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# **FOREWORD**

We know that prevention is better than cure. But on obesity we are making frustratingly little progress. Rates have continued to climb in recent years despite best efforts, particularly amongst children.

As a Minister in the Department of Health and Social Care during the pandemic I saw the full impact of what higher obesity rates mean. Increased health inequalities, more healthcare complications and co-morbidities, and tragically higher hospitalisations and death rates from the virus.

One of the legacies from the pandemic needs to be a new concerted effort to improve the health of the nation. The scale of this challenge is immense. Data show that we are the only country in the developed world where people have continued dropping out of the workforce in ever greater numbers beyond the acute phase of the pandemic<sup>1</sup>.

Our health is clearly our wealth, and tackling obesity needs to be at the heart of this new national mission.

As this report shows, there are too many areas of the country where the rates of obesity are too high, and where this is having a negative economic impact. None of the local authorities with the highest overweight and obesity rates have an above average rate of GDP per head. Places such as Hartlepool, Middlesborough, Blackpool and Sandwell, have some of the highest obesity rates and the highest numbers of workless households in the country.

Obesity is no longer just a public health challenge, it is an economic challenge too. That is why I have called on the Treasury to commission the Office for Budget Responsibility to conduct an assessment of the impact of obesity rates on welfare costs, labour market participation and productivity, direct and indirect health and social care expenditure and inward investment.

Successive Governments have tried, often with good intentions and efforts to tackle these issues but action has often been stymied, piecemeal and overly cautious. We now need a co-ordinated, evidence based national plan for tackling obesity. This needs to look beyond a narrow set of measures to a comprehensive approach covering public health, taxation, smart regulation, better use of digital and treatment. We also need to use the power of research to gain a greater understanding of the links between mental health and obesity, and in particular the impact of childhood trauma on obesity rates.

We are not the only country facing this challenge. Most OECD countries are seeing their obesity rates rise. This is a global health issue where cross border learning about the evidence and the approaches that will work best, particularly following Covid-19, feels more important than ever. Global platforms such as the G7, G20 and the World Economic Forum should explore what more can be done.

Both at home and abroad it is time for a turning point in obesity policy. One that moves beyond the fragmented approach of the past and into a new more dynamic and holistic model of the future. The success of our nation's health and economy both depend on it.

#### **Lord Bethell**

Former Minister for Life Sciences and Innovation



# **EXECUTIVE SUMMARY**

Obesity rates are rising globally. According to the OECD more than half of the population is classified as overweight in 34 out of 36 OECD member countries, and almost one in four people have obesity. Rates of severe obesity – known as morbid obesity or class III obesity – are now growing at the same pace as class I obesity<sup>2</sup>.

In the UK overweight and obesity rates have reached nearly two thirds of the population, and have nearly doubled since 1980. Obesity is set to take up an increasing amount of direct and indirect healthcare spend and have a 3% impact on economic growth over the next thirty years<sup>3</sup>.

Like many other countries, the UK Government is trying a range of different policies and initiatives to try and tackle obesity. However, whilst there is evidence that the rates of increase have slowed in the last twenty years when compared with the end of the last century, rates continue to rise.

Our approach to obesity policy is not working. Existing obesity policies and strategies have often been isolated, narrow and poorly implemented.

Recent efforts to reverse or dilute policy commitments on obesity (as they were seen to run counter to the priority of 'economic growth') were misguided and failed to acknowledge the links between obesity, deprivation and the economy. They also failed to learn from the pandemic which demonstrated the intrinsic link between public health and economic outcomes. The findings of this research highlight a group of local authorities with the highest overweight and obesity rates which have lower than average rates of GDP per head and higher numbers of workless households.

We have now reached a turning point. We need to set a new ambition to stabilise and then reduce obesity rates.

To deliver this change, a more concerted, integrated and long term policy approach is needed. Obesity needs to be seen as both a health and economic challenge. Government needs to show leadership by commissioning new evidence, building a new obesity plan, embedding it within efforts to tackle health inequalities and tackling stigma.

https://www.oecd-ilibrary.org/sites/67450d67-en/1/2/1/index.html?itemId=/content/publication/67450d67-en&\_csp\_=77ac5dad9f2cb67b4d2e46c9fc814aa4&itemIGO=oecd&itemContentType=book

<sup>3</sup> https://www.oecd-ilibrary.org/sites/67450d67-en/1/2/1/index.html?itemId=/content/publication/67450d67-en&\_csp\_=77ac5dad9f2cb67b4d2e46c9fc814aa4&itemIGO=oecd&itemContentType=book

Opportunities are also opening up to make new progress, including pioneering new innovations through the Life Sciences Vision and using new Integrated Care Systems (ICSs) to tackle variations in service access. New investments through diverting a portion of a public health levy on tobacco companies as part of a new 'polluter pays' approach to public health investment could boost access and tackle variation to obesity services.

This research looks at the health and economic impacts of obesity in England and the challenges and opportunities facing new ICSs in tackling obesity rates. It explores international practice and learnings for UK policymakers and sets out ten recommendations for delivering a turning point for obesity.

A turning point that will improve economic growth, reduce healthcare costs and improve lives.

# KEY STATISTICS AND REPORT FINDINGS<sup>4</sup>

# Rates of obesity

- National rates Rates of people who have obesity or overweight in England have tripled since 1975. Just under two-thirds of the population live with obesity or overweight today
- Local authority rates Thurrock has the highest recorded local authority rate of people having overweight or obesity of 76%. 21 local authorities have overweight or obesity rates of over 70%. By contrast 17 local authorities (all in London) have overweight or obesity rates of below 55%. Islington has the lowest recorded overweight and obesity rate of 44%, nearly a quarter below the rate in Thurrock, just 25 miles to the East
- Health inequalities Rates of overweight and obesity are 10% lower in the local authority with the highest healthy life expectancy, Wokingham (60%), in comparison with the local authority with the lowest healthy life expectancy, Blackpool (70%)

# **Economic impact**

- **GDP** Obesity is forecast to cost the UK 3% of GDP by 2050. The local authorities with the highest rates of obesity have the lowest rates of GDP per head (£24,214). By contrast local authorities with the lowest rates of obesity have the highest rates of GDP per head (£33,979). This represents an average difference between the lower and upper quintile of £9,765 per head<sup>5</sup>
- Employment Six local authorities Hartlepool, Middlesborough, Blackpool, Wirral, Kingston upon Hull and Sandwell are ranked in the top twenty local authorities for obesity rates and recorded proportion of workless households

<sup>4</sup> Full references and data sources within relevant report section

<sup>5</sup> Analysis covers all local authorities in England outside London

# **NHS** impact

- ICSs The four ICSs with the highest overweight and obesity rates; Black
  Country, Shropshire, Telford and Wrekin, Northamptonshire, Staffordshire and
  Stoke are all in the Midlands and have rates over 69%. By contrast the five ICSs
  with the lowest rates of obesity are all in London, with rates of 58% or below.
  There is a 17% difference in the overweight and obesity rate of North London
  with the lowest rate and Black Country with the highest rate
- Variation within ICSs Within ICSs there are large variations in obesity rates between local authorities. Hertfordshire and West Essex has the largest range in obesity and overweight rate of 22.5%, with Harlow recording a rate of 73.5% and St Albans a rate of 51%. Five other areas have variation rates of over 18%: Devon; North West London; North East and North Cumbria; Mid and South Essex; and Lancashire and South Cumbria
- Hospital admissions There has been an accelerated increase in the number of admissions with a primary and secondary diagnosis of obesity. In 2009/10 the number of admissions was 142,219 and in 2019/20 this had risen to 1,022,040, a seven fold increase. NHS data highlights a rising number of hospital admissions related to obesity and bariatric surgery as levels of deprivation increase
- Primary care appointments 11 ICSs: Humber and North Yorkshire, Suffolk and North Essex, South Yorkshire, Derby and Derbyshire, Leicester, Leicestershire and Rutland, Lincolnshire, North East and Cumbria, Gloucestershire, West Yorkshire, Norfolk and Waveney and Herefordshire and Worcestershire have above average numbers of primary care appointments per head of population and higher obesity rates

# RECOMMENDATIONS

**Recommendation 1: Obesity should be seen as both a health and economic issue.** The Treasury should commission an update to the Foresight report<sup>6</sup> by the Office for Budget Responsibility which includes an assessment of the impact of obesity rates on:

- Other health conditions
- Welfare costs
- Labour market participation and productivity
- Health and social care expenditure both direct and indirect costs<sup>7</sup>
- Inward investment<sup>8</sup>

Recommendation 2: To avoid shifts in the 'policy pendulum' between political administrations, the Office for Health Improvement and Disparities (OHID) should be commissioned by the Department of Health and Social Care to review the evidence on obesity interventions and policies every three years. If necessary a mandate to do this should be introduced in legislation. The work should be undertaken independently under the responsibility of the Chief Medical Officer who should include it as part of their annual report that year

Recommendation 3: To deliver systemic change, the Department of Health and Social Care should publish a long term, evidence based and holistic obesity strategy. The strategy should be a central part of the health inequalities white paper and the central Cabinet committee on health inequalities should be reestablished with obesity as a priority agenda item

Recommendation 4: New innovations should be prioritised in areas with the greatest need and impact. The Office for Life Sciences and NHS England should ensure that sites selected for the obesity mission in the Life Sciences Vision are chosen based on the health and economic impacts of obesity. These sites should be used to trial new innovative payment models for interventions, particularly related to prevention. NHS England should factor such work into its efforts to classify preventative healthcare spend and assess its impacts<sup>9</sup>

<sup>6 &</sup>lt;a href="https://www.gov.uk/government/publications/reducing-obesity-future-choices">https://www.gov.uk/government/publications/reducing-obesity-future-choices</a>

<sup>7</sup> This should also look at mental health and related costs: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3705987/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3705987/</a>

<sup>8</sup> Adapted from <a href="https://twitter.com/JimBethell/status/1573323548118360065/photo/1">https://twitter.com/JimBethell/status/1573323548118360065/photo/1</a>

<sup>9</sup> https://www.gov.uk/government/publications/build-back-better-our-plan-for-health-and-social-care/build-back-better-our-plan-for-health-and-social-care

Recommendation 5: Variations in access to weight management services must be addressed. NHS England should work with ICSs in establishing a new framework for obesity services that:

- Establishes a baseline of service provision across the country
- Addresses variation in services and patient support
- Increases access to cost-effective treatments

Part of this re-structure should initially be to review the tiered obesity services structure. An expert working group should be established to consider this and explore international practice and innovative approaches. NHS England should continue to expand access to the NHS Diabetes Prevention Programme, and factor obesity into efforts to tackle health inequalities such as within Core20PLUS5

Recommendation 6: New investments should be unlocked from polluters of poor health. The Treasury should introduce a tobacco levy capping the profits of tobacco companies. Excess funds of up to £400m raised should be invested in weight management services and associated infrastructure<sup>10</sup>. If implemented this could see an estimated extra 750,000 -1.5million people benefitting from access to such services each year. Alongside this, a wider review should explore the contributions of companies who are 'health polluters' to the nation's healthcare costs as part of a new approach to increase health investment from means beyond general taxation

**Recommendation 7: Public health campaigns need to be protected against budget cuts.** The Department of Health and Social Care should maintain levels of investment in public health campaigns aimed at tackling obesity such as the Better Health campaign and continue to evaluate their impact. A new digital health check presents an opportunity for more active engagement between clinicians and the public on their health and in tackling obesity<sup>11</sup>

Recommendation 8: Given rising rates and the impact on population health and the economy, obesity and obesity related clinical guidelines should be regularly reviewed and their implementation evaluated. By September 2023 NICE should review the uptake and implementation of the revised obesity guideline. Alongside this, other key clinical guidelines related to the co-morbidities associated with obesity, should also be reviewed to align with this revised approach

