

Summary

- Definitive obesity data on adults in Wirral is lacking. There is a GP Quality Outcomes Framework (QOF) register for obesity, but not all obese patients will visit their GP every 15 months to be recorded. We therefore rely on estimates to supply obesity and overweight figures. It is also estimated that around 10% of elective (or planned) surgery patients are obese
- Estimates are based upon the Active People (AP) survey (2013-15) and Health Survey for England (HSE, 2015). Data on the number of obese adults in Wirral differs between the two surveys (23.8% in the AP versus 27% in the HSE)
- Active People (2013-15) estimates suggest there are in the region of 68,000 obese people in Wirral compared to a figure of 70,000 according to the Health Survey for England (HSE, 2015)
- Active People (2013-15) however, suggests there are more overweight people in Wirral than the Health Survey for England (2015), 42.9% versus 36.1% respectively
- Although the two surveys differ on the proportions of the Wirral population they categorise as obese or overweight, they are both agreed that the number of people who are *either* overweight or obese (i.e. of an unhealthy weight) is around two-thirds of the Wirral population or around 164,000 people. This means there are more people of an unhealthy weight in Wirral than there are of a healthy weight
- It is likely that obesity is more prevalent amongst women compared to men, whilst overweight is more prevalent amongst men
- The largest *numbers* of obese people (by age band) in the Wirral population are found in the 55-64 age group
- 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
- 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
- There is a strong relationship between deprivation and obesity in Wirral; the more deprived an area, the higher the estimated rate of adult obesity

Contents	
Summary	1
Contents	2
What do we know?	3
Overview	3
Facts and figures	3
Trends	6
Cost of Obesity	8
Targets and Performance	9
What is this telling us?	10
National and local strategies	10
Current activity and services	13
Key inequalities	16
Key gaps in knowledge and services	18
What is coming on the horizon?	18
What does the research suggest as further actions?	18
Glossary	19
References	19
Contact details	21

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 2015 Health Survey for England data, and applying it to the Wirral population (See Table 1).

Estimated obesity by age band

Table 1: Weight status of England population from the Health Survey for England, 2015

Weight status	Definition (BMI score)	Percentage
Underweight	<18.5	2.2%
Normal	18.5-24.9	34.9%
Overweight	25.0-29.9	36.1%
Obese	30+	26.9%
Overweight and obese	25+	62.9%

Source: Health Survey for England, 2015

Note: Numbers may not sum exactly due to rounding

The above percentages have also been produced by age band and gender and these were then applied to the mid-2015 Wirral population estimates (ONS, 2016), giving the numbers in Table 2.

Table 2: Estimated number of obese adults in Wirral by age band and gender, 2015

Age Band	Men		Women		Obese & Overweight
	Overweight	Obese	Overweight	Obese	
16-24	3,759	2,719	3,282	2,434	12,196
25-34	6,411	3,391	4,568	4,690	19,101
35-44	8,040	4,759	6,441	5,225	24,572
45-54	10,581	7,213	8,415	6,933	33,346
55-64	8,703	7,408	7,445	7,311	30,901
65-74	7,670	5,794	6,570	5,596	25,696
75+	6,639	2,884	7,244	5,254	22,104
All	50,835	33,391	42,779	36,730	164,266

Source: Health Survey for England, 2015 and Office for National Statistics (ONS), 2016

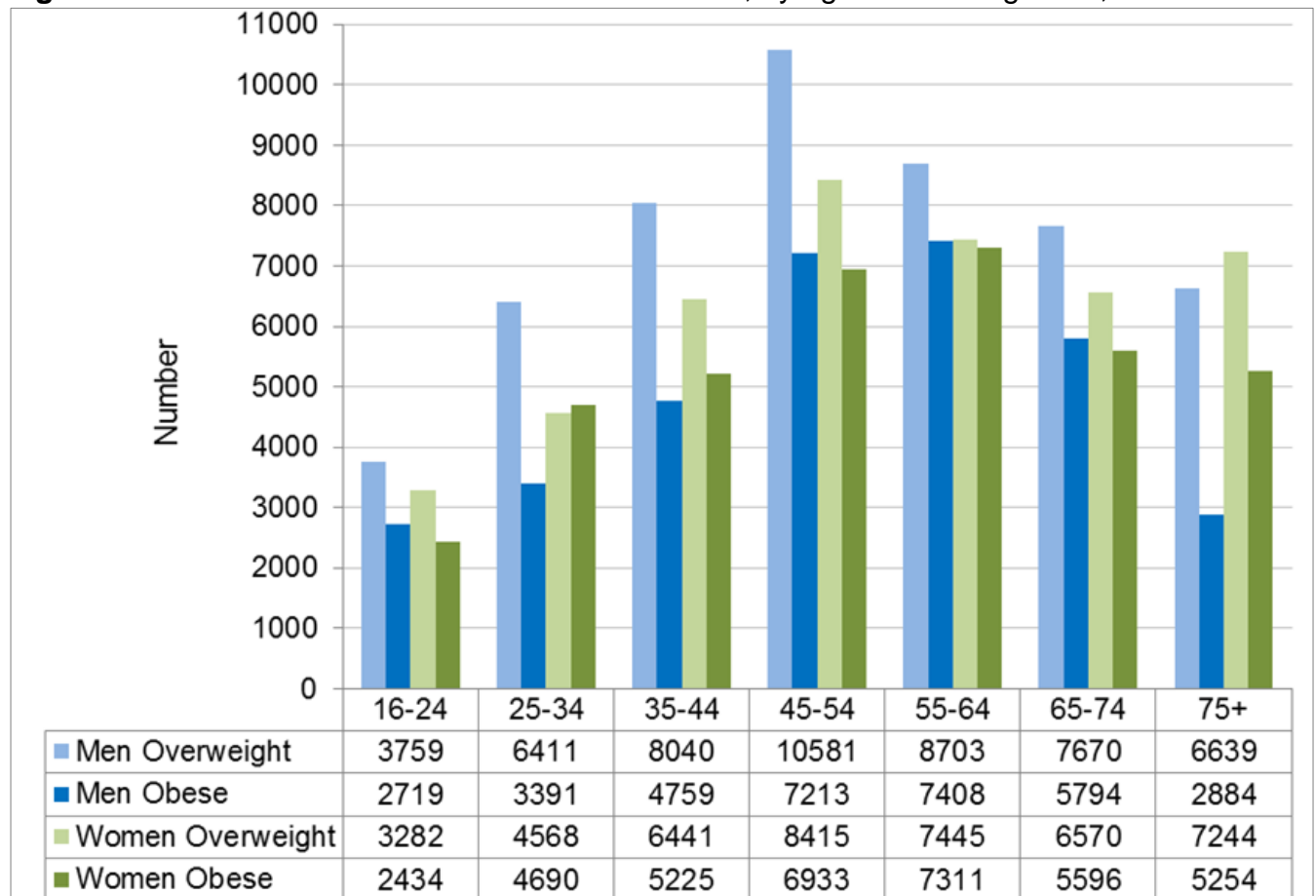
As Table 2 shows, more women in Wirral are obese than men, but more men are overweight. The total number of people classed as overweight is 93,614. The total number obese is 70,151. The combined percentage of 62.9% (from the Health Survey for England), when applied to Wirral means that just over 164,000 people in Wirral are probably overweight or obese

