

# JSNA Briefing - Obesity health needs and systems mapping in Buckinghamshire

This report is based on the Obesity Health Needs Assessment (HNA) and systems mapping in Buckinghamshire report prepared by Dr Duncan Radley, Dr George Sanders, Joanna Saunders and Dr James Nobles (Leeds Beckett University) on behalf of Buckinghamshire Council. The evidence and considerations and recommendations also include those provided as part of a wider healthy lifestyles needs assessment conducted by the Centre for Public Innovation. Please contact [PHAdmin@buckinghamshire.gov.uk](mailto:PHAdmin@buckinghamshire.gov.uk) for more details of the full reports.

## 1 Introduction

In England, 63% of adults and a third of children live with unhealthy excess weight or obesity. Obesity has a strong socio-economic profile and disproportionately affects the lives of poorer groups in society, contributing to growing health inequalities. It is estimated that obesity is responsible for more than 30,000 deaths nationally each year. On average a person who is obese has a reduced life expectancy of nine years. The UK wide NHS costs attributable to overweight and obesity are projected to reach £9.7 billion by 2050, with wider costs to society estimated to reach £49.9 billion per year.

The strategy [Tackling obesity: empowering adults and children to live healthier lives](#), published in July 2020, recognises that excess weight is one of the few modifiable factors for COVID-19 and highlights that tackling obesity is one of the greatest long-term health challenges we face.

Obesity results from complex interactions of policy, economic, environmental, social, cultural, behavioural and biological factors. In recent years, a whole systems approach ([Whole systems approach to obesity: A guide to support local approaches](#)) has surfaced as a realistic and promising approach to address complex issues, enabling investigators to examine the dynamic interrelationships of system components, while simultaneously studying the behaviour of the system as a whole over time.

The approach enables local authorities to deliver the 7 key principles identified as what a good quality, local approach to promoting healthy weight looks like ([What-Good-Healthy-Weight-Looks-Like](#)):

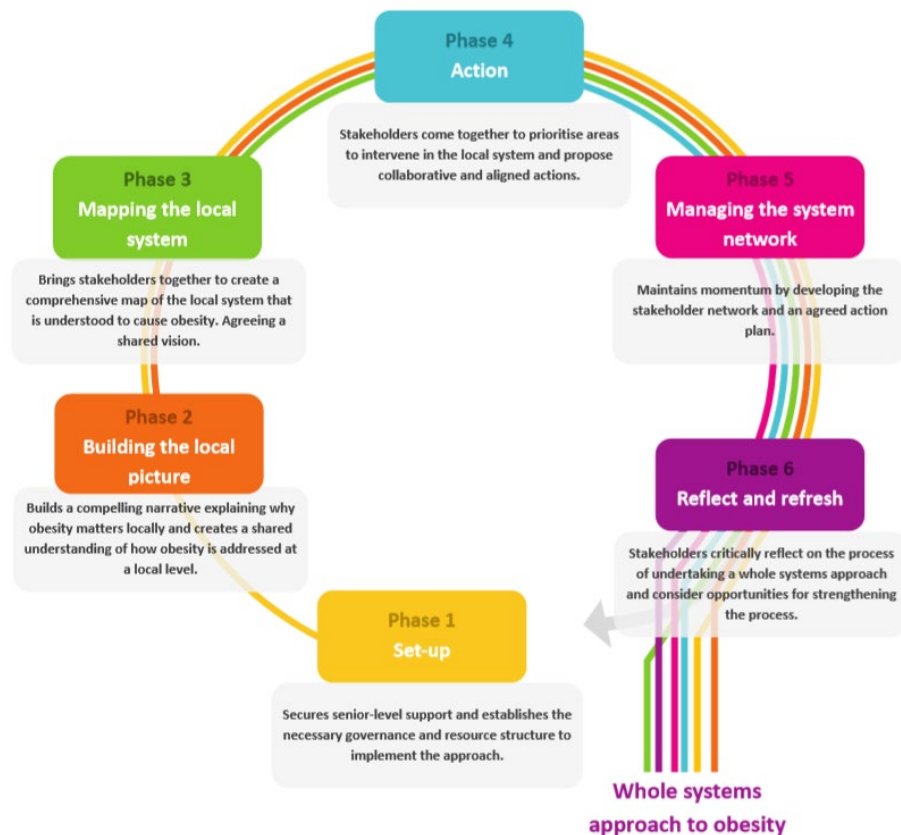
- Systems Leadership
- A long-term whole systems approach
- A health promoting environment
- Community engagement
- Focus on inequalities
- A life course approach
- Monitoring, evidence, evaluation and innovation

## 1.1 Project overview

A whole systems approach to obesity takes a 'Health in All Policies' approach, drawing on the local areas strengths, supporting key priorities and recognising that we can create better and more effective approaches by engaging with the community and the local assets.

