Harrow
JSNA Online

PUBLIC HEALTH REPORT

DIABETES

Introduction

This cardiovascular disease summary profile focuses on diabetes and is produced by the National Cardiovascular Intelligence Network (NCVIN). It compares the CCG with data for England, a group of similar CCGs and the North West London Sustainability and Transformation Partnership (STP).

Key Findings

- Harrow has a higher than England prevalence rate of Diabetes.
- In NHS Harrow CCG, the prevalence of diagnosed diabetes was 10.0% and the estimated prevalence of diabetes was 10.5%. At GP practice level, the prevalence of diagnosed diabetes ranged from 6.0% to 16.4%.
- Harrow has large areas of deprivation. Deprivation is strongly associated with higher levels of obesity, physical inactivity, unhealthy diet, smoking and poor blood pressure control which is also a strong indicator of Diabetes development.
- Type 1 diabetes is usually diagnosed earlier in life than type 2
- People with type 2 diabetes are on average older than people with type 1 as Figure 4 confirms for Harrow.
- There maybe evidence to show that Covid 19 has caused a spike in prevalence.
- Both Type 1 and Type 2 diabetes are more common in males than females which is confirmed in the rates provided for Harrow
- The white population of Harrow has a smaller rate for Type 1 Diabetes than England but a higher rate than the ethnic population of Harrow.
- Type 2 rates in Harrow show that the white population has a much lower rate than that of the ethnic population.
- People with diabetes are at a higher risk of having a heart attack or stroke. In Harrow, people with diabetes were 100.5% more likely than people without diabetes to have a heart attack. This was higher than the figure for England which was 86.9%.

- People with diabetes were also 44.5% more likely to have a stroke. This was lower than the figure for England where there was a 58.5% greater risk.
- Harrow has a lower than England rate for achieving the eight recommended care process and treatments.
- Harrow there were low rates of type 1 and type 2 residents achieving all three treatment targets of HbA1c (glucose control), blood pressure and serum cholesterol recommended by NICE.
- The additional risk of mortality for people with diabetes is higher in Harrow than in England.
- Those with Diabetes can be more vulnerable to Covid than the main population. There are some indications that this is the case in Harrow.

In 2020/21 there were 22,367 people, aged 17 years or older, who had been diagnosed with diabetes and included on GP registers in NHS Harrow CCG. This equals 10.0% of the population. This equals 10.0% of the population. However, the total prevalence of people with diabetes, diagnosed and undiagnosed, is estimated to be 10.5%.

The percentage of people with *type 1* diabetes who achieved the blood glucose target of ≤58 mmol/ml (7.5%) in this CCG was 30.0% compared to 31.6% in England. The percentage of people with *type 2* diabetes who achieved the blood glucose target of ≤58 mmol/ml (7.5%) in this CCG was 66.8% compared to 65.6% in England.

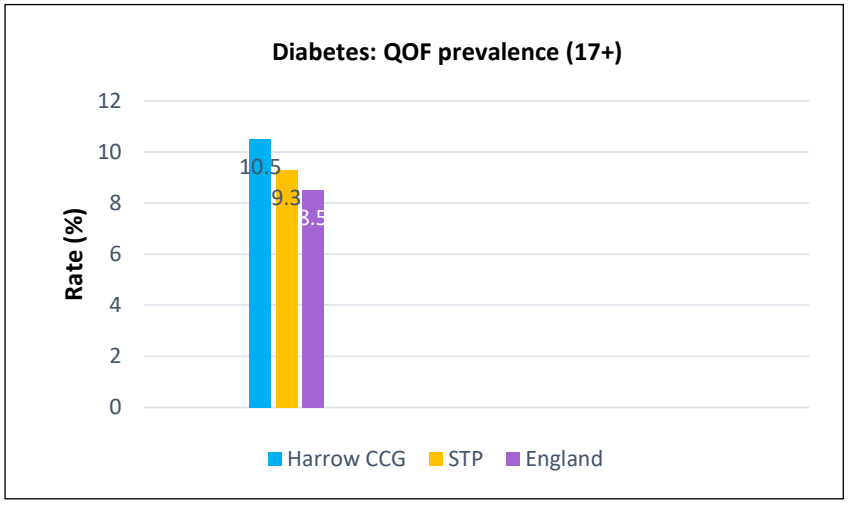


Figure 1 QOF Prevalence (17+); Harrow, the North West London Sustainability and Transformation Partnership (STP), London and England, December 2021.

