# CHILDHOOD OBESITY: TIME FOR ACTION IN DERBY AND DERBYSHIRE

## Ten Year Plan: 2020 - 2030

Joined Up Care Derbyshire

NHS

DERBYSHIRE County Council

Derby City Council

## Table of Contents

| Abbreviations | |
|---|---|
| BMI | Body Mass Index |
| BPS | British Psychological Society |
| CDC | Centers for Disease Control and Prevention |
| CMO | Chief Medical Officer |
| CSJ | Centre for Social Justice |
| DCCT | Derby County Community Trust |
| DDSCP | Derby and Derbyshire Safeguarding Children Partnership |
| DHSC | Department of Health and Social Care |
| NCMP | National Child Measurement Programme |
| NHS | National Health Service |
| NICE | National Institute for Health and Care Excellence |
| PHE | Public Health England |
| PHOF | Public Health Outcome Framework |
| SMuCOG | Strategic Multiagency Childhood Obesity Group |
| ViA | Voices in Action |
| WHO | World Health Organisation |

**Advisory Note: measuring weight in children and young people**

Although factors such as fitness, ethnicity and puberty can alter the relation between BMI and body weight, NICE guidance recommends the use of UK90 BMI distribution to provide a practical estimate of excess weight in children and young people.

| UK90 BMI Thresholds | |
|---|---|
| Underweight | Less than or equal to 2nd centile |
| Healthy Weight | Greater than 2nd and less than 85th centile |
| Overweight | Greater than or equal to 85th and less than 95th centile |
| Obese | Greater than or equal to 95th centile (includes severely obese) |
| Excess weight | Greater than or equal to 85th centile (overweight plus obese) |
| Severely obese | Greater than or equal to 99.6th centile |

| Definition (unless otherwise stated) | |
|---|---|
| Derby City | Geographical area as defined by Derby City Council |
| Derbyshire County | Geographical area as defined by Derbyshire County Council |
| District and Borough Councils | Eight District and Borough Councils of Derbyshire |
| Derbyshire | Advisory note on relationship with Glossop and Tameside |
| Derbyshire Footprint | As defined by Joined-up Care |

**Acknowledgements**

The authors would like to thank the individuals and organisations who contributed to this work and supported its undertaking including all members of the Strategic Multiagency Childhood Obesity Group, the staff involved with Voices in Action, and LiveIT who have supported this strategy. Particular thanks are given to the children and young people at Voices in Action, LiveIT and Healthwatch who gave their time and were willing to be open in sharing their opinions, needs and experiences of services.

Joined Up Care Derbyshire NHS DERBYSHIRE County Council Derby City Council

## *Executive Summary*

Being overweight or obese can lead to chronic and severe medical conditions including type 2 diabetes, fatty liver disease, heart disease, stroke, certain cancers and psychological and psychiatric morbidities and have substantial long term economic, wellbeing and social costs.

Obesity in children is defined as a BMI at or above the 95$^{th}$ percentile for children and teens of the same age and gender (CDC, 2018). Nationally, 22.6% of children are overweight or obese when they start school and 34.3% of children are overweight or obese by Year 6.

By the same measurement, children in Derby are above the national average at both Reception (24.7%) and Year 6 (37.2%). Children in Derbyshire are above the national average in Reception (23.8%) and lower than the national average in Year 6 (32%). In total, more than 6,500 children in those two year groups alone were overweight or obese and a further 762 were living with severe obesity in Derby and Derbyshire in 2018/19 (PHOF, 2019).

A recent Learning Review led by the Derby and Derbyshire Safeguarding Children Partnership identified a need to develop clear pathways of care for overweight and obese children and to develop a whole systems approach to the prevention and early intervention of childhood obesity.

This document outlines a strategic approach for Derby and Derbyshire, focussing on four key areas: 1) Families and Early Years, 2) Health and Care Professionals, 3) Education and Schools and 4) The Obesogenic Environment

This strategy recommends that:

1) Derby and Derbyshire develop clear pathways and signposting to enable children who are already overweight or obese to access joined-up and long-term support. This includes ensuring that there are robust systems in place to identify children who are overweight or obese and a commissioned service is available which provides effective support, in a multidisciplinary approach, to children and families.
2) Derby and Derbyshire develop preventative approaches for current and future generations and, in particular, a whole systems approach to obesity which coordinates existing efforts, reveals gaps in provision and supports the efficient use of limited resources.

Despite existing achievements in this area and effective interventions, there is evidence that the current system is fragmented and the number of obese children in Derby and Derbyshire has continued to rise. Evidence has demonstrated that any individual intervention alone is unlikely to succeed and a strategic multifaceted approach is required to achieve change.

## *1.0 Introduction*

"Current estimates suggest that nearly a third of children aged 2 to 15 are overweight or obese in the UK and younger generations are becoming obese at earlier ages and staying obese for longer."

- Health and Social Care Committee, 2018

Childhood obesity may be the greatest public health challenge of our time (Rudolf et al., 2019). Being overweight or obese can lead to chronic and severe medical conditions including type 2 diabetes, fatty liver disease, heart disease, stroke, certain cancers and psychological and psychiatric morbidities (NICE, 2013).

In an average Year 6 class, six children out of a class of thirty would be obese and a further four overweight, twice as many as thirty years ago (Chief Medical Officer, 2019). Reducing childhood obesity is a national priority and the government has committed to halving childhood obesity by 2030 (Department of Health and Social Care, 2018).

The causes of childhood obesity are complex and multifaceted. Poor diet and low levels of physical activity are further influenced by poverty, self-esteem, body image, poor sleep and mental wellbeing. The burden of obesity is not experienced equally across society: obesity rates for children are highest in the most deprived 10% of the population, approximately twice that of the least deprived 10%. Childhood Obesity is an issue of social justice and a significant risk to our children's future health and wellbeing.

Children live within families and a wider environment that can either encourage or be a barrier to achieving a healthy weight. Evidence has demonstrated that any individual intervention alone is unlikely to succeed and that a strategic approach is required to achieve change.

### 1.1 Purpose of the strategy

*Childhood obesity: Time For Action in Derby and Derbyshire* is a strategy for Derby City and Derbyshire County. It provides an overarching vision for a reduction in **prevalence of childhood overweight and obesity** over a ten year period. The strategy is evidence based and driven by local need. It applies a whole systems approach to outline preventative and treatment interventions which are recommended across the region and applicable throughout childhood.

The purpose of this strategy is to:

- Provide a strategic framework for the development of a system level action plan; providing clear direction and a means to monitor progress towards reducing prevalence of childhood overweight and obesity.
- Take forward key recommendations of Derby and Derbyshire Safeguarding Children Partnership
- Provide the background and rationale for the vision to share with and engage partners.

### 1.2 Need for the strategy

Being overweight or obese in childhood can have a lasting impact on both short-term and long-term health. Children living with obesity are at risk of remaining obese into adulthood and developing non-communicable diseases, such as diabetes and cardiovascular disease, at a younger age.

Nationally, more than 1 in 5 children are overweight or obese when they start primary school and 1 in 3 children are overweight or obese by Year 6 (PHOF, 2019). In Derby and Derbyshire almost 1 in 4 children were overweight or obese at the start of primary school in 2018/19.

Derby is also above the national average for the proportion of children overweight or obese in Year 6 (37.2%). Comparatively, Derbyshire is lower than the national average for Year 6 (32%) and, although encouraging, this represents 2,671 children who were overweight or obese at 10 - 11 years of age (PHOF, 2019).

In December 2018, Derby and Derbyshire Safeguarding Children Partnership (DDSCP) conducted a serious incident learning review of a child death attributed to obesity.

Following the Learning Review, they identified two key actions:

1. To develop clear pathways of care for overweight and obese children
2. To develop a whole system approach to the prevention and early intervention of childhood obesity

Independently to this, local clinicians have raised concerns regarding the availability of treatment services for overweight and obese children.

#### 1.2.1 Prevalence of childhood obesity (age 4 – 5 and 10 - 11 years)

The National Child Measurement Programme (NCMP) is an annual surveillance programme which collates the height and weight of children in their first and final year of primary school. This data, in anonymised form, allows mapping, and observation of trends, of obesity prevalence at both a local and national level (NHS Digital, 2018).

Local authorities make appropriate arrangements for NCMP to take place in all state-maintained schools. In total 94.9% of eligible children were measured as part of the national programme in 2018/19. Both Derby and Derbyshire regularly achieve above average participation in NCMP with 97.9% and 98.2%% respectively of eligible children participating in 2018/19 (PHOF, 2019).