Buckinghamshire Council are following the Public Health England 2019 guidance to delivering a whole systems approach to obesity, with this project's focus being on Phase 2 of the approach – Building the Local Picture.

Figure 1: Whole system approach to obesity



The aim of this phase was to gather the information required to understand the local picture of obesity, including its prevalence, the local impact, relevant organisations and people, community assets and existing actions to address it. Thereby creating a shared understanding of the issue and of how obesity is addressed at a local level.

Key steps of the phase include:

- Collating key information about obesity locally (across the life-course)
- Starting to understand the local assets including community capacity and interest
- Establish a comprehensive understanding of current actions
- Identify the departments, local organisations and individuals currently engaged in supporting work around obesity

## 1.2 Methodology

A mixed methods approach was employed, capturing quantitative and qualitative information from primary and secondary sources. Specifically:

- Publicly available health-related electronic databases, along with local data, were used to collate key information about obesity locally and nationally.
- Content analysis was undertaken of local authority policies to obtain an understanding of how overweight and obesity is embedded within or aligned with other priorities.
- Reviews of the research literature were conducted to determine: 1) the health impacts of obesity, 2) the wider impacts beyond health, and 3) the association between excess weight and COVID-19.
- A stakeholder map of the key agencies and local organisations that make up a system was created.
- Community asset maps were generated to capture relevant organisations that have a focus on improving the health of those living with overweight or obesity.
- Local actions on obesity were captured and considered with reference to the causes of obesity and the wider determinants of health.
- Focus groups were undertaken with children and young people, and adults who were and were not attending weight management services.

## 2 Summary of risk factors

Tackling obesity is one of the greatest long-term challenges this country faces ([Tackling obesity: empowering adults and children to live healthier lives](#)). Obesity can result in serious health issues including high blood pressure, type 2 diabetes, coronary heart disease, osteoarthritis, sleep apnoea, breathing problems and a wide range of cancers, and obesity can impact on mental health. Severe obesity can reduce an average life expectancy by around 10 years, similar to the impact of lifelong smoking.

Obesity prevalence is highest amongst the most deprived groups in society, with children in the most deprived parts of the country being more than twice as likely to be obese as their peers living in the richest areas. Children living with obesity are more likely to become adults living with obesity and thus increase the risk of obesity for their own children later in life [Childhood obesity: applying All Our Health](#)

For further information please see infographics on wider, physiological and psychological impacts published alongside this report.

## 3 Summary of local need

Although Buckinghamshire compares well with other areas in the South-East and England, the prevalence of excess weight among adults is still very high, with over 60% of adults (estimated to be over a quarter of a million people locally) not at a healthy weight. [Obesity Profile - Data - OHID](#) Additionally, only 58.4% of adults in Buckinghamshire are currently meeting the recommended '5-a-day' fruit and vegetable intake (2020/21) [Public health profiles - OHID](#)

