes a person who's very overweight, with a lot of body fat". ³⁰

What is less clear, however, is how obesity is defined in practice – that is, how it is determined clinically. While the body mass index (BMI) – which takes a person's weight (in kilograms) and divides it by the square of their height (in meters) – is the international standard for measuring and recording obesity, there are limitations to its use and it may even lead to racial or gender biases. As a simple calculation that is easy to use but which does not measure body fat directly, BMI can only ever be used as a way of estimating and predicting obesity and it can therefore lead to inaccuracies.

In alignment with guidance set by the WHO,³¹ the NHS states that, for most adults, the categorisations of weight as per the BMI are as follows:³²

- 18.5 to 24.9 represents a healthy weight
- 25 to 29.9 represents having overweight
- 30 to 39.9 represents having obesity
- 40 or above represents having severe (morbidly) obesity

Here, the argument for using BMI is that it is the most basic and therefore the most convenient and inexpensive method for assessing the risk of obesity. Not only can doctors use it in general check-ups, but it can also be used by individuals at home via BMI tables and online calculators. Because it has a strong correlation with body fat levels, because it is reliable in predicting weight-related chronic disease and mortality, and because its thresholds for 'overweight' and 'obesity' are standardised across many countries, BMI is the most common and, generally speaking, the most practical means of estimating body fat.³³

Limitations of the Body Mass Index

Generally, the BMI is a reliable way of *indicating* whether someone has a healthy weight or not.³⁴ However, it does not assess body fat directly, as it instead measures "excess" weight. This is its greatest limitation: it does not distinguish between fat and lean body mass (or, muscularity), which is more dense than fat, and therefore some people with a high BMI can be incorrectly classified as having obesity. At an individual level, the index is not an accurate diagnostic of health conditions or diseases or even of body fat – it is best deployed as a screening tool.³⁵

The index itself is even said to be inherently, mathematically flawed, in relation to its original purpose, which was to measure the average weight of a population, and its contemporary usage, which is used for individuals. For Nick Trefethen, Professor of Numerical Analysis at Oxford University, the BMI results in taller people believing they are more overweight than what they really are, and shorter people believing they are more underweight. He says that at the time of its conception in the mid-1800s, there were no calculators or computers to make sophisticated calculations. Today, a better calculation for charting weight against height than the current

standard of weight/height² formula would be weight/height^{2.5}, because it is a "better approximation to a complex reality", taking into account "typical weights of people against their heights". Trefethen believes the current calculation divides the weight by too great a number for shorter people, and too small a number for taller people – misleading people into how they think about their weight.³⁶

Because of inaccuracies, the implications of BMI can be inconsistent and misleading. For example, an Olympic athlete could be found as having the same BMI as someone that is physically inactive and has overweight, due to having the same body density. The index was even designed by, and modelled upon, a Belgian. This is said to provide a biased, Eurocentric basis to its mathematical formula, distorting certain ethnic populations in its categorisation of weight.³⁷

In terms of the ethnic differences in BMI and the risk of disease, Asians are most likely to be misclassified. Research has found that, at the same BMI, Asians are more than twice as likely to develop type 2 diabetes than white populations, and have higher risk of cardiovascular disease, because they have slightly higher body fat. This has thrown the international standards of thresholding within BMI into doubt, with some countries, such as China, Japan, and India, having more recently set lower cut-off points for their metrics.³⁸

But the misclassification of obesity is not confined to ethnicity. Whilst self-reporting, the weight of women is more often underestimated – whilst both men and women overestimate their height – while it may also matter for educational and income inequalities. Women with higher educational attainment have been found to misreport less than those with lower educational attainment, whereas the likelihood of being misclassified decreases with income for both men and women alike. ^{39 40}

It has also been found that misleading misperceptions and understandings about one's own weight can obstruct positive behaviour change. Studies have proposed that body weight and perceptions of it, especially where discrepancies with BMI exist, can lead to poor weight management. For example, individuals who perceive their weight status as overweight are more likely to overeat and gain weight. Stigma concerns might explain why individuals who perceive their weight status as overweight are at increased risk of overeating.⁴¹

Cognitive biases and inaccurate perceptions surrounding weight concerns already exist, especially in a body conscious and fat shaming society such as our own, and so the misclassification of obesity may lead to health risks. It has been suggested that the correct perception of weight does influence educational and behavioural interventions.⁴²

Some researchers have found an inverse correlation between BMI and mortality. This is known as the Obesity Paradox; evidence that shows that obesity (when defined by the BMI) may be associated with reduced chance of death. Because BMI is unable to quantify body fat, nor the health disturbances that sit on top of it, the complexity of obesity in terms of nutrition, physical activity, psychological factors, social influences, internal and organ impairment, and quality of life all go undetected when measuring healthy weight. Essentially, BMI fails to adequately reflect body fat, body composition, and the host of other issues that characterise obesity. Indeed, there are no universal cut-off points used to classify obesity accurately by sex, ethnicity, age, or some physiological groups (such as post-menopausal women).⁴³

Studies have suggested that BMI as a measurement of obesity frequently misclassifies metabolic health. For example, in the United States, a 2016 study found that an estimated 75 million adults were incorrectly classified as being unhealthy or healthy. This means that large groups of healthy American people are being penalised (and unhealthy people pay the same amount) for their health insurance, all because of the shortcomings of BMI.⁴⁵ Because BMI is understood to be a proxy for health, US businesses will use it to help decide their employee's health care costs, potentially amounting to higher premiums.

Given these issues, there are calls for policymakers to focus on *actual* health indicators, and for improved tools for diagnosing obesity. As it stands, more complex measures that look at adiposity directly require specific or expert medical training and so are not as useful, whereas additional or alternative simpler measures, even the relatively accurate use of waist measurements, do not alleviate the limitations of BMI altogether.⁴⁶

Obesity in children

Obesity in children has been described as one of the most pressing public health issues of the 21st Century. ⁴⁷ Like with adults, the commonly accepted method for measuring and diagnosing is by way of the BMI, although the calculation used is a more complicated. Because children are always growing and there are no fixed thresholds for defining them, a child's weight is benchmarked against the population average and against their age, sex, and height. Again, much like adult obesity, waist measurement stands out as an important indicator for detecting and predicting obesity-related health problems amongst children. ⁴⁸

We have already pointed out the ways that BMI might be misleading, and that it should be interpreted with caution as it does not measure adiposity directly. With children, different growth patterns between young boys and girls means that a growth reference chart is needed to more accurately determine their weight status. Although different BMI thresholds can be used, particularly for international comparisons of obesity where growth references may differ, Public Health England has advised that the British 1990 (UK90) chart should supplement the index.⁴⁹ With UK90, the child's BMI centile is calculated and then classified by age and sex, taking into account growth differences. According to Public Health England, any child who has a BMI higher than 95% for their age and their sex, by way of UK90, has obesity.⁵⁰

Some critics, such as Christopher Snowdon from the Institute of Economic Affairs, say that such a measurement labels children as having obesity unnecessarily and that the problem of obesity may be exaggerated. It is not seen to be a perfect measure, and the 95% threshold for obesity may be somewhat arbitrary, but the BMIs that are higher than 90% and above are at higher risk of poor health. Insofar as UK90 is an extension of BMI, it serves as a useful tool, allows for a degree of comparison between populations, despite limitations to how accurately it classifies obesity.⁵¹

Like with adults, BMI has come to be the standard approach for measuring obesity in children. It has been adopted worldwide and thus represents progress towards harmonisation. However, there are a range of references, thresholds, and therefore definitions of obesity which create problems of bias and its subsequent mis-categorisation. It has been said that for child obesity reduction programmes to be successful, the measure of obesity has to be both accurate and straightforwardly implemented. BMI currently stands out as the most appropriate, even though there are several measures that are able to replace it.⁵²

Weight bias and stigma

In the above sections we have discussed the implications of defining obesity purely in terms of weight, the body mass index, and numerical values. Here, we have showed that racial, gender, and age biases exist in the measurement of obesity, and even that the practice itself may be conceptually and mathematically flawed. But there are also socio-cultural biases attached to the issue of body weight, whereby negative attitudes and beliefs toward weight amount to stereotyping, prejudice, and marginalisation.⁵³ As such, the way we *talk about* obesity is also an important issue, alongside how we *measure* obesity.

