Obesity: A Health Needs Assessment for Milton Keynes

April 2014

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1. Introduction

This health needs assessment (HNA) has been conducted to support the development of a local healthy weight strategy; to inform the commissioning of new services for children, young people and adults around the prevention, identification and treatment of obesity and to support individuals to maintain a healthy weight.

It will focus on the following:

- The evidence base, including any NICE guidance and recommendations for care pathways for obesity
- The scale of the problem in Milton Keynes, compared to national trends and what this might look like in the future
- The current position for Milton Keynes commissioned services currently available locally, how the current pathway meets national guidance, and the identification of gaps in the current service provision
- Recommendations for action, including future considerations for commissioning, partnerships, future strategies and the methods for monitoring and evaluation

This HNA will be shared with the appropriate commissioning and provider organisations for adults, children and young people.

2. The Policy Context

2.1. National

Tackling obesity continues to be a national government priority, several documents have been published over the last few years, the most recent being Healthy Lives, Healthy People; A Call to Action on Obesity, which was published in 2011.[1]

A call to action gave a new direction to tackling obesity; empowering people and communities to take action and building local capability. It gave direction for both local and national working together, national leadership and clarified the role of the government in helping people to make healthy food and drink choices and to become more physically active.

The document sets out two national ambitions for obesity:

- A sustained downward trend in the level of excess weight in children by 2020
- A downward trend in the level of excess weight averaged across all adults by 2020

The key national drivers of this HNA include the Public Health Outcomes Framework[2] .The Public Health Outcomes Framework sets out the broad range of measures, relating to improving and protecting health across the life course and to reduce inequalities. This HNA firmly fits into the Health Improvement domain.

The key outcomes including:

- Breastfeeding initiation
- Breastfeeding prevalence at 6-8 weeks
- Excess weight in 4-5 and 10-11 year olds
- Excess weight in adults
- Percentage of physically active and inactive adults - active adults
- Percentage of active and inactive adults - inactive adults

2.2 Milton Keynes

[1] DOH. Healthy Lives, Healthy People; A call to action on Obesity [2011]
[2] Public Health Outcomes Framework (2014) [www.phoutcomes.info]

Similar to the national picture, obesity has long been addressed as an important Public Health issue in Milton Keynes. On 1st April 2013 the NHS reforms came into effect and Milton Keynes Council (MKC) took on new local government responsibilities for the health of their population supported by the Public Health team as a fully integrated service within MKC. With this came the new responsibility of obesity services at Tier 1 and Tier 2.

In 2008, a task group produced a local Healthy Weight, Healthy Lives Strategy (HWHL) for Milton Keynes (2008-2011).[3] In line with the national strategy at the time, this local approach highlighted several key themes to address obesity; promoting healthier food choices, building physical activity into our lives and psychological support. A Healthy Weight Strategy is currently being written for Milton Keynes.

There are a number of other strategies in Milton Keynes that contribute to the prevention and treatment of obesity, including specific interventions that tackle the obesogenic environment. Physical Activity and obesity are clear priorities in MKC Corporate Plan.[4] The Milton Keynes Health and Wellbeing strategy (MKHWBS) highlighted the need to take action on childhood obesity, invest in active travel and physical activity and to develop local healthy eating initiatives in Milton Keynes.[5]

In addition to this the Cycling Strategy (2013) provided a link between cycling for active travel, recreation and sport as a mechanism for improving health (including reducing obesity).[6] The emerging Sport and Active Recreation Strategy (due 2014) supports the opportunities for individuals to lead an active lifestyle in Milton Keynes, thus potentially impacting on the obesity levels locally. The Milton Keynes Physical Activity Alliance (MKPAA) also has an action plan that supports the physical activity opportunities in Milton Keynes; they were originally a group responsible for the deliverables of the physical activity aspect of the HWHL strategy.[7]

2.3 Local Commissioning Intentions

This health needs assessment will inform the commissioning of future services for obesity prevention and treatment in Milton Keynes. Milton Keynes Council is responsible for procuring Tier 1 and 2 services for adults and children (see figure 7).

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[3] Department of Health (2008) Healthy Weight, healthy Lives Strategy: a cross- government strategy for England
[4] Milton Keynes Council Corporate Plan (2012-2016) www.milton-keynes.gov.uk/performance
[5] Milton Keynes Joint Health and Wellbeing Strategy 2012-2015 (2012) [www.milton-keynes.gov.uk/health-wellbeing]
[6] Cycling Strategy for Milton Keynes (2013) www.milton-keynes.gov.uk/cycling-strategy
[7] Milton Keynes Physical Activity Alliance Action Plan (2008)

It is anticipated that provision of redeveloped and re-commissioned services will start September 2015. Support will be made available for each point of an individual's life course, with a focus on early years and their families.

The Public Health team will produce an overarching five year strategy and clear action plan, ensuring the maximum return on investment is achieved. In keeping with the underpinning principles of the Joint Health and Wellbeing Strategy we aim to invest our resources across communities in a way which aims to achieve similar outcomes in each. As there is a direct correlation between the index of multiple deprivation score (IMD) and obesity levels, this will be an important factor in our commissioned plans.

2.4 NHS Health Checks

The NHS Health Check programme aims to help prevent heart disease, stroke, diabetes and kidney disease.[8] Everyone between the ages of 40 and 74, who has not already been diagnosed with one of these conditions, will be invited (once every five years) to have a check to assess their risk of heart disease, stroke, kidney disease and diabetes and will be given support and advice to help them reduce or manage that risk. The national target is that all eligible people (the eligible cohort) should have been offered a health check by 31 March 2017, with, as milestones, 20% of the eligible population being offered health checks in each year from 2012/3.

In April 2013, the responsibility for health checks moved from the NHS Milton Keynes to Milton Keynes Council, along with the Public Health function. The programme began delivering in November 2012 with practices joining in phases, currently there are two practices remaining to start the checks.

The programme is provided by Milton Keynes GP Practices, each completed health check results in a payment of £23. In 2012/13 5601 invitations for health checks were sent out, with a total of 1882 health checks being completed by the GP practices. The targets for 2013/14 are much higher with 7765 health checks to be completed.

[8] Public Health England. NHS Health Check implementation review and action plan (2013)

3. Evidence and National Policy Recommendations

3.1. NICE CG43 Obesity: Guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children[9]

This guidance sets out key priorities for the implementation of the recommendations for Public Health, the NHS, Local Authorities, and early year's settings, schools, workplaces and the community. It also outlines priorities for the clinical care of obesity.

It outlines that preventing and managing obesity should be a priority both at a strategic and delivery level, and that training needs of professionals working in this field should be met. This would ensure the most up to date and appropriate methods are being used to prevent and treat obesity. The guidance gave specific recommendations on the content and structure of diet and physical activity interventions, as well as on work with partners such as local community venues, shopkeepers, businesses and children's centres.

Preventing obesity is a complex issue, the guidance outlined the need for family and community interventions to incorporate a range of components, and address the concerns at a community level. There is a need for planning and transport departments to consider the physical environment available for active travel, play and other recreational activities in order to contribute to preventing obesity as part of their core work. Schools, early years settings and workplaces should provide role models and opportunities for individuals to eat healthily and be physically active while in this environment.

The guidance also stated recommendations for the clinical treatment of obesity, these included:

- Classification of obesity in adults using Body Mass Index (BMI)

Classification	**Body Mass Index Range (kg/m^2)**
Healthy weight	18.5-24.9
Overweight	25-29.9
Obese I	30-34.9
Obese II	35-39.9
Obese III	40+

[9] NICE CG43 Obesity: Guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children (2006)

- Classification of obesity in children using percentiles

Classification	BMI Centile
Very underweight	≤0.4th centile
Low weight	≤2nd centile
Healthy weight	>2 - <91th centile
Overweight	≥ 91st centile
Obese	≥98th centile
Extremely obese	≥99.6th centile

- The use of waist circumference along with BMI should be used to assess someone's individual health risks in relation to obesity
- Classification of obesity in children using the UK 1990 BMI charts
- Long term follow up for all ages should be offered
- Interventions for children should address lifestyle within the family setting
- Lifestyle interventions should be multi component, including behaviour change strategies, to increase physical activity levels, improve diet and reduce calorie intake
- Pharmacological interventions (the use of Orlistat) should only be considered once diet, exercise and behavioural approaches have been started and evaluated
- Generally pharmacological methods shouldn't be used with children
- Use with adults requires regular review, drug use should be withdrawn if weight loss is not achieved, a three month review should take place and only continued if the individual has lost 5% of their body weight

The guidance also outlines the use of surgical interventions; these are only to be considered if:

- The patient has a BMI of 40kg/m^2 or more
- The patient has a BMI of 35kg/m^2 with other significant disease
- All non-surgical measures have been tried, but failed to achieve or maintain weight loss for at least six months
- The person has been receiving, or will receive, intensive management in a specialist obesity service
- Surgery can be considered as a first line option for patients with a BMI of more than 50kg/m^2
- Surgery is not generally recommended for children or young people

3.2. The National Obesity Forum (NOF) Model of Obesity Pathway (2009)[10]

Based and extended from the Rotherham model, the National Obesity Forum (NOF) has adopted a model of good practice for the prevention and treatment of obesity for both adults and children. This model adopts a four tier structure representing each of the tiers outlined in the NICE guidance published in 2006. Tier one indicates a level of population wide prevention activity, Tier two is community weight management services, Tier three a Multidisciplinary Team service for obesity, and Tier four being specialist obesity services including surgery.

In Milton Keynes, as described in section five, the model has been used to illustrate the current service in Milton Keynes and the gaps in service that need to be addressed.

3.3. Clinical Commissioning Policy: Complex and Specialised Obesity Surgery

In 2013, NHS England produced a policy on severe and complex obesity surgery.[11] This document outlined that NHS England will commission complex and specialised surgery as a treatment for selected patients with severe and complex obesity that have not responded to all other non-invasive therapies. It outlined the criteria for commissioning, including the eligibility criteria for bariatric surgery.

3.4 NICE CG43 Obesity - Commercial Weight Management Programmes[12]

The guidance outlines that the use of commercial weight loss programmes should only be recommended if they:

- Are based on a balanced healthy diet
- Encourage regular physical activity
- Expect people to lose no more than 0.5–1 kg (1–2 lb) a week.
- Help people assess their weight and decide on a realistic healthy target weight (people should usually aim to lose 5–10% of their original weight)
- Include some behaviour change techniques, such as keeping a diary and advice on how to cope with ‘lapses’ and ‘high-risk’ situations
- Recommend and/or provide ongoing support.

[10] The National Obesity Forum (NOF) Model of Obesity Pathway (2009)
[11] NHS Commissioning Board (2012) Clinical Commissioning Policy: Complex & Specialised Obesity Surgery. NHSC/A5.
[12] NICE CG43 Obesity: Guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children (2006)

Programmes that do not meet these criteria are unlikely to help people maintain a healthy weight in the long term. People with certain medical conditions – such as type 2 diabetes, heart failure or uncontrolled hypertension or angina – should check with their general practice or hospital specialist before starting a weight loss programme.

3.5 NICE PH27 - Weight management before, during and after pregnancy[13]

This guidance sets out key recommendations for NHS and other commissioners, managers and professionals who have a direct or indirect role in, and responsibility for:

- Women who are pregnant or who are planning a pregnancy
- Mothers who have had a baby in the last 2 years.

It is particularly aimed at: GPs, obstetricians, midwives, health visitors, dietitians, community pharmacists and all those working in antenatal and postnatal services and children's centres.

The guidance states six recommendations that are based on approaches that have been proven to be effective for the whole population. They include advice on:

- How to help women with a BMI of 30 or more to lose weight before and after pregnancy – and how to help them eat healthily and keep physically active during pregnancy
- How to help all pregnant women eat healthily and keep physically active
- The role of community-based services
- The professional skills needed to achieve the above

Maternal obesity has become one of the most commonly occurring risk factors in obstetric practice. Maternal obesity (defined as obesity during pregnancy) increases health risks for both the mother and child during and after pregnancy. Obesity in pregnancy is widely defined as a maternal BMI of 30 or more at the first antenatal consultation. Women with obesity are at increased risk of miscarriage, gestational diabetes, pre-eclampsia and they are less likely to initiate or maintain breastfeeding. The babies of mothers with obesity are at increased risk too, including stillbirth, congenital anomalies, prematurity, macrosomia and neonatal death.