Although factors such as fitness, ethnicity and puberty can alter the relation between BMI and body weight, NICE guidance recommends the use of UK90 to provide a practical estimate of excess weight in children and young people.

A summary of data collected as part of the National Child Measurement Programme is outlined in Figures 1 and 2.

Figure 1 – Reception Year NCMP Derby and Derbyshire in 2018/19 (PHOF, 2019)

| PHOF Indicator | England (bench mark) | Derby | Derbyshire | Additional Information |
|---|---|---|---|---|
| Prevalence of underweight | 1% | * | 0.7% | Represents an increase in England and Derbyshire. Trend unavailable for Derby. |
| Prevalence of overweight | 12.9% | 13.1% | 14.6% | Represents a decrease in England and an increase in Derbyshire. No significant change in Derby. |
| Prevalence of overweight (including obesity) | 22.6% | 24.7% | 23.8% | Represents an increase in England, Derbyshire and Derby. |
| Prevalence of severe obesity | 2.4% | 2.7% | 2.1% | Represents an increase in England and Derbyshire. Trend unavailable for Derby. |

Figure 2 – Year 6 NCMP Derby and Derbyshire in 2018/19 (PHOF, 2019)

| PHOF Indicator | England (bench mark) | Derby | Derbyshire | Additional Information |
|---|---|---|---|---|
| Prevalence of underweight | 1.4% | * | 1.6% | Represents an increase in England and Derbyshire. Trend unavailable for Derby. |
| Prevalence of overweight | 14.1% | 14.2% | 13.2% | Represents a decrease in England. No significant change in Derby or Derbyshire. |
| Prevalence of overweight (including obesity) | 34.3% | 37.2% | 32.0% | Represents an increase in England and Derby. No significant change in Derbyshire. |
| Prevalence of severe obesity | 4.4% | 5.4% | 3.9% | Represents an increase in England and Derbyshire. Trend unavailable for Derby. |

### 1.2.2 Prevalence of severe obesity in childhood (age 5 -18 years)

In this context, severe obesity is classified as a BMI measurement greater than or equal to the 99.6$^{th}$ centile of the UK90 growth reference. A child with a measurement on 99.6$^{th}$ centile would have higher measurements than 99 out of 100 other children of the same age and gender (as measured in 1990). Local prevalence data for severe obesity is displayed in Figure 3.

Figure 3 – Prevalence data for severe obesity, as measured in NCMP, Derby and Derbyshire 2018/19

| NCMP measurement on or above the 99.6$^{th}$ centile (PHOF, 2019) | | Reception: 4 -5 years | Year 6: 10 – 11 years | Total |
|---|---|---|---|---|
| Derby | Count | 87 | 178 | 265 |
| | Prevalence | 2.7% | 5.4% | - |
| Derbyshire | Count | 169 | 328 | 497 |
| | Prevalence | 2.1% | 3.9% | - |

NCMP measurements are taken at two fixed points in time, the first and final year of primary school, and provide an accurate measure of child weight status at 4 -5 and 10 – 11 years. By replicating the methodology used in the *Effectiveness of tier 3 weight management services for children aged 0-18* (Derbyshire County Council, 2019) it is possible to calculate a crude estimate of the prevalence of severe obesity amongst children and young people aged 5 – 18 years in Derby and Derbyshire[1].

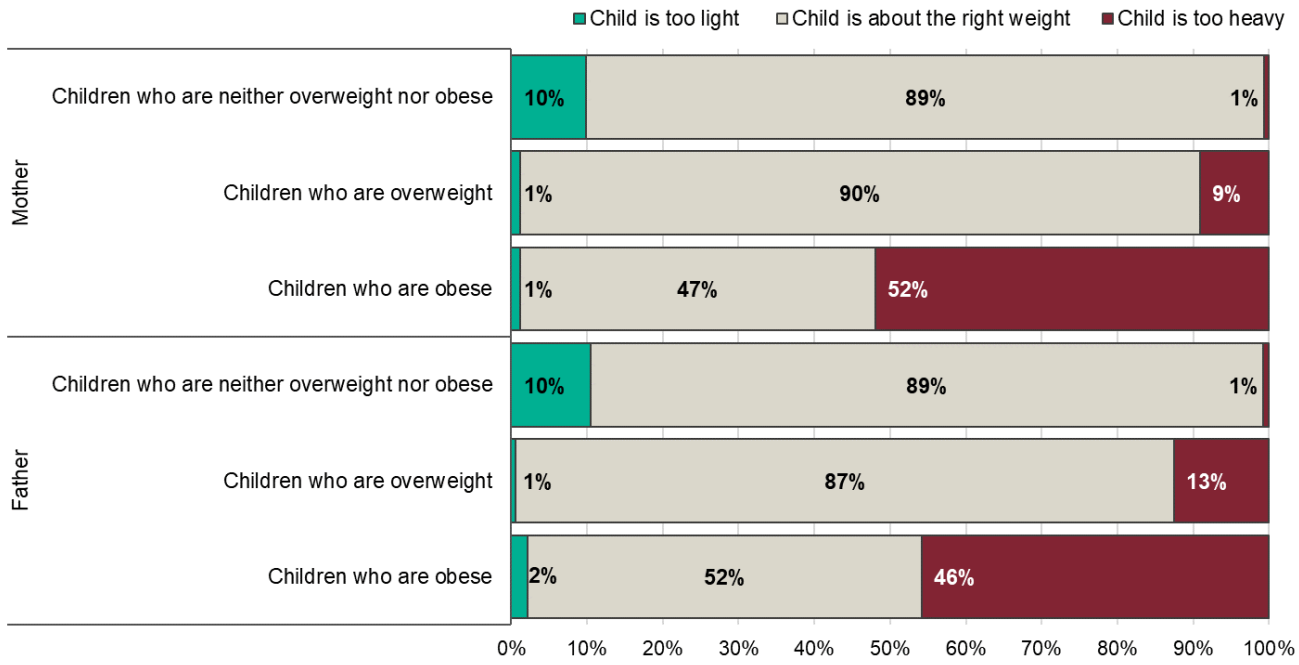
The results suggest an estimated 5,701 children and young people living with severe obesity in Derby and Derbyshire. It is likely that a significant proportion of the children and young people living with severe obesity in Derby (1,920) and Derbyshire (3,780) will, at some time, require tier 3 services.

The annual Health Survey for England provides information about adults aged 16 and over, and children aged 0 to 15, living in private households in England. Height and weight measurements are collected from participants and, in 2018, 28% of children aged 2 to 15 were overweight or obese. This figure included 15% of children who were obese and the proportion of children who were obese was higher in the most deprived areas. 19% of children in the most deprived quintile were obese compared to 11% of children in the least deprived quintile.

### 1.2.2 Parent's perception of child's weight by child's BMI status

In 2015 and 2016 parents were asked for their opinion on the weight of each of their children (Figure 4). 10% of parents with a child who was neither overweight nor obese perceived their child to be underweight. Around 90% of parents of overweight and 50% of parents of obese children felt that their child was about the right weight.

Figure 4: Parents' perception of child's weight by child's BMI status (NHS Digital, 2015 and 2016)