Source: Office for health improvement and disparities – CVD Profiles - Diabetes

Disease Prevalence

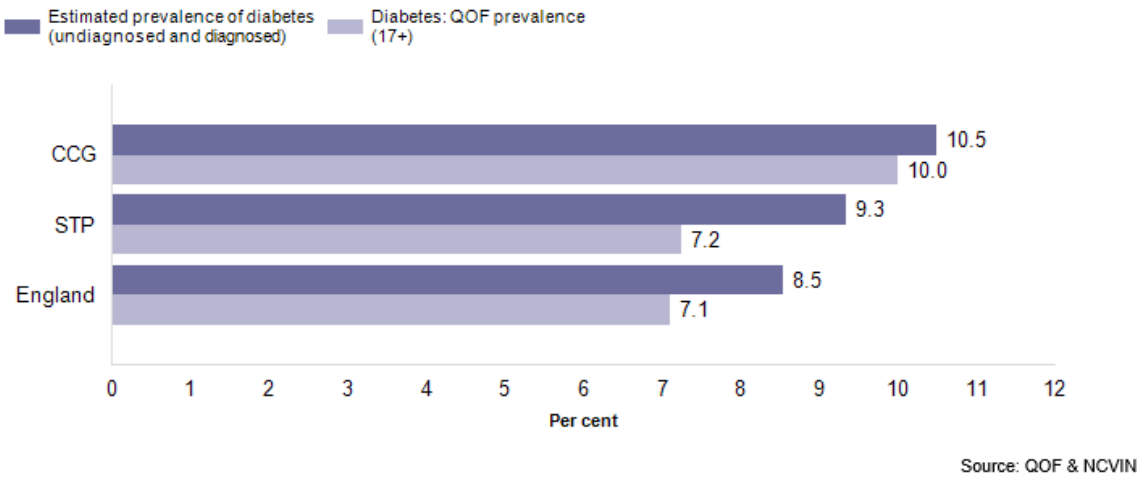
Prevalence is the number of people in a given population with a particular condition at a given point in time. The diagnosed prevalence of diabetes is identified from the returns submitted to NHS Digital as part of the Quality and Outcomes Framework (QOF) by each GP practice.

No distinction is made between type 1 or type 2 diabetes. Diagnosed prevalence is the number of patients aged 17 years and over who are on the practice's diabetes register on 31 March in a given financial year. Practice returns are combined to calculate prevalence for the local CCG.

The estimated prevalence is taken from the National Cardiovascular Intelligence Network (NCVIN) diabetes prevalence model. The model uses data from three years of Health Surveys for England: 2012, 2013 and 2014.

The graph below shows that generally, the actual QOF prevalence of Diabetes is less than the estimated but nevertheless the CCG prevalence is higher than that of England and the STP.

Figure 2 Diabetes diagnosed prevalence (2020/21) compared to estimated diabetes (2017)



Source: Office for health improvement and disparities – CVD Profiles - Diabetes

The estimates take into account the age, sex and ethnic-group distribution, as well as deprivation of the area. It estimates the total number of people with diabetes (diagnosed and undiagnosed).

In NHS Harrow CCG, the prevalence of diagnosed diabetes was 10.0% and the estimated prevalence of diabetes was 10.5%. At GP practice level, the prevalence of diagnosed diabetes ranged from 6.0% to 16.4% as can be seen in Figures 3 and 4 below :

