
LEICESTERSHIRE JOINT STRATEGIC NEEDS ASSESSMENT 2018-2021

OBESITY: PHYSICAL ACTIVITY, HEALTHY WEIGHT AND NUTRITION

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FOREWORD

The purpose of the Joint Strategic Needs Assessment (JSNA) is to:

- Improve the health and wellbeing of the local community and reduce inequalities for all ages.
- Determine what actions the local authority, the local NHS and other partners need to take to meet health and social care needs, and to address the wider determinants that impact on health and wellbeing.
- Provide a source of relevant reference to the Local Authority, Clinical Commissioning Groups (CCGs) and NHS England for the commissioning of any future services.

The Local Authority and CCGs have equal and joint statutory responsibility to prepare a Joint Strategic Needs Assessment (JSNA) for Leicestershire, through the Health and Wellbeing Board. The Health and Social Care Act 2012 amended the Local Government and Public Involvement in Health Act 2007 to introduce duties and powers for Health and Wellbeing Boards in relation to JSNAs. The JSNA offers an opportunity for the Local Authority, CCGs and NHS England's plans for commissioning services to be informed by up to date information on the population that use their services. Where commissioning plans are not in line with the JSNA, the Local Authority, CCGs and NHS England must be able to explain why.

The Health and Wellbeing Board has agreed that the JSNA will be published in subject-specific chapters throughout a three-year time period. Chapters will be developed in line with CCG and local authority commissioning cycles. As many of the relationships required for the JSNA in Leicestershire are wide ranging, involving representation from NHS England, CCGs, Leicestershire Partnership Trust, University Hospitals of Leicester, District Councils and the voluntary sector, a JSNA Reference Group has been established. This Reference Group supports the JSNA work across the Health and Wellbeing Board. To examine the detail of the chapters, Task and Finish groups have been established to bring together local professionals, where they can share their expert knowledge on the work area being examined.

The outputs of the JSNA will include:

1. Subject-specific chapters of an assessment of current and future health and social care needs
2. An online infographic summary of each chapter available on the internet

The JSNA has reviewed the population health needs of the people of Leicestershire in relation to obesity and physical activity. This has involved looking at the determinants of obesity and physical activity, the health needs of the population in Leicestershire, the impact of obesity and physical activity, the policy and guidance supporting obesity and physical activity, existing services and the breadth of services that are currently provided. The unmet needs and recommendations that have arisen from this needs assessment are discussed.

Please note, the majority of indicators presented in this needs assessment are from national sources so are subject to a time lag due to the time required for data collection, data analysis and publication. Where possible, comparisons have been made to national averages and local context has been included. Where possible, comparisons have also been made to Chartered Institute of Public Finance and Accountancy (CIPFA) nearest neighbours. This is a group of 16 similar local authorities to Leicestershire based on various factors including, but not limited to, population, output area density and unemployment. Where comparisons have been made to neighbours, the top five neighbours have been presented as opposed to all 16. Where the terms 'statistical neighbours' are used in the report, this is in reference to the CIPFA nearest neighbours. The term significance is used throughout the report and refers to statistical significance. This examines if the result presented is different to the national result, due to something other than chance. Most often, this is calculated using 95% confidence intervals.

EXECUTIVE SUMMARY

The national picture

Obesity is a complex, systems problem, not simply a result of people choosing to over eat or be sedentary. Our choices are significantly influenced by the 'obesogenic environment'; that is the layout of our environment, the range of choices available to us and our culture, values and social interactions. As such, tackling obesity requires a whole systems approach, from reforming national policy and legislation through to local action in different settings (such as schools and the workplace) and across different sectors (including corporate, voluntary and public sectors). This action needs to promote access to nutritious and healthy food, support people to maintain a healthy weight and encourage people to be more active in their daily lives. Without concerted action in these areas the problem of obesity will continue to rise, particularly in children, continue to impact on people's quality and length of life and present significant cost pressures on the public purse. Already in 2014 to 2015 it has been estimated that the NHS spent £6.1 billion on overweight and obesity-related ill-health with an overall cost to wider society of £27 billion per year. NHS costs are expected to reach £9.7 billion per year by 2050 and wider societal costs to £49.9 billion.

Obesity is defined as an abnormal or excessive amount of fat accumulation that presents a risk to health and is typically measured using a height to weight ratio termed the Body Mass Index (BMI). For adults, a BMI of 25 kg/m² or above is considered overweight and over 30 kg/m² is considered obese. For children, BMI is compared to a reference sample and BMI thresholds are defined in terms of a z score or centile against that reference. Weight equal to or greater than the 85th percentile is considered overweight and equal to or greater than the 95th percentile considered obese. Currently two-thirds of adults and a quarter of children between two and 10 years of age are overweight or obese.

The amount of energy we expend in relation to the calories we consume is a significant contributor to obesity. Physical activity is defined as any bodily movement produced by skeletal muscles that requires energy expenditure. It can include everyday activities such as walking, cycling or gardening as well as more structured sports and exercise. Inactivity is defined as doing fewer than 30 minutes of activity a week, whereas sedentary behaviour is not simply a lack of physical activity but is a cluster of individual behaviours where sitting or lying is the dominant mode of posture and energy expenditure is very low. In England, the Chief Medical Officer has published physical activity guidelines specific to an individual's age and activity surveys are used to estimate how active the population is, particularly in relation to moderate to vigorous physical activity and strength and balance-promoting activities. Being active improves physical and mental health, sleep, confidence, co-ordination and independence. Despite the benefits, 32% of children in England do less than 30 minutes of activity per day and 25% of adults do less than 30 minutes of physical activity per week. However, overweight/obesity and physical inactivity are not equally distributed across the

population. Overweight and obesity increases with socio-economic deprivation, age and is higher in certain ethnic groups (particularly Asian and Black backgrounds) and in people who class themselves as disabled. Being overweight/obese is also more common in boys and men, although being morbidly obese is more common in women and maternal obesity is a significant risk factor for obstetric complications and childhood mortality. Physical activity levels drop significantly when children reach their teenage years and again activity levels decline with age and are lower in those who class themselves as disabled and in people who are more socio-economically deprived. Boys and men tend to be more active than girls and women and there are differences between ethnic groups. Altogether, given these differences, it is likely that different approaches will be needed to encourage and support people to manage healthy weight, make healthy food choices and be physically active. These approaches are likely to be more effective if they adopt learning from behavioural insights/behaviour change theory and fundamentally change that 'obesogenic environment' described earlier.

The level of need in Leicestershire

This chapter has drawn upon a significant amount of local and national data. Where available, it is presented at the district level and broken down by the population characteristics described above. Overall the picture of obesity and physical activity in Leicestershire is either similar to or better than the England average, but there is variation, with higher levels of obesity and inactivity in 'at risk' groups described above. Based on the most recent data, adult obesity is worse than the England average in North West Leicestershire, but otherwise similar to or better than the England average. Using local data from University Hospitals Leicester, more obstetric complications are observed in mothers with a higher BMI. Fruit and vegetable consumption is significantly lower in Oadby and Wigston than the England average and there are areas of 'food deserts' and 'food swamps' where healthy food is hard to access and unhealthy food is more abundant. There is limited access to specialist weight management and bariatric surgery, with the rate per 100,000 population around 80% lower than the England average.

Physical activity patterns are also similar to the overall picture in England. Of great concern is that a third of children do less than 30 minutes of activity per day in Leicestershire and nearly 60% do less than 30 minutes in school time. There is also a significant drop off in activity as children move to secondary school. For adults the picture is again overall similar to the England average, with a significant reduction in activity as people age.

Current services

Leicestershire has been an early adopter of whole system approaches to tackle obesity and has a balanced obesity strategy across three broad priority areas – physical activity, healthy weight and food sustainability and nutrition. There is good partnership working in Leicestershire in all three

priority areas and in particular around active and sustainable travel and the active environment, weight management and food.

Leicester-Shire and Rutland Sport, is the Active Partnership team for the locality and has led on the development of a shared strategy for physical activity in Leicestershire. Together with the County Council Public Health department, there is cross-departmental and cross-organisational oversight of an annual physical activity grant, which is awarded to district councils to deliver on this strategy. Effective joint working with Sport England, has led to local investment on active design in the planning process through a new Sport England appointment and via community physical activity through an active families grant. Physical activity work in schools is led through a co-ordinated Whole School Approach, supported by School Sports Physical Activity Networks and the Healthy Schools and Healthy Tots programme. Tier 1 and tier 2 Weight management support is commissioned by the public health team and provided currently through Leicestershire Partnership Trust. Tier 1 services are preventative services for healthy eating (including cooking, growing etc) and physical activity and are delivered population-wide and through environmental change approaches. Tier 2 services are multi-component lifestyle weight management services focussed on identification, assessment and intervention. There is currently only a modest tier 3 service and bariatric service, funded by CCGs. Tier 3 services are multi-disciplinary specialist services targeting patients at high or immediate risk as a result of obesity and obesity-related ill-health. Children are supported to eat well through a whole school approach to food, delivered by the Soil Association's 'Food for Life' programme in Schools and Leicestershire Traded Services. The latter provide school meals for many children across the county and have recently been awarded the prestigious Gold Food for Life award. To facilitate greater environmental change, Leicestershire also has a new 'Food Plan' and 'Food Charter' and we are the first upper tier authority to become members of the UK 'sustainable food cities' network.

Unmet needs in Leicestershire

Despite the considerable amount of evidence-based work being undertaken in Leicestershire, some gaps in services and unmet need have been identified through this needs assessment. The recommendations to address these gaps are outlined below:

Recommendations

Overarching strategic recommendations - national

1. There needs to be stronger and more coordinated lobbying and advocacy to raise the profile of obesity within national strategies. Public Health funding is inadequate to address the problem at a local level, with reductions in funding and services eroding current provision and capacity to adequately address the complex causes of obesity.

2. Identify opportunities to lobby specifically for stronger Government regulation of the Food Industry to replace voluntary agreements, and to meet UK Parliament Health and Social Care Committee recommendations (see section 5).
3. Support schools and early years settings to promote the Personal Development (judgement in the new Ofsted Education Inspection Framework from September 2019) of Children & Young People to build their resilience by participating in sport and physical activity

Overarching strategic recommendations – local

4. Develop an obesity strategy partnership that adopts a whole systems approach across the life-course and including health social, economic and environmental components. The strategy should promote behavioural science decision-making, service design and implementation, the embedding of cross-cutting obesity priorities into wider strategic policies and more joined up working with the voluntary/community sector.
5. If Leicestershire is serious about addressing obesity, we must identify partner funding and develop better strategies and skills to successfully bid for and secure increasingly scarce sources of funding for public health activities.
6. Prioritise cycling and walking as the preferred means of transport in Leicestershire. Including health impact assessments on new large developments, adoption of 20 mph limits/zones where appropriate, and providing cycling and walking infrastructure.
7. Establish a task force (district and county) to review opportunities for working more closely with trading standards and licencing authorities on fast food outlets, food formulation fast food retailers and advertising. Explore opportunities to increase business rates for unhealthy outlets / decrease business rates for healthy outlets and influence planning policy to reduce fast unhealthy food outlets. Support healthier product placement in shops/signage in shops for healthy and unhealthy foods.
8. Co-ordinate with local planning authorities to influence policy and planning guidance increasing provision of active travel and high-quality walking infrastructure in new developments.
9. Work with Leicester-Shire and Rutland Sport to develop health and physical activity design guidance for the built environment influencing the wider design of new developments to increase the prevalence of sustainable travel and active recreation facilities.
10. Use the “Leicestershire Food Plan” and Sustainable Food Cities movement as a central platform to build consensus on local priorities and solutions, and to engage and support communities, businesses and strategic planners to develop creative and innovative solutions to healthy eating and food sustainability issues and be an advocate for affordable healthy food in Leicestershire.
11. Coordinate work on Active travel / rights of way linked to wider physical activity programmes commissioned by public health.
12. Identify opportunities to promote physical activity through culture and leisure.

13. Identify opportunities to promote locally-available services for obesity, physical activity and nutrition to the local population, including NHS patients and professionals.
14. Support schools through the Leicestershire Healthy Schools Programme and the Healthy Schools Rating Scheme to prepare for statutory health education from September 2020 including the curriculum relating to 'Physical Health & Fitness' and Healthy Eating.
15. Continue to support the implementation of the Leicestershire Children and Families Partnership Action Plan 2018-2021, with a particular focus on: maternal obesity (Priority 5)
16. Continue to support the action(s) on maternal obesity in the LLR Healthy Pregnancy, Babies and Birth Strategy (Formerly LLR Infant Mortality strategy)

Children's obesity and inactivity

17. Fully Implement the whole school approach to focus on more schools achieving 30 minutes of activity per day, targeting fundamental movement skills to children at risk of poor development.
18. Ensure weight management programmes reach out to Black and Mixed Ethnic groups (BAME) and more deprived groups and support programmes that address family holiday hunger.

Adult obesity and inactivity

19. Develop workplace-focused programmes to address the increase in the inactive and sedentary workforce.
20. CCGs and the local authority review opportunities to jointly commission weight management services (including tier 3 specialist services) and physical activity pathways for disease prevention and management (including cancer, cardiorespiratory, falls, obesity, back pain/MSK), establishing a route for oversight and accountability of this e.g. Sustainability and Transformation Partnership (STP) prevention, or Unified Prevention Board (UPB) or Health and Wellbeing Board (H&WBB).
21. Encourage social prescribing to support healthy lifestyles outside of clinical pathways.
22. Promote use of rights of way and access to green spaces including the council's own parks.
23. Work with employers to encourage health needs assessment of workforce and interventions to reduce sedentary time at work and support people as they transition into retirement to continue to be active.

Conclusion

Tackling the obesity and inactivity crisis in Leicestershire is going to require considerable partnership working at a systems level and a commitment to prioritise human health in policy and economic development. It could be further supported with additional investment and strategic leadership from central government, though this has not yet been forthcoming.

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1 Introduction

Obesity

Obesity is one of the most serious public health challenges of the 21st century. The growing obesity epidemic is a complex problem, whose scope extends beyond the fact that too many of us simply over-eat and do not do enough regular physical activity¹. It is made worse by the ‘obesogenic environment’ we live in, which can often limit safe or convenient walking or cycling, and can encourage us to buy cheap, convenient, ready-made and highly processed foods, loaded with sugar and fat.¹

Obesity is already having an impact on people’s lives in terms of our quality of life, across the generations. Being overweight increases the risk of numerous health conditions including heart disease, diabetes, musculoskeletal disorders, cancers, depression and anxiety. Severely obese individuals are three times more likely to require social care than those with a normal weight, resulting in increased risk of hospitalisation and associated health and social care costs.¹

The UK is seeing reduced rises or even a plateauing effect of overweight and obesity among adults and children, but the reasons for this remain unclear. For example, this may be due to a combination of government policies and programmes, and increased health literacy in the population; or indeed overweight and obesity levels may have reached a point of ‘saturation equilibrium.’¹

Public Health England (PHE) estimates that two-thirds of adults and a quarter of children between 2 and 10 years old are overweight or obese. Obese children are more likely to become overweight adults and to suffer premature ill-health and mortality. By 2034, 70% of adults are expected to be overweight or obese.

It is estimated that the NHS spent £6.1 billion on overweight and obesity-related ill-health in 2014 to 2015. The annual spend on the treatment of obesity and diabetes is greater than the amount spent on the police, the fire service and the judicial system combined. More broadly, obesity has a serious impact on economic development, with the overall cost of obesity to wider society estimated at £27 billion per year. 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.²

Obesity is not a straightforward problem, with a large number of different, but often interlinked causes. The definitive research on obesity remains the Foresight report “*Tackling Obesities: Future Choices.*”³ For the first time, the report represented the causes of obesity using a comprehensive

systems map showing multifaceted biological and societal drivers, demonstrating that no single measure is likely to be effective on its own in tackling obesity. The paper concluded that only an obesity strategy based on a ‘whole system approach’ could be effective in reducing obesity, involving transformative, co-ordinated action across a broad range of disciplines and stakeholders, operating across all levels of governance and throughout the life course.⁴



- **Biology:** an individual’s starting point reflecting the influence of genetics and baseline physical health status, as well as early life programming effects and internal appetite control mechanisms
- **Activity environment:** the influence of the environment on an individual’s activity behaviour, for example a decision to cycle to work may be influenced by road safety, air pollution or the provision of a cycle shelter and showers at work
- **Physical activity:** the type, frequency and intensity of activities an individual carries out, such as cycling vigorously to work every day
- **Societal influences:** the impact of society on individual behaviour, for example the influence of the media, education, peer pressure or culture
- **Individual psychology:** for example, a person’s individual psychological drive for particular foods and consumption patterns, or physical activity patterns or preferences. Also includes issues around stress coping skill, self-esteem and self-efficacy
- **Food environment:** the influence of the local, national and even global food environment on an individual’s food choices. At the local level for example, a decision to eat more fruit and vegetables may be influenced by the availability and quality of fruit and vegetables

near the home. Regional and national influences cover all arrangements for food production and distribution as well as trade agreements and incentives which influence them

- **Food consumption:** the quality, quantity (portion sizes) and frequency (snacking patterns) of an individual's diet.
- **Food manufacturing responsibility:** added sugar, additives, caffeine etc

Physical Activity

A third of children (aged 5-15 years) do less than an average of 30 minutes of physical activity a day, and around one in two women and a third of men in England are not active enough for good health.⁵ In comparison to the 1960s, our population is around 20% less active and if current trends continue, it will be 35% less active by 2030,⁶ with a risk that the increasing costs of health and social care will destabilise public services and take a toll on quality of life for individuals and communities. The extent of the inactivity problem⁹



Physical inactivity directly contributes to one in six deaths in the UK⁷, the same number as smoking.⁸ Around a quarter of us are still classified as inactive, failing to achieve a minimum of 30 minutes of

activity a week. Changes in social, cultural and economic trends have contributed to people participating in less physical activity, created by fewer manual jobs, increased technology at home and workplaces and employment that, often unwittingly, encourages sedentary behaviours at work and over reliance on cars and other motorised transport to get to work.⁹

There is a complex relationship between physical activity and obesity however, and it cannot be assumed that inactivity leads to obesity, rather it is one of many risk factors.

1.1 How obesity is defined

Overweight and obesity are defined as an abnormal or excessive amount of fat accumulation that presents a risk to health.¹⁰

1.1.1 Measuring levels of obesity

A crude population measurement of obesity is Body Mass Index (BMI). This measure can be used for children and adults. For children, BMI is calculated as part of The National Child Measurement Programme (NCMP).¹¹ Established in 2005/06, the NCMP records height and weight measurements of children in reception (aged 4–5 years) and year 6 (aged 10–11 years) in state-maintained schools in England. Children’s BMI is calculated by dividing their weight (kg) by the square of their height (m) and comparing this to a reference sample of measurement (British 1990 growth reference), which takes into account the age and sex of the child. BMI thresholds are frequently defined in terms of a specific z score, or centile, on a child growth reference. Once a child’s BMI centile or z score has been calculated, this figure can then be checked to see whether it is above or below the defined thresholds for the child growth reference used. Children’s weight classifications are provided in Table 1.¹²

Table 1: Childrens weight classifications based on Body Mass Index (BMI)

BMI (kg/m ²)	Classification
BMI less than or equal to the 2 nd percentile	Underweight
BMI greater than the 2 nd percentile but lower than the 85 th percentile	Healthy weight
BMI greater than or equal to the 85 th percentile, but less than the 95 th percentile (overweight but not obese)	Overweight
BMI greater than or equal to the 95 th percentile	Obese

Source: National Obesity Observatory (2011)

Adults’ BMI is calculated by dividing their weight (kg) by the square of their height (m). A person with a BMI of 30 kg/m² or more is generally considered obese.¹³ The UK does not routinely collect data on height/weight or BMI at a population level. Such data can however be found in surveys which estimate prevalence based on a sample of the population. For the purpose of this report, the main sources for adults’ BMI are the ‘Active Lives Survey’, and the ‘Health Survey for England’.

The 'Active Lives Survey' is an annual survey which includes questions on self-reported height and weight for adults aged 18 or over. This provides estimates at a national and local level. It is known that adults tend to underestimate their weight and overestimate their height when providing self-reported measurements and the extent to which this occurs can differ between population groups. Therefore, prevalence of excess weight (overweight including obese) calculated from self-reported data is likely to produce lower estimates than prevalence calculated from measured data.

The 'Active Lives Survey' weight data presented in this report is based on analysis produced by Public Health England for the Public Health Outcomes Framework; reporting bias has been adjusted for, using formulas estimated with the 'Health Survey for England'. The 'Health Survey for England' is also an annual survey, and reports on measured rather than self-reported data, however, data is only available at a national level.

Adult weight classifications are provided in Table 2.¹⁴

Table 2: Adult weight classifications based on Body Mass Index (BMI)

BMI (kg/m²)	Classification
Under 18.5	Underweight
18.5 – 24.9	Healthy weight
25 – 29.9	Overweight
30 – 34.9	Obese (class I)
35 – 39.9	Obese (class II)
40 +	Obese (class III)

Source: NHS, National Institute for Health and Clinical Excellence (2006)

1.2 How physical activity is defined

Physical activity is defined as any bodily movement produced by skeletal muscles that requires energy expenditure.¹⁵ It includes all forms of activity such as everyday walking and cycling as a mode of transport as well as recreational, organised and competitive sport or exercise.

Sedentary behaviour is not simply a lack of physical activity but is a cluster of individual behaviours where sitting or lying is the dominant mode of posture and energy expenditure is very low.¹⁶ Sedentary behaviour is an independent risk factor to physical inactivity, meaning that even individuals who are sufficiently active at the recommended levels, are at increased risk if they spend large amounts of time sitting.¹⁷

1.2.1 Recommended levels of physical activity

The Chief Medical Officer (CMO) has set out the amount and type of physical activity we should all aim to do at each stage of our lives. These guidelines draw on global evidence for the health benefits that can be achieved by taking part in regular physical activity. The recommended minimum levels

of activity for each age group have been summarised in Table 3.¹⁶

Table 3: CMO’s physical activity guidelines for each age group

Age group	CMOs physical activity guidelines
Early years (0-5 years)	<ul style="list-style-type: none"> - 180 minutes (3 hours) each day, once a child is able to walk. - Time spent being sedentary for extended periods should be minimised.
Children and young people (5-18 years)	<ul style="list-style-type: none"> - 60 minutes and up to several hours every day of *moderate to vigorous intensity physical activity. - 3 days a week should include vigorous intensity activities that strengthen muscle and bone. - Time spent being sedentary for extended periods should be minimised.
Adults (19-64 years) and older people (65 years plus)	<ul style="list-style-type: none"> - 150 minutes (2.5 hours) each week of moderate to vigorous intensity physical activity in bouts of 10 minutes or more. - Adults and older adults should aim to do some physical activity every day. - Muscle strengthening activity should be included twice a week. - Time spent being sedentary for extended periods should be minimised.

Source: Department of Health (2011)

*Moderate intensity physical activity leads to faster breathing, increased heart rate and feeling warmer, where vigorous intensity physical activity leads to very hard breathing, shortness of breath and a rapid heart rate.

1.2.2 Measuring levels of physical activity

Sport England leads on the measurement of children and adults’ physical activity levels through the ‘Active Lives Adult and Children and Young People’s (CYP)’ surveys. These surveys measure the estimated number of people taking part in sport and physical activity based on self-reported data.¹⁸ The physical activity measures that Sport England use for adults and children are set out in Figure 1 and Figure 2.¹⁹

The 2017/18 ‘Active Lives CYP survey’ data used in this report is based on 5-16-year olds in the 2017/18 academic year. The ‘Active Lives adults survey’ data used in this report is sourced from the Sport England November 2017-November 2018 survey analysis where possible, and the May 2017-May 2018 survey analysis where the November analysis is not yet published. This is based on adults aged 16+, where gardening is not included as a form of physical activity. Where possible, statistical significance has been presented – this is most often based on the PHE analysis of the ‘Active Lives

Survey'. Please note, where PHE analysis is presented, this is based on adults aged 19+ (in line with CMO guidelines) and includes gardening as a form of physical activity, therefore these physical activity figures are likely to differ from Sport England analysed figures.

Figure 1: Physical activity measures for adults aged 16+

Levels of activity

We measure activity based on the number of moderate intensity equivalent minutes whereby each 'moderate' minute of activity counts as one minute and each 'vigorous' minute of activity counts as two moderate minutes.

Moderate activity is defined as activity where you raise your breathing rate, and vigorous activity is where you're out of breath or are sweating.

Depending on the number of minutes of moderate intensity equivalent (MIE) physical activity, people are described as being:

- Inactive – doing fewer than 30 minutes a week
- Fairly active - doing 30-149 minutes a week
- Active – doing at least 150 minutes a week.

Figure 2: Physical activity measures for children and young people aged 5-16

Activity through the week

Activity in the last week is measured for the Children and Young People Survey.

The Chief Medical Officer's guidelines for young people recommend doing 60 minutes of activity on seven days a week, with activity being of at least moderate intensity.

As a result, we present activity data for four activity groups:

- Active every day (60 minutes or more every day)
- Active across the week (an average of 60 minutes or more a day but not every day)
- Fairly active (an average of 30-59 minutes a day)
- Less active (less than an average of 30 minutes a day).

1.2.3 Importance of maintaining an active lifestyle

There are many benefits to leading an active lifestyle across the life course. These have been summarised by different life stages in Table 4.²⁰

Table 4: Overview of the benefits physical activity can bring at different life stages

Babies and children (birth – 5 years)	Children and young people (5 – 18 years)	Physical activity benefits for adults and older adults (18 years +)
<ul style="list-style-type: none"> - Builds relationships & social skills. - Maintains health & weight. - Contributes to brain development & learning. - Improves sleep. - Develops muscles & bones. - Encourages movement & co-ordination. 	<ul style="list-style-type: none"> - Builds confidence & social skills. - Develops co-ordination. - Improves concentration & learning. - Strengthens muscles & bones. - Improves health & fitness. - Maintains healthy weight. - Improves sleep. - Makes you feel good. 	<ul style="list-style-type: none"> - Benefits health by reducing your chance of: <ul style="list-style-type: none"> ○ Type II diabetes by 40%. ○ Cardiovascular disease by 35%. ○ Falls, depression and dementia by 30%. ○ Joint and back pain by 25%. ○ Cancers (colon and breast) by 20%. - Improves sleep. - Maintains healthy weight. - Manages stress. - Improves quality of life.

Source: Department of Health and Social Care (2016)

2 Who is at risk?

Several groups are identified in research as being at increased risk of becoming overweight or obese, and/or having reduced activity levels. It is important to note that identification of the risk factors below does not mean an individual will inevitably have excess weight and/or reduced activity levels. Rather, evidence suggests these are some of the risk factors that increase the likelihood of this happening. These groups are not exclusive, and individuals may have a range of interlinked vulnerabilities which increase their overall risk.

2.1 Age

2.1.1 Obesity

Younger generations are becoming obese at earlier ages and staying obese for longer. This can have serious implications for physical and mental health both during childhood and leading into adulthood. Currently in England more than one in five children are overweight or obese when they begin school (aged 4-5) and one in three children are overweight or obese by the time they leave primary school (aged 10-11).²¹

Weight further varies in adults by age. The 'Active Lives Survey' 2017/18 showed that nationally, the lowest proportion of excess weight levels was in 18-24-year olds, with 34.2% being overweight or obese, significantly better (lower) than the national average for all ages combined (62.0%). The survey shows overweight and obesity increases with age up until the age of 84, with 72.9% of 75-84-year olds classed as overweight or obese; for those aged 85 or above, 64% were classed as having excess weight. Data is not available at a local level.