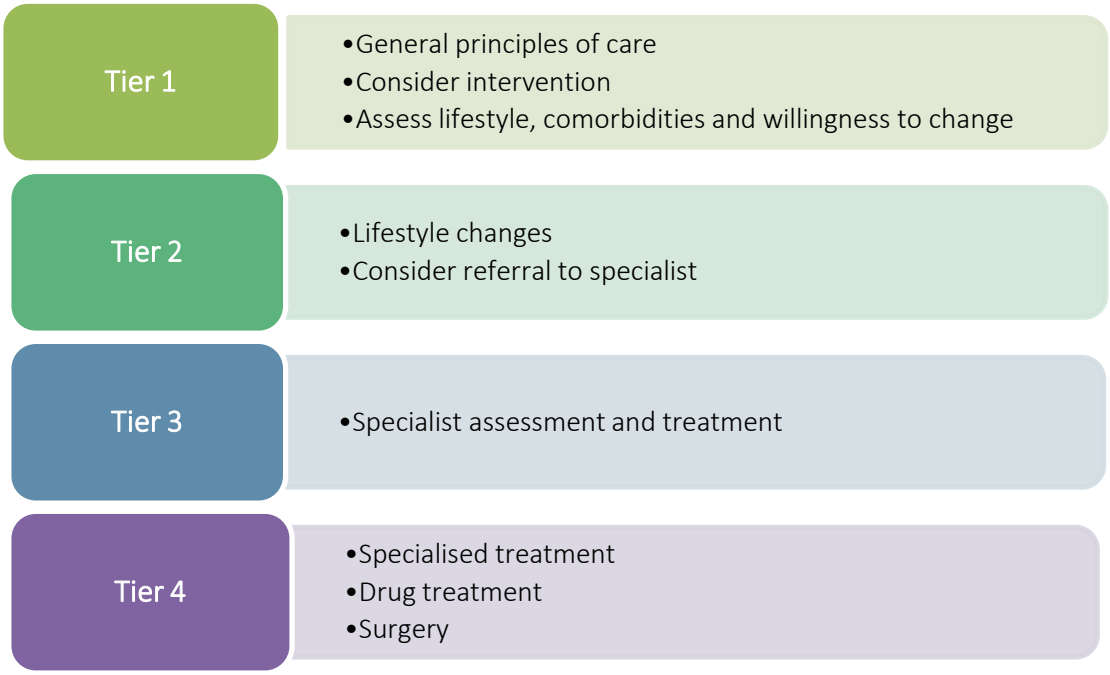



[1]Underestimation is likely: 0 – 4 year olds are not included and prevalence of severe obesity may be higher between 6 – 10 years. It is not possible to control for selective opt-out of NCMP.

### 1.3 Services

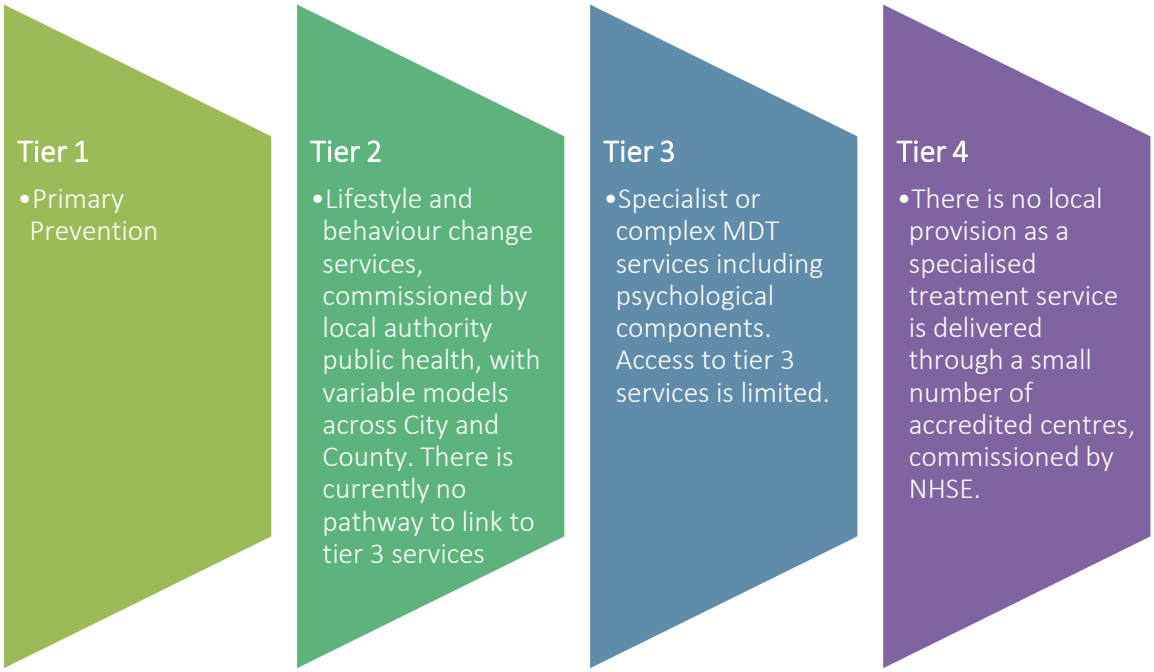
The UK Obesity Care Pathway is described from Tier 1 through to Tier 4 services (Figure 5).

Figure 5: Services for obesity management in children and young people




Examples of a range of tiered services available in Derby and Derbyshire are outlined in Figure 6. There are opportunities to ensure a joined-up approach to weight management across the system.

Figure 6: Commissioned services available in Derby and Derbyshire



## *2.0 Vision and Objectives*

### 2.1 Vision

The strategy provides an overarching vision for a reduction in prevalence of childhood overweight and obesity over a ten year period. The strategic vision is to support and enable children living in Derby and Derbyshire to achieve and maintain a healthy weight, by supporting children and families to live a healthy life and make healthy choices through a whole systems approach.

### 2.2 Objectives

Development of two core objectives has been identified for this strategy:

1. A whole systems approach which supports children and families to make healthy choices from birth to adulthood.
2. Targeted specialised interventions and clear signposting which provides a pathway for overweight and obese children to access evidence based interventions.

The remit of this strategy recognises that childhood obesity is a complex disease, driven by an obesogenic environment, which can be affected by both poor diet and inactive lifestyles, and also poor mental wellbeing and social deprivation. In addition, it recognises that achievement of these primary objectives will contribute to a number of wider population outcomes.

### 2.3 Strategy development

This strategy has been developed in consultation with stakeholders across Derby and Derbyshire, including Joined-Up Care Derbyshire, City and County Health and Wellbeing Boards and young people. The process has been overseen by the strategic multiagency childhood obesity group (SMuCOG). A summary of membership and accountability is available in Appendix 1.

## *3.0 The Current Position*

### 3.1 The Strategic Context

The following review outlines the key national, regional and local policies that have influenced the development of this strategy and, in particular, the policy drivers which influence the development of priorities for children's health and wellbeing in Derby and Derbyshire.

### 3.2 National documents and policy on childhood obesity

Successful interventions have the potential to enable children to live longer, healthier lives and to reduce the social gradient of health inequalities. Prevention of childhood obesity is likely to lead to savings in the health care system and wider economy (Rudolf et al., 2019).

Addressing childhood obesity is a priority for the World Health Organization and national governments around the world. **In England, the government has committed to halving childhood obesity by 2030 (Department of Health and Social Care, 2018).**

National guidance and interventions include:

- A Healthy Start scheme which provides free vouchers to families on low incomes to spend on milk, fresh and frozen fruit, vegetables and vitamins.
- A voluntary healthy rating for primary schools (Department for Education, 2019).
- A School Food Plan (Department for Education, 2013).

In addition, *Towards an Active Nation* (Sport England, 2016), outlines intentions to invest £40 million GBP into projects which offer new opportunities for families and children to get active and play sport together.

### 3.2.1 House of Commons Health and Social Care Select Committee Report

A Health and Social Care Select Committee report *'Childhood obesity: Time for action*' (2018) outlined eight key areas for immediate consideration by the government:

1. **A 'whole systems' approach** – recognition that childhood obesity is everyone's business and that clear and ambitious targets are required to reduce overall levels of childhood obesity and associated health inequalities.
2. **Marketing and advertising** – support for a 9pm watershed on junk food advertising.
3. **Price promotions** – introduction of statutory measures to restrict price promotions and remove certain foods and confectionary from the ends of aisles and checkouts.
4. **Early years and schools** – consideration of early years and the first 1000 days of life, including support for targets to improve rates of breastfeeding
5. **Takeaways –** increased local authority powers to limit quantity of unhealthy food outlets and prevalence of food and drink billboard advertising
6. **Fiscal measures –** extension of the soft drinks industry levy to milk-based drinks.
7. **Labelling** – support for calorie labelling at point of food choice.
8. **Services for children living with obesity –** recognition that there must be systems in place to identify children who are overweight or obese and to offer effective help in a multidisciplinary approach.

### 3.2.2 Chief Medical Officer Report

The Chief Medical Officer's report, '*Time to solve Childhood Obesity*' (2019), identified national and legislative actions that could be taken to reduce overweight and obesity, along with additional local actions. The principals underpinning the recommendations are to:

1. Rebalance the food and drinks sold to favour healthy options, through regulation.
2. Allow children to grow up free from marketing, signals and incentives to consume unhealthy food and drinks.
3. Innovative policies that find the win-wins for children's health and the private sector.
4. Invest in and design the built environment to create the opportunities for children to be active and healthy.
5. Take action to improve exercise and healthy weight in pregnancy, breastfeeding rates, and infant feeding.
6. Ensure schools and nurseries play a central role, supported by Ofsted monitoring. Food, drink and physical activity standards should be set and adhered to in all schools and nurseries.

