Wirral JSNA: Adult Obesity

Summary

- Estimates based upon the Health Survey for England data suggest the number of obese adults in Wirral is somewhere in the region of 60,000 to 68,000 people.
- The number of people who are *either* overweight or obese is 164,000 (more than half of the Wirral population). This means there are more people of an unhealthy weight in Wirral than there are of a healthy weight. This number could be approaching two-thirds of our local population according to Active People Survey results
- Obesity is more prevalent amongst women compared to men
- Overweight is more prevalent amongst men
- Obesity and overweight are both more prevalent in deprived populations. This trend is particularly marked in women, where the social class gradient results in higher levels of obesity (compared to men) in more deprived groups
- Four out of five (80%) of obese children go on to become obese adults
- Actual 'real' data on adults in Wirral is lacking. There is a GP QOF register for obesity, but not all obese patients will visit their GP every 15 months to be recorded
- Adult obesity appears to be stabilising after around 20 years of rising prevalence, but rates are still double what they were in 1993 and there is no sign of reversal.
- Current levels of overweight and obesity are likely to have serious consequences with potential increases in prevalence of diabetes, CVD, some cancers and musculoskeletal conditions etc. which will be extremely costly if not tackled
- Evidence supports prevention as the most cost-effective strategy. Overweight and obesity are now so common, population level action is required.

Contents

What do we know?

Overview

Obesity is a significant public health problem both in Wirral and the UK overall which results in long term negative social, psychological and physical consequences. Adults are classified as obese if they have a body mass index (BMI), of over 30. BMI is a measure of weight status that adjusts for height and is calculated by dividing a person's weight in kilograms, by the square of their height in metres (1).

Obesity increases the risk of developing irreversible, chronic conditions at younger ages (2), such as Type 2 diabetes, cardiovascular disease (CVD), liver disease, musculoskeletal disorders, obstructive sleep apnoea, asthma, certain cancers, poor mental health and quality of life and a reduced life expectancy of around eight to ten years compared to those of a healthy weight (1,3-8).

Obesity is not only detrimental to physical and mental health, in common with the majority of risk factors significant in the development of chronic disease and poor quality of life; there are stark social gradients in the prevalence of obesity. Higher levels of deprivation are associated with an increased likelihood of obesity in both adults and children (9-11).

Obesity is notoriously difficult condition to reverse once established. Four out of five children who are obese go on to become obese adults (7 & 12-14) and many adults struggle to lose excess weight, often regaining any weight lost through dieting (14). Prevention therefore seems the best approach.

Whilst bariatric surgery is effective in reducing weight, it is risky, invasive and costly (14). It is also an individual level solution to what is a population issue (15).

Obesity is not just detrimental at the individual level; it affects overall society and can have economic impacts, by for example, affecting a person's ability to work. Obese people are much less likely to be in employment than those of healthy weight (10), and even when in work, earn less on average than people of normal weight (16-17).

Overall, obesity has been projected to cost the wider UK economy overall around £20 billion per annum from 2015 (18) and it has been suggested that obesity has the potential to reverse recent gains in life expectancy (19-20) and reduce healthy life expectancy (years spent free of disability or ill-health) by up to a third over the next 20 years (21).

Facts and figures

There are no definitive data for obesity (in adults). In the absence of definitive data, numbers of adults in Wirral who may be obese have been estimated here using data from the Health Survey for England (HSE) and the National Obesity Observatory (NOO).

Obesity has been estimated by a) age band and b) deprivation. Obesity by age band was extrapolated by applying percentages in each weight category from the 2011 Health Survey for England data, and applying it to the Wirral population (See table 1 below).

Table 1: Weight status of England population from the Health Survey for England, 2012

Weight status	Definition (BMI score)	Percentage
Underweight	<18.5	1.8%
Normal	18.5-24.9	36.4%
Overweight	25.0-29.9	37.1%
Obese	30+	24.7%
Overweight and obese	25+	61.9%

Source: Health Survey for England, 2012

The above percentages have also been produced by age band and gender and these were then applied to the 2012 Wirral population, giving the numbers in Table 2.

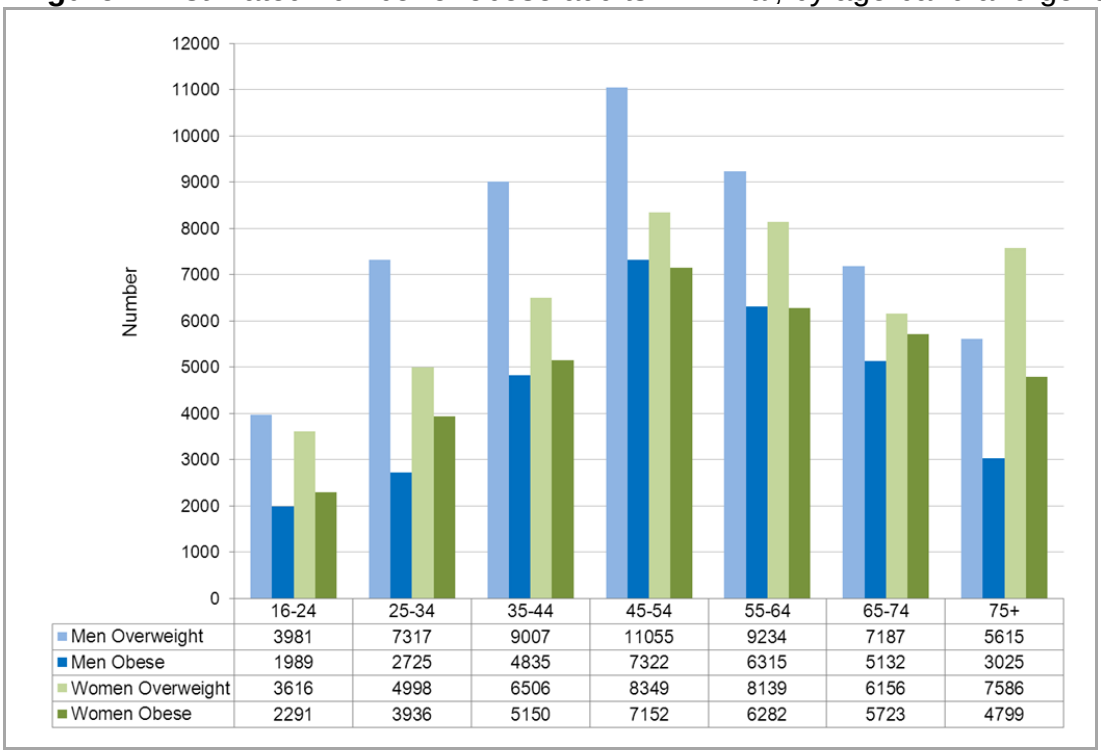
Table 2: Estimated number of obese adults in Wirral by age band and gender, 2012

