### Wirral JSNA: Diabetes

#### Summary

- Diabetes prevalence was higher in Wirral in 2014/15 compared to England (6.8% or 18,399 patients in Wirral, compared to 6.4% of the England population aged 17 and over).
- Amongst people who are obese, diabetes prevalence rises to 15% of men, and 12% of women (UK figures)
- The most current estimates suggest that there could be almost an additional 5,000 people undiagnosed diabetics living in Wirral, which would bring total prevalence to nearly 24,000 people (aged 17 and over)
- Prevalence of diabetes increased in Wirral (and the NW and England) every year between 2007/08 and 2012/13 and shows no sign of slowing. Figures for 2014/15 suggest that prevalence of diabetes is increasing again in Wirral.
- Undiagnosed cases are of concern, as unmanaged diabetes is more likely to result in complications (such as major amputations). Case finding should concentrate on obese or overweight patients, living in areas of deprivation, with a family history of diabetes, hypertension, non-diabetic hyperglycaemia and/or people of black or Asian origin
- The Wirral population has a high levels of several known risk factors for obesity such as: deprivation, hypertension, obesity and an older age profile
- There were an estimated number 30,197 people aged 16+ with non-diabetic hyperglycaemia in Wirral in 2015, which is a further important risk factor for the development of diabetes
- There are lower levels of other risk factors however, such as numbers of BME population (BME population is 5.3% in Wirral, compared to 15% in England)
- One in 5 children in Wirral are obese by the age of 11, with the effects of deprivation much more apparent amongst girls (high deprivation is associated with higher obesity prevalence). Obesity amongst children is of particular concern, as prolonged obesity from an early age is associated with earlier development of many chronic conditions, of which diabetes is one
- According to the previous 2015 report by the National Cardiovascular Network :
  - Levels of major amputations continue to be high compared to England
  - Diabetes prescribing in Wirral in 2013/14 was £4.68million (or around 8.1% of Wirral CCGs prescribing budget). This equates to £268 per local -+patient with diabetes (compared to £285 per diabetic patient in England)
  - Wirral was classified as achieving poor outcomes in return for a low spend on diabetes in 2013/14
- A <u>local Diabetic Retinopathy Screening Audit</u> showed that the more deprived GP practices had lower uptake rates of diabetic retinopathy screening. This means that Wirral residents living in deprived areas are at higher risk of visual impairment arising from their diabetes.
- There are some gaps in knowledge around patients with multiple risk factors, real-time data from GP practices and the take-up and effectiveness of the NHS Health Checks programme in preventing lifestyle related conditions such as diabetes

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### What do we know?

#### **Overview**

Diabetes is an increasingly common health condition for which there is no cure. Diabetes is caused when the body cannot make proper use of glucose, meaning that it builds up in the blood and can't be used as fuel. In diabetes, the body is unable to deal with glucose because either:

- There is no insulin to unlock the cells, allowing glucose to move from blood to the cells (Type 1 Diabetes)
- There is not enough insulin, or the insulin is there but the body cannot use or process glucose properly (Type 2 Diabetes)

When the body cannot use or process glucose properly, the amount of glucose in the blood becomes so high that it causes damage to tissues, e.g. to the nerve endings in the feet. The inability to process glucose is caused by the pancreas not producing any insulin (or not enough insulin), or the insulin that is produced does not work properly (known as insulin resistance).

Diabetes.org.uk (2015) estimates that Type 2 Diabetes makes up the majority of cases of diabetes at around (90%) and is potentially preventable, as it is caused by lifestyle factors (e.g. obesity) and develops later in life. Type 1 Diabetes makes up around 10% of diabetes cases and usually develops in childhood and is not related to lifestyle factors. In this chapter, when we say diabetes, we will mainly be talking about the preventable, Type 2 diabetes unless otherwise stated.

Individuals with diabetes are at higher risk of complications and conditions such as stroke, heart failure, angina, renal failure, blindness and amputations, but many of these will be preventable if the diabetes is well managed.

In 2014/15, there were 18,399 known diabetics\* in Wirral aged 17years and above; or 6.8% of this population. This is higher than the diagnosed diabetes prevalence rate for England, which was 6.4% in 2014/15. Data from the 2013 Health Survey for England (HSE) suggests that 2.4% of adults in England have undiagnosed diabetes so for Wirral this could mean an extra 6,469 cases of diabetes.