7. Ensure that the NHS and health sector workforce can deliver what our children and families need to prevent, manage and treat obesity, including having conversations about weight and tackling weight related stigma.
8. Make better use of data to guide practice, for example, systematically link and share data on children's weight to enable early intervention.
9. Protect and prioritise child health and children's rights when making trade deals
10. Develop the evidence base to inform practice and policy

### 3.2.3 NHS Long Term Plan

The *NHS Long Term Plan* (2019) notes that the burden of obesity is not experienced equally across society and provided a commitment to offer targeted support and access to weight management services in primary care for people with a diagnosis of type 2 diabetes or hypertension with a BMI of 30+ (adjusted appropriately for ethnicity). By 2022/23, the NHS expects to treat up to a further 1,000 children a year for severe complications related to their obesity, such as diabetes, cardiovascular conditions, sleep apnoea and poor mental health. These services will prevent children needing more invasive treatment in the future.

## 3.3 Local Interventions

It is beyond the scope of this strategy to list all of the services available for children living with obesity. However, a range of examples are provided in the following section for reference. It is important to note that this cannot be taken to reflect the range of activities undertaken by partners. Viewing alongside additional sources of information including aligned strategies, which respond to air quality and physical activity, and local mapping activities is encouraged.

***Tier 1: Universal prevention***

- National Child Measurement Programme is undertaken in state-maintained schools by the 0-19 years' public health nursing service in Derby City and by Live Life Better in Derbyshire County. Participation rates are above the national average in both areas; a total of 97.9% of eligible children in Derby and 98.2%% of eligible children in Derbyshire participated in the programme last year (PHOF, 2019).

- Planned local mapping activities will capture the full range of Tier 1 services available in the future. Key examples include the mile a day initiative, 0-19 years' public health nursing service, school sports partnership work, food for life, forest schools, parks and leisure activities.

***Tier 2: Lifestyle intervention***

Derby City Council provides a comprehensive lifestyle service: *Livewell.* A child weight service, delivered in partnership with Derby County Community Trust (DCCT), provides the following activities in Derby:

- A whole school programme is delivered at six primary schools per year
- A free, specialised lifestyle intervention, *LiveIT,* for children aged 5-17 years with a BMI on or above 85$^{th}$ centile and their siblings. Invitations to *LiveIT* are included in NCMP results letter where a BMI centile of 85 or above is recorded.

- DCCT are working to develop an early year's programme which focuses on healthy eating, physical activity and physical development.

Derbyshire County Council provides a comprehensive lifestyle service: *Live Life Better.*

- A weight management service for overweight or obese residents aged 16 or over
- A specific provision for children is in development.

***Tier 3: Specialist services***

- Medical causes for obesity are assessed through the relevant paediatric service. A children's dietetic service is available to children with comorbidities.
- Mental health conditions which effect, or are related to, food and/or weight management are assessed through the relevant child and adolescent mental health service.
- Clinicians and healthcare professionals have expressed concern that there is a lack of provision and no clear pathway for children living with obesity in Derby and Derbyshire to access a Tier 3 service.

***Tier 4: Specialist medical interventions and surgery***

- Tier 4 services are delivered in a few accredited centres nationally. It is understood that no children from Derbyshire have accessed these services over the past five years.

## *4.0 Consultation and Engagement*

### 4.1 Strategy development

Strategy development has been conducted in consultation with:

- Community and Secondary care clinicians
- Derby and Derbyshire Safeguarding Children Partnership
- Internal management teams within Derby City and Derbyshire County Council
- Joined-up Care Derbyshire through the Clinical and Professional reference group and the Children's Delivery Board

### 4.2 Engagement of Children and Young People

The views in the following section are the result of engagement activities completed in 2018 and 2019. Whilst it may not reflect the experience of all children and young people living in Derby and Derbyshire it may provide useful insight.

#### 4.2.1 Views and perceptions of children and young people in Derby City

Voices in Action (ViA), Derby City Council's youth council, provides a forum for young people, aged 11 to 19 years. It is peer-led by an elected Youth Mayor and Deputy Youth Mayor.

Public Health attended a youth council meeting in November 2018 to discuss childhood obesity. 54 young people attended and, through four peer-led focus groups, responded to two key questions:

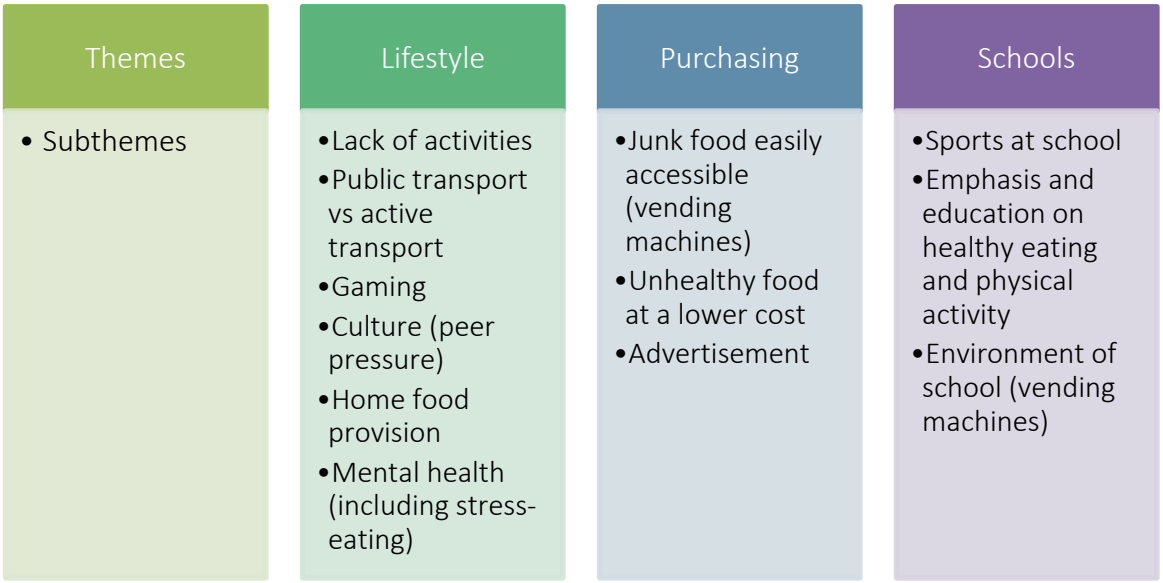
i) What is your school already doing to help with eating well and being physically active?

ii) What is stopping children and young people being healthy?

The responses highlighted positive efforts in some schools including, offering a range of activities during PE lessons and after school, increased availability of healthy food and drink and limited availability of high-sugar options. However, this was not experienced equally and some children noted that their school offered typically unhealthy options such as burgers, pizza and fizzy drinks.

ViA provided suggestions for improvement which included provision of classes to teach physical activity, increased support for girls to access sport and access to non-communal changing facilities. Barriers to healthy lifestyles were broad and two independent researchers identified three major themes: Lifestyle Factors, Purchasing Behaviours and School (Figure 7).

Figure 7: Themes and subthemes identified from Derby City Council's Youth Council




### 4.2.2 Views and perceptions of children and young people in Derbyshire

Healthwatch Derbyshire undertakes independent engagement activities to ensure that a wide range of individuals in Derbyshire are able to share their views on local health and social care services.

Pertinent findings of a recent report are presented in the following sections and cover the topics of eating well, maintaining a healthy weight and exercise.

#### 4.2.2.1 Eating well and maintaining a healthy weight (Healthwatch, 2019)

Some children, young people, parents and carers identified:

- Limited knowledge or confidence in their ability to prepare meals from raw ingredients
- Cookery classes were more likely to a focus on baking and cakes
- Convenience foods and takeaway products were perceived to be easier and/or quicker than alternatives
- Concerns regarding the number of outlets offering low cost convenience foods
- Limited time to prepare meals between home, school/college and work
- A dependency on adult support to maintain a healthy diet
- Financial barriers; healthy eating often considered more expensive than other options
- Pricing and presentation of unhealthy food choices within schools
- Influence of body image on the diet choices of some children and young people
- Unhealthy food used as a reward or treat by some teachers, parents and carers

#### 4.2.2.2 Exercise levels (Healthwatch, 2019)

- The ability to exercise with friends or in social groups was viewed as important and there was evidence of the influence of peers on decision making
- The financial cost of activities was perceived to be a barrier in some cases, particularly for families living on a low income or for families with more than one child
- Some comments suggested that activities and sport in schools were often more tailored to suit boys and that boys were generally encouraged to play sport during lunch breaks.