Recommendation 9: The role of obesity within medical training should be enhanced. The General Medical Council, NHS England and the professional bodies should review the role of obesity within medical training and practice and make sure health professionals have access to up to date and adequate training in relation to obesity prevention and treatment

<sup>10</sup> Action on Smoking and Health has estimated that a tobacco levy would raise £700m, with over £200m needed to support smoking cessation services, the excess funds could be diverted to other public health issues such as obesity: <a href="https://ash.org.uk/uploads/ASH\_Budget\_CSRSeptember-210930-FINAL.pdf?v=1660663607">https://ash.org.uk/uploads/ASH\_Budget\_CSRSeptember-210930-FINAL.pdf?v=1660663607</a>

<sup>11</sup> https://www.gov.uk/government/publications/nhs-health-check-programme-review/review-of-nhs-health-checks-terms-of-reference

Recommendation 10: Given the rising global challenge of obesity the UK Government should work with partners in the G7 or G20 group of countries to tackle obesity rates. Such an approach would include:

- Sharing best practice on policies and interventions
- Committing to patient access to evidence based treatments
- Building improved public awareness and tackling obesity stigma
- Setting a new target for stabilising and then reducing obesity rates

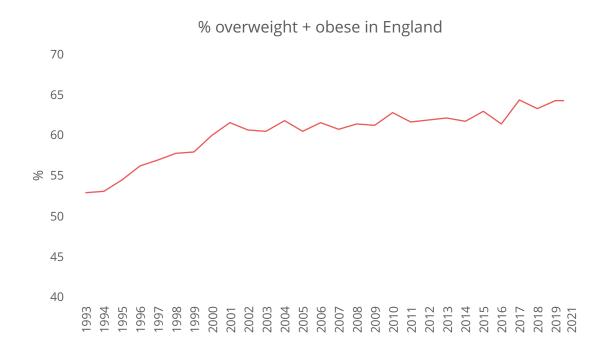


The definition of obesity in England is aligned with guidance published by the World Health Organisation (WHO) which defines anyone with a BMI over 30 as having obesity. The BMI scale is classified as follows:

- 18.5 to 24.9 as a healthy weight
- 25 to 29.9 having overweight
- 30 to 39.9 having obesity (class I and II)
- 40 or above having severe (morbid) class III obesity<sup>12</sup>

Rates of people who have obesity or overweight in England have tripled since 1975. There was a particularly stark increase in rates of obesity and overweight between 1993 and 2001, followed by a gradual rise between 2001 and 2021. Just under two-thirds of the population (64%) live with obesity or overweight today<sup>13</sup>.

Figure 1: Percentage of the population classified as overweight or obese in England



<sup>12</sup> https://www.nhs.uk/conditions/obesity/#:~:text=18.5%20to%2024.9%20means%20you,means%20you're%20 severely%20obese

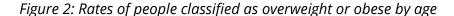
<sup>13</sup> https://digital.nhs.uk/data-and-information/areas-of-interest/public-health/health-survey-for-england---health-social-care-and-lifestyles

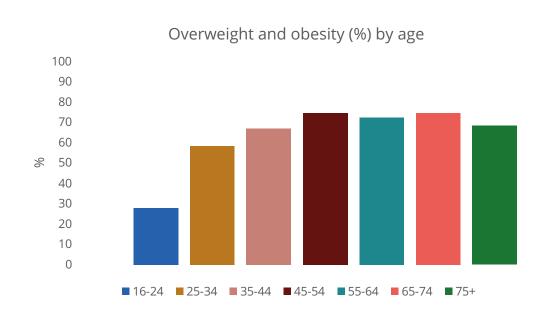
Obesity is one of the top five causes of premature death in England alongside smoking, poor diet, high blood pressure, and alcohol and drug use<sup>14</sup>. HHaving obesity can cause a range of related health conditions including type 2 diabetes, high blood pressure, high cholesterol and increased risk of respiratory, musculoskeletal and liver diseases. There is also a growing body of evidence about the link between obesity and being overweight with the development of certain types of cancer<sup>15</sup>.

COVID-19 is likely to have led to a further increase in obesity rates. The World Obesity Federation noted that decreased movement and increased stress during the pandemic was likely to have led to a rise obesity rates<sup>16</sup>. According to the King's Fund, 2020/21 saw a rise in obesity rates across every deprivation decile<sup>17</sup>.

# **Demographics**

The proportion of the population in England with the highest rate recorded as having overweight or obesity is the 65-74 and 45-54 age groups (73%). The groups with the lowest record rates are 16-24 (28%), 25-34 (59%) and 35-44 (66%). The biggest difference between adjacent age groups is 31% between 16-24 and 25-34<sup>18</sup>.





<sup>14</sup> https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32207-4/fulltext

<sup>15</sup> https://www.cancerresearchuk.org/about-cancer/causes-of-cancer/obesity-weight-and-cancer/does-obesity-cause-cancer

<sup>16</sup> https://www.telegraph.co.uk/global-health/science-and-disease/pandemic-may-have-pushed-millionsobesity-perfect-storm/

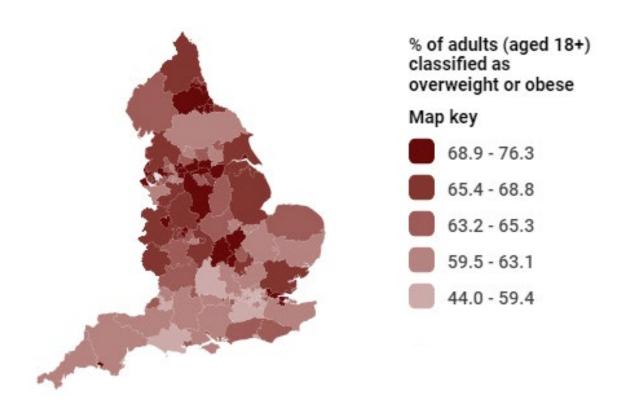
<sup>17</sup> https://www.kingsfund.org.uk/blog/2022/07/obesity-deprivation-and-covid-19#:~:text=Obesity%20rates%20 and%20the%20first%20year%20of%20Covid%2D19&text=At%20the%20same%20time%20the,18%20points%20in%202020%2F21.

<sup>18</sup> https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2021/health-survey-for-england-2021-data-tables

# Regional variation

Obesity rates also vary across the country. Thurrock has the highest recorded rate of people having overweight or obesity of 76%. 21 local authorities have overweight or obesity rates of over 70%. By contrast 17 local authorities all in London have overweight or obesity rates of below 55%. Islington has the lowest recorded overweight and obesity rate of 44%, nearly a quarter below the rate in Thurrock, just 25 miles to the East<sup>19</sup>.

Figure 3: Map of population overweight and obesity rates by local authority



<sup>19 &</sup>lt;a href="https://lginform.local.gov.uk/reports/lgastandard?mod-metric=10709&mod-period=1&mod-area=E06000031&mod-group=AllSingleTierAndCountyLalnCountry\_England&mod-type=namedComparisonGroup">https://lginform.local.gov.uk/reports/lgastandard?mod-metric=10709&mod-period=1&mod-area=E06000031&mod-group=AllSingleTierAndCountyLalnCountry\_England&mod-type=namedComparisonGroup</a>



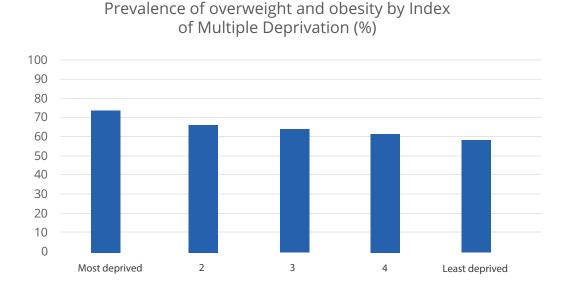
Rising obesity rates have a set of wider health and economic impacts. The following explores links between obesity and:

- Health inequalities
- · Pressures on the NHS
- · Economic growth

# Health inequalities and obesity

The latest data from the Health Survey for England finds that obesity prevalence was lowest among adults living in the least deprived areas (20%) and highest in the most deprived areas (34%).

Figure 4: Prevalence of overweight and obesity by Index of Multiple Deprivation quintiles)



Whilst proportion of men and women classified as overweight or obese was similar in the most deprived category, 72% and 71% respectively, there was a wider difference in the least deprived areas, 64% and 52% respectively. 69% of men are classified as overweight or obese compared with 59% of women<sup>20</sup>.

Figure 5: Prevalence of overweight and obesity by sex by Index of Multiple Deprivation quintiles



Prevalence of overweight and obesity (%) by sex by Index of Multiple Deprivation

Another important measure of health inequalities is healthy life expectancy (HLE). The Government's 2019 manifesto committed to improving HLE by five years by 2035, but this promise is well off track<sup>21 22</sup>. HLE varies across local authorities by 17 years. Blackpool has the lowest HLE of 54 and Wokingham in Berkshire the highest of 71.

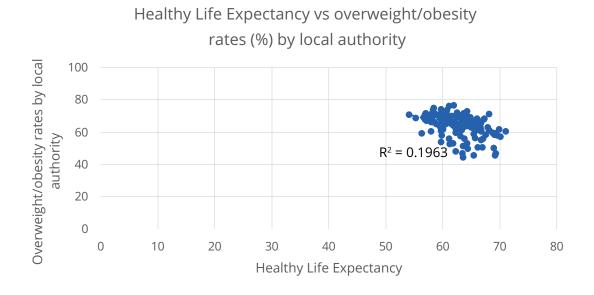
When mapped to local authority obesity rates (see figure 6 below) there is evidence of a weak negative correlation between rising HLE and lower obesity rates. The picture is a bit clearer when comparing specific areas. Taking the geographic areas with highest and lowest HLEs as examples, Wokingham has an obesity rate of 60%, 10% below Blackpool's.

<sup>20 &</sup>lt;a href="https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2021/part-2-overweight-and-obesity">https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2021/part-2-overweight-and-obesity</a>

<sup>21</sup> https://www.health.org.uk/news-and-comment/charts-and-infographics/healthy-life-expectancy-target-the-scale-of-the-challenge

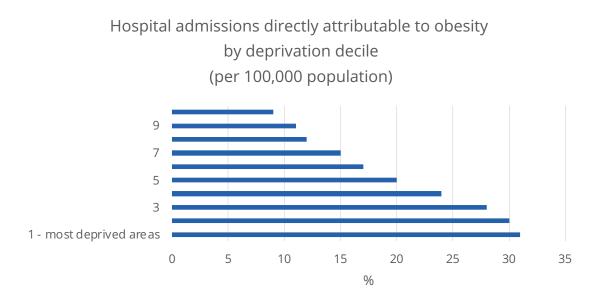
<sup>22 &</sup>lt;a href="https://policyexchange.org.uk/publication/saving-a-lost-decade/">https://policyexchange.org.uk/publication/saving-a-lost-decade/</a>

Figure 6: Rates of Healthy Life Expectancy compared with overweight and obesity rates by local authority



Whilst there is no strong correlation on rates of HLE and obesity, there is evidence that the impacts of obesity are higher in more deprived areas. Figure 7 below sets out the hospital admissions directly attributable to obesity by deprivation decile, and shows a steady increase in the number of admissions as levels of deprivation increase.

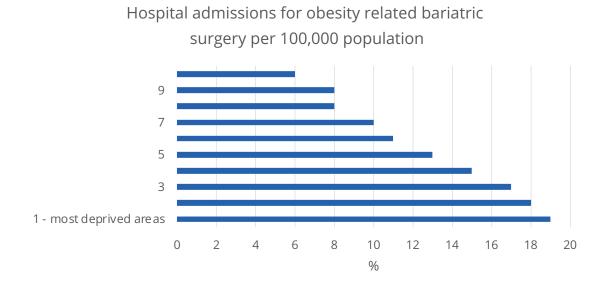
Figure 7: Hospital admissions directly attributable to obesity by deprivation decile<sup>23</sup>



<sup>23</sup> https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-obesity-physical-activity-and-diet/england-2021/part-1-obesity-related-hospital-admissions

This picture is repeated when looking at hospital admissions attributable to obesity related bariatric surgery by deprivation decile.