#### Risk factors for development of diabetes

There are a number of risk factors for developing diabetes, several of which are also linked with each other, the main ones include:

- Being obese or overweight, with a large waist size (over 80cm (31.5 inches) for women, 94cm (37 inches) for men, or 89cm (35 inches) for South Asian men.
- Being over 40 (or over 25 if you are South Asian)
- Having a close family member with diabetes (parent, brother or sister)
- Low levels of physical activity, poor diet and nutrition.
- Being of South Asian, Black African or African Caribbean descent even if you were born in the UK
- Having ever had high blood pressure, a heart attack or a stroke
- Severe mental illness for which medication is required (e.g. schizophrenia, bipolar or depression)
- Having impaired glucose tolerance

### Women only

• Ever having had gestational diabetes or given birth to a baby over 10 pounds in weight

Having polycystic ovary syndrome and being overweight

# **Facts and figures**

#### Prevalence of recorded diabetes

Prevalence according to the GP system (the Quality & Outcomes Framework or QOF) in Wirral 2014/15 is shown in Table 1 below.

Table 1: QOF recorded Diabetes prevalence in Wirral (2014/15) in patients aged 17+

	Wirral	North of England	England	
Prevalence	6.8%	6.7%	6.4%	

Note: QOF register only records diabetes status in those aged 17+

- Diabetes prevalence is higher in Wirral compared to England (same as the North West overall) and has increased by 0.3% since 2013/14, when it was 6.5%
- In numbers, there were **18,399**\* **patients** aged 17+ on the diabetes register in Wirral (\*with the exception of the All Day Health Centre)

# QOF recorded diabetes prevalence by practice 2014/15

Diagnosed prevalence of diabetes varies enormously by Wirral practice, from 8.6% (Parkfield), to 5.3% (TG Medical Centre). The practice with the highest number of recorded diabetic patients in Wirral in 2014/15 was Marine Lake Medical Centre (845 patients), whilst the practice with the lowest number\* was TG Medical Centre, (75 patients). Table 2 below also shows the practice deprivation rank (1 = most deprived practice, 60 = least deprived). Deprivation is associated with diabetes, so it is to be expected that the more deprived practices in Wirral will have the highest diabetes prevalence. However, diabetes is also associated with age and the prevalence rates below are crude rates (i.e. they are not adjusted for age). If in future, prevalence can be analysed by age in GP practices, it will be possible to better understand the relationship with deprivation and predict which practices have lower than expected rates of diabetes.

**Table 2:** Diabetes prevalence by Wirral CCG practice, 2014/15 (numbers and percentage prevalence), ranked by prevalence from high to low.

Practice Code	Practice Name (& GP Lead)	Practice List Size	Diabetes Register (17+)	Diabetes Prevalence (%)	Deprivation Rank*
N85034	Parkfield MC (Oates)	6,049	421	8.64	23
N85619	Earlston & Seabank (Mantgani)	4,275	311	8.57	25
N85634	Vittoria MC (Karyampudi)	1,468	103	8.54	3
N85009	Commonfield Road (Brodbin)	5,420	374	8.47	22
N85012	St Georges MC (Hodgson)	9,720	633	8.24	29
N85625	Miriam (Mantgani)	5,354	331	8.01	1
N85040	Moreton Health Centre (Wright)	6,162	406	7.98	28
N85038	Vittoria MC (Edwards)	4,971	307	7.82	2
N85648	Blackheath MC (Quinn)	2,862	183	7.70	27
N85013	Upton Group Practice (Larkin)	7,967	518	7.69	41
N85640	Leasowe Primary Care Centre (Swift)	3,139	163	7.67	8
N85629	Egremont MC (Hickey)	4,540	269	7.66	6
N85027	Central Park MC (Mukherjee)	10,766	651	7.65	15
N85052	Grove Road Surgery (Tandon)	2,407	158	7.59	36
N85028	Moreton Cross Group Practice (Alman)	7,150	432	7.53	30