Healthwatch offered the following recommendations to address these issues:

- Increased opportunities for parents, carers, children and young people to develop skills in cookery and healthy meal preparation.
- Increased availability of affordable and healthy foods
- Encouragement to make healthier choices
- Increased availability of activities which are affordable or free of charge, including activities which are supported by digital ‘apps’
- Encouragement for involvement in sport and activities within schools
- Improved infrastructure to allow for safe exercise.

### 4.2.3 Views of children and parents participating in treatment services

*LiveIT*, Derby City Council’s child weight management programme, is delivered by Livewell and Derby County Community Trust. A parent and several staff members shared their views during an observation of *LiveIT* sessions. Whilst the discussion identified similar themes to those presented in earlier sections, the sample size was not sufficient to draw further conclusions. Resource permitting, a questionnaire or focus group will be conducted with a further sample of parents with the kind support of Derby County Community Trust.

## 4.3 Findings of engagement activities with children and young people

Whilst these findings cannot be generalised to apply to the experience of all children and young people living in Derby and Derbyshire, the overarching themes provide useful insight.

In particular, the findings suggest that children and young people may wish to follow a healthy lifestyle and recognise barriers to fulfilling this intention. There is evidence that

children and young people can feel prohibited by their surrounding culture and environment and that relatively small change may have immediate impact. Involving children and young people in decision-making, encouraging physical activity and ensuring access to private changing spaces, provide a few examples.

Many of the choices that children and young people make are influenced by both convenience and their peers. Facilitating changes in culture and encouraging local providers to stock healthy convenient food, at affordable rates, and reconsidering the use of vending machines in schools all hold potential to support behaviour change.

## *5.0 The Strategy Detail*

### 5.1 Objectives and Priorities

***Objectives***

1) Ensure a whole systems approach is in place to reduce the prevalence of overweight and obesity in children across Derby and Derbyshire.
2) Ensure children and young people and their families are able to access appropriate services to support healthy weight, from pregnancy to adulthood.

***Priorities***

1. Support all children and young people to live healthy lifestyles and maintain a healthy weight, providing adequate skills, support and empowerment to make diet and lifestyle changes where appropriate and required
2. Ensure all settings and services provide the best possible foundation to enable children to prevent and manage excess weight gain
3. Ensure the provision of accessible, evidence based services, which are supported by clear signposts and appropriate pathways
4. Ensure those working with and supporting children and young people, in all settings, are able to recognise and respond to causes for concern in weight management
5. Reduce the impact of the obesogenic environment surrounding children and young people in Derby and Derbyshire through a preventative whole systems approach.

It is anticipated that all partner organisations will be able to contribute to at least one priority.

***Partner organisations***

- Active Derbyshire
- Amber Valley Borough Council
- Bolsover District Council
- Chesterfield Borough Council
- Chesterfield Royal Hospital
- Colleges, primary schools and secondary schools
- Derby and Derbyshire Clinical Commissioning Group
- Derby City Council
- Derby County Community Trust
- Derbyshire Community Health Services
- Derbyshire County Council
- Derbyshire Dales District Council
- Derbyshire Healthcare NHS Foundation Trust

### *6.0 Themes*

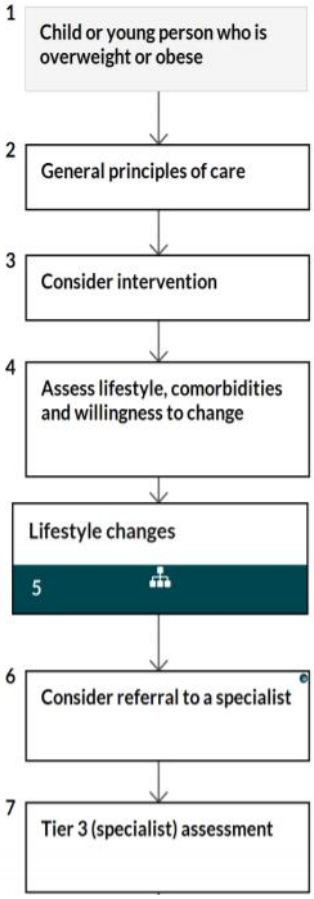
It is widely recognised that there is no single solution to the childhood obesity crisis, and an effective response must include a long-term, impartial strategy and multiple interventions (Harry Rutter in CSJ, 2017). A whole systems approach is considered more likely to create an environment that facilitates healthy choices and supports healthy weight management.

In addition to recommendations for focus areas from the CSJ (2017) the following section is split into five areas: Treatment Pathway, Families and Early Years, Health and Care Professionals, Education and Schools and The Obesogenic Environment

### 6.1 Treatment Pathway

For children already living with overweight or obesity, access to an appropriate care pathway and support is of paramount importance. NICE pathway is shown in Figure 8 (see also Section 7.1).

Figure 8: Obesity management in children and young people (NICE, 2019)




### 6.1.1 Lifestyle changes

It is estimated that 80% of overweight and obesity is related to diet and 20% to a lack of physical activity (CMO, 2019). For many families advice may be sufficient to achieve lifestyle change. However it must be acknowledged that children's weight gain over past decades is not simply due to a lack of knowledge and understanding. Many children and families will need individual support to achieve lifestyle change.

It is important to recognise that behaviours are influenced by a combination of biological, psychological and social factors. Eating is an essential part of daily life and it meets a range of social and psychological needs. For many, over-eating may have developed as a way to regulate emotions and children who have been bullied may learn to use food as solace. Interventions can address self-esteem and self-efficacy, help individuals to cope with the re-emergence of old habits, especially under stress, tackle unhelpful thoughts and beliefs about themselves and encourages healthy lifestyles (BPS, 2019).

### 6.1.2 Referral to a specialist

Specialist multidisciplinary teams should be available for children and young people living with obesity, particularly those with complex needs and serious co-morbidities, and should involve wider family members where possible. NICE (CG189) recommends that multidisciplinary teams should be skilled to deliver psychological support, behavioural interventions, and interventions to increase physical activity and improve diet. Along with these components there is consensus that specialist medical input, via Paediatricians is also required.

Locally identified gaps in current dietetic and psychological services may prevent children who are living with obesity, without co-morbidities or serious mental health concerns, from accessing specialist support.

### 6.2 Families and Early Years

The first 1,000 days, from conception up to a child's second birthday, are considered the most formative in a child's development. Healthy weight throughout pregnancy and healthy infant feeding are pivotal in enabling children to maintain a healthy weight through life.

Breastfeeding provides a range of protection and can be an important component of strategies to reduce the risk of overweight and obesity in children (WHO, 2002). Breastfeeding for three months in the first year of child's life is thought to reduce the risk of obesity by 13% in later life (PHE, 2018). There are several contributing factors which support the relationship between breastfeeding and healthy weight management.

Exclusive breastfeeding precludes inappropriate complementary feeding practices which could lead to unintended weight gain. Evidence suggests that breast milk contains hormones and other biological factors involved in the regulation of food intake which may help shape long-term physiological processes responsible for maintaining energy balance. Current national and international guidance recommends exclusive breastfeeding from birth and for the first six months of infancy (WHO, 2002).

The percentage of infants that are totally or partially breastfed at 6-8 weeks after birth in Derby is 45.9% and 41.3% in Derbyshire, both of which are lower than the national average of 46.2% (PHOF, 2019). There are opportunities to support breastfeeding awareness and continuation through initiatives such as the *Breastfeeding Welcome Here Award* which is available from Derbyshire County Council and Derby City Council. A locally developed website, *For You and Baby,* offers support for Derbyshire families through pregnancy and the early years.

Tackling childhood obesity should consist of support for children and the whole family. In particular, families should be further supported by their surrounding environment and

through contact with healthcare professionals, schools and educational settings. Working with parents to ensure that they have sufficient knowledge and skills to make healthy choices and provide healthy meals, from weaning onwards, is integral and is reflected in the whole systems approach.

### 6.3 Health and care professionals

Parents and children routinely have contact with health professionals at several key points throughout their life (see Figure 9). Families that are most in need of support may have increased contact with primary care professionals, midwives, social care staff, early year settings and/or school nursing staff.

Figure 9: Key Contact Points and opportunities for intervention

These contacts provide an important opportunity to recognise and respond to child weight concerns. Health and care professionals are integral to providing clear and consistent advice on healthy weight management. Whilst conversations are likely to be sensitive, there are increasing resources available and opportunities to embed appropriate training within existing learning and development activities.

Specific consideration should be given to children in care for whom the Local Authorities are the Corporate Parent. There are particular opportunities to improve the health of children cared for by foster carers and direct influence for those resident within Local Authority homes.