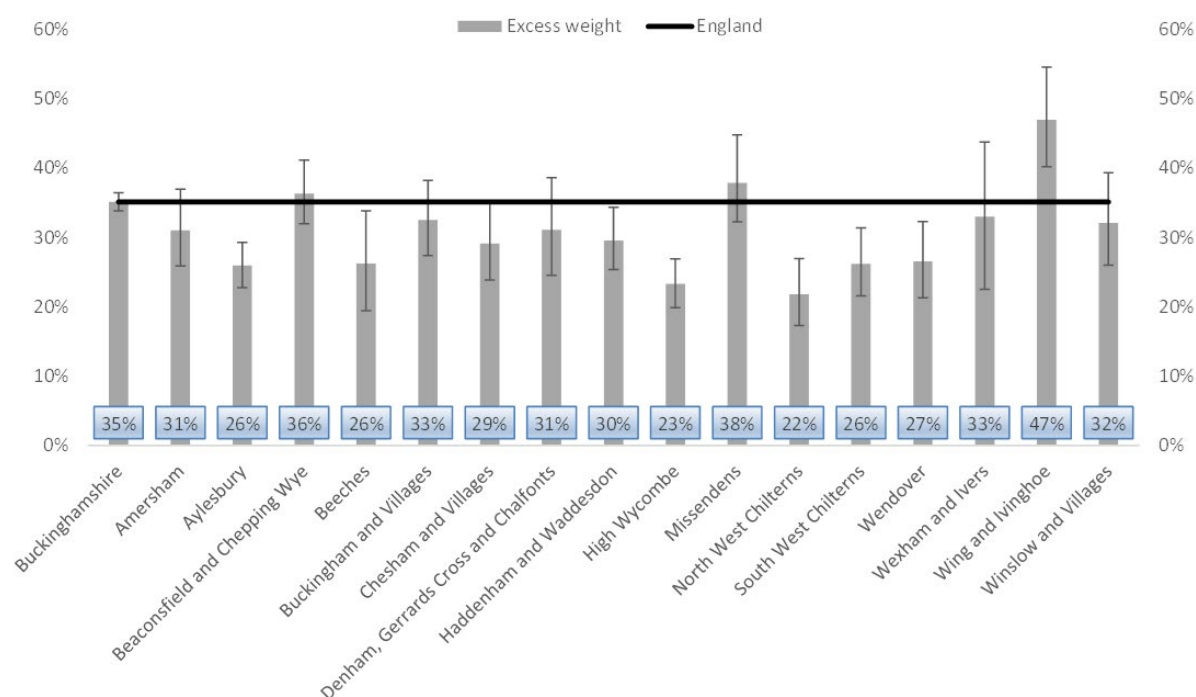
Obesity rates in early pregnancy in Buckinghamshire (16.3%) are one of the lowest in the South-East region and when compared to England (22%). Buckinghamshire also has one of

the lowest levels of hospital admissions (2019/20) with a primary diagnosis of obesity compared to the region and England. [Obesity Profile - Data - OHID](#)

In children, 1 in 5 Reception aged child (4-5 years old) (18.2%) were overweight or obese increasing significantly to 1 in 3 in Year 6 (10–11-year-olds) (31.1%). Boys have a higher prevalence of obesity than girls for both age groups.

Significant inequalities also exist across the county, with a disproportionate number of those living in our more deprived communities more likely to be affected by obesity. By the time children reach year 6, there is a stark trend related to deprivation, with those children in the more deprived communities having the highest rates of overweight and obesity – 37% in DQ5 compared to 20% in DQ1. The chart below shows Beaconsfield & Chepping Wye (36%); Missendens (38%); Wing & Ivinghoe (47%) as the community boards with the highest percentage of Year 6 children who are overweight or obese.

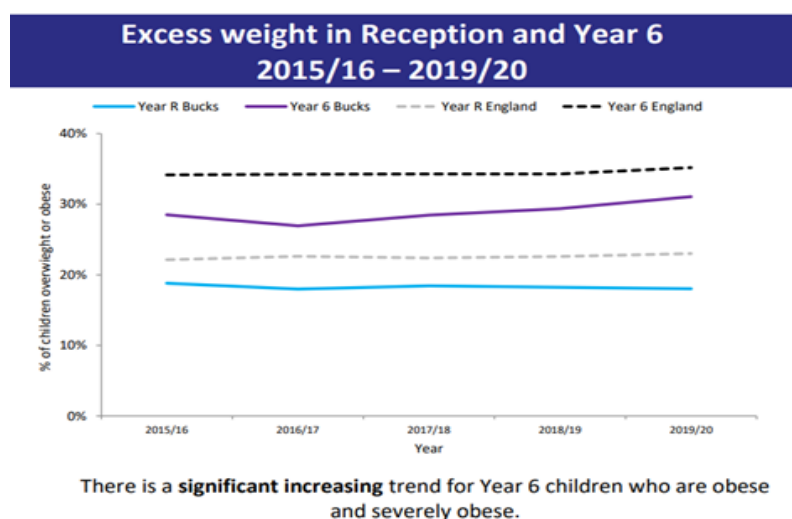
Figure 2: Percentage of Year 6 children who are overweight or obese in Buckinghamshire by Community Board, 2019/20