N85031	Gladstone MC (Salahuddin)	4,675	285	7.49	9
N85029	Fender Way Health Centre (Ream)	3,733	209	7.42	11
N85046	Hoylake Rd MC (Ali)	4,048	245	7.38	34
N85051	Parkfield MC (Booth)	7,523	436	7.36	21
N85021	Hamilton MC (Jayaprakasan)	2,288	149	7.30	4
N85019	Whetstone Lane MC (Pleasance)	8,657	484	7.28	7
N85022	Holmlands MC (Srivastava)	3,239	195	7.28	35
N85017	Cavendish Medical Centre (Melville)	5,076	291	7.20	5
N85020	Victoria Park Health Centre (Freeman)	7,295	411	6.98	16
N85620	The Village Medical Centre (Roberts)	3,157	411	6.84	32
N85037	Heatherlands MC (Camphor)	4,090	225	6.81	13
N85057	Teehey Lane Surgery (Sargar)	2,144	125	6.80	39
N85018	Villa MC (Cookson)	5,739	329	6.79	38
N85053	Field Rd Health Centre (Downward)	3,451	190	6.75	24
N85025	St Hilary Group Practice (Kingsland)	5,191	301	6.71	33
N85643	Prenton MC (Murugesh)	1,709	94	6.66	42
N85024	Somerville MC (Smye)	8,143	430	6.66	14
N85616	Liscard Group Practice (Staples)	4,056	220	6.64	18
N85003	Allport Medical Centre (Walton)	4,328	224	6.58	45
N85048	Moreton MC (Pereira)	5,611	302	6.57	31
N85005	Eastham Group Practice (Bush)	11,750	624	6.53	47
N85058	Silverdale MC (Hennessy)	4,961	256	6.53	54
N85041	Greenway Surgery (Dow)	8,113	415	6.44	17
N85044	Claughton Medical Centre (Taylor)	9,997	533	6.44	20
N85016	Riverside Surgery (Williams)	7,393	385	6.43	12
N85047	Orchard Surgery (Lannigan)	5,203	278	6.37	43
N85008	West Wirral Group Practice (Johnston)	13,464	717	6.35	51
N85023	Manor Health Centre (Magennis)	5,799	296	6.33	26
N85007	Heswall & Pensby Group Practice (Rule)	12,417	647	6.17	53
N85002	West Kirby Health Centre (Wells)	17,036	854	6.15	49
N85633	Church Road Medical Practice (Patwala)	2,580	132	6.09	40
N85015	Devaney MC (Bates)	8,160	402	6.09	19
N85001	Sandstone MC (Alam)	3,627	195	6.03	48
N85014	Townfield Health Centre (Lee)	6,830	311	6.00	37
N85032	Greasby Group Practice (Coppock)	7,471	360	5.80	55
N85006	Civic Medical Centre (Pillow)	9,759	439	5.67	46
N85617	Spital Surgery (Francis)	4,205	204	5.66	52
N85054	Kings Lane Medical Practice (Kershaw)	4,449	198	5.40	44
N85059	Hoylake & Meols MC (Wight)	5,488	231	5.07	50
Y02162	Woodchurch MC (Martin-Hierro)	2,406	75	5.01	10

Source: Quality & Outcomes Framework (QOF) on the HSCIC, 2014/15

**Notes:** \*The GP Practice IMD is estimated by taking a weighted average of the IMD scores for each LSOA in which a given practice has registrations. The weights are the % of the practice's registrations in each LSOA. The GP Practice IMD scores are provided by the Public Health Observatories on behalf of the Department of Health

- Parkfield MC has the highest prevalence of diabetes in Wirral, with 8.64% of the practice population diagnosed diabetics. This is 26% higher than the England prevalence rate.
- Practices with deprived catchments (lower rank), but low practice prevalence may be most likely to have larger numbers of undiagnosed patients (unless their practice population has a very young age profile).

- Practices with *lower* prevalence than might be expected given the deprivation of their practice populations are: Woodchurch MC, Devaney MC, Greenway Surgery, Riverside Surgery and Claughton MC.
- Practices with a higher prevalence of diabetes than expected (given their deprivation ranking) are Grove Road and Upton Group Practice, but this may be due to the older age profile of their population.

# Projected prevalence of total diabetes (recorded and unrecorded)

The Diabetes Prevalence Model estimates the total (diagnosed and undiagnosed) number of people with diabetes. Estimates are adjusted for the age, sex, ethnic group and deprivation pattern of the local population. For further information see the <u>Diabetes prevalence model for local authorities and CCGs</u> (Figure 1 below shows data from this model).