A joined-up approach has the potential to extend the success of existing interventions, reduce gaps in provision and ensure that limited resources are used to the greatest effect. This may be achieved through a systematic approach.

Evidence suggests that it is increasingly difficult for parents and practitioners to accurately identify a child's weight status without measurement. Therefore, the Chief Medical Officer has proposed that BMI be calculated at each contact, after appropriate consideration of clinical or psychological factors that may influence measurement.

### 6.4 Education and Schools

The majority of children and young people will spend a significant proportion of their time in educational settings. Attitudes, beliefs and behaviours learned during these early years show a strong tendency to continue into adulthood. Children in good health are less likely to have poor attendance at school and more likely to achieve their academic potential.

Traditional health education approaches, which promote health messages through the school curriculum, have produced little evidence of sustained change in health behaviours. A whole school approach, which is universal and evidence-based, seeks to promote health through the whole school environment. It goes beyond teaching in the classroom and lunchtime; a good school food culture helps children to develop healthy eating habits which support healthier and longer lives. The approach brings together school leadership including principal/s and school council, teaching staff, food services, students, families and the broader community to promote healthy eating and physical activity.

State-maintained schools are required to comply with the school food standards (The Requirements for School Food Regulations, 2014) and since 2014 this expectation has also formed an explicit requirement in the funding agreements of academies. Whilst the school food standards may not be enforced consistently, the regulations apply to food and drink provided to pupils on and off school premises up to 6pm. Since September 2014, every child in Reception Year 1 and Year 2 in state-funded schools has been entitled to a free school lunch. Drinking water must also be provided free of charge at all times on school premises

Physical inactivity directly contributes to one in six deaths in the UK and is a key factor in the obesity crisis (CSJ, 2017, Transport Committee, 2019). Current recommendations suggest that children should complete at least 60 minutes of moderate to vigorous-intensity physical activity each day (CMO, 2019). Despite this advice, just 9% of children aged two to four years and 22% of children aged five to 15 years achieve the recommended physical activity levels for their age group (NHS Digital, 2015).

It is recommended that schools in Derbyshire and Derby City are supported to embed a whole school approach to healthy eating and physical activity. This approach should be extended, where possible, to early year's settings.

The framework to deliver this requires schools to take action in three key areas:-

### 6.4.1 Formal Health Curriculum

Providing health education topics with specific time allocation, within the formal school curriculum, may support students to develop the knowledge, attitudes, and skills required to make healthier choices. In particular, building a healthy relationship with food is linked to an appropriate understanding of healthy weight. Practical skills, such as budgeting, meal planning, cooking and regular opportunities to try new foods are thought to further support children and young people to maintain healthy behaviours. There is an opportunity to support schools in implementing recommended levels of physical activity and the new Health Education Curriculum in 2020 (Appendix 5).

### 6.4.2 Ethos and environment of the school or early years setting

Health and wellbeing of students and staff are often promoted through the 'hidden' or 'informal' curriculum, which encompasses the values and attitudes promoted within the school, and the physical environment and setting of the school. There are opportunities to promote healthy food options, embed physical activity through initiatives such as an active mile (children run or walk for 15 minutes every day within the school day), active travel and providing visible leadership through appropriate governing bodies and healthy school polices.

School and early years' settings are important venues and are eligible for accreditation under the *Breastfeeding Welcome Here Award* offered by Derbyshire County Council and Derby City Council.

### 6.4.3 Engagement with families and communities

It is important to recognise the spheres of influence which shape children's attitudes and behaviours. Schools should continue to engage with families, external agencies, and the wider community. There are opportunities to share children's learning with parents, link with local community organisations, and increase wider engagement in healthy eating and physical activity.

## 6.5 The Obesogenic Environment

The term 'obesogenic environment' is used to describe an environment which discourages physical activity and promotes consumption of unhealthy food and drink. Examples of obesogenic environments include urban spaces that promote driving over active travel, vending machines in common areas and high streets, stations and cinemas which are dominated by shops selling fast food, sugary drinks and sweets.

There is reliable evidence that people living in the most deprived areas in the UK are more likely to suffer ill health than those living in the least deprived areas. Overall, the least affluent areas can expect to have five times more fast food outlets than the most affluent areas. A summary of fast food outlets in Derby and Derbyshire is included in Figure 10.

Figure 10 – the number of fast food outlets in Derby and Derbyshire (PHE, 2017)

| Local Authority | Number of Fast Food Outlets | Rate per 1,000 residents | Trend over three years |
|---|---|---|---|
| Amber Valley Borough Council | 120 | 0.98 | 9% increase |
| Bolsover District Council | 76 | 1 | 19% increase |
| Chesterfield Borough Council | 139 | 1.34 | No significant change |
| Derby City Council | 208 | 1.24 | 17% increase |
| Derbyshire Dales District Council | 64 | 0.9 | 8% increase |
| Erewash Borough Council | 107 | 0.95 | No significant change |
| High Peak Borough Council | 102 | 1.12 | No significant change |
| North East Derbyshire District Council | 69 | 0.7 | 8% increase |
| South Derbyshire District Council | 63 | 0.67 | 19% increase |

It is not necessarily causative, however, additional research in Derby City suggested a degree of correlation between clustering of fast food outlets and higher prevalence of childhood overweight (Burgess-Allen, 2014).

Existing local authority planning powers cannot address the clustering of fast food outlets that are already in place. However, a number of local authorities have used their power to reduce outlets close to schools. There are further opportunities to utilise a strategic approach to prevent new hot food takeaways from opening and to improve existing outlets (Local Government Association, 2017).

It is suggested that Derby City Council and the District and Borough Councils of Derbyshire review local policies to regulate planning and advocate for increased powers, where required, to protect residents. In particular, additional powers to limit fast food advertising on billboards, bus stops and stadiums.

Local Authorities and Health and Wellbeing Boards in Derby and Derbyshire are in a position to advocate to national government on their commitment to reducing childhood obesity and their progress to date.

### 6.5.1 Actions to influence the food and drinks industry

There are opportunities to maximise the use of existing local authority powers and utilise flexibility. Restricting advertising near schools, reviewing vending machine use in public sector buildings and exploring how partnerships with the food and drink sector could be developed locally. The recommendations of the Health Select Committee, and of the Chief Medical Officer, strongly indicate that national action will be taken. This is an imperative part of a true whole systems approach to this challenge.

### 6.5.2 Being active in Derby and Derbyshire

Provision of safe, accessible open space is a recognised factor in improving the physical and mental well-being of a community. To be effective interventions such as sport and physical activity need to be interwoven as integral parts of a healthy lifestyle (our daily routine at home, work and school) rather than being treated as independent solutions to the childhood obesity crisis. Whilst schools play a critical role in encouraging and facilitating children to eat

healthily and be physically active, children also need to be supported to undertake this lifestyle and make independent healthy choices outside of school. Therefore, this needs to be introduced as part of a whole systems approach, involving schools, families and active transport options. Actions must be considered in relation to other local strategies already in place including physical activity and air quality.

### 6.6 Transport

Local authorities have a statutory duty under the Education and Inspections Act 2006 to promote sustainable travel and transport modes on the journey to and from school and between schools and other institutions. Existing Derbyshire County Council projects, which include Travel Smart and Scooter Smart, encourage active travel where possible. Similarly, Cycle Derby provides free training for adults and children learning to cycle or wishing to build confidence cycling on the road.

Active travel has the potential to improve immediate and long term health and reduce health inequalities. For older children, active travel may further support their ability to access extra-curricular sport and physical activities independently. This should include active transport options along with the infrastructure to enable them.

Increasing active travel has the potential to lower emissions; around a quarter of greenhouse gas emissions in the UK are from transport and approximately 60% of journeys for distances of 1–2 miles were made by motor vehicle (Transport Committee, 2019). Air pollution can have significant effects on health. Epidemiologic evidence suggests that air pollution is a risk factor for childhood obesity (Wei et al., 2016). Derby City and Derbyshire County Council have a legal responsibility for assessing and working towards improving air quality to meet stringent health based objectives set by the government and there is already a shared air quality strategy in place.

The government National Planning Policy Framework guidance advises that new and existing development should not create or be adversely affected by unacceptable levels of air pollution. As a general rule, planning applications that may have a significant impact on air quality, or be significantly affected by existing air pollution levels, should be supported by an air quality assessment (Derby City Council, 2019).