The information shown in Table 2 is shown visually in Figure 1.

Figure 1 shows that 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.

Figure 1 also shows that the obesity (only) is more prevalent in those aged 55-64 years; 7,408 males and 7,311 females, or 14,719 persons overall in Wirral.

Figure 1: Estimated number of obese adults in Wirral, by age band and gender, 2015



Source: Health Survey for England, 2015

Active People Survey (2013-15)

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 is 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 1,383 phone contacts (in 2013-15).

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 (2013-15) indicates that 23.8% of adults were obese with 42.9% of adults being overweight (total 923 of 1,383 responses) which means that two thirds, 66.7%, of adults in Wirral were overweight or obese in 2013-15.

Maternal Weight

Table 3: Maternal BMI statistics at time of delivery, Quarter 1 & 2, 2016/17

Area	Missing Value	Underweight	Normal	Overweight	Obese	Overweight & Obese
Wirral	1.6%	1.9%	42.6%	27.0%	27.0%	53.9%
England	16.4%	6.2%	38.5%	21.9%	17.0%	38.9%

Source: NHS Digital, 2017

As Table 3 shows, more than half (53.9%) of females giving birth are classed as either

overweight or obese, compared to 38.9% (or just over one in three) nationally. This is a difference of 15% between Wirral and England. The reasons for such a large percentage of women of childbearing age being either overweight or obese in Wirral compared to England are unclear.

Trends

The trend toward increasing levels of obesity is a relatively recent phenomenon, with surveys first picking up large increases in the population Body Mass Index (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).

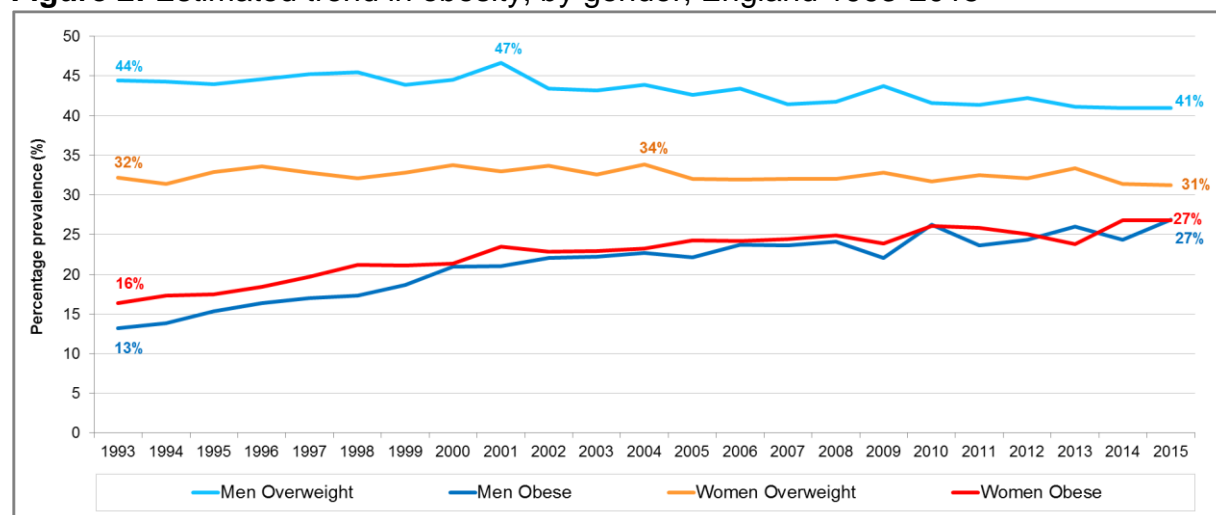
The [Organisation for Economic Cooperation and Development \(OECD\)](#), reported that the UK had the second highest rates of adult obesity in Europe in 2014 (16).

Obesity trend (estimated)

Figure 2 shows the estimated trend since 1993 in obesity and overweight 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 2015, more than one in four adults was obese. Levels of overweight have by contrast, remained fairly stable over the period shown.

Percentages are only shown for the beginning of the period, the peaks and the end of the period (2015). As Figure 3 shows, for women and men, the peak in obesity was the most recent year for which figures were available (2015).