[13] NICE PH27 -Weight management before, during and after pregnancy (2010)

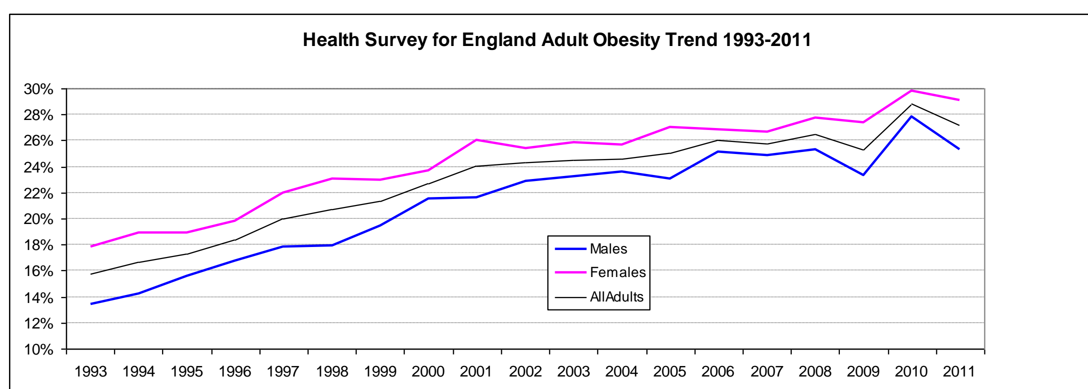
4. The Scale of the Issue

Obesity in adults is defined as a Body Mass Index (BMI) of 30 or more and in children it is measured using growth charts. Excess weight is a major risk factor for diseases such as type 2 diabetes, cancer and heart disease it can reduce an individual's self-esteem, mental health and ability to gain and maintain employment. It is estimated that excess weight costs the NHS more than £5 billion each year and has a huge financial and social impact on society as a whole.

Obesity is a priority both nationally and locally. The most recent document produced by the Government suggests a number of ways that we can support individuals to lose weight and maintain a healthy weight. According to the 2013 Health Profile of England[14], an estimated 25.3% of adults are obese (BMI over 30) and according to A call to action on obesity (2011)[15] more than 61% are overweight or obese (BMI over 25) in England. The National Child Measurement Programme (NCMP) records the height and weight of all children in reception and year 6 each year; in the 2012/13 programme it reported that 9.7% of reception and 18.4% of children in year 6 in England were obese which are comparable to national levels of obesity.[16]

England, along with the rest of the UK, ranks as one of the most obese nations in Europe. Efforts must be made to reduce these levels and the impact of obesity in both the health of our nation and also the costs to the economy.

Figure 1: Adult obesity trend in England 1993-2011



Source: Health Survey for England (1993-2011)[17]

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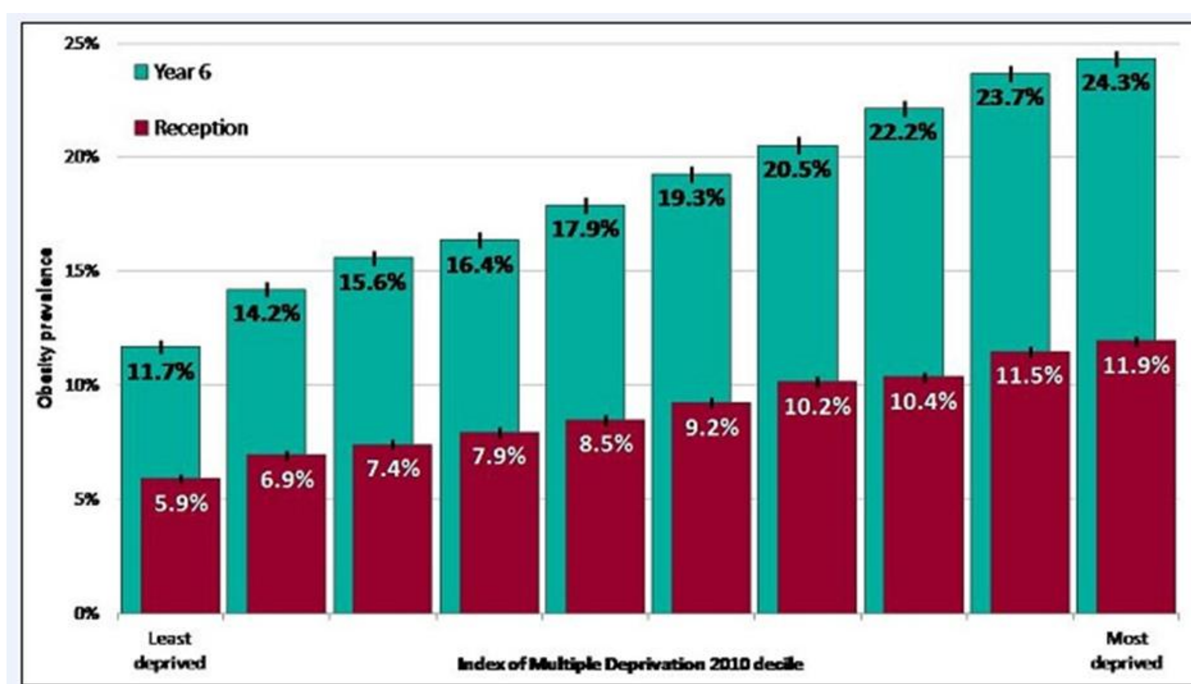
[14] Health Profile England [2013]
[15] Department of Health (2011). Healthy Lives, Healthy People: A call to action on Obesity.
[16] The National Child Measurement Programme [2012-2013]
[17] Public Health England, (1993-2011) Health Survey for England (http://www.noo.org.uk)

Figure 1 shows the increase in the levels of obesity for all adults since 1993 as recorded by the Health Survey for England (HSE), with higher levels for women compared to men

Overweight and obese children are more likely to become obese adults, and have a higher risk of morbidity, disability and premature mortality in adulthood. Above average BMI at age five and older is a risk factor for development of type-2 diabetes later in life. Below average BMI at age 5 combined with above average BMI at age 11 leads to an increased likelihood of coronary heart disease as an adult (Barker, 2007).[18]

Figure 2: Childhood Obesity data for England 2008 – 2012, by deprivation decile[19]



There are profound inequalities in levels of childhood obesity. Figure 2 shows a clear relationship between deprivation and childhood obesity across England which has significant implication for future health inequalities. The prevalence of obesity in the most deprived decile is approximately twice that of the prevalence in least deprived.

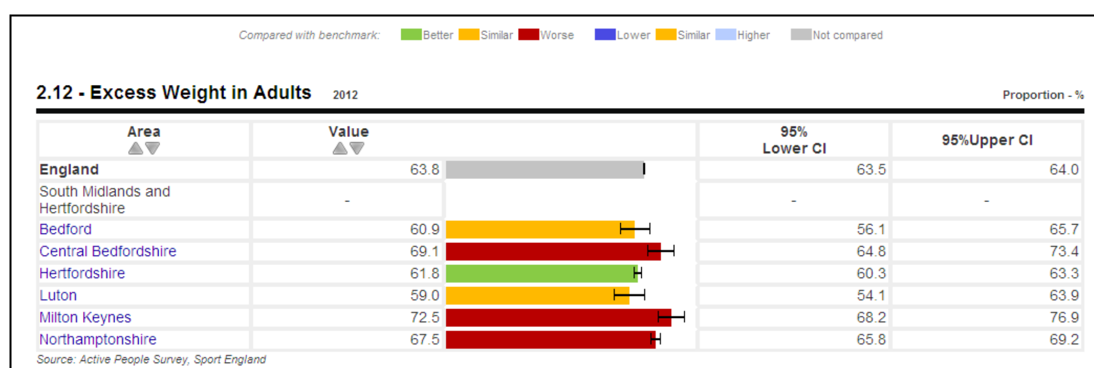
[18] Obesity and early life, D. J. P. Barker, obesity reviews (2007) 8 (Suppl. 1), 45–49
[19] *http://www.noo.org.uk/NOO_about_obesity/inequalities*

4.1. Milton Keynes Adult Population

The prevalence of obese adults in Milton Keynes is estimated to be 25.3%, similar to the East Midlands average (23.6%), (Public Health England, 2013).[20] The Public Health Outcomes Framework indicator is Excess weight in adults, this indicator incorporates the number of overweight and obese adults. The current and increasing obesity levels in Milton Keynes will impact on life expectancy; with the development of obesity in middle age shortening life expectancy by on average 2-4 years and by 8-10 years in those who become morbidly obese. While everyone is susceptible to obesity, levels are disproportionally higher in the lower socio-economic group.

Figure 3 below shows that Milton Keynes is significantly higher than England (63.8%) and Milton Keynes has the highest percentage (72.5%) of adults classified as overweight or obese in the South Midlands and Hertfordshire area.

Figure 3 Excess Weight in Adults in Milton Keynes compared to South Midlands and Hertfordshire and England in 2012[19]



Compared with benchmark: Better Similar Worse Lower Similar Higher Not compared

2.12 - Excess Weight in Adults 2012 Proportion - %

Area	Value	95% Lower CI	95%Upper CI
England	63.8	63.5	64.0
South Midlands and Hertfordshire	-	-	-
Bedford	60.9	56.1	65.7
Central Bedfordshire	69.1	64.8	73.4
Hertfordshire	61.8	60.3	63.3
Luton	59.0	54.1	63.9
Milton Keynes	72.5	68.2	76.9
Northamptonshire	67.5	65.8	69.2

Source: Active People Survey, Sport England

It is estimated that in Milton Keynes there are over 51,392 people with high blood pressure (21.7% compared with 25% for East Midlands), nearly 17,767 people with cardio-vascular diseases (7.5% compared with 9.7% for East Midlands).

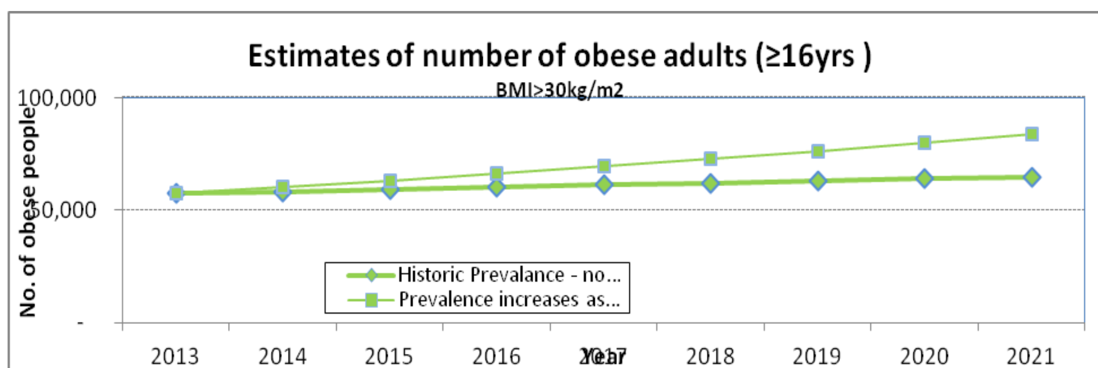
Local modelling based on the most recent Health Survey for England (HSE) results suggests that of the 199 thousand people aged 16 and above living in Milton Keynes, 27.2% are obese and a further 36.9% overweight: that leads to an estimate of

[20] Public Health England (2013) Finger tips for Public health (http://fingertips.phe.org.uk/)

approximately 54,000 people with obesity as a significant health issue and a further 74,000 people who are overweight.[21]

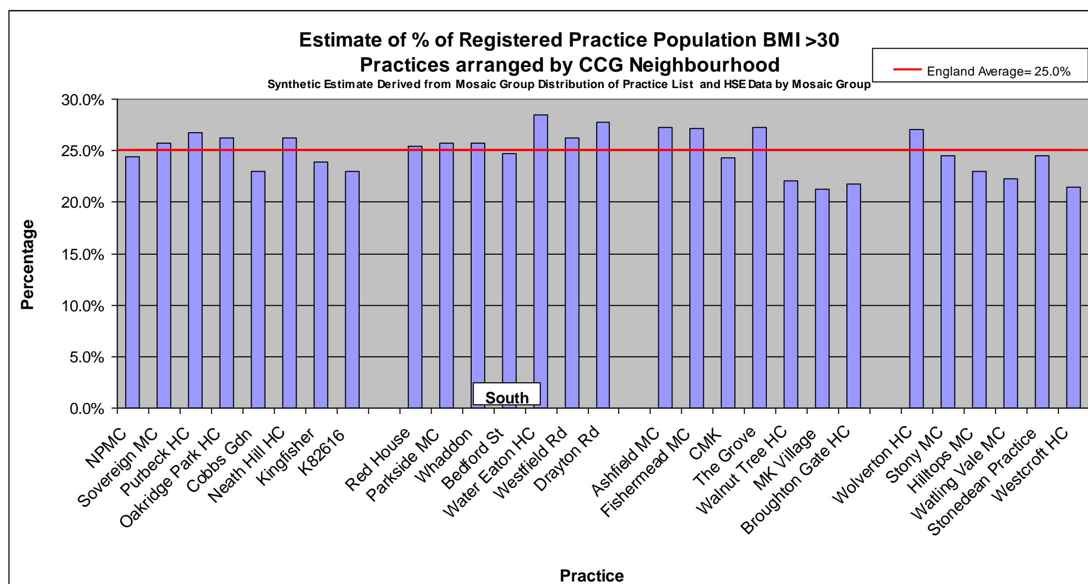
Figure 4 shows the estimated prevalence of obesity in Milton Keynes over the next ten years using locally modelled HSE data. The lower line indicates the prevalence remaining the same and the population increasing, whereas the upper and increasing line over time shows the estimated increases in obesity in adults if the trend remains the same. This could see a rise from an estimated 54,000 people who were obese in 2011 to more than 83,000 in 2021; this marked increase will have a significant impact on the economy in Milton Keynes if action is not taken.