### 6.7 How the strategy contributes towards wider priorities

*Childhood obesity: Time for Action in Derby and Derbyshire* presents an important overarching document to drive future developments, local partnerships and links in with the Health and Wellbeing Strategies (Figure 11 and 12).

Figure 11: Summary of the strategy's alignment with Derby's Health and Wellbeing strategy priorities

| | |
|---|---|
| Derby Health and Wellbeing Strategy | **Health and Social Care System Transformation**<br>Transforming how we think about, provide and access services locally. A number of objectives are specifically focussed on enabling young people to access services. |
| | **To shift care closer to the individual**<br>The strategy has a number of objectives aimed at empowering the child including increasing the options of after-school clubs |
| | **To reduce inequalities**<br>The strategy has a number of objectives aimed at tackling social inequalities through providing opportunities to all children |

Figure 12: Summary of alignment with Derbyshire's Health and Wellbeing strategy priorities

| | |
|---|---|
| Derbyshire Health and Wellbeing Priorities | **Enable people in Derbyshire to live healthy lives**<br>The strategy focuses on helping children and young people to be physically active and eat healthily. It is thought that these benefits will extend to mental wellbeing. |
| | **Work to lower levels of air pollution**<br>The strategy considers whether children can be facilitated to have a more active commute to school. This may result in reducing parents driving children and therefore reduce air pollution. |
| | **Build mental health and wellbeing across the life course**<br>The strategy aims to develop a whole life course approach to enable children and young people to develop good mental health and wellbeing which continues for a lifetime. |
| | **Support our vulnerable populations to live in well-planned and healthy homes**<br>The strategy considers a universal whole systems approach, aiming to ensure everyone is able to live in a healthy home. |

### *7.0 Objectives*

There are two overarching objectives:

1) Derby and Derbyshire develop clear pathways and signposting to enable children who are obese or overweight to access joined-up and long-term support. This includes ensuring that there are robust systems in place to identify children who are overweight or obese and also that there is a commissioned service available to them that can offer them, and their families, effective help in a multidisciplinary approach.
2) Derby and Derbyshire develop preventative approaches for current and future generations. This should include the development of a whole systems approach to obesity. This approach coordinates existing efforts, reveals gaps in provision and supports the efficient use of limited resources.

### 7.1 Development of clear pathways

It is proposed that clear pathways would include:

- Identification of children and young people who are overweight or obese
- Clear thresholds for referral to the next tiered service
- Clear guidance on thresholds to involve safeguarding and/or referral to social care
- Capacity and capability within services to manage need
- Agreed definition of improvement or success.
- Development of a multi-agency assessment tool.

A mapping exercise has been undertaken of the current pathways and services available and it is clear that there are gaps in our provision. In particular specific gaps have been identified in dietetic and psychology services, necessitating a review of the commissioning of services and the development of an alternative model of delivery. Further details of recommendations for the pathway and successful implementation can be found in Appendix 3.

It is crucial that pathways include appropriate consideration of mental health services and that all services are trauma informed to support those who have been subjected to adverse childhood experiences. The experience of stress as an adult, caused by factors like financial insecurity and mental illness, has also been linked to an increased risk of obesity. Up to half of adults attending specialist obesity services may have experienced childhood adversity or trauma (BPS, 2019).

### 7.2 Development of a whole systems approach

Development of a whole systems approach aims to create an environment which both prevents the development of overweight and obesity, and also support those who have already gained excess weight with behaviour change. It should consist of six phases, in line with best evidence (PHE, 2018):-

- **Phase 1:** Set-up
- **Phase 2**: Building the local picture
- **Phase 3:** Mapping the local reality
- **Phase 4:** Action
- **Phase 5:** Creating a dynamic local system
- **Phase 6:** Reflection

Derby City and Derbyshire County Council are steering a whole systems approach and, at the time of writing, both Councils have pilot areas at phase 3 – *mapping the local reality*.

As part of a whole systems approach it is important to ensure that actions are considered for all services delivered to children and families. Best evidence suggests that the approach and environment created by schools, early year settings, social care workings, primary care and secondary care services is essential in making progress towards the strategic vision.

### *8.0 Governance*

Mitigating childhood obesity is neither easy nor simple and it is anticipated that the approach will be an iterative process.

It is recommended that the Strategic Multiagency Group monitors the implementation of this strategy and subsequent action plan, and is held accountable by the Children's Board of the STP and Derby and Derbyshire Safeguarding Children Partnership.

Clearly defined measures will help us ensure that we are making positive progress and would allow us to be held to account. It would also allow prompt identification of any unintended consequences.

In keeping with the recommendations of CSJ (2017), appropriate measures are encouraged to monitor progress in achieving an overall reduction in childhood obesity rates and the social gradient in child health - reducing the gap in childhood obesity between the most and least affluent.

It is suggested that a 'Healthy Weight Declaration' is developed with standard commitments, similar to those implemented in Leeds and other areas (Appendix 2), and that progress against these commitments is subject to regular review.

### *9.0 References*

British Psychological Society., (2019), *Psychological Perspectives on Obesity.* [Online]. Available from: https://www.bps.org.uk/news-and-policy/psychological-perspectives-obesity-addressing-policy-practice-and-research

Burgess-Allen, J., (2014). *Derby's Childhood Obesity Strategy*. [Online]. Available from: https://cmis.derby.gov.uk

Centers for Disease Control and Prevention., (2018). *Overweight & Obesity, defining childhood obesity* [Online]. Available from: https://www.cdc.gov/obesity/childhood/defining.html

Change4Life., (2019) *Lunchbox ideas.* [Online]. Available from: https://www.nhs.uk/change4life/recipes/healthier-lunchboxes

Chief Medical Office., (2019). *Time to solve Childhood Obesity.* [Online]. Available from: https://www.gov.uk/government/publications/time-to-solve-childhood-obesity-cmo-special-report

Chief Medical Office., (2019). *Physical Activity Guidelines*. [Online]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf

Centre for Social Justice., (2017). *Off the scales Tackling England's childhood obesity crisis*. [Online]. Available from: https://www.centreforsocialjustice.org.uk/library/off-scales-tackling-englands-childhood-obesity-crisis

Department for Education., (2013), *The school food plan.* [Online]. Available from: https://www.gov.uk/government/publications/the-school-food-plan

Department for Education., (2019), *Healthy schools rating scheme.*[Online}. Available from: https://www.gov.uk/government/publications/healthy-schools-rating-scheme

Department of Health and Social Care., (2016). *Childhood obesity: a plan for action. Chapter 2.* [Online]. Available from: https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action-chapter-2

Department of Health and Social Care., (2018). *New measures announced to halve childhood obesity by 2030.* [Online]. Available from: https://www.gov.uk/government/news/new-measures-announced-to-halve-childhood-obesity-by-2030

Department of Health and Social Care and Public Health England., (2018). *Early years high impact area 3: Breastfeeding.* {Online]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754791/early_years_high_impact_area_3.pdf

Derby City Council., (2019), *Air Quality.* [Online]. Available from: https://www.derby.gov.uk/environmental-health-licensing-trading-standards/environmental-health/environmental-protection/air-quality/

Derbyshire County Council., (2019). *Effectiveness of tier 3 weight management services for children aged 0-18*.

Health and Social Care Committee., (2018). *Childhood obesity: Time for action.* (HC 8, 2017-19). [Online]. Available from: https://dera.ioe.ac.uk/31708/1/882.pdf

Healthwatch Derbyshire., (2019). *Children and Young People – Creative Engagement.* [Online]. Available from: https://healthwatchderbyshire.co.uk/2019/08/children-and-young-people-creative-engagement/

Local Government Association., (2017). *Tipping the scales: case studies on the use of planning powers to limit hot food takeaway.* [Online]. Available from: https://www.local.gov.uk/tipping-scales-case-studies-use-planning-powers-limit-hot-food-takeaway

NHS Health Education England., (2019). *Making Every Contact Count.* [Online]. Available from: https://www.makingeverycontactcount.co.uk/

NHS Digital., (2015), *Health Survey for England 2015: Physical activity in children*, December 2016: London, Health and Social Care Information Centre. [Online]. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/health-survey-for-england-2015

NHS Digital., (2015, 2016). *Health Survey for England.* [Online]. Available from: https://digital.nhs.uk/pubs/hse2017

NHS Digital (2018)., *National Child Measurement Programme.* [Online]. Available from: https://digital.nhs.uk/services/national-child-measurement-programme/

NHS., (2019). *Long Term Plan* [Online]. Available from: https://www.longtermplan.nhs.uk/