Figure 2: Estimated trend in obesity, by gender, England 1993-2015

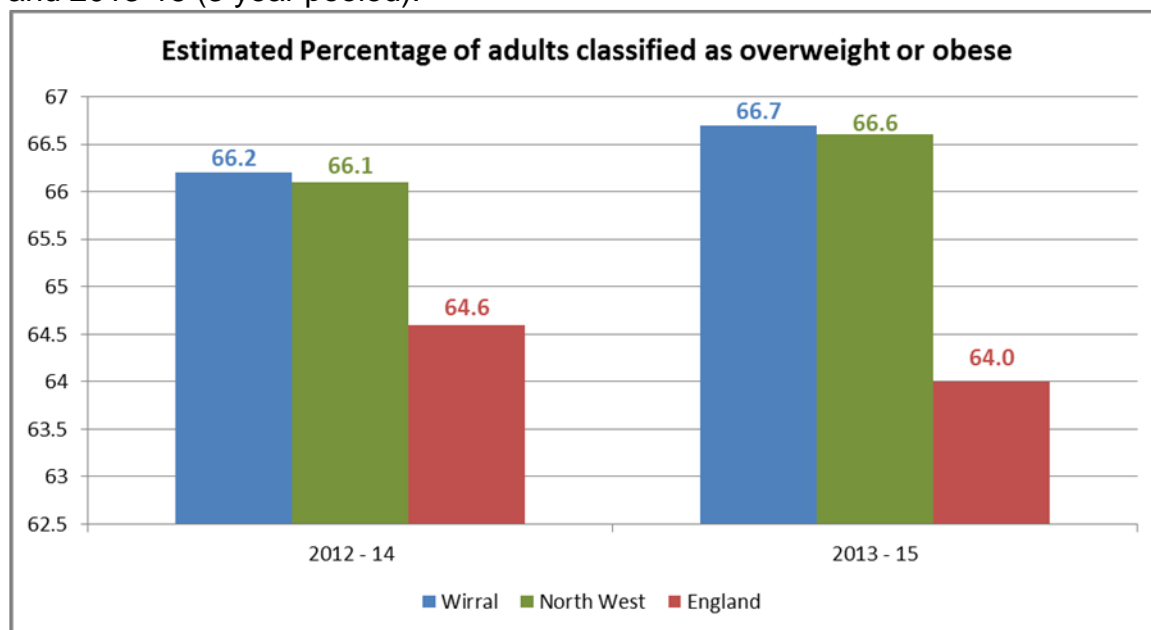


Source: Health Survey for England, 1993-2015

The [Health Profiles produced by PHE](#) and published on fingertips (PHOF) each year for the estimated percentage of adults classified as obese and overweight. The data is sourced from the Active Peoples Survey, Sports England. It is worth noting that it is well known that adults tend to underestimate their weight and overestimate their height when providing self-reported measurements and the amount to which this occurs can differ between population groups. Therefore prevalence of excess weight (overweight including obese) calculated from self-

reported data is likely to produce lower estimates than prevalence calculated from independently measured data.

Figure 3: Estimated prevalence of adult obesity in Wirral, North West and England, 2012-14 and 2013-15 (3 year pooled).



Source: [Public Health England Health Profiles](#), 2017

As the chart shows, Wirral had a higher prevalence of obesity than both the North-West and England in both time periods. Using these estimated percentages and applying them to the population of Wirral would suggest there are around **172,333 people who are obese and overweight in Wirral**. This is slightly higher than when applying the HSE estimates directly to the local population.

Other available statistics and estimates

GP data: The recording of obesity is no longer a requirement of the QOF scheme, which may account for the decline in the number of adults recorded as obese on GP systems. In 2015/16 there were just **28,347** Wirral population aged 18+ years and over on GP obesity registers, compared to estimates which indicate the true figure is far higher. Estimates from other sources (already mentioned), it would seem that only around half of all the adults who are obese in Wirral are currently recorded as being obese on their GP held health records..

National Child Measurement Programme (NCMP): Excellent data on overweight and obesity amongst Wirral children exists which has been collected annually since 2006. It is a definitive and valid data source (98% of Wirral schoolchildren measured), see [Childhood Obesity section of the Wirral JSNA website](#) for further analysis of child obesity in Wirral.

Both the surveys for Active People and Health Survey for England have a similar proportion of the population who are classed as being of an unhealthy weight (i.e. being EITHER overweight or obese), with Active People estimating this proportion of the population to be 66.7%, compared to 68% according to the Health Survey for England. **Whichever survey is used, the fact remains that the majority of adults in Wirral are of an unhealthy weight.**

In 2011, The Lancet (Wang et al) (24) published an article predicting future trends for obesity. The article suggests that by 2030, an additional 11 million people in the UK will be classed as

obese, with 3.3 million being 60 years and over. This increase will also have an impact on the obesity attributable disease risk in the UK meaning people diagnosed with diabetes, coronary heart disease, stroke and cancers is likely to increase. 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 as well as the ageing population.

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 4 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.

Table 4: 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%

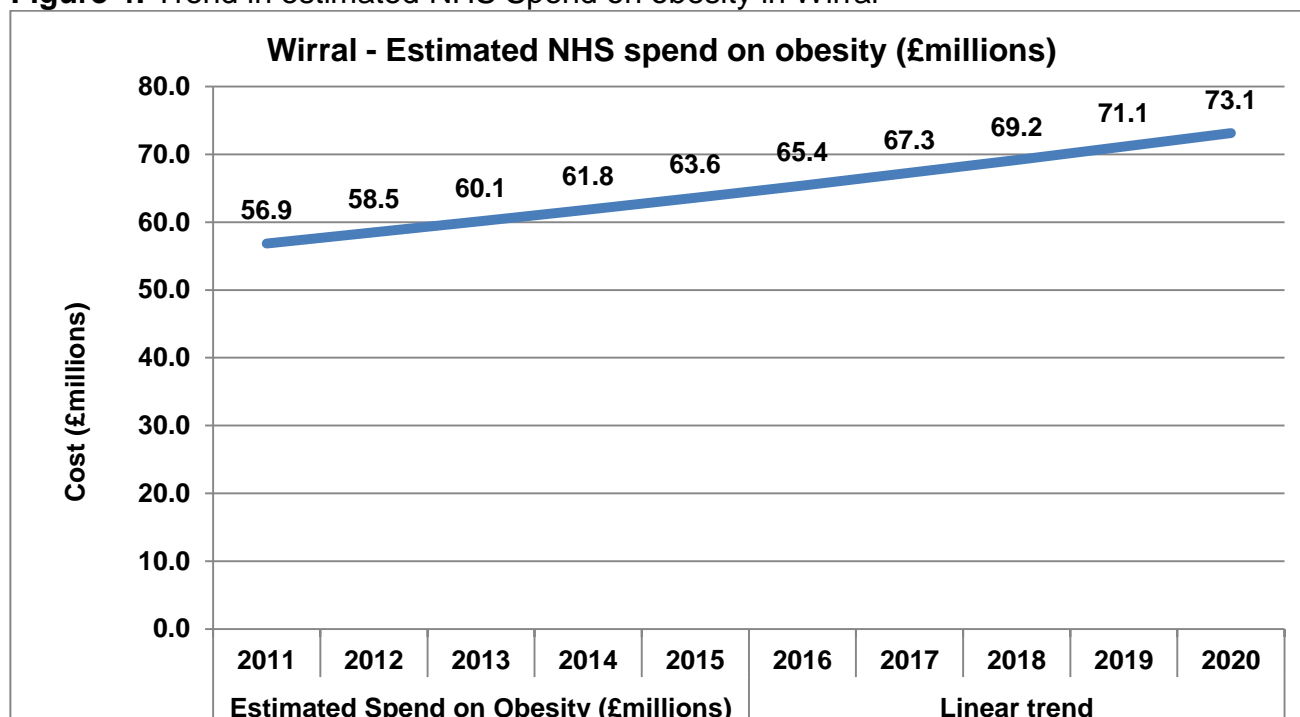
Source: Adapted from Healthy Weight, Healthy Lives: A Toolkit for Developing Local Strategies (2007) by Wirral Council, Performance & Public Health Intelligence Team