2.1.2 Physical activity

As children grow older, they report lower levels of enjoyment, confidence and competence of physical activity. Previous research from Sport England showed that activity levels dropped when children reach their teenage years.²² Data from the 'Active Lives Survey' 2017/18 shows that for pupils in year 1-11 in England, those in years 5-6 and 7-8 (ages 9-13) were more likely to be active every day. Those in years 9-11 (ages 13-16) were the least likely to be active every day.²³

In 2017/18, amongst adults aged 19 or over, those aged 19-24 were found to be most physically active (74.8%) with activity levels declining as age increased. Simultaneously, inactivity levels generally increased with age; 15.5% of 16-24-year olds were classed as inactive, compared to 39.1% of those aged 75-84 and 62.7% of those aged 85 and above.²⁴

2.2 Gender

2.2.1 Obesity

In 2016/17 the National Child Measurement Programme (NCMP) reported that in England, there was a significantly higher proportion of boys with excess weight compared to girls in Reception and in Year 6. More detail on local data is available in the Level of Need section.²⁵

The Active Lives Survey 2017/18 found a similar pattern in the prevalence of overweight and obese adults (aged 19 or over), by gender. Nationally, a significantly higher proportion of males were overweight or obese compared to females (68.3% compared to 55.5% respectively)²⁴

The Health Survey for England 2017 found similar results, with 67.2% of males classed with excess weight, higher than females (61.5%). However, when measuring obesity alone, there was a smaller difference between the two; males (30%) and females (28.7%). Further, there was a higher prevalence of females (5%) who were morbidly obese compared to males (2%).²⁶

2.2.2 Physical activity

Nationally, the 'Active Lives Survey' 2017/18 showed that of CYP aged 5-16, a higher proportion of boys were active every day compared to girls (20% compared to 14% respectively). This gap between boys and girls widened from years 5-6 (ages 9-11) upwards.²³

For adults aged 19 and above, a significantly higher proportion of males in England were active compared to females in 2017/18 (65% compared to 61% respectively).²⁴

2.3 Ethnicity

2.3.1 Obesity and Physical Activity

There are differences in body fat distribution and obesity between different ethnic groups. The World Health Organisation recommends using a lower BMI threshold for people of South Asian origin, although this has not been taken up by The National Institute of Health Care and Excellence (NICE) at present.²⁷

The 'Active Lives Survey' 2017/18 showed the percentage of adults aged 18 or over, who were overweight or obese in England, was 62.0%. White British people and those from Black ethnic backgrounds had a significantly higher prevalence of excess weight compared to all other ethnic groups (white other, Asian, Chinese, Mixed and Other) with a prevalence of 62.9% and 72.8% respectively.²⁴

For physical activity, the 'Active Lives Survey' 2017/18 showed that nationally, girls from Asian and

Black backgrounds and both boys and girls from 'other' backgrounds (such as Arab and South American), were more likely to be classified as 'less active'. The age at which these differences were seen varied for each group; girls from Black backgrounds are more likely to be 'less active' from years 5-6 (ages 9-11) upwards and girls from Asian backgrounds are more likely to be 'less active' in Years 9-11 (ages 13-16) (47% compared to 37% of all children and young people).²³ In 2017/18, a higher proportion of adults (aged 19 or over) from a mixed ethnic background (72.4%) and white other ethnic background (68.2%) met recommended guidelines for activity. The ethnic groups with the smallest proportions meeting these guidelines were from Black (56.0%), Asian (56.7%), and other ethnic groups (58.2%).²⁴

Key barriers to South Asian children's participation in physical activity include; (i) restraints on parents and children's time; (ii) parents providing limited support for physical activity (lack of role models); and (iii) physical activity has a low priority.²⁸

Existing research has indicated that barriers to physical activity among BME individuals are influenced by four main concepts; perceptions; cultural expectations; personal barriers; and factors limiting access to facilities. Individuals' different understandings of physical activity were influenced by migration history, experiences, cultural and health beliefs. This in turn may have a disempowering effect on BME individuals in terms of adopting or maintaining physical activity.²⁹

2.4 Religion and Culture

2.4.1 Obesity and Physical Activity

There is limited evidence currently available on different religions and beliefs and how these may provide barriers or facilitators to weight management and physical activity.

There is some evidence however that for people with South Asian religions, there should be a greater emphasis on collective health, i.e. the family, rather than a sole focus on the individual.³⁰

A number of religious norms will impact on engagement in physical activities, such as maintenance of Islamic or South Asian dress codes; curtailing movement of women outside the home and female cultural obligations after marriage. This suggests that the desire to observe these norms by some South Asian women or Muslim women being stronger than the desire to be physically active. The threat of the disappearance of traditional cultural values was also another reason BME members would desire to observe these norms. Therefore, individuals from BME groups (especially South Asian women or Muslim women) find it difficult to meet the expectations of their traditions as well as becoming active individuals.³¹ The lack of culturally-sensitive and segregated indoor facilities and services also deters some BME individuals from engaging in physical activity.³²

Cultural expectations in some BME groups are religious and culturally based. Sometimes, South

Asian individuals expect physical activity facilities to promote or incorporate their religious and cultural practices, for example, single-sex facilities and same-sex instructors or life-guards. These cultural expectations were embedded in their religious beliefs of segregated environment for both genders (as also observed during Muslim prayers). The gender identity of South Asian women was pronounced as dictated by cultural norms and family obligations. Emphasis was placed upon South Asian women to stay indoors, attending to domestic chores, and prioritise family responsibilities over their independence and freedom. In this way, to the community groups, modesty as expected by religious beliefs was preserved by both genders in Muslim or South Asian communities.³³

2.5 Lesbian Gay Bisexual and Transgender (LGBT)

2.5.1 Obesity and Physical Activity

There is no specific evidence available on how sexual orientation or gender reassignment may affect obesity. For physical activity, a study conducted by the National Institute of Health (NICE) found that gay and bisexual adolescent males engaged in less physical activity and played team sports less frequently than heterosexual males. Similarly, lesbian and bisexual females also engaged in less physical activity than heterosexual females.³⁴

The 'Active Lives Survey' (November 2017/18) found that nationally, a higher proportion of adults aged 16 or above, identifying as gay or lesbian (72.3%) or bisexual (71.8%) reported meeting the recommended guidelines for activity compared to those identifying as heterosexual or straight (65.1%) or other (60.1%)³⁵

The reverse relationship is also true, with a lower proportion of those identifying as gay or lesbian (18.6%) or bisexual (17.8%) classified as being inactive compared to those identifying as heterosexual or straight (22.2%), or other (29.5%).

Some of the reported barriers to participation faced by the LGBT community include; the use of homophobic and transphobic language within sport settings, the acceptance of this language as 'banter', and the anxiety individuals face with regards to taking part.³⁶

2.6 Disability

2.6.1 Obesity

A relationship exists between obesity and some limiting illnesses and disabilities. Analysis shows that children who have a limiting illness are more likely to be obese or overweight, particularly if they also have a learning disability. A child with both a limiting illness and a learning disability is over one and a half times as likely to be obese or overweight as a child with neither.³⁷

The 'Active Lives Survey' 2017/18 showed there was a significantly higher proportion of adults aged

19 or over with a disability classed as overweight or obese, compared to those without a disability (70.6% compared to 60.1% respectively).²⁴

2.6.2 Physical activity

In England in 2017/18, the 'Active Lives Survey' found there is no real difference in the activity profile of children and young people with and without a disability, with only a small difference in 'less active' for Years 7-8 (ages 11-13) and 9-11 (ages 13-16).²³

Based on PHE analysis, a significantly higher proportion of adults (aged 19 or over) with a disability were classified as inactive (37%), compared to those without a disability (18.2%).²⁴

Analysis from Sport England found the higher the number of impairments a person had (aged 16 or over), the more likely they were to be inactive, with 50.4% of those with three or more impairments being inactive. This represents a large challenge both in terms of the difficulties in participating in activities and in the high proportion of people it affects; 52% of people with a disability were found to have three or more impairments.³⁵

2.7 Mental Health

2.7.1 Obesity

There is a two-way association between obesity and serious mental health conditions in individuals. One study found that being obese increases risk of depression by 55%, whilst being depressed increased the risk of obesity by 58%.³⁸

For further information on Mental Health in Adults in Leicestershire, please visit: <http://www.lsr-online.org/uploads/mental-health-of-adults.pdf>

2.7.2 Physical Activity

The 'Active Lives Survey' 2017/18 shows that nationally amongst CYP, mental wellbeing (happiness) scores were higher for those active every day than those who were active across the week. In turn, these scores were higher than for those who are fairly active, with scores being lowest for those who were less active.²³ The same pattern was apparent in adults across all four wellbeing measures (life satisfaction, happiness, feeling that life is worthwhile and anxiety).²²

People with severe mental illness (SMI) have significantly lower levels of physical activity compared to those without mental health problems.³⁹ The recorded prevalence of SMI in Leicestershire in 2017/18 was 0.75%, significantly better than the national average of 0.94%. These data are based on the Quality Outcomes Framework (QOF) which measures the GP registered population. Those less likely to be registered with a GP (i.e. homeless, ethnic minorities, migrants, travellers) are

unlikely to be included in the figure, and so this is likely to be an underestimate of the true prevalence in the population.⁴⁰

2.8 Maternity

2.8.1 Obesity

Obesity can affect the physical and mental health of mothers during and after pregnancy and is associated with adverse outcomes for both mother and baby. These include infertility, increased risk of miscarriage, gestational diabetes, pre-eclampsia and caesarean section for the mother. It has been estimated that nationally, roughly half of women of childbearing age are either overweight or obese and that this figure is likely to increase.^{26,41}

2.8.2 Physical Activity

The Active Lives Adult Survey report on Spotlight on Gender 2015/16⁴² reported that pregnant women are 20% less likely to do physical activity than women of the same age who aren't expecting. Women who take part in physical activity during pregnancy, are more likely to continue this after giving birth and therefore be exposed to the longer-term benefits of physical activity.⁴³ Growing evidence supports the notion that exercise during pregnancy is also beneficial for fetal health and well-being, extending into childhood.⁴⁴

2.9 Deprivation / Socio-economic status

2.9.1 Obesity

Children from the most deprived areas are twice as likely to be obese compared to their more affluent peers.⁴⁵

Data from the 'Active Lives Survey' for 2017/18 showed that a significantly higher proportion of adults living in the most deprived deciles in England were overweight or obese compared to those living in the least deprived deciles. This relationship persisted when stratifying data by county, district or lower super output area (LSOA) which is a geographical area with approximately 1500 residents.²⁴

The Health Survey for England 2016 showed that there is a strong correlation between obesity and deprivation in women, although this was not seen in men. A fifth (20%) of women in the least deprived quintile were obese; this increased with each quintile reaching 38% in the most deprived decile.⁴⁶

Based on the Index of Multiple Deprivation, in 2015 14.7% of adults experienced income deprivation in England. The proportion in Leicestershire was lower with 9% of residents experiencing income

deprivation.⁴⁷ However, deprivation varies across the county.

For further information, please visit the Demography JSNA, available here: <http://www.lsr-online.org/uploads/demography-report.pdf>

2.9.2 Physical activity

Data from the 'Active Lives Survey' 2018 showed a social gradient in physical activity in CYP with those from the most affluent families generally being more active than those from the mid-affluent families, who in turn are generally more active than those from the least affluent families.²³

For adults in 2017/18, PHE has categorised data from the 'Active Lives Survey' by socioeconomic status into the following groups: managerial and professional occupations, intermediate occupations, routine and manual occupations and never worked and long term unemployed. A social gradient is apparent with stepped significant differences between each group. The highest proportion of people meeting activity guidelines were in managerial and professional occupations (75.3%). This is followed by those in intermediate occupations (67.1%), routine and manual occupations (59.0%) and never worked and long term unemployed (50.8%).²⁴

2.10 Education

2.10.1 Obesity

The existing evidence concerning the relationship between education and obesity is relatively limited, as the main focus of most research has been more broadly on the links between socio-economic factors and health status, or longevity, with a smaller number of studies focusing on lifestyles and on obesity in particular. The evidence available, covering a number of OECD (Organisation for Economic Cooperation and Development) countries, generally shows strong associations between education and obesity. However, there have been only few studies that have investigated the causal effects of education on obesity, and these studies have reported mixed results.⁴⁸

While often conflicting, an overall pattern emerges from the research evidence suggesting that there is a weak negative association between obesity and educational attainment in children and young people; i.e. that higher weight is associated with lower educational attainment. Obesity is also associated with other variables, such as socio-economic status, and when these other variables are taken into consideration, the association between obesity and attainment becomes still weaker, and often loses statistical significance.⁴⁹

2.10.2 Physical Activity

Analysis from PHE for the 'Active Lives Survey' 2017/18 showed that a significantly higher proportion

of adults with a level 3 qualification or equivalent (69.8%) or level 4 qualification or above (74.5%) were physically active compared to those with no qualifications (43.2%) or level 1 and below (54.2%). The inverse was true for inactivity levels.¹⁸

It is known that there is a strong link between attainment and educational outcomes and the health and wellbeing of pupils, with evidence suggesting a positive long-term association with moderate to vigorous physical activity on academic attainment in some subjects.⁵⁰

Government guidelines set out that CYP should get 30 minutes of their daily physical activity through the school day and 30 minutes outside of school. National data shows that just under a third of CYP (28%) achieve these 30 minutes or more every day at school, and 60.5% do less than an average of 30 minutes a day at school.²³

2.11 Personal barriers / attitudes and perceptions

Decisions are not made in a vacuum. They are influenced by our environment, culture and beliefs. Recent work on behavioural insights indicates that the ‘choice architecture’ can play an important role in addressing some of these barriers. By simply making healthy choices the easiest choice (e.g. fruit at the canteen checkout rather than chocolate) we can influence people’s behaviour.⁵¹ Similarly, by understanding individuals’ barriers to health behaviours we can develop social marketing campaigns to tackle those barriers head on. A good example of this is the recent ‘This Girl Can’ campaign by Sport England, showing that women of all shapes and sizes can be active and enjoy it. Understanding theories of behaviour change and adopting behaviour change techniques in our interventions and approaches will be critical moving forward.

2.11.1 Obesity

The Foresight report lists personal barriers that stop an individual from successfully managing their weight; some of these lie within the control of the individual, and some within the control of society and government. These include a perceived lack of time, food literacy, self-esteem, stress, demand for indulgence, degree of primary appetite control, genetic and epigenetic predisposition to obesity and peer pressure.³

2.11.2 Physical activity

The ‘Active Lives Surveys’ explore the behaviours and attitudes of both adults and CYP’s relationship with physical activity. Nationally, findings show that children with high levels of enjoyment, confidence, competence, understanding and knowledge (physically literate) do twice as much activity with enjoyment being the biggest driver of activity levels. The findings show that girls are less likely to say they enjoy or feel confident about doing sport and physical activity (58% of boys enjoy it, compared to 43% of girls and 47% of boys feel confident, compared to 31% of girls). Among

children aged 5-7, boys are more likely to love playing sport, while girls are more likely to love being active.²²

Nationally, the majority of adults say they enjoy sport and physical activity and that it is important to be active. However, of those who are not currently active, they don't feel they have the ability to become physically active. Overall, the biggest driver is how much they enjoy sport and physical activity.⁵²

2.12 Transition from children to adulthood

Younger generations are becoming obese at earlier ages and staying obese for longer. This can have serious implications for the physical and mental health both during childhood and leading into adulthood.²¹ Research shows that children who are obese are five times more likely to be obese as adults than children with healthy weight.

The National Childhood Measurement Programme (NCMP) 2017/18 showed approximately one quarter (24.3%) of children were overweight or obese in Reception. By the time they reach year 6, this proportion increased to approximately one third (32.7%), with significantly worsening (increasing) trends for both ages. Developing regular physical activity behaviours in childhood is crucial as children who are active are more likely to become active adults and continue to reap the benefits of an active lifestyle throughout their life course.⁵³

There is less focus on physical education and sport in secondary schools than in primary, with considerable variation between schools and regions.⁵⁴

2.13 Lifestyle behaviours

Multiple Unhealthy Behaviours (MUBs) commonly include combinations of the "big four" behavioural risks to health: low physical activity; poor diet in terms of both composition and energy balance; smoking and alcohol use. A review on the impact of MUBs showed that a majority of people reporting one unhealthy behaviour will also report at least one other (approximately 70% in the UK) and 25% report three or more unhealthy behaviours. Such combinations of unhealthy behaviours have strong links to disease and reduced quality of life. MUBs affect all socio-economic groups but slow declines in recent decades are unevenly distributed with deprived populations appearing more resistant to change.⁵⁵

Drinking alcohol can increase individual's calorific intake and increase risk of developing chronic disease. Combined 2011-2014 data from the Health Survey for England found that 29.8% of Leicestershire's residents consume more than 14 units of alcohol a week, significantly worse (higher) compared to the national average of 25.7%.⁵⁶

Smoking can reduce people's exercise tolerance and whilst smoking cessation is immensely beneficial, weight gain after stopping can be an issue. Those who smoke are independently at risk of many of the same diseases as those who are obese, such as stroke and cardiovascular disease. The Annual Population Survey 2017 showed 12.1% of Leicestershire population were smokers, significantly better (lower) than the national average of 14.9%.⁵⁷

Evidence linked to diet and specifically calorie consumption, found that overweight and obese boys consume anywhere between 140–500 calories too many each day, depending on their age. For overweight and obese girls, it's 160–290, while adults currently consume between 200–300 excess calories each day.⁵⁸

2.14 Sleep deprivation

The causes of sleep deprivation are multi-factorial and include several overlaps with obesity such as associations with low income, educational attainment and unemployment.⁵⁹ Evidence shows sleep deprivation increases hunger and encourages less healthy food choices.⁶⁰

It is acknowledged that regular physical activity can positively impact on sleep, by helping to boost mood, improve energy and sleep quality, whilst reducing the risk of stress and depression.⁶¹ Research has found that individuals who engaged in at least 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity activity per week (or a combination of the two), were less likely to: feel overly sleepy during the day, have leg cramps while sleeping, and have difficulty concentrating when tired, compared to participants not meeting this level of physical activity.⁶²

3 Level of Need

3.1 Local Prevalence of Obesity in Children

Reception Year Children

3.1.1 Prevalence of overweight and obesity in Children in Reception Year

The National Child Measurement Programme (NCMP) is a nationally mandated public health programme, providing the data for the child excess weight indicators and is part of the government’s approach to tackling child obesity.⁶³ It covers children in Reception (aged 4-5 years) and year 6 (aged 10-11 years) in mainstream state-maintained schools in England.⁶⁴ Please note the data in this section are based on all children that attend schools for which Leicestershire County Council is the educationally responsible authority. The NCMP data presented in this section is for the 2016/17 year due to data quality issues with the 2017/18 data for Leicestershire.

Table 5 shows that the proportion of Reception pupils classified as overweight and obese in Leicestershire (20.3%) in 2016/17 was significantly better than England average (22.6%). The prevalence of underweight (1.0%) and overweight (12.3%) pupils were similar to the England averages (1.0% and 13.0% respectively). These data examine all children that reside in Leicestershire, regardless of where they attend school.

Table 5: Proportion of pupils classified as underweight, healthy weight, overweight or obese in Reception, Leicestershire and England 2016/17.

	Underweight	Healthy weight	Overweight	Obese	Overweight and obese
Leicestershire	1.0%	78.7%	12.3%	7.9%	20.3%
England	1.0%	76.4%	13.0%	9.6%	22.6%

- Significantly better than England
- Not significantly different to England
- Significantly worse than England

Source: NHS Digital, National Child Measurement Programme, 2016/17

Leicestershire featured the 3rd lowest (best) proportion of overweight or obese reception pupils (20.3%) within all 16 of its CIPFA nearest neighbours; ranked 3rd lowest (best) for overweight pupils (12.3%) and for obese pupils (7.9%). Table 6 compares Leicestershire’s CIPFA nearest neighbours against the England averages for each BMI category.

Table 6: Proportion of pupils classified as underweight, healthy weight, overweight or obese in Reception,

in Leicestershire, its CIPFA nearest neighbours, and England 2016/17.

	Underweight	Healthy weight	Overweight	Obese	Overweight and obese
Leicestershire	1.0%	78.7%	12.3%	7.9%	20.3%
Buckinghamshire	0.9%	81.1%	11.5%	6.5%	18.0%
Cumbria	0.4%	71.5%	16.3%	11.9%	28.2%
Derbyshire	0.8%	75.6%	13.7%	10.0%	23.7%
Devon	0.5%	76.8%	14.5%	8.3%	22.7%
Gloucestershire	0.5%	75.2%	15.1%	9.2%	24.3%
Hampshire	0.5%	76.5%	14.4%	8.6%	23.0%
North Yorkshire	0.6%	78.3%	12.2%	8.9%	21.2%
Northamptonshire	1.0%	76.9%	13.3%	8.8%	22.1%
Nottinghamshire	0.8%	77.4%	13.2%	8.6%	21.8%
Oxfordshire	0.8%	79.6%	12.6%	7.0%	19.6%
Somerset	0.6%	77.1%	13.6%	8.7%	22.3%
Staffordshire	0.5%	74.6%	14.5%	10.3%	24.9%
Suffolk	0.5%	77.3%	13.5%	8.8%	22.3%
Warwickshire	0.7%	76.6%	13.5%	9.3%	22.8%
Worcestershire	0.5%	75.9%	14.1%	9.5%	23.6%
England	1.0%	76.4%	13.0%	9.6%	22.6%

Source: NHS Digital, National Child Measurement Programme, 2016/17

Table 7 shows the proportion of reception pupils classified as overweight and obese in Leicestershire (20.1%) was significantly better than the England average (22.6%). The proportion of reception pupils classified as underweight was significantly worse in Oadby and Wigston (2.1%) compared to the national average (1.0%). Harborough (21.6%), Melton (21.6%) and Hinckley and Bosworth (20.7%) featured similar proportions of overweight and obese pupils, compared to England (22.6%). All districts in Leicestershire have a similar proportion of overweight pupils to the national average.⁶⁴

Table 7: Proportion of pupils classified as underweight, healthy weight, overweight or obese in Reception Year, Leicestershire districts and England 2016/17

	Underweight	Healthy weight	Overweight	Obese	Overweight and obese
Blaby	0.9%	80.3%	11.3%	7.5%	18.8%
Charnwood	0.8%	78.6%	12.4%	8.2%	20.6%
Harborough	0.4%	78.0%	13.5%	8.1%	21.6%
Hinckley and Bosworth	1.0%	78.3%	12.4%	8.3%	20.7%
Melton	1.2%	77.2%	13.0%	8.6%	21.6%
North West Leicestershire	0.8%	79.7%	12.0%	7.5%	19.5%
Oadby and Wigston	2.1%	79.1%	11.6%	7.2%	18.8%
Out of area	2.7%	79.5%	11.4%	6.4%	17.8%
Leicestershire	1.0%	78.9%	12.2%	7.9%	20.1%
England	1.0%	76.4%	13.0%	9.6%	22.6%

- Significantly better than England
- Not significantly different to England
- Significantly worse than England
- Suppressed

Source: NHS Digital, National Child Measurement Programme, 2016/17

3.1.2 Prevalence of overweight or obesity in Children in Reception Year by gender

Table 8 shows the proportion of male (20.0%) and female (20.2%) pupils classified as overweight and obese was significantly better than England (22.6%). The same pattern was also observed in obese pupils, but not overweight pupils. The prevalence of underweight pupils was significantly higher amongst males (1.3%) compared to the England average (1.0%).⁶⁴

Table 8: Proportion of pupils classified as underweight, healthy weight, and overweight or obese in Reception, by gender in Leicestershire 2016/17

	Underweight	Healthy weight	Overweight	Obese	Overweight and obese
Male	1.3%	78.7%	12.1%	7.9%	20.0%
Female	0.8%	79.0%	12.4%	7.8%	20.2%
Leicestershire	1.0%	78.9%	12.2%	7.9%	20.1%
England	1.0%	76.4%	13.0%	9.6%	22.6%

- Significantly better than England
- Not significantly different to England
- Significantly worse than England
- Suppressed

Source: NHS Digital, National Child Measurement Programme, 2016/17

3.1.3 Prevalence of overweight or obesity in Children in Reception Year by ethnicity

Table 9 shows the proportion of Asian (5.4%) reception pupils classified as underweight in Leicestershire to be significantly worse than the England average (1.0%). The proportion of black pupils classified as overweight and obese (41.7%) and obese (25.0%) was significantly higher than the England averages (22.6% and 9.6% respectively). White pupils, which account for 84.4% of all reception pupils, have the same percentage of overweight pupils as England. White pupils in Leicestershire have a significantly lower proportion of pupils who are obese (7.7%) and excess weight (20.7%) compared to the national average.⁶⁴

Table 9: Proportion of pupils classified as overweight or obese in Reception, by ethnicity in Leicestershire 2016/17.