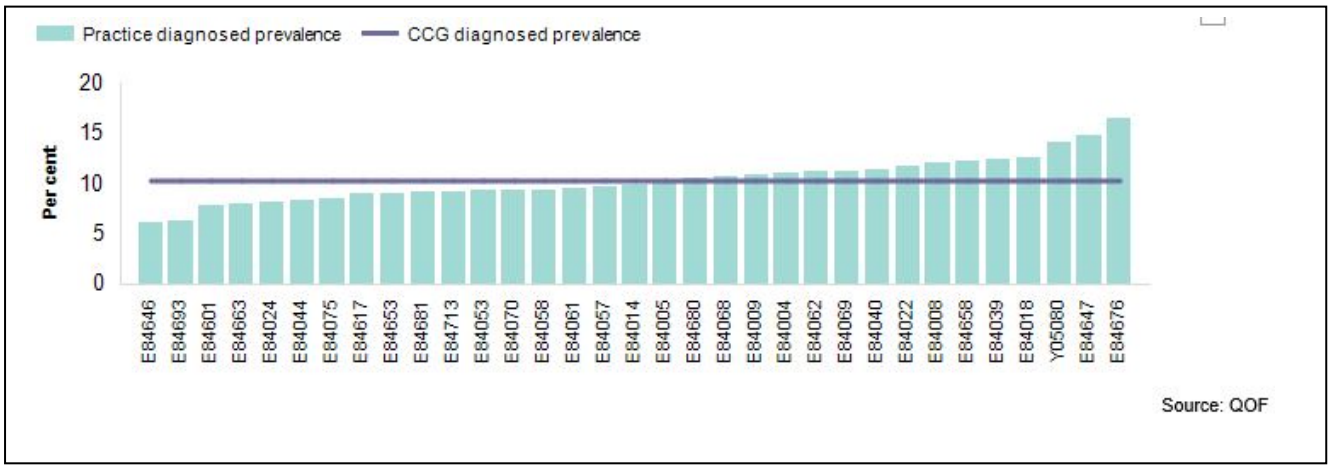
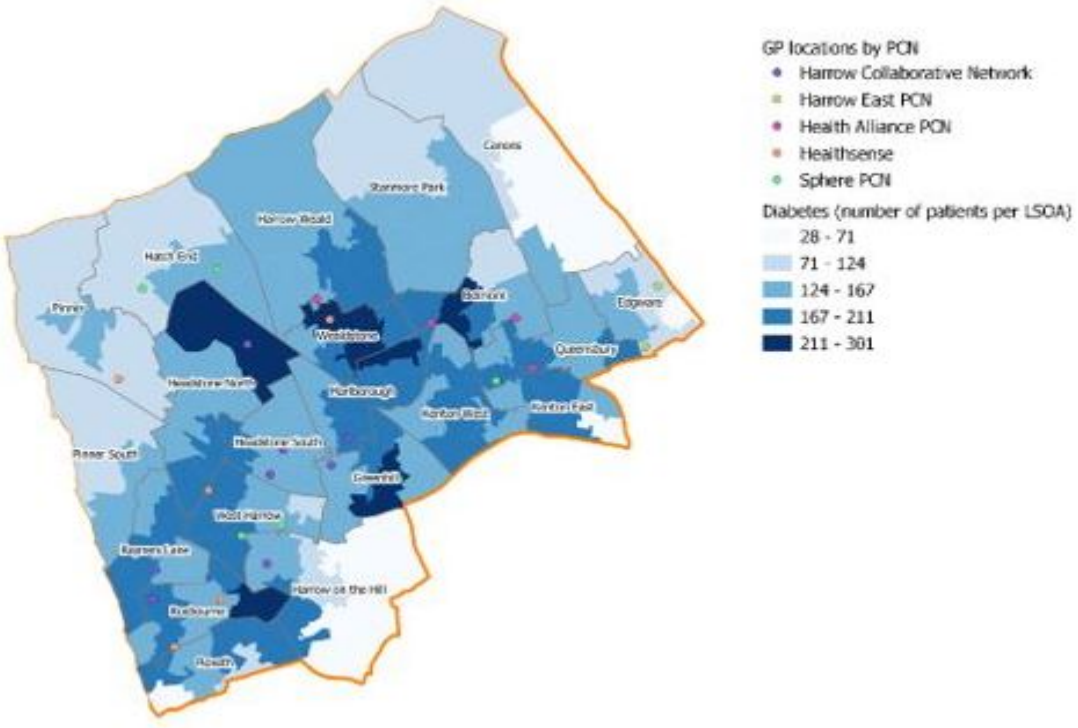


Figure 3 Variation by general practice of diabetes prevalence 2020/21 (per cent)