Notes: We are awaiting latest data to be able to recalculate estimates beyond 2015

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.

If we assume costs will continue to increase at a similar rate, the cost of obesity for Wirral in 2020 will be £73.1million (see Figure 4).

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



Source: Public Health Intelligence Team, Wirral Council

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](#)). Further information can be found on the [Child Obesity](#) section of the [JSNA website](#).

There are six [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. These are detailed in Table 5.

Table 5: PHOF indicators relating to obesity and achievement (various time periods)

Indicator	Wirral	England
2.12 - Percentage of adults classified as overweight or obese (2013-15)	66.7%	64.8%
2.13i - Percentage of active and inactive adults (active adults) (2015)	51.5%	57.0%
2.13ii - Percentage of active and inactive adults (inactive adults) (2013)	37.1%	28.7%
1.16 - Utilisation of outdoor space for exercise/health reasons (2013/14)	20.7%	17.1%
2.22i – Cumulative percentage of the eligible population aged 40-74 offered an NHS Health Check (2013/14 – 2015/16)	65.1%	56.4%
2.22i - Cumulative percentage of eligible population aged 40-74 offered an NHS Health Check who received an NHS Health Check (2013/14 – 2015/16)	44.7%	48.6%

Source: PHOF, 2017

As Table 5 shows, Wirral had broadly poorer proportions of people physically active and inactive to England overall (significantly worse figure than England overall). In addition, proportion of the eligible population offered a health check was significantly higher than the England average; the percentage of those who then went on to take up the health check offered

to them was significantly lower than the England average.

In numbers, a total of 65,738 people were offered a health check in Wirral between 2013/14 to 2015/16, whilst 29,357 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”.

Table 6: Summary of obesity indicator information from QOF for Wirral GPs, 2015/16

Indicator	2014/15	2015/16	Change
OB002	28,543 (10.44%)	28,347 (10.63%)	+1.8%

Source: QOF, NHSIC (2016)

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 have been weighed and measured even if they did so).

What is this telling us?

Evidence throughout this document suggests that adult obesity is a significant concern at a local and national level. In Wirral, it is estimated that more than half of the adult population are either overweight or obese; with women being more likely to be obese than men, whilst men are more likely than women to be overweight. The evidence also suggests that 80% of overweight children will go on to be obese adults.

Increasing obesity prevalence will have serious impacts on the prevalence of diseases such as diabetes, CVD and cancer. Consequently, the health and social care economy in Wirral (and nationally) will experience rising costs attributable to obesity. Overweight and obesity are now so common, population level action is required, with evidence supporting prevention as the most cost-effective strategy.

National and local strategies

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

In June 2012, the [Cheshire & Merseyside Sustainability & Transformation Plan \(STP\)](#) (30) identified early years and adult obesity as one of the key challenges facing the region. The STP also focuses on how these challenges will be managed, specifically the following priorities:

1. Improve the health of the C&M population by:
 - Promoting physical and mental well being
 - Improving the provision of physical and mental care in the community (i.e. outside of hospital)
2. Improve the quality of care in hospital settings by:
 - Reducing the variation of care across C&M;
 - Delivering the right level of care in the most appropriate setting;
 - Enhancing delivery of mental health care
3. Optimise direct patient care by:

- Reducing the cost of administration
- Creating more efficient clinical support services

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 on to 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 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 (update 2015) '[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:

- Exercise referral schemes to promote physical activity ([PH54](#))
- Managing overweight and obesity among children and young people: lifestyle weight management services ([PH47](#))
- 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 thresholdsblack, 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 [Healthier Lives Strategy](#) (part of Wirral Plan: a 2020 vision) identifies the promotion of healthy eating as one of its priorities. The strategy aims to achieve a decrease in the level of obese and overweight people in Wirral, together with an increase in the prevalence of healthy weight. To help achieve these aims, work includes collaboration with local schools and business to promote healthy eating and work with the Wirral Council Planning Team to encourage development of "Healthy High Streets".

Current activity and services

Wirral Council Public Health Department currently commissions a Tier 2 weight management service provided by Slimming World and Weight Watchers – the choice of which provider lies with patients, who must be referred by their GP. The service mainly supports obese individuals with a BMI up to 40. Above this level of obesity, patients are referred to the Tier 3 service commissioned by Wirral CCG, which provides a more medical approach and can in appropriate cases, facilitate referral for bariatric surgery. There are also a range of commercially available services that individuals may access at their own cost available in Wirral, e.g. Lighter Life.