	Underweight	Healthy weight	Overweight	Obese	Overweight and obese
Asian	5.4%	81.4%	6.9%	6.3%	13.2%
Black	0.0%	58.3%	16.7%	25.0%	41.7%
Chinese	0.0%	87.9%	6.1%	6.1%	12.1%
White	0.6%	78.6%	13.0%	7.7%	20.7%
Mixed	1.3%	81.3%	8.5%	9.0%	17.5%
Any other ethnic group	0.0%	71.0%	9.7%	19.4%	29.0%
Not stated	1.9%	85.2%	7.4%	5.6%	13.0%
Leicestershire	1.0%	78.9%	12.2%	7.9%	20.1%
England	1.0%	76.4%	13.0%	9.6%	22.6%

- Significantly better than England
- Not significantly different to England
- Significantly worse than England

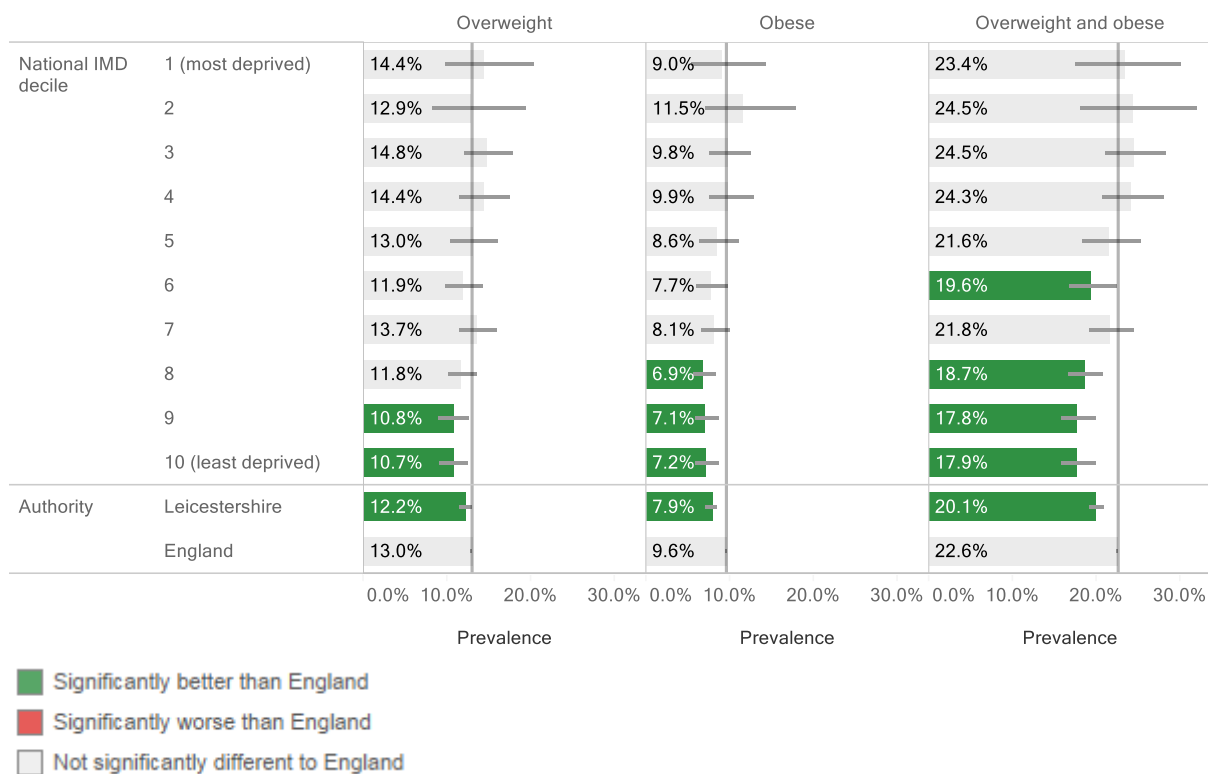
Source: NHS Digital, National Child Measurement Programme, 2016/17

3.1.4 Prevalence of overweight or obesity in Children in Reception Year by deprivation

Figure 3 shows a deprivation gradient exists for excess weight in reception children. The least deprived areas (National IMD deciles 8, 9 and 10) featured significantly lower proportions of reception pupils classified as obese (6.9%, 7.1%, 7.2%) compared to the England average (9.6%). The prevalence gap between the least deprived and most deprived areas was -0.1 percentage points for underweight, +5.6 for healthy weight, -3.7 for overweight, -1.8 for obese, and -5.5 for excess weight. This suggests less deprived areas had a higher prevalence of healthy weight and excess weight pupils than more deprived areas in reception but, did not differ in the prevalence of underweight pupils.

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Figure 3: Proportion of pupils classified as overweight, obese, or overweight and obese in Reception, per National IMD decile in Leicestershire 2016/17.

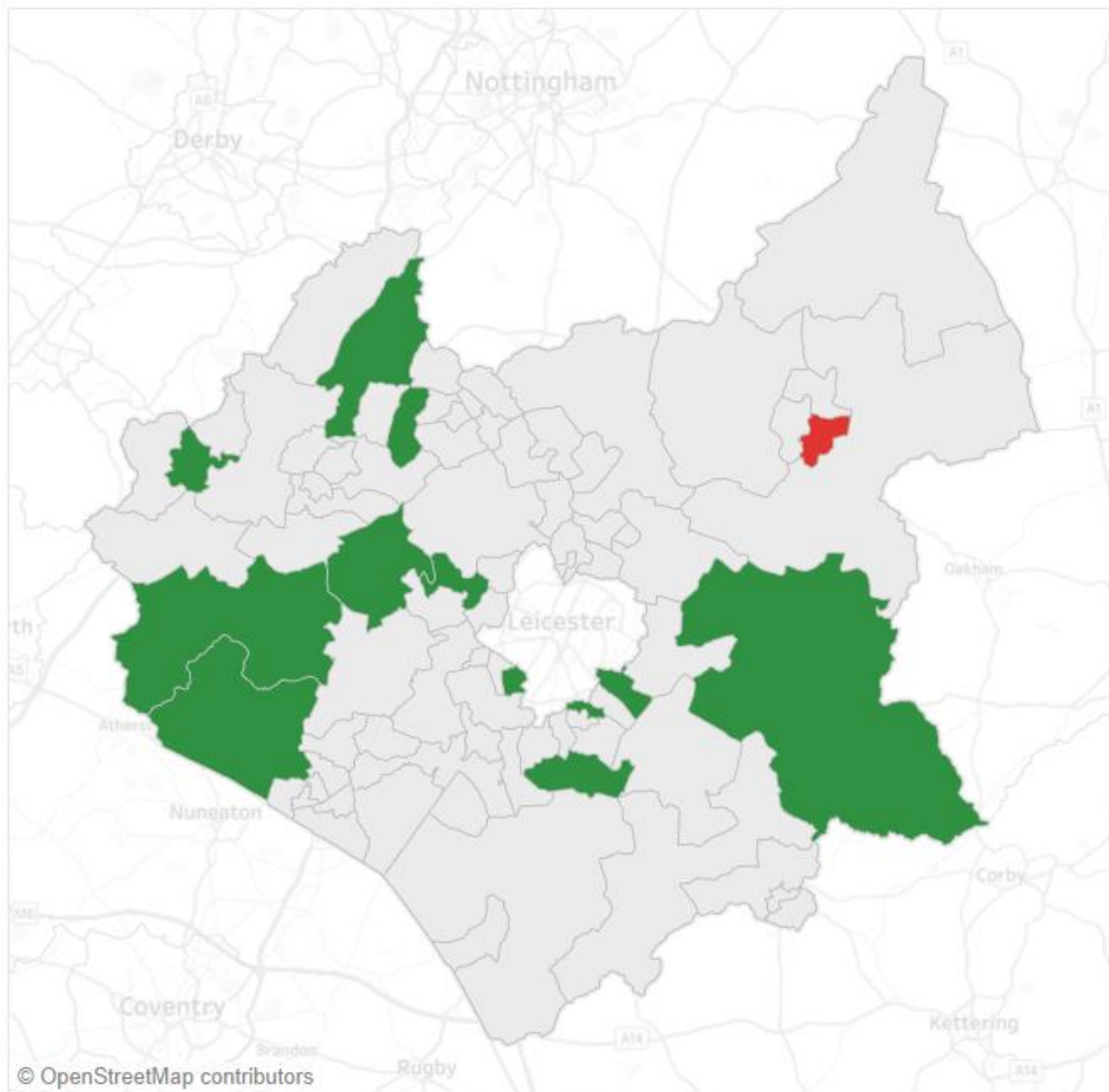


Source: NHS Digital, National Child Measurement Programme, 2016/17

3.1.5 Prevalence of overweight or obesity in Children in Reception Year by Middle Super Output Area (MSOA)

Figure 4 shows Leicestershire middle super output areas (MSOAs) with significantly different proportions of pupils classified as overweight or obese in reception, compared to England. One MSOA, located in the south east of Melton, featured significantly higher proportions of overweight and obese reception pupils compared to England.⁶⁴

Figure 4: Leicestershire MSOA's with significantly different proportions of pupils classified as overweight or obese in reception, Leicestershire, compared to the England average 2014/15-2016/17



Statistical significance compared to England
 ■ Significantly better ■ Significantly worse ■ Similar

Source: NHS Digital, National Child Measurement Programme, 2016/17

Year 6 Children

3.1.6 Prevalence of overweight or obesity in Children in year 6

Table 10 shows the proportion of Year 6 pupils classified as overweight or obese (29.6%) was significantly lower than England (34.2%). A similar pattern was observed for obese pupils (16.1% vs. 20.0%), but the prevalence of overweight pupils (13.6%) was similar to the national average (14.3%).

Table 10: Proportion of pupils classified as underweight, healthy weight, and overweight or obese in Year 6, Leicestershire 2016/17.

	Underweight	Healthy weight	Overweight	Obese	Overweight and obese
Leicestershire	1.6%	68.7%	13.6%	16.1%	29.6%
England	1.3%	64.4%	14.3%	20.0%	34.2%

- Significantly better than England
- Not significantly different to England
- Significantly worse than England

Source: NHS Digital, National Child Measurement Programme, 2016/17

Leicestershire features the 4th lowest (best) proportion of overweight and obese year 6 pupils (29.6%) amongst its CIPFA nearest neighbours; ranked 4th lowest (best) for overweight pupils (13.6%) and 4th lowest (best) for obese pupils (16.1%).

Table 11 compares Leicestershire’s CIPFA nearest neighbours against the England averages for each BMI category.

Table 11: Proportion of pupils classified as underweight, healthy weight, overweight or obese in year 6, in Leicestershire and its CIPFA nearest neighbours, 2016/17

	Underweight	Healthy weight	Overweight	Obese	Overweight and obese
Leicestershire	1.6%	68.7%	13.6%	16.1%	29.6%
Buckinghamshire	1.4%	71.3%	12.6%	14.6%	27.2%
Cumbria	0.7%	63.8%	15.3%	20.1%	35.5%
Derbyshire	1.0%	66.3%	14.6%	18.1%	32.7%
Devon	1.1%	69.8%	13.9%	15.2%	29.1%
Gloucestershire	0.9%	67.9%	14.0%	17.1%	31.1%
Hampshire	1.1%	69.5%	13.6%	15.8%	29.4%
North Yorkshire	1.0%	68.3%	14.5%	16.2%	30.6%
Northamptonshire	1.0%	64.9%	14.7%	19.4%	34.2%
Nottinghamshire	1.3%	67.9%	13.5%	17.4%	30.9%
Oxfordshire	1.0%	69.3%	12.8%	16.9%	29.7%
Somerset	0.8%	68.8%	13.9%	16.4%	30.3%
Staffordshire	1.1%	65.3%	14.4%	19.2%	33.6%
Suffolk	1.2%	67.8%	13.7%	17.2%	31.0%
Warwickshire	1.2%	67.3%	14.5%	17.0%	31.5%
Worcestershire	1.2%	65.0%	14.2%	19.6%	33.8%
England	1.3%	64.4%	14.3%	20.0%	34.2%

- Significantly better than England
- Not significantly different to England
- Significantly worse than England

Source: NHS Digital, National Child Measurement Programme, 2016/17

Table 12 shows the proportion of overweight and obese children in year 6 in Leicestershire (29.8% was significantly lower than the national average (34.2%) The proportion of year 6 pupils classified as underweight in Oadby and Wigston (3.1%) and Charnwood (1.9%) was significantly higher than England (1.3%). Both districts also featured similar proportions of overweight and obese pupils (32.0%, 33.2% respectively) compared to England (34.2%). Five districts featured similar proportions of overweight year 6 pupils compared to England.⁶⁴

Table 12: Proportion of pupils classified as underweight, healthy weight, and overweight or obese in year 6, per Leicestershire district 2016/17.

	Underweight	Healthy weight	Overweight	Obese	Overweight and obese
Blaby	1.5%	72.2%	11.7%	14.6%	26.3%
Charnwood	1.9%	64.8%	15.3%	17.9%	33.2%
Harborough	1.3%	73.8%	13.5%	11.4%	24.9%
Hinckley and Bosworth	1.3%	67.4%	14.6%	16.7%	31.3%
Melton	0.4%	73.6%			
North West Leicestershire	1.7%	68.4%	12.0%	17.9%	29.9%
Oadby and Wigston	3.1%	64.9%	13.7%	18.3%	32.0%
Out of area	2.3%	63.1%	18.2%	16.4%	34.6%
Leicestershire	1.7%	68.5%	13.8%	16.0%	29.8%
England	1.3%	64.4%	14.3%	20.0%	34.2%

- Significantly better than England
- Not significantly different to England
- Significantly worse than England
- Suppressed

Source: NHS Digital, National Child Measurement Programme, 2016/17

3.1.7 Prevalence of overweight or obesity in Children in year 6 by gender

Table 13 shows the proportion of year 6 female pupils (1.7%) classified as underweight in Leicestershire to be significantly higher than the England average (1.3%). However, both genders also featured significantly lower proportions of overweight and obese pupils compared to England (34.2%). Males showed higher levels of obesity and excess weight compared to females, however females had a higher proportion of overweight pupils.⁶⁴

Table 13: Proportion of pupils classified as underweight, healthy weight, and overweight or obese in Year 6, by gender in Leicestershire 2016/17.

	Underweight	Healthy weight	Overweight	Obese	Overweight and obese
Male	1.6%	67.3%	13.5%	17.3%	30.8%
Female	1.7%	69.2%	14.0%	14.6%	28.6%
Leicestershire	1.7%	68.5%	13.8%	16.0%	29.8%
England	1.3%	64.4%	14.3%	20.0%	34.2%

- Significantly better than England
- Not significantly different to England
- Significantly worse than England

Source: NHS Digital, National Child Measurement Programme, 2016/17

3.1.8 Prevalence of overweight or obesity in Children in Year 6 by ethnicity

Table 14 shows the proportion of Asian (5.8%) year 6 pupils classified as underweight in Leicestershire to be significantly above the England average (1.3%). The prevalence of excess weight amongst black year 6 pupils (50.6%) was significantly above than the national average (34.2%). In contrast, children of white (29.0%) or mixed (27.2%) ethnicity in Leicestershire have significantly lower prevalence of excess weight compared to the national average (34.2%). White pupils, which account of 85.5% of all Year 6 pupils, have a similar percentage of overweight pupils to the national average, but have a significantly lower proportion of pupils who are obese and with excess weight compared to the national average. All ethnic groups had a similar proportion of overweight pupils compared to the national average.⁶⁴

Table 14: Proportion of pupils classified as overweight, obese, or overweight and obese in year 6, by National IMD decile in Leicestershire 2016/17

	Underweight	Healthy weight	Overweight	Obese	Overweight and obese
Asian	5.8%	59.4%	15.5%	19.2%	34.7%
Black	0.0%	49.4%	21.7%	28.9%	50.6%
Chinese	5.0%	65.0%	5.0%	25.0%	30.0%
White	1.3%	69.5%	13.6%	15.5%	29.2%
Mixed	2.1%	70.7%	11.4%	15.9%	27.2%
Any other ethnic group	0.0%	57.7%	23.1%	19.2%	42.3%
Not stated	1.9%	67.3%	13.5%	17.3%	30.8%
Leicestershire	1.7%	68.5%	13.8%	16.0%	29.8%
England	1.3%	64.4%	14.3%	20.0%	34.2%

■ Significantly better than England
■ Significantly worse than England

Source: NHS Digital, National Child Measurement Programme, 2016/17

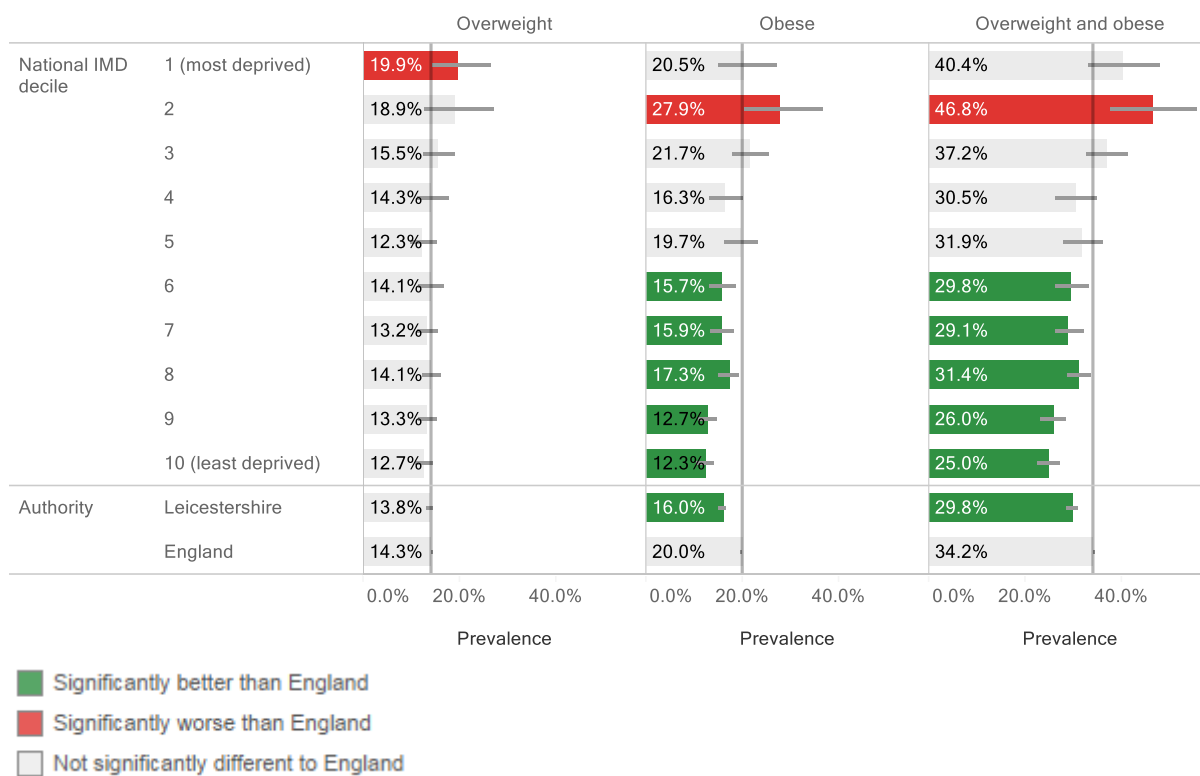
3.1.9 Prevalence of overweight or obesity in Children in Year 6 by deprivation

Figure 5 shows a deprivation gradient exists for excess weight in year 6 children. The least deprived areas (National IMD deciles 6, 7, 8, 9 and 10) featured significantly lower proportions of year 6 pupils classified as excess weight (29.8%, 29.1%, 31.4%, 26.0%, and 25.0% respectively) compared to the

England average (34.2%), and the proportion in IMD decile 2 (46.8%) was significantly worse. A similar trend was observed in the obese and healthy weight categories. The deprivation gradient was much less apparent for year 6 children who are underweight.

The gap between the least deprived and most deprived areas was +0.4 percentage points for underweight pupils, +15.0 for healthy weight, -7.2 for overweight, -8.2 for obese, and -15.4 for overweight or obese pupils. This suggests less deprived areas had a higher prevalence of healthy weight and lower prevalence of excess weight pupils in year 6, and a higher prevalence of underweight.

Figure 5: Proportion of pupils classified as overweight or obese in year 6, per National IMD decile in Leicestershire 2016/17

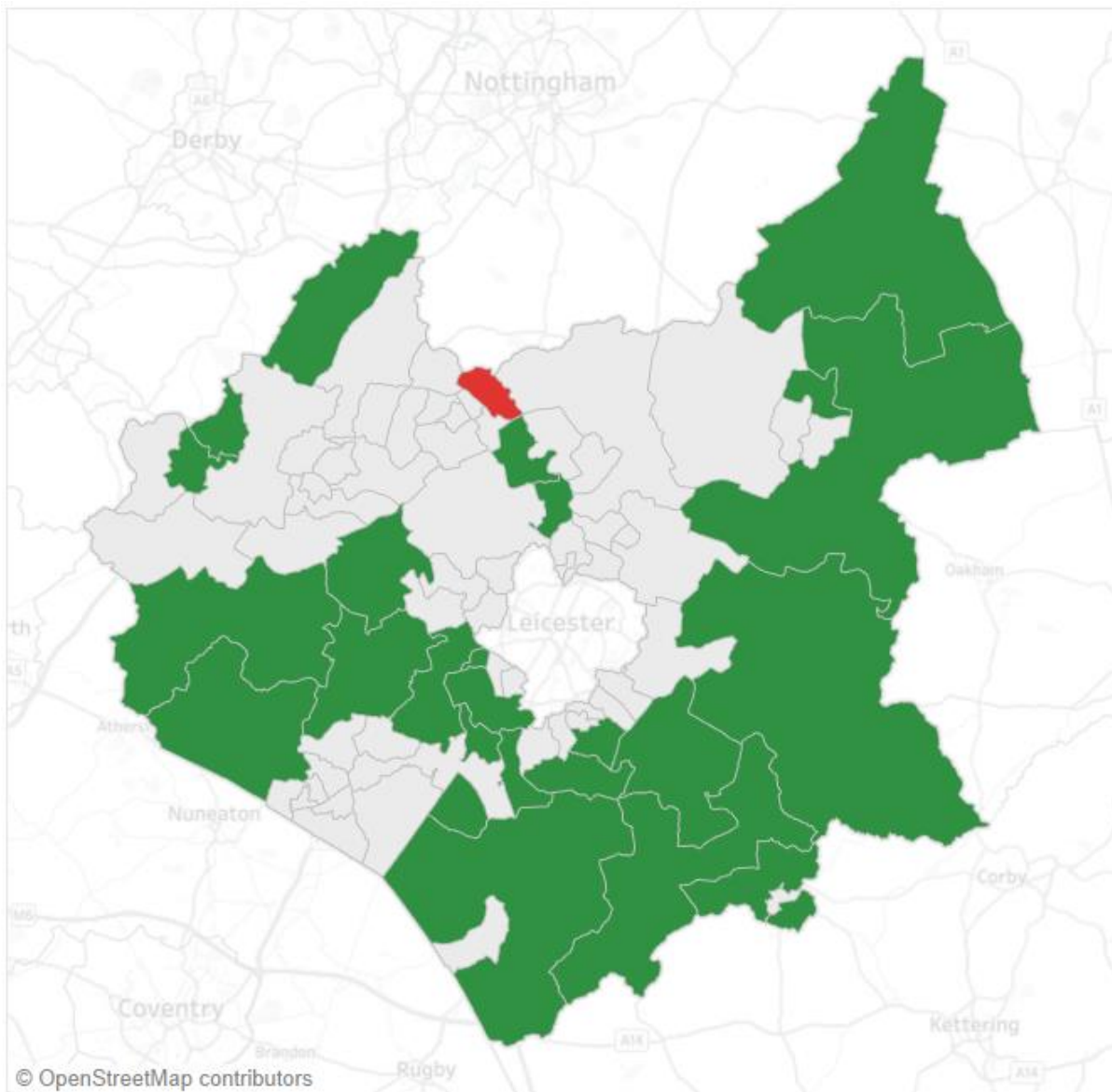


Source: NHS Digital, National Child Measurement Programme, 2016/17

Prevalence of overweight or obesity in Children in Year 6 by Middle Super Output Area (MSOA)

Figure 6 shows the Leicestershire MSOAs with significantly different proportions of pupils classified overweight or obese in year 6, compared to England. One Leicestershire MSOA, located in the north of Loughborough, featured significantly higher levels of overweight and obese pupils compared to England.⁶⁴

Figure 6: Leicestershire MSOAs with significantly different proportions of pupils classified as overweight or obese in year 6, Leicestershire, compared to the England average 2014/15-2016/17



Statistical significance compared to England

■ Significantly better ■ Significantly worse ■ Similar

Source: NHS Digital, National Child Measurement Programme, 2016/17

3.2 Local Prevalence of Obesity in Adults

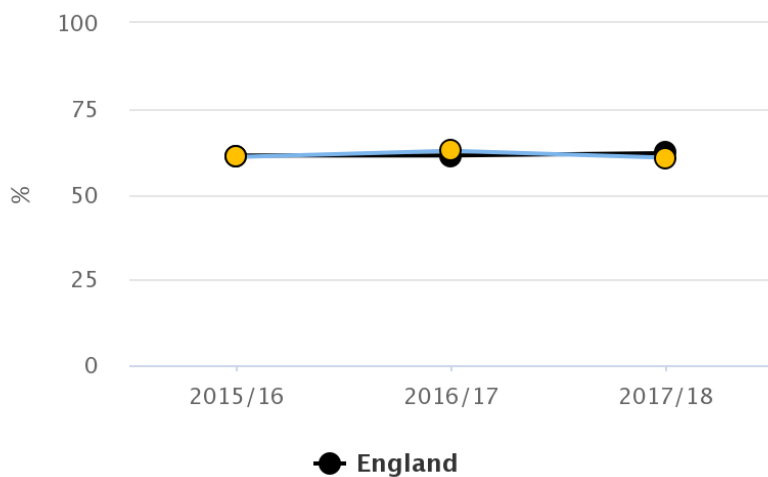
3.2.1 Prevalence of obesity in adults by district

The Health Survey for England 2017 presents measured data on weight; it found that 27.4% of men and 30% of women were obese in England; and 67.2% of males had excess weight, higher than females 61.5%. The sample size is too small to provide data on a county level.²⁶

The 'Active Lives' 2017/18 data for Leicestershire, showed that 60.6% of adults aged 18 or over were classified as overweight or obese; this was similar to the national average of 62%. Over the 3 years

that data has been reported from this survey, there has been no significant change in the percentage of adults with excess weight in Leicestershire, with the prevalence remaining similar to the national average over all 3 years as shown in figure 13.²⁴

Figure 7: Proportion of adults aged 18+ classified as overweight or obese in Leicestershire and England, 2015/16- 2017/18

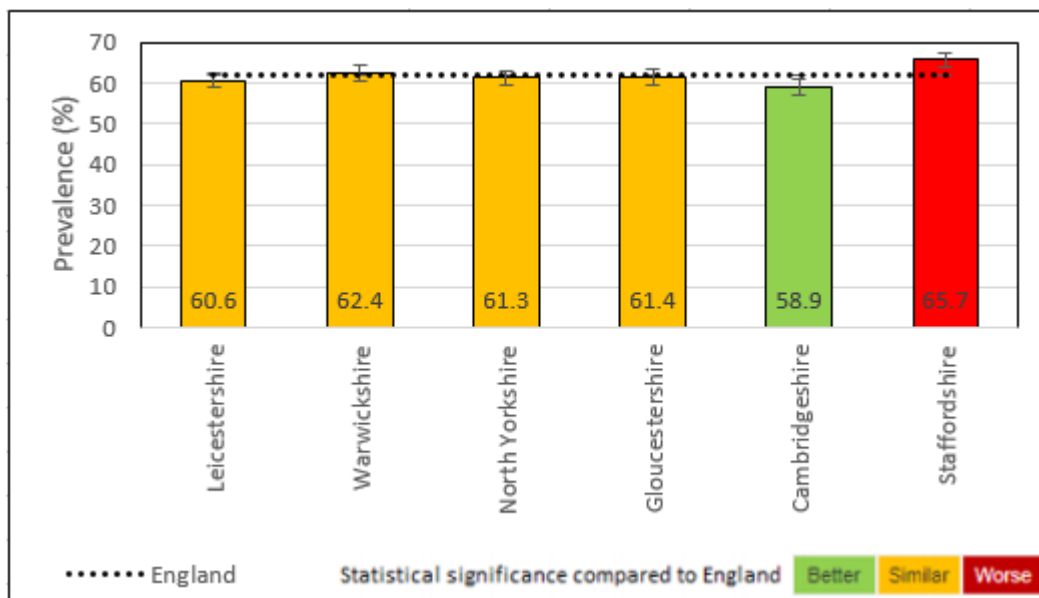


Source: Public Health Outcomes Framework, Public Health England, 2019

When compared to its statistical neighbours, Leicestershire’s adults’ excess weight prevalence is ranked 4th best (lowest) out of 16.

