

MANCHESTER JOINT STRATEGIC NEEDS ASSESSMENT 2015/16

CHILDREN AND YOUNG PEOPLE (STARTING WELL AND DEVELOPING WELL)

CHAPTER: Childhood

TOPIC: Childhood Obesity

Why is this important?

In the past 25 years obesity rates have more than doubled, leading to the United Kingdom (UK) being in the grip of an obesity epidemic. The proportion of adults with a normal body mass index (BMI) has decreased in recent years, whereas the proportion of both sexes that are classified as obese has increased (Health Survey for England, 2011).

Obesity is an important risk factor for a number of chronic diseases during adulthood, which are the principal causes of death in England including coronary heart disease (CHD), stroke and some cancers (Foresight, 2007). Being overweight and obese is also associated with several other serious life shortening conditions such as type 2 diabetes, hypertension and dyslipidaemia, which are strongly linked to an increased risk of CHD (Foresight, 2007. Healthy Weight Healthy Lives (HWHL), 2008). As well as the physical risks to health of being overweight and obese there is also psychological effects, for instance there is a social stigma attached to obesity and those affected often face prejudice and discrimination and suffer low self-esteem (North West Public Health Observatory (NWPHO), 2008).

There is strong evidence to link childhood obesity with increased risk of elevated blood pressure and cholesterol, glucose intolerance, adverse blood lipid profiles and adverse changes to the heart. Other possible consequences of obesity in children include poor dental health, mechanical problems e.g. back pain and foot strain, exacerbation of asthma, type 2 diabetes and psychological problems such as poor self esteem and depression. Some of these health problems occur in childhood, while others appear in adulthood as a consequence of childhood obesity. Obese children are more likely to become obese adults, increasing the likelihood further of developing such health problems later in life (HWHL: A toolkit for developing local strategies, 2008).

The most common method of measuring obesity is BMI. BMI is a measure of weight status that adjusts for height. BMI is a person's weight in kilograms divided by the square of their height in metres. The British 1990 growth reference (UK90) for BMI is used to determine weight status according to a child's age and sex. Children whose BMI is between the 85th and less than the 95th centile are classified as overweight and those at, or above the 95th centile are classified as obese. This definition is commonly used in the UK for population monitoring rather than for clinical purposes.

For clinical (individual) assessment, children whose BMI is between the 91st and less than the 98th centile are classified as overweight and those at or above the 98th centile are classified as obese.

The Manchester Picture

In 2012, an estimated 62% of adults (aged 16 and over) were overweight or obese. Men and women have a similar prevalence of obesity, but men are more likely to be overweight (42% compared to 32%).

Obesity among 2–10 year olds rose from 10% in 1995 to around 13% in 2010-2012 according to Health Survey for England (HSE) figures. There are growing indications that the previous upwards trend in child obesity may now be flattening out. However, it is still too early to be certain that this represents a long-term change in the trend, particularly for older boys. Future HSE data will confirm whether this is a persistent pattern, or just a short-term change in a long-term upwards trend.

Health Survey for England (HSE) figures show that the prevalence of obesity in children aged 2–10 years (averaged over the latest three years) is around 12% and the prevalence of excess weight (overweight including obesity) is around 25%. In 11-15 year olds the prevalence of obesity (averaged over the last three years) is around 20% and the prevalence of excess weight (overweight and obesity) is around 36% (HSE, 2013).