The data indicates that, while overall trends are positive and that Buckinghamshire performs well, rates of obesity are clustered and are coterminous with deprivation. It also suggests that the situation is not a stable one and rates appear to be worsening so that by Year 6, prevalence looks closer to the national rate – particularly in relation to those who are obese. Conversely the rate of those who are of a healthy weight is declining.

A full data profile looking at findings from the National Child Measurement programme is published alongside this report.

Figure 3: Percentage of overweight or obese children in Reception and Year 6, 2015/16 to 2019/20



The wider impacts findings above clearly demonstrate that local levels of overweight and obesity are not just an issue for public health. Impacts on economic burden, stigmatisation and discrimination, productivity loss, the environment and education align to wider local priorities and make the case for why addressing obesity should receive priority from all sectors.

In addition, it is evidenced that being overweight increases the risk of severe illness from COVID-19 ([Excess weight can increase risk of serious illness and death from covid-19](#)). Evidence also indicates a negative impact on individuals dietary and physical activity behaviour during lockdowns ([Excess Weight and COVID-19](#)). Whilst many people reported positive nutrition behaviours, such as frequently cooking from scratch during 2020-21, the majority of people also responded their unhealthy snacking behaviours (cakes, biscuits, confectionary and savoury snacks and purchasing takeaways) had increased. Males and those living in single households were significantly less likely to eat healthy meals. Those living in a house with at least one child present, 16-44-year-olds, and those living in larger households were also significantly more likely to buy processed foods ([The COVID-19 consumer research | Food Standards Agency](#)).

Child obesity levels are measured through the National Child Measurement Programme that measures the height and weight of children in Reception (aged 4 to 5 years) and Year 6 (aged 10 to 11 years) each year. Due to the impact of COVID-19 a large enough sample was not able to be collected in schools across Buckinghamshire in 2020/21. National data shows obesity prevalence increased in Reception children from 9.9% (2019/20) to 14.4% (2020/21) and increased in Year 6 children from 21% (2019/20) to 25.5% (2020/21). Prior to 2020 to 2021 prevalence of obesity had only seen small annual changes, more data is needed to know whether this is a long-term increase.

## 4 Current services, local plans and strategies

As highlighted in the Healthy Lifestyle HNA, the Healthy Lifestyle Service in Buckinghamshire, Live Well Stay Well (LWSW), commissioned by Buckinghamshire Council and the Integrated Care Board (ICB) provides the main community-based access to both adult and child weight management services. Over the past 3 years 2,383 adults started a weight management service with numbers severely reduced during the height of the COVID-19 pandemic. Data for 2021/22 indicates that 49% of adults accessing weight management services through LWSW complete the programme with 79% of these achieving a 3% weight loss and 53% achieving a 5% weight loss. The child weight management service, supporting 7–11-year-olds supports over 100 children per year with data from 2021/22 indicating that 85% of children complete the programme, with 85% of them achieving either a reduction or maintenance of their BMI Z score<sup>1</sup>.

Additionally, Buckinghamshire Council commission a number of community-based projects, targeting key population groups, such as:

- Grow to Give – increasing food bank and community fridge users access to fresh fruit and vegetables
- Grow It, Cook It, Eat It – supporting communities to grow their own fruit and vegetables, with the provision of basic cooking sessions to increase knowledge and skills to create healthy meals with the food they have grown.
- Simply Walks – provision of over 60 free guided walks across Buckinghamshire
- Playstreets – encouraging communities to utilise their local area to be more active

The council works collaboratively with a network of both internal departments and external organisations and communities to tackle obesity in Buckinghamshire. The obesity HNA stakeholder mapping identifies key stakeholders and services that will be essential to developing a 'Health in All Policies' approach to addressing obesity. This information is useful to determine the relevant departments, organisations and services that are part of the many subsystems at play – identifying those that need to work collaboratively and align their actions to bring about system change. The analysis helped to determine the level of involvement each department, organisation and individual has in the present network and identified new contacts for future engagement in the approach.