Age band	Men		Women		All Persons
	Overweight	Obese	Overweight	Obese	Obese & Overweight
16-24	3981	1989	3616	2291	11876
25-34	7317	2725	4998	3936	18976
35-44	9007	4835	6506	5150	25499
45-54	11055	7322	8349	7152	33877
55-64	9234	6315	8139	6282	29969
65-74	7187	5132	6156	5723	24198
75+	5615	3025	7586	4799	21026
All	**53,396**	**31,342**	**45,350**	**35,333**	**165,421**

Source: Health Survey for England, 2012

As Table 2 shows, more women in Wirral are obese than men, but more men are overweight. The total number of people classed as overweight is 97,746. The **total number obese is 66,675**. These extrapolated figures (from the Health Survey for England), when applied to Wirral means that 165,000 people in Wirral are likely to be overweight or obese.
The information in Table 2 is shown visually in Figure 1.

Figure 1: Estimated number of obese adults in Wirral, by age band and gender, 2012



	16-24	25-34	35-44	45-54	55-64	65-74	75+
Men Overweight	3981	7317	9007	11055	9234	7187	5615
Men Obese	1989	2725	4835	7322	6315	5132	3025
Women Overweight	3616	4998	6506	8349	8139	6156	7586
Women Obese	2291	3936	5150	7152	6282	5723	4799

Source: Health Survey for England, 2012

As Figure 1 shows, overweight and obesity in both women and men peaks in the 45-54 age band. It is important to note that these are just raw numbers, so the larger number of women overweight and obese in the older age groups will be due to the larger number of women in the population in those age groups.

Active People Survey (2012)

In 2012 The Active People Survey (APS) became the indicator for measuring population levels of obesity and people overweight used by the Public Health Outcomes Framework. It a large telephone survey of sport and active recreation among adults (age 16 and over) in England, commissioned by Sport England. For Wirral, this constitutes a sample size of 841 phone contacts.

APS and Health Survey for England (HSfE) both provide local data on obesity that is subject to amount of uncertainty due to sample size and a range of other variables. The most recent published data for Wirral (2012) indicates that 18.6% of adults were obese with 47.9% of adults being overweight (Total 551 of 841 responses) which means that two thirds, 66.5%, of adults in Wirral were overweight or obese in 2012/13.

Trends

The trend toward increasing levels of obesity is a relatively recent phenomenon, with surveys first picking up large increases in the population BMI of developed countries in the 1980s, with the most rapid rise occurring in the 1990s (22). Prior to this, levels of obesity had been well below 10% (2). Rates have now more than doubled and 26% of adults in England were obese in 2011 according to the NHS Health & Social Care Information Centre for England (23).

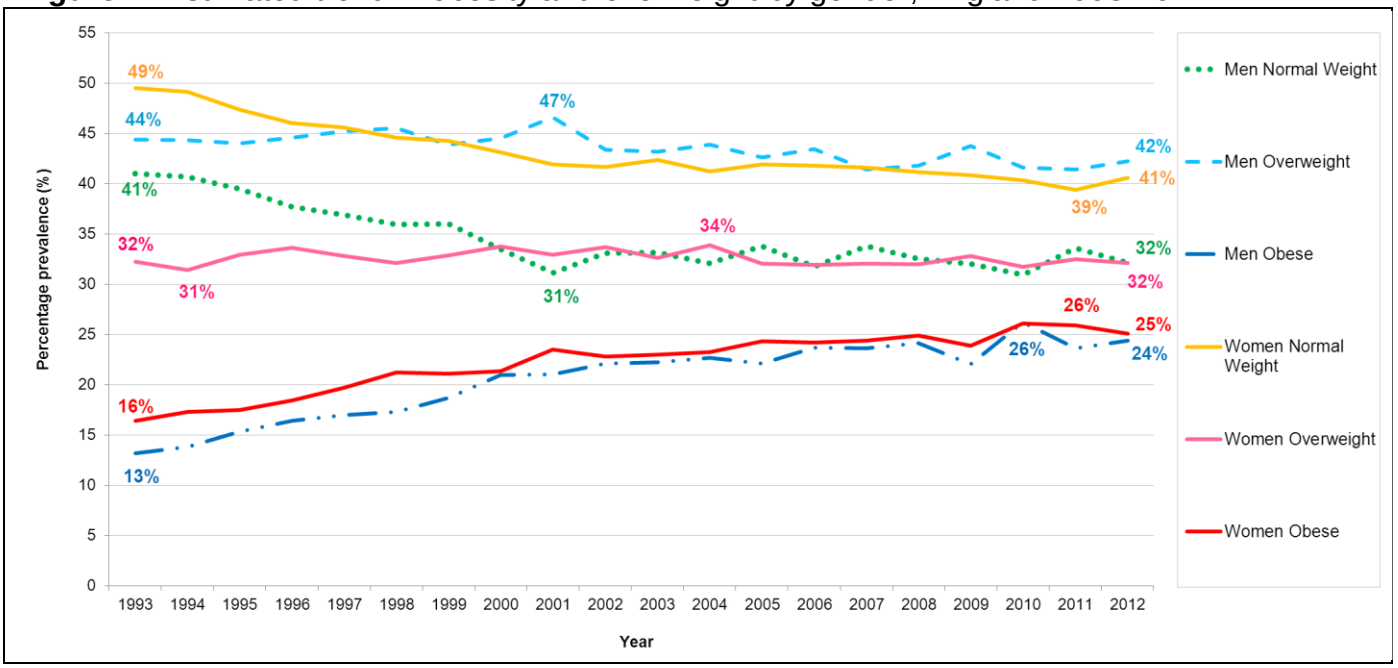
The Organisation for Economic Cooperation and Development (OECD), reported that the UK had the highest rates of adult obesity in Europe in 2012 (16).