Figure 4: Estimated trend of adult obesity in Milton Keynes



Source: Modelled data for HSE (1993-2011)

Figure 5: Milton Keynes Practice Population Estimates of Adult Obesity



Source: Estimate derived from MOSAIC groups and HSE Data

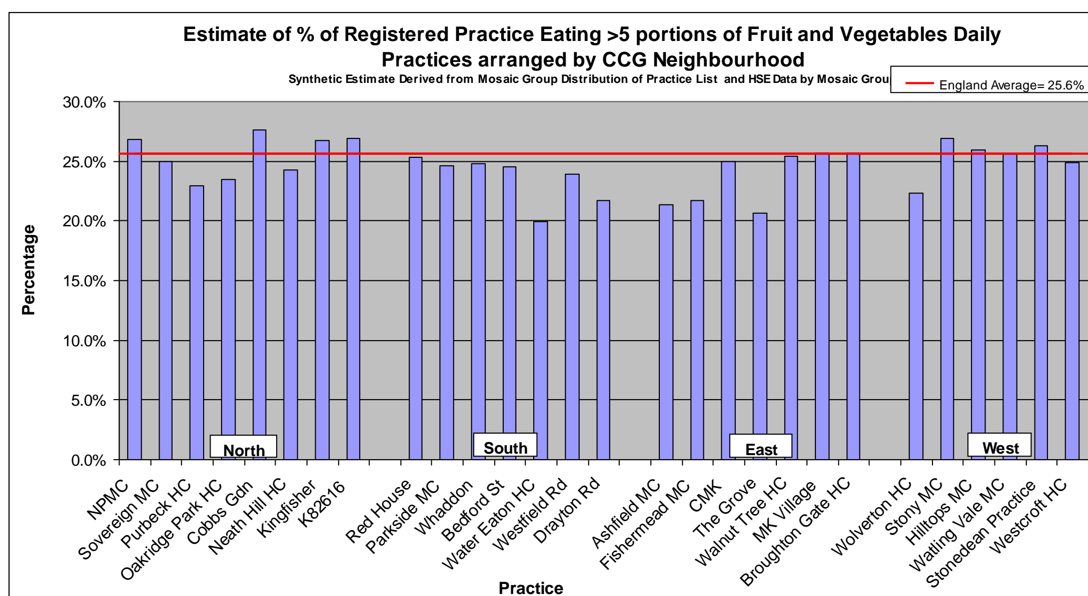
[21] NHS Information Centre for Health and Social Care (2012) Health Survey for England

Figure 5 illustrates the estimated prevalence of adult obesity for each of the GP practices in Milton Keynes; it shows a correlation between areas lower on the social gradient and higher obesity levels in areas such as Water Eaton, Fishermead and Wolverton. Areas of lower obesity levels were found in Milton Keynes Village, Cobbs Garden and Walnut Tree. This knowledge can support planning of new services, with focus given to those areas with the highest levels of obesity.

4.2. 5 a day – Nutrition in Adults

According to the Health Survey for England, only one in four adults in England eat the recommended five portions of fruit and vegetables a day. Figure 6 shows a modelled view for each of the GP practice areas in Milton Keynes, these figures correlate the obesity figures seen for each practice with those with lower levels of consumption in areas with higher obesity prevalence.

Figure 6: Estimated percentage of registered practice eating 5 or more portions of fruit and vegetables per day



Source: Estimate derived from MOSAIC groups and HSE Data

4.3. Physical Activity in Adults

Physical inactivity alone is a significant Public Health issue that can impact on the health of our population, as well as a contributing factor to the obesity levels that we are currently facing in Milton Keynes. Physical inactivity is estimated to cost Milton Keynes alone nearly £3 million pounds when plotted against the costs of treating five main diseases attributable to physical inactivity (Sport England, 2013).[22] Evidence suggests that aerobic physical activity has a positive effect on achieving weight maintenance and therefore should be promoted as part of weight management services (Start Active, Stay Active 2011). [23]

Start Active, Stay Active also outlines the impact that sedentary lifestyles are having on our health, there is a strong relationship between sedentary behaviour and being overweight or obese and it is independently associated with other health outcomes even amongst people who are active at the recommended levels.

According to the Milton Keynes Sport England Local Sport profile there are 38.5% of adults participating in sport at least once a week, with more men participating than women. The top five sports in Milton Keynes are gym, swimming, cycling, athletics and football, and 56.6% of people would like to do more sport than they currently do. The most popular specified sports are cycling and swimming.[24]

The benefits of regular physical activity have been clearly set out across the life course with the strength of the relationship between physical inactivity and poor health persisting throughout people's lives.

Percentages of physically active and inactive adults are indicators in the Public Health Outcomes Framework. The indicator considers the percentage of adults achieving at least 150 minutes of physical activity per week in accordance with the UK Chief Medical Officer's (CMO) recommended guidelines on physical activity.

Figure 7 below shows that the percentage of physically active adults in Milton Keynes (57.4%) is similar to England (56.0%) and South Midlands and Hertfordshire area.

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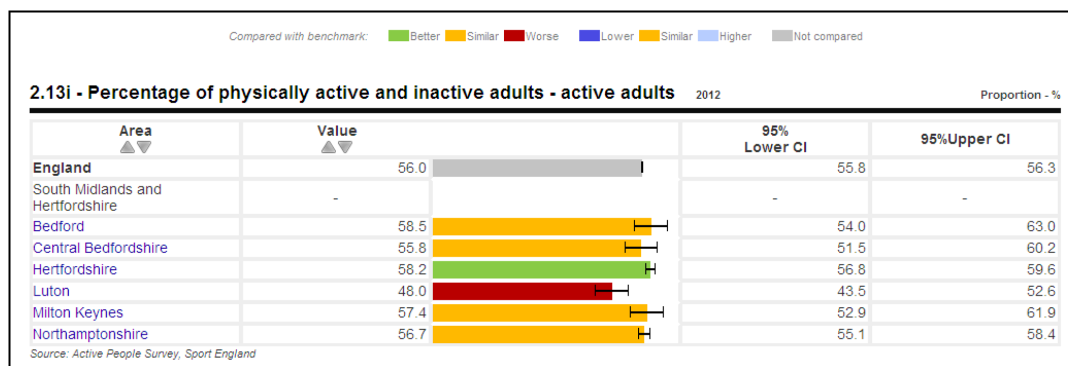
[22] Sport England, 2013 (www.sportengland.org/)
[23] Chief Medical Offices (2011) Start Active,Stay Active (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf)
[24] Sport England (2012) Milton Keynes Local Sport Profile (http://archive.**sportengland**.org/idoc.ashx?docid=c5a2b898-ee82-4f1b)

Figure 7 Physically Active in Adults in Milton Keynes compared to South Midlands and Hertfordshire and England in 2012[25]



Compared with benchmark: Better Similar Worse Lower Similar Higher Not compared

2.13i - Percentage of physically active and inactive adults - active adults 2012 Proportion - %

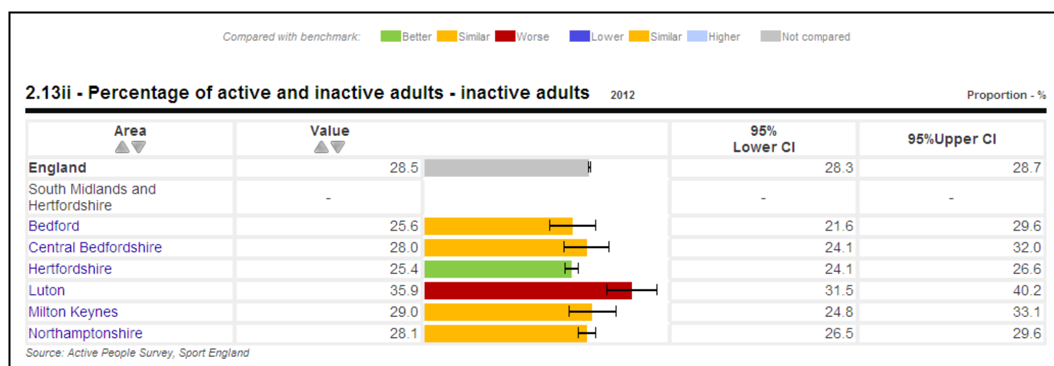
Area	Value	95% Lower CI	95%Upper CI
England	56.0	55.8	56.3
South Midlands and Hertfordshire	-	-	-
Bedford	58.5	54.0	63.0
Central Bedfordshire	55.8	51.5	60.2
Hertfordshire	58.2	56.8	59.6
Luton	48.0	43.5	52.6
Milton Keynes	57.4	52.9	61.9
Northamptonshire	56.7	55.1	58.4

Source: Active People Survey, Sport England

The Active People's survey (2012) also reported that 1 x 30 minute participation in sport has increased from 38.5% to 41.3% and 3 x 30 minute participation in sport and active recreation has increased from 22.5% to 28.3% in Milton Keynes.[26]

Figure 8 below shows that the percentage of physically inactive adults in Milton Keynes (29.0%) is similar to England (28.5%) and South Midlands and Hertfordshire area.

Figure 8 Physically Inactive in Adults in Milton Keynes compared to South Midlands and Hertfordshire and England in 2012[24]



Compared with benchmark: Better Similar Worse Lower Similar Higher Not compared

2.13ii - Percentage of active and inactive adults - inactive adults 2012 Proportion - %

Area	Value	95% Lower CI	95%Upper CI
England	28.5	28.3	28.7
South Midlands and Hertfordshire	-	-	-
Bedford	25.6	21.6	29.6
Central Bedfordshire	28.0	24.1	32.0
Hertfordshire	25.4	24.1	26.6
Luton	35.9	31.5	40.2
Milton Keynes	29.0	24.8	33.1
Northamptonshire	28.1	26.5	29.6

Source: Active People Survey, Sport England

There are real achievable population health gains through more people becoming more active throughout the life course. All planning and development which seeks to reduce obesity and increase physical activity levels in Milton Keynes should invest the available resources in a way which seeks to achieve proportionately higher uptake levels across the deprivation gradient. This will ensure that any development or service does not increase but reduce health inequalities.