Figure 8: Hospital admissions for obesity related bariatric surgery by deprivation decile<sup>24</sup>



The above analysis would appear to indicate that obesity rates are broadly higher in more deprived areas as there does appear to be a link between deprivation and direct hospital admissions and bariatric surgery rates. However, there is only a weak correlation between overweight and obesity rates and overall HLE, most likely explained by the multi-factor nature of what contributes to HLE.

<sup>24</sup> https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-obesity-physical-activity-and-diet/england-2021/part-1-obesity-related-hospital-admissions

# The NHS and obesity

#### The role of ICSs in tackling obesity

The NHS is undergoing its latest re-organisation to plan and deliver care. The creation of ICSs through the Health and Social Care Act 2022 seeks to join-up health and care services on a regional level.

The 42 ICSs have four over-arching objectives set out in Box 1 below.

#### Box 1: ICS objectives<sup>25</sup>

- 1. Improve outcomes in population health and healthcare
- 2. Tackle inequalities in outcomes, experience and access
- 3. Enhance productivity and value for money
- 4. Help the NHS support broader social and economic development

NHS England believes this model will help the health system tackle more complex challenges such as:

- Improving the health of children and young people
- Supporting people to stay well and independent
- Acting sooner to help those with preventable conditions
- Supporting those with long-term conditions or mental health issues
- Caring for those with multiple needs as populations age
- Getting the best from collective resources so people get care as quickly as possible<sup>26</sup>

Tackling obesity rates would appear to be an issue for ICSs that can help them deliver against their four over-arching objectives. The following maps population obesity and overweight rates at ICS level.

<sup>25</sup> https://www.england.nhs.uk/integratedcare/what-is-integrated-care/

<sup>26 &</sup>lt;a href="https://www.england.nhs.uk/integratedcare/what-is-integrated-care/">https://www.england.nhs.uk/integratedcare/what-is-integrated-care/</a>

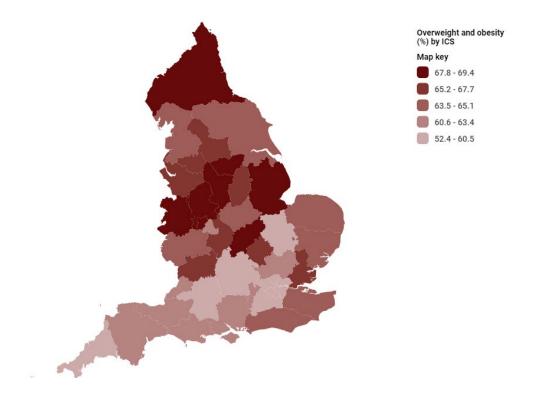


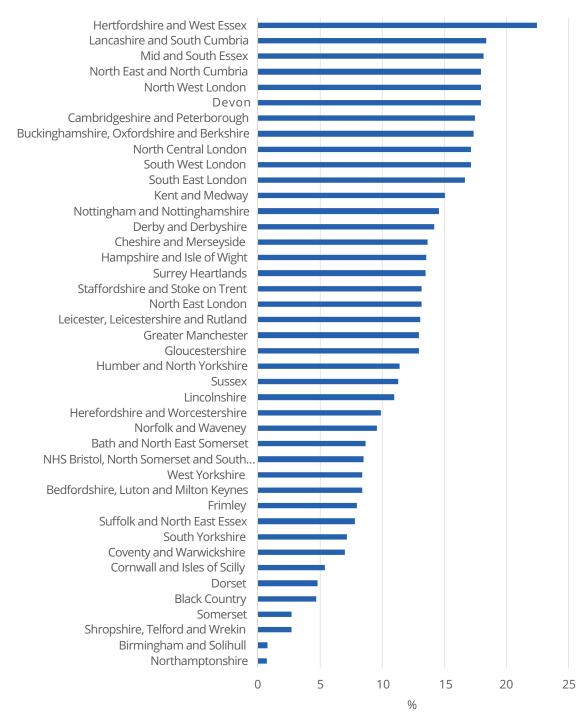
Figure 9: Map of population overweight and obesity rates by ICSs

The four ICSs with the highest overweight and obesity rates; Black Country; Shropshire, Telford and Wrekin; Northamptonshire; Staffordshire and Stoke; are all in the Midlands and have rates over 69%. By contrast the five ICSs with the lowest rates are all in London, with rates of 58% or below. There is a 17% difference in the overweight and obesity rate of North London with the lowest rate and Black Country with the highest rate.

As set out in Figure 10 below within individual ICSs there is widespread variation in overweight and obesity rates by local government area.

Figure 10: Variation in overweight and obesity rates within ICSs





Hertfordshire and West Essex has the largest range in its obesity and overweight rate of 22.5%, with Harlow recording a rate of 73.5% and St Albans a rate of 51%. Five other areas have variation rates of over 18%: Devon; North West London; North East and North Cumbria; Mid and South Essex; and Lancashire and South

#### Cumbria.

By contrast six areas have a below 5% range in obesity rates across their area. This includes Black Country which has the highest overall rate, along with Dorset (4.8%), Somerset (2.7%), Shropshire, Telford and Wrekin (2.7%), Birmingham and Solihull (0.8%) and Northamptonshire (0.7%).

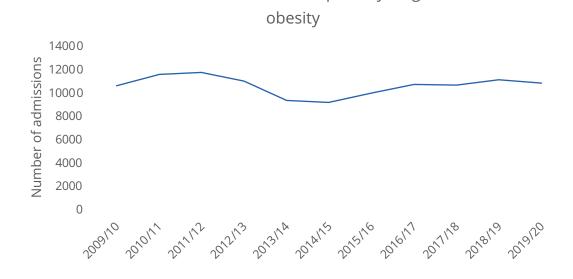
This variation within ICSs demonstrates the importance of using local place-based strategies as mechanisms to tackle obesity.

# Obesity and secondary care pressures

The number of hospital admission with a primary diagnosis of obesity has been fairly consistent over the last 10 years. In 2009/10 there were 10,571 admissions, in 2019/20 there were 10,780. After a drop from 2011/12, the number of admissions has risen 18% since 2014/15<sup>27</sup>. As set out earlier there is some evidence that rates of admission may be linked to deprivation.

Number of admissions with a primary diagnosis of

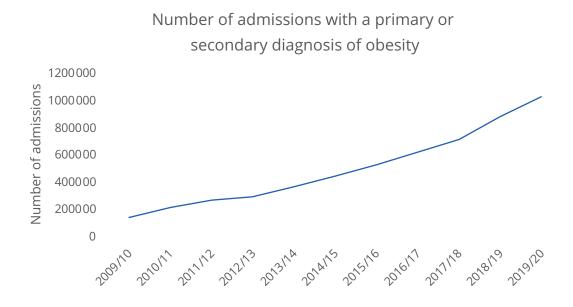
Figure 11: Number of hospital admissions with a primary diagnosis of obesity



<sup>27</sup> https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-obesity-physical-activity-and-diet/england-2021/part-1-obesity-related-hospital-admissions

There has been an accelerated increase in the number of admissions with a primary and secondary diagnosis of obesity over the same time frame. In 2009/10 the number of admissions was 142,219 and in 2019/20 this had risen to 1,022,040, a seven fold increase.

Figure 12: Number of hospital admissions with a primary or secondary diagnosis of obesity



Such figures are likely to be an under-estimate due to challenges with coding obesity, which is reliant on having up to date information on BMI in a patient's medical record<sup>28</sup>.

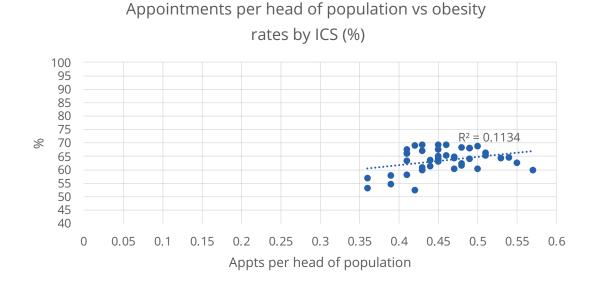
<sup>28</sup> https://questions-statements.parliament.uk/written-questions/detail/2020-06-01/51969

# Obesity and primary care pressures

GP services are under significant pressure with the number of GPs falling and appointment levels at record highs<sup>29</sup>.

Studies have demonstrated that patients with overweight or obesity make more visits to the GP<sup>30</sup>. The following maps the number of appointments per head of population against obesity rates at an ICS level.

Figure 13: Appointments per head of population vs obesity rates by ICS



29

https://digital.nhs.uk/data-and-information/publications/statistical/appointments-in-general-practice

<sup>30</sup> https://onlinelibrary.wiley.com/doi/full/10.1038/oby.2005.174

The analysis reveals a weak positive correlation between rising obesity rates and the number of GP appointments per head of population. There are, though, a set of systems where obesity may be a factor in relatively increased primary care demand. These are systems with above average numbers of appointments per head of population and higher obesity rates. They include:

- · Humber and North Yorkshire
- Suffolk and North Essex
- · South Yorkshire
- · Derby and Derbyshire
- Leicester, Leicestershire and Rutland
- Lincolnshire
- North East and Cumbria
- Gloucestershire
- · West Yorkshire
- Norfolk and Waveney
- Herefordshire and Worcestershire

In these 11 systems obesity rates may be contributing to increased healthcare demand and strategies to tackle obesity and its impacts should be particularly prioritised.

# The economy and obesity

Studies have shown that obesity has a wider economic impact, from loss of productivity, work absence and premature mortality<sup>31</sup>.

Analysis from the OECD has found that individuals with chronic diseases associated with obesity are likely to be less productive. The findings include:

- Having at least one chronic disease is associated with a 8% decrease in the
  probability of being employed in the following year compared to individuals
  with the same age and level of education that do not report a chronic disease.
  The decrease in probability of being included in the labour force is particularly
  high in the case of stroke (up to 20% for men). Individuals with at least two
  chronic diseases are about 17% less likely to form part of the labour force
- If employed, individuals with a chronic disease will be absent from work for 1.5% more days over the rest of their working life. Diabetes has the most detrimental effect causing an additional 3.4% days of absence from work in women. Individuals with overweight show a 1% increase in absences, due to other reasons
- Individuals with at least one chronic condition are almost 20% more likely to retire early<sup>32</sup>

The OECD estimates that by 2050 overweight and obesity will reduce GDP by 3.3% in the UK<sup>33</sup>.

When examining the relationship between GDP and overweight / obesity rates by local authority there is a weak negative correlation where higher rates of GDP map to lower obesity rates (figure 14 below) $^{34}$ . This is mainly driven by particular local authorities in London having higher rates of GDP (particularly those over £60,000) and lower rates of obesity. Areas with GDP rates in the range of £15,000 to £60,000 appear to have no correlation to rates of obesity.