Obesity trend (estimated)

Figure 2 below shows the estimated trend since 1993 in obesity, overweight and normal weight in both men and women in England (using data from the Health Survey for England). As the chart shows, obesity has almost doubled in both men and women, so that by 2012, one in four

adults was obese. Levels of overweight have by contrast, remained fairly stable over the period shown. Normal weight has decreased by 8% in women and 9% in men over the period shown. Percentages are only shown for the beginning of the period, the peaks, the lows and the end of the period (2012). As Figure 2 shows, for women, the peak in obesity was in 2011 (26%), whilst for men the peak was in 2010 (26%).

Figure 2: Estimated trend in obesity and overweight by gender, England 1993-2011



Source: Health Survey for England, 1993-2011

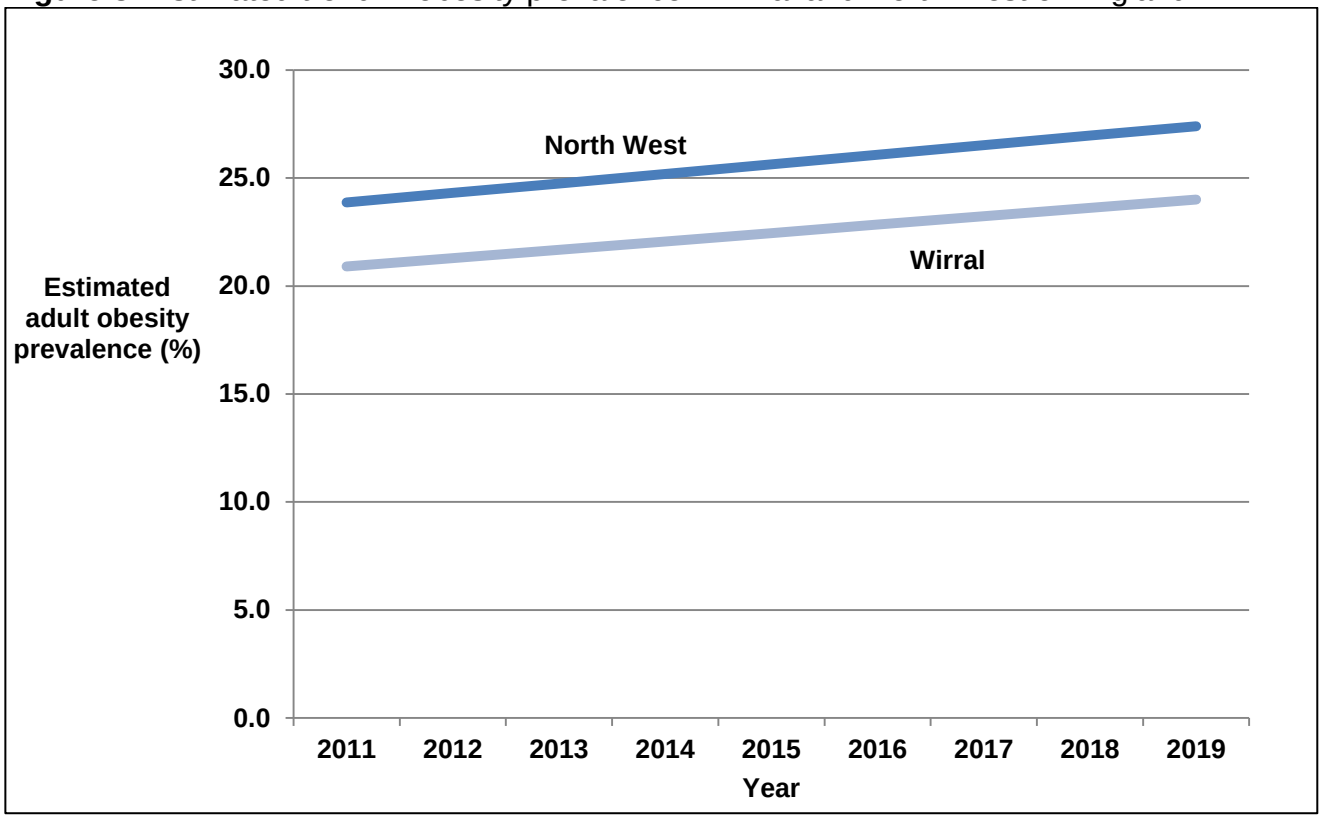
Using these estimated percentages and applying them to the population of Wirral would suggest there are around **60,000 people who are obese in Wirral**. This is slightly lower than the Active People Survey data suggest.

The 2007 Government Office for Science (24) prediction of future trends for obesity is worrying for England and of course Wirral. By 2025, 47% of males and 36% of females could be obese. By 2050, 60% of males and 50% of females could be obese. The research tells us that over the next twenty years, the obesity attributable disease risk in the UK is projected to add an excess 544,000 to 668,000 cases of diabetes, 331,000 to 461,000 of coronary heart disease and stroke along with 87,000 to130,000 cancers. There is no evidence to suggest Wirral will avoid any such impact from these predictions and, this could be exacerbated with the higher number of more deprived parts of the borough.

Based on the Health Survey for England modelled estimates for 2006-08, Wirral was not significantly different to the North West or England for adult obesity. However based on the Active People Survey 2012, Wirral was significantly lower than the North West and England for adult obesity prevalence, but significantly higher for prevalence of overweight. This is despite the fact that Wirral has a higher rate than national of diabetes, 90% of which is type 2 diabetes, for which obesity is considered to be the main cause.