Year to date (April 2016 to February 2017), close to 1,400 people have accessed the current Tier 2 weight management services in Wirral. Of those accessing the service, 89% are female compared to 11% being male. Similarly, of people currently on the Bariatric Surgery pathway, 70% are female and 30% are male. Tables 7 and 8 show further detail.

Table 7: Rate of people accessing current Tier 2 weight management services in Wirral, by age-band and gender, April 2016 to February 2017

Age Band	Female	Male
Under18	0.3%	0.0%
18-24	3.3%	0.1%
25-44	24.9%	2.9%
45-59	32.7%	4.8%
60 and over	27.4%	3.6%

Source: Public Health Intelligence Team, Wirral Council, March 2017

Table 8: Rate of people accessing the Bariatric Surgery pathway (Tier 3), Wirral, by age-band and gender, April 2016 to February 2017

Age Band	Female	Male
18-24	26	< 5
25-44	123	47
45-59	105	55
60+	52	25

Source: Business Intelligence Team, Wirral CCG, 2017

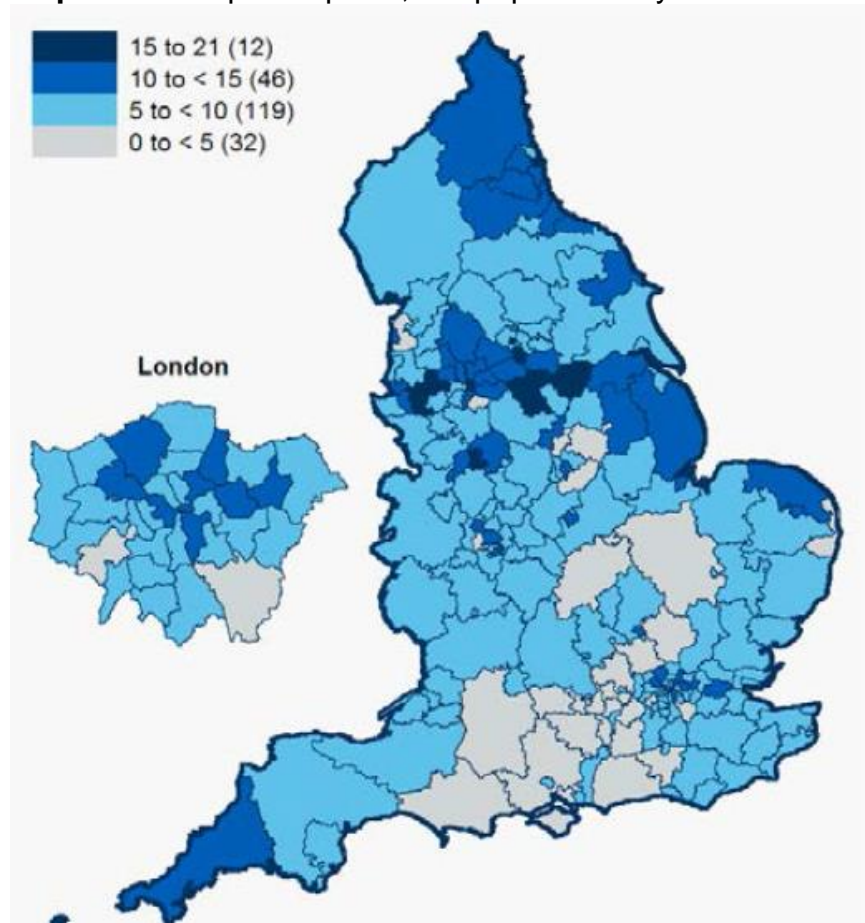
Table 9: Finished Consultant Episodes with a primary diagnosis of obesity and a main or secondary procedure of 'Bariatric Surgery', 2015/16

Area	Admissions			Admission rate per 100,000 population		
	Persons	Male	Female	Persons	Male	Female
Wirral	40	9	31	13	6	19
Sefton	28	8	20	10	6	14
England	6,438	1,418	5,020	12	5	19
North West	461	114	347	7	3	10

Source: NHS Digital, Statistics on Obesity, Physical Activity and Diet - England, 2017

Prescription items for the treatment of obesity

Map 1: Prescriptions per 1,000 population by Clinical Commissioning Group (CCG)



In 2016, 449,000 items were prescribed for the treatment of obesity in primary care in England. This equates in a rate of approximately 8 prescription items per 1,000 people, compared to 10 prescription items per 1,000 people in Wirral. Map 1 shows how Wirral performs in comparison to other CCGs in England.

Tier 2 Wirral Weight Management Services

Service	Description	Access
Weight management on referral delivered by Weight Watchers.	The service provides 12 weeks of supportive and motivational healthy eating input plus promotion of and signposting to, physical activity opportunities. Service users hitting agreed target body weights may have further, on-going access to support.	Referral is by GP practice based doctor, practice nurse or related health professional.
Weight management on referral delivered by Slimming World.	The service provides 12 weeks of supportive and motivational healthy eating input plus promotion of and signposting to, physical activity opportunities. Service users hitting agreed target body weights may have further, on-going access to support.	Referral is by GP practice based doctor, practice nurse or related health professional.

Certain other services in Wirral that support and promote healthy weight are set out in below.