NICE., (2013). *Weight management: lifestyle services for overweight or obese children and young people.* [Online]. Available from: https://www.nice.org.uk/guidance/ph47

NICE., (2019). *Obesity management in children and young people.* [Online]. Available from: https://pathways.nice.org.uk/pathways/obesity#path=view%3A/pathways/obesity/obesity-management-in-children-and-young-people.xml&content=view-index

Health and Social Care Committee., (2018). *Childhood obesity: Time for action.* (HC 8, 2017-19). [Online]. Available from: https://dera.ioe.ac.uk/31708/1/882.pdf

Public Health England., (1995). *Body mass index reference curves for the UK, 1990*. Archives of Disease in Childhood 1995 73:25-29

Public Health England., (2018). *Official statistics breastfeeding prevalence at 6-8 weeks after birth.* [Online]. Available from: https://assets.publishing.service.gov.uk

Public Health England., (2019). *Fast food outlets: density by local authority in England* [Online]. Available from: https://www.gov.uk/government/publications/fast-food-outlets-density-by-local-authority-in-england

Public Health Outcomes Framework and Fingertips Profile. (2019). *NCMP and Child Obesity Profile.* [Online]. Available from: https://fingertips.phe.org.uk/profile/national-child-measurement-programme/

Rudolf, M., Perera, R., Swanston, D., Burberry, J., Roberts, K., and Jebb, S., (2019). *Observational analysis of disparities in obesity in children in the UK: Has Leeds bucked the trend?* [Online]. *Pediatric Obesity.*

Shield, J. E., (2019). *When should my kids snack?* [Academy of Nutrition and Dietetics]. Online. Available from: https://www.eatright.org/food/nutrition/dietary-guidelines-and-myplate/when-should-my-kids-snack

Sport England., (2016). *Towards an Active Nation.*[Online]. Available from: https://www.sportengland.org/media/10629/sport-england-towards-an-active-nation.pdf

The Active Mile Foundation (2019). *The Active Mile.* [Online]. Available from: https://thedailymile.co.uk/

The Guardian. (2019). *Fast Food England: how many takeaways are near you?* [Online]. Available from: https://www.theguardian.com/inequality/ng-interactive/2017/jul/25/fast-food-england-how-many-takeaways-are-near-you

*The Requirements for School Food Regulations 2014.* [Online]. Available from: http://www.legislation.gov.uk/uksi/2014/1603/contents/made

Transport Committee., (2019). *Active travel: increasing levels of walking and cycling in England.* (HC 11, 2017-19) [Online]. https://publications.parliament.uk/pa/cm201719/cmselect/cmtrans/1487/1487.pdf

Wei et al., (2016)., *Chronic exposure to air pollution particles increases the risk of obesity and metabolic syndrome: findings from a natural experiment in Beijing*. [Online]. The Faseb Journal. Available from: https://www.fasebj.org/doi/full/10.1096/fj.201500142

World Health Organisation. (2002). *Global strategy on infant and young child feeding*. [Online]. Available from: http://apps.who.int/gb/archive/pdf_files/WHA55/ea5515.pdf?ua=1

## 10.0 Appendices

**Appendix 1: Membership and accountability of SMuCOG**

Strategic Multi-Agency Childhood Obesity Group (SMuCOG) reports and is accountable to:

- Derby and Derbyshire Safeguarding Children Partnership
- Joined Up Care Derbyshire Children's Delivery Board

It also works with other Boards such as the Health and Wellbeing Boards of both the City and the County.

Organisations represented in the Derby and Derbyshire Strategic Multiagency Childhood Obesity Group meetings:

- Chesterfield Royal Hospital (Paediatrics)
- Derby and Derbyshire Clinical Commissioning Group (Children's commissioning)
- Derby and Derbyshire Clinical Commissioning Group (Safeguarding)
- Derby City Council, Public Health and Children's Social Care
- Derby County Community Trust (children's weight management programme)
- Derbyshire Community Healthcare service (0-19 Public Health Nursing)
- Derbyshire County Council, Public Health
- Derbyshire Healthcare NHS Foundation Trust (0-19 Public Health Nursing and Safeguarding)
- University Hospitals Derby and Burton (Paediatrics)

**Appendix 2 - Leeds City Council Healthy Weight Declaration**

| Healthy Weight Declaration – one page guide |
|---|
| **What is the Healthy Weight Declaration?** |
| The Local Government Declaration on Healthy Weight was developed by the healthy weight programme 'Food Active', which is based within the health charity *Health Equalities Group*. A steering group including Directors of Public Health, Universities, third sector and other food and physical activity partners provided expert input to devise the Declaration. The aim of the Declaration is to achieve a local authority commitment to promoting healthy weight across all Council teams with a view to improving the health and wellbeing of the local population. The Declaration includes 14 standard commitments and the opportunity of several locally chosen priorities. |
| **How will it support the work we are doing?** |
| Overweight and obesity is a serious public health problem that increases disability. Disease and death and has substantial long term economic, wellbeing and social costs. The proportion of the population who are overweight continues to rise. The Healthy Weight Declaration will provide a strategic vision and aspiration for the Council to strive towards. It will provide the rationale and a platform to connect Council teams to work together to raise awareness and deliver on the importance of healthy weight. |
| **Who will it involve?** |
| Action is required by all partners to promote healthy eight and to make it easier for people to make better choices. A local authority commitment has the scope to impact significantly on local residents and council staff. A whole-systems approach which links together the many influencing factors on obesity is key to improving the health of people in Leeds. As a local authority we are in a strong position to provide strategic leadership for a joined-up approach. The Healthy Weight Declaration will provide a focus to recognise local related strategies and commonalities and to help integrate them together. It will enable collaboration both across the local authority and with external partners to highlight the importance of healthy weight and our commitment to it. |
| **What progress have we made so far?** |
| We are already taking action on many of the 14 standard commitments of the Declaration for example, we have developed and approved the Leeds Food Charter, are developing a Supplementary Planning Document on hot food takeaways, we support the national VChange4Life and One You campaigns, and have commissioned an Integrated Healthy Living Service for Leeds. |
| **What next?** |
| A working group will be established. An event will be held in March to introduce this Declaration approach and identify local priorities. A campaign and programme of work will raise awareness about the Healthy Weight Declaration |

**Appendix 3: Ingredients for pathway to prevent obesity, and assess, manage and support obese children: a serious incident learning Review by Derbyshire Safeguarding Children Board (December 2018).**

**Ingredients for pathway to prevent obesity, and assess, manage and support obese children**

Practitioners who participated in the review have provided the following comments about the content of any care pathway

**What needs to be covered in the pathway?**

1. When to refer to a paediatrician, and their role and that of other practitioners in assessment and management of co-morbidities
2. When to refer to children's social care/ when obesity might be a child protection issue
3. Definition of improvement/success which takes into account the dilemmas that;
    a. there are serious potential health concerns for children who are very obese
    b. there is no robust evidence based programme for weight reduction
    c. Losing weight may not be the highest priority need for a child nor the most pressing issue from their point of view

**What is needed to support successful implementation of a pathway?**

1. Multi-agency assessment tool, which takes into account family and environmental factors
2. Development of a common language amongst practitioners
3. Build on the arrangements in place e.g. the National Child Measurement Programme and consider how something similar might be applied to pre-school children; promote take up of and through the 3 – 4 year old offer
4. Capacity to undertake direct work with the children, especially year 6 and above within a family based approach
5. Identify whether there are windows in a family's life when they might be more responsive to change
6. Consideration of food available in nurseries and schools – especially where children have scope to make poor choices – e.g. some schools have removed snack machines
7. Skilling up staff; raising a sensitive subject and overcoming normalisation of unhealthy weight, use of motivational interviewing techniques
8. Service user input into development of the pathway
9. Consideration of differing needs of people from diverse backgrounds
10. Prioritising where the impact would be greatest – especially young children

**Scope of the pathway**

1. Right across all levels of need; universal, early help and protecting children

**Appendix 4: National Curriculum**

The national curriculum in England states that pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Pupils should be taught to:

**Key stage 1 (age 5 – 7 years)**

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from

**Key stage 2 (7-11 years)**

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

**Key stage 3 (11-14 years)**

- understand and apply the principles of nutrition and health
- cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet
- become competent in a range of cooking techniques
- understand the source, seasonality and characteristics of a broad range of ingredients

The national curriculum for physical education aims to ensure that all pupils:

- develop competence to excel in a broad range of physical activities
- are physically active for sustained periods of time
- engage in competitive sports and activities
- lead healthy, active lives