Figure 8 presents Leicestershire’s prevalence compared to its top five CIPFA nearest neighbours; the graph shows Cambridgeshire (ranked 5th closest to Leicestershire in terms of demographics) has adult obesity prevalence levels that are significantly better than the England average while Staffordshire (ranked 5th closest to Leicestershire in terms of demographics) has obesity prevalence levels which are significantly worse compared to the national average. Staffordshire is the only county in the top 5 that has excess weight prevalence that is significantly worse than Leicestershire, with all other areas having excess weight prevalence levels which are similar to Leicestershire.²⁴

Figure 8: Prevalence of excess weight in adults aged 18+, by Leicestershire and top 5 CIPFA similar neighbours, 2017/18



Source: Public Health Outcomes Framework, Public Health England, 2019

Table 15 shows the variation of adult obesity amongst the districts in Leicestershire. In 2017/18, North West Leicestershire (66.4%) had a significantly higher (worse) percentage of adults classified as overweight and obese compared to the national average. This has been the case over the three years that data has been reported. Oadby and Wigston and Charnwood. had a significantly better (lower) percentage of overweight and obese adults in 2017/18. All other districts had a similar percentage of overweight and obese adults to the national level. Charnwood was the only district to present a statistically significant change on the previous year, with the prevalence decreasing from 66.9% to 55.2%.²⁴

Table 15: Proportion of adults aged 18+ classified as overweight or obese by Leicestershire districts, 2015/16-2017/18

Area	2015/16	2016/17	2017/18
Blaby	64.9	54.6	63.3
Charnwood	54.2	66.9	55.2
Harborough	56.7	56.1	57.7
Hinckley and Bosworth	61.5	60.1	64.1
Melton	63.9	60.9	64.5
North West Leicestershire	69.9	66.4	68.2
Oadby and Wigston	59.6	65.1	56.6
England	61.3	61.3	62.0

Statistical significance compared to England Better Similar Worse

Source: Source: Public Health Outcomes Framework, Public Health England, 2019

The obesity statistics from 2017/18 for the Quality and Outcomes Framework (QOF) are based on

being aged 18 and over and having a BMI at 30 kg/m² or over. The QOF found that nationally 9.8% of those over 18 were obese (with a BMI of 30 kg/m² and above). Leicestershire recorded prevalence is significantly lower than this average, with 8.9% being registered as obese, although this masks district level variation with figures varying from 7.1% in Oadby and Wigston to 11.4% in North West Leicestershire. North West Leicestershire, Hinckley and Bosworth and Melton districts had recorded obesity prevalence levels which were significantly higher than the England average, with all other districts recorded prevalence levels significantly lower than the national average. It is worth noting these figures are likely to be an underestimate of the true prevalence in the population as they are based on those that are registered with and diagnosed by a GP. Further, to be included in the obesity register a patient must be 18 or over and have a record of a BMI of 30 kg/m² or higher in the previous 12 months. This requirement results in the prevalence of obesity in the QOF being much lower than the prevalence found in the Health Survey for England and other surveys.

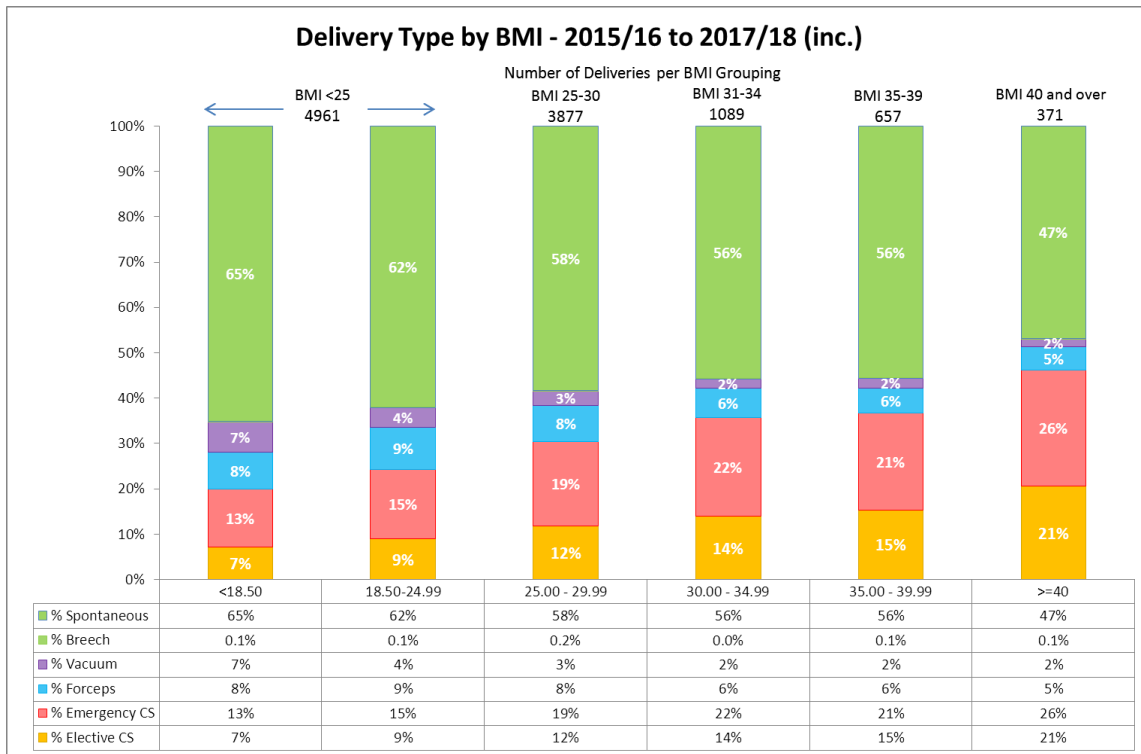
3.2.2 Maternal obesity

In 2017/18, the percentage of women attending University Hospitals of Leicester NHS Trust (UHL) with an overweight and obese BMI at the time of their booking appointment was 29% and 22% respectively (excluding missing values). Nationally, the percentage with an overweight and obese BMI at the time of their booking appointment was lower at 26% and 21% respectively.⁶⁵

Further data from UHL shows that from 2015/16-2017/18, as BMI increased, so did the proportion of women having an emergency or elective C-section; simultaneously, the proportion of those having a spontaneous delivery decreased. This is shown in

Figure 9. Please note these data are based on all those attending UHL, regardless of their area of residence.

Figure 9: Delivery type by BMI in University Hospitals Leicester, 2015/16 – 2017/18



Source: University Hospitals of Leicester. Behavioural Change in Pregnancy Presentation

3.2.3 Projected level of obesity

Demographic trends will influence population need. The total population of Leicestershire in 2017 was 690,212, an increase of 1.1% since 2016. There were approximately 7,000 more females (348,694) than males (341,518). Compared with England, the population of Leicestershire is older, with higher proportions aged 40-64 (33.5% in the county compared with 31.8% in England) and 65 and over (20.2% compared with 18% for England). Between 2016 and 2041 Leicestershire's population is projected to increase by 15.8%, an increase of 107,100 people. This is compared to an increase of 12.4% for the East Midlands and 12.1% for England. The greatest cumulative change by broad age is projected to occur in the 65+ age band, accounting for an additional 74,300 older people in the county by 2041.⁶⁶ As excess weight levels are higher in the older population, this would suggest that there could be an increase in the prevalence of obesity in Leicestershire.

For further demographic information for Leicestershire, please visit the demography report, available here: <http://www.lsr-online.org/uploads/demography-report.pdf>

1.1.1.1 Older adults (aged 65 years and over)

Table 16 below shows projections for adults aged 65 years and over in Leicestershire and England who are obese or morbidly obese. The table shows an increase in obesity in those aged 75 years and over in Leicestershire and England from 2019 to 2035.⁶⁷ Please note these projections are based on obesity figures from the 2005 'Health Survey for England'; as obesity prevalence in adults has

increased since then, these projections are likely to be an underestimate.

Table 16: Obesity projections for adults aged 65 and over in Leicestershire and England, 2019-2035

Leicestershire					
Age of person with a BMI over 30 kg/m ² or more	2019	2020	2025	2030	2035
65-69	33%	32%	32%	33%	31%
70-74	30%	30%	26%	25%	27%
75-79	18%	19%	22%	19%	19%
80-84	11%	11%	12%	14%	12%
85 and over	8%	8%	8%	9%	11%
Total population aged 65 and over	100%	100%	100%	100%	100%
England					
65-69	33%	32%	33%	34%	32%
70-74	30%	30%	25%	25%	27%
75-79	18%	19%	22%	18%	19%
80-84	11%	11%	12%	13%	12%
85 and over	8%	8%	8%	9%	10%
Total population aged 65 and over	100%	100%	100%	100%	100%

Source: Poppi (*Projecting Older People Population Information*), 2019

3.2.4 Diet and Nutrition

Weight control is heavily linked to food intake, however nationally there is a large discrepancy between food consumption and a recommended healthy diet. The UK Scientific Advisory Committee on Nutrition recommends that sugar consumption should be reduced from 11% to 5% of dietary energy. The same guide also made recommendations for the adult population to increase their fibre from 23g to 30g a day.⁶⁸ Achieving guideline recommendations would involve substantial changes in diet; examples of this include keeping sugar-sweetened beverage intake to a minimum, reducing red meat consumption by 78% and increasing fruit and vegetable intake by 54%.⁶⁹

A report on affordability of the UK's 'Eatwell Guide' found that 26.9% of households would need to spend more than a quarter of their disposable income after housing costs to meet the 'Eatwell Guide' costs, and more than half of these households contain at least one child. For households with children in the bottom two deciles, earning less than £15,860, 42% of after-housing disposable income would have to be spent to meet the 'Eatwell Guide' costs.⁷⁰

In 2017/18, 56.4% of adults in Leicestershire reported meeting the recommended '5-a-day' on a usual day. This was similar to the national average of 54.8% and has shown no significant change in the three years the data have been reported. When ranked against nearest neighbours, Leicestershire falls 11th out of 16, with consumption varying from 51.7% in Northamptonshire to 62.3% in Devon.²⁴

Table 17 shows the variation of 5-a-day consumption amongst the districts in Leicestershire. In 2017/18, Charnwood (59.8%) and Harborough (61.3%) had a significantly better (higher) percentage of adults reporting meeting their 5-a-day recommendation. All other districts had proportions similar to the national average, with Oadby and Wigston having the lowest proportion (50.6%). Harborough is the only district with proportions significantly better (higher) than the national average since data has first been reported, and Charnwood is the only district to have improved from being significantly worse than England in 2016/17 to significantly better than England in 2017/18.²⁴

Table 17: Proportion of adults meeting the recommended ‘5-a-day’ on a ‘usual day’ by Leicestershire districts, 2015/16-2017/18

Area	2015/16	2016/17	2017/18
Blaby	57.7	55.9	52.7
Charnwood	55.8	53.0	59.8
Harborough	63.4	65.3	61.3
Hinckley and Bosworth	53.6	59.9	53.4
Melton	56.2	58.7	59.1
North West Leicestershire	53.3	61.0	54.9
Oadby and Wigston	63.2	58.5	50.6
England	56.8	57.4	54.8

Statistical significance compared to England Better Similar Worse

Source: *Public Health Outcomes Framework, Public Health England, 2019*

When 5-a-day is broken down by the fruit and vegetable consumption, the ‘Active Lives Survey’ 2017/18 found that in Leicestershire the average daily quantity of fruits consumed was 2.52, while the average daily quantity of vegetable consumption was 2.63. Both of these are similar to the national average (2.51 and 2.65 respectively).²⁴

Fruit and vegetable consumption varied between districts as shown in Table 18. The highest consumption of fruit was in Melton (2.73), followed by Harborough (2.69), both significantly better (higher) than the national average (2.51). The lowest level of fruit consumption was jointly in Oadby and Wigston and North West Leicestershire (2.41), both similar to the national average (2.65). The lowest consumption of vegetables was in Oadby and Wigston (2.44), the only district to perform significantly worse than the national average, with all other districts performing similar to the national average.²⁴

Table 18: Average number of portions of fruit and vegetables consumed by adults, by Leicestershire districts, 2017/18

Area	Fruit	Veg
Blaby	2.47	2.51
Charnwood	2.51	2.59
Harborough	2.69	2.66
Hinckley and Bosworth	2.49	2.71
Melton	2.73	2.72
North West Leicestershire	2.41	2.73
Oadby and Wigston	2.41	2.44
England	2.51	2.65

Statistical significance compared to England Better Similar Worse

Source: Public Health Outcomes Framework, Public Health England, 2019

3.3 Access

There are several factors that can affect a persons' access to healthy food and this access to food has a large influence in a person's diet and therefore their weight.

3.3.1 Food deserts

Access to unhealthy foods can be measured by considering areas where residents have limited options for purchasing fresh foods – sometimes called a food desert.⁷¹ There is limited evidence available on this for England, however there is some suggestion that the large increase in availability of supermarkets and relatively short travelling distances required to reach these, somewhat limits the potential of food deserts in the UK.

3.3.2 Food availability

The cost of food is often cited as having the largest impact on diet and is becoming increasingly important.⁷² A review of various studies found that a healthy diet costs \$1.49 more than an unhealthy diet.⁷³

There is evidence that where food prices rise, adults in the UK will 'trade down' to similar but less expensive products. In recent years, as food prices have risen households in the lowest decile of income have bought less butter, beef, pork, bacon, potatoes and alcoholic drinks but more sugar and preserves.⁷⁴ It is hoped that using a similar principle, a national Pigouvian tax on some sugar sources will lead to people buying healthier alternatives which might contribute towards reducing obesity.⁷⁵

Food prices have risen by 8% since 2007 in real terms and any rise in food prices tends to

disproportionately affect those in low income households as they spend a greater proportion of their income on food.⁷⁶ It is known that the consumption of fruit and vegetables is positively correlated with income in the UK.⁷⁷

3.3.3 Fast food outlets

Fast food tends to be unhealthy; greater exposure to fast food outlets is associated with increased consumption of fast food and increased BMI.⁷⁸ In 2014, there were 65.6 fast food outlets per 100,000 people in Leicestershire, significantly better than the national average of 88.2 per 100,000 population. However, the density of fast food outlets varied across Leicestershire, from a crude rate of 51.1 per 100,000 population in Blaby to 76.9 per 100,000 population in Oadby and Wigston. The rate of outlets in Oadby and Wigston and North West Leicestershire were similar to the national average, with all other districts having rates better (lower) than the national average.⁷⁹

The Cambridge University's Centre for Diet and Activity Research found the total number of takeaway food shops had risen by 4,000 between 2014 and 2017 – an increase of 8%. Table 19 shows the variation within Leicestershire districts, with Blaby having the largest increase in number of takeaways during this time (24%), followed by Harborough (12%). Despite the increase, Blaby had the lowest rate of takeaways (0.65 per 1,000 residents) in 2017 and Charnwood and Oadby and Wigston the highest (0.89 per 1,000 residents).⁸⁰

Table 19: Number and rate of takeaways per 1,000 residents, by Leicestershire districts

Area Name	Number of takeaways (2014)	Number of takeaways (2017)	Rate of takeaways per 1,000 residents (2017)
Hinckley & Bosworth	82	82	0.78
Blaby	49	61	0.65
Harborough	50	56	0.66
Melton	33	34	0.67
NW Leicestershire	78	77	0.82
Oadby & Wigston	46	50	0.89
Charnwood	138	147	0.89

Source: Cambridge University's Centre for Diet and Activity Research, 2019

3.3.4 Food banks

The Trussell Trust supports a nationwide network of food banks which provides emergency food and support to people locked in poverty, and campaign for change to end the need for food banks in the UK.⁸¹ Nationally, in 2018/19, 33% of referrals were due to low income and 37% related to benefit delays or changes. In 2018/19, Leicestershire saw 13,343 people use a Trussell Trust foodbank (8,405 adults and 4,938 children). This was a 24% increase on the previous year. The only county in the East Midlands with a higher number of foodbank usage was Nottinghamshire.

3.4 Local prevalence of physical activity in children

3.4.1 Prevalence of physical activity in children by district

The 2017/18 Active Lives CYP data found 17.5% of children aged 5-16 in England were meeting the CMO guidelines of 60+ minutes of activity a day, every day of the week. In Leicestershire, 18.1% of children met this recommendation, ranking 10th out of the 16 CIPFA nearest neighbours. Oxfordshire ranked 1st with 21.2% meeting these guidelines, and Derbyshire 16th with 15.1% meeting guidelines. Across Leicestershire, there was an 11.1% difference across the districts. Oadby and Wigston had the highest percentage of children who met the recommendation (26.2%) and was the only district with a significantly higher proportion of children (+8.7%) meeting the recommendation compared to the national average. All other districts had similar proportions to the national average, with North West Leicestershire (15.1%) having the lowest proportion.⁸²

Nationally, just under one third of children (32.9%) were 'less active', which means they did less than 30 minutes of physical activity a day. In Leicestershire, the proportion of 'less active' children was lower at 30.8%, with an 11.5% difference between the districts, of which Blaby had the lowest proportion of 'less active' CYP (27.0%) and Melton the highest (38.5%).⁸²

The survey found that overall, 43.3% of children aged 5-16, did an average of 60 or more minutes of physical activity a day nationally. In Leicestershire, 45.1% of children did so, with a 15.7% difference across the districts. Oadby and Wigston had the highest percentage of children doing so (54.0%) and Melton had the lowest (38.3%).⁸² It was not possible to test for statistical significance for these averages due to the combining of datasets.

The data shown in Table 20 summarises the above information, with RAG ratings to represent statistical significance compared to the national average.⁸² Figure 10 presents the data within a graph but does not indicate statistical significance.

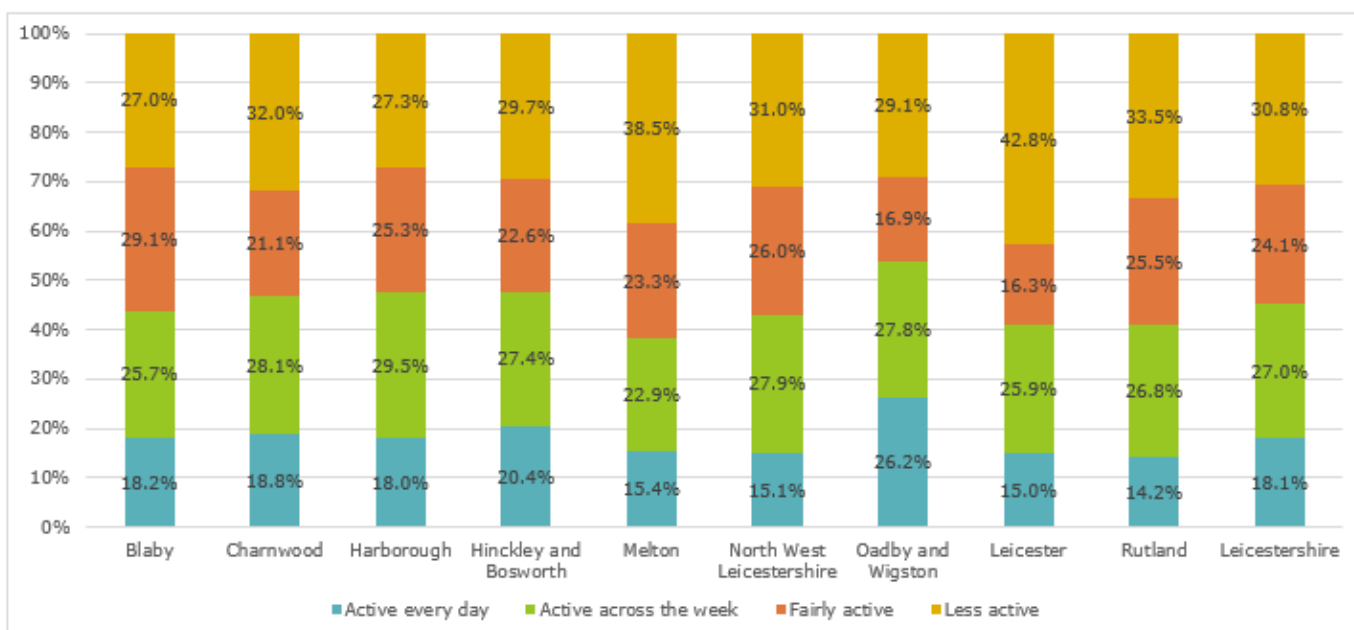
Table 20: Physical activity levels in children and young people aged 5-16 in Leicestershire, by district

2017-18	Active every day (60 minutes or more every day).	Active across the week (average of 60 minutes or more a day but not every day).	Fairly active (average of 30-59 minutes a day).	Less active (less than an average of 30 minutes a day).	Active – average of 60 or more minutes of physical activity a day
Blaby	18.2%	25.7%	29.1%	27.0%	43.9%
Charnwood	18.8%	28.1%	21.1%	32.0%	46.9%
Harborough	18.0%	29.5%	25.3%	27.3%	47.5%
Hinckley and Bosworth	20.4%	27.4%	22.6%	29.7%	47.8%
Melton	15.4%	22.9%	23.3%	38.5%	38.3%
North West Leicestershire	15.1%	27.9%	26.0%	31.0%	43.0%
Oadby and Wigston	26.2%	27.8%	16.9%	29.1%	54.0%
Leicestershire	18.1%	27.0%	24.1%	30.8%	45.1%
LLR	16.9%	26.8%	23.1%	33.3%	43.7%
England	17.5%	25.7%	23.9%	32.9%	43.3%

Statistical significance compared to England Better Similar Worse

Source: Sport England - Active Lives Children and Young People Survey (2018)

Figure 10: Physical activity levels in children and young people aged 5-16 in Leicestershire, by district, 2017/18

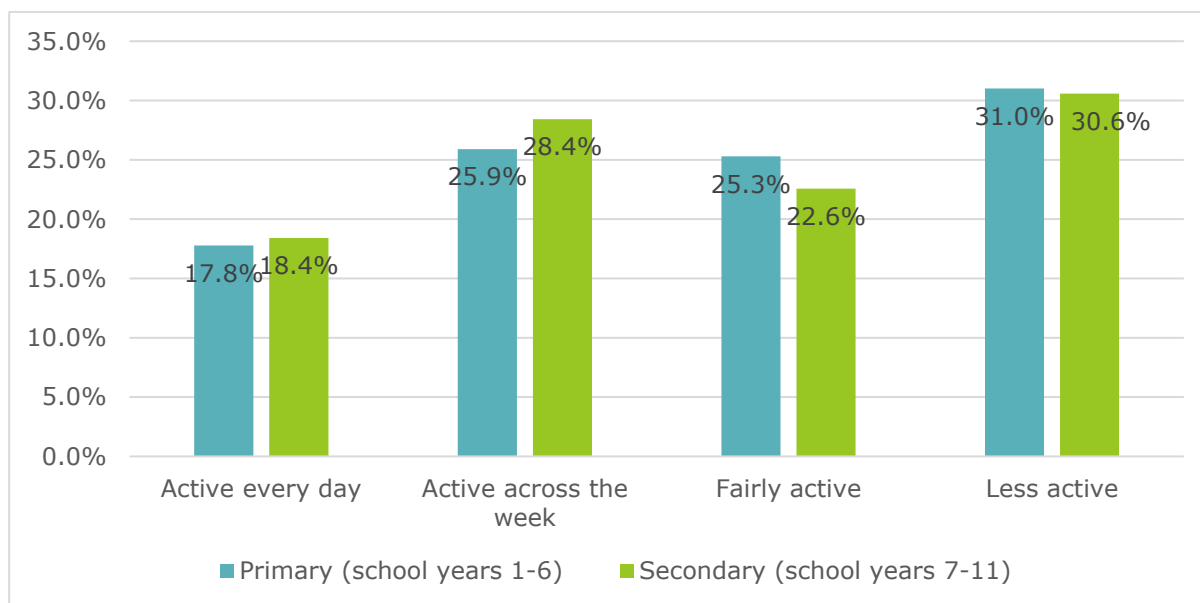


Source: Sport England - Active Lives Children and Young People Survey (2018)

3.4.2 Prevalence of physical activity in children by age

The 2017/18 'Active Lives CYP' data showed that across Leicestershire, more pupils reported being active every day (+0.6%) and across the week (+2.5%) in secondary school compared to primary school. There was a 0.4% difference between the percentage of less active pupils across the two types of school, although no statistical significance testing has been applied to these figures⁸² (see Figure 11). *National comparisons have not been possible as data has not been published at this level.*

Figure 11: Children and young people’s physical activity levels by primary school and secondary school in Leicestershire, 2017/18

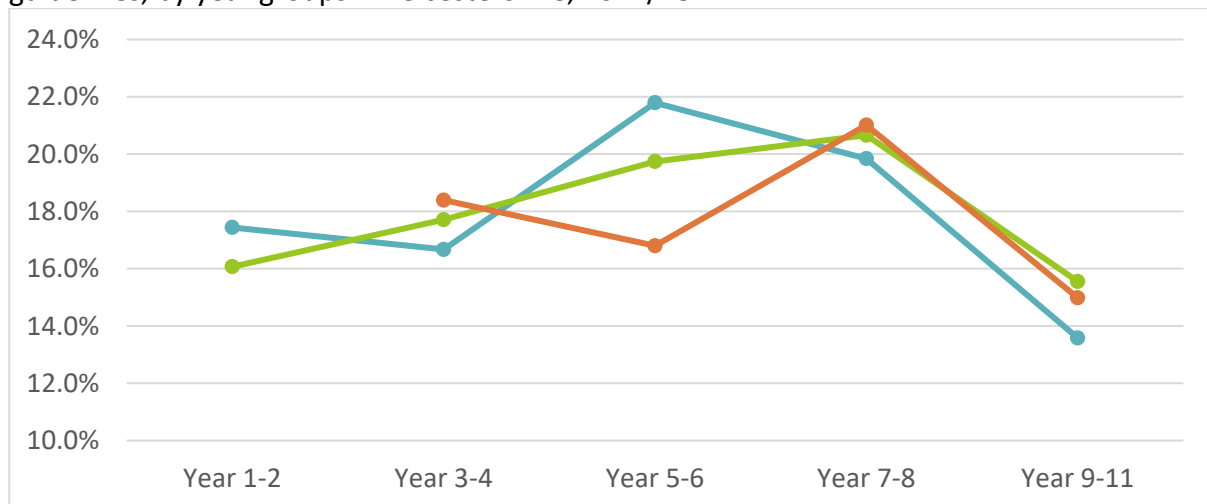


Source: Sport England - Active Lives Children and Young People Survey (2018)

The percentage of children who met the CMO guidelines of 60 minutes of physical activity or more every day is presented by school year group at a national, regional and Active Partnership level (i.e. Leicester, Leicestershire and Rutland) in Figure 12. Across Leicestershire, Leicester and Rutland (LLR), the percentage of children who met the guidelines varied across school years. There was a 1.6% decline in the proportion of children reporting being active from years 3-4 to years 5-6, followed by an increase of 4.2% in years 7-8 and then a further decrease by 6.0% in years 9-11. However, none of these differences were statistically significant.⁸²

When comparing LLR figures with the national average, there were significantly fewer children (-5.0%) meeting CMO recommendations within years 5-6 (see Figure 12).⁸²

Figure 12: The percentage of children and young people meeting the CMOs physical activity guidelines, by year groups in Leicestershire, 2017/18



England	17.4%	16.7%	21.8%	19.8%	13.6%
East Midlands	16.1%	17.7%	19.7%	20.7%	15.6%
LLR	*	18.4%	16.8%	21.0%	15.0%

**Please note that there are no data available for years 1-2 for LLR due to a small sample size.*

Source: Sport England - Active Lives Children and Young People Survey (2018)

3.5 Local Prevalence of Physical Activity in Adults

** Please note the data in this section have been reported by Sport England unless otherwise stated*

3.5.1 Prevalence of physical activity in adults by district

The 'Active Lives' Adult data (November 2017-18), identified that nationally, 62.6% of adults aged 16 or over were active and met the Chief Medical Officers (CMO) guidelines of at least 150 minutes of moderate intensity each week. Leicestershire's average (60.0%) was significantly lower than the national average. There was a 9.9% difference between the districts, with the highest percentage of active adults in Harborough (64.7%) and the lowest in North West Leicestershire (54.7%). North West Leicestershire was the only district to perform significantly lower than the national average (by -7.9%), with all other districts having similar proportions compared to the national average.⁸³

Nationally, 37.4% of adults aged 16 or over do not meet the CMO guidelines. Across Leicestershire the comparative proportion is 40.0%. When considering districts, there was a 10% difference between the highest and lowest proportions. Harborough had the lowest proportion of adults not meeting the CMO guidelines (35.3%) while North West Leicestershire had the highest (45.3%).⁸³ Please note it was not possible to calculate statistical significance due to the combining of data sets.