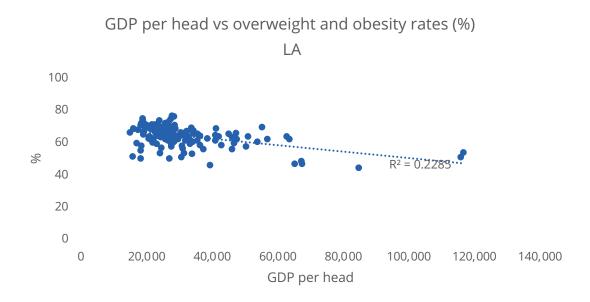
<sup>31 &</sup>lt;a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5409636/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5409636/</a>

<sup>32</sup> https://www.oecd-ilibrary.org/sites/67450d67-en/1/2/1/index.html?itemId=/content/publication/67450d67-en&\_csp\_=77ac5dad9f2cb67b4d2e46c9fc814aa4&itemIGO=oecd&itemContentType=book

https://www.oecd-ilibrary.org/sites/67450d67-en/1/2/1/index.html?itemId=/content/publication/67450d67-en&\_csp\_=77ac5dad9f2cb67b4d2e46c9fc814aa4&itemIGO=oecd&itemContentType=book#section-d1e2134

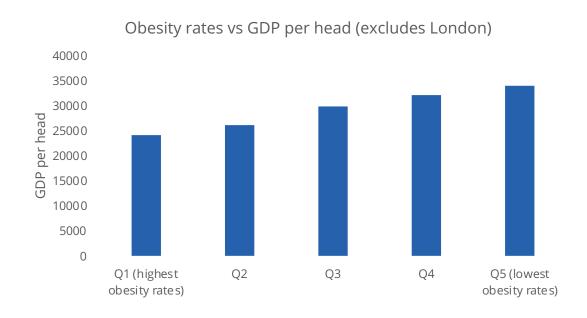
<sup>34</sup> https://www.ons.gov.uk/economy/grossdomesticproductgdp/datasets/ regionalgrossdomesticproductlocalauthorities

Figure 14: GDP per head compared with rates of overweight and obesity by local authority



When local authorities in London are removed a picture emerges of a relationship between overweight and obesity rates and levels of economic output.

Figure 15: Local authority overweight/obesity rates (quintiles, 1 – highest rates, 5 – lowest rates; excludes London) compared with average GDP per head of population



The average GDP per head by local authority outside London is £28,810. The local authorities with the highest rates of obesity (quintile 1) have the lowest rates of GDP per head (£24,214). By contrast local authorities with the lowest rates of obesity (quintile 5) have the highest rates of GDP per head (£33,979). This represents an average difference between the lower and upper quintile of £9,765 per head.

As overweight and obesity rates decrease, rates of GDP per head increase as set out in table 1 below.

Table 1: Differences in GDP per head between quintiles

	GDP per head difference (£)
Quintile 2 - Quintile 1	1,973
Quintile 3 – Quintile 2	3,657
Quintile 4 - Quintile 3	2,258
Quintile 5 – Quintile 4	1,877

This would appear to show a link between higher rates of overweight and obesity and lower rates of GDP per head outside London.

Within local authority areas with the highest rates of obesity outside London, none recorded an above average rate of GDP per head.

Table 2: GDP rates of local authorities with overweight and obesity rates outside London only

Local authority	Overweight/obesity rate (%)	GDP per head (£)
Thurrock	76.3	27,638
Stockton-on-Tees	75.8	28,417
Hartlepool	74.6	18,728
Knowsley	74	27,358
Wigan	73.7	18,763
Gateshead	73.3	23,825
Darlington	72.5	26,721
Wirral	71.8	19,240
Wakefield	71.6	25,643
Sefton	71.5	18,540
Walsall	71.5	18,375
Doncaster	71	21,548
Durham	70.8	19,208
Middlesbrough	70.8	23,324
Sandwell	70.8	22,588
Kingston upon Hull, City of	70.7	26,400
Barnsley	70.6	18,749
Telford and Wrekin	70.6	28,560
Blackpool	70.5	22,761
Oldham	70.4	19,919
Tameside	70.3	18,197
Kirklees	69.7	19,562
Rochdale	69.7	19,369
North Northamptonshire	69.6	23,479
Average	65.6	28,810

Another measure to assess the links between the economy and obesity in England is the number of workless households<sup>35</sup>.

Local authorities were ranked on the proportion of workless households in their area (1- highest), and this was mapped to obesity rate rankings (1- highest).

<sup>35</sup> https://www.ons.gov.uk/file?uri=/employmentandlabourmarket/peoplenotinwork/unemployment/datasets/rankingsofmeasuresofhouseholdeconomicactivityforcountiesandunitaryauthorityareasingreatbritaintablef/current/tablefhouseholdeconomicactivityranks2020.xlsx

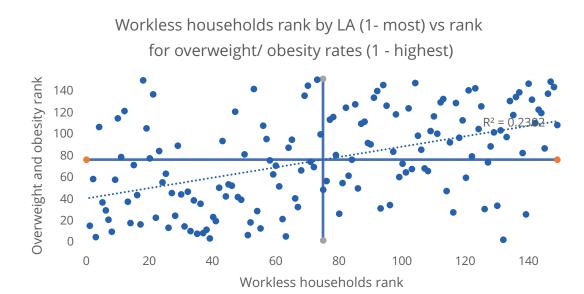


Figure 16: Rank of workless households vs rank of obesity rates by local authority

There was a weak positive correlation between the two variables. In segmenting the graph it is possible to identify a set of areas ranked in the bottom left of the graphic who have higher numbers of workless households and higher obesity rates. These include a list of six who found themselves ranked in the bottom 20 for both measures:

- Hartlepool
- Middlesborough
- Blackpool
- Wirral
- · Kingston upon Hull
- Sandwell

Another 15 local authorities find themselves in the bottom 40 on both indicators.

In these areas, obesity should be considered as a public health priority and action to tackle it co-ordinated across local government and the NHS. In these areas efforts to tackle obesity should be embedded within local and regional economic growth plans.

Tackling obesity needs to be seen as both a health and economic challenge. Recent efforts to water down and dilute obesity policies – as they were seen to run against ambitions for economic growth – should be reversed.



#### Overview

Since 1991 there have been 14 obesity strategies introduced by the UK Government, covering 689 wide-ranging policies. 50% of the strategies included obesity in the context of a wider approach to public health (tobacco, food safety etc.) while the remaining 50% were specifically focused on obesity.

Since the Conservatives took power in 2015 they have published four strategy papers on tackling obesity – two of which have solely focused on childhood obesity with a third heavily weighted towards children as part of a wider prevention strategy. These include:

- 2016: Childhood Obesity a plan for action<sup>36</sup> (Chapter 1)
- 2018: Childhood Obesity a plan for action<sup>37</sup> (Chapter 2)
- 2019: Advancing our health: prevention in the 2020s<sup>38</sup>
- 2020: Tackling obesity: empowering adults and children to live healthier lives<sup>39</sup>

While the theme of individual agency remains prominent, there has been a shift to include more interventionist policies focusing on shaping the wider food, drink and physical environments such as:

- Soft drinks levy
- Calorie labelling
- Reduction in sugar across food and drink children are exposed to
- Advertising / promotional restrictions
- Use of urban planning to create healthier communities
- Role of schools in supporting healthy eating and increasing levels of physical activity

However, whilst some of the above measures have been introduced such as the soft drinks levy and out of home calorie labelling, others such as advertising restrictions have been delayed due to pressure from industry stakeholders and amid criticism from a group of backbench parliamentarians.

<sup>36</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/546588/ Childhood\_obesity\_2016\_\_2\_\_acc.pdf

<sup>37</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/718903/childhood-obesity-a-plan-for-action-chapter-2.pdf

<sup>38</sup> https://www.gov.uk/government/consultations/advancing-our-health-prevention-in-the-2020s/advancing-our-health-prevention-in-the-2020s-consultation-document

<sup>39</sup> https://www.gov.uk/government/publications/tackling-obesity-government-strategy/tackling-obesity-empowering-adults-and-children-to-live-healthier-lives

# NHS policy

Obesity services in England are separated into four tiers covering different types of activities. These can vary by area but are typically structured as follows:

- Tier 1 universal services (such as health promotion or primary care);
- Tier 2 lifestyle interventions;
- Tier 3 specialist led weight management services;
- Tier 4 bariatric surgery.

Since the creation of NHS England as an independent organisation in 2013 it has published two long term strategic papers – the Five Year Forward View in 2015 and the NHS Long-Term Plan in 2020<sup>40</sup>. Both NHS papers set out organisational programmes and actions for tackling obesity.

The Five Year Forward View set out a plan for the national roll out of intensive lifestyle intervention programmes, which have been shown to cut obesity and prevent diabetes. The NHS Long-Term Plan which followed five years later, builds on this approach by committing to doubling enrolment in its NHS Diabetes Prevention Programme and offering targeted support via its weight management services for those with diabetes and hypertension and a BMI of over 30. It also notes commitments made in the Government strategy to roll out new hospital food standards and to reduce availability of High Fat Sugar Salt (HFSS) foods and beverages on site for both patients and staff. In addition it also commits to working alongside professional bodies and universities to ensure nutrition has a greater place in professional education training.

The most recent Government 2020 strategy paper on obesity also included the importance of NHS focused programmes such as weight management services, the Diabetes Prevention Programme and GP incentives through the Quality and Outcomes Framework<sup>41</sup>.

<sup>40</sup> https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf

<sup>41 &</sup>lt;a href="https://www.gov.uk/government/publications/tackling-obesity-government-strategy">https://www.gov.uk/government/publications/tackling-obesity-government-strategy</a>

#### **Box 2: National Diabetes Prevention Programme**

The Healthier You NHS Diabetes Prevention Programme, also known as the Healthier You programme, identifies people at risk of developing type 2 diabetes and refers them onto a nine-month, evidence-based lifestyle change programme. It is a joint service from NHS England and NHS Improvement and Diabetes UK.

People on the face-to-face group service receive personalised support to manage their weight, eat more healthily and be more physically active – which together have been proven to reduce a person's risk of developing type 2 diabetes.

The programme has been found to be effective with researchers finding a 7% reduction in the number of new diagnoses of type 2 diabetes in England between 2018 and 2019 and an estimate that someone completing the nine month NHS scheme reduces their chances of getting the condition by more than a third $^{42}$ . There is variation in uptake across the country $^{43}$ . One million people have been referred to the programme since it was first launched in 2016, with participants who complete achieving an average weight loss of  $3.3 \text{kg}^{44}$ .

NICE published the first obesity prevention guidelines in 2006 however it was not until 2014 that the first 'weight management' and 'obesity identification, assessment and management' guidelines for adults were published<sup>45</sup>.

This latter guideline was recently updated to include recommendations on anthropometric measures (particularly central adiposity – the accumulation of excess fat in the abdominal area) for assessing health risks associated with overweight and obesity in adults<sup>46</sup>.

<sup>42</sup> https://www.nihr.ac.uk/news/nhs-prevention-programme-cuts-chances-of-type-2-diabetes-for-thousands/30265#:~:text=Someone%20completing%20the%20nine%20month,DPP)%20through%20the%20DIPLOMA%20study.

<sup>43</sup> https://digital.nhs.uk/data-and-information/publications/statistical/national-diabetes-audit/nda-core-e4-21-22/nda-core-e4-21-22

<sup>44</sup> https://www.nihr.ac.uk/news/nhs-prevention-programme-cuts-chances-of-type-2-diabetes-for-thousands/30265#:~:text=Almost%20one%20million%20people%20have,weight%20loss%20of%203.3kg.

<sup>45 &</sup>lt;a href="https://www.nice.org.uk/guidance/conditions-and-diseases/diabetes-and-other-endocrinal--nutritional-and-metabolic-conditions/obesity/products?Status=Published&GuidanceProgramme=guidelines">https://www.nice.org.uk/guidance/conditions-and-diseases/diabetes-and-other-endocrinal--nutritional-and-metabolic-conditions/obesity/products?Status=Published&GuidanceProgramme=guidelines</a>

<sup>46 &</sup>lt;a href="https://www.nice.org.uk/guidance/cg189">https://www.nice.org.uk/guidance/cg189</a>

#### Obesity policy - state of play: limitations and variation

#### Government strategies have had serious limitations

Government has been active on trying to tackle obesity, through the publication of strategies and individual policies in recent years. However there have been a set of criticisms of the approach taken, including:

- Strategy documents are a set of individual initiatives rather than a joined-up holistic approach
- Policies are focused more on individual agency rather than tackling wider environmental factors
- There is a welcome focus on prevention in the documents but little focus on treatment and supporting those with obesity today
- Strategies have not come with substantial new funds
- Many policies are announced but not implemented
- There is a lack of accountability for delivery and limited evaluation of policy impact

A study from Cambridge University reviewing the last 14 Government strategies set out some of these limitations. The study by Theis and White found that the majority of policy recommendations within Government obesity strategies relied heavily on the concept of individual agency (i.e. diet, physical activity), rarely focusing on shaping wider external environmental factors (i.e. availability of junk food, design of urban transport systems).