According to the World Obesity Federation, "weight stigma refers to the discriminatory acts and ideologies targeted towards individuals because of their weight and size". This might include oversimplified preconceptions about the causes of weight such as individual laziness, lack of will power, a lack of moral fortitude, or even poor intelligence.⁵⁴

In schools, an institution known for playground bullying and teasing, both students and teachers (especially physical education teachers) can perpetrate stigma. In the workplace, weight discrimination manifests in all stages of employment, from interviews to promotions, income to contract termination, holding significant implications for fair participation – and productivity – in the labour market⁵⁵ In healthcare, even health professionals stereotype and show less time and respect for patients with higher BMI; as we discuss later, this might lead to those living with obesity being unable to access weight management services or surgery. The media is renowned for perpetuating prejudice against weight, whether it be through stereotypical or underrepresented television characters, or idealistic advertising images. In the home, it has even been said family members are the most frequent and harmful source of stigmatisation.⁵⁶

In terms of how it is reported in the media, a study has found that obesity has become an increasingly newsworthy topic over recent years, and that depictions of obesity have also changed – something which is likely to result in increased stigma and discrimination. By analysing a 36 million-word databased of all UK newspaper articles containing the words 'obese' or 'obesity' between 2008-2017, academics have showed that obesity is persistently portrayed as a personal, biological issue, with emphases on wider political or social factors decreasing over time. It is widely accepted that the press plays an important role in influencing public opinion, and this holds significant implications for individuals as it can contribute to victim blaming and "the individualising trend" also seen in Government policies (see Chapter 5).⁵⁷

It has even been found that such use of language in the traditional media and social media has increased during the COVID-19 pandemic, and that stigma and its associated mental health issues may have increased.⁵⁸ And, due to coronavirus, people are more likely to have showed higher levels of anxiety in relation to their weight due to worrying about the capacity of the healthcare system and the implications of accessing healthcare at a time of increased demand. Here, dignity becomes subject to 'priority' and (perceptions of) who deserves it most, which may lead to people with obesity avoiding healthcare altogether – worsening COVID-related health outcomes. People with obesity are also more likely to fear weight gain during lockdown, adding to their anxiety and coping strategies.⁵⁹

At a time where obesity is prevalent, not just in the UK but throughout the world, there is a strong and palpable culture of weight bias and stigma. Weight discrimination is even more prevalent amongst groups already at risk of discrimination, such as marginalised racial or ethnic groups.⁶⁰

In a study carried out in the 1950s, children had to rank images of six other children – including one that is 'normal', one that has obesity, one in a wheelchair, one with crutches, one without a hand, and one with a facial disfigurement – in order of likeability, it was found that across samples the child with obesity was ranked last. ⁶¹ With obesity, the stigma and disdain attached to weight is strong, so strong that it can trigger physiological and behavioural changes that affect weight gain, devotion to exercise, and mental health. The pervasiveness of weight stigma may even extend to all-cause mortality. ⁶²

In March 2020, through a joint international consensus statement, which includes British organisations such as The Royal College of Physicians, Obesity UK, and Diabetes UK, as well as the APPG on Obesity, several pledges were made to end weight bias and stigma of obesity. These pledges include treating individuals with obesity with respect, refraining from stereotypical language, images, and narratives in relation to depicting individuals with obesity, encouraging educational initiatives and disseminating knowledge of obesity, and supporting initiatives to prevent discrimination in the workplace, education, and healthcare settings. ⁶³

The statement provides evidence from many different countries that has shown that, when individuals attribute obesity to internal factors or personal choices, rather than the more complex external causes, higher weight bias, blame, and stigma are exhibited. Again, this points to the individualising trend historically found in UK obesity policy and the part it is likely to play in the reinforcement of weight stigma. At the same time, there is also a gap between scientific evidence and misconceptions in the public narrative of obesity, such as in the belief that body weight simply equates to 'calories in minus calories out', and that it is entirely caused by voluntarily overeating and physical inactivity. ⁶⁴

Given this, it is crucial that the public discourse around obesity evolves into one in which stigmatisation is removed and there is broader recognition of the complex range of factors that drive obesity and overweight - from poverty to urbanisation to underlying health problems. The Opinium survey commissioned for this report showed that, while a significant majority (73%) of adults agree that "obesity is a complex condition with many causes, and people need access to a range of support options to lose weight", close to half (46%) agree that "people that live with obesity only have themselves to blame for their unhealthy weight".

Public attitudes thus appear conflicted and at times inconsistent – recognising the need to support those living with obesity while also believing that those with obesity have sole responsibility for their weight. While close to two thirds (65%) agree that people need help to lose weight, just 32% believe the NHS should provide more people with surgical help to lose weight, such as through fitting gastric bands. This is despite evidence suggesting gastric bands can be an effective, cost-efficient way of reducing obesity. 65

Figure 14: Thinking about the following statements, how strongly do you agree or disagree with them? % agreeing



In terms of health outcomes, feelings of shame, self-blame and guilt are major barriers to changing one's diet and weight-related activity. Stigma may therefore be an unintended, counterproductive consequence of anti-obesity efforts, as many engage in rhetoric that emphasises the role of individual responsibility and, in some cases, fat shaming.

By looking at health policies outside of the obesity debate - by paying particular attention to approaches to reducing smoking and HIV/AIDS - it is possible to see that it is often central institutions that contribute to the stigmatisation of disease, due to ineffective, damaging - and perhaps unethical - strategies.

Tobacco and anti-smoking

With smoking, there has already been heavy debate as well as policy interventions surrounding the aim of reducing harms of tobacco. This includes the 2007 ban on smoking in public places and plain packaging on tobacco products to make them less appealing to minors. In alignment with these policies, social norms have also changed – views on smoking have transformed from being something that is socially acceptable to something that is for many people "unhealthy, "revolting" or even "immoral" – affecting the way smoking is perceived. Today, smokers are becoming increasingly stigmatised, with research showing that smokers *feel* they are increasingly attached to stigma.⁶⁶

The stigma associated with smoking, despite the positive effects of anti-smoking and tobacco control campaigns, may impact treatment and diagnoses, as patients are frequently blamed for their problems. Indeed, late diagnosis has been identified as a frequent cause of lung cancer deaths. ⁶⁷ It is argued that public health campaigns should consider stigma, as there is an ethical burden placed on the individualised, fear-inducing messaging contained within them. Instead, it has been suggested that the benefits of quitting smoking should be emphasised rather the costs - finding a sweet spot between effective, hard-hitting campaigning and the tones of blame and bias undermining it. ⁶⁸

HIV and AIDS

At the height of the epidemic in the 1980s, HIV/AIDs became heavily stigmatised. Linked to homosexuality, with gay and bisexual men being the population group most affected by it, the disease was once a subject of intense public vitriol. Though public attitudes towards it have changed, with the public interpretation of sex and sexuality also changing, the stigma of HIV still exists. Much like with obesity and smoking, stigma is a major barrier to providing effective public health responses to HIV, negatively affecting the health and wellbeing of those living with it – amounting to discouragement from accessing prevention tools, testing, and treatment. It is also most likely to emerge in those also affected by stigma according to their gender identity, sexual orientation and ethnicity.⁶⁹

The criminalisation of certain populations, such as those who use and inject drugs or those that are sex workers, presents obstacles to receiving effective HIV support. ⁷⁰ But even though stigma is widely considered to be an impediment to strong responses to the HIV virus, and even though it perpetuates discrimination across many institutions and areas of society, stigma reduction remains at the bottom of programme agendas. ⁷¹

HIV/AIDS stigma reduction methods can be found via methods such as counselling, self-help and support groups, education via social marketing and mass media, training programmes, policy

development, and legal interventions – all to improve the effectiveness of HIV-related programmes, from the level of government downward.⁷²

Stigma is a culmination of labelling, stereotyping, and discrimination, which often stems from structural powers within society. As such, law and policy directly contribute to, or perpetuate, the stigma that is already associated with at-risk groups. Anti-obesity, anti-smoking, and HIV/AIDS responses have shown that, in terms of recent policy decisions in the UK, this may well be the case. As such, approaches to reducing stigma as major barriers to health programmes, and therefore to creating public health policy more broadly, ought to be multileveled – addressing both the individual and structural aspects of health-related stigma.⁷³ This is as important with respect to obesity, as it is with smoking and HIV/AIDS.