**Figure 1:** Projected total diabetes prevalence (diagnosed *and* undiagnosed) in adults, 2015 to 2035, England, North West & Wirral



Source: Public Health England (2016)

- It is estimated that in 2015, an estimated 9.0% of the Wirral population are diabetic (an increase from 2012, when APHO estimated the prevalence to be 7.7% (of people aged 16+)
- This equates to a total of 23,439 Wirral residents likely to have diabetes
- This 9% rate is higher than England (8.6%), the North West (8.8%) and this trend is projected to continue to 2035. If current trends do persist, the total prevalence of diabetes is expected to rise to 10.2% of the adult population of Wirral by 2035 (compared to 9.7% of the England population)
- The difference between the estimated total prevalence in the population and those recorded on QOF means there are likely to be a further 5,040 adults with currently undiagnosed diabetes in Wirral in 2015.

#### Prevalence of risk factors

# Non-diabetic hyperglycaemia

Non-diabetic hyperglycaemia, also known as pre-diabetes or impaired glucose regulation/ tolerance, refers to raised blood glucose levels, but not in the diabetic range. People with non-diabetic hyperglycaemia are at increased risk of developing Type 2 diabetes (as well as other cardiovascular conditions). For more information on non-diabetic hyperglycaemia, please see the report by the <a href="NHS Diabetes Prevention Programme">NHS Diabetes Prevention Programme</a> (NHS DPP). Table 3 below shows the estimated number of people aged 16+ with non-diabetic hyperglycaemia in England and Wirral in 2015. This is based on data from the Health Survey for England.

**Table 3:** Estimated prevalence of non-diabetic hyperglycaemia in England & Wirral, 2015

Area	Number	Percentage (%)
England	5,047,891	11.4%
Wirral	30,197	11.5%

Source: NCVIN & PHE (2015)

# Obesity

Obesity is the main, *modifiable* risk factor for diabetes. There is a seven times greater risk of diabetes in obese people compared to those of healthy weight, with a threefold increase in risk for overweight people. There is a dedicated chapter in our Wirral JSNA on <u>Adult Obesity</u> (a child obesity chapter is currently in development and will follow on the site in 2015), so only selected information from that chapter is shown here, including the table below.

 Table 4: Estimated number of obese adults in Wirral by age band and gender, 2013

	Men		Won	nen	Persons		
	Overweight	Obese	Overweight	Obese	Overweight	Obese	
16-24	3,359	1,601	3,868	2,038	7,227	3,639	
25-34	7,268	3,433	6,100	3,389	13,368	6,822	
35-44	8,050	5,400	6,149	5,363	14,199	10,763	
45-54	10,427	7,509	8,918	6,418	19,345	13,927	
55-64	8,766	6,595	7,894	6,057	16,660	12,652	
65-74	8,101	5,066	6,431	5,901	14,532	10,967	
75+	5,588	3,238	7,337	4,276	12,925	7,514	
All	51,559	32,842	46,697	33,442	98,256	66,284	

Source: Health Survey for England, 2013

These figures (from the Health Survey for England and applied to the Wirral population), mean that 165,000 people in Wirral are likely to be overweight or obese. In turn, this means there are more people of an unhealthy weight in Wirral than there are of a healthy weight.

Obesity is recorded as part of the QOF but recording is patchy as many people do not see their GP very often. If there was a push to record height and weight for all patients regularly then this could potentially be a good source of data for Wirral.

# Diabetes prevalence by weight status

Although the overall prevalence rate for diabetes is 6.5% in Wirral (and 6.2% in England), this varies considerably depending on weight status. The table below shows this disparity clearly.

**Table 5:** Doctor diagnosed diabetes prevalence by weight status and gender for adults aged 18 years and over 2010-12, England

	Underweight	<b>Healthy Weight</b>	Overweight	Obese	
Female	1.9%	1.9%	4.3%	10.7%	
Male	0.0%	3.3%	6.0%	14.6%	
Total	1.3%	2.4%	5.2%	12.4%	

**Source**: Health Survey for England combined data 2010-12. Joint Health Surveys Unit (National Centre for Social Research & UCL) 2014. The Health and Social Care Information Centre (2014)

# **Childhood Obesity**

Obesity in children, as recorded by the National Child Measurement Programme (NCMP), however, is a very good quality source of data, with over 98% of children in Wirral measured in 2013/14. Table 6 below shows the results.