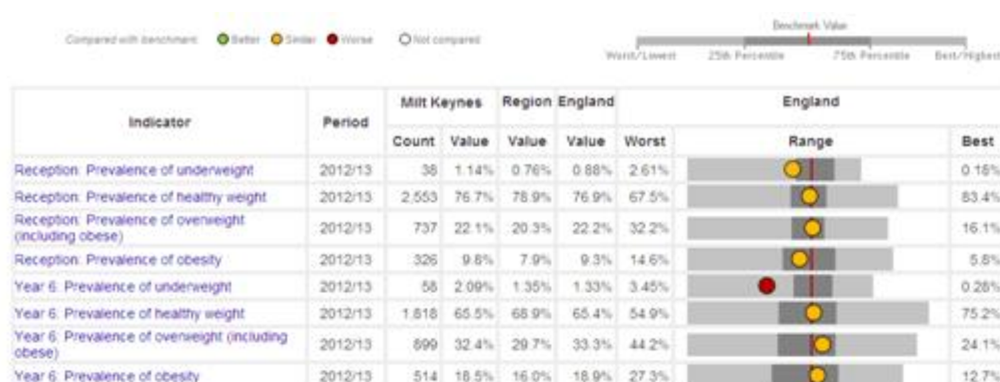
[25] Public Health England (2013) Finger tips for Public health (http://fingertips.phe.org.uk/)
[26] Sport England (2012) The Active Peoples Survey (http://archive.sportengland.org/research/active_people_survey/active_people_survey_7.aspx)

4.4. Milton Keynes Child Population

The emotional and psychological effects of being overweight are often seen as the most immediate and serious problems by children themselves. They include teasing and discrimination by peers; low self-esteem; anxiety and depression. In one study, severely obese children rated their quality of life as low as children with cancer on chemotherapy[27]. Obese children may also suffer disturbed sleep and fatigue. Some obesity-related conditions can develop during childhood. Type-2 diabetes, previously considered an adult disease, is beginning to be seen in obese children as young as five. Some musculoskeletal disorders are also more common.

There are over 58,000 children under 16 years old in Milton Keynes. In the 2012/13 NCMP in Milton Keynes, a reported 9.8% reception year and 18.5% year 6 children were obese.

Figure 9: Prevalence of underweight, healthy weight, overweight and obesity in Reception and Year 6 (2012/2013)[28]



Compared with benchmark: Better, Similar, Worse, Not compared

Benchmark Value — Worst/Lowest, 25th Percentile, 75th Percentile, Best/Highest

Indicator	Period	Milt Keynes		Region	England	England		
		Count	Value	Value	Value	Worst	Range	Best
Reception: Prevalence of underweight	2012/13	38	1.14%	0.76%	0.88%	2.61%		0.16%
Reception: Prevalence of healthy weight	2012/13	2,553	76.7%	78.9%	76.9%	67.5%		83.4%
Reception: Prevalence of overweight (including obese)	2012/13	737	22.1%	20.3%	22.2%	32.2%		16.1%
Reception: Prevalence of obesity	2012/13	326	9.8%	7.9%	9.3%	14.6%		5.8%
Year 6: Prevalence of underweight	2012/13	58	2.09%	1.35%	1.33%	3.45%		0.28%
Year 6: Prevalence of healthy weight	2012/13	1,818	65.5%	68.9%	65.4%	54.9%		75.2%
Year 6: Prevalence of overweight (including obese)	2012/13	899	32.4%	29.7%	33.3%	44.2%		24.1%
Year 6: Prevalence of obesity	2012/13	514	18.5%	16.0%	18.9%	27.3%		12.7%

Figure 9 above shows the prevalence of underweight, healthy weight, overweight and obesity in Reception Year and Year 6 within Milton Keynes in comparison to regional and England values. Milton Keynes shows similar values to England within these indicators.

Children's heights and weights are monitored through the National Child Measurement Programme. Figures 10 & 11 show the seven year trend in the prevalence of childhood obesity in Milton Keynes at Reception Year (ages 4-5) and at year six (ages 10-11).

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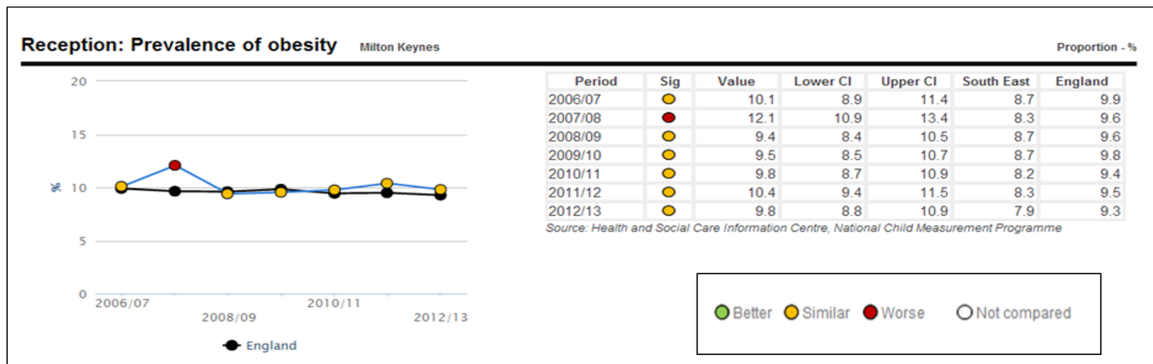
[27] Schwimmer, J.B., Burwinkle, T.M and Varni, J.W. (2003) Health-Related Quality of Life of Severely Obese Children and Adolescents. JAMA 289: 1813-1819

[28] Public Health England (2013) Finger tips for Public health (http://fingertips.phe.org.uk/)

Figure 10: Trend in Obesity levels in Milton Keynes at Reception Year: 2006 -2013

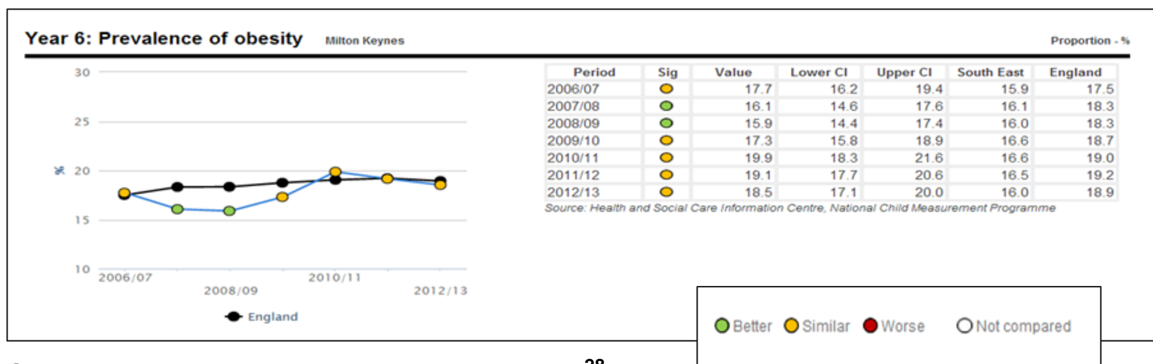


Period	Sig	Value	Lower CI	Upper CI	South East	England
2006/07		10.1	8.9	11.4	8.7	9.9
2007/08		12.1	10.9	13.4	8.3	9.6
2008/09		9.4	8.4	10.5	8.7	9.6
2009/10		9.5	8.5	10.7	8.7	9.8
2010/11		9.8	8.7	10.9	8.2	9.4
2011/12		10.4	9.4	11.5	8.3	9.5
2012/13		9.8	8.8	10.9	7.9	9.3

Source: Health and Social Care Information Centre, National Child Measurement Programme

Source: Fingertips Public Health England[29]

Figure 11: Trend in Obesity levels in Milton Keynes at Year 6: 2006 -2013



Period	Sig	Value	Lower CI	Upper CI	South East	England
2006/07		17.7	16.2	19.4	15.9	17.5
2007/08		16.1	14.6	17.6	16.1	18.3
2008/09		15.9	14.4	17.4	16.0	18.3
2009/10		17.3	15.8	18.9	16.6	18.7
2010/11		19.9	18.3	21.6	16.6	19.0
2011/12		19.1	17.7	20.6	16.5	19.2
2012/13		18.5	17.1	20.0	16.0	18.9

Source: Health and Social Care Information Centre, National Child Measurement Programme

Source: Fingertips Public Health England[28]

Figures 12 & 13 show the seven year trend in the prevalence of overweight children (including obese) in Milton Keynes at Reception Year (ages 4-5) and at Year 6 (ages 10-11). These figures show that in 2012/13 the prevalence of excess weight in children (overweight and obese) at Reception Year was 22.1% and in Year 6 was 32.4%, again similar to national levels.

Figure 12: Trend in Excess Weight in Milton Keynes at Reception Year: 2006 -2013

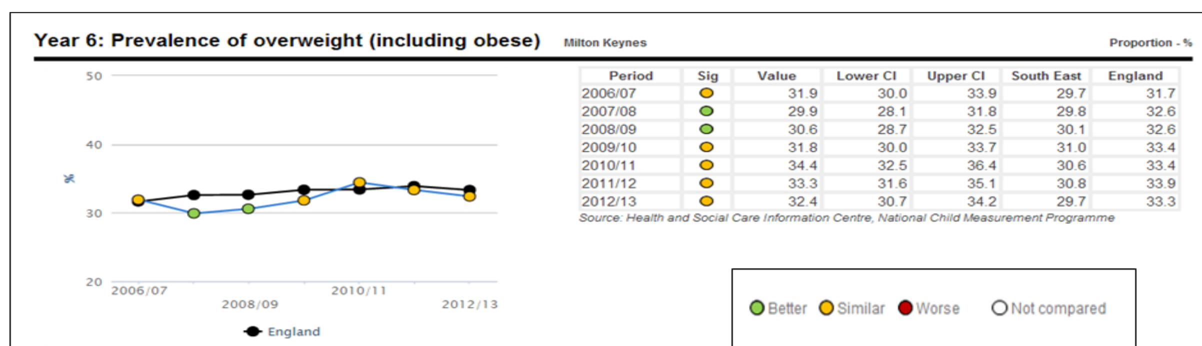
Period	Sig	Value	Lower CI	Upper CI	South East	England
2006/07		24.3	22.6	26.2	21.2	22.9
2007/08		25.4	23.7	27.1	20.8	22.6
2008/09		22.0	20.5	23.6	21.7	22.8
2009/10		22.2	20.8	23.8	21.6	23.1
2010/11		23.2	21.7	24.8	20.9	22.6
2011/12		22.5	21.1	24.0	20.8	22.6
2012/13		22.1	20.8	23.6	20.3	22.2

Source: Health and Social Care Information Centre, National Child Measurement Programme

Source: Fingertips Public Health England[28]

[29] Public Health England (2013) Finger tips for Public health (http://fingertips.phe.org.uk/)

Figure 13: Trend in Excess Weight in Milton Keynes at Reception Year: 2006 -2013



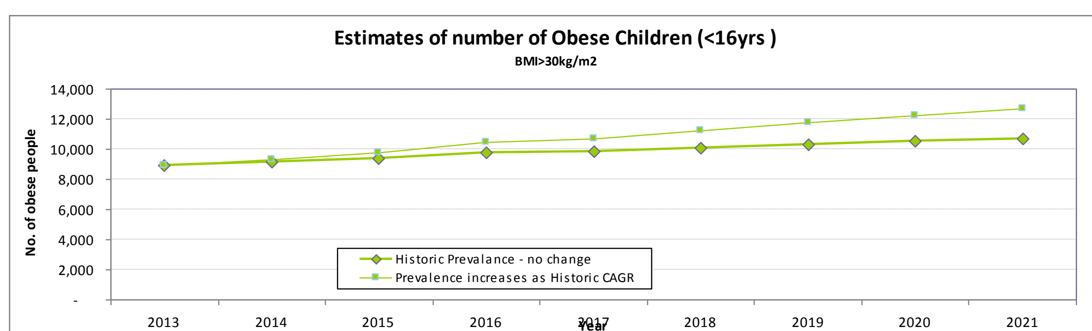
Period	Sig	Value	Lower CI	Upper CI	South East	England
2006/07		31.9	30.0	33.9	29.7	31.7
2007/08		29.9	28.1	31.8	29.8	32.6
2008/09		30.6	28.7	32.5	30.1	32.6
2009/10		31.8	30.0	33.7	31.0	33.4
2010/11		34.4	32.5	36.4	30.6	33.4
2011/12		33.3	31.6	35.1	30.8	33.9
2012/13		32.4	30.7	34.2	29.7	33.3

Source: Health and Social Care Information Centre, National Child Measurement Programme

Source: Fingertips Public Health England[30]

The information gained through the NCMP programme enables services to target areas where levels of obesity are high. Figure 14 illustrates the potential future trend for obesity in children over the next ten years. Without intervention the levels will continue to increase, causing significant effects on the health of the population.

Figure 14: Estimated trend of childhood obesity in Milton Keynes



Source: Modelled data for HSE (1993-2011)

Locally there are insufficient data to comment on inequalities due to ethnicity. However, nationally the NCMP shows that in reception year, Black African boys and girls have the highest prevalence of obesity. In Year 6, Bangladeshi boys have the highest prevalence, whereas among girls, those from African and Other Black groups have the highest prevalence.