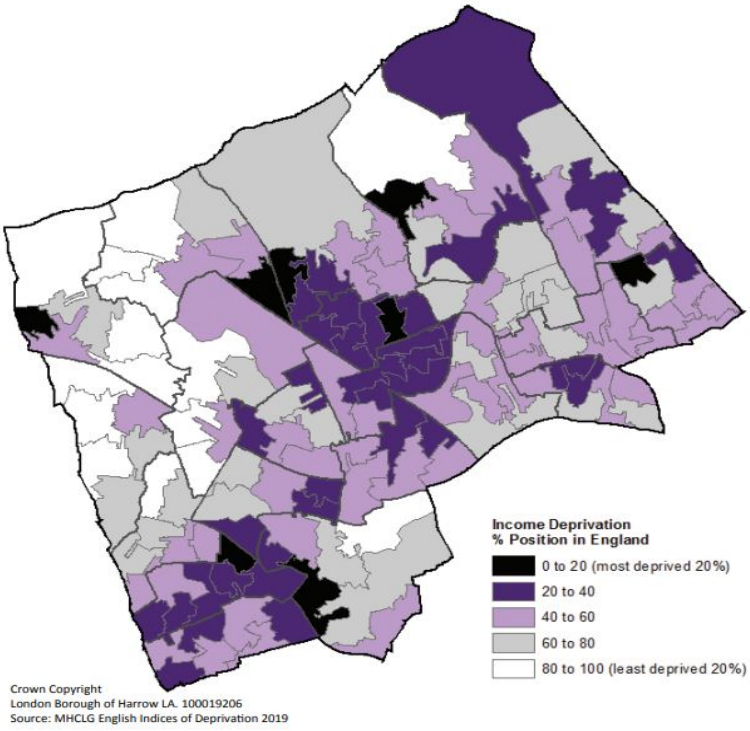
Source: Office for health improvement and disparities – CVD Profiles - Diabetes

Map 1 – Map of Density of NWL GP resident registered population within each Lower-level super output area, (LLSOA), who have specific LTC recorded, regardless of which NWL GP/PCN/CCG they are registered with.



Source: WSIC

Map 2 – Map of Income Deprivation in Harrow



Source: Harrow Index of Multiple Deprivation Summary 2019

Deprivation is strongly associated with higher levels of obesity, physical inactivity, unhealthy diet, smoking and poor blood pressure control, all of which are linked to the risk of developing Type 2 diabetes and the risk of serious complications amongst those already diagnosed with both Type 1 and Type 2 diabetes.

2The National Diabetes Audit

The National Diabetes Audit (NDA) is a major, national, clinical audit in England and Wales, which measures the effectiveness of diabetes healthcare against NICE guidelines and quality standards. In 2019/20, 99.2% of GP practices in England and Wales participated in the audit. In NHS Harrow CCG, 100% of practices participated.

(*Source: Office for health improvement and disparities – CVD Profiles - Diabetes*

Characteristics of people with diabetes in NHS Harrow CCG

Diabetes by Age

Type 1 diabetes is usually diagnosed earlier in life than type 2 and 54.8% of people with type 1 diabetes, in this CCG, are under the age of 40 (figure 4 below). Although it can be diagnosed later in life too, type 1 diabetes is the most common form of diabetes found in children. There's no known cure for type 1 diabetes at present. People with type 2 diabetes are on average older than people with type 1, 46.0% of people with type 2 diabetes in this CCG are aged over 65 (figure 4 below). There are numerous physiological changes underway as our bodies grow and adapt to their age.

Elderly people who are at risk of developing diabetes, or who have already developed the disease, may not exhibit the classic symptoms expected. Age-related changes can mean that some symptoms will be masked, or harder to spot increasing the risk of developing the disease as you get older.

In Figure 4 it shows that for type 1 there are higher rates at a younger age but getting lower as the group becomes older. Type 2 peaks at the 4- to 64 age group getting lower later in life.