Towards thinking about obesity as a disease?

Linked to the debate around obesity and stigma, is the discussion on whether obesity should be recognised as a disease.

In June 2013, the American Medical Association (AMA) House of Delegates voted to recognise obesity as a disease state requiring treatment and prevention efforts. Other medical societies had sponsored a resolution to support this idea, including the American Association of Clinical Endocrinologists, the Endocrine Society, the American College of Cardiology, the American College of Surgeons, and the American Heart Association. The National Institutes of Health had declared obesity a disease in 1998 and the American Obesity Society did so in 2008.⁷⁴

The stated purpose of the AMA's decision was to improve research into the causes of obesity. It has been argued that this change in public policy by the AMA supports the concept that obesity is a serious disease that requires treatment and also removes the stigma currently associated with obesity. Arguably, it better reflects the complex nature of obesity and its causes, and helps shift the public discourse away from a blame culture in which obesity is solely seen as a result of poor lifestyle choice.

Having said that, the decision of the AMA is controversial and indeed the AMA's own Council on Science and Public Health in 2012 said that there was not sufficient data to support calling obesity a disease. 76

In Europe, this year Germany has recognised obesity as a disease in the context of a new comprehensive German National Diabetes Strategy. In an official statement, obesity was recognised as one of the root causes of diabetes and a call was issued for recognition of obesity as a disease.⁷⁷

In the UK, the Royal College of Physicians (RCP) has called for obesity to be recognised as an ongoing, chronic disease "to allow the creation of formal healthcare policies to improve care both in doctors' surgeries and hospitals, and so that significant and far-reaching preventative measures can be put in place." The RCP also notes that such a move could help change the public discourse about obesity, so that those with the condition are no longer blamed for it.⁷⁸

CHAPTER 5 - THE OBESITY POLICY LANDSCAPE

COVID-19 and the new Government strategy for reducing obesity

Chapter 3 has already explored the relationship between coronavirus and obesity, highlighting that having overweight is linked to COVID-related deaths. Recognising this, in July 2020 the Department of Health & Social Care announced a new government strategy for reducing obesity in the UK, referring specifically to "the urgent need to respond to COVID-19". The policy paper explicitly acknowledges that obesity is just one of a few mitigatable factors for the prevention of COVID-19, but it also refers to the opportunity the pandemic has created – the "wake-up call" to how we think about our health.⁷⁹

Policies in the new obesity strategy

- Introducing evidence-based tools and apps to provide advice that helps people move towards a healthier weight.
- Expanding the amount of weight management services available through the NHS, so that people have more support to lose weight.
- Banning TV and online advertising for foods that are high in fat, sugar, and salt before 9pm.
- Ending promotional deals such as 'buy one get one free' on foods that are high in fat, sugar, and salt.
- Legislating to require that food businesses and alcoholic drinks add calorie labels to their products.

According to the paper, this strategy is the beginning of a long-term effort from government to shift healthcare towards a mode of public health and prevention. It claims that it will help to empower the population to make the right choices regarding their health by giving them new and useful information, while acknowledging that environmental factors such as access to healthy food and advertising deeply influence eating choices. For many health bodies and commentators, the strategy contains many important measures that are crucial to reducing obesity in the UK – particularly given the context of COVID-19 and the complications it has presented to weight-related health.

Issues with the obesity strategy

However, the strategy has also been criticised for being too narrow in scope and for failing to address the root causes of obesity. In terms of health inequalities, it has been said that the new policies can be effective only insofar as people have the adequate levels of time, as well as the psychological and material resources to engage with them. For interventions such as improved food labelling to be successful, a high degree of individual agency is required – which in turn necessitates high socioeconomic capital.⁸⁰ The Health Foundation has said that a more credible strategy would look to tackle the many intricate social and economic factors that drive health inequalities – of which obesity is included – by examining drivers such as poverty and unemployment.⁸¹ In an article published in The Lancet, the suggestion is made that bans on food promotions and advertisements could even result in an increase in food prices and therefore in poor health outcomes.⁸²

The latest developments in obesity policy have been highlighted as showing 'two sides of one nation': one that both has obesity and hunger, as low income families may have little to no choice in eating unhealthily if unhealthy food is priced cheaply.⁸³ Hence, in the attempt to restrict food marketing with the aim of reducing obesity, the effect this has on food prices and on the consumption of food may negatively affect the ability to eat at all. Here, the Government has been urged to consolidate its strategy by improving access to healthy foods, potentially by using money collected from the Soft Drinks Industry Levy introduced in 2018 to make healthy foods more available and cost-effective for customers.⁸⁴ As it stands, there are too many barriers to eating healthily in the UK – such as 'food deserts', where areas are poorly served by shops selling affordable, healthy food.⁸⁵

The Government has also been faulted for the emphasis it places on personal responsibility, weight watching, and calorie counting – rather than on wider societal empowerment. Again, this fails to address the many biological, social, and environmental drivers of obesity. For example, the role that car-dependent urban design can play in reducing rates of physical activity. Or how crime in deprived areas can act as a deterrent to adults and children engaging in outdoor exercise. The 2007, the Government's Foresight 'Tackling Obesities: Future Choices' report highlighted that there are over 100 factors that contribute to overweight and obesity – a lot of these have not been addressed in the latest strategy.

Paying attention to the Government's focus on calorie labelling specifically, the Centre for Mental Health believes its strategy could be highly destructive for those that suffer from eating disorders such as bulimia, anorexia and body dysmorphia. They say that to think about calories, weight, and BMI as a common-sense approach to weight reduction perpetuates a climate of fat shaming, guilt, and self-hatred, and it does not lead to positive health outcomes. ⁸⁹ It has been pointed out that the Government's recent call to people to lose weight in order to "reduce pressure on doctors and nurses in the NHS" ⁹⁰ as a patriotic call of duty is a clear example of promoting health via individual feelings of guilt and shame. ⁹¹

A number of organisations which specialise in obesity and obesity-related health have issued their responses to the Government's strategy, highlighting gaps that are a cause for concern. The Royal College of Physicians, the British Dietary Association's (BDA's) Obesity Specialist Group, Obesity UK, the Association for the Study of Obesity, and the Obesity Health Alliance, among others, all concede that the new Obesity Strategy represents significant progress, particularly where moves to reduce the advertising and marketing of unhealthy foods occur, but that it ultimately lacks breadth. Crucially, there is the worry that the rhetoric around obesity has remained the same, and that it has failed to improve the portrayal of obesity and people's perceptions of it.⁹²

It has been said that the strategy is "the equivalent of the emperor's new clothes" as it fails to contain the details or funding that is necessary to a distinct plan for long-term action. 93 Notably, the recent Spending Review made no mention of obesity or the Government's obesity strategy. 94

In an extensively prepared statement made in response to the Government, the BDA lists several shortcomings. This includes reasons such as (but is not limited to): 95

 The delivery of app- and online-based programmes may not be accessible to those experiencing digital exclusion.

- There are no new details on when action on the promotion of foods that are high in fat, sugar, and salt will be carried out.
- There are no new details for when a ban on advertising on foods that are high in fat, sugar, and salt will be implemented.
- There are no details for how a ban on online advertising will be achieved
- There are no details of how (or which) weight management services will be expanded in the NHS.
- There is no commitment to the subsidisation of healthy foods in order to make them affordable for certain vulnerable groups
- Physical activity has not been included in the strategy.
- Mental and psychological factors have not been included in the strategy.
- Breastfeeding and maternal health have not been included in the strategy.