**Table 6:** Obesity in Year 6 children (age 10/11) in Wirral in 2014/15 by deprivation quintile

	Male	Female	All
1 Most Deprived	25%	20%	22%
2	24%	20%	22%
3	18%	16%	17%
4	16%	16%	16%
5 Least Deprived	13%	12%	13%
All	20%	18%	19%

Source: NCMP, 2013/14

As four out of 5 children who are obese go on to become obese adults, it is of concern that one in 5 Wirral school-children aged 10/11 were obese (20%) in 2013/14. As the table also shows, deprivation is a huge factor, especially in girls, where the prevalence of obesity in the most deprived quintile is almost three times higher than girls in the least deprived quintile (22% compared to 8%). Overall, deprivation is closely linked to the risk of both obesity and type 2 diabetes. Prevalence of type 2 diabetes is 40% more common among people in the most deprived quintile compared with those in the least deprived quintile (Public Health England report, 2014).

### **Hypertension**

Hypertension is a risk factor for diabetes and the table below shows the number of men and women with diagnosed hypertension in Wirral in 2014/15.

**Table 7:** QOF recorded prevalence of hypertension, 2014/15

	Wirral	North of England	England
Percentage Prevalence	15.2%	14.5%	13.8%

Source: QOF, 2013/14

As Table 7 shows, Wirral had a higher prevalence of hypertension than both England and the North of England (NHS region) in 2014/15 according to the QOF register. In numbers there were 50,733 Wirral patients on the QOF hypertension register. Estimates suggest that there could be a further 40,000 undiagnosed hypertensive people in Wirral (Wirral Pharmaceutical Needs Assessment, 2014).

# **Ethnicity in Wirral**

As mentioned previously, people from Black and Asian ethnic groups are at an equivalent risk of Type 2 diabetes at lower BMI levels to people from White European populations. Table 8 below shows the prevalence of different ethnic groups in Wirral in 2001 and 2011 (2011 Census are the most recent figures on ethnicity available in Wirral).

Table 8: Ethnicity in Wirral: Comparison of Census 2001 & 2011 Ethnic Group

Ethnicity	Census 2001	Census 2011	% of population	Change 2001 to 2011
White: British	303,800	303,682	94.97	-118
White: Irish	3,100	2,667	0.83	-433
White: Gypsy or Irish Traveller	0	77	0.02	+77
White: Other White	2,700	3,730	1.17	+1,030
Mixed: White and Black Caribbean	500	964	0.30	+464
Mixed: White and Black African	300	558	0.17	+258
Mixed: White and Asian	500	949	0.30	+449
Mixed: Other Mixed	500	815	0.25	+315
Asian or Asian British: Indian	700	1,344	0.42	+644
Asian or Asian British: Pakistani	100	226	0.07	+126
Asian or Asian British: Bangladeshi	400	851	0.27	+451
Asian or Asian British: Chinese	1,300	1,653	0.52	+353
Asian or Asian British: Other Asian	200	1,042	0.33	+842
Black or Black British: African	300	389	0.12	+89
Black or Black British: Black Caribbean	200	189	0.06	-11
Black or Black British: Other Black	100	117	0.04	+17
Other Ethnic Group	0	530	0.17	+530
All	314,700	319,783	100.00	+5,083

Source: ONS, 2011: http://www.ons.gov.uk/ons

• The 2001 Census showed there were 3,300 people from Asian or Black back grounds in Wirral. This had almost doubled to just over 5,800 by 2011

 BME groups in Wirral (not just those of black or Asian origin) make up 5.3% of the Wirral population, compared to 15% of the population of England who are from BME groups

# Age of the Wirral population

Age is a risk factor for diabetes (those aged 40+ are more likely to be diagnosed); table 9 below shows the number of men and women aged 40+.

**Table 9:** Number of residents aged 40+, Wirral Mid-Year (2014) Population Estimates by age group and gender

Ago Group	Male			Female			Persons	
Age Group	Number	%		Number	%		Number	%
Aged 40+	81,692	53%		93,375	56%		175,067	55%
All ages	154,687		100%	166,227		100%	320,914	100%

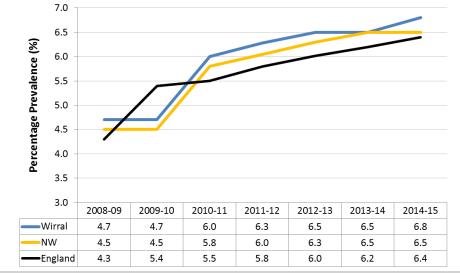
Source; Office for National Statistics 2015 (http://www.ons.gov.uk/)

- Over 40s make up 55% of the total Wirral population (which was 320,914 in 2014)
- 175,067 Wirral residents were aged over 40+ in 2014 (81,692 men and 93,375 women)

#### **Trends**

As figure 2 below shows, recorded diabetes prevalence has increased almost every year since 2007-08 in Wirral, the NW and England overall. Prevalence has increased by 51% between 2007-08 and 2013/14 in Wirral.