The data shown in Table 21 have been colour coded to display statistically significant differences

comparing the respective areas and the England average.⁸³

Table 21: Physical activity levels for adults aged 16+ in Leicestershire, by district, 2017/18

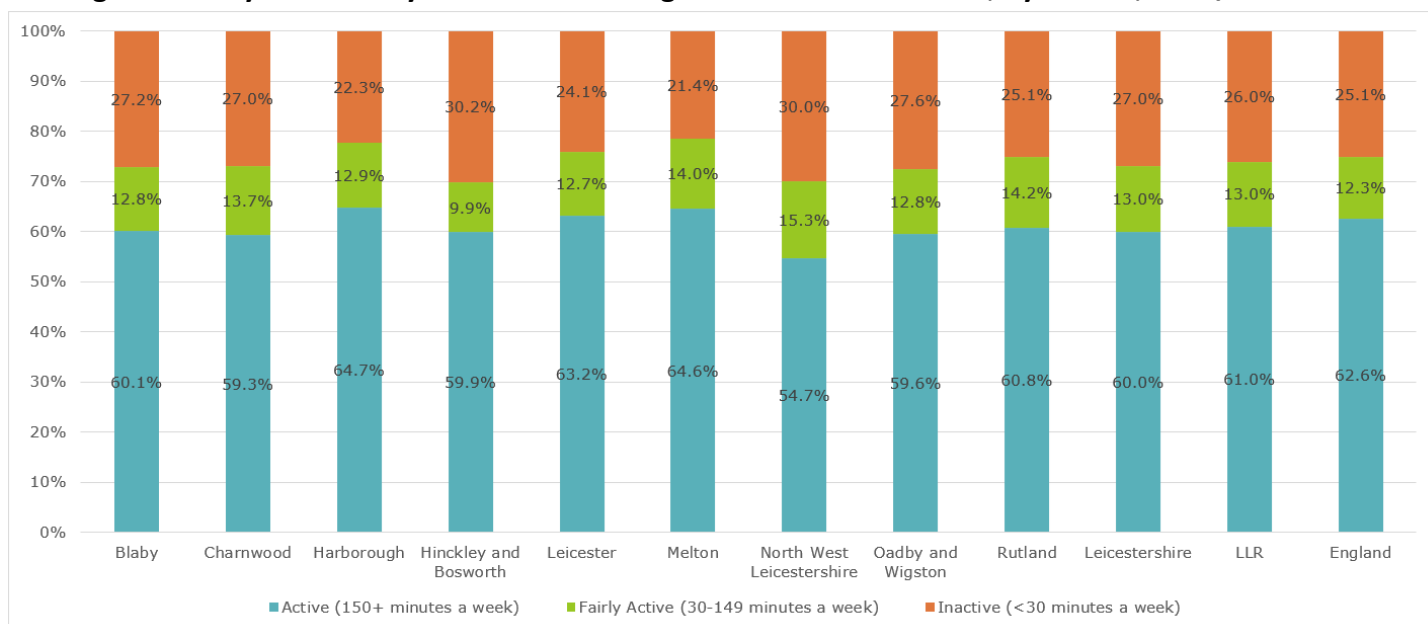
November 2017-18	Active (150+ minutes a week)	Fairly Active (30-149 minutes a week)	Inactive (<30 minutes a week)	% not meeting CMO guidelines
Blaby	60.1%	12.8%	27.2%	39.9%
Charnwood	59.3%	13.7%	27.0%	40.7%
Harborough	64.7%	12.9%	22.3%	35.3%
Hinckley and Bosworth	59.9%	9.9%	30.2%	40.1%
Melton	64.6%	14.0%	21.4%	35.4%
North West Leicestershire	54.7%	15.3%	30.0%	45.3%
Oadby and Wigston	59.6%	12.8%	27.6%	40.4%
Leicestershire	60.0%	13.0%	27.0%	40.0%
LLR	61.0%	13.0%	26.0%	39.0%
England	62.6%	12.3%	25.1%	37.4%

Statistical significance compared to England Better Similar Worse

Source: Sport England - Active Lives Adult Survey (2019)

Figure 13 below presents these data within a graph but does not indicate statistical significance.

Figure 13: Physical activity levels for adults aged 16+ in Leicestershire, by district, 2017/18



Source: Sport England - Active Lives Adult Survey (2019)

3.5.2 Prevalence of physical activity in adults by age

The 'Active Lives' Adult data (May 2017/18) shows that across Leicestershire, the percentage of active adults (achieving 150 minutes of physical activity a week), decreased as age increased. This follows the national pattern. The highest proportion of active adults locally were aged 16-34 (69.0%), while the lowest proportion were those aged 75 years (37.1%).³⁵ For all age bands, other than the 75+ age band, the proportion of active adults was lower locally than nationally, although it is not possible to say whether these differences are statistically significant.

The proportion of inactive adults (achieving less than 30 minutes of physical activity a week), increased as age increased in Leicestershire, from 19.9% of 16-34-year olds to 53.9% of those aged 75 and older. This follows the national pattern. The highest proportion of inactive adults locally were aged 75+ (53.9%), while the lowest proportion were those aged 16-34 (19.9%). For all age bands, other than the 55-74 age band, the proportion of inactive adults was higher locally than nationally, although it is not possible to say whether these differences are statistically significant (see Table 22).³⁵

Table 22: Physical activity levels in adults aged 16+ by age group, 2017/18

	Aged 16-34	Aged 35-54	Aged 55-74	Aged 75+
Active				
Leicestershire	69.0%	62.2%	58.5%	37.1%
England	71.3%	65.7%	58.9%	34.5%
Inactive				
Leicestershire	19.9%	22.8%	26.5%	53.9%
England	17.9%	21.3%	27.5%	51.7%

Source: Sport England - Active Lives Adult Survey (2018)

3.5.3 Prevalence of physical activity in adults aged 16+ by gender

The 'Active Lives' Adult data (May 2017/18) shows that across Leicestershire, a higher proportion of males (62.1%) were active (i.e. met the CMO guidelines) compared with females (57.4%). They also had a lower proportion who were inactive (26.6% vs 27.8% respectively). This follows the national pattern. When comparing local and national data, the proportion of active males and females across Leicestershire was below the national average (-2.4% and -2.9% respectively), while the local proportion of inactive males and females was higher than the national average (2.8% and 1.4% respectively) (see Table 23).³⁵

Table 23: Physical activity levels in adults aged 16+ by gender, 2017/18

	Male	Female
Active		
Leicestershire	62.1%	57.4%
England	64.5%	60.3%
Inactive		
Leicestershire	26.6%	27.8%
England	23.8%	26.4%

Source: Sport England - Active Lives Adult Survey (2018)

3.5.4 Prevalence of physical activity in adults aged 16+ by ethnicity

The 'Active Lives' Adults data (May 2017/18) showed variation in levels of activity across different ethnic groups. Ethnicity was categorised into the following groups: White British, white other, South Asian, Black, Chinese, Mixed and Other ethnic Origin. Of these groups, the 'Mixed' ethnicity group had the highest proportion of respondents classed as active and meeting the CMO recommended guidelines for activity levels. The black ethnic group had the lowest proportion reporting being active with 56.5% doing so. The corresponding proportions for Leicestershire were only available for the White British, White Other and South Asian groups. Across all groups, the proportions reporting being active were lower in Leicestershire compared to the national averages, with the lowest proportion of active individuals in the White Other group (50.1% compared to 65.7% respectively; a 15.6% difference) and the highest proportion of active individuals in the White British group (60.6% compared to 63.3% respectively).³⁵

Nationally, the ethnic group with the highest proportion of inactivity was the South Asian group (31.4%), while the group with the lowest proportion was the Mixed ethnic group (18.1%). This equates to a 13.1% difference between the groups. In Leicestershire, data were only available for the White British, White Other and South Asian groups. Of these, the group with the highest proportion reporting inactivity was White Other (41.5%), while the lowest was White British (25.7%). Across all groups, inactivity levels were higher locally compared to nationally. It is noted that there is a large difference between the Leicestershire average for the White Other group, and the corresponding national average (41.5% compared to 23.2% respectively; an 18.3% difference).³⁵

Table 24: Physical activity in adults aged 16+ by ethnicity, 2017/18

	White British	White Other	South Asian	Black	Chinese	Mixed	Other Ethnic Origin
Active							
Leicestershire	60.6%	50.1%	53.5%	-	-	-	-
England	63.3%	65.7%	54.8%	56.5%	60.2%	71.4%	57.0%

							Inactive
Leicestershire	25.7%	41.5%	32.3%	-	-	-	-
England	24.2%	23.2%	31.4%	29.1%	26.4%	18.1%	30.1%

– sample size is too small

Source: Sport England - Active Lives Adult Survey (2018)

3.5.5 Prevalence of physical activity in adults aged 16+ by disability

The 'Active Lives' Adult data (May 2017/18) shows that both nationally and locally, a lower proportion of those with a limiting illness or disability were active compared to those with no limiting illness or disability. Nationally, the respective figures were 39.4% and 64.0%; a 24.6% difference between the groups. For Leicestershire, the respective figures were 39.4% compared to 64.4%; a 25% difference between the groups.³⁵

Both nationally and locally, as the number of impairments increased, the proportion of people reporting being active decreased. The data shows that locally, there were more people who were active with one impairment compared to the national average, although a lower proportion active with two or more impairments compared to the national average.

Equally, both locally and nationally, a higher proportion of those with a limiting illness or disability reported inactivity compared to those with no limiting illness or disability. As the number of impairments increased, the proportion of people reporting being inactive also increased. The data shows that locally, there were less people who were inactive with one impairment compared to the national average, although a higher proportion active with two or more impairments compared to the national average. The largest difference in inactivity relative to the number of impairments between Leicestershire and England was for two impairments; with a 10.5% difference. However, it is not possible to say whether this difference is statistically significant.³⁵

Table 25: Physical activity in adults aged 16+ by disability, 2017/18

	Limiting illness or disability	No limiting illness or disability	One Impairment	Two Impairments	Three or more Impairments
Active					
Leicestershire	39.4%	64.4%	60.4%	33.9%	32.2%
England	44.0%	67.1%	53.4%	46.5%	36.6%
Inactive					
Leicestershire	46.2%	22.3%	27.6%	50.5%	52.8%
England	42.4%	20.7%	31.9%	40.0%	50.4%

Source: Sport England - Active Lives Adult Survey (2018)

3.6 Environment and transport

3.6.1 Workplace

Investing in the health of employees can also bring business benefits such as reduced sickness absence, increased loyalty and better staff retention. It has been found that physical activity in the workplace can reduce sickness absence by 20%.⁸⁴ Physical activity helps to protect against musculoskeletal disorders which account for 19% of all sickness absences nationally.⁸⁵ There is currently no local data available. LRS are currently undertaking a workplace needs assessment which will be based on organisations within Leicestershire County.

3.6.2 School setting

The 'Active Lives Survey' includes questions for CYP on the amount of physical activity they do at school and outside of school. 'At school' refers to activity done while at school, during normal school hours. It includes activities in PE lessons and break times but excludes activities before and after school clubs, even if these take place at school. 'Outside school' refers to activity done outside of school hours. It includes anything done before getting to school and after leaving school (including travel to/from), as well as activity done at the weekend, on holiday days and at before and after school clubs, even if these took place at school.⁸² The data in Table 26 shows the percentage of CYP that meet the government's guidelines (30 minutes of daily physical activity through the school day and 30 minutes outside of school). Nationally, less than a third of CYP (27.7%) achieved 30 minutes or more physical activity at school; a similar proportion (29.4%) did so in Leicestershire. However, there was variation (18.6%) between the districts, with North West Leicestershire (22.5%) performing significantly worse (lower) compared to the national average, while Charnwood (41.1%) and Hinckley and Bosworth (40.7%) being significantly better (higher) than the national average. All other districts had similar physical activity levels at school to the national average.⁸²

Table 26 also shows that nationally, 60.5% of CYP did less than 30 minutes of physical activity a day at school; a similar proportion (58.0%) did so in Leicestershire. However, there was variation (15%) between the districts, with Hinckley and Bosworth (50.9%), Oadby and Wigston (50.4%) and Charnwood (50.2%) performing significantly better (lower) compared to the national average. All other districts showed no significant difference compared to the national average.⁸²

Table 26: Physical activity levels in schools for children and young people aged 5-16 in Leicestershire, by district

November 2017-18	30 minutes or more everyday	Average of 30 minutes or more a day but not everyday	Less active (less than an average of 30 minutes a day)
Blaby	23.9%	13.5%	62.6%

Charnwood	41.1%	8.7%	50.2%
Harborough	28.1%	*	58.3%
Hinckley and Bosworth	40.7%	*	50.9%
Melton	24.2%	10.6%	65.2%
North West Leicestershire	22.5%	15.4%	62.1%
Oadby and Wigston	31.7%	18.0%	50.4%
Leicestershire	29.4%	12.6%	58.0%
LLR	28.4%	12.8%	58.9%
England	27.7%	11.8%	60.5%

*Insufficient data to report on

Statistical significance compared to England	Better	Similar	Worse
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Source: Active Lives CYP Survey, 2017/18

Table 27 shows that nationally, 21.5% of CYP did 30 minutes or more of physical activity a day outside school; a similar proportion (22.0%) did so in Leicestershire. However, there was variation (10.9%) between the districts. Oadby and Wigston performed significantly better (higher) than the national average. All other districts had similar physical activity levels outside school to the national average. The district with the lowest proportion of CYP (18.7%) achieving this level of activity was North West Leicestershire.⁸²

Table 27 also shows that nationally, 47.4% of CYP did less than an average of 30 minutes of physical activity and sport a day, outside school; a similar proportion (45.5%) did so in Leicestershire. However, there was variation (18.3%) between the districts. Harborough (36.1%) performed significantly better (lower) than the national average. All other districts had similar physical activity levels outside school to the national average. The district with the highest proportion of less active CYP (54.4%) was Melton.⁸²

Table 27: Physical activity levels outside school for children and young people aged 5-16 in Leicestershire, by district

November 2017-18	30 minutes or more everyday	Average of 30 minutes or more a day but not everyday	Less active (less than an average of 30 minutes a day)
Blaby	22.1%	35.3%	42.5%
Charnwood	22.1%	30.1%	47.8%
Harborough	23.1%	40.8%	36.1%
Hinckley and Bosworth	23.4%	30.5%	46.1%
Melton	21.2%	24.4%	54.4%
North West Leicestershire	18.7%	34.3%	47.1%

Oadby and Wigston	29.6%	32.7%	37.7%
Leicestershire	22.0%	25.8%	45.5%
LLR	21.0%	30.8%	48.2%
England	21.5%	31.1%	47.4%

Statistical significance compared to England Better Similar Worse

Source: Active Lives CYP Survey, 2017/18

3.6.3 Active travel

1.1.1.2. Walking

Analysis from PHE of the 'Active Lives Survey' shows that in 2016/17, 16.9% of adults aged 16 or above in Leicestershire walked for travel at least three days per week. This was significantly worse (lower) compared to the national average of 22.9%. This varied by district with four of Leicestershire's districts performing significantly worse (lower) compared to the national average. These were Hinckley and Bosworth (13.6%), North West Leicestershire (14.8%), Blaby (15.9%) and Charnwood (17.1%). The other three districts were not significantly different to the national average, with Oadby and Wigston having the highest proportion of 22.6%.⁸⁶

1.1.1.3. Cycling

Analysis from PHE of the 'Active Lives Survey' shows that in 2016/17, 2.6% of adults aged 16 or above in Leicestershire cycled for travel at least three days per week. This was similar to the national average of 3.3%. Melton was the only district to perform significantly worse than national with 0.8% of adults doing so. All other districts performed similar to the national average, with the highest proportion being from Charnwood (3.6%).⁸⁶

3.6.4 Access

1.1.1.4. Greenspaces

NICE emphasises the importance of public open spaces in encouraging physical activity.⁸⁷ Access to open and green space – parks, gardens, tree-lined streets, communal squares and allotments is important for quality of life and for the sustainability of towns and cities. People who have close access to green space live longer than those without it, even adjusting for social class, employment and smoking.⁸⁸ Having the open space to exercise also alleviates stress and depression and has been shown to aid mental health.^{89 90} At a neighbourhood level, trees and vegetation improve residents' health, wellbeing and social safety.^{91 92}

Access to green space such as woodland, supports wellbeing and allows people to engage in physical

activity. Both the presence of a woodland and the number of people who can readily access the space represents a significant asset to that community. Woodlands provide spaces for community activities, social connectedness, and volunteering as well as employment.⁹³ In Leicestershire, 6.9% of the population has access to woodland of at least 2 hectare within 500 metres of where they live compared to 16.8% nationally.⁹³

Figure 14 shows the proportion of residents in Leicestershire taking a visit to the natural environment for health or exercise purposes. Visits to the natural environment are defined as time spent "out of doors" e.g. in open spaces in and around towns and cities, including parks, canals and nature areas; the coast and beaches; and the countryside including farmland, woodland, hills and rivers. In 2015/16, 20.8% of residents in Leicestershire utilised outdoor space for exercise/health reasons, this is similar to the national rate of 17.7%. There has been an increase in the percentage of residents in Leicestershire utilising outdoor space for exercise/health reasons since 2012/13 to 2014/15.

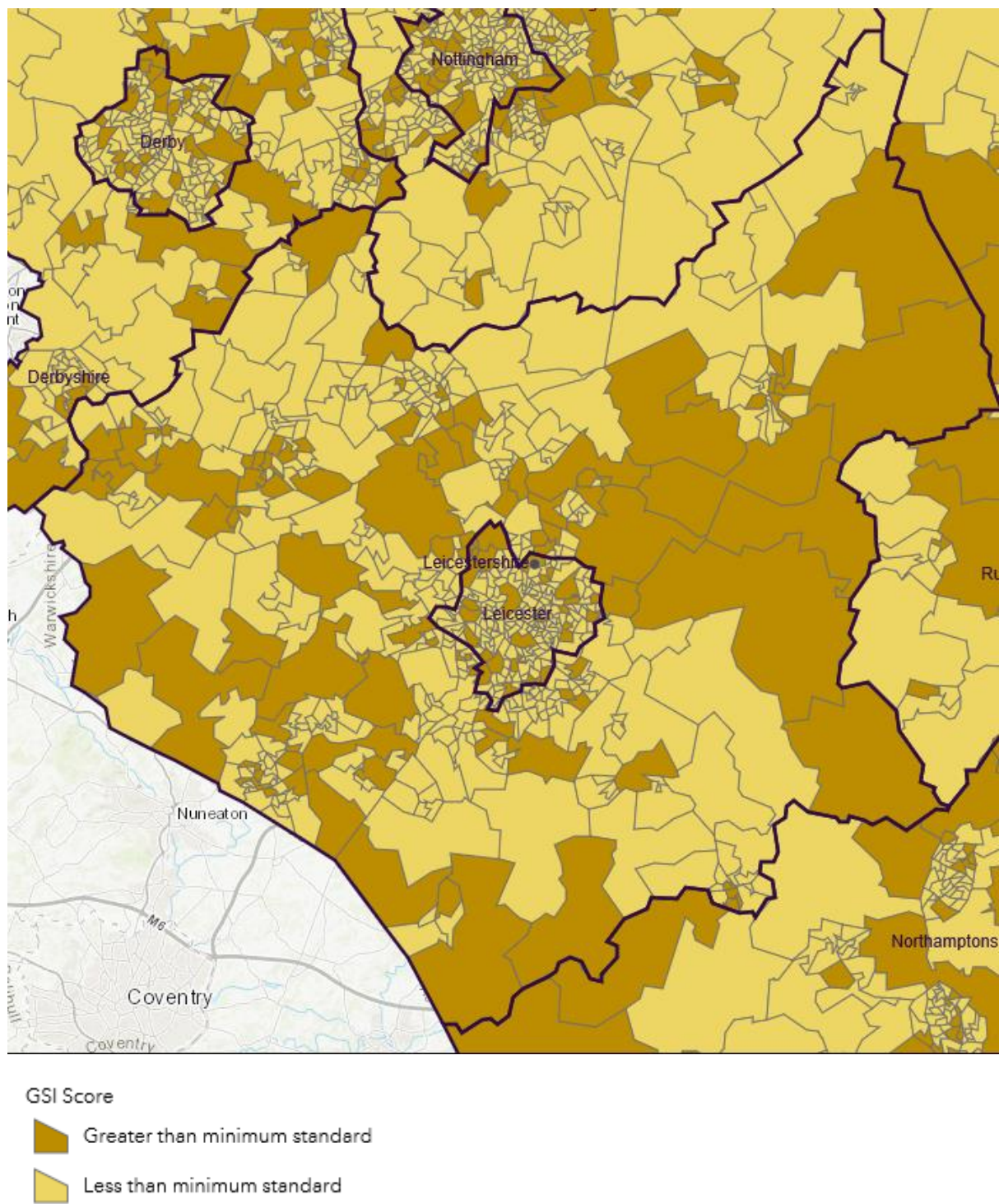
Figure 14: Utilisation of outdoor space for exercise/health reasons - Leicestershire



Source: PHE Fingertips, Public Health Profiles

The Green Space Index is Fields in Trust's barometer of publicly accessible park and green space provision. The recently published tool allows for mapping across Leicestershire to quickly identify areas that do not meet the minimum standard of green space provision. This is shown in Figure 15⁹⁴

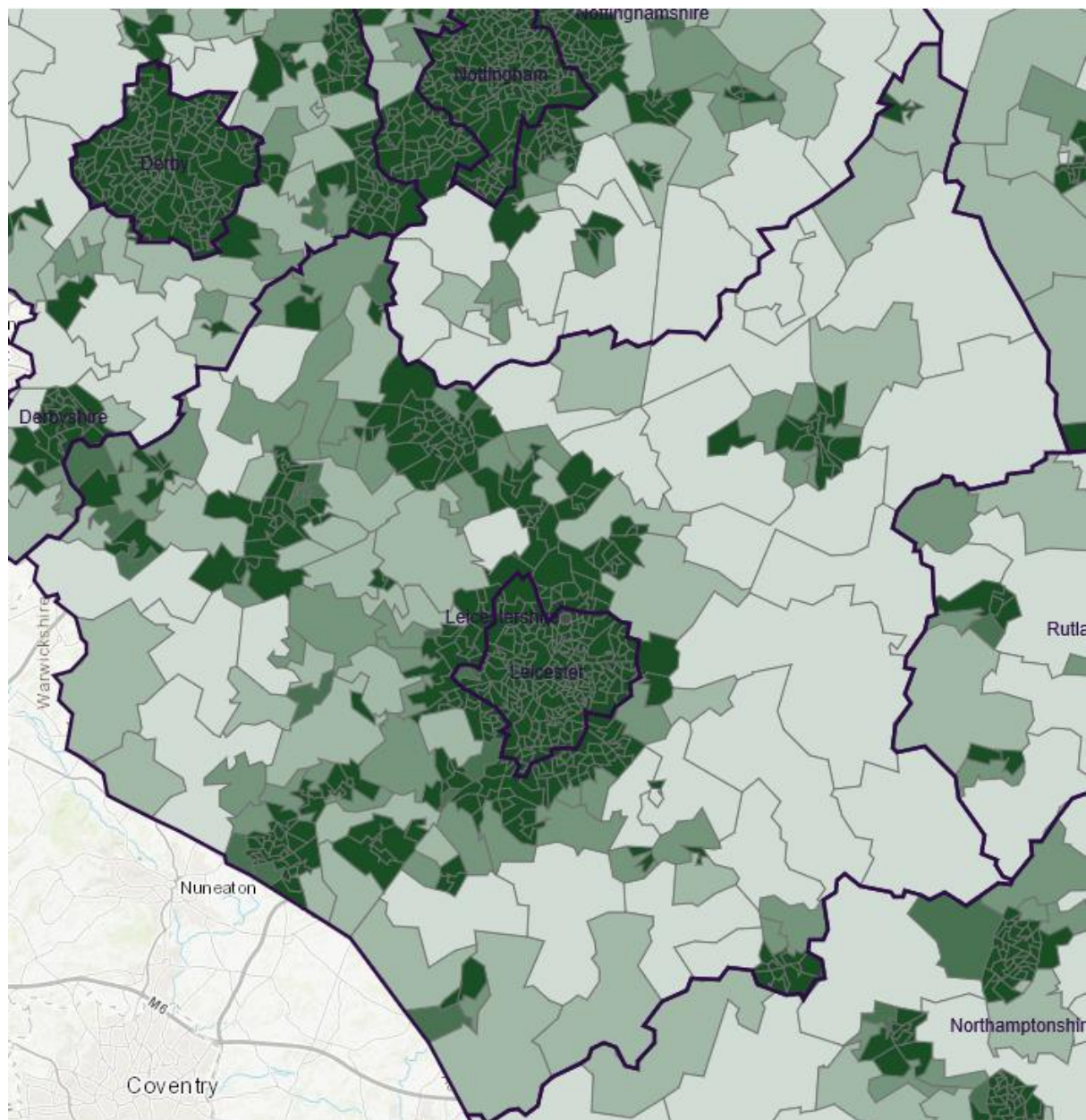
Figure 15: Standards of Green Space Index Score in Leicestershire



Source: Fields in Trust, Green Space Index, 2019

The tool also allows for mapping of people without a green space within a 10-minute walk. Figure 16 shows the variation of this across Leicestershire.

Figure 16: People without a green space within a ten-minute walk, Leicestershire



Source: Fields in Trust, Green Space Index, 2019

3.7 Obesity and Physical Activity related Morbidity and Mortality

The British Heart Foundation acknowledges that keeping physically active can also reduce the risk of early death by as much as 30%.⁹⁵

3.7.1 Hospital admissions due to obesity

Obesity has a large impact on service provision. Nationally, obesity was the primary diagnosis for over 10,700 of finished admission episodes in hospitals in 2016/17. This is an increase of 8% on 2015/16. In Leicestershire in 2016/17, there were 42 finished admission episodes to hospital where the primary diagnosis was obesity, representing an admission rate of 6 in 100,000 people, lower than the national rate of 20 admissions per 100,000 population.⁹⁶

In 2016/17 there were almost 617,000 admissions to NHS hospitals where obesity was a factor (i.e. was the primary or secondary diagnosis). This is an increase of 18% on 2015/16. In Leicestershire, there were approximately 7,100 finished admission episodes to hospital where it was primary or secondary cause for admission, representing an admission rate of 1053 per 100,000 population, slightly lower than the national rate of 1159 per 100,000 population.⁹⁶

Please note a finished admission episode is the first period of inpatient care under one consultant within one provider. Admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

3.7.2 Bariatric surgery

Bariatric surgery encompasses a group of procedures that can be performed to facilitate weight loss, although these procedures can also be performed for other conditions. It includes stomach stapling, gastric bypasses, sleeve gastrectomy and gastric band maintenance. In general, such surgery is used in the treatment of obesity for people with a BMI above 40 kg/m² or those with a BMI between 35 and 40 kg/m² who have health problems such as type 2 diabetes or heart disease.