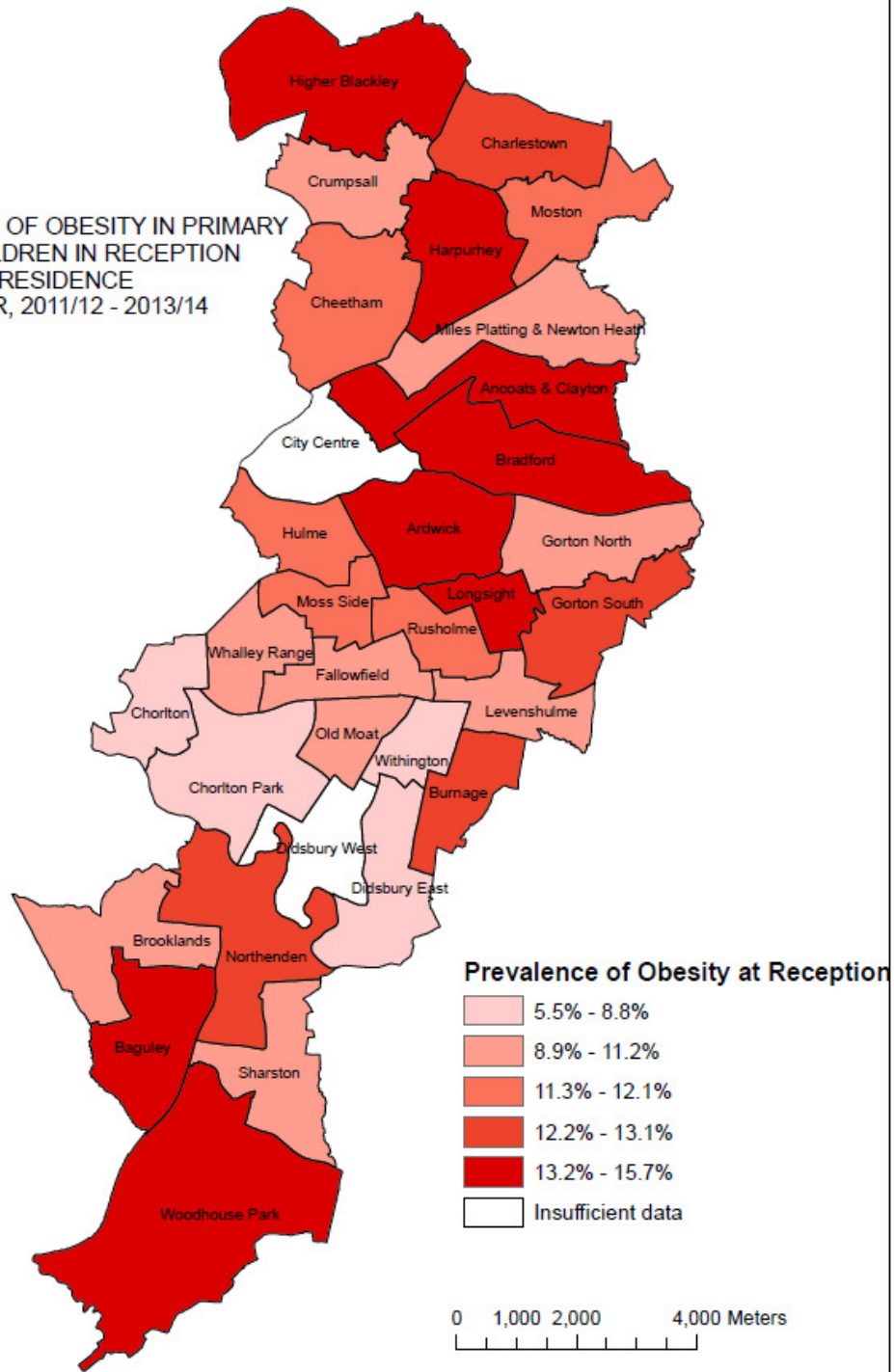
The National Child Measurement Programme (NCMP) weighs and measures children at school in Reception Year and Year 6. In Manchester in 2013/14 the percentage of obese children in Reception and Year 6 was higher than the National and North West average. In Reception 11.7% of children were classified as obese, with levels more than doubling by year 6 to 25%. The year-on-year rise in obesity levels in Manchester have varied but with our high levels of children measured we are confident in having an accurate picture of obesity in primary school aged children.