4.5. Obesity in Pregnancy

Maternal obesity (obesity in pregnancy) has become one of the most commonly occurring risk factors in obstetric practice. Maternal obesity increases health risks for both the mother and child during and after pregnancy. Obesity in pregnancy is widely defined as a maternal

[30] Public Health England (2013) Finger tips for Public health (http://fingertips.phe.org.uk/)

BMI of 30 or more at the first antenatal consultation. Obese women are at increased risk of miscarriage, gestational diabetes, pre-eclampsia and they are less likely to initiate or maintain breastfeeding. The babies of mothers with obesity are at increased risk too, including stillbirth, congenital anomalies, prematurity, macrosomia and neonatal death. Maternal Obesity (CMACE/RCOG 2010).[31]

Statistics on the prevalence of obesity in pregnancy are not routinely collected in the UK, but trend data from the Health Survey for England show the prevalence of obesity among women of childbearing age increased during the period 1997-2010. Women who are obese in pregnancy are significantly more likely to be to be older, to have a higher parity (number of pregnancies), compared to women who are not obese (NOO, 2014).[32] They are also significantly more likely to be living in areas of high deprivation.

A national study of obesity during pregnancy undertaken by the Centre for Maternal and Child Enquiries (CMACE) showed that out of a total of 128,290 women reported to have given birth (≥24 weeks' gestation), 6413 were identified as having a BMI ≥35 at any time during pregnancy, a UK prevalence rate of 5% [33](BMI ≥35 is higher than the standard threshold for obesity which is ≥30kg/m2).[34]

Local BMI data for pregnant women is not available for Milton Keynes. Nationally in 2011 17.2% of women who had their BMI taken at their dating scan were obese (BMI >30), an additional 22.7% had a BMI between 25 and 29.9 kg/m^2 and therefore fell into the overweight category. Of those measured as obese, 6.2% (n241) of the expectant mothers had a BMI over 35, putting both them and their unborn babies at risk of complications during and after pregnancy. In 2012 the figures were similar, 19% of the expectant mothers were recorded as obese, with a further 22.4% overweight. 7.3% (n291) had a BMI over 35. [30]

It is worth noting that there is still a percentage of women who do not have their BMI taken during their consultations, this figure is approximately 12%. Work is being done to increase the number of mothers who are weighed and measured at their dating scan and figures improve each year.

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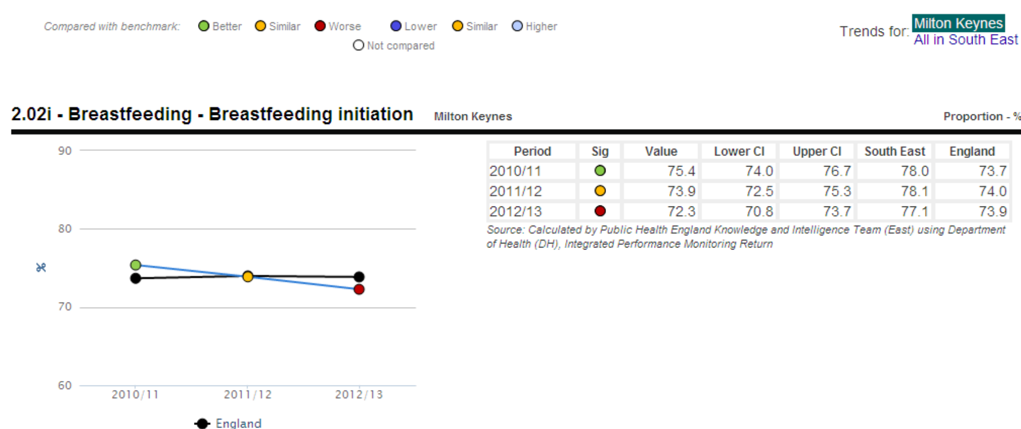
[31] CMACE/RCOG Joint Guideline: Management of Women with obesity in pregnancy (2010) [http://www.rcog.org.uk/womens-health/clinical-guidance/management-women-obesity-pregnancy]
[32] *The National Obesity Observatory* (2014) [www.noo.org.uk]
[33] http://www.noo.org.uk/NOO_about_obesity/maternal_obesity/uk_prevalence
[34] CMACE/RCOG Joint Guideline: Management of Women with obesity in pregnancy (2010) [http://www.rcog.org.uk/womens-health/clinical-guidance/management-women-obesity-pregnancy]

4.6 Breastfeeding

Breastfeeding helps secure the best start in life for new-born infants. It promotes health and prevents disease in both the short and long term for both the infant and the mother. There is strong evidence[35] that infants who are not breastfed are more likely to suffer with conditions such as gastroenteritis and respiratory disease which requires hospitalisation.

Breastfeeding initiation and prevalence at 6-8 weeks are indicators in the Public Health Outcomes Framework. Figure 15 shows in 2012/13, 72.3% of mothers in Milton Keynes initiate breastfeeding in the first 48 hours after delivery, this is significantly lower than the England average of 73.9%.

Figure 15: Breastfeeding Initiation rates for Milton Keynes compared to the South East and England



Period	Sig	Value	Lower CI	Upper CI	South East	England
2010/11		75.4	74.0	76.7	78.0	73.7
2011/12		73.9	72.5	75.3	78.1	74.0
2012/13		72.3	70.8	73.7	77.1	73.9

Source: Calculated by Public Health England Knowledge and Intelligence Team (East) using Department of Health (DH), Integrated Performance Monitoring Return

Source: Fingertips Public Health England[36]

The proportion of infants who were being totally or partially breastfed at 6-8 weeks in 2011/12 (12/13 data not available) was 53.1% of infants. Figure 16 below shows that this is significantly higher than the South East (50.9%), East Midlands (43.7%) and England (47.2).

[35] *UNICEF 2013 The Evidence and the rational for the UNICEF UK Baby Friendly Initiative standards* http://www.unicef.org.uk/Documents/Baby_Friendly/Research/baby_friendly_evidence_rationale.pdf accessed 14th March 2014
[36] http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000042/pat/6/ati/102/page/0/par/E12000008/are/E06000042

Figure 16: Breastfeeding rates for Milton Keynes at 6 – 8 weeks compared to the South East and England

Period	Sig	Value	Lower CI	Upper CI	South East	England
2010/11	●	55.9	54.4	57.5	48.4	46.1
2011/12	●	53.1	51.5	54.7	50.9	47.2
2012/13		*	-	-	50.1	47.2

Source: Calculated by Public Health England: Knowledge and Intelligence Team (East) using Department of Health (DH), Integrated Performance Monitoring Return

Source: Fingertips Public Health England[37]

5. Summary

It is clear that both locally and nationally there is work to be done to reduce the rise in obesity that we have experienced over the last decade. To ensure that we are successful in reducing the prevalence of obesity in Milton Keynes we need to address each factor in turn, and influence the commissioning of services, organisations and programmes to reduce the levels of obesity in our population.

The next chapters will discuss the existing services, the national recommendations and will outline the views of local people on their experiences. Recommendations will be made on how the findings of this health needs assessment can be implemented in order to impact on obesity locally.

6. Existing Provision and Impact

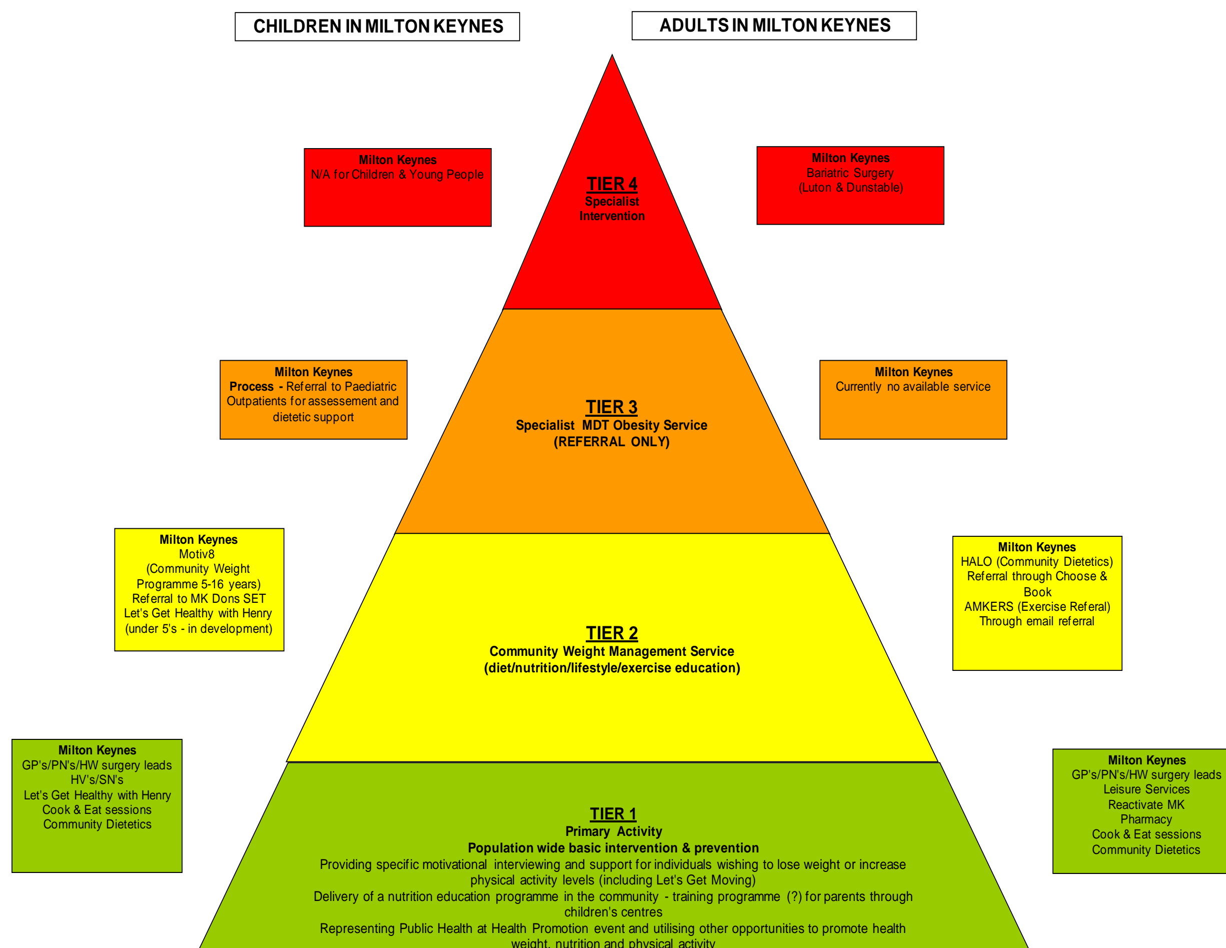
Milton Keynes has adopted a care pathway for the prevention and treatment of the overweight and obese based on the National Obesity Forum model, the model illustrates the current opportunities available in Milton Keynes.

The model outlines each tier of service and which organisation is responsible for each tier. On the left hand side of the pyramid, the current services for children and young people are

[37] http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000042/pat/6/ati/102/page/0/par/E12000008/are/E06000042

detailed. On the right side are the adult's services. These are outlined in detail in this chapter.

Figure 17: Milton Keynes Obesity Care Pathway



6.1. Adult Treatment Pathway

Tier 1 - Population wide obesity prevention programmes

Community Health Promotion Dietetics Service

Since its establishment in 2008 on the back of the HWHL strategy in Milton Keynes, the Health Promotion Dietetics service has been providing nutrition related support and advice to individuals in Milton Keynes, both in the community and as part of formal weight management services. In the community the Dietitians offer practical sessions such as cooking on a budget and Cook4Life in various locations such as children's centres, community venues and specialist groups, concentrating on areas with the highest obesity levels and health inequalities. They also run a train the trainer style approach to their sessions, ensuring that a member of staff is on hand both to support and to be able to continue running the programmes into the future.

Data has been captured for the service from the beginning of April 2013 to end of March 2014. During this time the service had direct contacts with more than 4000 adults and around 4200 children; they also made more indirect contact with approximately 1000 people through a variety of different activities and events.

Reactivate Milton Keynes

Reactivate Milton Keynes is a programme delivered by Milton Keynes Sports Development to encourage all adults to participate in sport and physical activity, to socialise and improve their health and fitness.