In 2016/17 there were almost 6,800 episodes of bariatric surgery in England due to obesity; 23 were for residents in Leicestershire and Rutland. This equals a local rate of 3 per 100,000 population, lower than the national rate of 13 per 100,000 population.⁹⁶

3.7.3 Type 2 diabetes

A review of adult obesity and type 2 diabetes published by PHE in 2014 stated that 90% of adults between the ages of 16-54 with type 2 diabetes were overweight or obese in England.⁹⁷ The risk of developing diabetes is seven times higher in adults who are obese, compared to those who are of healthy weight.⁹⁸ Nationally, there is expected to be a further increase in the prevalence of type 2 diabetes due to the increased rates of obesity; this has been estimated to be a 70% increase between 2007 and 2050.⁹⁹

The 'Prescribing for Diabetes report' for England¹⁰⁰ examined prescribing trends on medicines prescribed in primary care for the treatment and monitoring of diabetes during the period April

2007 to March 2018. The report showed that drugs used in diabetes make up 11.4% of total primary care net ingredient costs and 4.9% of prescription items. In the financial year 2017/18 there were 53.4 million items prescribed for diabetes at a total net ingredient cost of £1,012.4 million. Up by 22.6 million prescription items and £421.7 million since 2007/08.

An inverse relationship is apparent between physical activity and risk of type 2 diabetes and metabolic syndrome. There is a 30-40% lower risk of metabolic syndrome and type 2 diabetes in at least moderately active people compared with those who are sedentary.¹⁰¹

The Quality and Outcomes Framework (QOF) 2017/18 shows that there were over 3.2 million adults with diabetes in England, representing 6.8% of the population. The recorded prevalence in Leicestershire is statistically similar to national, with 6.8% having diabetes. It is noted that this is likely to be an underrepresentation of the true prevalence in the population as not all those who have diabetes are diagnosed, and these figures are based on the GP registered population.¹⁰²

3.7.4 Cardiovascular disease

Cardiovascular disease is the name for a group of disorders of the heart and blood vessels. Types of cardiovascular disease include coronary heart disease and stroke. The UK analysis of the Global Burden of Diseases, Injuries and Risk Factors Study estimated that physical inactivity contributes to almost one in ten premature deaths from coronary heart disease (a type of cardiovascular disease). Research shows that doing regular physical activity can reduce the risk of coronary heart disease and stroke by as much as 35%.

Hypertension is a known risk factor for cardiovascular disease and stroke. The 2007 'Foresight report' states that there is a fivefold risk of hypertension for those who are obese, and that that 66% or two thirds of hypertension is associated with excess weight. It further states that obesity is a contributing factor to cardiac failure in more than 10% of all patients.³

The QOF 2017/18 shows approximately 1.8 million people have a diagnosis of coronary heart disease in England; 21,000 of whom are from Leicestershire. The corresponding proportions show that Leicestershire's recorded prevalence of 3.1% is significantly higher than the national average of 3.0%. Leicestershire's recorded prevalence for stroke was significantly higher than the national average with almost 12,500 strokes, a prevalence of 1.8%.¹⁰²

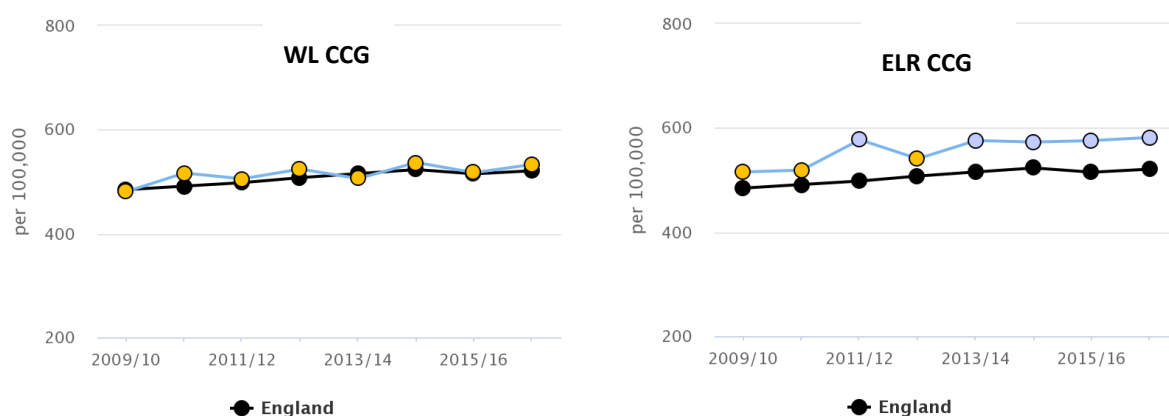
3.7.5 Cancers

Amongst non-smokers, 10% of all cancer deaths are related to obesity. These figures vary depending on cancer type, with endometrial cancers being linked to obesity in 30% of cases.³ Incidence of both distal colon and proximal colon cancers is lower in people who are more physically active than in those who are less physically active. Further, physical activity has been associated with a reduced

risk of breast cancer in both premenopausal and postmenopausal women.¹⁰³

In 2016/17, there were 521 new cases of invasive cancer (excluding non-melanoma cancer) in England per 100,000 population. This follows an increasing trend over the past five years, although it is difficult to determine whether this is reflective of an increased incidence in the population, or more pro-active case identification. Across East Leicestershire and Rutland Clinical Commissioning Group (CCG), the crude incidence rate was 582 per 100,000 population, significantly higher than the national average in 2016/17. Here, the rate has remained significantly higher than the national average since 2013/14. Across West Leicestershire CCG there was 533 new cases per 100,000 population; here the crude incidence rate was similar to the national average. While ELR CCG has witnessed an increasing trend over the past seven years, WL CCG has seen no significant change in trend in the last eight years.¹⁰⁴

Figure 17: Crude incidence rate of cancer: new cases per 100,000 population, 2009/10 – 2015/16, by CCG



Source: Public Health England, Cancer Services Profile, 2019

3.7.6 Liver disease

Obesity is associated with non-alcoholic fatty liver disease (NAFLD) and non-alcoholic steatohepatitis (NASH). It is estimated that 40% of NASH patients are obese.⁹⁹

In 2012/13-14/15, the crude rate of hospital admissions for NAFLD in England was 3.0 per 100,000 population. The rate in Leicestershire and Rutland (combined) was 1.8 admissions per 100,000 people, significantly better (lower) than the national average. The local rate has remained better than the national average since 2010/11.¹⁰⁵

In 2015-17, the crude mortality rate for under 75's due to NAFLD was 0.51 per 100,000 population. The Leicestershire and Rutland (combined) rate of 0.25 deaths per 100,000 population was statistically similar to this and accounted for 5 premature (i.e. preventable) deaths. The local rate has remained similar to the national rate since reporting began in 2007-09, although the most recent

figures are the lowest since reporting began.¹⁰⁵

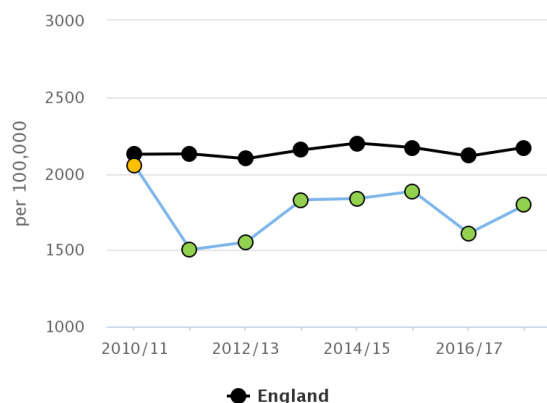
3.7.7 Falls

Falls in older people are a leading cause of unintentional injury. Due to an ageing population, injuries are likely to increase unless more is done to reduce older people's falls risk. The Falls Management Exercise (FaME) programme is a community-based exercise programme that aims to improve strength and balance. The programme has been shown to reduce falls in community-dwelling older adults at lower falls risk. It has also been shown to reduce injurious falls by 40% and increase moderate intensity physical activity levels, with the potential to improve other aspects of health.¹⁰⁶

In 2017/18, the directly standardised rate for emergency hospital admissions due to falls in people aged 65 and over was 2,170 per 100,000 people in England. Leicestershire's admission rate was 2,455 per 100,000 population. While the rate has varied, Leicestershire has remained significantly better (lower) than national since 2011/12. The rate of falls is significantly higher in females compared to males both locally and nationally (2,048 per 100,000 females compared to 1,474 per 100,000 males; and 2,453 per 100,000 females compared to 1,775 per 100,000 males respectively).¹⁰⁷

Hospital admissions have been used as a proxy of the prevalence of falls injuries, these are only the tip of the iceberg in relation to the health and well-being burden of falls. Inpatient hospital admissions are a proportion of falls incidents, more may present to A&E and GPs, not all of which will lead to hospital admission. It is further noted that there may be variation between trusts in the ways hospital admissions and injuries are coded and variation in data recording completeness. Due to these coding variations, the figures presented may be underestimates.

Figure 18: Emergency hospital admissions due to falls in people aged 65 and over, 2010/11-2016/17, Leicestershire



Source: Public Health England, *Fingertips Healthy Ageing Profile, 2019*

4 How does this impact?

4.1 Human cost

4.1.1 *Life expectancy*

Obesity significantly impacts on life expectancy. It is estimated that there is a four-year difference in life expectancy for a 30-year-old male with a BMI of 34 kg/m² compared to 24 kg/m² and a 2-year difference in life expectancy for females.¹⁰⁸

4.1.2 *Quality of life*

Other than conditions mentioned in the morbidity and mortality sections above, there is evidence that obesity is linked to multiple other conditions that can have a large impact on a person's quality of life including; shortness of breath, back pain, reduced mobility, osteoarthritis, pulmonary embolisms, deep vein thromboses; sleep apnoea, hyperuricaemia, gout, end-stage kidney disease, increased psychological and social burden.¹⁰⁹

4.1.3 *Obesity and physical activity associated mortality*

Nationally, obesity reduces life expectancy by an average of three years; severe obesity reduces life expectancy by 8-10 years on average.¹¹⁰

An analysis of the Global Burden of Diseases, Injuries and Risk Factors Study found physical inactivity and low physical activity to be among the ten most important risk factors in England.¹¹¹ It is estimated that physical inactivity contributes to almost one in ten premature deaths (based on life expectancy estimates for world regions) from coronary heart disease and one in six deaths from any cause.¹¹²

4.2 Financial cost

Severely obese individuals are three times more likely to require social care than those with a normal weight, resulting in increased risk of hospitalisation and associated health and social care costs. It is estimated that the NHS spent £6.1 billion on overweight and obesity-related ill-health in 2014 to 2015. Musculoskeletal conditions can be caused by obesity and are the biggest causes of sick leave in England. Sick leave costs the economy £100 billion a year.¹¹³

The annual spend on the treatment of obesity and diabetes is greater than the amount spent on the police, the fire service and the judicial system combined. More broadly, obesity has a serious impact on economic development, with the overall cost of obesity to wider society estimated at £27 billion per year. 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.¹¹⁴

4.2.1 Physical inactivity is estimated to cost the UK £7.4 billion annually (including £0.9 billion to the NHS alone).¹¹⁵ Cost of maternal obesity

Women with a BMI of 35 kg/m² or above are; almost four times more likely to have a primary postpartum haemorrhage, over twice as likely to have a stillbirth, at greater risk of gestational diabetes, pre-eclampsia and foetal abnormalities.¹¹⁶ It is estimated that each pregnancy with an overweight mother costs an average £698 more than if the mother is normal weight, and for obesity over £1,170 in the NHS, based on figures from 2011/12.¹¹⁷

4.2.2 Prescriptions

In 2017 there were 4,189 prescription items prescribed for the treatment of obesity in Primary Care within East Leicestershire and Rutland CCG and West Leicestershire CCG. There were rates of 4 items per 1,000 members of the population in East Leicestershire and Rutland CCG and 7 items per 1,000 members in West Leicestershire CCG. At £17 per prescription item for orlistat, this equates to over £70,000 in Leicestershire alone.⁹⁶

Nationally, there were 7 items prescribed for the treatment of obesity per 1,000 members of the population with a cost of over £6.8 million. Nationally, the figures for prescriptions have varied considerably within the last decade, from almost 1.5 million prescription items in 2009 to under 400,000 in 2012' however, the overall trend is tending towards fewer prescriptions, with prescription items also costing less.⁹⁶

4.3 Environmental cost

4.3.1 Congestion

Encouraging and enabling a modal shift in cycling and walking for short journeys will deliver a reduction in traffic congestion and emissions from road transport, as well as health benefits from more active lifestyles and reduced emissions. The Air Quality JSNA for Leicestershire covers this in more detail. It notes:

“There are a plethora of services and information, aimed at different ages on the life course, to support individuals to be active but these do not routinely reference air quality considerations or align with active or sustainable travel”

The chapter also recommends:

“Planning and Highways Authorities should seek to implement a hierarchy of sustainable travel which prioritises walking and cycling above other forms of transport. This includes prioritising investment in walking and cycling infrastructure, especially where this would encourage and facilitate active travel to schools and workplaces in areas of high urban density.”

For further information, please visit: <http://www.lsr-online.org/uploads/jsna-air-quality-2019-v10-final.pdf>

5 Policy and Guidance

Doing nothing is not an option, but as with other complex issues such as climate change, the sheer scale of the challenge can often deter policy makers from responding at an appropriately large scale. A strong legislative response is required from Government that delivers meaningful societal changing measures, such as those introduced in the UK to restrict smoking in public places in 2007. Unfortunately, there is a widely held consensus amongst obesity experts that Government policy has not yet met the challenge.¹¹⁸

There has been a national discussion on obesity in recent years through a series of strategies: The Public Health White Paper '*Choosing Health*'¹¹⁹, the National Strategy on Obesity '*Healthy Weight Healthy Lives*'¹²⁰, and the '*Call to Action on Obesity in England*'¹²¹, which set out the key components of a successful approach through:

- Empowering individuals,
- Giving partners (e.g. food and drink industry) the opportunity to play their full part,
- Giving local government the lead role in driving health improvement and harnessing partners at local level,
- Building the evidence base.

The current Government's first childhood obesity plan¹²² was simply not good enough to address multiple challenges of obesity and it was widely criticized. The plan generally failed to address expert recommendations in many areas including price promotions, marketing and advertising, labelling, information, or giving local authorities stronger regulatory powers.

There were some positives however - the soft drinks levy on sugar in soft drinks was widely welcomed. Since then we've seen that the industry response has been so dramatic that HM Treasury's forecasts of how much the levy would raise have turned out to be over-optimistic, as drinks have been reformulated to avoid it. The plan also included work on reformulation of foodstuffs, such as cakes and biscuits, through a voluntary agreement monitored by PHE. PHE recently announced the results of progress in the first year of this agreement: the 5% target was missed, with an average reduction across categories of 2%.¹¹⁸

Another welcomed policy has been the £320 million PE and Sport Premium for primary schools. Schools must use the funding to make additional and sustainable improvements to the quality of physical education (PE), physical activity and sport they offer. This means that the premium should be used to:

- develop or add to the PE, physical activity and sport activities that the school already offers, and

- build capacity and capability within the school to ensure that improvements made now will benefit pupils joining the school in future years.¹²³

In 2018, the Government published “*Childhood obesity: a plan for action, Chapter 2*”.¹²⁴ The new measures were a significant upgrade on the first childhood obesity plan, including a target to halve childhood obesity by 2030. The proposals to restrict the advertising of junk food and ban the sale of energy drinks to children also signaled a slightly bolder and more active approach from the government.

Unfortunately, the national plan remains far short of the comprehensive response recommended by the UK Parliament Health and Social Care Committee .¹²⁵ The table below shows how the updated plan measures up against the Committee’s key asks.

Health and Social care Committee recommendation	The Obesity Plan – Chapter 2	RAG rating
A whole system approach		Amber
Cabinet Committee for obesity with mandatory reporting across departments	No cabinet sub-committee or mandatory reporting of actions across departments	Red
Targets, with a focus on health inequality reduction	Ambitions to halve the rate of childhood obesity by 2030, no specific numerical commitment on reducing inequalities	Green
Greater powers for local government including health as a licensing objective	No new powers, but will work on “trailblazer programme” to maximise use of existing powers with focus on inequalities, provision of training for planning inspectors	Amber
Extend soft drinks levy to milk-based drinks	Extension to be considered in 2020 HM treasury will consult on ending sale of energy drinks to children	Amber
Advertising, marketing and price promotions		Green
9pm watershed controls on advertising of high fat, sugar or salt (HFSS) products	Will consult on 9pm watershed controls for HFSS products by end of 2018	Green
Ban on cartoon characters advertising HFSS products	No new announcement, “no new plans” NIHR obesity unit will continue to monitor	Red
Alignment of regulation between broadcast and social media	Intention to legislate, with consultation by end of 2018	Green
Calorie labelling for out-of-	Intention to legislate, will consult by end of	Green

home food sector	2018; will consider additional simplification of labelling following EU exit	
End buy one, get one free (BOGOF) and similar promotions	Intention to ban BOGOF (plus free refills, etc.) of HFSS products, consult by end of 2018	Green
Remove unhealthy products from end of aisles	Intention to legislate to end “promotion of unhealthy food and drink by location” e.g., end of aisle. Consult by end of 2018	Green
Early years, schools and their environment		Amber
Targets for breastfeeding	No new announcement	Red
“Full implementation” of 2016 childhood obesity plan commitments on schools	Action across a range of areas, but not all. Additional activity on “daily mile” updating School Food Standards	Amber
New powers for local government to limit HFSS billboards near schools	No new announcement	Red
Make it easier for local government to limit “unhealthy food outlets” close to schools	Nothing specific, though trailblazer programme (see above) is likely to include this.	Amber
Access to effective services for children and families	No new announcement	Red

There are six green, five red and four amber ratings, with marked improvement in the areas of marketing and advertising – with controls on both signaled across a broad range of areas. Chapter 2 signals the intention to legislate in many of these areas, with consultation launched at the end of 2018.

However, the government has not moved on some specifics such as banning cartoon characters associated with high in fat, salt or sugar (HFSS) products or improving weight management or breastfeeding services. In fact, the latter two are being negatively impacted by the Government’s ongoing cuts to Public Health grant funding, estimated by the Health Foundation as a £700m real terms reduction in funding between 2014/15 and 2019/20 – a fall of almost a quarter (23.5%) per person.

But there is progress – if not yet a green light – on a wide range of the areas that the Health and Social Care Committee highlighted, and strong signals that the government will move again, including on reformulation of foods, if the industry does not speed up progress.

Overall, the government has clearly focused on advertising, marketing and price promotions, but

regrettably the government has ignored the Health and Social Care Select Committee's view that a new cross-government committee is required to co-ordinate and hold to account government departments for their contributions to tackling childhood obesity.

The UK government has rightly placed principal focus on children, but a health-in-all-policies approach has yet to be realised. Currently, school nutrition and exercise policies are diluted by an opt-in position among academies and free schools, and further barriers are presented by school-rating systems that place enormous emphasis on educational attainment, often to the detriment of child (and teacher) physical and mental health.

At a local level, community-based programmes for school-aged children, typically 0-12s, and their families are much more effective than interventions focused on school environments alone. The strongest evidence derives from programmes that traverse childhood and educational settings, the family home, community structures and the built environment.¹

While local, whole-systems approaches to obesity need to be explored, children require special focus. Failure to implement joined-up, multi-sectoral obesity prevention strategies for children and their families across a range of local contexts will limit any impact on ever reversing the obesity epidemic among the wider population.

5.1 Overview of NICE Guidance on Obesity and Physical Activity

- **Obesity prevention (CG43)** is the first national guidance on the prevention of overweight and obesity in adults and children in England and Wales.
- **Obesity - identification, assessment and management (CG189)** is evidence-based advice on the care and treatment of obesity.
- **Obesity in children and young people: prevention and lifestyle weight management programmes (QS94)** covers preventing children and young people (under 18) from becoming overweight or obese, including strategies to increase physical activity and promote a healthy diet in the local population. It also covers lifestyle weight management programmes for children and young people who are overweight or obese.
- **Obesity in adults: prevention and lifestyle weight management programmes (QS111)** covers preventing adults (aged 18 and over) from becoming overweight or obese. It includes strategies to increase physical activity and promote a healthy diet in the local population. It also covers lifestyle weight management programmes for adults who are overweight or obese.
- **Weight management: lifestyle services for overweight or obese adults (PH53)** makes recommendations on the provision of effective multi-component lifestyle weight management services for adults who are overweight or obese (aged 18 and over).

- **Weight management before, during and after pregnancy (PH27)** includes 6 recommendations based on approaches proven to be effective for the whole population.
- **Preventing excess weight gain (NG7)** includes recommendations for children (post weaning) and adults to support approaches suggested in other NICE guidelines about effective interventions and activities to prevent people becoming overweight or obese.
- **BMI: preventing ill health and premature death in black, Asian and other minority ethnic groups (PH46)** aims to determine whether lower cut-off points should be used for black, Asian and other minority ethnic groups in the UK as a trigger for lifestyle interventions to prevent conditions such as diabetes, myocardial infarction or stroke.
- **Obesity: working with local communities (PH42)** aims to support effective, sustainable and community-wide action to prevent obesity. It sets out how local communities can achieve this, with support from local organisations and networks.
- **Physical activity and the environment (NG90)** covers how to improve the physical environment to encourage and support physical activity.
- **Physical activity: exercise referral schemes (PH54)** covers exercise referral schemes for people aged 19 and older, in particular, those who are inactive or sedentary.
- **Physical activity: brief advice for adults in primary care (PH44)** covers providing brief advice on physical activity to adults in primary care. It aims to improve health and wellbeing by raising awareness of the importance of physical activity and encouraging people to increase or maintain their activity level.
- **Physical activity: walking and cycling (PH41)** covers encouraging people to increase the amount they walk or cycle for travel or recreation purposes.
- **Physical activity: encouraging activity in the community (QS183)** covers how local strategy, policy and planning and improvements to the built or natural physical environment such as public open spaces, workplaces and schools can encourage and support people of all ages and all abilities to be physically active and move more.

5.2 Overview of separate strategies and recommendations for key obesity determinants

5.2.1 Physical Activity

The “perfect storm” of reduced activity and increased calorie intake has undoubtedly combined to create the surge of obesity seen in the past two decades. Changes in our social environment, working lives and increasing use of technology have the potential to eradicate physical activity out of many people’s lives. We are the first generation that needs to make a conscious decision to build physical activity into our daily routines.

It is important for us to be active throughout our lives. Physical activity is central to a baby’s normal growth and development and this continues through school, into adulthood and older

years. Being physically active can bring substantial health benefits and there is consistent evidence of a dose–response relationship, i.e. the greater the volume of physical activity undertaken, the greater the health benefits that are obtained.¹²¹In 2011, the UK Chief Medical Officers produced guidelines¹⁶¹⁶ on the volume, duration, frequency and type of physical activity required across the life-course to achieve general health benefits.¹²¹

1.1.1.5. Guidelines for early years

EARLY YEARS (under 5s)

1. Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.
2. Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day.
3. All under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

In recent years, there has been considerable growth in research exploring the benefits of physical activity for children under 5. Physical activity is central to optimal growth and development in the under 5s and is valuable in developing motor skills, promoting healthy weight, enhancing bone and muscular development, and for the learning of social skills.

Ideally, children under 5 should build up the required quantity of physical activity across the course of their day. This is typically characterised by sporadic sessions of activity mixed with periods of rest. This pattern of activity protects against children engaging in prolonged periods of sedentary behaviour by prompting regular breaks from sitting or lying down.

The social and physical environments in which activity is most likely to occur, such as the home, childcare and leisure facilities, should be stimulating, fun and safe. Young children also need the freedom to create their own opportunities for active play and to lead their own activities, direct their own play and engage in imaginative play. This will encourage independence and appropriate exploration in a safe and supervised environment.

Parents and carers can encourage activity by interacting with young children in a physically active way as often as possible. Adults are important role models and their involvement in physical activity and play will encourage a young child to be more active and enjoy their interactions, which will stimulate further participation.

1.1.1.6. Guidelines for children and young people (5-18 years)

CHILDREN AND YOUNG PEOPLE (5–18 years)

1. All children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours every day.
2. Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated at least three days a week.
3. All children and young people should minimise the amount of time spent being sedentary (sitting) for extended periods.

The guidelines above describe the amount of activity required to achieve substantial health benefits. However, regular participation in physical activity at higher levels will provide additional health gains. For children and young people who are currently inactive, doing some physical activity, even if it is less than the guidelines, will provide some health benefits. For such children and young people, a gradual increase in the frequency, duration and intensity of activity to achieve the guidelines is recommended. Children and young people who are overweight or obese can gain health benefits from meeting the recommended levels of physical activity, even in the absence of any changes to their weight status. To achieve and maintain a healthy weight, additional physical activity and a reduction in calorie intake may be required.

1.1.1.7. Guidelines for adults aged 19 to 64

ADULTS (19–64 years)

1. Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week.
2. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous intensity activity.
3. Adults should also undertake physical activity to improve muscle strength on at least two days a week.
4. All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Examples of physical activity that meet the guidelines:

Moderate intensity physical activities will cause adults to get warmer and breathe harder and their hearts to beat faster, but they should still be able to carry on a conversation. Examples include:

- Brisk walking
- Cycling

Vigorous intensity physical activities will cause adults to get warmer and breathe much harder and their hearts to beat rapidly, making it more difficult to carry on a conversation. Examples include:

- Running
- Sports such as swimming or football

Physical activities that strengthen muscles involve using body weight or working against a resistance. This should involve using all the major muscle groups. Examples include:

- Exercising with weights
- Carrying or moving heavy loads such as groceries

Minimising sedentary behaviour may include:

- Reducing time spent watching TV, using the computer or playing video games
- Taking regular breaks at work
- Breaking up sedentary time such as swapping a long bus or car journey for walking part of the way

1.1.1.8. Guidelines for adults aged 65 and over

OLDER ADULTS (65+ years)

1. Older adults who participate in any amount of physical activity gain some health benefits, including maintenance of good physical and cognitive function. Some physical activity is better than none, and more physical activity provides greater health benefits.
2. Older adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week.
3. For those who are already regularly active at moderate intensity, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous activity.
4. Older adults should also undertake physical activity to improve muscle strength on at least two days a week.
5. Older adults at risk of falls should incorporate physical activity to improve balance and co-ordination on at least two days a week.
6. All older adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Adults aged 65 or older who are generally fit and have no health conditions that limit their mobility should try to be active daily:

Examples of physical activity that meet the guidelines:

Moderate intensity physical activities will cause older adults to get warmer and breathe harder and their hearts to beat faster, but they should still be able to carry on a conversation. Examples include:

- Brisk walking
- Ballroom dancing

Vigorous intensity physical activities will cause older adults to get warmer and breathe much harder and their hearts to beat rapidly, making it more difficult to carry on a conversation.