Figure 2: Trend in QOF prevalence of diabetes in Wirral, NW\* and England, 2007-2014



Wirral has had a higher prevalence of diabetes than either North West or England almost every year since 2007. In 2013/14 however, rates remained static in Wirral, in contrast with the North West and England, where prevalence continued to rise.

Source: Public Health Outcomes Framework, 2015

Notes \*2012-13 figure for NW is for the new NHS North of England region, this is different to previous NHS North West region.

The projected prevalence of diabetes (Type 1 & Type 2) in the Wirral population aged 18+ (Figure 3) indicates that there is a likely to be an increase from 14,600 in 2014, to 16,700 by 2030. There are some slight reductions in some of the younger age bands, but the largest increase is amongst those aged 75+ between 2014 and 2030 (projected 48% increase).

407 2030 710 1,736 2,988 5,313 5,371 191 3.281 4.857 2025 1,776 4.854 176 2020 3,217 643 2.020 4,875 4,105 182 2,234 2015 4,650 205 2014 676 2,244 2,943 4,551 209 0 2.500 5.000 7.500 10.000 12.500 15.000 17.500 Aged 18-24 Aged 55-64 Aged 65-74 ■ Aged 25-34 Aged 35-44 Aged 45-54 Aged 75+

**Figure 3:** Wirral residents aged 18+ projected to have Type 1 or Type 2 diabetes, by age, 2014- 2030

Source: PANSI, 2015

**Notes:** The prevalence rates are taken from the Health Survey for England 2006 Volume 1: *Cardiovascular Disease and Risk Factors in Adults*, The NHS Information Centre, 2008. The study provides prevalence data by age and gender, and by type of diabetes. The most significant factors for the onset of Type 2 diabetes are age and weight. The prevalence rates have been applied to ONS population projections for the 18 and over population to give estimated numbers predicted to have diagnosed diabetes, projected to 2030.

# Spend on obesity and diabetes

There is no direct correlation between spend on disease areas and disease prevalence, as the relationship is mediated by factors such as severity of disease, uptake of new technologies, and services hopefully becoming more efficient over time.

The cost per year of an individual having diabetes in 2010/11 was estimated at around £6,320, of which £2,613 is direct health and social care costs<sup>1</sup>. The majority of diabetes costs are caused by complications, many of which can be prevented with good management such as having foot checks, eye checks and being tested for protein in the urine.

Obesity after the age of 40 is the main risk factor for diabetes however and modelled projections indicate that NHS and wider costs to society associated with overweight, and obesity will rise dramatically in the next few decades. Based on a <u>model produced by YHPHO</u>, there is a considerable opportunity to save money on diabetes from a reduction in obesity. In <u>Economic Value of Public Health Opportunities in Cheshire, Mersey & Alliance areas: A Rapid Review (2016)</u> is estimated that the difference between the two scenarios is £18.3million per year in direct costs, and a further £25.9million in indirect costs (costs not adjusted for inflation). In 2012 spend on obesity was estimated to be around 9% of the total NHS spend in Wirral (£673m). Once NHS cost of individuals being overweight is factored in as well, this could equate to around 16% of total NHS spend. See Figure 4.

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Based on Hex & Bartlett, 2012. Total UK cost of diabetes £23.7bn of which £9.8bn direct; <a href="https://jdrf.org.uk/wp-content/uploads/2015/10/Hex-and-Bartlett.pdf">https://jdrf.org.uk/wp-content/uploads/2015/10/Hex-and-Bartlett.pdf</a> and Diabetes UK (2014) states 3.75 million people in UK have diabetes. <a href="https://www.diabetes.org.uk/Documents/Diabetes%20UK%20Cost%20of%20Diabetes%20Report.pdf">https://www.diabetes.org.uk/Documents/Diabetes%20UK%20Cost%20of%20Diabetes%20Report.pdf</a>