The aim of Reactivate MK is to increase awareness of existing sports and physical activity opportunities and make new programmes available. This is to encourage those living a sedentary lifestyle to become active and for others to increase their existing level of fitness. Return to Sport courses are organised throughout the year for adults to participate in a fun and social sport, at a basic or intermediate level. Health Walks and Nordic Walking programmes are coordinated to encourage people to be more active outdoors. Occasional major events are also planned to inspire adults to take part. The sessions aim to leave the individuals feeling happier and healthier, with an increase in their overall physical and mental wellbeing.

The Health Walks, organised as part of Reactivate, see a throughput of on average 13,000 people per year and 200 new walkers joining each year. These Health walks encourage regular activity at a moderate pace, inspiring participants to work towards the Chief Medical Officer's recommendations of completing at least 150 minutes of moderate exercise every week. The groups provide motivation and the opportunity for individuals to socialise, explore the natural environment and keep active, to reduce the risk of disease or manage illness.

Change4Life

Locally the Change4Life national campaigns are used to promote lifestyle messages around healthy eating and physical activity to residents.[38] In the past we have used media such as LiveMK, a resource produced to communicate with tenants and landlords in Milton Keynes. In this publication we sent out to 15,000 households a sign up and questionnaire during the Games4Life campaign.

Tier 2 - Community Weight Management for adults

Health & Lifestyle Opportunities (HALO)

HALO is a 12 week lifestyle programme for the adult population (16+). Over six sessions, patients are introduced to ways in which to manage their weight through a healthy balanced diet. Patients are weighed and have their waist circumference taken at each of the six sessions, and are supported through their weight loss journey. The goal for the patient is to lose between 5 and 10% of their starting weight and to reduce the risk of developing any obesity related health conditions.

During week 5 (session three) of the course individuals are introduced to the role of physical activity in weight management. At this point many are referred onto AMKERS for physical activity intervention to support and assist with their weight loss and behaviour change, or they are signposted to other local activities through the Reactivate programme.

HALO is delivered by the Community Health Promotion Dietetics service, currently at a venue in the hospital. Between April 2013 and December 2013, there were 130 referrals to the programme, 73 adults accessed the HALO programme with a total of 32 completing the programme (a completer is someone who has attended the final session of HALO). 26% of

[38] Change for life (www.nhs.uk/**change4life**/Pages/**change-for-life**.aspx)

attenders were male and 74% were female. 12.5 % of those who completed the programme lost between 5 and 10% of their starting weight, the remaining 87.5% lost less than 5%.

Exercise Referral Scheme

The Active MK Exercise Referral Scheme (AMKERS) has been running locally since 2004. Since this time it has established itself as a creditable scheme and has increased capacity to currently include 12 providers. The scheme has recently transferred into Milton Keynes Council as part of the transition of Public Health from the NHS.

AMKERS forms part of the current obesity care pathway for adults in Milton Keynes; it forms an exercise intervention alongside the Health and Lifestyle Opportunities (HALO) programme run by the Health Promotion Dieticians. The scheme aims to support patients to increase their physical activity levels gradually towards achieving the recommended 150 minutes of moderate intensity physical activity across the week. A person is eligible for the scheme if they have a health condition; as well as obesity, this includes high blood pressure, raised cholesterol, asthma, diabetes, depression, angina, impaired strength mobility, controlled COPD and stroke. The programme lasts for 12 weeks with the aim of attending at least two hour long sessions each week. During this period patients are given an initial health assessment, a personal programme tailored to their needs, and a final assessment at the end of the programme.

A Stroke pilot project commenced in February 2014 and is part of the AMKERS programme. The aim of the project is to provide Stroke specific support in the community for patients after their rehabilitation. The programme incorporates ARNI principles (Action for Rehabilitation from Neurological injury) within an 11 week programme, with additional follow-up support and maintenance sessions.

Between April 2013 and March 2014, 148 patients were referred to AMKERS with overweight as the primary reason for referral; a further 114 had overweight as a secondary reason for referral. A total of 566 patients were referred in 2011/2012. In 2012/13, 399 were referred and 371 in 2013/2014.

Obesity in Pregnancy

A pilot programme, Start4Life, is currently in development. The need for a scheme was identified in early 2013 when the midwifery team reviewed the numbers of pregnant women

presenting in their care who were obese at the time of the dating scan. This programme will initially be targeted towards those with a BMI of 35 or above at the time of the dating scan. The mother (and her partner) will be invited to attend three sessions over the course of six weeks, where she will learn the fundamentals of a healthy diet, and receive support and advice from the midwifery team. It is intended that pathways are put in place with Health Visitors and Children's Centres to ensure that the support continues once the baby has been born, and the mother can receive advice on returning to/achieving a healthy weight.

Tier 3 Specialist Intervention for adults

There is currently no Specialist MDT service in place for obesity for adults; this is an identified gap in the care pathway.

Anti-obesity drug use (as part of Tier 3 service)

Currently Orlistat is the only drug licensed for use, since the licenses were withdrawn for Sibutramine and Rimonabant. NICE guidelines for obesity (NICE 2006) recommend that drug intervention is only prescribed as part of an overall plan to reduce weight after diet, exercise and behavioural approaches have failed.[39] Patients must have a BMI of 28kg/m^2 or more with associated risk factors, or a BMI of 30kg/m^2 or more. Patients should only continue treatment if they have lost 5% of their initial body weight at three months. Treatment is only recommended for 12 months and a maximum of 24 months.

There is limited data available to capture information on the prescribing patterns in GP practices in Milton Keynes. What is available is the raw cost of providing the drug Orlistat. What we cannot be sure of is whether the drugs are being used in line with the recommendations, there is currently no mechanism to assess whether patients had a weight loss target set, whether appropriate follow up has been carried out and whether patients are treated beyond the 24 month limit.

In 2011/12 Orlistat prescriptions cost more than £133,000, in 2012/13 this dropped to just over £55,000 but there were issues with the availability of Orlistat. Between April 2013 and February 2014, the prescribing costs were at £81,000, indicating a rise in the figures again. However, the rise is still lower than the 2011/12 costs. As mentioned, the limited availability of data does not allow for any patterns to be identified for each practice.

[39] National Institute for Clinical Excellence(2006), Clinical Guidance for the identification, prevention and Treatment of Obesity in adults and children.CG43

Tier 4 Bariatric Surgery for adults

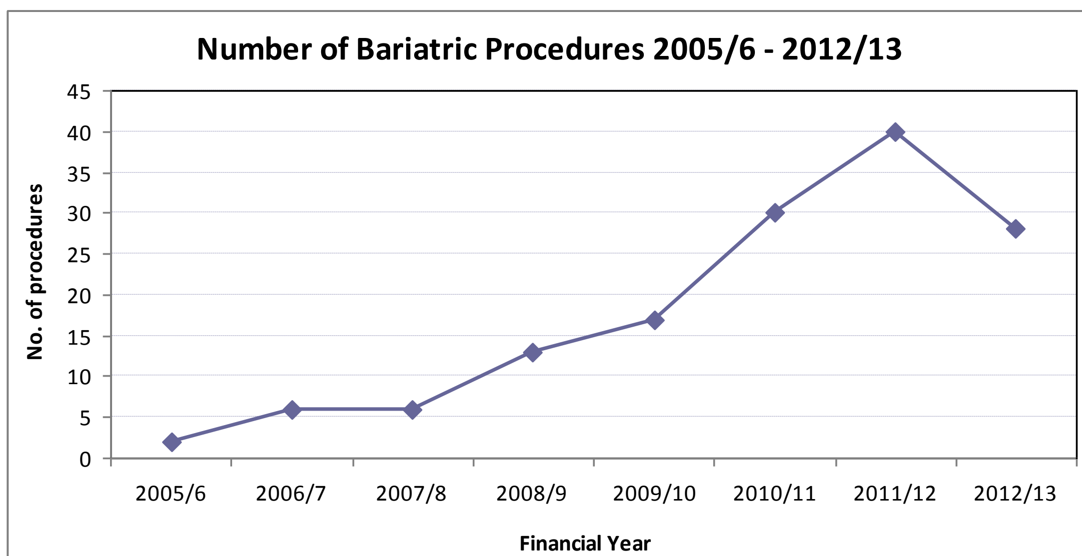
The final treatment option for individuals classified as morbidly obese is bariatric surgery; this can consist of a number of different procedures.

In Milton Keynes, in order to be eligible for bariatric procedures individuals must meet the following criteria as stated in the South Central Priorities Committees policy statement (2009,reviewed 2010)[40]:

- BMI over 50 with or without a stated comorbidity
- BMI of more than 40 and less than 50 with insulin dependent type 2 diabetes

Individuals are referred to Luton & Dunstable Hospital to receive the treatment. Over the last eight years, there has been a marked increase in the number of procedures performed on Milton Keynes residents, with only two receiving a procedure in 2005/6, increasing to 40 in 2011/12. This decreased in 2012/13 to 28 procedures.

Figure 18: Bariatric procedures 2005/06 – 2012/13



Source: Sollis Database 2005/06 – 2012/13

Considering that an estimated 2790 adults (1.4%) in Milton Keynes are morbidly obese, these are very low numbers actually going through the pathway. This may be due to the

[40] NHS Commissioning Board (2012) Clinical Commissioning Policy: Complex & Specialised Obesity Surgery. NHSC/A5.

fact that there are no structured Tier 3 services locally for individuals to attend in order to be eligible and assessed properly for Tier 4.

6.2. Children's Treatment Pathway

Tier 1 - Population wide obesity prevention programmes for children

Breastfeeding

There is no specific commissioned work taking place around breastfeeding, all work is directed through the Health Visiting and Midwifery teams. There is a network of support peers through the work at the hospital, and Children's Centres provide a supportive environment for women who are breastfeeding.

Community Health Promotion Dietetics Service

As outlined in the adults section, the Health Promotion Dietetics service provide sessions in the community to educate people around nutrition with practical and theory based sessions. They have worked closely with children and their families through children's centres, and support the training of the SMILE Plus+ Award coordinated by the Oral Health Promotion team in Milton Keynes. As outlined before, during April 2013 to March 2014 the team have had 4190 direct contacts with children across a variety of venues and sessions.

Change4Life

The Change4Life national campaigns are used locally to promote lifestyle messages around healthy eating and physical activity. During 2013 sign ups have been targeted during the Be Food Smart and Get Going campaigns; this has been done through a visual presence such as the MK Play Day, Sports Development days and events in the Shopping Centre.

The branding for Change4Life has been used to promote local programmes, the children's weight management programme Motiv8 and the summer sports activities have used this, as well as the MK Play Day 2013. A series of posters have been created for use in pharmacies and GP practices to encourage them to raise the issue of weight with a health professional that can then continue the conversation and offer support, feedback from these were positive.

Early Years Intervention

In Milton Keynes the Public Health team have invested in early year's intervention. A Healthy Early Years Award (HEY) is available for early years settings such as child-minders, Children's Centres and pre-schools. The programme has a strong focus on nutrition, healthy eating and physical activity. The Award is being co-ordinated by Public Health working with the Early Years Support team at Milton Keynes Council towards sustainability for the award. It should be noted that there is a limited co-ordination between the settings in terms of monitoring the provision of healthy eating and physical activities within early years settings. The HEY award could be a way to address this.

The national Start4Life campaign is being used locally; the resources are promoted to health professionals such as Midwives and Health Visitors to use with families with babies and young children.

Lifestyle Support in Schools

Since the end of the Healthy Schools service in Milton Keynes and the increasing number of schools becoming Academies in 2010, the support offered to schools around wellbeing, including lifestyle has been inconsistent, with many schools choosing to buy in their own services of mixed quality. There is currently no system in place in Milton Keynes to monitor the provision of healthy eating and other lifestyle factors within school settings. There is also no system for providing support to schools around these issues. This should be noted as a priority for future services.

Tier 2 – Community Weight Management for Children

Health, Exercise, Nutrition for the Really Young (HENRY)

The national Health, Exercise, Nutrition for the Really Young (HENRY) approach has been taken as part of the investment in early year's intervention. Training has been provided for both Children's Centre staff and Health Visitors in the HENRY approach, six initial areas have been identified based on low levels of breastfeeding initiation and high levels of obesity. The six corresponding children's centres will be the venues for the 'Let's Get Healthy with HENRY' eight week parenting courses that are being delivered.

Additional HENRY e-learning licenses have been purchased for use with other early years professionals, initially the professional's licenses are being used for the Midwifery team to support the work with obesity in pregnancy they are starting. The licenses for the public are planned for use within midwifery, alongside the Start4Life programme (obesity in pregnancy); they will be offered to those mothers who are obese but not eligible for the Start4Life programme in order to bridge the gap in service capacity.