To estimate obesity prevalence for Wirral in 2014 and 2018, a linear trend was calculated for North West obesity prevalence from the Health Survey for England. This was then adjusted against the average ratio between Wirral and the North West for the 2006-08 modelled estimates and used with the 2012 Active People Survey data. These estimated projections of prevalence can be seen in Figure 3 below and show North West increasing from 25.2% obese in 2014 to 27.4% in 2019 with a similar upward trend for obesity in Wirral from 22.1% in 2014 to 24.0% by 2019.

Figure 3: Estimated trend in obesity prevalence - Wirral and North West of England.



Source: Wirral Council, Performance & Public Health Intelligence Team

Cost of Obesity

The Government Office for Science report in 2007 (24) estimated the direct costs to the NHS for treating overweight and obesity in that year to be £4.2 billion pounds and this is much overshadowed by their estimate of £15.8 billion for total wider costs of excess weight at that time. Foresight's modelling predicts this figure could be as much as £27 billion by 2015 as excess weight levels continue to rise.

Work by the Wirral Council Public Health team report suggest a local estimate for annual healthcare cost of overweight and obesity in Wirral (2010/11) near to £103million, or around 16% of the total healthcare budget. It is thought this could rise to over £109m by 2015. (See table 3 below).

A review of the economic impact of obesity across the world (25) found that spend on obesity related diseases represented 0.7% - 2.8% of a country's healthcare costs and that obese people had healthcare costs that were typically 30% higher than people of healthy weight. In the UK in 2006/07, obesity and overweight was estimated to cost the NHS £5.1billion, or around 5% of total NHS spending (26).

The Department for Health produced estimates of the cost of obesity for 2007, 2010 and 2015 which were available at old NHS Primary Care Trust (PCT) level, this included estimates for the North West (27). The estimated total NHS cost of obesity and overweight for England in 2015 was £15.4 billion.

If we assume that costs continue to increase at a similar rate, then as figure 4 describes, the cost of obesity for Wirral in 2018 will be £69.2million.

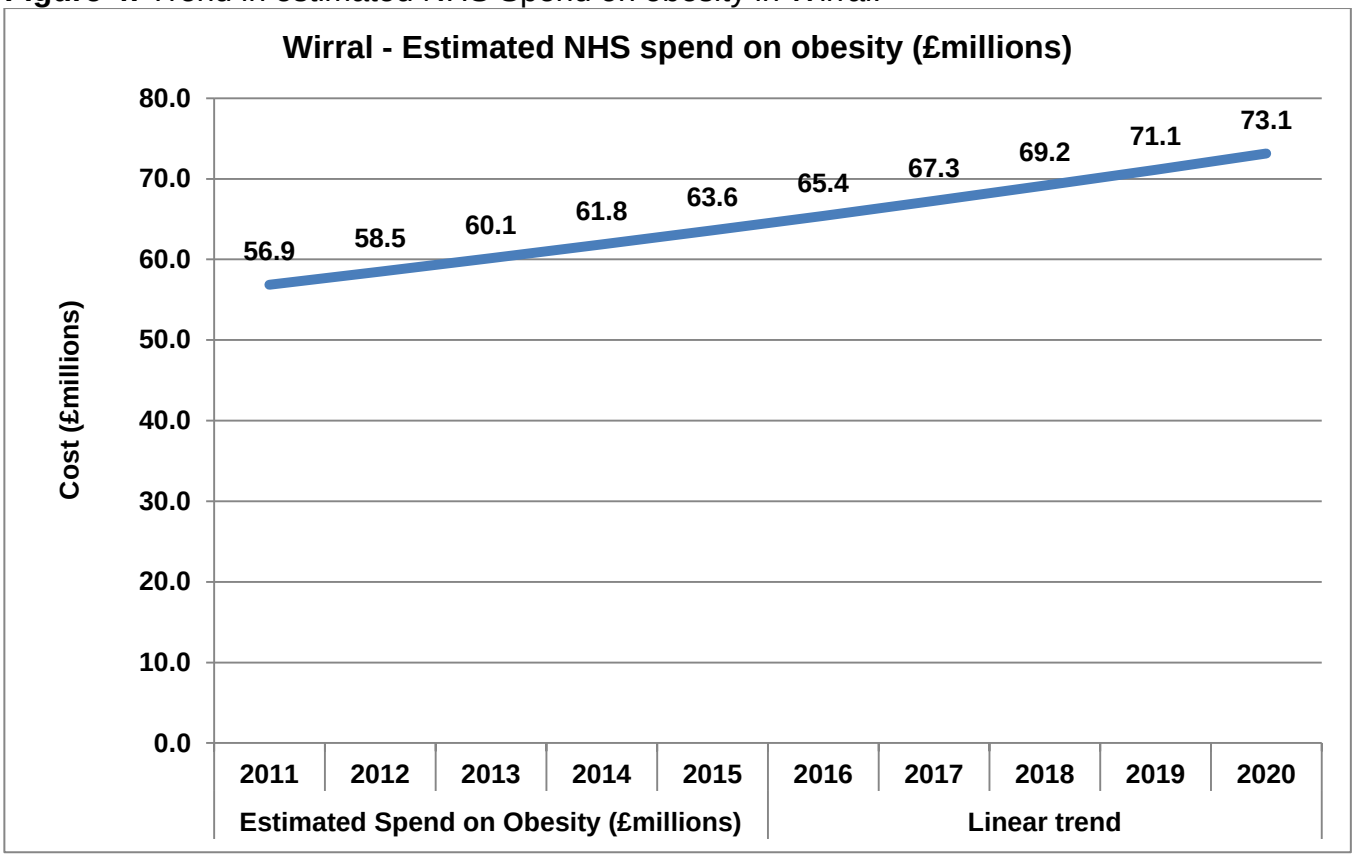
Table 3: Estimated average NHS obesity costs 2007, 2010 and 2015 - Wirral and England

	Estimate annual costs to NHS of overweight & obesity (£million)			Estimate annual costs to NHS of obesity (£million)			Average % increase in obesity costs per year 2010-15
	2007	2010	2015	2007	2010	2015	
Wirral	98.5	102.2	109.3	51.1	55.3	63.6	2.84%
England	13,891	14,416	15,415	7207	7,805	8,962	2.80%

Source: Adapted from Healthy Weight, Healthy Lives: A Toolkit for Developing Local Strategies (2007) by Wirral Council, Performance & Public Health Intelligence Team

In 2012, spend on obesity was estimated to be around 9% of the total NHS spend in Wirral (£673m). Once the NHS costs of individuals being overweight is also factored in, spending on this issue could equate to around 16% of total NHS costs.