Ultimately, the BDA has said a 'whole systems approach' is needed to address the complexities of obesity – not one which focuses on the individual responsibility of people to make dietary or exercise changes themselves. ⁹⁶ This sentiment has been echoed elsewhere across the field of obesity policy and research, as the Obesity Strategy has been assessed as falling short of something more all-encompassing in areas such as: not placing an equal emphasis on biological, genetic, and social factors, ⁹⁷ not providing psychologically-informed policy or mental health and stigma support for people living with obesity, ⁹⁸ or for not introducing better access to *all* weight management treatments (whether that be lifestyle interventions or more complex bariatric surgery). ⁹⁹

For those living with severe obesity, bariatric surgery is an effective form of treatment – yet the Government's latest focus on obesity is instead aimed at prevention and low-level interventions targeting those with lesser degrees of overweight or obesity. 100 While coronavirus maintains its presence in the UK, access to high quality obesity treatments should be improved to protect atrisk people. It has been proposed that patients in need of bariatric surgery should be given prioritised admission, with a short-term expansion to allow as many patients as possible to "be moved out of harm's way" until an effective vaccine is administered. 101 In terms of the delivery of the Government's new obesity strategy, there have also been queries as to how the obesity crisis will actually be dealt with in the years to come. National-level health policy does, after all, need to be administered at the local level for it to be effective. The Local Government Association has said that, as a serious public health challenge that poses a significant threat to adult social care and NHS budgets, financial investment is required. Here, the Government must reverse funding cuts in order to invest in services - such as its proposed expansion of weight management services¹⁰² – otherwise population-wide interventions that seek to effectively target those that are most at risk within local communities can never truly come to fruition. 103 As it stands, with no commitment to funding or investment in supporting people experiencing obesity, the Government "has placed Local Authorities and Clinical Commissioning Groups at the forefront of the crisis" which means "people living with obesity are likely to be the middle of the national vs local confusion of priority and agenda setting". 104

It is worth noting that the abolition of Public Health England in August 2020, following the supposed failings¹⁰⁵ of how it has responded to the COVID-19 pandemic, has also caused concern about the long term future of obesity (as well as other kinds of health problems) policy. Due to a

shakeup whereby PHE is merged into a new body, the National Institute for Health Protection, which will be focus on external threats to the UK, such as pandemics and infectious diseases, there is concern that hundreds of staff who specialise in obesity may become peripheral to the debate – reducing the likelihood of positive change. To add, the Government has failed to reveal who will take its newest obesity strategy forward, as there is now no government body with the sufficient stature available to do so.¹⁰⁶ The future success of the Government's anti-obesity efforts may now rest upon much broader, drastic forms of political decision making.

This analysis has showed that, although the Government's Obesity Strategy offers some productive changes, some of which have been referred to as "landmark steps", there remain a number of gaps in terms of its focus and scope. ¹⁰⁷ But previous campaigns are also said to have been largely ineffective in reducing obesity, as well as persistently increasing the stigma associated with weight and the risk of developing eating disorders. ¹⁰⁸ Such approaches have been shown to oversimplify obesity, and reduce the notion of weight gain to a matter of individual choice despite there being many other surrounding factors involved. Today, the Government's latest obesity strategy and its 'call to action' still exaggerates individual willpower such as through its promotion of its new weight loss app and through the legislation of food labelling – when it is fundamentally a public health issue – .¹⁰⁹ By looking at previous anti-obesity policies, lessons can be learned.

Other obesity policies in recent years

Obesity has been a controversial political issue in the UK, and as an ever-increasing public health issue it has been high on the agenda of successive governments in recent years. The state has looked to measure and monitor it for over a century, first viewing it through the lens of an 'individual model' that is related solely to weight and overeating, but gradually moving towards an 'environmental model' in which it is viewed as a population issue caused by wider societal factors and inappropriate diet and lifestyles. These opposing models offer very different approaches to reducing obesity, with the former's focus purely on weight and food intake claimed to be ineffective and even psychologically damaging.

There have been numerous policy decisions created to reduce obesity, though some still appear to flutter between two models of approach – some emphasise the environmental, root causes of obesity, whereas others lay responsibility on the individual. The Government's recent obesity strategy is a good example of this. And even while committing to challenging the food industry to reduce the amount of calories it puts in products¹¹² and introducing the Soft Drinks Industry Levy in order to reduce sugar consumption and reduce childhood obesity in 2018,¹¹³ the Health Secretary, Matt Hancock, in the very same year said that, in terms of obesity prevention, "we need to do far more to personally take responsibility for our own health".¹¹⁴

Major policies designed to reduce obesity over the past ten years ¹¹⁵									
Year	Policy	Summary	Characteristics	Response					
2007	Tackling Obesities: Future Choices	Under the direction of the then- Chief Scientific Advisor, considered how society might sustainability respond to obesity over the next 40 years.	Created a more balanced perspective about the roles of the individual and the environment in obesity, stating that all elements on the system need to be focused upon for change.	Seen as a seminal and landmark report for how it bridged science with policy. Crucially, it suggested that systems-wide approaches should be deployed to reduce obesity.					
2011	A Call to Action on Obesity	Via a 'combined national effort', it sought to achieve a downward trend in childhood and adult obesity by 2020.	Stressing the importance of overconsumption and calorie reduction, renewed emphasis was placed on individual behaviour <i>and</i> the role of the environment in reducing obesity.	Though it justified government and industry's support for individuals to lose weight, objectives – and accountability – meant it did not amount to a long-term, coherent strategy. 116					
2011	Public Health Responsibility Deal	Set up to improve public health via a public-private partnership between government and the food industry.	Laid out objectives for the food industry to respond to in order to control the food environment and influence consumer choice, such as removing more salt and fat from the market.	Due to its reliance on voluntary efforts from the food industry, the Deal is widely seen as a failure – while many of its pledges were not met. ¹¹⁷					
2016	Childhood Obesity Plan (1)	Kickstarted a plan to reduce childhood obesity over 10 years, while announcing the Soft Drinks Industry Levy (SDIL).	Acknowledges that obesity is a complex problem with many drivers. Yet it failed to provide a coordinated delivery plan, ignoring Select Committee recommendations for cross-society interventions (e.g. marketing and education).	The SDIL was welcome, and the industry's response to it has been positive (there has been a 28.8% fall in the amount of sugar contained in soft drinks since its announcement). 118 However, a more thorough, 'game-changing' plan was preferred instead. 119					
2018	Childhood Obesity Plan (2)	Outlined actions needed to halve childhood obesity by 2030 and narrow health inequalities.	Highlighted specific areas for legislation, addressing areas such as the marketing and advertising of unhealthy food.	Praised for improving shortfalls in the original childhood plan, but faulted for missing a whole-society approach. 120					
2019	Childhood Obesity Plan (3)	Released as part of the Government's Prevention Green Paper, 121 outlining an approach for the prevention of different health problems in the UK.	Sets out plans for infant feeding, clear labelling, food reformulation, and includes ending the sale of energy drinks to children under 16.	Is seen as a downgrade for being absorbed into a green paper alongside other issues and, of all three childhood plans, no proposals have yet been fully implemented. 122					
2020	Tackling Obesity	To try and mitigate the effects of COVID-19, new policy actions seek to empower the population to make healthier choices.	Introduced long-sought after measures to restrict food marketing and advertising, but may also overemphasise individual responsibility.	It has initially been criticised for failing to address the many environmental drivers of obesity, possibly contributing to individual feelings of guilt and stigma.					

Outside of central government policy, in the Welsh, Scottish, and Northern Irish administrations, other approaches do exist. A lot of the actions in the UK's newest obesity strategy are devolved, such as restricting the marketing of foods that are high in fat, salt, and sugar, but the constituent governments also have their own plans for reducing obesity at the regional level. Each are summarised in the table below.