0.08 70.0 73.1 71.1 69.2 60.0 67.3 65.4 63.6 61.8 60.1 58.5 50.0 56.9 40.0 30.0 20.0 10.0 0.0 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 Estimated Spend on Obesity (£millions) Linear trend

Figure 4: Trend in estimated NHS Spend on obesity in Wirral (£millions)

**Source:** Modelling the potential change in diabetes, asthma and COPD in Wirral, Wirral Public Health Intelligence Team (August 2015)

#### **Targets**

An annual profile is produced for Wirral CCG by the National Cardiovascular Intelligence Network which shows primary care (GP) performance against the key diabetes QOF targets such as good control of cholesterol, blood sugar and blood pressure. The <a href="most recent profile">most recent profile</a> was published in April 2016 and also shows the rate of complications (such as amputations) and prescribing locally compared to England overall.

#### **Performance**

There are a number of <u>Public Health Outcome Framework Targets</u> which relate to diabetes, these are:

- 2.06i Excess Weight in 4/5 year olds
- 2.06ii Excess Weight in 10/11 year olds
- 2.12 Excess Weight in Adults
- 2.13i Proportion of physically inactive adults
- 2.13ii Proportion of physically active adults
- 2.17 Recorded Diabetes
- 2.21vii Access to non-cancer screening programmes diabetic retinopathy
- 2.22iii Cumulative % of the eligible population aged 40-74 offered an NHS Health Check
- 2.22iii Cumulative % of the eligible population aged 40-74 who took up an NHS Health Check
- 4.12iii Preventable sight loss diabetic eye disease

How Wirral performs against our peers and England, currently and historically can be accessed via the Public Health Outcomes Framework website.

# What is this telling us?

#### **Local views**

National Diabetes Audit is carried out annually and published by the Health & Social Care Information Centre. Part of this audit is to look at patient experience of certain aspects of service, below is the link to the Wirral results for 2013/14:

National Diabetes Audit 2013

– 14. Patient Experience of Diabetes Services Survey
 Pilot: Summary for Wirral University Teaching Hospital NHS Foundation Trust (RBL)

# National and local strategies

# **NICE** pathways

NICE produces a <u>number of different pathways on the management of diabetes</u>. The pathways covers the management of type 1 and type 2 diabetes, including pre-conception care, diabetes in pregnancy and foot care (some of the recommendations for type 1 diabetes are for children and young people). The pathways available are:

- Diabetes (overview)
- Managing Type 1 diabetes in children and young people
- Ongoing care for children and young people with Type 1 diabetes
- Managing Type 1 diabetes in adults
- Diet and lifestyle advice for adults with Type 1 diabetes
- Ongoing care for adults with Type 1 Diabetes
- Managing arterial risk in adults with Type 1 diabetes
- Managing Type 2 diabetes
- Blood-glucose lowering therapy for Type 2 diabetes
- Managing blood-pressure in Type 2 diabetes
- Identifying and managing long-term complications
- Foot care for people with diabetes
- Foot care for people with Type 2 diabetes
- Foot care for people with Type 1 diabetes
- Foot care for inpatients with diabetes

#### **NICE Guidance**

Type 1 diabetes in adults: diagnosis and management (2015): (NG17) This guideline covers the care and treatment of adults (aged 18 and over) with type 1 diabetes.

<u>Diabetes (type 1 and type 2) in children and young people: diagnosis and management (2015)</u> (NG18): This guideline covers the diagnosis and management of type 1 and type 2 diabetes in children and young people aged under 18. The guideline recommends strict targets for blood glucose control to reduce the long-term risks associated with diabetes.

<u>Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period (2015)</u> (NG3): It offers evidence-based advice on managing diabetes and its complications in women who are planning pregnancy and those who are already pregnant. The guideline focuses on areas where additional or different care should be offered to women with diabetes and their newborn babies.

<u>Diabetic foot problems: prevention and management (2015)</u>: (NG19). This guideline covers preventing and managing foot problems in children, young people and adults with diabetes. The guideline aims to reduce variation in practice.

<u>Preventing type 2 diabetes: risk identification and interventions for individuals at high risk</u> (2012) (PH38): This guidance is for all those involved identifying people at high risk of type 2 diabetes, it may also be of interest to people at high risk of developing type 2 diabetes, their families and other members of the public.