Figure 4: Key stakeholders for obesity in Buckinghamshire

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<sup>1</sup> A measure of relative weight adjusted for child age and sex



From this initial stakeholder mapping, as recommended within the HNA and PHE Whole Systems Approach to Obesity guidance we have subsequently brought stakeholders together over two half-day workshops to map out the local system that is thought to cause obesity, develop a shared vision, identify key priority areas and start the development of a shared action plan. Key to this is identifying existing projects and activities being undertaken by this wide array of stakeholders that feed into tackling obesity and identifying where we have gaps in the local system and identifying actions which may have the greatest potential impact and thereby priority areas of focus.

This continuous process will result in a shared vision and mission that unites stakeholders with different backgrounds and agendas to a common aspiration for Buckinghamshire. It is essential stakeholders engaged are passionate about improving the health, wellbeing and prosperity of the local population and can commit time on a regular basis. This vision will provide clear direction for the development of a jointly owned action plan which will be overseen by a systems network/advisory group where members will offer positive challenge, advice, support and accountability for the work.

As part of the obesity HNA we carried out focus groups with only a small number of participants taking part (5 adults and 3 child and young people (CYP)). There were largely positive adult and CYP comments in relation to their physical capabilities and motivations to eat healthy and keep active. Mixed comments were noted among adults in relation to psychological capabilities and opportunities to eat healthy and be active. Largely negative comments were noted among CYP in relation to opportunities to eat healthy and be active, and mixed comments were noted by adults.

There were overall positive perceptions of support during COVID-19 among both adults and CYP. Support from community organisations throughout COVID-19 was noted as being particularly positive. However, largely negative comments were noted among adults in relation to the effect COVID-19 has had on their nutrition and physical activity habits.



Largely negative comments were noted among adults in relation to current weight management programme offers throughout Buckinghamshire. Comments in particular highlighted a lack of individually tailored services and them not enjoying the online nature of the sessions. Maintenance sessions were also noted by adults as being a key missing characteristic of currently offered weight management services.

As part of the Whole Systems Approach to a Healthy Weight work further community engagement activity is being undertaken ensuring we benefit from the communities expertise in what people in their community want, what they consider to be their assets and how efforts to intervene might be made more effective. Identifying common priorities to take forward.

Following the completion of the HNA work has continued to follow the PHE guidance for delivering a whole systems approach to obesity. Working collaboratively to develop a shared action plan with stakeholders taking collective ownership of actions to align and strengthen actions, maximising impact. Stakeholders involved in the system network now have the responsibility for local delivery of individual actions within their own organisation and collective ownership of actions and the approach with the system network.

Figure 5: Stakeholders Engaged in Whole Systems Approach to Obesity (May 2022)



Regular evaluation of actions within the plan will be undertaken by the newly formed core network group, essential to ensure progression, with assessment of the local system and how it aligns and works collaboratively for bigger impact.



## 5 Summary of evidence of what works

A growing body of evidence, including from the Foresight Tackling Obesity Report [Foresight: Tackling Obesity: Future Choices](#), suggests that whole systems approaches could help tackle complex problems like obesity. The PHE guidance does not specify which specific policies, interventions or actions local areas should include in their approach, this is an important part of the approach which needs to be agreed with local stakeholders reflecting the needs of the local community.

One of the major challenges when setting up a Whole Systems Approach to Obesity is how to bring all stakeholders together, with the mind set and motivation to address the issue and create a joined up, dynamic plan and on-going network. It is clear that obesity is only one of a number of very challenging issues, and for many stakeholders, it may be difficult to see why it should receive priority. The PHE guidance therefore emphasises the importance of the initial phases of the approach to create the necessary environment for change.

The approach is a long-term commitment, with actions across the short-, medium- and long-term, throughout this journey we will continue to test new approaches and learn from the experiences of wider areas across the country.