Major policies designed to reduce obesity in devolved nations								
Year	Policy	Nation	Summary	Characteristics	Response			
2012	A Fitter Future for All	Northern Ireland	A cross-departmental framework for preventing obesity across the entire life course of people from Northern Ireland, to be delivered until 2022.	Sets long-term objectives to increase the percentage of people eating healthy diets and population meeting CMO guidelines on exercise.	Despite progress being made on short- to medium- term outcomes, there has not been a significant statistical change to levels of overweight and obesity. ¹²³			
2018	A Healthier Future	Scotland	Delivers a plan for healthier diets and weight, including ambitions such as reducing childhood obesity in Scotland by 50% by 2030 and aiming to reduce dietrelated health inequalities.	Recognises that overweight and obesity are shaped by a multitude of factors, and takes a "human rights approach" to support those most in need.	The aim to reduce childhood obesity by 50% in less than 10 years may be too ambitious, whereas there is no specific target for reducing adult obesity. 124			
2019	Healthy Weight Healthy Wales	Wales	A long term strategy to prevent and reduce obesity, and to "make Wales' one of the first countries to see obesity rates decline". 125	Looks to deliver healthy "settings and environments" to allow people, of all ages, to make healthy choices, delivered across all sectors.	Recognises the complex nature of obesity and sets out positive actions for children's health, but it gives little attention to the treatment of obesity. 126			

SOCIAL MARKET FOUNDATION

Due to its shortcomings, particular attention should be given to the 2011 Public Health Responsibility Deal, and the 'call to action' strategy it helped to enforce. ¹²⁷ The Deal, in operation in England until 2017, ¹²⁸ was implemented to improve public health by addressing food, alcohol, physical activity, and health in the workplace, setting aspects of the 'Healthy Lives Healthy People' white paper, published in 2010, ¹²⁹ into motion. Ostensibly, this meant that the wider social determinants of health would be challenged, emphasising that "the right environment can encourage and empower people to take responsibility for their health and make healthy choices" ¹³⁰ Here, the Responsibility Deal hinged upon the renewed relationship between government and industry as a public-private partnership to improving health. The Food Network, which contains a set of pledges for the food industry to adhere to in order to influence consumption, included: ¹³¹

- Providing calorie information for food and non-alcoholic drinks in out-of-home settings.
- Committing to the reduction of salt in foods, giving a total reduction of 1g per day by 2012.
- Working to remove artificial trans fats from products by 2012.
- Challenging the population to reduce its calorie consumption by 5 billion calories (kcal) a day.
- Supporting consumers to reduce their dietary salt intake, reducing the amount of salt used in kitchens by at least 15%.

However, it has been said that the food industry has failed in upholding its objectives within the Responsibility Deal. According to research carried out by the London School of Hygiene and Tropical Medicine, the initiatives pledged as part of the Deal were largely ineffective, as many of the voluntary agreements made by food firms, supermarkets, and high street chains in the private sector were not fully implemented. It has been pointed out that successful voluntary arrangements require greater involvement from public organisations and greater accountability from food actors, such as sanctions for non-compliance. Otherwise, it has been said, pledge targets cannot be meaningful. Based on existing evidence, the most effective strategies to improve diet are pricing strategies, restrictions on marketing and reducing sugar intake – however these were in no way reflected in the Deal's food pledges. 133

As part of the wider Healthy Lives Healthy People strategy, the 'Call to Action on Obesity' sought to achieve a downward trend in the level of 'excess weight' in both adults and in children by 2020. 134 As Chapter 2 has shown, this is not the case. Here, critics believe that the 'call to action' that aimed to bring together business, civil society, and the voluntary sector as one partnership, has meant that Public Health Responsibility Deal was inherently flawed. The Government has been heavily criticised for enabling food and drink producers input during the Deal's development. 135

Since the Call to Action on Obesity paper and the Public Health Responsibility Deal that supported it, there has been little success in the reduction of excess weight. It has been argued that this is some way explained by food and drinks industry involvement in government public health policy, as it has, perhaps inevitably, resulted in a feeble response to the challenge. This is echoed by the National Audit Office (NAO), which has criticised the Government's childhood obesity plan for deploying voluntary measures instead of more interventionist approaches, and for failing to bring in more involvement from local authorities. The NAO claims that tax and voluntary reduction objectives had failed to meet the Government's aim to reduce sugar across products by 20% by

2020, citing the limited success of the Responsibility Deal's voluntary approach in the past.¹³⁷ It has been recommended that legislative powers are used as an intervention against obesity instead – thereby limiting industry influence in public health concerns. The Soft Drinks Industry Levy (SDIL), often referred to as "the sugar tax", was introduced to do exactly this, to reduce sugar consumption among children by incentivising companies to reformulate their products.¹³⁸

The SDIL placed a charge of 24p on drinks containing 8g or more of sugar per 100ml, and 18p a litre on those with 5-8g sugar per 100ml. Launched in 2016, but only coming into effect in 2018, the policy was declared a success before it even started as manufacturers quickly moved to change their recipes in order to avoid the levy. 139 Public Health England found that between 2015 and 2019, while being successful by some measures, such as leading to a 43.7% fall in the amount of sugar contained in soft drinks subject to the levy, only 3.0% has been cut from sugary products. 140 This shows taxation is not a silver bullet to improving unhealthy diets, 141 and it has even been said that the Government's failure to meet its original target (3% versus 20%) is because manufacturers are defying the Government's request to cut sugar by 20% by 2020, with some increasing the amount they put in confectionary and desserts. 142

In 2018-19, the amount of revenue generated by the SDIL was £240 million, yet NAO's estimated annual cost of obesity to the NHS is £6.1 billion. And while the levy imposes a tax disincentive on producers of sugary drinks, it does not hold any significance for the production of sugary foods. It was expected that the SDIL would lead to the reformulation of products of different kinds, both food and drinks, but this has not always been the case – adding complexity to the Government's sugar reduction targets overall. There have been calls to introduce a 'snack tax' on biscuits and other such products. As of 2019, such interventions were made in 28 countries, with research suggesting they may indeed have the potential to reduce sugar consumption and, in the longer term, obesity and its associated health problems.

At the same time, however, self-regulation remains an issue within the food sector. The World Health Organisation has expressed its concern that commercial entities continue to influence UK policy content and delivery, while ineffective voluntary targets – such as those laid out in the Responsibility Deal – consistently limit progress. With regard to the Government's newest Obesity Strategy, it has been reported in the British Medical Journal that the "real enemy" on the road to progress is the food industry, ¹⁴⁶ while supermarkets' role in reducing childhood obesity has been called into question in Parliament ¹⁴⁷ and in a report produced by the APPG on a Fit and Healthy Childhood, where it is recommended supermarkets do more to balance promotions and discounts towards healthier options. ¹⁴⁸

Successive governments, despite refreshing obesity POLICES and strategy over the past 20 years, have provided varying levels of emphasis on the extent to which environmental factors contribute to obesity – with many policies choosing to focus on individual responsibility, effectively blaming individuals for the choices they make. ¹⁴⁹ In November 2020, four months after the Tackling Obesity strategy was published, a parliamentary debate on obesity under COVID-19 was motioned by Jim Shannon MP. In that debate, the point was made that, as well as addressing the structural drivers of obesity, directing policy attention towards socioeconomic deprivation and multidisciplinary support, the Government should also work more closely with the food and drink industry, "to make the healthy option the easiest option". The obesity challenge was described as a long-term process, one which "involves planning, housing, the workplace, the food supply, communities, and even the culture of life in the places that we live in". ¹⁵⁰ Here, more

ought to be done to ensure that industry, and others, properly contribute to obesity reduction in the UK.

A whole systems approach to reducing obesity

In the sections above, it has been shown that previous government policies, implemented with varying degrees of usefulness, have often fallen short of their objectives in reducing obesity in the UK. Overweight and obesity are driven by a multitude of factors, whether they be economic, social, or individual, but the major policy initiatives that have been initiated over the past decade have failed to properly grasp the complex nature of the issue, and the many factors at play. For example, where the 2011 Call to Action on Obesity paper emphasised the mechanical process of overconsumption, calling for a reduction of calories in response, the 2020 Tackling Obesity Strategy, almost 10 years later, has been criticised for overemphasising individual behaviours as a main contributor to the challenge. Between those particular policies, others have also fallen victim to the depth and breadth of obesity, instead offering narrow, incoherent strategies – even after the recommendation for a system-wide approach was made in the Tackling Obesities: Future Choices report in 2007.

In response, health bodies and organisations – including the House of Commons Health Select Committee¹⁵¹ – have argued that a "whole systems approach" or a "health in all policies approach" is needed. Rather than simply aiming to tackle just one issue or a handful of issues – whether that be individual behaviour change, industry levers, or taxation – a "systems way of working" that grapples with the multifaceted, multi-actor dynamics of the health environment can be deployed to preventatively reduce overweight and obesity. This means taking a bold, coordinated swipe at obesity reduction from all angles: central government, local government, the NHS, businesses, schools, and individuals and their families must work together if a whole systems approach is to be implemented successfully. The successfully of the systems approach is to be implemented successfully.