Figure 4: Trend in estimated NHS Spend on obesity in Wirral.



[1]Source: Wirral Council, Performance & Public Health Intelligence Team

Targets and Performance

There are no national or local targets relating specifically to adult obesity but there is a stated national ambition from the Healthy Lives, Healthy People: A call to action on obesity in England (2011).(28) of *a downward trend in the level of excess weight averaged across all adults by 2020.*There are targets for child obesity (and the data required to monitor those targets is available via the National Child Measurement Programme (A JSNA chapter on Childhood Obesity is being prepared in the near future).

There are five Public Health Outcomes Framework (PHOF) targets related to obesity in adults such as being offered (and taking up) health checks, which should pick up those who are obese and overweight and provide appropriate support:

- 2.12 - Percentage of adults classified as overweight or obese

- 2.13i - Percentage of active and inactive adults (**active** adults)
- 2.13ii - Percentage of active and inactive adults (**inactive** adults)
- 1.16 - Utilisation of outdoor space for exercise/health reasons)
- 2.22i - Take up of NHS Health Check Programme by those eligible - health check **offered**
- 2.22i - Take up of NHS Health Check Programme by those eligible - health check **take up**

Table 4: PHOF indicators relating to obesity and achievement (various time periods)

Indicator	Wirral	England
2.12 - Percentage of adults classified as overweight or obese	66.4%	63.8%
2.13i - Percentage of active and inactive adults (active adults)	56.4%	56.0%
2.13ii - Percentage of active and inactive adults (inactive adults)	28.8%	28.5%
1.16 - Utilisation of outdoor space for exercise/health reasons)	23.8%	15.3%
2.22i - Take up of NHS Health Check Programme by those eligible (health check offered)	25.5%	16.5%
2.22i - Take up of NHS Health Check Programme by those eligible (health check take up)	57.8%	49.1%

Source: PHOF, 2014
Notes: 2.12, 2.13i and 2.13ii figures relate to 2012, 1.16i relates to Mar 2012-Feb 2013, 2.22i and 2.2ii relate to 2012/13

As Table 4 shows, Wirral had similar proportions of people physically active and inactive to England overall. Wirral did however have the highest percentage of people in England who reported using outdoor space for exercise/health reasons (23.8% compared to England average of 15.3%). In addition, the proportion of the eligible population offered a health check was also higher than the England average; as was the percentage of those who then went on to take up the health check offered to them.

In numbers, a total of 24,066 people were offered a health check in Wirral in 2012/13, whilst 13,902 went on to take it up.

In addition to the PHOF indicators, there is also one target indicator related to obesity on the GP Quality & Outcomes Framework (QOF) Register. The indicator is around the recording of obesity, specifically: “The practice can produce a register of patients aged 16+ with a body mass index (BMI) greater than or equal to 30 in the previous 15 months”. All Wirral GPs produced a register (this indicator attracts 8 QOF points) in 2012/13. See Table 5 below for Wirral results.

Table 5: Summary of obesity indicator information from QOF for Wirral GPs, 2012/13

Indicator	2011/12	2012/13	Change
OBESIT01	45,285	45,660	+375 (or +0.8%)

Source: QOF, NHSIC (2014)

As this indicator requires that the BMI measurement is taken in the previous 15 months, prevalence of adult obesity according to QOF, it will be difficult for most GP practices to record actual obesity in their practice population, as many patients will not have visited their GP in the previous 15 month period (or necessarily have been weighed and measured if they did so).

What is this telling us?

- The most current estimates suggest the number of obese adults in Wirral is somewhere in the region of 60,000 to 68,000 people.
- The number of people who are *either* overweight or obese is 164,000 (more than half of the Wirral population). This means there are more people of an unhealthy weight in Wirral than there are of a healthy weight.

- Obesity is more prevalent amongst women compared to men
- Overweight is more prevalent amongst men
- Obesity and overweight are both more prevalent in deprived populations. This trend is particularly marked in women, where the social class gradient results in higher levels of obesity (compared to men) in more deprived groups
- Four out of five (80%) of obese children go on to become obese adults
- Actual 'real' data on adults in Wirral is lacking. There is a GP QOF register for obesity, but not all obese patients will visit their GP every 15 months to be recorded
- Adult obesity appears to be stabilising after around 20 years of rising prevalence, but rates are still double what they were in 1993 and there is no sign of reversal.
- Current levels of overweight and obese are likely to have serious consequences (increases in prevalence of diabetes, CVD, cancer, musculoskeletal conditions etc…) which will be extremely costly if not tackled
- Evidence supports prevention as the most cost-effective strategy. Overweight and obesity are now so common, population level action is required.

National and local strategies

There is a considerable amount of legislation and guidance nationally and locally concerning efforts to tackle excess weight.

The government's central public health white paper Healthy Lives, Healthy People: our strategy for public health in England (2010) is consistently clear on its steer towards preventative work. It highlights the need to address any possible imbalances, so that prevention and public health enjoy true parity with treatment. It goes onto suggest that Localism should be at the heart of any new system and Directors of Public Health will be the strategic leaders for public health and health inequalities in local communities.

The follow up paper sub-headed Healthy Lives, Healthy People: A call to action on obesity in England (2011) expands further on these themes and sets out the coalition's approach to this agenda. Central themes include:

- Working to create an environment where the healthier choices are the easier choices whilst restating that ultimate responsibility and choice lie with the individual
- Engaging extensively with a wide range of partners including the business community
- Avoiding 'one size fits all' approaches to work locally with communities and with local government taking a strong lead
- Taking a vigorous evidence based approach to understanding the issue and how to tackle it (what works?)