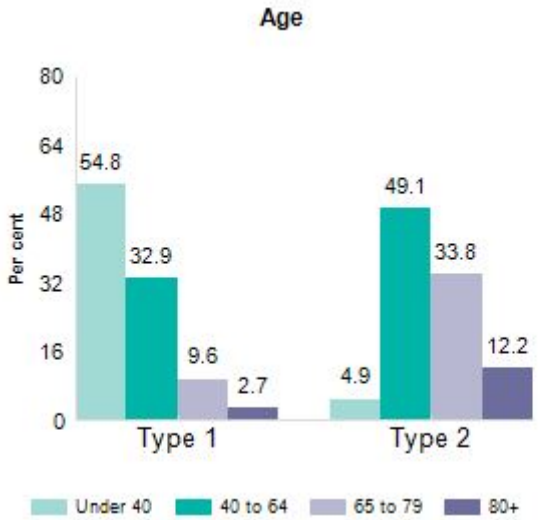


Figure 4 Percentage of people with Type 1 and Type 2 diabetes by age group *(*Harrow CCG 2020/21)

Source: Office for health improvement and disparities – CVD Profiles - Diabetes

Figures 5 and 6 shows trends and confidence intervals for all Diabetes cases.

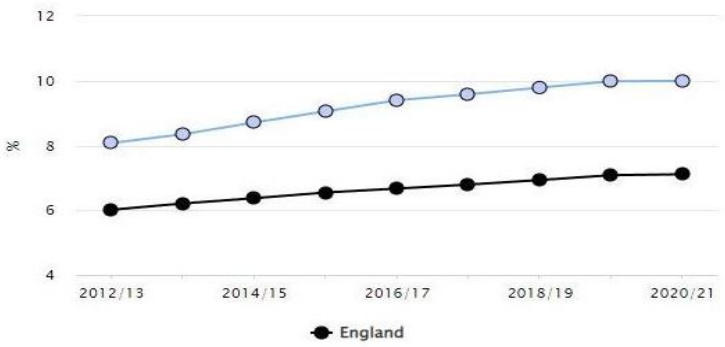
A confidence interval (CI) means that the researcher can only estimate the parameters (i.e., characteristics) of a population, the estimated range being calculated from a given set of sample data. Therefore, a confidence interval is simply a way to measure how well your sample represents the population you are studying.

In frequentist statistics, a confidence interval (CI) is a range of estimates for an unknown parameter, defined as an interval with a lower bound and an upper bound. The interval is computed at a designated confidence level and such a narrower the interval between the lower and the higher, the more confidence that be given to the figures within the analysed sample. The 95% confidence level is most common, but other levels (such as 90% or 99%) are sometimes used.

The factors affecting the width of the CI include the confidence level, the sample size, and the variability in the sample. Larger samples produce narrower confidence intervals when all other factors are equal. Greater variability in the sample produces wider confidence intervals when all other factors are equal.

A higher confidence level produces wider confidence intervals when all other factors are equal.

Figure 5 - % Diabetes: QOF prevalence 17+ (%)



Source: Quality and Outcomes Framework (QOF), NHS Digital

Figure 5 shows that for all types of Diabetes, Harrow QOF prevalence's for over 17 year olds (marked in blue in the chart) has risen at a higher rate than England between 2012/13 and 2020/21. The confidence intervals are narrow indicating a high sample size and therefore a greater accuracy to the date provided.

Figure 6 shows that the percentage of all Diabetics 65 and over in Harrow (in blue) has remained lower than England, staying almost constant between 2012 and 2020 although both show a very slight reduction in value for 2020 with confidence intervals also being narrow.

Figure 6 - Diabetes: All Diabetics aged 65+ (%)