The most popular focus of policy (20%) was on how to encourage more healthy behaviours from individuals, such as the Healthy Start Programme, which provides vouchers for low-income families to exchange for healthy foods.<sup>47</sup> It also found that there was a focus on the introduction of guidance or standards (16%) within the public sector and informative policies (12%) such as '5 a day'. The analysis found very few policies aimed at disincentivising behaviour (fiscal or non-fiscal) or restricting choice (i.e. unhealthy food promotions, reformulation).

Only a quarter of strategies included any form of monitoring or evaluation, with even less (19%) offering evidence to support proposals. A minority (9%) of papers included details about projected costs and/or available additional budget to deliver on the plan.

<sup>47</sup> Milbank Quarterly, Volume: 99, Issue: 1, Pages: 126-170, First published: 19 January 2021, DOI: (10.1111/1468-0009.12498)

# There is a postcode lottery in access to weight management and obesity services

Within the NHS there is a postcode lottery of access to services. The latest insights available for commissioning of Tier 2 and 3 obesity services from a 2015 survey of local authorities and CCGs found that<sup>48</sup>:

- Only 61% of local authorities reported providing or commissioning a tier 2 service
- 21% CCGs in England described having a tier 3 adult weight management service (however the survey recognised its limitations due to a lack of responses)

The survey, undertaken by Public Health England and the Royal College of Physicians, also asked stakeholders what the common barriers were in commissioning services with the following most common responses:

- A lack of evidence proving that a type of intervention is effective and a difficulty setting outcomes/key performance indicators as a result
- · A lack of national leadership and clear guidance
- A general lack of funding and resource alongside a lack of prioritisation (i.e. ringfenced funding)
- Confusion about commissioning responsibilities leading to a lack of accountability
- Concerns with the obesity pathway and service model not being patient-centred enough and challenges recruiting participants leading to issues of service cost effectiveness<sup>49</sup>

NHS England and NHS Improvement have recently established the National Obesity Audit (NOA) which collates comparable data from the different types of adult and children's weight management services across England.<sup>50</sup>

The first NOA focused on access to bariatric surgery rates across England. The following map highlights the variations found in bariatric surgery rates across ICSs.

<sup>48</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/484115/ Final\_Weight\_Management\_Mapping\_Report.pdf

<sup>49</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/484115/ Final\_Weight\_Management\_Mapping\_Report.pdf

<sup>50</sup> https://app.powerbi.com/view?r=eyJrljoiYmlyZWRmYjUtYTQ1ZS00YWEwLWIxOGUtYTky ZTM2ZDlmNDQ0liwidCl6ljUwZjYwNzFmLWJiZmUtNDAxYS04ODAzLTY3Mzc0OGU2M jllMilslmMiOjh9?r=eyJrljoiYmlyZWRmYjUtYTQ1ZS00YWEwLWIxOGUtYTkyZTM2ZDl NDQ0liwidCl6ljUwZjYwNzFmLWJiZmUtNDAxYS04ODAzLTY3Mzc0OGU2MjllMilslmMiOjh9

Number of people who had primary bariatric procedures in each ICB of residence for 2021-2022

Map key

136 - 395

86 - 135

56 - 85

31 - 55

0 - 30

Figure 17: Number of people who had primary bariatric procedures in each Integrated Care Board (ICB) of residence for 2021-2022

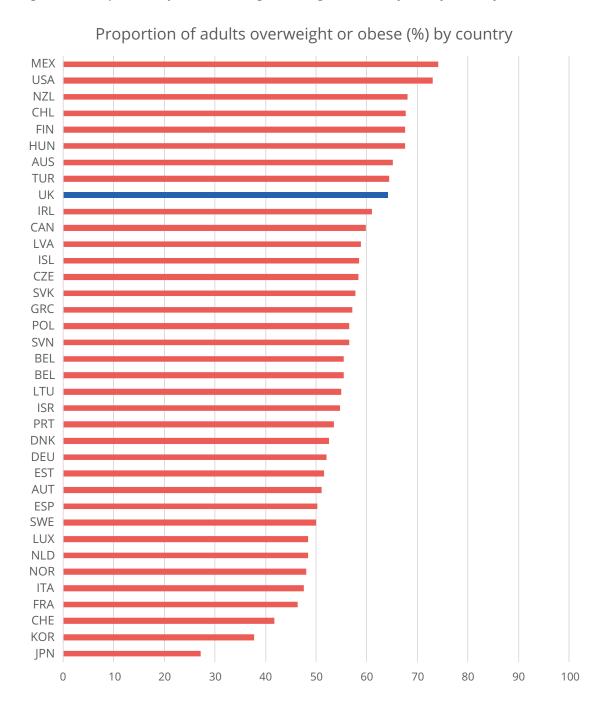
Government has made regular commitments overt the last 30 years to tackling obesity but central strategies have had major limitations in both their construction and execution. Within the NHS certain programmes have built momentum in specific areas such as the National Diabetes Prevention Programme but access to weight management and related services for patients are still subject to widespread variation across the country.



Rising obesity rates are not just a UK problem, many other developed countries around the world are grappling with the challenge.

According to the OECD, Mexico and the United States have the highest recorded overweight and obesity rates of 74% and 73% respectively<sup>51</sup>. The average rate recorded is 56%. The UK has a higher obesity rate (64%) than a number of other European countries (France, 46%, Germany 52% and Italy 38%). The lowest rates recorded are in Asia, with Japan the lowest at 27% and South Korea at 38%.

Figure 18: Proportion of adults having overweight or obesity (%) by country



<sup>51</sup> https://data.oecd.org/healthrisk/overweight-or-obese-population.htm Measured preference to self-reported

#### Rates are rising in most countries, and particularly fast in the UK

Looking at historical data – where available – it is possible to calculate the average annual rise in overweight and obesity rates by country.

The UK has seen its rates rise from 36% in 1980 to 64% in 2019, a rise of 28% in 40 years. This represents an annual change of 0.7% over that time frame. When compared to other countries, with data available for at least the last 20 years, the OECD shows that this is above the average rate of increase of 0.4%. The country with the most rapidly growing proportion of citizens recorded as overweight or obese is Chile which has seen a rise of 1.6% a year since the year 2000, and now finds itself as the country with the fourth highest overall rate. Australia (0.8%) and New Zealand (0.7%) have also seen similar annual increases to the UK52.

By comparison a number of countries have seen their overweight and obesity rates rise at a much slower rate: these include Canada (0.2%), Italy (0.3%), Germany (0.2%), and Portugal (0.2%).

The only country to experience a drop in obesity rates is Estonia which saw its rate fall from 58% in 1990 to 52% in 2020. This equates to an average annual fall in its overweight and obesity rate of 0.2%. However a closer inspection of the data provides a possible explanation for this. The first data point is 1990 which was when Estonia was still part of the former Soviet Union. The recorded rate in 1990 is 57.6%, but in 1992 following independence (in 1991) this drops substantially to 41.9%. Using the 1992 data point as the start of the sample, shows that Estonia's obesity and overweight rate is increasing by 0.35% a year - a similar rate to other countries. A short literature review also highlights concerns about the growing obesity rates in the country<sup>5354</sup>.

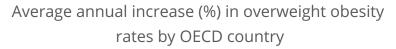
<sup>52 &</sup>lt;a href="https://data.oecd.org/healthrisk/overweight-or-obese-population.htm">https://data.oecd.org/healthrisk/overweight-or-obese-population.htm</a>

Only countries with 20 years worth of data and a latest recording of 2017 were included in the analysis

<sup>53</sup> https://news.err.ee/1028540/obesity-epidemic-continues-in-estonia#:~:text=Currently%2C%2040%20 percent%20of%20men,men%20has%20doubled%20since%201996.

https://www.oecd.org/estonia/Estonia-Country-Health-Profiles-2019-Launch-presentation.pdf

Figure 19: Average annual increase in overweight and obesity rates by OECD country





#### **Box 3: CHILE CASE STUDY**

An estimated 33.7% of adult (aged 18 years and over) women and 27.6% of adult men are living with obesity in Chile – representing a 10% increase in the last decade.<sup>55</sup> A similar increase can be seen in the child and adolescent population (although the trend is reversed with more males than females living with obesity).

This rise in obesity is attributed to an increase in the amount of unhealthy foods consumed and decrease in physical activity.<sup>56</sup> Chile has sought to respond by being at the forefront of introducing regulations to restrict the advertisement of unhealthy foods to children, first bringing in rules in 2016. Analysis has shown that these restrictions have slightly reduced the overall intake of calories, saturated fat, sodium and sugar.<sup>57</sup>

<sup>55</sup> https://globalnutritionreport.org/resources/nutrition-profiles/latin-america-and-caribbean/south-america/chile/

<sup>56</sup> https://www.oecd-ilibrary.org/sites/9789264309593-6-en/index.html?itemId=/content/component/9789264309593-6-en#:~:text=A%20number%20of%20factors%20are,consumption%20of%20calorie%2Ddense%20food.

<sup>57</sup> https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(21)00172-8/fulltext#:~:text=Added%20 value%20of%20this%20study,not%2Dhigh%2Din%20purchases.

#### Tackling obesity internationally

The World Health Organisation (WHO) has published four reports on the topic of obesity since 1997. These have been very much focused on addressing the drivers of obesity (namely poor diet and lack of exercise)<sup>58</sup> and adopting a preventative approach with a particular focus on child nutrition<sup>596061</sup>.

Most recently, the World Health Assembly, the decision-making body of the WHO, made new recommendations on the prevention and management of obesity when it met in May 2022<sup>62</sup>. These included a set of related targets in a bid to halt the rise of obesity in children under five, adolescents and adults by 2025 and to end all forms of malnutrition by 2030.

The document sets out the importance of:

- · A whole-of-government and whole-of-society approach
- A life-course approach, in which primary preventive efforts are likely to have optimal effects if started in early childhood with parental involvement
- Integrated health services that provide a continuum of care, such as health promotion, disease prevention, diagnosis, treatment and management<sup>63</sup>

There are a total of 16 recommendations for Governments grouped into the following five categories: health, food systems, social protection and welfare; built environment and physical activity; and, health literacy and education.

The document calls for "comprehensive and evidence-informed national action plans for the prevention and management of obesity in all age and population groups" to be developed. It also stresses the importance of: "monitoring and evaluating policy and programme implementation in different sectors, including to assess access to quality care and clinical interventions, the capacity of health care workers, the availability of healthy foods and the impact of actions taken on obesity reduction across the life course<sup>64</sup>".