Examples include:

- Climbing stairs
- Running

Physical activities that strengthen muscles involve using body weight or working against a resistance. This should involve using all the major muscle groups. Examples include:

- Carrying or moving heavy loads such as groceries
- Activities that involve stepping and jumping such as dancing
- Chair aerobics

Activities to improve balance and co-ordination may include:

- Tai chi
- Yoga

Minimising sedentary behaviour may include:

- Reducing time spent watching TV
- Taking regular walk breaks around the garden or street
- Breaking up sedentary time such as swapping a long bus or car journey for walking part of the way

Physical activity guidelines are also available for disabled adults and pregnant women.

The Government has made a long-term commitment to reduce levels of physical inactivity through a series of national strategies and frameworks:

Public Health England published the national physical activity framework, 'Everybody active, everyday' in 2014 which highlighted the importance of education across its four domains for action: active society, moving professionals, active environments and moving at scale; implementation reviews were published in 2017 and 2018. It has also published evidence on 'The link between pupil health and wellbeing and attainment' and a 'Rapid evidence review on the effect of physical activity participation among children aged 5-11 years'.

Department for Digital, Culture, Media and Sport – Sporting Future – In 2015, 'A New Strategy for an Active Nation' set out a new government vision to redefine what success looks like in sport and physical activity participation by concentrating on five key outcomes: physical wellbeing, mental

wellbeing, individual development, social and community development and economic development.

Sport England's strategy for 2016-2021, 'Towards an Active Nation' will invest £194m into projects focusing on improving children and young people's capability and enjoyment of physical activity. This includes projects which offer new opportunities for families with children to get active and play sport together. Sport England will also focus £250 million combatting inactivity across the life course for children, young people and adults.¹²⁶

5.3 Weight management commissioning responsibilities

Obesity is one of the Cinderella services of healthcare.¹²⁷ We all know that it is a major problem and yet there are significant gaps in NHS provision nationally, whilst local authorities are increasingly unable to fund adequate services due to Public Health funding cuts.

Following the enactment of the 'Health and Social Care Act' (HSCA) in 2012, responsibility for commissioning weight management services has been split across 3 local authority and NHS organisations, working across 4 tiers.

This appears to be a coordinated pathway, but it is fragmented by multiple responsibilities. Tiers 1 and 2 are commissioned by Local Authorities, as the HSCA placed public health responsibility with them. Tier 3, where it exists, is an orphan service inconsistently commissioned by either Local Authorities (as a remnant of earlier commissioning models) or Clinical Commissioning Groups (CCGs). Tier 4 is now also commissioned by CCGs (since April 2017) after previously being commissioned by the Specialist Commissioning arm of NHS England.

Tier 1: Local authorities are responsible for commissioning

Behavioural – Universal interventions (prevention and reinforcement of healthy eating and physical activity messages), which includes public health and national campaigns, providing brief advice.

Tier 1 is delivered by local and regional public health teams, together with the identification and advice, often carried out in a primary care setting, by healthcare professionals such as GPs, nurses, health visitors, school nurses etc. but together with support from pharmacists, local leisure providers and allied organisations.

Tier 2: Local authorities are responsible for commissioning

"Lifestyle weight management services. Normally time limited"

Tier 2 services are delivered by local community weight management services, that provide community-based diet, nutrition, lifestyle and behaviour change advice, normally in a group setting

environment. Normally people can only access these services for a limited time period often only 8-12 weeks.

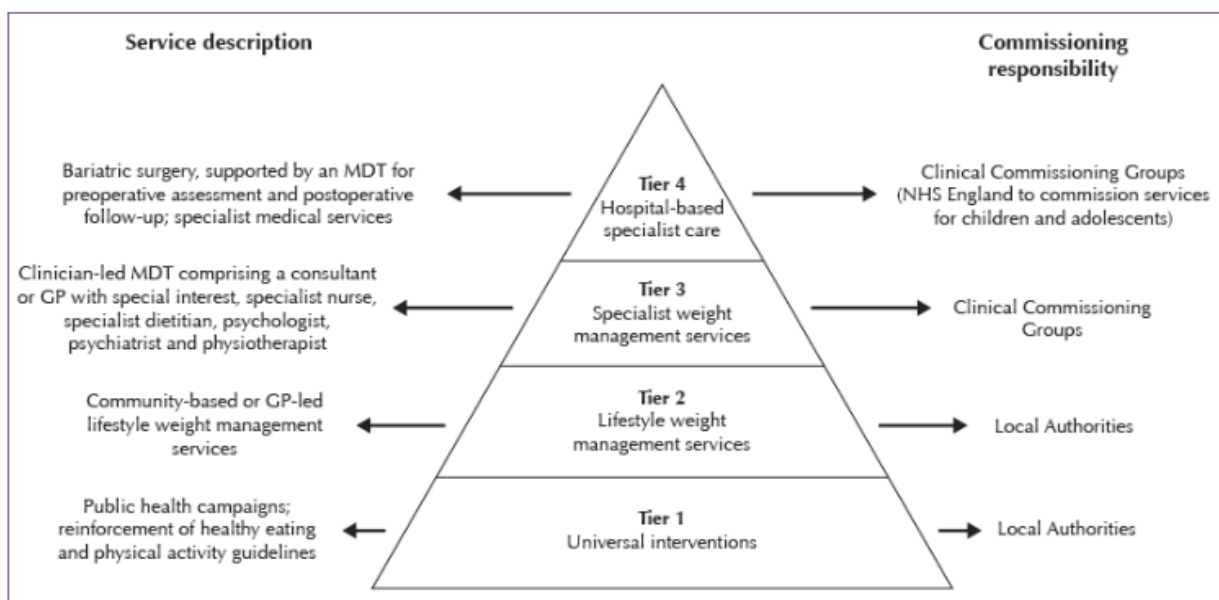
Tier 3: CCGs are responsible for commissioning

“Clinician led multidisciplinary team (MDT) – A MDT clinically led team approach, potentially including physician (including consultant or GP with a specialist interest), specialist nurse, specialist dietitian, psychologist, psychiatrist, and physiotherapist.”

In practice these are the specialist weight management clinics that provide non-surgical intensive medical management with an MDT approach that consists of doctor with a special interest on obesity (physician or GP), specialist nurses, specialist dietitian, psychological support and specialist exercise therapists/physiotherapist.

Tier 4: CCGs are responsible for commissioning Tier 4 (since April 2017)

“Surgical and non-surgical – Bariatric Surgery, supported by MDT pre and post-op.” Performed in secondary care with pre-operative assessment and post-operative care and support.



In 2017, NHS England made the decision to devolve Tier 4 services comprising obesity surgery and the required 2-year period of post-surgical follow-up to CCGs. This has a considerable advantage, in that the separation of Tiers 3 and 4 was largely arbitrary and it is more logical to commission the entire service as a coherent pathway. However, there are a considerable number of challenges to local commissioning. Firstly, CCGs are still not universally aware of their new responsibility; secondly, obesity may not be perceived as a major priority; and, thirdly, in order to commission obesity surgery safely, CCGs will need to join up into clusters to be able to have sufficient volume.

These factors continue to threaten quality and safety. Over the past years, the central commissioning of obesity surgery by NHS England was starting to bring uniformity to Tier 3 and Tier 4 services, but these clinical standards were not binding on CCGs when they took responsibility for commissioning services. NHS England now only retains a small interest in obesity by commissioning obesity surgery for children and adolescents.¹²⁷

5.3.1 Weight management: lifestyle services for overweight or obese adults

Specific clinically focussed NICE clinical guidelines and quality standards have been published as guidance to prevent obesity and deliver evidence based adult weight management services.^{128 129}

The focus of prevention is on primary prevention, defined as intervention when individuals are at a healthy weight and/or overweight, to prevent or delay the onset of obesity.

The guidelines are of particular interest to those working in primary, secondary and tertiary NHS weight management services and those involved in management of services for long term conditions especially diabetes and cardiovascular disease. They should be used to provide direction for planning at local and national levels and will also be of interest to voluntary sector and commercial weight loss organisations, to patients and the general public.

5.4 Tackling the obesogenic environment

The strategic movement towards “whole system solutions” to reduce obesity has focussed greater attention on the obesogenic environment around us – factors which passively encourage a more inactive and sedentary lifestyle and increases in calorie intake, or actively reduce the opportunities for adopting healthier alternatives.

Local authorities have a range of legislative and policy levers at their disposal, alongside wider influences on healthy lifestyles, that can help to create places where people are supported to maintain a healthy weight. The relocation of public health departments to local authorities has also created new opportunities for joint working with town planners, environment and transport (Active Travel team), and waste management colleagues. It is easier to develop programmes which cut across boundaries of responsibility and reduce silo working.

In ‘Planning healthy weight environments’ the Town and Country Planning Association (TCPA) set out six elements to help achieve healthy weight environments through the planning process. These provide a useful framework to consider the impact of new developments to support people to maintain healthy weight, both within councils and with developers.¹³⁰ The six elements are:

- movement and access;
- open spaces,
- recreation and play;

- food environment;
- neighbourhood spaces;
- building design; and
- local economy.

The fabric of the urban environment can be altered to increase healthy food availability, encourage active transport and limit unhealthy food near schools. Planning obligations from new developments can be used to encourage a more active lifestyle, including integrated green spaces for recreation, cycle and walking paths, traffic control measures and leisure opportunities.

Action on the food environment is supported by the NICE public health guidance, ‘Prevention of Cardiovascular Disease.’¹³¹ NICE recommends encouraging planning authorities “to restrict planning permission for takeaways and other food retail outlets in specific areas (for example, within walking distance of schools)”.

It is only in recent years that local authorities have started to use the legal and planning systems to regulate the growth of fast food restaurants, including those near schools. There is thus an unavoidable lack of evidence that can demonstrate a causal link between actions and outcomes, although there is some limited evidence of associations between obesity and fast food, as well as with interventions to encourage children to stay in school for lunch. However, there are strong theoretical arguments for the value of restricting the growth in fast food outlets, and the complex nature of obesity is such that it is unlikely any single intervention would make a measurable difference to outcomes on its own.

There are several reasons why the presence of fast food outlets may be undesirable from a public health perspective, with implications for planners. For example:

- many hot food takeaways may generate substantial litter in an area well beyond their immediate vicinity
- discarded food waste and litter attracts foraging animals and pest species
- hot food takeaways may reduce the visual appeal of the local environment and generate night-time noise
- short-term car parking outside takeaways may contribute to traffic congestion
- improving access to healthier food in deprived communities may contribute to reducing health inequalities

The most relevant evidence of successful approaches in England tends to come from case studies of approaches being taken by local authorities using policy and regulatory approaches.¹³² There are three broad approaches that could be taken to address the problem of over-proliferation of hot-food takeaways in city centres and near schools:¹³³

- working with the takeaway businesses and food industry to make food healthier
- working with schools to reduce fast food consumed by children
- using regulatory and planning measures to address the proliferation of hot food takeaways

In a practical example, Public health professionals in Birmingham recently produced a Supplementary Planning Document (SPD) aiming to reduce an existing 10% cap on hot food takeaway units in shopping centres down to 5%. The SPD also introduces a levy to deter new businesses from opening, and to restrict hot food takeaways within an 800m radius of schools.

Alongside planning policies, there are other measures available, mainly implemented by environmental health or licensing teams, to help local authorities regulate the sale of fast food. These include:

- street trading policies to restrict trading from fast food vans near schools
- policies to ensure that menus provide healthier options
- enforcement on other issues such as disposal of fat, storage of waste, and litter
- food safety controls and compliance
- restrictions on opening times
- using Section 106 agreements and the Community Infrastructure Levy to contribute to work on tackling the health impacts of fast food outlets.

5.4.1 Addressing food sustainability

Policies including the Health and Wellbeing Strategy, Strategic Economic Plan and Waste Management Strategy all emphasize the importance of food for Leicestershire's health, prosperity and sustainability, and considerable work is already being done in each of these areas to ensure food is a positive force in Leicestershire. But getting food to our plates is clearly a complex process. Its role in health cannot easily be disentangled from its environmental and economic aspects, and vice versa. Moreover, Leicestershire's food is part of a national and global network, and only an integrated, whole-systems approach can hope to be effective in this context. A strong local food system will increase Leicestershire's resilience to global threats including climate change and rising food prices.

A coordinated strategic approach that values and prioritises sustainability, local provenance and healthy food in policies and procurement, whilst also developing community capacity and assets in relation to food growing, cooking and eating can address all of these issues. As a major local employer and catering provider, the County Council would be in a position to lead on policy change and influence other public sector organisations to follow suit. This alone could produce a major step change in patterns of food buying in the county. It would also be able to ensure existing work done by departments within the council takes an integrated approach as part of an overall strategy.

5.5 Ofsted – Education Inspection Framework

Ofsted has published its new education inspection framework which will take effect from September 2019.

The 'personal development' judgement will recognise the work early years providers, schools and colleges do to build young people's resilience and confidence in later life, including through participation in sport, music and extra-curricular activities.

5.6 Statutory Health Education for all Schools

From September 2020 all schools will be required to deliver statutory Health Education including:

Physical Health & Fitness

- The characteristics and mental and physical benefits of an active lifestyle
- The importance of building regular exercise into daily and weekly routines and how to achieve this: for example, walking or cycling to school, a daily active mile or other forms of regular, vigorous exercise
- The risks associated with an inactive lifestyle (including obesity) (Primary)
- The characteristics and evidence of what constitutes a healthy lifestyle, maintaining a healthy weight, including the links between an inactive lifestyle and ill health, including cancer and cardio-vascular ill-health. (secondary)

And Healthy Eating

- How to maintain healthy eating and the links between a poor diet and health risks, including tooth decay and cancer

6 Current Services

Leicestershire has been an early adopter of whole system approaches to tackle obesity and has a balanced obesity strategy across three broad priority areas – physical activity, healthy weight and food sustainability and nutrition.



A number of key principles have shaped our service commissioning and design:

- Establishing high quality, sustainable “foundation” programmes universally in every district.
- Consistency of offer across all districts and centralising common functions where appropriate.
- Building standardised monitoring and evaluation.
- Cross-integration of programmes by encouraging providers to work closely together.
- Collaboration with districts in planning and coordination of services.
- Simplifying coordination and delivery of programmes in a complex environment which includes multiple commissioners and providers (Two tier authority, Community Sport Partnership, School Sport Network etc.).

6.1 Physical activity

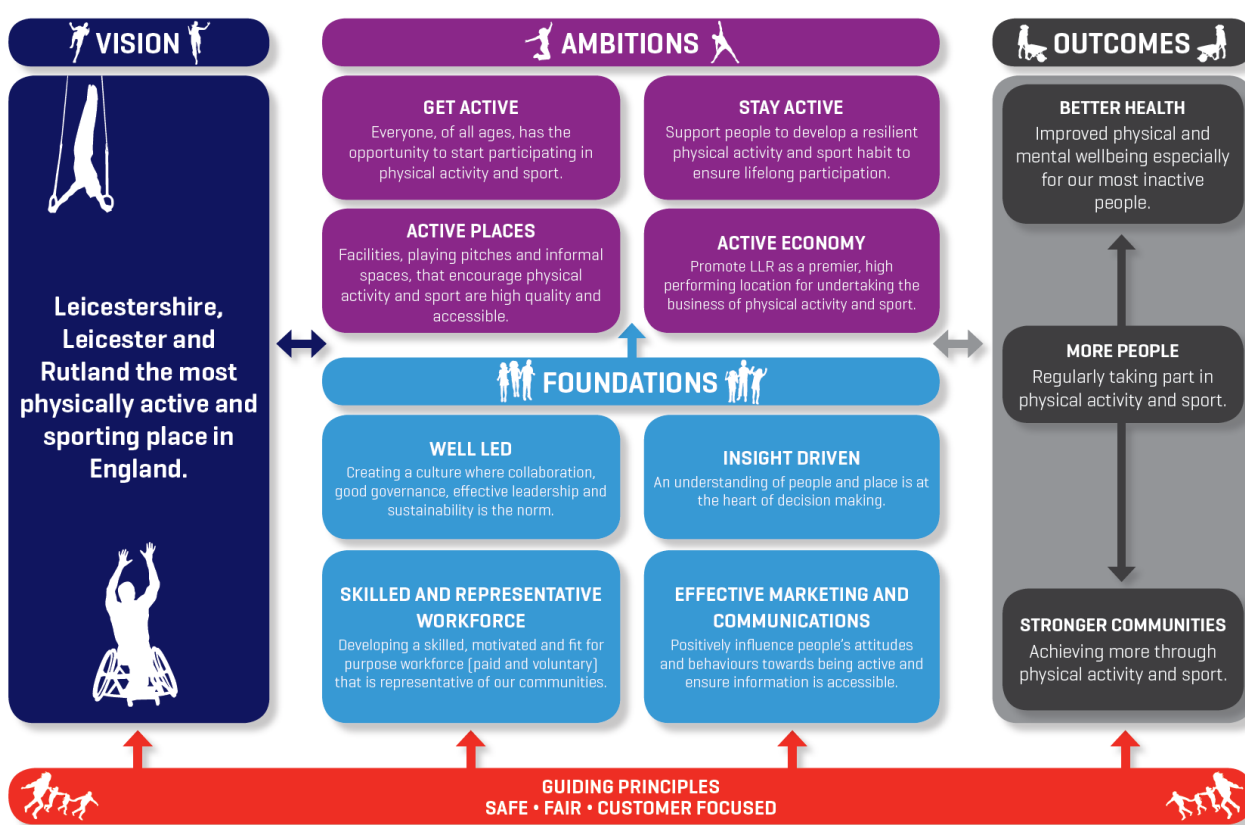
Leicester-Shire & Rutland Sport (LRS) led on developing Leicestershire’s Physical Activity and Sport Strategy 2017-21, which sets out a long-term vision for physical activity and sport, providing a framework for action for local partners.¹³⁴ The document sets out the planned activity to deliver the strategy across four key ambition areas;

Ambition 1 – Get Active – “Everyone, of all ages, has the opportunity to start participating in physical activity and sport”.

Ambition 2 – Stay Active – “Support people to develop a resilient physical activity and sport habit to ensure lifelong participation”.

Ambition 3 – Active Places – “Facilities, playing pitches and informal spaces, that encourage physical activity and sport, are high quality and accessible”.

Ambition 4 – Active Economy – “Promote LLR as a premier, high performing location for undertaking the business of physical activity and sport”.



There is a strategic focus on:

- A greater emphasis on physical activity, ranging from everyday lifestyle activity to structured sport.
- Supporting the local community to change behaviours and move from being inactive to active.
- Encouraging active ageing, helping to maintain health and independence longer in life, which will lead to a supporting a reduction in hospital admissions and social care costs.
- Developing Early years & fundamental movement skills within the early years, – to ensure school readiness and capacity to engage in physical activity opportunities.
- A greater use of existing community resource (green and recreational spaces) and services

to embed physical activity into local communities.

- A greater involvement in urban planning to tackle obesogenic environments.

6.1.1 Commissioned programmes

Sport and Physical Activity (SPA) Grant Agreement

The SPA grant agreement represents a collaborative commissioning approach use in Leicestershire to link up the physical activity related work of Leicestershire County Council (Public Health and Active travel), Leicester-Shire and Rutland Sport (LRS) and the county's seven district / borough councils and their local Leisure centre providers. Each year, districts produce a commissioning plan outlining how they will deliver local programmes and campaigns using the grant funding from Public Health. The commissioning plans are based on the following guiding principles:

- **Targeting those of greatest need:** Funding is distributed on the basis of need, with higher proportions being received by localities with the highest prevalence of health inequalities. Funding is targeted at individuals and communities with the highest need, with programmes targeting inactive participants and priority groups.
- **Evidence Based Approach:** Localities ensure their programmes target unmet need, identified using local and national data. Evidence based approaches are used and implemented using best practice guidance where available.
- **Partnership Approach:** A 'co-design' approach is central, with localities expected to demonstrate how interventions 'join-up' current/planned provision and used multi-agency partnerships to deliver their programmes.
- **Life-Course & Whole System Approach:** There is a move away from a separate child/adult offer with localities expected to demonstrate a life-course approach. Localities are encouraged to take a whole system approach rather than seeing priorities in isolation.

Alongside the guiding principles, the commissioning plan outlines priority work areas which localities must demonstrate that they are delivering against. Examples of this include;

- **School Sport & Physical Activity Programmes;** Funding should be utilised to deliver programmes such as active travel, fundamental movement programmes and targeted physical activity programmes to support the development of a healthy school.
- **Least Active Children, Young People and Adults;** Development and delivery of interventions that target the inactive population within community settings.
- Development and delivery of **population-based programmes** such as walking / cycling /running / back to sport schemes utilising the Active Together branding. Delivery of tailored rehabilitation referral programmes such as the exercise referral, falls prevention

and back pain sessions at a local level.

- **Active aging programmes;** Supporting the development of the older person's physical activity pathway.

6.1.2 Wellbeing @ Work

LCC Public Health and six local authorities have funded LRS to develop a Wellbeing @ Work package which organisations across LLR can access free of charge to support the implementation of workplace health initiatives. One of the major programmes is the Workplace Health Needs Assessment which provides practical advice on Workplace Health and standardised survey questions to identify the key priority areas including healthy eating, physical activity, smoking and alcohol awareness and sleep and stress management.

6.1.3 Healthy Tots and Healthy Schools programme

The Leicestershire Healthy Tots Programme (a healthy early year's programme) & the Leicestershire Healthy Schools Programme.

Early years settings and schools in Leicestershire have to fulfil criteria regarding physical activity and healthy eating to achieve Healthy Tots status and to renew their Healthy School status. Healthy weight is one of the public health priorities that schools can work on to achieve enhanced healthy school status.

Schools are encouraged through Leicestershire County council's Choose How you Move team to adopt a [Whole School Approach to Promoting Active Travel](#) including developing a School Travel Plan and through participating in Mode- Shift- Star. Schools are also encouraged to promote active travel to and from school as part of [Improving Air Quality](#).

Early years settings and schools are supported by Public Health through dedicated websites...

- Leicestershire Healthy Tots www.leicestershirehealthytots.org.uk
- Leicestershire Healthy Schools www.leicestershirehealthyschools.org.uk

...and through free healthy school/ tots training courses including:

- Schools- Developing Whole School Physical Activity Policies
- Early Year Settings: Purposeful Physical Play training and associated training commissioned and delivered by LRS

In September 2020 all schools will have to deliver statutory Health Education (including teaching about healthy eating and physical activity following the DfE statutory Guidance (June 2019).

6.1.4 *Healthy Together: 0-19 Healthy Child Programme*

- Five mandatory contact points (where children are weighed and measured and their measurements are plotted on a Percentile Chart) often provides Public Health nurses with an opportunity for a brief intervention to discuss healthy lifestyles and healthy weight and if necessary offer time limited 'Universal Plus' intervention.
- NCMP – follow up work (one to one / family) with a Public Health nurse

6.1.5 *Whole school approach to physical activity*

The Whole School Approach to Physical Activity (WSAPA), adopted in 2016, represents a paradigm shift in the way schools in Leicestershire plan and deliver physical activity and how public health and partners commission and influence this work.

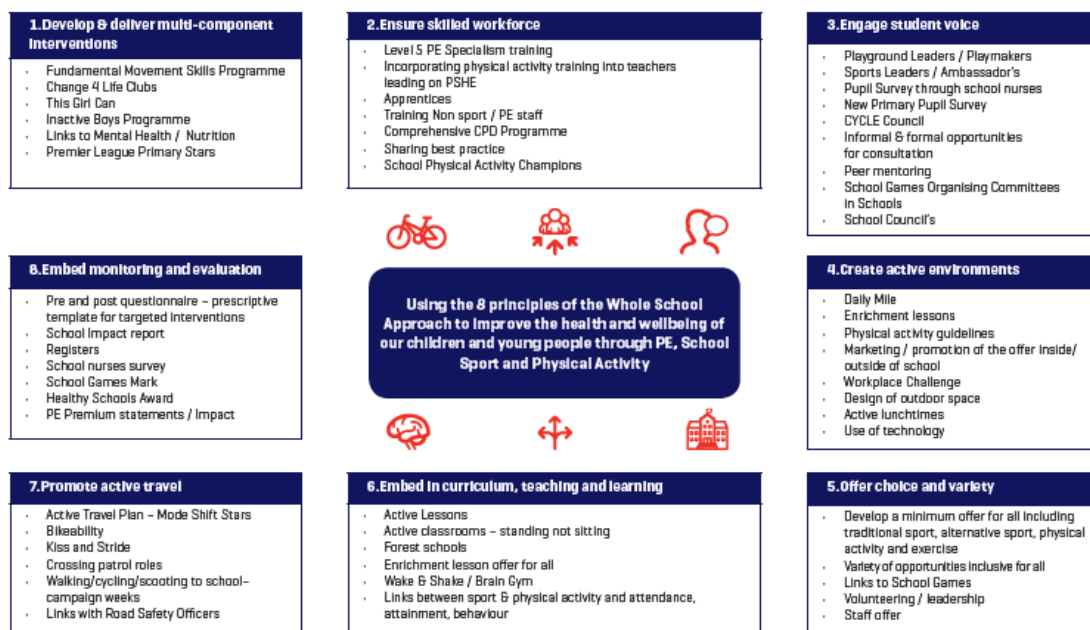
The programme is coordinated by LRS and primarily delivered by the School Sport & Physical Activity Network (SSPAN) managers, whose focus of work has been partially changed to focus on promoting the adoption of the WSAPA framework (as a tool to meet "Enhanced Healthy Schools" status described above) and delivering programmes to meet 4 public health priorities within the WSAPA framework;

- Increasing schools' engagement in active travel initiatives
- Delivering Fundamental movement skills programmes
- Developing new inactivity programmes
- Introducing the "Daily boost" (Daily mile) programme into Primary schools

The WSAPA model is shown below.



LLR Active Schools Leicestershire, Leicester and Rutland's Whole School Approach



The WSAPA approach encourages schools to plan and deliver physical activity interventions in each of the 8 themes (or principles) shown in the circle, in order to produce a holistic and sustainable change of culture within the school. The 8 principles are:

- Develop and deliver multi-component interventions
- ensure skilled workforce
- engage student voice
- create active environments
- offer choice and variety
- embed in curriculum, teaching and learning
- embed monitoring and evaluation

6.1.6 Exercise referral

The Leicestershire Exercise Referral (ER) programme is a well-established programme, commissioned by LCC Public Health, co-ordinated by LRS and delivered via the 7 District Local Authorities and their Leisure Centre Providers.

It is a health professional referral programme for patients that are sedentary or inactive and have a medical condition or chronic illness which would be improved by increased physical activity. The programme can be used as both a preventative programme and also as an extension of specialist clinical rehabilitation programmes, to maintain and establish routine physical activity for patients in the community setting. It is not a programme which is used to increase population physical activity levels and should be considered a targeted treatment intervention.

Patients are offered a 12 week, tailored physical activity programme, following an assessment by a BACPR (British Association for Cardiovascular Prevention and Rehabilitation) qualified Level 3 / 4 Instructor. Level 4 Instructors are able to support patients in higher risk categories, such as cardiac and COPD rehab, morbid obesity, etc.