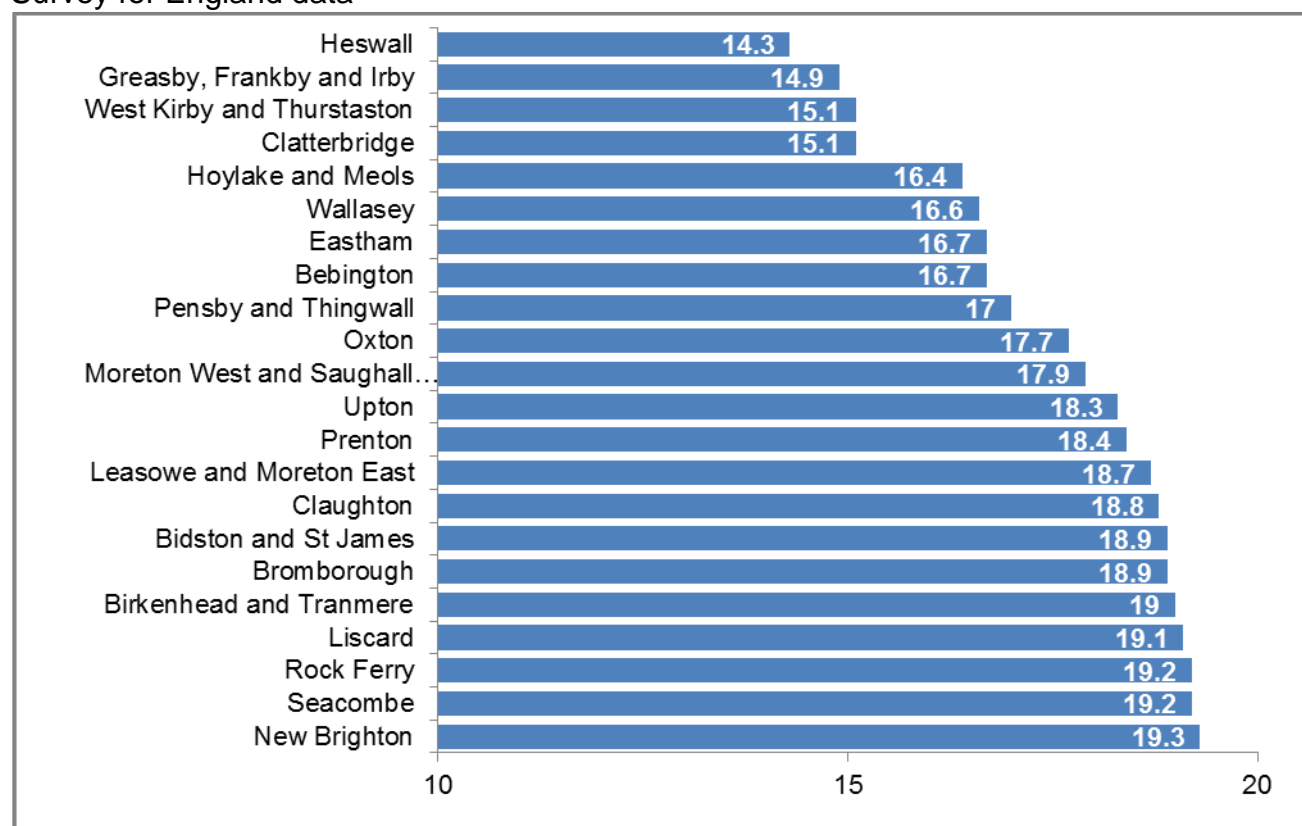
Other Wirral services providing weight management support

Service	Description	Access
Wirral's Dietetics Services	Wirral Community NHS Foundation Trust Dietetics Services (community) Provide advice about nutrition and the relationship between nutrition, health and disease. The service strives to maximise the health of individuals, groups and families. Wirral University Teaching Hospital Nutrition and Dietetics Services provide 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.	Access is via referral from GPs and all health or social care professionals. Access is via referral by an appropriate health professional.
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

Key inequalities

Nationally, research indicates that obesity is associated with deprivation (greater deprivation equalling greater levels of obesity).

Figure 5: Estimated obesity prevalence in adults by Wirral ward, modelled from 2013 Health Survey for England data



Source: Public Health Intelligence Team, Wirral Council, 2016

From Figure 5, the ward estimated to have the highest prevalence of adult obesity is New Brighton, closely followed by Seacombe and Rock Ferry. These three wards are all within the two most deprived IMD quintiles. Heswall ward is estimated to have the lowest obesity prevalence and is within the least deprived IMD quintile.

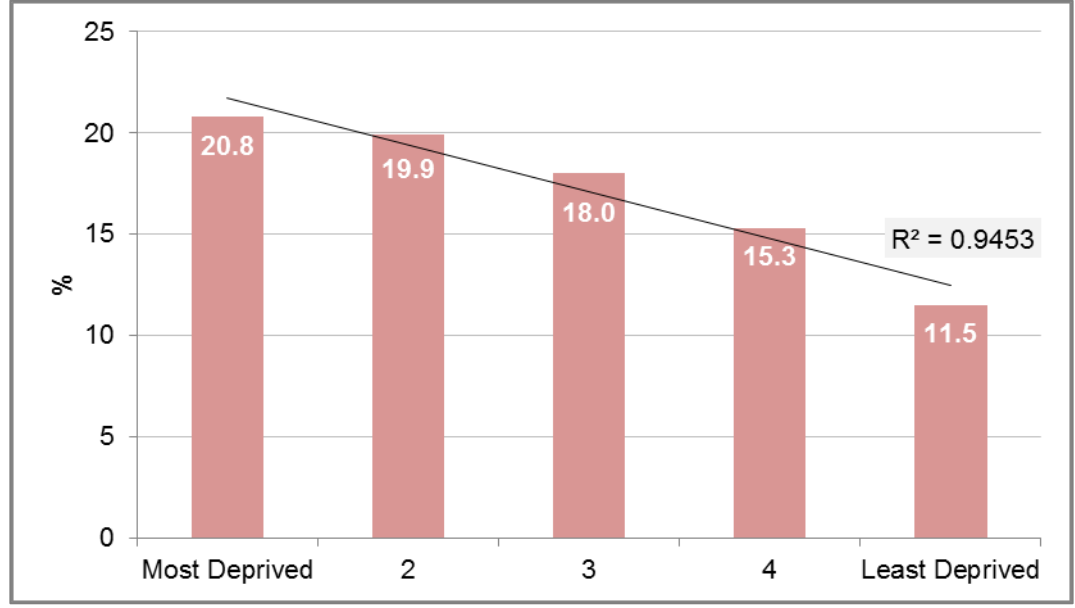
Table 10: Estimated percentage of obese adults in Wirral by deprivation quintile and gender