<sup>58</sup> https://apps.who.int/iris/handle/10665/63854

<sup>59</sup> https://apps.who.int/iris/bitstream/handle/10665/42519/9241562110.pdf

<sup>60</sup> https://apps.who.int/iris/bitstream/handle/10665/113048/WHO\_NMH\_NHD\_14.1\_eng.pdf

<sup>61</sup> https://www.who.int/publications/i/item/9789241510066

<sup>62 &</sup>lt;a href="https://apps.who.int/gb/ebwha/pdf\_files/EB150/B150\_7-en.pdf">https://apps.who.int/gb/ebwha/pdf\_files/EB150/B150\_7-en.pdf</a>

<sup>63</sup> https://apps.who.int/gb/ebwha/pdf\_files/EB150/B150\_7-en.pdf

<sup>64 &</sup>lt;a href="https://apps.who.int/gb/ebwha/pdf\_files/EB150/B150\_7-en.pdf">https://apps.who.int/gb/ebwha/pdf\_files/EB150/B150\_7-en.pdf</a>

#### **Country policy comparisons**

With obesity rates rising across the OECD, albeit at different rates, and with criticisms in the approach of the UK Government to delivering effective policies, Future Health researched what other policies countries had introduced to try and tackle the issue. Research was undertaken through a series of 1:1 expert interviews and discussion with representatives from each country. Future Health focused on the G7 countries with overweight and obesity rates of 40% or more (all G7 countries except Japan). A summary of the approaches in each country is contained within the grid below. The grid is not designed to be comprehensive but to provide a snapshot of the different policy approaches adopted.

# Country-level policy action on obesity

						*
	UK	Germany	France	Italy	US	Canada
Overweight and obese population <sup>i</sup>	64.2%	52.1%	46.4%	47.6%	73.1%	59.8%
Average annual increase"	0.7%	0.2%	0.5%	0.3%	0.5%	0.2%
Economic impact (2020-2050) <sup>iii</sup>	- 3.4% GDP	- 3.0% GDP	- 2.7% GDP	- 2.8% GDP	- 4.4% GDP	- 3.6% GDP

	UK	Germany	France	Italy	US	<b>C</b> anada
National strategy / plan	Yes - 14 obesity-related strategies since 1991 (both adult and childhood) – the majority of which focus on individual-agency with regards to weight loss. Since 2015 these have included more interventionist policies such as limits to marketing of unhealthy foods and calorie labelling. Unless mandatory, implementation progress has been slow and there is little evaluation of their impact.	Yes - National diabetes plan with recognition of obesity as a chronic disease by Parliament. The plan calls on the Ministry of Health Statutory Insurance Scheme to address current deficits in care. Within the GVWG (Health Care Development Act) – the G-BA (Federal Joint Committee - FJC) is charged with the development of a disease management plan for obesity by 08/24.	Yes - Obesity Roadmap 2019-2022 – ambition to better co-ordinate care, regulate bariatric surgery, improve training & information as well as use of innovation and evaluation.	Limited - The Italian national prevention plan references the importance of physical activity and the link between diet and obesity (particularly in children). It also highlights comorbidities with an emphasis on cancer and dementia. However the plan is light on recommendations. There is also reference to obesity within the national plan for chronic disease.	Yes - The Biden-Harris Administration National Strategy on hunger, nutrition and health was published in September 2022. The strategy focuses on the availability and affordability of nutritious food alongside creating safe spaces for people to be physically active.  A series of call to actions, resources and press releases have been published by the Office of the Surgeon General to encourage 'healthful eating with regular physical activity'.vi	Limited - No overarching strategy. In October 2022 the Federal Government did publish a framework to improve access to diabetes treatment and prevention in Canada. VIII Measures in the plan included raising awareness of the link between obesity and type 2 diabetes. Curbing Childhood Obesity: A Federal, Provincial and Territorial Framework for Action to Promote Healthy Weights was published in 2010. VIII

	UK	Germany	France	Italy	US	<b>C</b> anada
Tax and regulation	Yes - Soft Drinks Industry Levy. Studies have shown that the levy has had success in reducing sugar intake.ix Regulations on the marketing of unhealthy foods. Front of pack nutrition traffic light system and calorie labelling has been introduced in the out of home sector.	Limited - Nutri-Score is a voluntary label. Wider discussions on sugar have been had politically but no action as yet.	Yes – Soda tax first launched in 2013 and updated in 2018. Nutri- Score front-of-pack nutritional labelling scheme launched in 2017. 2004 Public Health Act bans vending machines in schools.	Limited - A sugar tax for sweetened drinks is planned for January 2023*.  Voluntary agreements with industry around improving the nutritional standards of foods for children and guidelines around the marketing of these foods.xi	Limited – A number of US cities have introduced a sugar tax but these have not been implemented at a state level.*ii  The FDA updated labelling requirements in 2016 which requires inclusion of calories and sugars in realistic serving sizes.*iii  The Affordable Care Act required chain restaurants and vending-machine companies to provide nutritional information about their products beginning in May 2018.*iv	Limited - Legislation to prohibit food and beverage marketing directed at children.**  The Healthy Menu Choices Act requires owners and operators of food premises to display the number of calories in each standard food item sold at the premises.**i
Obesity classified as a disease	Limited – No official recognition but the Royal College of Physicians has called for obesity to be recognised as a disease***i.	Yes - The German Parliament classified obesity as a disease in 2020.	No	Limited - The Italian Parliament approved obesity as a chronic disease for Government consideration in 2019.xviii	Limited – The American Medical Association recognised obesity as a disease in 2013.xix	Limited - Obesity has not received official recognition as a chronic disease by the federal government or any provincial/ territorial governments, despite recognition from the Canadian Medical Association and the medical professional associations in Saskatchewan and Yukon.**

		Courses	Front	lan b.		<b>*</b>
Clinical practice	NICE have published several guidelines and quality standards to guide clinical practice. The majority of focus is on early intervention, education and weight management approaches.	Germany  The German Obesity Society (DAG) eV has published several guidelines on obesity including for children and adults but these require updating. The surgical guideline of the German Society for	New guidelines expected for patients with BMI between 30 and 34.9.  Bariatric surgery guidelines were published in 2009. There were an estimated 571 procedures per 1m	The Italian Society for Obesity (SIO) published treatment guidelines in 2016-17.xxv They have also published a management algorithm for overweight and obesity.xxvi	The AACE/ACE Comprehensive Clinical Practice Guidelines for Medical Care of Patients with Obesity were published in 2016.** Pharmacological management of	Canada  The 2020 Canadian Adult Obesity Clinical Practice Guidelines are regularly highlighted as gold standard practice across the world.xxxii Clinical best
	approaches.  Bariatric surgery is provided only if a patient meets specific criteria. An estimated 117 procedures per 1m of the population took place in 2012.**  Pharmacological interventions are recommended but only as a last resort.  the German Socia General Visceral (DGAV - CAADIP) to date. A guideli synopsis for DMF Obesity by IQWiG (German HTA Ins was recently pub)  A 2020 study estit that 27.4 bariatric surgery procedur 100,000 persons year take place.**  Pharmacological interventions are excluded by law funding by health	General Visceral Surgery (DGAV - CAADIP) is up to date. A guideline synopsis for DMP Obesity by IQWiG (German HTA Institute) was recently published. A 2020 study estimated that 27.4 bariatric surgery procedures per 100,000 persons per year take place.***	of the population in 2012.xxiii  Limited pharmacological interventions offered if nutritional management has failed.  Pharmacological interventions are included within the ISO treatment guidelines. xxiv	Bariatric surgery is included within the ISO treatment guidelines however patients must fulfil a strict criteria to qualify.**xviii An international study estimated 128 procedures per 1m people took place in 2012.**xviiii  Analysis has shown that for employee health insurance programmes 42 states provide nutritional counselling, 23 states provide pharmacological interventions and 43 states fund bariatric surgery. In contrast Medicaid health insurance programmes: 21 states provide nutritional counselling (from 9 to 21 states) and 49 bariatric surgery but only 16 states will provide pharmacological interventions.**xix	obesity: an endocrine Society clinical practice guideline was published in 2015.****	practice guidelines for primary prevention of childhood obesity were published in 2014. *****  A separate guideline also exists for the prevention of weight gain and use of behavioural and pharmacologic interventions to manage overweight and obesity in adults in primary care. ****  Bariatric surgery rates: an average of 1 in 185 (2017) and 1 in 171 (2019) people received surgery that were eligible. *****

#### **Headline findings**

- Obesity rates The UK has the second highest overweight and obesity rate of the six countries analysed and the fastest annual growth rate from the OECD data
- Economic impact The UK's obesity rate will have a greater economic impact on GDP between 2020-2050 than Germany, France and Italy; but below the USA and Canada
- National plans Two countries, the UK and France have national obesity specific plans/strategies from 2019 and 2020. They also have the highest rates of growth in their populations classified as having overweight and obesity. The US has recently published its own obesity related plan. Germany, Italy and Canada have sought to embed policies to tackle obesity through its inclusion within diabetes and associated preventative healthcare plans
- Tax and regulation The UK and France have brought in legislation to tax sugary drinks. Italy plans to bring in a similar tax in 2023 and US cities have introduced such taxes. A range of other regulatory policies are being trialled in different countries including food labelling and marketing restrictions
- Obesity as a disease Germany has gone the furthest of all countries in labelling obesity as a disease. The Italian parliament classified obesity as a disease in 2019 but the Government has yet to officially respond. Clinical groups in the UK, USA and Canada have all called for obesity to be officially recognised as a disease
- Clinical guidelines There are variations in clinical practice across different countries. Canada updated its clinical guidelines in 2020, and in 2022 NICE updated its 2014 obesity guideline to account for new clinical practice. There is variation in access to new pharmacotherapies and the UK carries out a similar number of surgeries per year to Italy but is behind France and the USA in surgery rates<sup>65</sup>

Across the six countries, a range of different policy approaches are being applied in an attempt to tackle obesity. Some proposals and updated guidelines are fairly new and it is too early to determine their impact. However the following are some learnings for UK policymakers from the research:

- All countries are struggling with building a cohesive and cogent approach
  to tackling obesity. The establishment of an obesity strategy is not itself a
  recipe for success. Far more important is what is included within such a
  strategy, whether it is integrated, holistic and funded, and how it is ultimately
  implemented
- Amongst the European countries in the G7 the UK's economy is set to be the
  worst hit by obesity in the next 30 years. It is important to see obesity as not
  only a health, but an economic challenge
- Countries are trying different policies with regards to tax and regulation as tools
  to reduce obesity and in some ways the UK is at the forefront of efforts here
  with the sugar industry drinks levy. The UK should continue to make strides in
  this area and review and evaluate the evidence as it emerges. However such
  approaches alone will not tackle the scale of the problem faced
- Clinical opportunities are emerging to improve outcomes for patients with obesity. Some countries are further ahead in ensuring those living with overweight and obesity have access to the latest treatments and interventions. Countries such as Germany and Canada have sought to embed action on obesity through new efforts to tackle diabetes



#### Economic assessment of the impact of obesity

As set out in this paper, obesity has a wider set of health, health system and economic costs.

In 2007 the Government Office for Science published the Foresight report looking at future trajectories for obesity rates over a 40 year period. The study found that the NHS costs attributable to overweight and obesity were projected to double to £10 billion per year by 2050. The wider costs to society and business were estimated to reach £49.9 billion per year (at today's prices)<sup>66</sup>.

Given the ongoing rise in obesity rates, the Government should now commission a new independent update to this work. This should include an assessment of the impact of obesity rates on:

- Other health conditions
- · Welfare costs
- Labour market participation and productivity
- Health and social care expenditure both direct and indirect costs<sup>67</sup>
- Inward investment<sup>68</sup>

The work should be commissioned by the Treasury and carried out by the Office for Budget Responsibility. The report should be completed within six months and be used as a catalyst for developing a new cross Government obesity strategy.

<sup>66 &</sup>lt;a href="https://www.gov.uk/government/publications/reducing-obesity-future-choices">https://www.gov.uk/government/publications/reducing-obesity-future-choices</a>

<sup>67</sup> This should also look at mental health and related costs: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3705987/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3705987/</a>

<sup>68</sup> Adapted from <a href="https://twitter.com/limBethell/status/1573323548118360065/photo/1">https://twitter.com/limBethell/status/1573323548118360065/photo/1</a>

#### Building an integrated and long term obesity strategy

Previous Government obesity strategies have had mixed and limited success. The finding from this work is that one of the challenges past strategies have faced is that they have often been a series of isolated policies packaged as a strategy, rather than a more balanced and integrated approach across the areas of prevention, management and treatment.