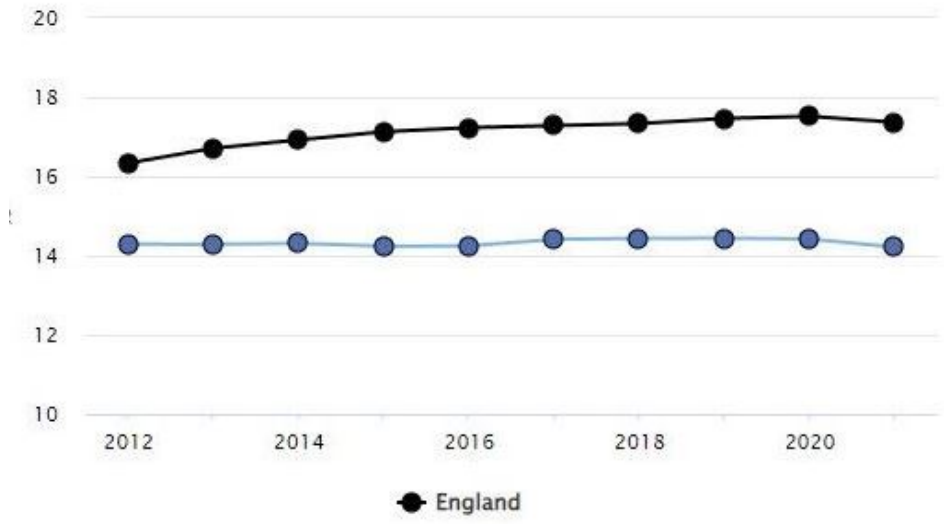


Figure 4 does shows data for a point in time (2020/21) for both types of Diabetes but figures 7 to 11 provides some trend analysis from the year 2015/16 to the present.

There seems to be an increase in rates since 2019 which may be linked to the onset of Covid 19.

Type 1 Diabetes

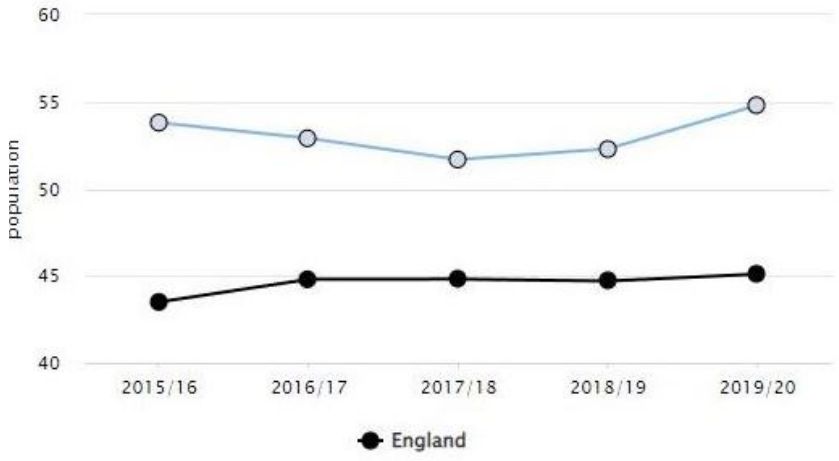


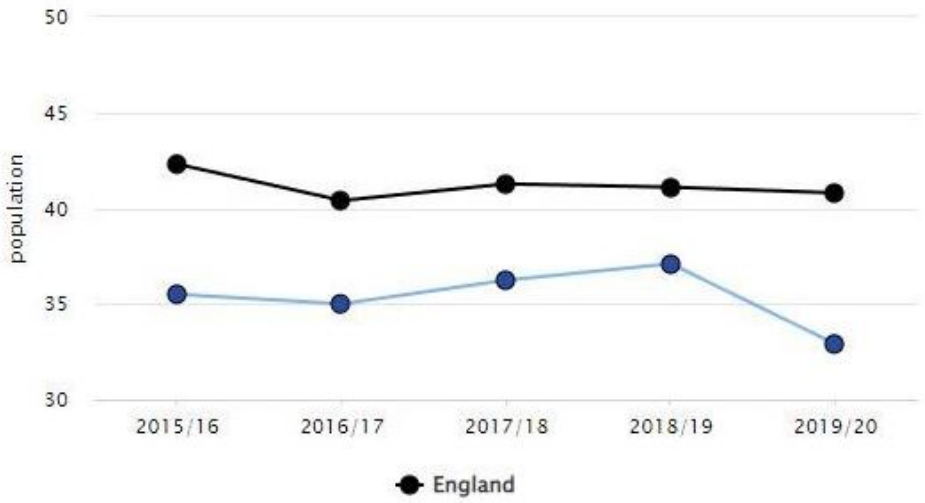
Figure 7 - Diabetes: Type 1 under 40 (%)

Source: National Diabetes Audit (NDA) NHS Digital

Figure 7 shows that type 1 Diabetes percentages in the younger (under 40s) population shows a general trend of decreasing rates in type 1 for under 40s until 2018/19, particularly in Harrow just prior to the Covid outbreak (53.8 to 54.8 in Harrow (in blue) and 43.5% to 45.1% in England).