Inequalities in the City

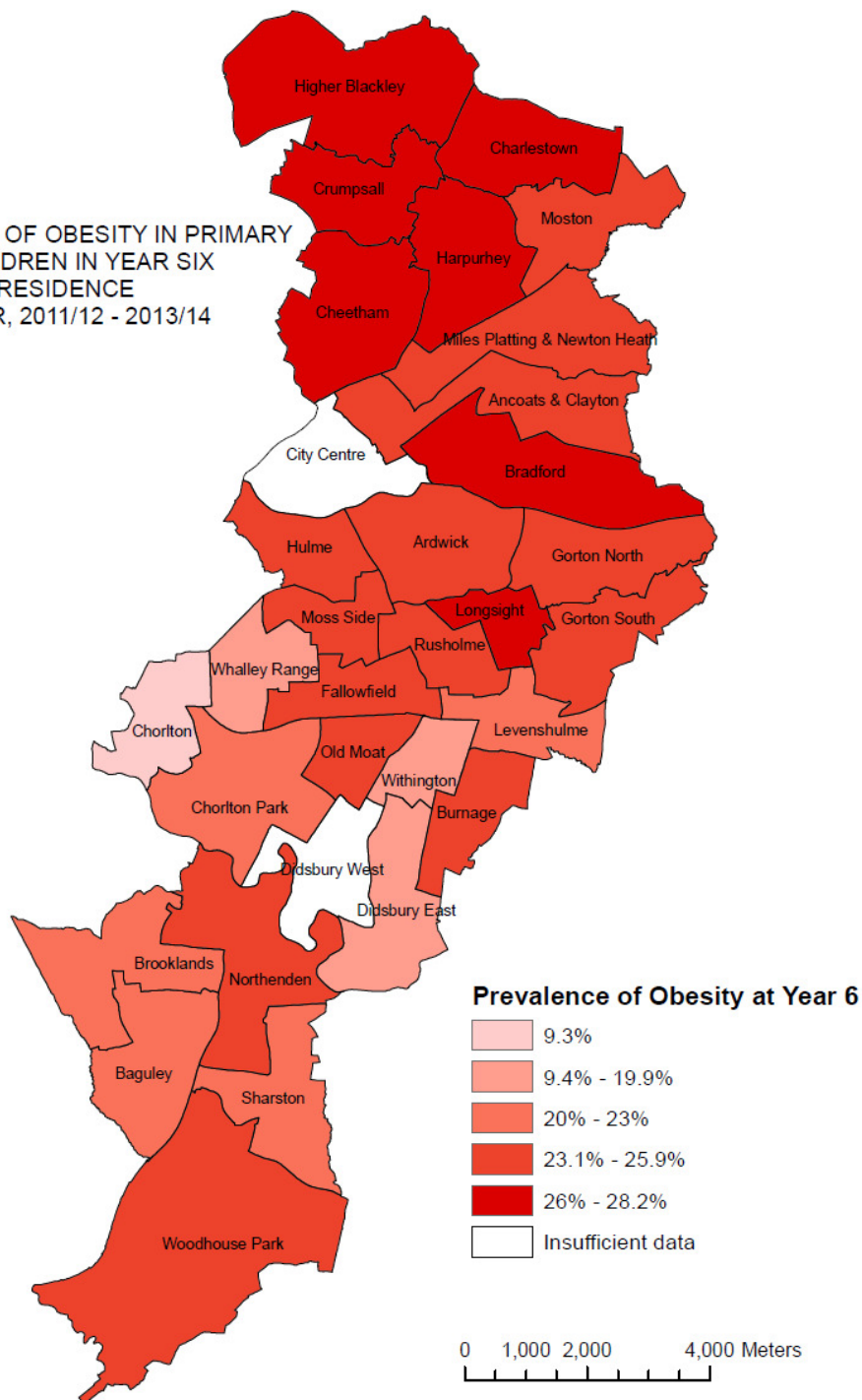
Obesity prevalence is strongly correlated with deprivation and is highest in the most deprived areas (Public Health England (PHE), 2015). There is an almost linear relationship between obesity prevalence in children and the Index of Multiple Deprivation 2010 (IMD) decile for the area where they live. Child obesity prevalence in the most deprived tenth of local areas is double that in the least deprived tenth (PHE, 2015).

The maps below highlight the prevalence of obesity in reception and year 6 by ward of residence, using the NCMP data from 2011/12 to 2013/14. The maps visually demonstrate the link between obesity prevalence and deprivation, with the most deprived wards in Manchester (e.g. Harpurhey, Higher Blackley, Ancoats and Bradford and Woodhouse Park) having much higher childhood obesity prevalence, than the least deprived wards (e.g. Chorlton and Didsbury East).