Health Professionals make a paper-based referral to their local District Council ER Coordinator and make an assessment of risk for their patient. Future plans will integrate the referral process into SystemOne and PRISM, creating an electronic referral process for the first time.

Local authority monitoring data showed that in 2018/19, there were a total of 4,127 referrals for exercise (this figure may include more than one referral for the same person) from GPs and other health professionals in Leicestershire and Rutland. Of these, 8% were for 16-25 year olds, 40% for 26-55 year olds and 53% for 55 years and over. The five top reasons for exercise referrals were for the following health conditions (these figures may include multiple reason for the same person):

- Obesity/Overweight (1,584)
- Back Pain (942)
- Depression / Stress / Anxiety (909)
- Rheumatoid Arthritis / Osteoarthritis (882)
- Hypertension (748)

The current ER programme commissioned by Public Health is predominantly a Tier 2 programme delivered by Level 3 Instructors, but includes such Tier 3 lead by level 4 Instructors, as a way to demonstrate effective community based rehabilitation programmes to potential CCG commissioners. As a rule, CCGs have the responsibility to commission level 4 specialist rehabilitations programmes and have begun to recognise the opportunities of delivering these through the District lead ER platform.

Examples of recent “joined up” commissioning include the “Steady Steps” falls prevention programme and a pilot back pain management programme.

6.1.7 Steady steps

The recently established “Steady Steps” falls management programme (known as FAME nationally) is now being delivered across all districts in Leicestershire, following a thorough one-year evaluation of the programme led by Public Health and the University of Nottingham.

Steady Steps is an evidence-based, 24-week strength and balance training programme that has been shown to reduce the number, cost and long-term complications of falls in older people (aged 65 and above). In clinical trials it has been shown to reduce injurious falls by 40% in targeted populations and pilot data from Leicestershire and Rutland shows an 18% reduction in falls.

The programme is delivered by qualified Postural Stability Instructors (PSIs) in community venues such as village halls and leisure centres and consists of weekly 1-hour group exercise classes (approximately 10 participants per class). Participants are also advised to complete two 30-minute home exercise sessions. The programme's exercise components include progressive strengthening and balance exercises targeted to the trunk, arms and legs, functional floor skills, cardiovascular conditioning, flexibility training and adapted tai chi.

Following the 24-week programme, maintenance classes are run to sustain behaviour changes and strength and balance improvements. In addition, we have also found participants are keen to keep meeting as a social group and are willing to self-fund the ongoing maintenance programme.

6.1.8 Built Environment

An ever-increasing body of research indicates that the environment in which we live is inextricably linked to our health across the life course. For example, the design of our neighbourhoods can influence physical activity levels, travel patterns, social connectivity, mental and physical health and wellbeing outcomes.¹³⁵

Leicestershire County Council with LRS are promoting the delivery of Active Environments through, encouraging policy and practice in the planning system that positions individual health and physical activity more at the forefront of local design and development of local infrastructure.

Through the management of the Strategic Growth Plan, a health work stream is being developed to shape the future design of built environments in a way that encourages individuals and communities to be more physically active.

Embedding the principles of developing Active Environments at a strategic level, could result in:

- Housing developments, with additional physical activity infrastructure which make walking and cycling the preferred method of individual transport and reduced reliance on the car and motorised transport;
- Neighbourhoods where people live closer to where they work and sustainable transport becomes a realistic option;
- Safe mixed-use developments and neighbourhoods, with increased physical recreation infrastructure, where residents feel safe and encouraged to maximise outdoor space for sustainable travel and physical activity;
- A contribution to increasing local population physical activity levels and a factor in reducing air pollution and obesity.
- Supporting Local Authority corporate challenges to improve health outcomes, develop community cohesion, and impact on community safety and neighbourhood resilience.

Working with colleagues at Sport England, Town and Country Planning Association, Local Government Association and others, Leicestershire County and LRS are engaging Chief Executives, Environment and Transport teams, and other sector leaders to adopt a collaborative leadership approach to shaping our future environments to ones that can be considered Active Environments.

Officers within LRS and County Council are also working with Local Planning Authorities to develop uses of section 106 funding from housing developments to provide additional facilities and services that support increased physical activity e.g. parks, play facilities, sports facilities and dedicated green infrastructure as part of existing and future housing developments.

Using the principles set out in the published Active Design guidance, the challenge over the next few years is to encourage the adoption of these key principles into local planning policy and delivery of the built environment.

6.1.9 Active Travel

Leicestershire County Council (LCC) have a Safe and Sustainable Travel Team (SSTT) that sits within the Environment and Transport Department. The team has an over-riding purpose to reduce single occupancy car use in Leicestershire by promoting and supporting alternative forms of transport, and by raising levels of cycling and walking. The team recognise the co-benefits of this alongside health, air quality, physical activity, financial, workplace wellbeing, network congestion and economic resilience benefits of active travel and raising levels of physical activity.

There has been significantly more partnership working in recent years with liaison with partner agencies including Public Health, district councils and LRS.

SSTT comprises four sub teams:

- **Road Safety:** provide Bikeability training to approximately 3,000 primary aged children per year; run the School Crossing Patrol service to encourage walking to school; runs general Road Safety sessions within schools; runs Community Speed Watch schemes to allow pedestrians greater confidence and protection from speeding drivers. Other programmes include SAGE elderly driver training days, Pre-Driver (aged 16) Days, Speed Awareness Workshop plus many others. The team also manages LCC's role in the Leicester, Leicestershire and Rutland Road Safety Partnership (LLRRSP).
- **Public Transport:** The team monitors the commercial bus network, responding to market changes, working in conjunction with transport operators, to provide service provision across Leicestershire in-line with LCC adopted Passenger Transport Policy and Strategy (PTPS); the team works in partnership with passenger transport operators to help reduce disruption caused by planned road works and minimise the impact these works have on

service reliability and punctuality. The team also works in partnership with Leicester City Council to manage Park and Ride sites and bus services.

- **Public Rights of Way:** this team maintains the integrity of the public right of way network, liaising with landowners and resolving legal disputes over footpath access, provides advice to land owners and Local Planning Authorities through the development management process in regard to new developments for footpath access and active travel connectivity.
- **Sustainable Travel:** this team funded by LCC plans and delivers much of the active travel workstreams. Part of this team focuses on the delivery of the 3-year Access Fund, programme. The programme is delivered in conjunction with Leicester City Council and has the aim to increase levels of cycling and walking in a defined geographical area through the delivery of revenue funded behavioural change measures i.e. not capital funded infrastructure or structural change, but by delivery of projects and initiatives within schools, business and communities. The programme is funded by Department for Transport to the value of £3m for three years with 2019-2020 being the third and final year of the programme. The Access Fund delivery area was identified as an area that is likely to experience significant growth (i.e. with residential, commercial, retail developments) in the next ten years, with the subsequent anticipated strain on the transport network. The programme aims to mitigate that strain by embedding behaviour change principles within programmes and projects. The Access Fund area is a diamond shaped area roughly running from Birstall in the North down to Fosse Park in the South, and Ratby in the West across to Braunstone in the East. The area covers City and County boundaries enabling successful partnership working.

Examples of ongoing work:

- ✓ Active Travel Schools Officer-a new role part funded by LCC and LRS-working exclusively within schools to increase active travel and to capitalise on the Chief Medical Officer 60 minute a day physical activity guidance by helping schools embed active travel. Includes banner competitions, establishing Park and Stride sites (e.g. Millfield and Ravenhurst schools), teacher training, assemblies, piggybacking onto national campaigns (walk to school week, Clean Air Day etc), provision of grants for equipment and much more.
- ✓ School Clear Zone-established a no waiting zone around Millfield Academy in Braunstone to prevent school gate congestion and improve air quality and pupil safety. Leicestershire is one of only a few local authorities to do this and has been very successful with 75% decrease in cars parking near the school, and a significant uptake of the nearby Park and Stride site.
- ✓ County Hall Travel Plan Coordinator-a new role to help address the parking issues at County Hall by way of behaviour change for LCC staff. Future activities will involve cycling

lessons, led walks, increased cycle parking provision, Liftshare scheme refresh, Park and Stride sites locally, workplace wellbeing activities etc.

- ✓ Electric bikes—a pool of four bikes for LCC staff use on duty which is popular for meetings and site visits. We also have a fleet of ten that are given to businesses for a 6-week period for their staff to use for commuting and leisure. We provide bikes, locks, coats, panniers and training, along with personalised route support. So far over 35% of users have continued to commute by bike or electric bike once the pilot scheme ends.
- ✓ Choose How You Move Rewards app. This is an app powered by Betterpoints, which tracks and rewards users for walking, cycling, public transport use and car share. It currently has 1,400 active users with a really high engagement rate.
- ✓ Adult Cycling Courses are delivered free to LCC staff and at £50 cost for other residents. Over 100 adults have learnt to ride and the feedback and testimonials are excellent.
- ✓ Business engagement work with businesses helping their staff to travel actively. We use a personalised approach along with established COM-B behaviour change principles to support staff to make a change. We also acknowledge that active travel can be encouraged by less obvious means, e.g. someone who takes part in a lunchtime led walk may then be persuaded of their own abilities to use a Park and Stride site or get off the bus a stop earlier etc. We will typically provide travel advice and information, cycle confidence sessions, Dr Bike services, led walks, etc.
- ✓ Business grants are available for up to £5,000 to overcome barriers to active travel. Examples of grant funding last year included a bike repair station for Leicestershire Police, showers and bike parking for Stephen George Associates, EV charging points for Next, walking clothing for Lathams, electric bikes for an LCC social care outreach team that now conduct many of their home visits by electric bike.
- ✓ Personalised mapping, partly funded by Public Health, allows us to produce personalised maps to highlight walking and cycling routes for individuals.
- ✓ Job Show; The CHYM have sponsored this for three years, allowing us access to prospective employees and also employers, ensuring these groups are aware of their travelling choices.
- ✓ Business breakfasts—we attend local district council business forums, Chamber of Commerce etc—we have also hosted our own at the National Space Centre.
- ✓ Local events: We have a presence at Bike Fest, Ride Leicester festival, City Ride etc. —all designed to support engagement and encourage the active travel message.
- ✓ Modeshift is a national accreditation scheme that recognises excellence in active travel—we have the only Gold accredited company in the UK (Next PLC) and we are recognised as being an example of good practice—presented at conference etc.

6.2 Other opportunities for physical activity; the role of Leisure and Culture

Whilst there is no central place for data to be recorded, it should be noted that there is a significant contribution made by the Leisure and cultural sectors in terms of providing a wide range of opportunities for people to be more active. This might include walking along canal tow paths, traditional/folk dancing, visiting museums or outdoor parks.

6.3 Weight management – Strategic focus

A number of aims have shaped the commissioning of local weight management programmes:

- Adult and children’s programmes should be available in all districts throughout year.
- Development of Maternity focussed (pre / post-natal) weight management programme.
- Development of new targeted programmes for men, teenagers and South Asian groups.
- Integration of multiple programmes nutrition and healthy eating programmes into one commissioned “integrated Weight Management Service”.

6.3.1 Commissioned programmes

The present weight management service is delivered by Leicestershire Partnership Trust’s (LPT) Leicestershire Nutrition and Dietetic Service (LNDS). LNDS delivers the following range of programmes across Tiers 1-3:

- **LEAP** - A tier 2, 10-week adult weight Management & exercise programme.
- **FLIC** - A tier 2, 8-week Children and Families Lifestyle Club (FLiC), including physical activity and Healthy Eating.
- **DHAL** - A tier 2, 10-week adult weight Management & exercise programme for South Asian population.
- **Back to Basics** – A targeted adult cookery programme delivered by LCC Adult learning team.
- **Food Routes** - A school based healthy eating programme, focused on nutrition healthy packed lunches.
- **Big Cook Little Cook** – A targeted, school-based family cookery programme.

Leicestershire Partnerships NHS Trust’s ‘Healthy Together ‘0-19 Healthy Child Programme’ has 3 websites and runs a campaign and training programmes:

- **Health for teens** – website: www.healthforteens.co.uk
- **Health for Kids** – website www.healthforkids.co.uk
- **Health for Under 5s website** <https://healthforunder5s.co.uk/>
- **Move it Boom campaign** – an annual campaign to promote physical activity to school aged children.
- **Community training programmes**

LNDS is an NHS, Dietitian lead service and is most cost effective when delivering specialist interventions to more high risk, overweight and obese patients. As such, the programmes offered by the service are relatively time-intensive and have limited capacity to address the large increases in prevalence of obesity that are emerging.

A tier 1 “gateway” service designed to support a greater number of low-risk users was commissioned from Weightwatchers between 2014 - 2017. This service more than doubled the number of patients receiving weight loss support, but was decommissioned due to cuts in local authority funding.

6.3.2 Leicestershire food plan

Leicestershire is a member of the Sustainable Food Cities (SFC) network (accepted May 2019). This national framework is managed by 3 national charities and the framework is a tried and tested model to develop food systems in an area as well as providing recognition through high profile awards (Bronze, Silver and Gold). This provides us with an approach to help support localities and to demonstrate progress – we aim to apply for a bronze award for our work in Leicestershire by 2021. Alongside this, we aim to support 2 localities to achieve the Bronze Award in a similar time period. An important part of this work is helping to develop the model for a County / Regional SFC member in collaboration with the national SFC team, ensuring Leicestershire we will be an active member of the growing SFC network in this regard.

The SFC framework focusses on 6 priority areas, these are:

1. Promoting healthy and sustainable food and drink to the public.
2. Tackling food poverty, diet-related ill health and access to healthy food.
3. Building community food knowledge, skills, resources and projects.
4. Promoting a vibrant and diverse sustainable food economy.
5. Transforming catering and food procurement.
6. Reducing waste and the ecological footprint of the food system.

The Good Food Leicestershire Charter sets out our vision for good food in Leicestershire. This Leicestershire Food Plan demonstrates how we intend to achieve the vision in the Charter.

Our vision is that good food supports and sustains the local economy; reduces the impact of poverty; helps people towards better health; has a reduced environmental impact; and is affordable, accessible and nutritious.

The principles of the Charter are –

People are supported and encouraged to grow, cook, buy and eat good food

- Skills and training are offered to help people gain the knowledge they need to eat well and affordably
- High quality, fresh and nutritious food is accessible for all, particularly reducing health inequalities and food poverty
- Positive messages are used to encourage the use and provision of high quality, fresh and nutritious food

A thriving local food and drink economy that works for people as much as they work for it

- The network of food and drink businesses and producers contributing to the local food chain are supported and celebrated to strengthen the local economy and promote local jobs including allowing for the workforce of the future
- Local food and drink businesses and producers contribute to healthy lifestyles, healthy choices and actively support access to good food for all

A food system which has a reduced environmental impact

- Food waste is prevented and reduced where possible, with any waste produced being dealt with responsibly through surplus being redistributed
- Food production, processing, distribution and disposal has a reduced environmental footprint
- The food system's contribution to climate change is reduced

A key element towards achieving the vision in the Charter is that we want it to be steered by a network of public, private and community organisations working towards the principles above. This will be achieved by breaking down barriers and working collaboratively; initiating practical projects in key elements of the principles above; identifying or creating hubs of great practice in localities across Leicestershire; and supporting local areas to celebrate and enhance their local food system.

Leicestershire's ambitions

In starting to develop Leicestershire's Food Plan, we have identified 5 ambitions which will focus our initial activity, but which will carry forward into future work. These are key actions identified across Leicestershire County Council departments, developed from conversations with key stakeholders across the wider county. The ambitions constitute some elements of best practice from elsewhere, as well as being aims which will build local capacity and strengthen the food system. By identifying some initial project ideas and working with partners in localities to initiate project solutions we will be able to test approaches and learn lessons from their successes and challenges. This will be fed into project planning, as well as into the wider network, which will include dissemination and events

(as detailed within the action plan below).

The 5 ambitions are:

1. Facilitate partnership activity working towards multiple food activities in community hubs* in order to tackle food poverty – including access to affordable (surplus) food, training and resources as well as developing volunteer opportunities
2. Seeking opportunities to work across departments e.g. cooking – work across departments and sections in Leicestershire County Council and external organisations, to develop a coordinated approach to nutritious, affordable cooking minimising food waste and working with surplus food.
3. Business networking - linking local businesses, producers and farms with local customers, schools and catering. Use these links to improve the local food economy and to influence healthy and nutritious food manufacture, options for staff health and wellbeing and food waste options
4. Locality working – supporting localities to express their own food plan ambitions
5. Develop our expertise through communications activities e.g. develop a seminar series, food summit event and specific campaigns (e.g. Sugar Smart)

*A community Hub is a place where people from a local area will use to access information, activities or support. An example would be the three Community Houses run by Hinckley and Bosworth Borough Council – these are right in the heart of communities and are well used and liked.

6.3.3 Commissioned programmes

1.1.1.9. Food for Life (FFL) – provided by Soil Association

When funding the Food for Life programme in Leicestershire started in 2013, Public Health was addressing a historically under-resourced area of work, which needed to be addressed in order to develop a holistic obesity strategy.

Fundamentally, FFL is a long-term intervention to bring about organisational and culture change in schools (although it is equally applicable to other large public organisations, such as nurseries, care homes and hospitals). FFL is a whole system approach addressing all aspects of food in schools, through the following interventions:

- Meaningful and sustainable organisational policy changes.
- Improved school meal quality and uptake.
- Growing programmes in schools.
- Farm visits and links to local food producers.
- Cooking and nutrition in the curriculum.

- Community engagement (grandparent gardening, school meal invites, Farmers markets).
- Supporting achievement of National FFL Catering mark.
- Supporting use of locally grown and organic produce.
- Trains and upskills cooks and teachers.
- High profile PR Profile for local food issues
- Developing the school as a healthy hub for their community

1.1.1.10. Master Gardeners – provided by Garden Organic

The Master Gardeners programme is commissioned to support long-term food sustainability, by building a network of skilled volunteers to encourage more food growing in Leicestershire communities. Over 60 Master Gardener volunteers, with teams located in every borough and district, support novice food growers individually in their own homes and gardens and also through community growing projects.

Food growing can contribute to tackling the big issues of childhood obesity, food poverty, social isolation and poor mental health, as well as getting all sections of the community outdoors and active.

Leicestershire residents are offered 1:1 mentoring for 12 months, taking them through a full season to inspire, build confidence and gain basic gardening skills. Supported growers include people with mental or physical disabilities, families with young children, housebound carers and new home owners who need some encouragement and advice to get to grips with their new garden.

In community settings, food growing is the perfect way to build communities and grow people. Volunteers share their gardening knowledge and skills and inspire new growers in a wide range of settings, from nurseries and schools, through residents' gardens on housing estates, to groups for elderly residents of care homes. In addition to offering gardening advice, with support from Garden Organic, volunteers have enabled many new groups to become constituted and find funding, working towards becoming sustainable community projects.

The programme works closely with a wide range of 3rd sector and local government organisations to support existing as well as new food growing communities and has developed a strong and supportive network with community food growers across the county.

1.1.1.11. Active Families

Leicestershire County Council, working in partnership with the Home Start Charities, District / Borough Councils and LRS have been successful in securing funding from Sport England to help low income families become more active together. Through the programme we will work directly with families to assess physical activity needs, and co-produce a bespoke activity plan with achievable,

time related goals. Families will receive weekly visits from volunteers who will review their physical activity plans and help with difficulties they've faced and attend activity sessions with families to boost their confidence and help them develop a manageable routine. We will work to ensure that there are free and low-cost family physical activities in the community utilising outdoor gyms, parks and other green spaces.

1.1.1.4. *Holiday Activities & Food*

Barnardo's, working with local partners (Leicestershire County Council (including Leicestershire Traded Services), LRS, Voluntary Action Leicestershire), has secured significant funding from the Department for Education to provide a Summer Holiday Activities and Food Programme in 2019. Grants will be distributed to holiday club providers to ensure that Free-School Meal Eligible children in the area can access up to 4 hours of provision on 4 days of the week for 4 weeks of the summer holidays with a meal provided on each day. Holiday Club providers will need to demonstrate that they are providing food that meets the school food standards, including nutritional education and physical activity every day within their setting as well as providing fun and enriching activities that provide children with opportunities to develop new skills or knowledge.

7 Unmet needs/gaps

Overarching strategic gaps

Currently, we lack a meaningful national obesity strategy that empowers and resources local authorities to address the complex causes of obesity. Political lobbying of policy and decision makers and advocacy approaches are a proven public health strategy to bring about meaningful population scale behaviour change and regulation of unhealthy practices. These approaches need to be used to counter the highly sophisticated campaigning and influence of lobbyists aiming to undermine and confound positive policy changes and health messages and the way these are perceived by the public. Such approaches should be integral to a wider obesity strategy, locally and nationally.

Working with partners, it is timely to further develop a local obesity strategy for Leicestershire. This strategy needs to set out how we will build a true whole system approach to obesity in Leicestershire, with strategic responsibility and accountability clearly defined across the key stakeholders involved.

Unmet needs of children

Data showing a drop in physical activity in children in secondary schools and the low proportion achieving 30 minutes of PA within school time is concerning.

Inequalities in child overweight and obesity in relation to both deprivation and ethnicity emphasise the need to have weight management services that reach BAME and poorer communities to address inequalities identified.

There remains a gap in the early identification and treatment of poor physical literacy in pre-school and reception / year 2 schoolchildren. There is increasing evidence of children having poor physical development and 'readiness' for school, with underdeveloped fundamental movement skills (such as the ability to be physically coordinated, catch a ball, balance or hop on one leg, jump) increasing the likelihood of future obesity, inactivity and poor educational attainment.

Unmet needs of adults

A joined-up and coordinated weight management pathway is needed to work with obese patients efficiently. Currently, there are gaps in commissioned tier 3 and 4 obesity services and maternal obesity services.

Similarly, more could be done to commission joined-up exercise rehabilitation pathways for patients with long-term conditions, in order to sustain their lifestyle behaviour changes, once discharged from NHS services. Notable gaps currently, include inclusion of community physical activity in cancer, obesity, cardio-pulmonary and musculo-skeletal care pathways.

Data show that there is a reduction in physical activity in working age adults and decrease in ‘white – other’ participation and participation in those with 2 impairments from the national average.

Environment

There is currently a lack of join up between those responsible for Public Health, planning and licencing around fast food outlets (number and food formulation) and advertising, required to address the increase in fast food outlet density over recent time.

8 Recommendations

Overarching strategic recommendations - national

1. There needs to be stronger and more coordinated lobbying and advocacy to raise the profile of obesity within national strategies. Public Health funding is inadequate to address the problem at a local level, with reductions in funding and services eroding current provision and capacity to adequately address the complex causes of obesity.
2. Identify opportunities to lobby specifically for stronger Government regulation of Food Industry to replace voluntary agreements, and to meet UK Parliament Health and Social Care Committee recommendations (see section 5).
3. Support schools and early year’s settings to promote the Personal Development (judgement in the new Ofsted Education Inspection Framework from September 2019) of Children & Young People to build their resilience by participating in sport and physical activity

Overarching strategic recommendations - local

4. Develop a obesity strategy partnership that adopts a whole systems approach across the life-course and including health social, economic and environmental components. The strategy should promote behavioural science decision-making, service design and implementation, the embedding of cross-cutting obesity priorities into wider strategic policies and more joined up working with the voluntary/community sector.
5. If Leicestershire is serious about addressing obesity, we must seek to identify partner funding and to develop better strategies and skills to successfully bid for and secure increasingly scarce sources of funding for public health activities.
6. Prioritise cycling and walking as the preferred means of transport in Leicestershire. Including health impact assessments on new large developments, adoption of 20 mph limits/zones where appropriate, cycling and walking infrastructure.
7. Establish a task force (district and county) to review opportunities for working more closely with trading standards and licencing authorities on fast food outlets, food formulation fast food retailers and advertising. Explore opportunities to increase business rates for unhealthy outlets / decrease business rates for healthy outlets and influence planning

- policy to reduce fast unhealthy food outlets. Support healthier product placement in shops / signage in shops for healthy and unhealthy foods.
8. Co-ordinate with local planning authorities to influence policy and planning guidance increasing provision of active travel and high-quality walking infrastructure in new developments.
 9. Work with Leicester-Shire and Rutland Sport to develop health and physical activity design guidance for the built environment influencing the wider design of new developments to increase the prevalence of sustainable travel, active recreation facilities.
 10. Use the “Leicestershire Food Plan” and Sustainable Food Cities movement as a central platform to build consensus on local priorities and solutions, and to engage and support communities, businesses and strategic planners to develop creative and innovative solutions to health eating and food sustainability issues and be an advocate for affordable healthy food in Leicestershire.
 11. Coordinate work on Active travel / rights of way linked to wider physical activity programmes commissioned by public health.
 12. Identify opportunities to promote physical activity through culture and leisure.
 13. Identify opportunities to promote locally-available services for obesity, physical activity and nutrition to the local population, including NHS patients and professionals.
 14. Support schools through the Leicestershire Healthy Schools Programme and the Healthy Schools Rating Scheme to prepare for statutory health education from September 2020 including the curriculum relating to ‘Physical Health & Fitness’ and Healthy Eating.
 15. Continue to support the implementation of the Leicestershire Children and Families Partnership Action Plan 2018-2021, with a particular focus on: maternal obesity (Priority 5)
 16. Continue to support the action(s) on maternal obesity in the LLR Healthy Pregnancy, Babies and Birth Strategy (Formerly LLR Infant Mortality strategy)

Children’s obesity and inactivity

17. Fully Implement the whole school approach to focus on more schools achieving 30 mins of activity per day, targeting fundamental movement skills to children at risk of poor development.
18. Ensure weight management programmes reach out to BAME and more deprived groups and support programmes that address Family holiday hunger.

Adult obesity and inactivity

19. Develop workplace-focused programmes to address the increase in the inactive and sedentary workforce.
20. CCGs and the local authority review opportunities to jointly commission weight management services (including tier 3 specialist services) and physical activity pathways for

disease prevention and management (including cancer, cardiorespiratory, falls, obesity, back pain/MSK), establishing a route for oversight and accountability of this e.g. STP prevention, or UPB or H&WBB.

21. Make more of social prescribing to support healthy lifestyles outside of clinical pathways.
22. Promote use of rights of way and access to green spaces including the council's own parks.
23. Work with employers to encourage health needs assessment of workforce and interventions to reduce sedentary time at work and support people as they transition into retirement to continue to be active.

GLOSSARY OF TERMS

BMI	Body Mass Index
CCG	Clinical Commissioning Group
CIPHA	Chartered Institute of Public Finance and Accountancy
ELRCCG	East Leicestershire and Rutland Clinical Commissioning Group
GP	General Practitioner
IMD	Index of Multiple Deprivation
JSNA	Joint Strategic Needs Assessment
LLR	Leicester, Leicestershire and Rutland
LPT	Leicestershire Partnership Trust
LRS	Leicester-Shire and Rutland Sport
LSOA	Lower Super Output Area
MSOA	Middle Super Output Area
MUB	Multiple Unhealthy Behaviours
NCMP	National Child Measurement Programme
NHS	National Health Service
OECD	Organisation for Economic Cooperation and Development
PHE	Public Health England
QOF	Quality Outcomes Framework
SMI	Severe Mental Illness
UHL	University Hospitals of Leicester
WLCCG	West Leicestershire Clinical Commissioning Group

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