A new strategy should learn from this, be grounded in available evidence and adopt international good practice examples where appropriate.

Strategies have also suffered from delays as a result of changes in political leadership. To try to reduce this 'policy pendulum', the Office for Health Improvement and Disparities should be commissioned to review the evidence on obesity interventions and policies every three years. If necessary a mandate to do this should be introduced in legislation. The work should be undertaken independently under the Chief Medical Officer who should include it as part of their annual report that year.

Any new integrated obesity strategy should be included within and as part of a wider health disparities white paper. Whilst the future of this document is currently uncertain, it is likely that a future administration will bring forward new actions on public health and obesity must be a central part of this. The cross-Government cabinet committee on health disparities should also be re-constituted and obesity confirmed as a priority agenda for this group. NHS England should examine how efforts to tackle obesity can be aligned with work on the Core20PLUS5 programme aimed at ensuring new ICSs are tackling health inequalities in important clinical areas such as cancer and hypertension<sup>69</sup>.

<sup>69</sup> https://www.england.nhs.uk/about/equality/equality-hub/national-healthcare-inequalities-improvement-programme/core20plus5/

#### Investing in innovation and improving local health outcomes

The Life Sciences Vision included obesity as one of its seven mission areas, particularly as a risk factor for cardiovascular disease (see box 4 below).

Box 4: The Life Sciences Vision: Prevention and treatment of cardiovascular disease and its major risk factors including obesity

"Government, NHS England, medical research charities and industry could collaborate and deliver a programme of large studies to build real world evidence, by simultaneously testing multiple different technological solutions to obesity and other risk factors to assess if and how well they work at scale, in live healthcare settings. In practice, this could involve trialling a combination of a novel medicine or medtech that allows an individual to lose weight, with digital technologies then used to support an individual to maintain their weight loss and remain at a healthy weight. Multiple technologies could be "mixed and matched" adaptively in the trial to examine the efficacy of different combinations, and the UK's diversity and clinical research and data infrastructure would allow the trial to be delivered at scale (20,000+ participants) in a representative population. If any of the technology combinations then proved effective, it would then be possible to use an innovative deal to incrementally trial in larger populations, and if efficacy is maintained, support a national rollout<sup>70</sup>."

This research has highlighted a set of geographic areas across the country where higher rates of obesity may be linked to deprivation, economic impacts and greater pressures on health services.

These could be sites for the innovative models expected to be rolled out through the Life Sciences Vision above. The recent £20m investment includes a focus on more deprived communities<sup>71</sup>.

These models should also look to explore more innovative payment models. This includes more outcomes based payments, where providers are rewarded for obesity related interventions that demonstrably improve health outcomes and reduce wider healthcare expenditure over time. This evidence base would be helpful as the NHS explores how to most effectively invest in more preventative care and set out a 10 year spend and outcome trajectory as detailed in *Build Back Better Health and Care*<sup>72</sup>.

<sup>70</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/ file/1013597/life-sciences-vision-2021.pdf

<sup>71</sup> https://www.gov.uk/government/news/government-to-use-vaccine-taskforce-model-to-tackle-health-challenges

<sup>72</sup> https://www.gov.uk/government/publications/build-back-better-our-plan-for-health-and-social-care/build-back-better-our-plan-for-health-and-social-care

#### Designing a new NHS obesity service

The NHS currently uses a four-tiered weight management system<sup>73</sup>. The Royal College of Physicians has noted that ICSs: "are well-placed to co-ordinate the identification and referral of patients from primary to secondary or tertiary care<sup>74</sup>." However there is currently a post-code lottery in access to obesity services across the country<sup>75</sup>.

Rather than acting as an escalator or seamless pathway for patients, in reality in many areas the tier system is used as a rationing tool. The rigid nature of the tiers can also create challenges in delivering more person-centred care<sup>76</sup>. There is also an argument that the sheer scale of the obesity challenge means that this model has not and will not deliver what is needed.

Against a backdrop of a postcode lottery and a fractured system, NHS England should work with ICSs on establishing a new framework for obesity services that:

- Establishes a baseline of service provision across the country
- Addresses variation in services and patient support
- Increases access to cost-effective treatments

Part of this re-structure should initially be to review the tier structure. An expert working group should be established to consider this as well as international practice and innovative approaches. One model put forward by Hazelhurst et al is to reduce the number of tiers to 2 – prevention and treatment (see graphic below)<sup>77</sup>:

<sup>73</sup> https://www.researchgate.net/publication/344615354\_Imperial\_Satiety\_Protocol\_A\_new\_non-surgical\_weight-loss\_programme\_delivered\_in\_a\_health\_care\_setting\_produces\_improved\_clinical\_outcomes\_for\_people\_with\_obesity

<sup>74</sup> https://www.rcplondon.ac.uk/news/rcp-calls-more-investment-services-people-living-obesity-england

<sup>75</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/484115/ Final\_Weight\_Management\_Mapping\_Report.pdf

<sup>76</sup> https://link.springer.com/article/10.1007/s13679-020-00416-8

<sup>77 &</sup>lt;u>https://link.springer.com/article/10.1007/s13679-020-00416-8</u>

Figure 20: Hazehurst et al model for re-designing obesity services

## TREATMENT TIER PREVENTION TIER Commercial weight loss Whole system approach targeting the different environmental and programmes societal contributors to obesity Lifestyle behavioural interventions Delivered in the community Specialist dietary interventions (e.g. VLED) Pharmacotherapy Bariatric surgery · Post bariatric surgery care (life long, flexible according to needs) Obesity complications management · Delivered in primary or secondary care depending on local needs and logistics, but expected to be largely in the community except surgery Multi Disciplinary Team with all the require expertised

This proposal would see a greater focus on patients accessing the multidisciplinary care and treatment they need in the 'treatment tier' with the 'prevention tier' focusing on wider population health. This model would also help move to a more balanced model between prevention and treatment and such a proposal should be considered as part of the review. Alongside this, NHS England should continue its work to expand access to related programmes such as the National Diabetes Prevention Programme.

#### Investment in obesity services

The NHS is under significant financial pressure, along with wider public health and social care services. In order for obesity related services to work better for patients, new investment will clearly be required. This is particularly the case when considering the arrival of new obesity treatments such as weightloss pharmacotherapies and new forms of surgery. However against a difficult economic backdrop and demands for efficiency savings, any new tax funded investment looks unlikely.

As a result there is a need to explore other revenue raising approaches for investing in obesity services and treatment.

The challenges for using tax to fund obesity tackling measures is well known. The IMF notes the difficulties of introducing such taxes for obesity when compared with other issues such as fuel and tobacco:

"The simplicity of an excise tax on high-calorie food or beverages is less straightforward given the complexity of the tax base, their wide variety, use as inputs in various products, and often complex production and distribution chains. Sugar, for example, is conceptually an attractive tax base to fight obesity, but it can occur naturally in food or can be added to it as an ingredient. Non-natural (processed) sugar can, in turn, come from sugarcane (which can be sold under various forms), beetroot, corn (syrup), fruits, and various other sources. All of these can then be used as direct food intake or as inputs into a wide variety of food products that can have final sugar contents ranging from very low to very high—hence necessitating differentiated taxation if the objective is to tax proportionally to sugar content. The administrative feasibility of an excise tax on a comprehensive set of high-calorie food items is therefore a key concern (especially in a low-capacity environment) and may suggest a narrower focus on a smaller subset of carefully chosen goods<sup>78</sup>."

The IMF does note that there may be narrow and well defined opportunities for such taxes. But in general such an approach would be both complex and also difficult politically (particularly when set against the backdrop of a cost of living crisis where there is an understandable political aversion to raising taxes that could lead to higher food prices).

<sup>78</sup> https://www.imf.org/en/Publications/Fiscal-Affairs-Department-How-To-Notes/Issues/2021/12/10/How-to-Apply-Excise-Taxes-to-Fight-Obesity-461733

There is however an opportunity to think more broadly. One area is in tobacco. Lung cancer is now the UK's number one cancer killer and smoking is expected to contribute to 90,000 deaths a year and increased health inequalities<sup>79</sup>. Whilst there is still more to do, smoking does represent something of a public health success. Smoking rates have fallen threefold from the 1970s to approximately 15% of the population. The Government has set an ambition to make England Smokefree by 2030, meaning that only 5% of the population will be smoking at the end of the decade<sup>80</sup>.

To make the next step of progress, a number of groups are calling for the introduction of a tobacco industry levy to fund smoking cessation services and further tobacco control policies.

Analysis carried out for the APPG on Smoking and Health has estimated that a 'polluter pays' levy on the tobacco industry could raise £700m in year one, if tobacco industry profits were limited to a maximum of 10%<sup>81</sup>. ASH has estimated that a total of £265.5 million per year is needed to pay for tobacco control in England<sup>82</sup>.

This leaves over £400 million from such a levy un-allocated. ASH themselves note the underspend from the levy should be allocated to the public health grant. What if the funding or a portion of it, was directed to help tackle a related public health challenge such as obesity and used to invest in weight management services?

This is particularly important after the decision earlier this year to pull a planned £100m weight management grant to local authorities<sup>83</sup>.

Based on cost data from Public Health England and public data from Kent Whole System Partnership, it is possible to calculate the numbers of people who could benefit from such an investment<sup>84</sup>.

<sup>79</sup> https://www.telegraph.co.uk/news/2021/05/20/chris-whitty-smoking-likely-have-killed-covid-last-year/

<sup>80</sup> https://www.gov.uk/government/publications/the-khan-review-making-smoking-obsolete/making-smoking-obsolete-summary#:~:text=In%202019%2C%20the%20government%20set,by%20five%20years%20by%20 2035%E2%80%9D.

<sup>81 &</sup>lt;a href="https://ash.org.uk/uploads/ASH\_Budget\_CSRSeptember-210930-FINAL.pdf">https://ash.org.uk/uploads/ASH\_Budget\_CSRSeptember-210930-FINAL.pdf</a>

<sup>82</sup> ASH and Breathe2025. ASH and Breathe2025 response to Advancing our health: prevention in the 2020s [Internet]. October 2019 [cited 2021 Sep 30]. Available at: https://ash.org.uk/wpcontent/uploads/2021/06/Featherstone-H.-submission-to-APPG-Smoking-Health\_-Establishing-a-Smoke-free2030-Fund-FINAL.pdf

<sup>83</sup> https://www.lgcplus.com/services/health-and-care/outrage-over-100m-weight-management-funding-cut-12-04-2022/

Calculation based on even split of funding of £120m for each tier, plus 10% (£40m) of costs for service setup. Cost per patient used based on PHE and Kent figures: Tier 2 service: £100 per patient, Tier 3 service: £400 per patient, Tier 4 service: £6000 per patient

If £400m was invested in tier 2, 3 and 4 services equally then over 1.5 million people could benefit through improved access to services across both prevention and treatment. Under this model 20,000 more surgeries would be undertaken. This would treble the rates of surgery currently performed<sup>85</sup>. This would start to bring the NHS closer to other countries for surgeries performed but would still be below the 50,000 surgeries a year called for by the BMJ in 2016<sup>86</sup>.

Even assuming that half of the unaccounted levy funded (£200m) was allocated to weight management services this would still result in 750,000 more people accessing such services.

Of course such an innovative funding model raises important questions, such as; how sustainable the funding would be; how the services would be staffed; the complexity of administering the scheme; and how to scale up capacity quickly. All these issues would need to be fully explored before the policy was commissioned. Alongside this, the Government should also commission a wider review of health polluter taxes, looking at how organisations that contribute to poorer health are taxed and ensuring they are contributing fairly to the nation's healthcare costs.

#### Tackling obesity stigma and classifying obesity

One of the reasons that obesity rates have continued to rise is that public health messaging has failed to reflect the complexity of the issue. Too often messages about obesity are used to reinforce prejudice and stereotypes about individual failure and responsibility.