PREVALENCE OF OBESITY IN PRIMARY SCHOOL CHILDREN IN RECEPTION BY WARD OF RESIDENCE MANCHESTER, 2011/12 - 2013/14



PREVALENCE OF OBESITY IN PRIMARY SCHOOL CHILDREN IN YEAR SIX BY WARD OF RESIDENCE MANCHESTER, 2011/12 - 2013/14



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In addition to deprivation there are also significant inequalities in obesity prevalence for both girls and boys, and across different age groups (PHE, 2015). Recent analysis by PHE that looked at NCMP trends shows a downward trend in obesity prevalence among boys in Reception while the trend among girls of this age appears to be relatively stable over time. Obesity prevalence among boys and girls in Year 6 shows an upward trend, with a higher average increase in Year 6 girls than boys.

In addition to deprivation, age and sex there is also variation in obesity prevalence by ethnic group for both Reception and Year 6 children. Reception children from Indian and Mixed ethnic groups have a similar prevalence of obesity to White ethnic groups. Obesity prevalence among boys in this age group is highest in the Black African, Bangladeshi, and Black Other groups. Among girls in Reception obesity prevalence is highest among those from Black African and Black Other ethnic groups (PHE, 2015).

Boys in Year 6 from all minority ethnic groups are more likely to be obese than White British boys, with boys of Bangladeshi, Asian Other, Pakistani and Any Other ethnic group having the highest prevalence. For girls in Year 6 obesity prevalence is highest for children from Black African and Black Other ethnic groups. The prevalence of obesity among boys in Year 6 from some Asian groups, particularly those of Bangladeshi, Asian Other and Pakistani ethnicity, is as high as or higher than that for the Black African and Black Other ethnic groups. Some of these differences may be due to the influence of factors such as deprivation and possibly in part to physical differences such as height (PHE, 2015).

As for children, certain adult population groups also face an increased risk of developing obesity (HSE, 2010. Healthy Lives Healthy People: A call to action on obesity, 2011). For instance women living in more deprived areas have higher levels of obesity than those in less deprived areas (PHE, 2014). Action on obesity must therefore aim to reduce health inequalities and target specific population groups that need particular attention. Considering the Health Profile in Manchester, the groups that require targeted work include specific socio-economic and ethnic groups, disabled people and people with mental health needs, as targeted in our local strategy (Foresight, 2007. Healthy Lives Healthy People: A call to action on obesity, 2011).

What would we like to achieve?

In Manchester we want to encourage and support all potential partners- statutory, voluntary and commercial sectors and local communities to become involved through contributing their skills, knowledge and influence to achieve the changes we all need to make through a family based approach. We need wide ranging interventions on information, education, food provision, physical activity, transport and behaviour change to tackle obesity and achieve improvements in the population's health.

Support an approach to tackling childhood obesity that, while recognising the financial environment, will commission upstream, preventative programmes, beginning at an early age and with a greater degree of assertive intervention than has historically been the case, in order to ensure improved health outcomes and better value for money

Support the building of a broad coalition for high profile action on obesity across the public, private and community sectors in order to help establish a culture of physical activity and healthy eating across the city.

What do we need to do to achieve this?

The new Partnership Board to tackle childhood obesity, co-chaired by the Deputy Chief Executive of Central Manchester University Hospitals NHS Foundation and Director of Public Health, is well placed to build the broad coalition of partners that will really make a difference in Manchester. The Board will oversee the refresh of the Healthy Weight Strategy with a view to re-launch in 2016. There is a need to ensure that future strategies and interventions either continue or begin to address a number of risky lifestyles behaviours, rather than obesity alone, and ensure these are targeted at the poorest families. As part of this process we are working with partners to link a future Healthy Weight Strategy to other relevant work in the city. Linking the Healthy Weight Strategy to other strategies and interventions will help to provide a joined up approach to reducing health inequalities and obesity prevalence.