Gender	IMD Quintile	%	CI+	CI-
MALE	Least Deprived	16.75	21.92	11.58
	4	17.58	22.53	12.63
	3	19.92	24.77	15.07
	2	19.47	24.60	14.34
	Most Deprived	16.80	22.04	11.56
FEMALE	Least Deprived	11.47	16.49	6.45
	4	15.26	20.07	10.45
	3	17.96	22.51	13.41
	2	19.86	24.50	15.22
	Most Deprived	20.80	25.33	16.27

Source: Public Health Intelligence Team, Wirral Council, 2016

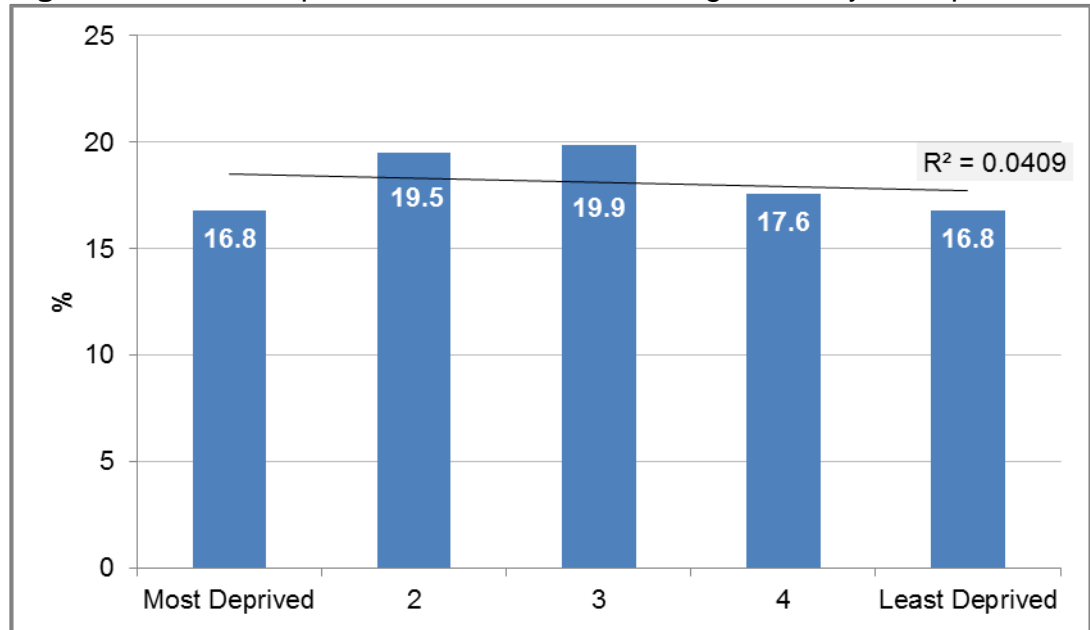
As the Table 8 shows, deprivation appears to have a greater effect on women compared to men, with a steeper gradient in obesity between those who were obese in the most and least deprived quintiles compared to men. Figures 6 and 7 show this information visually.

Figure 6: Estimated obesity prevalence rates for females aged 16+ by IMD quintile, 2014



Source: Public Health Intelligence Team, Wirral Council, 2016

Figure 7: Estimated prevalence rates for males aged 16+ by IMD quintile, 2014



Source: Public Health Intelligence Team, Wirral Council, 2016

Figure 6 shows that females from the most deprived areas are more likely to be obese, whereas females from the least deprived areas are less likely to be obese. The R² value suggests that there is a strong relationship between deprivation and obesity rates for females.

In comparison, Figure 7 shows that males in the middle quintile are more likely to be obese whereas males in both the least deprived and most deprived quintiles are the least likely to be obese. The R² figure suggests that there is no clear relationship between obesity and deprivation in males.

The full report “[Adult Obesity Prevalence](#)” can be accessed via the [JSNA website](#).

Key gaps in knowledge and services

- Actual numbers of adult Wirral residents who are obese (estimates only currently available)
- What works in reducing obesity in general, but specifically for certain groups such as pregnant women
- Recording of obesity on General Practice (GP) registers
- Number of people who have bariatric surgery privately
- Long-term outcomes of adults who have been through adult weight management services

What is coming on the horizon?

It is currently estimated that around 10% of patients undergoing elective surgery have a BMI of 30 and over and evidence suggests that people who are obese have a higher risk of complications and have poorer outcomes post-surgery. Wirral CCG are therefore looking at a ‘pre-operative optimisation’ policy where people whose body mass index (BMI) is above 30 are advised to attempt to lose weight while they are considered for surgery. The policy also advises elective surgery patients to attempt to quit smoking for the same reasons.

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 (18) 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 a more varied cross section 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
- 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.

References

1. **Royal College of Physicians (2013).** Action on obesity: comprehensive care for all. Report of a working party. RCP, London
2. **Organization for Economic Co-operation and Development (OECD) (2010).** Obesity and the Economics of prevention: Fit not Fat: OECD Publishing.
3. **Gopinath, B., Baur, L.A., Burlutsky, G. and Mitchell, P. (2013)** Adiposity Adversely Influences Quality of Life among Adolescents. *Journal of Adolescent Health*. Last accessed at www.ncbi.nlm.nih.gov/pubmed/23425948 on 6th March 2014
4. **National Audit Office (2012).** An update on the Governments approach to tackling obesity.
5. **Gable, S., Krull, J.L. and Chang, Y. (2012).** Boys and Girls Weight Status and Math Performance from Kindergarten Entry through Fifth Grade: A Mediated Analysis. *Child Dev* 83 (5):1822-1839.
6. **National Obesity Observatory (2010).** Health risks of childhood obesity. Available at: http://www.noo.org.uk/NOO_about_obesity/obesity_and_health/health_risk_child. Accessed 11/28, 2013
7. **Magarey, A., Daniels, L., Boulton, T and Cockington, R. (2003).** Predicting obesity in early adulthood from childhood and parental obesity. *International Journal of Obesity*; 27:505.