Within Buckinghamshire, taking the Whole Systems Approach to obesity will enable us to build on the evidence and growing recognition that working collaboratively and involving stakeholders from across the local system, will help tackle obesity:

- [Foresight: Tackling Obesity: Future Choices](#)
- [Childhood obesity: a plan for action](#)
- [The need for a complex systems model of evidence for public health](#)

Evidence of outcomes in the UK to date are limited, however internationally areas such as Amsterdam are further advanced in implementing such approaches. The approach in Amsterdam puts child and adolescent health at the heart of all municipal policies and collaboration among many sectors and early evidence is it supports whole systems working. [Whole city working against childhood obesity | The BMJ](#)

In terms of weight management services and the surveillance of unhealthy weight the Healthy Lifestyle Service HNA highlighted the following evidence for future service provision. The National Child Weight Management programme (NCMP) continues to provide an excellent source of surveillance data which increases the understanding of patterns and trends in weight, from underweight to those who are obese, among the child population.

The efficacy of weight management programmes for children, young people and their families and the different approaches used has been extensively reviewed. There is also a plethora of guidance and advice to service providers and commissioners regarding weight management for children and young people. Most of the guidance identifies the complexities of identifying overweight and obese children and the need for multiple indicators to assess the need for intervention. [Overview | Weight management: lifestyle services for overweight or obese children and young people | Guidance | NICE](#)

The standard approach and guidance for supporting adults to lose weight remains 12-weeks. The Local Government Association's Towards a Healthy Weight acknowledges that the standard approach to two tiered services is to provide support for 12 weeks to

encourage healthy eating and physical activity. Follow-up support is also offered to sustain any weight loss achieved ([1.109 Weight management](#)). However, within these standard approaches innovation and a more flexible approach is recommended to address the specific needs of particular cohorts ([Overview | Weight management: lifestyle services for overweight or obese adults | Guidance | NICE](#)). One caveat included in the guidance published by NICE and regarding the 12-week minimum standard relates to very-low-calorie diets (800 kcal/day or less), they should only be considered as part of a multi-component weight reduction strategy when a need for rapid weight loss is clinically identified.

## **6 Considerations/recommendations for Health and Well Being**

### **Board and Commissioners**

Both the Obesity and Healthy Lifestyle Service HNA's identified key recommendations to support the delivery of a Whole Systems Approach to Obesity and addressing unhealthy weight across Buckinghamshire:

- Development of an advisory group/core working team to coordinate the approach, challenging actions and providing advice, support and accountability for the work
- Evaluation and reflection throughout will ensure that actions continue to be aligned to local priorities and stakeholders continue to work in a systems approach (including stakeholder engagement assessment)
- Communities are one of the key stakeholders in whole systems work and involving, empowering and understanding local communities can help improve health and wellbeing and reduce health inequalities. As part of the whole systems approach, the council should consider involving communities in identifying further assets that might help address obesity.
- Analyse actions implemented against the causes of obesity to ensure alignment, current assessment indicates that the majority of actions (43%) are targeting individual lifestyle factors, illustrating a mismatch between cause and action, reinforcing that the complexity of obesity is often addressed through individual-level interventions.
- The evidence presented demonstrates how addressing excess weight is linked to numerous policy and strategy objectives within the council, for example planning and transport. These identified connections between obesity and the overarching priorities of the council should be used to build compelling narrative to engage and make the case with a wide range of stakeholders, ensuring senior leadership support. This collated information and subsequent stakeholder engagement should be used to reflect on the council's application of a 'Health in All Policies' approach creating efficiencies and improving effectiveness, performance and outcomes
- A review of eligibility criteria for weight management services should be undertaken, considering accepting adults with a lower BMI (under 30) to support people before they become obese.
- To support residents to maintain weight loss and encourage adherence to programmes provide light-touch follow-up support.
- Target weight management provision should be considered, offering alternative models of weight loss support that diverges from the NICE recommended 12-week model, followed by robust evaluation to determine the effectiveness of the adapted approach.

- Deliver a systematic promotional campaign to promote weight management services for children and young people, utilising strategies such as flyers and posters at schools, GP surgeries, in local media and at local events alongside more active targeted strategies.
- Consider adopting the principles of child weight management as advocated by the All-Wales Weight Management Pathway 2021 in the delivery of children's weight management services in Buckinghamshire. Delivering services that are: person-centered, psychologically and behaviorally informed, focused on the long-term, provided with coordinated support and with ongoing support on the weight management journey.

There is also an Actions mapping infographic published alongside this report.