Collaboration is crucial. Ultimately, central government must set the conditions of change through legislation and regulation, whereas programmes themselves must be delivered locally. Local approaches would consider all common areas of obesity activity such as in school and childcare, healthy workplaces, creating active travel, promoting physical activity, access to weight management support and increasing health food access. Like a bicycle, the anti-obesity challenge can only move forward when all parts are working together, and therefore the whole systems approach must be harmonised. Action must take place across all levels of government and society, ultimately being delivered directly where it matters – into communities.¹⁵⁴

According to Public Health England, the benefits of such a system do not just reach people's health, but they may also impact other local agendas, such as employability, economic productivity, and social care. It may also help to address health inequalities within communities. These benefits include: 155

- Collective action, rather than the sum of individual actions, and the collaborative system that it aligns with has a wider impact across the local health system.
- The unique position of local authorities allows them to target the needs of communities, with the ability to include a range of stakeholders.
- A 'Health in All Policies' approach recognises and addresses the many causes of obesity, helping to facilitate a systems-wide approach to tackling health inequalities.

- Supporting a community-centred approach to tackling health inequalities, as local realities are reflected through the involvement of communities, particularly those that are disadvantaged.
- Local assets become maximised, drawing on the particular strengths of communities.

While evidence showing how a whole system approach may best work in practice is still emerging, health organisations – such as Obesity Action Scotland – and local councils are currently looking at ways of developing such approaches to addressing overweight and obesity. Durham County Council, Gloucestershire County Council, the London Borough of Lewisham, and North Kesteven District Council have already run pilots exploring the implementation of the whole system approach, each reporting various degrees of progress. Relatedly, in Chapter 2 of the Childhood Obesity Plan, the Government also committed to deliver a Childhood Obesity Trailblazer Programme in partnership with the Local Government Association and Public Health England, aiming to test innovation and local action and create healthier environments across five local authorities.

International approaches to obesity

Examples of more integrated approaches to reducing obesity can be found abroad. For the WHO, as a rising global epidemic of obesity, 'globesity' is one of the world's most apparent, yet most neglected, public health problems in the world today. As such, the health body has been leading the charge in raising public awareness that obesity is chiefly a social and environmental 'disease', and it has helped to develop strategies to enable people to make healthier choices.¹⁵⁹

Alongside this approach, WHO's Regional Office for Europe has stated that obesity requires a whole-society response for interventions to be effective. There are a range of environmental drivers that determine behaviour – household income, prices and availability of food, and formulation and marketing of products – and they ought to be recognised as such. Here, categories for reducing obesity include: education and research (such as enabling people to make healthier choices); information supply (such as advertising and promotion); market manipulation (such as taxing certain food products); technological innovation (such as increasing use of artificial sweeteners in food or use of pedometers); and institutional reforms (such as creating a public agency to coordinate anti-obesity policies).¹⁶⁰

Historically, countries' efforts to reduce obesity have oriented around industry-led measures delivered within a framework of personal responsibility, overemphasising the main drivers of obesity to be individuals' poor diets and lifestyle choices. ¹⁶¹ By looking to specific cases of how other countries approach the problem of obesity, however, there are a number of governments that recognise the many factors which exist both inside and outside of the health sector, and which have been implemented with reasonable success.

Finland

In 2012, Finland adopted a Health In All Policies approach within its Health Act by ordering local municipalities to consider health in each of its decision-making priorities. Its Act was reformed to make health promotion services mandatory and to ensure that all local districts involve all sectors in their health plans. For example, nurses were required to be in schools to provide free health check-ups and to give personalised advice on mental health, physical fitness, and healthy eating. National policies meant that schools had to provide health education classes and

nutrition and cooking lessons. As a case study of good practice, in the Finnish city of Seinäjoki, by working with the municipality's childcare, education, nutrition, recreation, and urban planning departments the proportion of five-year-olds who had overweight or obesity almost halved between 2009 and 2015. 162 163

The Netherlands

The Netherlands has adopted a preventative approach to reducing overweight and obesity, directing attention to environments that are healthier and providing support for children and their families, particularly where rates of obesity are higher. Here, the Dutch government financially supports local authorities to deliver programmes, with more than 18 municipalities having effectively reduced childhood obesity. Though there are a number of effective programmes in the country, one that stands out is the JOGG (Jongeren op Gezond Gewicht) initiative. JOGG utilises a local approach to reducing obesity by approaching health professionals, shopkeepers, schools, businesses, and local government to help children (aged 0-19) maintain a healthy weight. The programme orients around five pillars: political and government support, public-private partnerships, social marketing, scientific coaching, and prevention and health care – all to enable collaboration and capacity building within communities. Between 2010-2014, JOGG's progress was monitored in 5 municipalities: all of which showed a decrease in overweight and obesity in primary school children.¹⁶⁴

Japan

Japan has one of the lowest obesity rates in the world (according to BMI). Academic research has showed that the reasons for this are manifold: first, owing to their traditional, more healthy dietary habits, the Japanese consume 200 fewer calories per day than Americans. The Japanese are also more physically active – not because they do more organised physical exercise, but due to walking more often as part of their daily lives. This may be explained by the relatively high costs of driving a car, a national metabolic syndrome screening program, and highly established walk to school policies and a national school lunch programme for children (where participation is almost compulsory). Japan's approach considers the social and cultural conditions influencing health, although this maybe be attributed to their being more shared norms regarding health than countries such as the UK and US. 166 167 168

The role of treatment

While there is much more that can be done to reduce obesity rates through preventative measures, especially through embracing a whole systems approach, there remains a segment of the population that might need or benefit from medical intervention to reduce weight. For some, preventative measures will be ineffective, as will measures that encourage weight loss through diet and exercise regime change. For example, those with mental and physical health conditions might need further medical support, whether that be in the form of counselling, other psychological approaches, medication or surgery such as having a gastric band fitted.

Within the NHS, the *Clinical Commissioning Policy: Complex and Specialised Obesity Surgery* outlines the model of care for managing obesity as follows:

- **Tier 1** Primary care with community advice.
- Tier 2 Primary care with community interventions.

- Tier 3 A community/primary care based multi-disciplinary team (MDT) to provide an intensive level of input to patients.
- Tier 4 Specialist obesity services including surgery.

The "Tier 3" Specialist Weight Management Service offers a weight management programme for a period of 12-18 months that support adults with severe and complex obesity to lose weight through a range of interventions including psychological approaches and dietary changes.

Tier 4 weight loss surgery is available on the NHS if:

- You have a body mass index (BMI) of 40 or more, or a BMI between 35 and 40 and an obesity-related condition that might improve if you lost weight (such as type 2 diabetes or high blood pressure)
- You have tried all other weight loss methods, such as dieting and exercise, but have struggled to lose weight or keep it off
- You agree to long-term follow-up after surgery such as making healthy lifestyle changes and attending regular check-ups

The most common types of weight loss surgery are having a gastric band fitted, having a gastric bypass of having a sleeve gastrectomy where some of the stomach is removed. 169

There have been several cost-effectiveness analyses of bariatric surgery for morbid obesity. One of the most authoritative was the 2009 study by Picot et al. The study found that bariatric surgery was a cost-effective intervention for morbid obesity, with incremental cost-effectiveness ratios viii ranging between £2,000 and £4,000 per quality-adjusted life year (QALY) gained over a 20-year time horizon. To

Despite this, use of weight loss treatment is low in the UK. About 3.6m people in England are eligible for weight-loss surgery, but just 6,627 people had this surgery in 2017/18. Further, this was down from 8,794 in 2011/12.¹⁷¹ This amounts to about 0.2% of eligible people getting surgery, lower than the 1.2% seen in the US and 0.5% in Canada.¹⁷²

Oyinlola Oyebode, Associate Professor of Public Health at Warwick Medical School, has argued that one reason for the low number of operations performed in England is low demand from patients, which might reflect stigmatisation and weight bias in the UK – including among health professionals who might be reluctant to recommend surgery to those perceived to only have themselves to blame for their obesity.¹⁷³

Oyebode also notes that while women are more likely than men to be eligible for surgery (58% of those eligible are women and 42% are men), the proportion of women receiving surgery is significantly higher (76% vs 24%).¹⁷⁴ As such, another factor that might lead to underutilisation of bariatric surgery is men being reluctant to seek help from a medical professional – an issue spanning health issues more broadly.¹⁷⁵

viii The incremental cost-effectiveness ratio (ICER) is a statistic used in cost-effectiveness analysis to summarise the cost-effectiveness of a health care intervention. It is defined as the difference in cost between two possible interventions, divided by the difference in their effect.