Preventing Type 2 diabetes: population and community-level interventions (2011) (PH35):

NICE's recommendations aim to help prevent type 2 diabetes among populations and communities of adults who are at high risk and specifically concentrate on: Integrating national strategy on type 2 diabetes with national activities to prevent other non-communicable diseases (such as cardiovascular disease and certain cancers); National action to promote a healthy diet and physical activity; Local needs assessments and strategies, including local action to promote a healthy diet and physical activity among communities at high risk and training for those involved in helping to spread awareness of the risks and how to prevent the condition.

Type 2 diabetes: Management of Type 2 diabetes (2009) (CG87):This guidance partially updates and replaces NICE clinical guideline 66 (published in May 2008) and covers: the monitoring of glucose, lipid (blood cholesterol and fat) and blood pressure levels; diabetes education programmes; dietary advice; the use of medications to control blood glucose, prevent vascular (blood vessel) disease, reduce blood pressure and improve lipid levels; detection and on-going management (with referral to a specialist if necessary) of: eye disease, kidney disease, nerve damage and nerve pain and depression. It is due to be updated in 2015.

### **Current activity and services**

A <u>Health Equity Audit of Wirral's Diabetic Retinopathy Screening Programme</u> was conducted on data from January-December 2013 (this is the third sequential Equity Audit which has been conducted on Diabetic Retinopathy Screening in Wirral). It showed that the more deprived GP practices had lower uptake rates of diabetic retinopathy screening. This means that Wirral residents living in deprived areas are at higher risk of visual impairment arising from their diabetes.

# **Key inequalities**

- Risk of developing diabetes (diabetes is 40% more common among people in the most deprived quintile compared with those in the least deprived quintile (PHE report, 2014)
- The five risk factors associated with the early development of complications for diabetes (obesity, smoking, high blood pressure, blood sugar (HbA1c) and cholesterol) and almost all show an association with inequalities
- Local Health Equity Audit on Diabetic Retinopathy Screening showed Wirral residents living in deprived areas were at higher risk of visual impairment arising from their diabetes because screening rates were lower in areas of deprivation

# Some key gaps in knowledge and services

- Following restrictions on data access brought about by the Health & Social Care Act (2012), locally held GP data (recorded for the Quality and Outcomes Framework or QOF system) is no longer routinely available to the Public Health Information Team. Consequently, there are several key knowledge gaps which have opened up recently including; real-time prevalence figures by GP practices, real-time target achievement data by GP practices and the identification of patients with multiple risk factors.
- NHS Health Checks Programme data also falls into the category above (restricted information following recent data restrictions) and so little is known about whether the programme is achieving good levels of take-up amongst those patients most in need (those in the more deprived areas with highest risk of developing diabetes). In addition, outcome data from the NHS Health Checks programme is not available, which may indicate if they are effective in preventing lifestyle related morbidity (such as diabetes)
- Information is also lacking on women with polycystic ovary syndrome (PCOS), women

who have given birth to large babies and/or had gestational diabetes, all people with impaired glucose tolerance, increased waist circumference or patients with severe mental illness who require medication (all risk factors for the development of diabetes)

#### Links

Cardiovascular Disease

**Chronic Kidney Disease** 

**Heart Disease** 

**Stroke** 

**BME** 

<u>Health & Wellbeing</u> (includes information on cardiovascular disease, chronic kidney disease, hypertension and stroke)

**Adult Obesity** 

**Long Term Conditions** 

#### Other relevant sections of JSNA:

Diabetes Profile for Wirral (2015)

Diabetes Profile for Wirral (2014)

Digital Retinopathy Audit for 2013 (published 2014)

National Diabetes Audit 2012-2013

Report on Care Processes and Treatment Targets: Summary for Wirral CCG

Diabetes Community Health Profiles for Wirral (June 2013)

<u>Diabetes Community Health Wirral Profile for Children and Young People</u> (please note that this document has not been updated since 2010)

Cardiovascular Disease Profiles (produced by PHE, updated regularly)

Diabetes prevalence estimate for Wirral (2012 to 2030)

<u>Diabetic Foot Disease Profile for Wirral</u> (June 2013)

Commissioning for Footcare (May 2015)

Healthier Lives website with national comparison of our local diabetes outcomes

Diabetes UK briefings for members of Health and Wellbeing Boards

Healthier Lives Hypertension/High Blood Pressure (published by PHE)

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