Motiv8

Motiv8 is a ten week, term time programme of physical activity and nutrition advice to support overweight and obese children and their families with weight management, delivered and coordinated by the MK Dons Sport & Education Trust (SET). The families receive information and support in changing their lifestyles to eat more healthily and be more physically active. Motiv8 is divided into three programmes for different age groups, 5-7 years, 8-12 years and 13-16 years, each delivered at a different venue across Milton Keynes.

Children are required to attend for the full ten weeks, once for a nutrition theory session and twice for a physical activity session (with the exception of the youngest group). The children learn about the importance of living a healthy lifestyle, including the fundamentals of a healthy diet through the Eatwell plate and how to make healthy swaps every day. They also learn how to build physical activity into their everyday lives and try new activities throughout the ten week programme. A course handbook is used throughout the ten weeks during the nutrition sessions; it is also used for homework tasks over the course. Small incentives are used during the first few weeks, all children are given a Motiv8 t-shirt, bag and water bottle to wear and use throughout the programme.

During 2011/12 177 children were referred onto the scheme, of those who started a total of 59 completed the programme (a completer is defined as having attended the final session). In 2012/13 the number referred dropped to 134 with 46 of those starting completing the programme. From April 2013 to March 2014; 126 have been referred, 66 attended the first session and 43 completed the programme.

Tier 3 – Specialist MDT Intervention for Children

There are currently no Tier 3 services for children in Milton Keynes, previously there was a small scale obesity clinic with intervention from a Paediatrician from the Child Health team at Milton Keynes Community Health Services and the Health Promotion Dietetics service, this support was decommissioned in 2011.

Since the service has been decommissioned, a process has been put in place to ensure that children are still given a level of support, children of concern who do not fit the referral criteria or who despite compliance have not been successful at Motiv8 should be referred to the Paediatric Outpatients Consultant at the hospital who can also refer them for support from a dietitian.

Tier 4 services are not available for children.

6.3 Summary

It has been noted during the development of this HNA that there is a significant gap in the evaluations of the programmes and tiers of service; although all have been assessed for effectiveness the need for a standard evaluation framework is clear.

There needs to be a large scale whole population based prevention programme for Weight Management that can be used to raise awareness of the problem within the population as part of Tier 1 services. This needs to inform and educate people on the scale of the problems and the need to change. There needs to be continued promotion and development locally of the national Change4life campaign.

The increase in the referral and uptake of community weight management programmes for both adults and children needs to be address as services provided are not being utilised. This needs to be addressed in any re-commissioned service.

Investment in prevention and early identification needs to continue and develop. There needs to be increased availability of local healthy eating initiatives, including cooking on a budget, basic cooking skills and family based learning. The lack of coordinated intervention in schools needs to be addressed.

For both adults and children there is a gap in service at Tier 3 and work with Milton Keynes CCG needs to happen to address this ensuring there is strict pathway between Tiers 2 and 4.

It is apparent that the services we provide have gaps but our provision of any level of service across the pathways are completely inadequate in comparison to the size of the problems.

7.0. Stakeholder Insight

In order to gather insight from providers, partners and practitioners, a variety of surveys were distributed to a wide range of respondents.

7.1. Providers of Weight Management Provision Survey

Responses were collected from five main providers of weight management provision (seven contacted, five responded), two of these services are currently commissioned by the Public Health team, the others are recognised commercial providers operating in Milton Keynes (Slimming World, Lighterlife).

Communication and Promotion

All of the providers used a variety of communication methods to promote their service; the commercial providers have the benefit of being heavily branded national companies and are able to use national media to promote their brands as well as local approaches. However, at a local level the contracted and non-contracted services both used media such as newspapers, social media, posters and websites to promote their services. The contracted services also used local health fairs and health promotion events to promote, as well as emails to local contacts including schools and health professionals, something that was not possible for the commercial providers.

Challenges and Barriers

The issues and barriers the providers have experienced are mainly around the retention of families/attendees for the duration of the programmes. The barriers can be multiple including: low confidence to attend, transport and availability/accessibility of the programmes and the parent/individual work commitments preventing attendance, there is

also a reluctance to join gym based sessions for adults and the associated negative opinions towards weight management sessions, which have prevented people from signing up in the first place. Also highlighted by the commercial provider was reluctance for men to join weight management groups, and low numbers of participants from Black and Minority Ethnics Groups. The lack of provision for psychological support for the services and the absence of a Tier 3 service were flagged as issues.

Gaps in Provision

When asked what improvements they felt were needed in Milton Keynes, the providers were keen to see an awareness campaign around healthy weight and expressed the need for the addition of psychological services to link in with the existing provision for weight management. The relationship between the provider and the health care professionals was felt to be weak, with improved relationships being required.

It was stated that local providers for the commercial programme research the local opportunities and felt that there were enough services to choose from for the clients/patients. It was highlighted that a children's directory of physical activity, similar to the Reactivate for adults, would be a useful resource.

7.2. Practitioners Survey

On the back of the provider's responses, information from practitioners working in the field of weight management was gathered. Response to this was low but the Health Promotion Dietetics team provided in depth information.

Challenges and Barriers

The Dieticians felt that engagement of individuals onto programmes and retaining them for a full course was a challenge, generally there was a lack of potential referrers raising the issue of weight with patients, which in turn caused a lack of access to members of the public who would benefit from weight loss.

Costs

The costs involved in running their service (other than commissioning costs) were low. Cook4Life sessions cost around £60 for a six week course and Get Cooking £120 for a six

week course, both of which is generally picked up by the centre running the sessions. Limitations are the lack of a working budget for outreach work.

Gaps in Provision

Schools featured heavily in the comments that they provided, a lack of provision for schools and the absence of a 'Healthy Schools' programme means that healthy eating is unmonitored. They highlighted the lack of measurements after the year 6 measurements, especially into adulthood.

The team described their experience of gaps in the current services, these included the absence of an adequate Tier 3 MDT service, limited support available to schools and early years settings, provision of community based cooking/healthy interventions at population scale and limited work within workplaces. Despite the significant gaps in service, the team did express the benefits of flexible working across Milton Keynes and different organisations, including the strong links between children's centres, the MK Dons SET interest in health and other healthcare professionals.

They actively encourage individuals to sign up to Change4Life and refer or signpost into the appropriate services available. They were aware of the opportunities available for physical activity, but felt that there needed to be more male/female split sessions, and a resource for children's activities similar to what is produced for the adults Reactivate programme.

When asked what support they felt was required to improve the local capacity, they expressed a need for medical professionals to identify and refer individuals into the services available, including the early identification from Midwives, Health Visitors and School Nurses of those at risk or already overweight/obese. They also discussed the need for a media presence or campaign around lifestyle, with additional support from local businesses.

7.3. Partners Survey

Online surveys were sent out to a number of partners across Milton Keynes whose work has a link to obesity service/treatment/identification, the responses were anonymous and have been summarised.

Challenges and Barriers

The challenges that partners faced were around the individual's self-confidence and motivation to attend sessions, this also included the recognition by parents that there is a problem. There was concern over the lack of focus and support for schools to lead on health and wellbeing, this extended to concern over the local availability of fruit and vegetables in community shops, and the education that it doesn't have to be expensive to eat healthily.

The awareness of local physical activity opportunities were mixed, the majority had heard of the Reactivate project for adults and many suggested that a children's alternative would be useful. The respondents felt that confidence to attend was a barrier to a number of the people they meet, the cost of attendance to a gym or swimming pool was also a significant factor.

In terms of identification, it was flagged that children do not generally present in primary care and therefore there is limited opportunities for them to be weighed and measured in practices. It was also highlighted that due to the high percentage of adults who are overweight or obese, they felt it an impossible task to raise the issue with all of the people who presented.

Gaps in Provision

Generally individuals who answered the survey were aware of the services that were available to residents of Milton Keynes. Many respondents quoted commercial slimming providers as options they would promote and GP's featured highly.

Gaps in provision for early years (under 5's) and women in pregnancy were also identified. It was felt that increased investment was needed in active play (and its role in weight management and prevention of obesity), training on supporting individuals to lose weight, support in school and after individuals have completed the weight loss, this linked into lack of a Tier 3 service for either children or adults, and also services available for patients who are homebound.

When asked what they felt should be included within any future services, the opportunities for children and young people through the settings they accessed featured heavily, with early years, schools and colleges all being mentioned. This linked to the need for more

education around having a healthy diet in local community settings, including basic cooking and information sessions. The inclusion of 'weight advisor' type roles working either in GP practices or throughout the community to support individuals to lose weight was suggested, it was also felt there was a requirement for a population wide intervention or mass media campaign around the importance of having a healthy weight and being active.

School Nursing

The same questions were also distributed to the School Nursing team, of 12 responses some themes around the issues and barriers emerged. The engagement of parents to participate in programmes or act on the advice given featured highly in the responses; this includes recognition by the parents that there is a problem in the first place. Although all of the School Nurses identified Motiv8 as the service for families, the main barrier they felt to attendance of the programme was transport and the accessibility of the Motiv8 programme in local areas. All of the responses were positive about the Motiv8 programme and the fact that it is a free programme with up to date advice and support. The main suggestion for improvement was to have feedback to the School Nurses when they are the referrer. Many of the responses highlight the need for a targeted intervention in schools as well as more general support, similar to the existing healthy schools project.

8.0. Consumer Insight

Consumer insight has been sought from two main methods, focus groups and consumer surveys.

8.1. Focus Groups

Three focus groups were held with existing attendees of local weight management groups, they gave the opportunity to obtain patients' views of both the current services and also their experiences of weight management. Two sessions were facilitated with two HALO groups (groups were in their final week and therefore completed the programme), a total of 16 individuals participated. One session was help for existing Motiv8 families; only one family attended this session but contributed significantly to an open conversation following the same structure.

The terms Overweight and Obese

When asked what the words overweight and obese mean to them, individuals from all of the focus groups discussed feelings of embarrassment, shame, the fact that it was a struggle to lose weight and they felt they were to blame; the children described bullying at school. Being obese was described more as a health problem; participants recognised the risks associated with being obese to their health, both now and in the future. There was however a perception of extreme weight associated with the term obese, people who were immobile and home bound felt that the term obese was an insulting word that was unfair and inappropriate to use with children.

Weight Management Services

Participants wanted weight management services to be a supportive environment where individuals could come to better themselves, and feel motivated to change their behaviour and take control of the situation. They discussed ideas around healthy eating advice, including healthy recipe ideas; they also highlighted the need to feel reassured that the leader of the session was not only supportive, but knowledgeable and able to answer their concerns. The mother in the family session mentioned receiving a letter as a result of her son being weighed and measured at school (as part of the NCMP) and the impact this had on the family taking action to become more healthy, they felt it was a positive action as it enabled her to take control of the situation. All gave local examples that they were aware of; they also mentioned Weight Watchers and Slimming World as commercial providers of weight management.

Experience of Weight Loss

Several participants in the adult group discussed their various experiences of their previous weight loss attempts, many felt that attempts through some of the commercial providers were adequate at the time but didn’t teach them how to change their behaviour, just to follow meal plans. Some found support from their Practice Nurse useful and the receiving of regular weigh-ins was a useful way for them to keep track. However, they all felt that in the past once the support had stopped they found it a struggle to keep up the changes.

When discussing the experiences they had of the weight management service they have attended locally, all spoke positively about the schemes. The adult groups all felt the sessions were supportive, the content was useful and all felt confident to be able to

continue with the simple advice that was given. All described tools such as portion sizes and food labelling as vital to understanding where they have been going wrong, and easy to put into place.

The central location (at Milton Keynes Hospital) was vital to continued attendance, but all disliked the fact that to get to the venue you had to walk through the canteen area of the Hospital which many found a challenge. All participants agreed that some sort of follow up scheme would be good, perhaps more around maintenance and ideas for healthy recipes and tips.

The family had similar experiences of Motiv8, feedback was positive on the nutrition side of the scheme, and the family have managed to integrate many of the actions into their home life. The child enjoyed trying new activities and making friends, they did feel similar to the adults that some sort of follow up scheme would be good where the parents and children can do activities together, they would be happy to pay a small family charge for such a service.