Perhaps unusually in the public health world, working on childhood obesity has the potential to deliver measurable improvements within a short number of years. The public sector still has regular contact with children under the age of 5, and almost daily contact with children of school age. Despite this and all the opportunities we have for intervention, we see the rate of obesity more than doubling between Reception and Year 6. It is clearly unacceptable simply to watch children progressing on a pathway to obesity, with all the future health risks (and service costs) this brings, when we could identify them early on that pathway and intervene at that point to support them and their families in tackling the problem.

In addition, and in keeping with the need to focus services as early in the obesity pathway as possible, there is a need to commission preventative and weight management services that meets the needs of pre-natal women and those who have recently had a baby. Pregnancy is the very start of child development and a time when women are often more motivated to make healthy choices. Most women are in contact with services and hence there is the potential to intervene and make a difference. The specialist weight management service has begun implementing a weight management service for pregnant women with a BMI >30. However lessons need to be learnt from this programme and both this service and activity services for ante and post natal women need up scaling.

In many ways the work required to tackle obesity overlaps with work to improve many other areas of health; this needs to be done at multiple levels: individual/family, neighbourhood and indeed cultural.

At neighbourhood level, the emphasis is on promoting healthy environments: ones that enable people easily to be more physically active and to eat a healthier diet. Culturally, there are significant opportunities created by the popularity of mass participation events such as the Manchester Run to begin to build a culture in which people in the city establish healthy and active lifestyles. All parts of the Manchester economy can participate in helping to build such a culture through coming together to promote physical activity and healthy eating initiatives— building a high profile coalition of support for tackling obesity in the city. This broader cultural change, while more difficult to achieve than targeted services, is ultimately what is required to make a long term sustainable impact on the levels of childhood obesity in the city.

What are we currently doing?

Starting Well

A number of private day-care providers have implemented **Manchester's weighing and measuring protocol**, which requires them to weigh and measure children quarterly. All children with consent are measured and their BMI calculated. Those children whose BMI centile is classified as underweight or overweight are referred to the appropriate services. Public Health Manchester commissions training for the staff to deliver this protocol in their setting, provides a protocol pack and support to the settings. All settings who are part of the weighing and measuring protocol are also working on Manchester's Early Year's Health Award (MEYHA), to ensure excellent practice in the setting.

Any children that are classified as being overweight as part of this programme will receive early intervention and treatment to address the child's and families needs (using the EHA). Overweight children who are over 2 years of age are referred to the Weight Management Service and those children who are overweight and under 2 years of age are referred to their Health Visitor, following the protocol and the Pre-School Healthy Weight Pathway.

As well as addressing childhood obesity early and targeting children and families most at need, this process will also provide Manchester Public Health Team with data on obesity levels in early years for the first time.

Manchester's Early Years Health Award (MEYHA) is a health award for Early Years settings that assesses policy and practice in service delivery around the following four themes:

- Personal, Social and Emotional Development
- Healthy Eating and drinking
- Physical Activity
- Emotional Health and Wellbeing

Manchester has implemented the **2 year Health and Development Review** as part of the Early Years New Delivery Model. All children who attend this review are weighed and measured and those classified as overweight are referred to the appropriate weight management service and encouraged to participate in Active Lifestyles activities.

To support all of the above work, **a pre School (1-4 ½ years) and family healthy weight care pathway** has been developed and implemented.

The Chief Medical Officer's (CMO) 2012 Annual Report discusses the importance of primary interventions that address feeding styles and activity levels in early life (such as those highlighted above), for later weight status and health outcomes. They also highlight the importance of intervening in infancy and toddlerhood to prevent obesity. In Manchester Health Visitors and early years education workers are viewed as having a key role in the delivery of the interventions that have been implemented, particularly in terms of supporting parents to provide the optimal nutritional intake from birth e.g. breastfeeding through to the preschool years, enhancing physical activity and referring overweight children to services for early intervention. The CMO

recommends implementing such practice and utilising the skills of these professionals in addressing obesity.

Developing Well

We are currently tendering for a provider to **design and deliver a citywide, evidence based accessible multi component lifestyle children and family weight management service in the community** (tier 2), that will assist children and young people between 2 and 18 years of age, who have a Body Mass Index (BMI) equal to or greater than the 91st centile to reach and maintain a healthier BMI, in accordance with applicable guidelines e.g. NICE.