Figure 15: Finished consultant episodes with a primary diagnosis of obesity and a main or secondary procedure of 'Bariatric Surgery', England



Source: NHS Digital

The Opinium survey commissioned as part of this study showed that close to three in five (58% of) respondents self-identified as having obesity have neither had weight loss surgery nor would consider doing so in the future. A quarter (24%) said that they have not discussed weight loss surgery to date, but are open to the idea in the future.

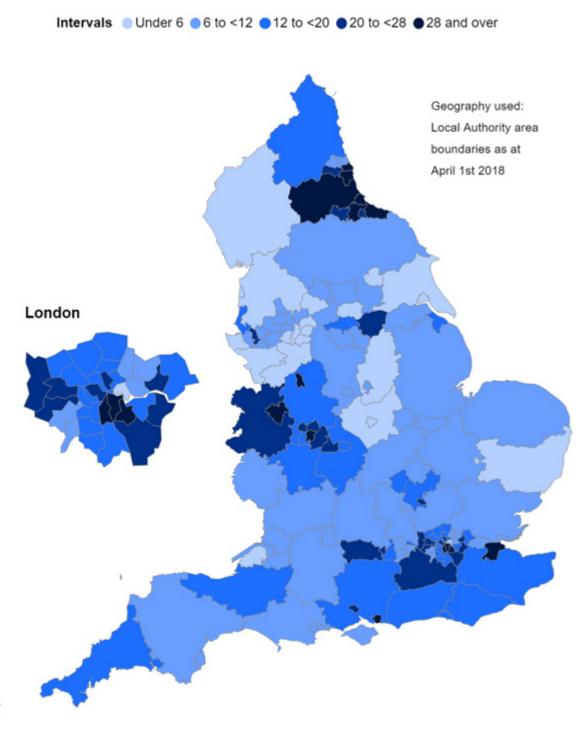
I have not had weight loss surgery, nor would I 58 % consider doing so in the future This is not something I have discussed, but I am open 24 % to the idea of weight loss surgery I am undertaking weight management support (e.g. weight reduction programmes, psychological 6 % approaches) as an alternative to surgery. I am thinking of undertaking weight management support (e.g. weight reduction programmes, 3 % psychological approaches) as an alternative to surgery. I have discussed weight loss surgery but concluded 2 % this was not the right approach to lose weight I have had weight loss surgery 2 % 0 % 10 % 20 % 30 % 40 % 50 % 60 % 70 %

Figure 16: Have you ever discussed weight loss surgery with a medical professional, or had surgery, as a way to reduce your weight? E.g. getting a gastric band fitted or gastric bypass surgery.

Source: Opinium survey. Results for those self-reported as having obesity

Another challenge in improving access to treatment for obesity, and tackling regional inequalities, is the "postcode lottery" in terms of access to bariatric surgery. The Royal College of Surgeons in England and British Obesity & Metabolic Surgery Society have argued that patients are being denied access to bariatric surgery because intensive weight loss programmes, which are a prerequisite to surgery, are not being commissioned in some areas. The A 2018 Freedom of Information Request found that only 52% of local authorities commission Tier 1 weight management services, while 82% commission Tier 2 services. It also found that just 57% of Clinical Commissioning Groups (CCGs) commissioned Tier 3 services and 73% commissioned Tier 4 services. The Just under two fifths (39%) of people with obesity who accessed lifestyle and prevention services found it incredibly or moderately difficult to do so.

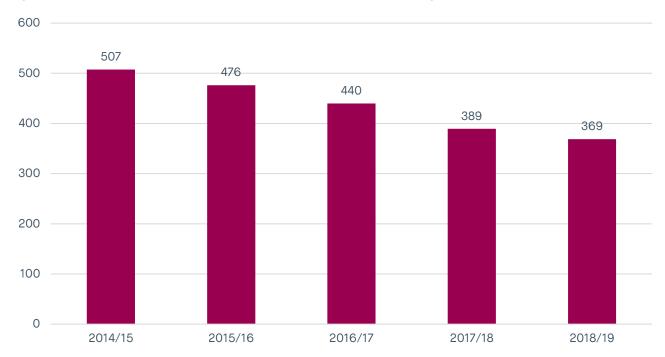
Figure 17: Obesity related bariatric surgery admissions, by Local Authority (rate per 100,000 population), 2018/19



Source: NHS Digital

In addition to the decline in bariatric surgery in recent years, NHS data show a decline in the number of prescription items for treatment of obesity in recent years, suggesting pharmacological approaches to treatment, alongside surgical approaches, have been in decline.

Figure 18: Number of prescription items for treatment of obesity, England, thousands



Source: NHS digital

CHAPTER 6 - WHERE DO WE GO FROM HERE?

The previous chapters have highlighted the complex nature of obesity in the UK. Its drivers are numerous; beyond the widely cited reasons of diet and physical activity, physical and mental health conditions are likely to play a key role. Further, a growing body of literature argues that we need to consider how all aspects to the economic and social system can drive obesity – for example, access to green space, the walkability of our urban environment and crime (which may deter outdoor exercise¹⁷⁹). Work-related factors such as job security are also important; a study of the health of Greek civil servants found that those with relatively higher job insecurity were reported to be eating more fast food meals per week than workers not at risk.¹⁸⁰

What does this mean in terms of where policymakers should go from here? Below we offer some broad thoughts. The aim of this paper is not to set out a series of narrow, specific policy recommendations, but to provide a steer on the broad thrust of obesity policy in the UK. We intend to examine the specifics of obesity policymaking – such as improving access to treatment and reducing childhood obesity – in subsequent reports.

The need for a whole systems approach to obesity

A clear theme emerging from much of the recent literature around obesity policy is the need for governments across the world to take a whole systems approach to obesity – looking at the wide range of factors that may contribute to higher rates of obesity.

Public Health England has recognised the potential benefits of a whole systems approach and last year published a guide to support local authorities with implementing a whole systems approach to "address obesity and promote healthy weight". ¹⁸¹ In the previous chapter, we also identified international examples such as Finland where the whole systems approach has been successful.

Despite this, what has emerged from the Government's obesity strategy to date is far from a whole systems approach – with its emphasis on tools such as advertising restrictions, labelling and curbing price discounts on junk food. Little has been said about the need to create urban environments that promote physical activity, through walkability and reduced car dependency. And there is no recognition of the potential role of job insecurity and stress on "comfort eating" or eating a relatively unhealthy diet.

There is a need for a broader obesity strategy which tackles all of these drivers. Critically, we believe that such a strategy would have widespread public support. The Opinium survey commissioned as part of this study showed a majority of adults supporting all of the key measures outlined to date as part of the obesity strategy – as shown in the chart below. Far from being libertarians, most of the public appears to favour a significant role for the state in reducing overweight and obesity rates across the country. There is scope for government to go further, with the support of the electorate.

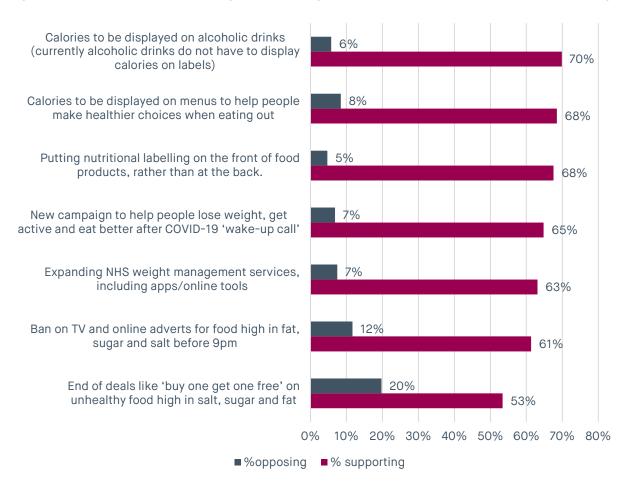


Figure 19: % of UK adults supporting and opposing policy measure in Government obesity strategy

Source: Opinium

We believe there is scope for government in the UK to learn from Finland's "Health in All Policies" approach – by ensuring that public health impacts (including impacts on overweight and obesity) are considered in all evaluations of spending, taxation and regulatory policy. By making policymakers in fields as broad as housing, crime, the environment, transport and business think about the health implications of decisions – and making this a key factor in deciding whether a policy should go ahead – we can gradually move towards a whole systems approach to obesity.