Motivation for Weight Loss

The motivation to attend sessions was mixed, some were there as they wanted to make improvements to their health, such as reducing the symptoms of conditions like arthritis and diabetes and help to manage pain. Others were there because they were told to attend by their doctor, whereas some were there because their families wanted them to seek help as they had tried before on their own but failed. Many had short term goals associated with things like holidays, and all agreed that weighing regularly was key to maintaining weight. In the family group they felt that attending as a family helped to strengthen the family unit, they were able to spend time together and support each other to change as a family.

Challenges and Barriers

When discussing the difficulties in attending and the temptation to drop out of the programme at any time, the majority of the participants felt that when they were having bad days and things weren't going well they felt like dropping out, the family found a change in instructor/coach difficult and felt that continuity was needed as trust was a significant factor for getting the child to attend each week. Childcare and caring responsibility made attending at times difficult; as did working patterns (shift work). Individuals felt that cost would be an

issue if they had to pay for it; they also felt that as they had been referred by a health professional that the scheme should be free.

Physical activity was recognised as playing an important part in their weight loss journeys. The weather, work patterns and the cost of attending all impacted on them participating in activities, especially when individuals were attending community sessions and the costs add up. Many wanted to do more of activities like swimming, cycling and walking but confidence did hinder them getting involved in group activities.

Gaps in Provision

All were keen to see any new services focusing in schools and education settings where children and their families could learn at an early age the importance of a healthy lifestyle. They expressed a need for reduced cost activities and gym memberships for those that need them the most, including more options for short term memberships without large joining fees. Many expressed an interest in follow on schemes, potentially more advice in the community through advisors in GP practices or other community venues that could support them with lifestyle issues. They felt there was a need for more cooking education in the community, and family activities that children could attend with their parents. It was also highlighted that a central children's activity search/booklet would be useful for families to find local, low cost activities.

8.2. Public Survey

The questions used for the public survey were based on those used during the focus groups, for three weeks a survey was placed on the Milton Keynes Council website. A total of 45 responses were collected.

Of those who responded 32 were residents of Milton Keynes, 39 were employees, 28 females and nine males responded with eight people not stating their gender.

The terms Overweight and Obese

Of the respondents, when asked what the word overweight meant the majority used the term 'fat' and associated it with poor health and low levels of fitness. They also described it as making you feel uncomfortable, having poor self-image and being out of shape. It was also flagged that carrying excess weight seemed to have become the norm for many

people. There were a few of the respondents who felt that it wasn't detrimental to health. When describing the term obese, the majority of respondents described the extreme of excessively overweight individuals who are physically restricted and in need of a clinical intervention. They also described these individuals as being expensive to the health service, lazy people who do no exercise.

Weight Management Services

When asked where they would go for advice if they were worried about their weight, 32 of the respondents said they would visit their GP, about a third of the respondents said they would do more exercise or visit a weight management service, a small number of them suggested things like looking online, seeking advice from family or friends, or reading magazines. Generally the respondents described weight management as free weekly advice and support with diet and exercise built in. They also described some of the commercial opportunities available to them, as well as stating that it would need to be professional advice. Individuals concentrated on the need for informed and realistic advice on changing behaviour and support for individuals to do this, either on their own or as a group. A small number mentioned the use of App's as a way of finding information.

Experience of Weight Loss

Three out of four respondents had never attended a weight management intervention, one in four had and the majority described these as one of the commercial providers. Generally, individuals were motivated to attend either for a short term goal such as a wedding or holiday, or in the majority of cases as they felt they needed to lose weight and required support to do so. Generally those who had attended commercial weight management programmes felt that they had achieved some weight loss but that they got bored quickly, and many put the weight back on once they stopped following the plans. One individual described the use of an online system, which as a motivated individual felt worked well and was easy to use. Many of the respondents found motivation to continue to attend the sessions a barrier as well as the costs incurred.

Challenges and Barriers

People used words like enjoyment, anything moving, fun, feeling good to describe physical activity. Many mentioned specific sports and activities they enjoyed, increasing heart rate and using muscles. When describing barriers to physical activity; time, cost and

embarrassment to join in featured heavily. Childcare was also a significant barrier for many of the respondents. Many of the respondents were not aware of the healthy eating or physical activity opportunities available to them locally, some mentioned the vast amounts of opportunities through Milton Keynes parks, open spaces and network of Redways. They did however also feel that work commitments, access and financial constraints limited their attendance, but some also felt they put barriers in the way of just getting out there and joining in. Some felt the costs of hiring some of the facilities (badminton/tennis courts) put them off as they are quite expensive for an hour's exercise.

Gaps in Provision

When asked what sort of services they would like to see developed, individuals wanted to see weight loss programmes with physical activity combined and these activities available outside of working hours. A few described the need for a service for home bound patients, which is delivered by a professional. A local community service, something that is accessible without having to travel too far. Support with the emotional wellbeing effects of overweight and obesity, including understanding how to change their behaviour. A few respondents expressed the need for more cooking classes within local community venues and online tools to support maintenance of a healthy weight. Several people described the need for employers to be more supportive, offering healthy lunchtime options where food is on site, more activities organised before, at lunch and after work, a designated area to eat lunch.

9.0. Summary of Insight

The views of professionals and public are extremely vital to informing the future services for Milton Keynes. There have been many points raised, with several themes emerging. From the responses the main points have been summarised and highlighted below:

- People were generally aware of the risks of being obese, especially the risks to the health and wellbeing of the person

- There is a common misunderstanding over what obesity is, as many perceive it to be the extremes of morbid obesity often portrayed by the media. There is a lack of knowledge and education around the actual scale of the problem

- Identification of individuals is an issue, with a need for the information to come from health care professionals who have credibility with patients

- The barriers associated with attendance to local sessions were unsurprising. Costs, accessibility and the personal embarrassment and feelings of shame in admitting they had a problem were all high on the agenda

- Many spoke of the times of the sessions being currently delivered and the need for out of hours sessions, this also included the flexibility of being able to attend weight management out of their own area

- It was clear from the responses that commercial providers of weight management are able to use their ‘big brand’ power to influence the behaviour of individuals seeking to lose weight.

- Retention of patients on the schemes is a common issue with delivering weight management, many lack the self-confidence to attend, especially when they do not achieve as quickly as others

- The gaps in service were highlighted - support and provision in schools and early years settings was seen as a key area for more focus, there was concern over the current lack of provision and continuity in this area

- The current local structure was seen as a benefit and allowed flexibility to suit individuals need

- The lack of a Tier 3 service in Milton Keynes was seen as a significant gap in service

- Physical activity – it was clear that all providers saw the importance of incorporating physical activity into the weight management programme and did so to varying degrees.

Each of these points needs to be addressed when considering the future services.

10. Summary

Based on the information gathered for this report, including the evidence, recommendations and views of residents and professionals of Milton Keynes, recommendations for consideration during the planning and development of future services have been made below.

To address these issues, we need to ensure that there is senior level commitment to the obesity and physical activity promotion and opportunities across Milton Keynes. Additionally, our approach across Milton Keynes should include public bodies, business and charitable organisations and incorporate a cross party political commitment to working to reduce the risk to the children and adults living within Milton Keynes.

1. This is a big problem with big health implications
2. This is a key recommendation within the Health and Wellbeing Strategy - '*To support and motivate people to engage in healthier lifestyles'*
3. NICE, NOO and the National Obesity Forum provide clear recommendations
4. Stakeholders including practitioners, partners and users have all been involved in this HNA
5. The services we provide have gaps but our provision of any level of service across the pathway Tiers are completely inadequate in comparison to the size of the problems
6. Maximise the benefit of our new working environment and develop a cross-party political commitment to addressing this issue

10.1. Recommendations

Both diet and physical activity are independently really important for health and are a key part of a weight management programme for both adults and children.

We need:

- A Strategic Framework for Weight Management

- Large scale population based prevention programme for Weight Management. The programme would be used to raise the awareness of the problem within the population (Appendix A)

- Re-commissioning of Tier 1 and Tier 2 Weight Management Services for Children and Adults incorporating the key findings of the HNA (Appendix B). This service would be responsible for raising the awareness of the problems within the population (Appendix A)

- The National Obesity Observatory Standard Evaluation Framework should be built into all contracts for local weight management programmes to ensure a standard process is in place.

- Address the gap in service at Tier 3, ensuring that any proposed service is fit for purpose and can meet capacity. Any service must ensure strict pathway between Tiers 2 and 4.

11. Conclusion

In this Health Needs Assessment, the scale of the obesity problem in Milton Keynes has been outlined in relation to the national picture. It is clear from the report that obesity continues to be an important Public Health issue, and there is still action to be taken if we are to reverse the rising tide of obesity. It has shown that without intervention the levels of obesity could continue to rise, with a significant impact on the health of the population and the wider economy. The report has outlined the current services available in Milton Keynes for the prevention, identification and treatment of obesity and how these compare to the national recommendations and evidence base.

Finally the report has outlined five key strategic recommendations for action and a further series of recommendations at an operational level that need to be considered during the development and implementation of future services around obesity identification, prevention and treatment.

Appendix A

Increasing population awareness through population wide programmes and weight management services

- As part of the Tier 1 services a high profile social marketing campaign should be developed to inform and educate people of the scale of the obesity problem and the need to change
- A coordinated approach to the use of social media should be implemented as part of the Tier 1 services
- Continued promotion of the national Change4Life campaign at a local level, including the development of local co-branding to increase recognition of the brand
- Development of a campaign with local retailers on the promotion of sale of fruit and vegetables including stocking fresh produce to support individuals to be able to access them locally (Change4Life have developed a similar project in the North including education on shop displays, weekly family recipes and offers)
- Increase work to promote walking and cycling as an accessible form of transport for all through schools and workplaces
- Support and work in partnership to achieve a common aim of increasing the number of people walking and cycling for active travel
- Increase the promotion of breastfeeding across Milton Keynes including the support that is offered locally (Encouragement of local businesses to adopt and work towards the UNICEF Baby Friendly Initiative principles)

Appendix B

Prevention & Early Intervention

- Ensure that there is senior level commitment to the obesity and physical activity promotion and opportunities across Milton Keynes
- Development of a multi-agency strategy and action plan to reflect the needs of the population in Milton Keynes
- Establish cross department/sector work to incorporate as a focus for work areas such as Transport, Environmental Health, Public Health and Planning
- Local Licensing and Public Health teams to work collaboratively on a project to address access to healthy food choices related to street vending
- Develop a healthy retailer/restaurant programme to improve the access to healthy snacks, meals and drinks
- Increase the availability of local healthy eating initiatives, including cooking on a budget, basic cooking skills and family based learning

Children and Young People

- Establish a formal mechanism for the monitoring of healthy eating and physical activity opportunities and promotion in all early years settings, including the promotion of lifelong health skills

- Development and implementation of the Healthy Early Years Award
  This award is already development but ownership and responsibility needs to be established

- Roll out of the HENRY parenting programme in Milton Keynes including commitment of future funding and increased capacity

- Address the lack of coordinated intervention in schools, including a formally adopted process for monitoring the provision of healthy eating and other lifestyle in schools

- Increase the referral and uptake of the community weight management programme for children

- Address the gap in service at Tier 3, ensuring that any proposed service is fit for purpose and can meet capacity
  The CCG are responsible for services at this Tier, therefore this should be included within commissioning intentions

Appendix C Adults

- Create new service specification for the Adult weight management service based on the current need as identified in this HNA, this should include long term weight loss outcomes
  There is a template service specification available through the Department of Health

- Increase referrals and uptake to the adult weight management programme

- Consider the use of commercial weight management as well as local services in the development of new service specifications
  This will ensure that the services offered locally are broader and more accessible to individuals and are available to suit their needs

- Investigate the use of online tools to support weight loss instead of face to face sessions, potentially with the support of a health care professional
  Allowing for a flexible approach to weight management, but support must be available from a HCP to ensure success is appropriately managed

- Establish an obesity in pregnancy programme to support expectant mothers to adopt healthy eating principles and be physically active during and after pregnancy
  This programme needs to be a structured programme accessed through and delivered by the midwifery team

- Investigate and implement a formal process for monitoring the use of Orlistat
  The generic use of Systmone in GP practices will support this as GP's will be able to run searches on how the medication is being allocated and used

- Address the gap in service at Tier 3, ensuring that any proposed service is fit for purpose and can meet capacity
  The CCG are responsible for services at this Tier, therefore this should be included within commissioning intentions. Any service must ensure strict pathway between Tiers 2 and 4

- Ensure the implementation of the Making Every Contact Count project continues to spread across organisations in Milton Keynes
  This will give a sound grounding for the raising of lifestyle opportunities including obesity & physical activity