The community based lifestyle weight management programme will be multi-component and will focus on the following:

- Diet and healthy eating habits
- Physical activity
- Reducing the amount of time spent being sedentary
- Strategies for changing the behaviour of the child or young person and all close family members

In 2013, Manchester City Council secured £200,000 over 3 years from the British Heart Foundation. This funding is being used to employ a **Senior Nutritionist based to work with overweight/obese young people (aged 11-18 years) who do not engage in services**. The funding also funds 4 adolescents to work with a personal trainer for 6 months.

Manchester Health Improvement Service for Children and Young People work citywide to support schools to adopt a whole school approach to improving the health and wellbeing of children and young people, by encouraging and supporting schools to contribute to key public health priorities for the city e.g. healthy eating and physical activity. They deliver the Manchester Healthy Schools Programme. Currently over 90% of mainstream schools are engaged in the programme.

School nursing is a universal public health service for children and young people of school age. The aim of the re-modelled school nursing service in Manchester is to ensure children, young people and their families have access to a core programme of preventative health care, with additional care based on need. School nurses in Manchester help to tackle obesity by:

- Leading and co-ordinating local delivery of the HCP 5-19 requirements
- Provide an integrated Public Health Nursing Service linked to children's centres, general practice and education settings by having locality teams and nominated leads known to the stakeholders, including a named school nurse for every education setting
- Deliver the universal HCP 5-19 through assessment of need by appropriately qualified staff e.g. health promotion advice, screening and engagement in health education programmes
- Deliver Public Health prevention and treatment interventions and programmes, in partnership (e.g. healthy schools team and EHIS service), to school-age children and young people, including physical activity, diet and healthy weight
- Deliver the NCMP, in accordance with 'The Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013' and the current

NCMP operational guidance

- Work with school leaders, school improvement services, healthy schools and the EHIS service to identify population health needs
- Ensure there is a clear protocol of addressing the health needs of priority groups, including those with special educational needs and disabilities;
- Build on resilience, strengths and protective factors to improve autonomy and self-efficacy based on best evidence of child and adolescent development, recognizing the context of family life and how to influence the family to support the outcomes for children

Change4Life Clubs have been implemented in over 70 Primary Schools in the City from 2014 until now. According to the recent Chief Medical Officers report delivering programmes that benefit the universal population should be used in combination with targeted approaches, such as this intervention. Change4life clubs are out of school clubs that are targeted at year 1 & 2 children who are most in need e.g. self esteem, confidence, overweight, inactive etc. Each school identifies and engages their target group. The evaluation from these clubs is extremely positive. This year the clubs have been targeted at additional year groups.

To support all of the above work, a **child/adolescent (age 4½- 17 years) and family healthy weight care pathway** has been developed and implemented.

Central Manchester Foundation Hospitals Trust is working with partners, including the University of Manchester, to pilot work in the city on measuring the height and weight of all primary school aged children. This work is in addition to the National Child Measurement Programme currently commissioned by Manchester City Council. It is hoped that this pilot will identify if there is a stable increase in weight over time or if there is a particular age when children become overweight. The results of this pilot may inform future targeted interventions.

Community and Stakeholder Views

An audit of the Children and Family Weight Management Service (CFWMS) was carried out to gauge levels of satisfaction and sustainability for our early years' patients following contact with the service. The results showed that parents felt supported by the Service and have been able to make many changes to their lifestyles as a result of the contacts.

References and Links

Public Health England (PHE) Obesity factsheets (previously known as Key Data Briefings

http://www.noo.org.uk/NOO_pub/Key_data

National Obesity Observatory (NOO)

www.noo.org.uk

Change4Life

www.nhs.uk/change4life

Health and Social Care Information Service (for NCMP data)

www.hscic.gov.uk

Child and Maternal Health Intelligence Network (CHiMAT)

www.chimat.org.uk

Other JSNA Topics that this links to

Healthy eating and weight; eating disorders

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Date: 23rd Nov. 2015