Whilst there are several pointers towards a more 'upstream' preventative approach, '…*will favour interventions towards the less intrusive end of the Nuffield ladder*.'(p6), there is still a clear call for commissioning of weight management services which will remain the responsibility of local areas.

What the 2011 'Call to action on obesity in England' does make clear, is the scale of ambition around this agenda with the national ambition of a downward trend in the level of excess weight averaged across all adults by 2020.

The paper announces the creation of a National Ambition Review Group with a real emphasis on bringing together a broad group of partnerships. Explicit support is given to both the National Obesity Observatory (NOO) and the Obesity Learning Centre (OLC), including the successful transition of both into Public Health England.

The support of NOO represents support for 'data analysis and a culture of evaluation'. Supporting the OLC means supporting good practice and its collation and dissemination. Clear

support and further development of Standard Evaluation Framework for weight management activity is promised – a useful aid to those commissioning, running or evaluating weight management interventions.

NICE, and its guidance, is considerably referenced in particular recent guidance on working with communities (PH42) plus new guidance on best practice for adult weight management services (PH53). Also, recognising the complex and broad nature of obesity, the planning tool Healthy Places Planning Resource is referenced.

In terms of partnering with business, the Public Health Responsibility Toolkit is highlighted as a means to harness the contribution of the food and drink industry. Increased and improved nutritional information for consumers is outlined too.

Regarding physical activity, the 2011 Chief Medical Officer's new guidelines on physical activity (29) are cited as a basis on which effective plans can be confidently set. Engaging business through the Responsibility Deal Physical Activity Network is referenced as well as the Olympic legacy and active travel plans. With several references to behavioural science, this is seen as a key element in efforts to tackle excess weight.

The most familiar and best established piece of guidance relating to this agenda is the NICE Clinical Guideline CG43 'Obesity: Guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children.' This is supported by a raft of NICE public health guidance and briefing papers including:

- Obesity - working with local communities (PH42)
- Physical activity and the environment (PH8)
- Weight management before, during and after pregnancy (PH27)
- Preventing type 2 diabetes: population and community-level interventions (PH35)
- Physical activity: brief advice for adults in primary care (PH44)
- Assessing body mass index and waist circumference thresholds ….black, Asian and other minority ethnic groups in the UK (PH46)

Additionally, NICE guidance on weight management services for adults. *Managing overweight and obesity in adults – lifestyle weight management services or PH53* was published in May 2014. This guidance puts forward very little which Wirral's current weight management services are not already doing and there is little which is new or challenging. It does however encourage review of current provision in a changing climate – something which is very useful. For example, recommendation 1 calls for an integrated approach: something Wirral's services are well used to but this can be used to check and strengthen links with new key bodies such as Health and Wellbeing Boards and Clinical Commissioning Groups. Recommendations 6 and 7 detail the necessary core elements of weight management services whilst further recommendations cover commissioning and evaluation.

NICE guideline PH42 Obesity – working with the local communities is published and moves away from a focus on weight management services. Considering central government's 'philosophy' on obesity centred on localism, communities and making healthier choices the easier choices (paper 'Healthy Lives, Healthy People: a call to action on obesity in England') this guidance should be significant. It does make clear the need for a sustainable, community-wide approach and the broad recruitment of a range of leaders and champions. The importance of co-ordination at a high level and of good communication with communities is stressed. Integration of local public and private sector partners will be key along with training, organisations acting as exemplars of good practice and the use of the planning system to achieve goals.

Locally the two key documents are Wirral Councils Corporate Plan and the Policy, Performance & Public Health Directorate Plan. The Corporate Plan sets out the authority's commitment to

good health and an excellent quality of life and welcomes its new leadership role in public health and the opportunities this brings to focus on improving health and wellbeing and reducing levels of child poverty and health inequalities. The Policy, Performance & Public Health Directorate Plan (2014-15*)* describes specific responsibility for delivering key elements of the Council's Corporate Plan and describes functions including striving to tackle health inequalities, protecting the health of the population and influencing the wider social determinants of health. It directly references readiness for market testing in relation to weight management services.

Across all guidance on excess weight, the consistent messages appear to be:

- localism
- evidence based working
- broad partnership working
- a role for treatment services within a generally healthier environment where healthier choices are easier choices

Current activity and services

Wirral currently has 2 commissioned adult weight management interventions (Table 6) along with other commercial operations such as Lighter Life. The first is Livewell Programme Weight Management Service which was formerly Weigh2Change and provided by Wirral NHS Community Trust to support obese children and adults. The second is 'Measure Up' and this is provided by the 5 Borough Partnership with a focus on overweight adults. Both the 5 Borough Partnership and Livewell Programme Weight Management Service overlap in terms of target audience.

Table 6: Primary Wirral Weight Management Services, with referral routes

Service	Brief Description	How to access
The **Livewell Programme** weight management service (*formerly branded as Weigh2Change*)	Provided by Wirral NHS Community Trust, the service provides 12 months of support mainly to obese adults who wish to achieve a healthier weight.	Referral by GP, practice nurse or related health professional. Self-referral: 0151 630 8383
Measure Up	Provided by the 5 Borough Partnership, focused on overweight adults who wish to achieve a healthier weight.	Self-referral: 0151 630 8383
The **Livewell Programme** family weight management service (formerly Weigh2Grow)	A fun and interactive course to support children, young people and their families to lead a healthier lifestyle.	Referral by GP, practice nurse or related health professional such as school nurse. Self-referral: 0151 630 8383

Source: Wirral Council, Performance & Public Health Intelligence Team
(Correct as of April 2014)

Intermediate weight management interventions are also available e.g. Wirral NHS Community Trust's health trainers provide this input and some local Children's Centres have intermediate level lifestyle advisors.

Analysis using NICE guidance on the cost per quality adjusted life year (QALY) has shown both of the adult services mentioned above to be broadly cost effective. During 2011-12 about 1 in 30 of the borough's obese adults was in touch with weight management services. Other services in Wirral which support and promote healthy weight are set out in Table 7 below.