8. **National Obesity Observatory (2010)**. NOO data briefing: Child obesity and socioeconomic status. Available at: <http://www.noo.org.uk/gsf.php5?f=7540&fv=16967>
9. **National Obesity Observatory (2011)**. Adult Obesity and Socioeconomic Status.
10. **Pickett, K. & Wilkinson. R. (2010)** The Spirit Level: Why Equality is Better for Everyone.
11. **El-Sayed, A.M., Scarborough, P. and Galea, S. (2012)**. Socioeconomic Inequalities in Childhood Obesity in the United Kingdom: A Systematic Review of the Literature. *Obesity Facts* Jan-1; 5 (5):671.
12. **Reilly, J. (2007)**. Childhood obesity: An overview. *Children & Society* 2007;21:390.
13. **Nader, P., O'Brien, M., Houts, R., Bradley, R., Belsky, J., Crosnoe, R., Friedman, S., Mei, Z. and Susman, E.J. (2006)** Identifying Risk for Obesity in Early Childhood. *Pediatrics* 2006; 118: e594. Last accessed at www.ncbi.nlm.nih.gov/pubmed/16950951 on 14th February 2014
14. **Jain A. (2005)**. Treating obesity in individuals and populations. *BMJ: British Medical Journal*; 331:1387.
15. **Singh A, Mulder C, Twisk J. (2008)** Tracking of childhood overweight into adulthood: A systematic review of the literature. *Obesity Reviews*;9:474.
16. **Organization for Economic Co-operation and Development (OECD) (2012)**. Obesity Update: 2012. Last accessed at <http://www.oecd.org/health/49716427.pdf> on 12th February 2014
17. **Cawley, J. & Spiess, C.K. (2008)** Obesity and skill attainment in early childhood. *Economics & Human Biology* 12;6 (3):388-397.
18. **SUSTAIN (2013)**. The alliance for better food and farming. A Children's Future Fund: How food duties could provide the money to protect children's health and the world they grow up in.
19. **Markwick, A., Vaughan, L. and Ansari, Z. (2013)**. Opposing socioeconomic gradients in overweight and obese adults *Aust NZ J Public Health* 2013;37:32.
20. **Olshansky, S., Passaro, D., Hershov, R., Layden, J., Carnes, B., Brody, J., Hayflick, L., Butler, R.N., Allison, D.E. and Ludwig, D.S. (2005)**. A Potential Decline in Life Expectancy in the United States in the 21st Century. *N Engl J Med* 10 1056/NEJMsr043743 2005; 352:1138. Last accessed at www.ncbi.nlm.nih.gov/pubmed/15784668 on 14th February 2014
21. **Moon, G., Quarendon, G., Barnard, S., Twigg, L. and Blyth B. (2007)**. Fat nation: deciphering the distinctive geographies of obesity in England. *Social Science and Medicine* 2007; 65:20.
22. **Canoy, I. & Buchan, I. (2007)**. Challenges in obesity epidemiology. *Obesity Reviews* 2007; 8 (Suppl 1):1.
23. **Health & Social Care Information Centre (2012)**. Statistics on obesity, physical activity and diet: England. NHS IC.
24. **Wang, Y. MacPherson, K. Marsh, T. Gortmake, S. Brown, M. (2011)** Health and economic burden of the projected obesity trends in the USA and the UK, *The Lancet*, Last accessed at <http://www.thelancet.com/action/showFullTextImages?pii=S0140-6736%2811%2960814-3> April 2017
25. **Withrow, D. and Alter, D.A. (2011)**. The economic burden of obesity worldwide: a systematic review of the direct costs of obesity. *Obes Rev* 2011; 12: 131-141. Last accessed (abs) on 16th June 2014 at <http://www.ncbi.nlm.nih.gov/pubmed/20122135>
26. **Scarborough, P., Bhatnagar, P., Wickramasinghe, K.K., Allender, S., Foster, C. and Rayner, M. (2011)**. The economic burden of ill health due to diet, physical inactivity, smoking, alcohol and obesity in the UK: an update to 2006-07 NHS costs. *J Public Health (Oxf)*. 2011 Dec;33(4):527-35. doi: 10.1093/pubmed/fdr033.
27. **Swanson, K. (2008)** Healthy Weight, Healthy Lives: A toolkit for developing local strategies. National Heart Forum/Cross-Government Obesity Unit/Faculty of Public Health. Last accessed on 16th June at http://www.fph.org.uk/healthy_weight,_healthy_lives%3A_a_toolkit_for_developing_local_strategies
28. **Department of Health (2011)** Healthy Lives, Healthy People: A call to action on obesity in England [Online]. Last accessed at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213720/dh_130487.pdf on 21st May 2014.
29. **Department of Health (2011)** *Start Active, Stay Active: A report on physical activity from the four home countries'* Chief Medical Officers Chief Medical Officer's new guidelines on physical activity. London. TSO. Last accessed at <http://webcache.googleusercontent.com/search?q=cache:Gt40->

gZ4dMUJ:<https://www.gov.uk/government/publications/uk-physical-activity-guidelines+&cd=1&hl=en&ct=clnk&gl=uk> on 20th May 2014.

30. **NHS Cheshire & Mersey (2016)** Cheshire & Merseyside Sustainability & Transformation Plan. Last accessed at <http://www.liverpoolcommunityhealth.nhs.uk> April 2017

Contact details

For further details please contact:

- Hayley Clifton, Commissioning & Contracts Manager at hayleyclifton@wirral.gov.uk
- Matthew Ray, Public Health & Commissioning Analyst at matthewray@wirral.gov.uk
- Brendan Collins, Health Economist at brendancollins@wirral.gov.uk
- John Highton, JSNA Programme Lead at johnhighton@wirral.gov.uk

To access a range of Wirral JSNA easy read documents

- Please use this link to access easy read content or go to <http://info.wirral.nhs.uk/easyread.html>

To download the Wirral JSNA logo to your desktop



Go to <http://info.wirral.nhs.uk/default.aspx> or via this [link here](#) and click on 'Download the JSNA desktop icon here'

To subscribe to Wirral JSNA Bulletin

- Email your contact details to SubscribeJSNA@wirral.gov.uk

To give us feedback

- Let us know your views or if you need to find out more about a particular topic or subject then go to <http://info.wirral.nhs.uk/Contact.aspx> or contact us [here](#)