Improving access to treatment

While the Government obesity strategy talks about "expanding NHS weight management services", we have noted a number of issues that will need to be addressed in the treatment space. This includes potential prejudice and stigmatisation towards those with obesity – even among medical professionals. If at least some medical professionals believe that those living with obesity are to blame for their condition, then this might be impacting referral rates to weight management services.

We also noted that women are significantly more likely than men to receive bariatric surgery. As with other health issues, such as encouraging regular GP visits, the relative lack of willingness of men to seek help may undermine efforts to encourage increased use of NHS weight management services. Thinking back to the need for a whole systems approach to reducing

obesity, tackling a culture in which men are (self-)perceived as "weak" for seeking help may be necessary.

Ending the postcode lottery in obesity treatment should also be a key part of an expanded Government obesity strategy. NHS data on bariatric surgery procedures and pharmacological approaches to reducing obesity show both have declined in recent years. Further, the UK lags behinds countries such as the US and Canada in terms of the proportion of those with obesity undergoing medical procedures, despite evidence suggesting that such approaches can be cost effective.

As such, there is a case for expanding the role of treatment in the Government's obesity strategy through:

- Explicitly pledging to eliminate the postcode lottery in access to weight management services and, in turn, surgical/pharmacological treatment. The SMF agrees with the All-Party Parliamentary Group on Obesity, in its recent recommendation that "government should provide clear national guidance on obesity treatment pathways and commissioning responsibilities and set a minimum standard for treatment at a local level." 182
- Adopting a "whole systems" approach to encourage men to seek help for medical conditions – including obesity.
- Undertaking a cost-benefit analysis to set a target for the proportion of the population with obesity that would benefit from bariatric surgery and pharmacological interventions.

Funding and leadership

We are concerned that the abolition of Public Health England, combined with a lack of commitment to additional funding for CCGs and local authorities, will lead to an obesity strategy which lacks leadership and the financial ammunition needed to be successful – particularly in areas where obesity and its underlying drivers are more prevalent.

As well as a commitment to funding, the Government needs to urgently provide clarity around who will drive the obesity prevention and reduction agenda in Public Health England's absence. Similar concerns apply to other health issues including alcohol, tobacco and sexual health. 183

Potential avenues for policymakers to explore include expanding the remit of the new National Institute for Health Protection so that it covers issues such as alcohol, tobacco and obesity. Alternatively, a new body could be established focused on these issues – though we note the inefficiencies of such an approach, with Public Health England replaced with two new bodies. Lastly, the Government could simply abandon its plans to abolish Public Health England, given emerging concerns about the number of public health issues that could fall through the cracks.

Promoting innovation and creativity in reducing obesity

We stress the importance of encouraging innovation and creativity in reducing obesity rates across the UK. Given the complex nature of the problem, there is no silver bullet. Consequently, policymakers across the globe are still trying to establish the best approach to reducing obesity rates.

Given this, there is scope to encourage different approaches to obesity reduction within the UK, effectively allowing NHS trusts and local authorities to experiment and "see what works". This would allow an evidence case to build over time over the effectiveness of different policy interventions at a local level. "Gold standard" case studies would gradually emerge, which could be adopted across the country more broadly.

An example of such a case study is the experience of Leeds, which has been successful in reducing childhood obesity rates by delivering training to health visitors and children centres practitioners and offering a range of programmes for parents and young children in community settings. This has helped families, particularly in more deprived areas of the city, adopt healthier lifestyles. Given that the decline in childhood obesity in Leeds has not been matched elsewhere, this suggests that lessons could be learned from these local initiatives. One way of facilitating a culture of creativity is through the use of outcomes-based contracts. Under outcome-based contracts, service providers are paid according to the outcomes they deliver, rather than the means with which they reach such outcomes. In the case of public health issues, such as obesity, service providers such as local authorities and NHS trusts could be financially rewarded by central government for reducing obesity rates in a given area.

There have also been attempts to financially incentivise those living with obesity, with payments to the individuals themselves for losing weight and attending weight management services. With respect to other health issues, such as smoking cessation, financial incentives have been found to be relatively cost-effective in encouraging behaviour change. Financial incentives might also encourage more men to seek help to lose weight and address the gender disparity seen here.

Getting the details right with outcomes-based contracts is critical. Poorly designed contracts can result in excessive cost cutting and end up undermining service quality. For example, this could happen if outcome-based payments are set at too low a level. Outcomes-based contracts need to take account of the measurability of outcomes, and the extent to which it is possible to directly attribute improving or deteriorating outcomes to, say, the actions of an NHS trust of local authority.

There are similar issues with financially incentivising individuals living with obesity or overweight. A key challenge with respect to obesity is the potential for individuals to return to obesity after losing weight. One trial which financially incentivised people into losing weight showed that monetary incentives can be effective in promoting weight loss as part of a structured programme, but that maintaining weight loss once the incentive is gone is more difficult.¹⁸⁷

Good contract design could create stronger incentives to maintain weight loss (through, for example, staggered payments). Some treatment options, such as bariatric surgery, are also shown to have a long-term positive impact on an individual's ability to maintain a healthy weight – reducing the risk of returning to obesity.

The role of price and taxation

One notable omission from the Government's obesity strategy is a lack of significant efforts to increase the price of junk food, beyond a restrictions on offers such as "buy one get one free". This is despite a widespread consensus among health professionals that price can be a powerful

tool for improving public health – by discouraging consumption of junk food in favour of consumption of healthier products.

Consumers need not even face significant financial penalties through the introduction of new "sugar taxes". The introduction of the Soft Drinks Industry Levy showed many drinks manufacturers reformulating their products to reduce exposure to the tax. Broader sugar taxes would probably have a similar effect – incentivising food and drinks manufacturers to produce healthier products.

The economic argument for a broader sugar tax, or an "unhealthy food tax", is compelling. Poor diet imposes costs not just on the individuals consuming such diets, but also on wider society. As mentioned earlier, the NHS spends over £6 billion on overweight and obesity-related ill-health. That is to say, poor diet creates "externalities" and taxes on junk food should aim to cover these societal costs.

Much like with alcohol-related harms, the Government's preferred approach to diet-related poor health is one that leaves a lot of power in the hands of industry. Yet, as we have argued, self-regulatory approaches are often unsuccessful in improving public health. A broader sugar/junk food tax in the obesity strategy would have sent a powerful message that government is willing to step in to improve diet-related health outcomes, if industry self-regulation and light-touch approaches (such as labelling requirements) are shown to be lacking.

Tackling stigma

This paper has discussed the detrimental role that stigma can have in reducing obesity-related ill health. Stigma can reduce the willingness of individuals living with obesity to seek help. It can also prevent medical professionals from prescribing the right kind of help. And a culture of shame and bullying can even trigger detrimental patterns of behaviour such as overeating. Weight stigma is not a beneficial public health tool for reducing obesity. Rather, stigmatization of individuals with obesity threatens health, generates health disparities, and interferes with effective obesity intervention efforts. 188

Tackling stigma has to form a key part of a whole systems approach to reducing obesity rates. At present negative attitudes to those with obesity are embedded in many aspects of society – from the school playground to the workplace to the GP surgery – highlighting the scale of the challenge.

Yet, we know that stigma can be successfully eliminated or, at least, curtailed significantly – as evidenced by public attitudes to those living with disabilities, for example.

Going forward, government should embed tackling stigma into its obesity strategy. Potential policy approaches that could be adopted include creating resources to support policymakers (e.g. in the fields of education and healthcare), using personal narratives from people living with obesity to engage audiences and communicate anti-discrimination messages and developing a better clinical definition for obesity. Further, there is scope to explicitly state that weight bias and obesity discrimination should not be tolerated in education, health care and the workplace.

There is an active debate on whether obesity should be classified as a "disease", though doing more to highlight the complex nature of obesity and treat it more like a medical condition could help shift the public discourse away from one with a heavy element of shame and stigma.

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