Table 7: Other services in Wirral which support and promote healthy weight (correct as of April 2014)

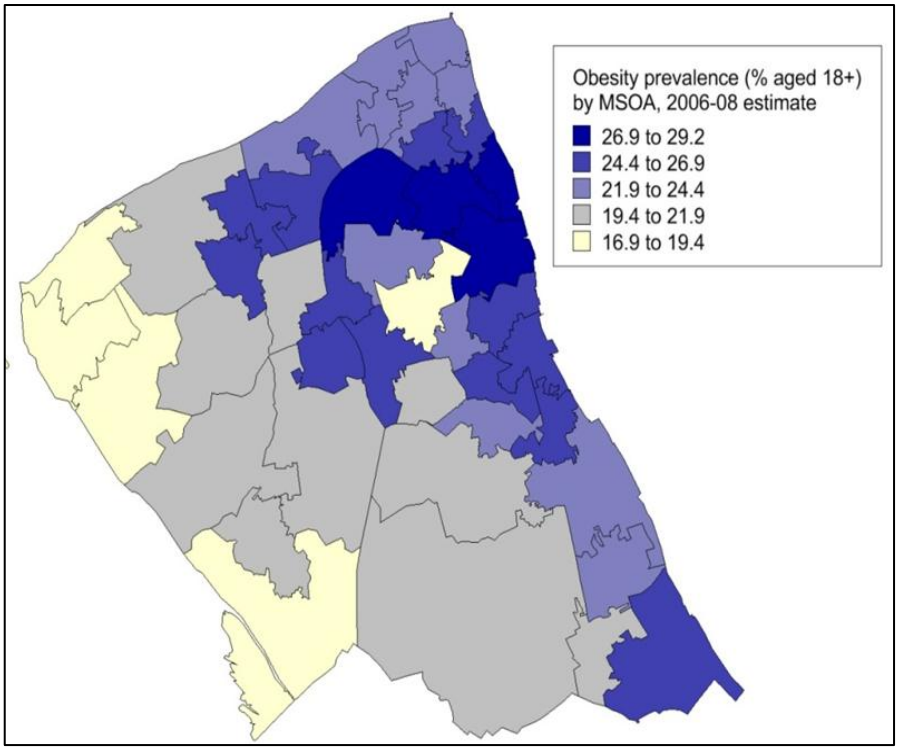
Service	Brief Description	How to access
Health Action Areas	Commissioned by Wirral Council Public Health team and delivered by Wirral NHS Community Trust. Promoting healthy lifestyles including healthy eating and physical activity to adults in targeted areas.	Via Wirral NHS Community Trust (initial assessment with a health trainer)
Wirral's Dietetics Services	Wirral University Teaching Hospital provides a dietetic service to adult inpatients and outpatients who are referred by medical or other health professional staff at both Arrowe Park and Clatterbridge Hospitals. A service is also available through Wirral Community NHS Trust	Referral via GP Wirral University Teaching Hospital NHS Trust information Wirral Community NHS Trust information
Prescribing	For some individuals, the prescription of drugs i.e. Orlistat or bariatric surgery is appropriate	Accessed via GP
Eating Disorder Services	Eating disorder services have the capacity to impact on obesity where appropriate	Accessed via GP

Source: Wirral Council, Performance & Public Health Intelligence Team

Key inequalities

Nationally, research indicates that obesity is associated with deprivation (greater deprivation equalling greater levels of obesity) with adult obesity within Wirral being measured periodically in lifestyle surveys.

Figure 5: Estimated obesity prevalence in adults by MSOA (Middle Super Output Area) in Wirral, modelled from 2006-2008 Health Survey for England data



Through surveys modelled estimates produced at a small area level (MSOA or Middle Layer Super Output Area, (see Glossary) were most recently produced using the Health Survey for England data for 2006-08. This data supports many other data sources which suggest that obesity is strongly related to deprivation and is around twice as prevalent in the most deprived areas, compared to the least deprived parts of Wirral.

Source: APHO Modelled Estimates.

National estimates by deprivation quintile have been applied to the Wirral population below, to give some idea about how figures may look for Wirral. The percentage of men and women who were obese by each of the five deprivation quintiles of the Index of Multiple Deprivation (2007), or IMD, used to produce the estimates below were produced by the National Obesity Observatory (NOO).

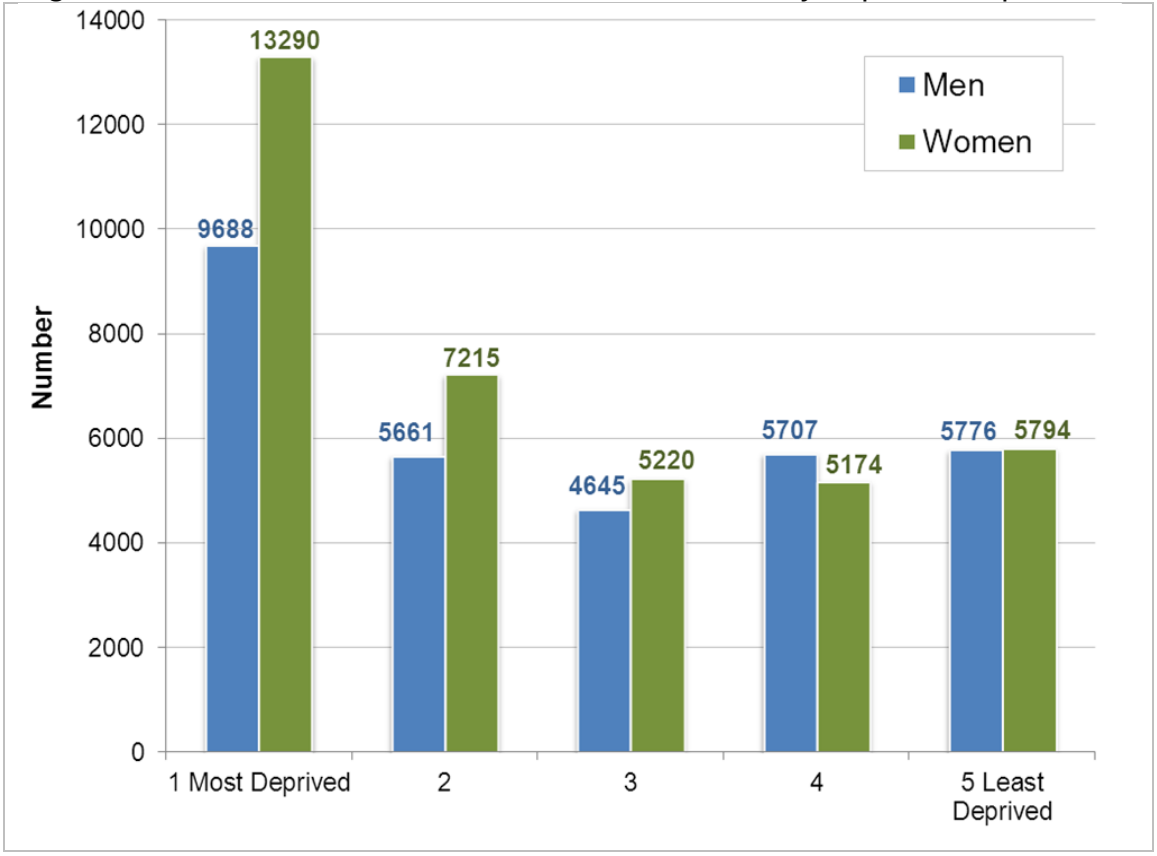
Table 8: Estimated percentage of obese adults in Wirral by deprivation quintile and gender