A study in the US researching 2000 people with obesity found a 66% increase over time in those experiencing weight discrimination. If weight stigmatisation worked as an approach then this number would have decreased<sup>87</sup>.

Puhl and Heuer advocate a comprehensive obesity prevention strategy that includes efforts to reduce weight-based stigma and discrimination. This includes incorporating anti-stigma messages into obesity prevention campaigns. Interventions should focus on health as both the primary motivator and desired outcome for behaviour change, rather than messages that emphasize achieving an ideal weight. They also see a need for obesity prevention efforts to go beyond individual campaigns to larger scale policies that initiate social change<sup>88</sup>.

Kar similarly argues: "if we want to be serious about obesity management, we need more focus on the societal changes needed to tackle it, rather than a simplistic narrative of lifestyle change and motivation, with the subtle (or sometimes overt) stigma attached to terminology and the implication of "not trying hard enough89."

<sup>85 &</sup>lt;a href="https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-obesity-physical-activity-and-diet/statistics-on-obesity-physical-activity-and-diet-england-2019/part-1-obesity-related-hospital-admissions">https://digital.nhs.uk/data-and-information/publications/statistics-on-obesity-physical-activity-and-diet-england-2019/part-1-obesity-related-hospital-admissions</a>

<sup>86</sup> https://www.bmj.com/company/wp-content/uploads/2016/05/NHS-weight-loss-surgery.pdf

<sup>87</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2866597/

<sup>88</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2866597/

<sup>89</sup> https://www.bmj.com/content/370/bmj.m3034

The Government launched the Better Health Campaign in July 2020. The campaign launched during the early phases of the pandemic, encouraging people to make healthy choices through losing weight and quitting smoking. An analysis by Talbot and Branley-Bell of the 2020 campaign found that the campaign did not take into account the complexity of obesity and may have reinforced stereotypes that was likely to have been detrimental to some of the population<sup>90</sup>.

The campaign has been re-run in 2021 and 2022 and there is evidence of learning in the development of the campaign. For example the 2022 campaign focuses on six health benefits from being healthier, aligning with the recommendations from Puhl and Huer; and Talbot and Branley-Bell<sup>91</sup>.

With Government finances under pressure it is important that public health campaigns to tackle obesity are not cut back and that evaluations of existing campaigns continue to be undertaken to ensure they are effective.

The delivery of the Life Science Vision obesity pioneer sites could be a good opportunity to tailor more local and targeted information campaigns on obesity. One of the major learnings from the vaccination programme was the importance of engaging with local communities directly and early in the development of such campaigns<sup>92</sup>.

The growing impact of obesity has led to a debate about whether to recognise obesity as a disease. Those in favour such as the Royal College of Physicians (RCP) argue that recognising obesity as a chronic disease would see "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<sup>93</sup>." However during a Future Health roundtable to discuss the issue there were mixed views with some participants expressing concern that such a recognition would have a large impact on health budgets and stigmatise individuals. Others pointed to work on both hypertension and mental health as evidence that greater clinical prioritisation had not negatively impacted either health budgets or increased stigma for individuals.

<sup>90</sup> https://journals.sagepub.com/doi/full/10.1177/1359105320985576

<sup>91</sup> https://www.gov.uk/government/news/new-campaign-launch-reveals-six-major-health-benefits-to-losingweight

<sup>92</sup> https://www.futurehealth-research.com/future-health-publishes-new-study-on-adult-vaccination-rates-and-health-inequalities/

<sup>93 &</sup>lt;u>https://www.rcplondon.ac.uk/news/rcp-calls-obesity-be-recognised-disease</u>

Given the complex nature of obesity and the differences of views on disease recognition, a possible approach proposed during the roundtable discussions was to try to find a 'middle route'. This would see people screened and assessed for obesity through existing tools such as BMI and waist circumference and then assessed for whether the obesity is contributing to wider 'health impairments' such as diabetes, cardiovascular disease risk, cancer or mental health issues. If this is the case, then the obesity would be recognised as a disease through the use of the relevant ICD 10 code and, require relevant health system treatment and intervention<sup>94</sup>.

In September 2022 NICE updated its 2014 clinical guideline for obesity to incorporate greater clinical judgement and interpretation into assessing BMI scores as a means for classifying obesity. The new guidance set out a series of checks and tools for supporting the clinical assessment of obesity for different demographic and population groups<sup>95</sup>.

The updated guidance notes that clinicians should: "Offer a higher level of intervention to people with weight-related comorbidities (see recommendation 1.3.6 for details of comorbidities). Adjust the approach depending on the person's clinical needs. For people with a BMI over 35 kg/m2 who have recently developed diabetes, see recommendation 1.11.1, and for people with a BMI of 50 and over, see recommendation 1.3.7 and recommendation 1.10.7%."

By September 2023 NICE should review the uptake and implementation of the new guideline. Alongside this, other key clinical guidelines related to the co-morbidities associated with obesity, should also now be reviewed to align with this revised approach.

#### Enhanced medical training

The growing impact of obesity on population health means there is an important role for healthcare professionals in providing advice and support for those affected. In 2010, the RCP published a report concluding that the rise in obesity had not been met by an increase in the importance of tackling obesity prevention and treatment within the medical curriculum<sup>97</sup>.

Luig et al through work with family medicine residents in the US developed a course based on the 5A's of obesity management (ASK, ASSESS, ADVISE, AGREE, ASSIST)<sup>98</sup>. The use of the course improved residents ability in a number of important areas including assessing root causes of weight gain, advising patients on treatment options, agreeing with patients on health outcomes and assisting patients in addressing their barriers.

<sup>94 &</sup>lt;u>https://icd.who.int/browse10/2010/en#/E65-E68</u>

<sup>95 &</sup>lt;a href="https://www.nice.org.uk/guidance/cg189/chapter/Update-information">https://www.nice.org.uk/guidance/cg189/chapter/Update-information</a>

<sup>96 &</sup>lt;a href="https://www.nice.org.uk/guidance/cg189/chapter/Update-information">https://www.nice.org.uk/guidance/cg189/chapter/Update-information</a>

<sup>97</sup> https://www.rcplondon.ac.uk/file/268/download

<sup>98</sup> https://pubmed.ncbi.nlm.nih.gov/31910854/

The RCP have similarly noted the importance of making every contact count: "talking about weight - in an empathetic, non-stigmatising way - should become a standard element of healthcare interactions, in the same way we deliver advice to stop smoking. Eighty per cent of people will accept an NHS weight loss referral if it is suggested in the right way<sup>99</sup>."

The RCP notes that improved health professional training should:

- Tackle the resistance to referral by healthcare professionals who believe that patients should be able to lose substantial amounts of weight on their own
- · Help them to discuss someone's weight in an empathetic manner
- Equip them with weight management skills, such as supporting patients on surgical waiting lists to 'wait well' by losing weight and increasing physical activity in advance of elective surgery

Efforts to improve medical training and practice in relation to obesity prevention and treatment are an ongoing effort. Health England Education and Public Health England have developed guides for health professionals on adult obesity<sup>100</sup>. In July 2022, Public Health Wales published a Primary Care Obesity Prevention Action Plan that includes efforts to improve medical training in relation to obesity in primary care, along with efforts to tackle stigma<sup>101</sup>.

The medical curriculum should ensure that appropriate time is assigned based on the impact of conditions on population health. The General Medical Council, NHS England and the professional bodies should review the role of obesity within medical training and practice and make sure health professionals have access to up to date and adequate training in relation to obesity prevention and treatment.

<sup>99</sup> https://www.rcplondon.ac.uk/news/rcp-calls-more-investment-services-people-living-obesity-england

<sup>100 &</sup>lt;a href="https://www.e-lfh.org.uk/programmes/obesity/">https://www.e-lfh.org.uk/programmes/obesity/</a>

<sup>101</sup> https://phw.nhs.wales/news/primary-care-obesity-prevention-action-plan-to-support-implementation-of-the-all-wales-weight-management-pathway/

#### Putting obesity on the global Government agenda

G7 countries have introduced and trialled a range of policy interventions to tackle obesity, however despite this action, obesity rates have continued to rise.

With countries struggling with the economic and health impacts of the coronavirus pandemic, tackling obesity should assume new urgency as an important part in the recovery effort.

There is an opportunity through the G7 or the G20 group of countries to come together and agree an action plan for tackling obesity rates. This could include:

- Sharing best practice on policies and interventions
- Committing to patient access to evidence based treatments
- Building improved public awareness and tackling obesity stigma
- Setting a new target for stabilising and then reducing obesity rates

Dementia is a recent example for how an issue of rising health concern has benefitted from inclusion on the agenda of the G7 as set out in Box 5 below.

#### BOX 5: Dementia at the G7

In 2013 UK Prime Minister David Cameron used the UK's Presidency of the then G8 to hold discussions and encourage international collaboration on the search for new treatments and solutions to the rising challenge of dementia.

The G7 agreed an action plan including:

- Setting an ambition to identify a cure, or a disease-modifying therapy, for dementia by 2025
- Significantly increasing the amount spent on dementia research
- Increasing the number of people involved in clinical trials and studies on dementia
- Establishing a new global envoy for dementia innovation, following in the footsteps of global envoys on HIV and Aids and on climate change
- Developing an international action plan for research
- Sharing information and data from dementia research studies across the G7 countries to work together and get the best return on investment in research
- Encouraging open access to all publicly-funded dementia research to make data and results available for further research as quickly as possible<sup>102</sup>

Despite mixed progress, a review of the commitments in the Lancet in 2021 found that: "In conclusion, the G7 Summit marked an important advance in the dementia field in terms of recognition and momentum<sup>103</sup>". The Lancet pushed for an updating of commitments based on "understanding dementia risk reduction, prevention, intervention, and care, which should be reflected by updated commitments and action plans based on the latest evidence<sup>104</sup>."

<sup>102</sup> https://www.gov.uk/government/publications/g8-dementia-summit-global-action-against-dementia/g8-dementia-summit-global-action-against-dementia-11-december-2013

<sup>103 &</sup>lt;a href="https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568(21)00145-8/fulltext">https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568(21)00145-8/fulltext</a>

<sup>104</sup> https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568(21)00145-8/fulltext

# CONCLUSION: A TURNING POINT FOR OBESITY RATES?

Both internationally and domestically obesity rates are rising, leading to higher healthcare costs and economic damage.

To date policymakers have sought to approach this important issue with a range of initiatives and levers from public health campaigns to taxation through to access to treatments. However, many of the approaches pursued have been isolated, piecemeal and poorly implemented.

With nearly two thirds of the people in England having overweight or obesity it is fair to say that obesity policy has failed and is failing.

Now is the time for a turning point for how the UK Government approaches the issue of obesity.

There is some hope in the historical data. The greatest rise in overweight and obesity rates may well be behind us and took place between 1980 and 2000, where rates jumped from 36% to 60%. This equates to an annual increase of over 1% a year.

By contrast since 2000 the rate has risen by 4% in 20 years; just 0.2% a year. The ambition now must be to stabilise and then reduce rates by going further and faster than before.

This should include working with other developed countries on cross border ideas and solutions for tackling the problem, assessing the economic and health impacts of obesity and building an integrated long term obesity plan, reviewing the structure and access to weight management services, investing in building capacity in weight management services, unlocking innovative local delivery opportunities through the Life Sciences Vision, tackling stigma and improving medical training.

If enacted, this policy framework can begin a turning point for the nation's challenge with obesity, improve public health and support economic growth.

### INTERNATIONAL EVIDENCE ENDNOTES

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- v https://www.whitehouse.gov/wp-content/uploads/2022/09/White-House-National-Strategy-on-Hunger-Nutrition-and-Health-FINAL.pdf
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- xxii JnJ calculation based on DRG statistic of the Federal Bureau of Statistics
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