IMD Quintile	Men (%)	Men (No.)	Women (%)	Women (No.)
1 Most Deprived	25.5%	9,688	31.5%	13,290
2	26.4%	5,661	30.3%	7,215
3	25.2%	4,645	25.5%	5,220
4	26.7%	5,707	21.8%	5,174
5 Least Deprived	23.8%	5,776	21.5%	5,794
Total		**31,476**		**36,693**

Source: National Obesity Observatory, 2011

As the Table 8 shows, deprivation appears to have a greater effect on women compared to men, with a steeper gradient in obesity between those who were obese in the most and least deprived quintiles compared to men. Figure 6 below shows this information visually.

Figure 6: Estimated number of obese adults in Wirral by deprivation quintile and gender



Source: National Obesity Observatory and ONS

According to these estimates using IMD quintiles, 31,476 men in Wirral are obese, compared to 36,693 women. This makes a total of **68,169** people who may be obese in Wirral. It must be remembered however that these estimates are based on the previous IMD (2007) and there is now a more recent IMD which became available in 2010. Estimates using the most recent IMD (2010) have not been produced however.

It is worth noting however, that this estimate is very close to the estimate of **66,675** reached by applying the 2011 Health Survey for England data to the Wirral population (Table 2) and that the *pattern* seen nationally for obesity (of greater deprivation equalling greater deprivation) is unlikely to have changed radically.

Key gaps in knowledge and services

- Actual numbers of adult Wirral residents who are obese (estimates only currently available)
- Recording of obesity on General Practice (GP) registers
- Long-term outcomes of adults who have been through adult weight management services

What is coming on the horizon?

Evidence suggests that recent changes which have made the provision of school meals free to all infant school aged children in England could have a positive effect (Sustain) on obesity, but it will be several years before data on this becomes available and we know if this is the case. Direction of travel from Government suggests nationwide changes to food labelling or pricing (e.g raised taxes on sugar-sweetened beverages) are unlikely.

What does the research suggest as further actions?

- Improved recording (e.g GP recording, follow up data from adult weight management services)
- Population level approaches, as more people are now of an unhealthy weight than a healthy weight
- Increased referrals from health professionals to weight management programmes.
- Focus on factors affecting childhood weight gain, as this is a crucial period for obesity to become established.
- Local adult weight management services provide reasonable value for money but need to do more to achieve their target numbers of clients (and demonstrate long term outcomes).
- Greater understanding of people's motivations to change, who needs to use specialist services, and how maximum efficiency can be achieved
- Interventions aimed at children and families do not seem to be very successful in providing value for money (based on data local services have provided). Improvements to ensure they are more efficient appear to be required.
- Tap in to local community engagement expertise and adopt concepts such as **ABCD** (asset based community development) to develop community weight management programmes.
- Consideration of the type of appeal that commercial products (e.g Slimming World) have when commissioning services.
- Interventions should be considered to be commissioned on a Payment by Results (PbR) basis, where qualified providers only get paid for the number of clients completing interventions. This has the potential to stimulate and broaden the market and make services more efficient.
- Wirral could consider commissioning weight management interventions on a bigger footprint (e.g neighbouring organisations) which could bring economies of scale and shared knowledge.
- Strategic partners continuing to develop a co-ordinated approach to excess weight (including bariatric surgery and its supporting services)

Glossary

Body Mass Index: the most widely used measure of overweight and obesity, it is a person's weight in kilograms divided by the square of their height in metres (other measures such as waist circumference and skin thickness can indicate weight status or body fatness, but BMI is the most widely used)
Disability Free Life Expectancy: the number of years an individual can expect to spend free from a limiting chronic illness or disability.
Index of Multiple Deprivation: an area based measure of relative deprivation in England; it was last calculated in 2010 and used LSOAs as its unit of geography
Lower Super Output Areas (LSOAs): small geographical areas, with an average population of 1,500 people. The IMD 2010 was calculated at LSOA level. Wirral has 206 LSOAs.
National Child Measurement Programme: annual programme which has measured the height and weights of all English school children at Reception and Year 6 since 2006.
Middle Layer Super Output Areas (MSOAs): as with the Lower Layer, Middle Layer SOAs are generated automatically by zone-design software using census data from groups of LSOAs. They have a minimum size of 5,000 residents and 3,000 households with an average population size of 7,500. They fit within local authority boundaries. Following the 2011 Census 0.11% of MSOAs were changed in order to maintain minimum and average population criteria. There are now 7,201 MSOAs in England and Wales. Wirral has 42 MSOAs.

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