This is in line with the figures shown in Figure 4 for type 1.

Figure 8 - Diabetes: Type 1 aged between 40 and 64 (%)



Source: National Diabetes Audit (NDA) NHS Digital

Figure 8 shows that type 1 Diabetes percentages in those between the ages of 40 and 64 population has decreased since 2015/16 from 42.3% to 40.8% in England but there has been a slight rise overtime in Harrow (in blue) with a peak in 2018/19 but with a sudden drop in 2019/20. Figure 4 shows a continuation of this drop.

Figure 9 shows that type 1 Diabetes percentages in those between the ages of 65 and 79 population has remained steady since 2015/16, although, as confirmed in Figure 4, there has been a slight increase since 2019/20 in Harrow.

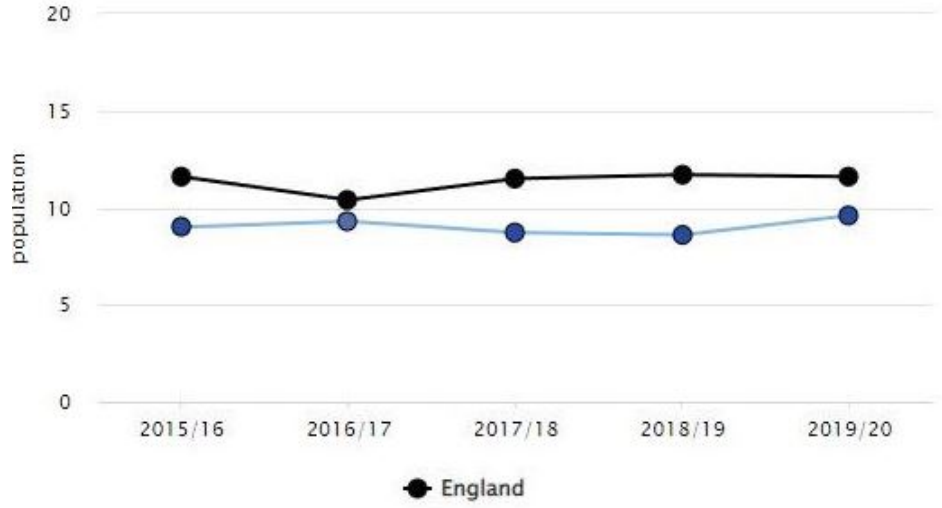


Figure 9 - Diabetes: Type 1 aged between 65 and 79 (%)

Source: National Diabetes Audit (NDA) NHS Digital

Type 2 Diabetes

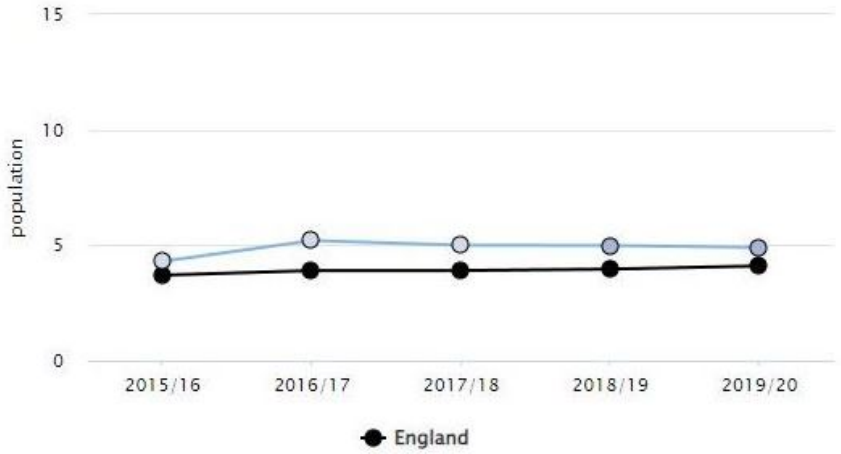


Figure 10 - Diabetes: Type 2 Under 40

Source: National Diabetes Audit (NDA) NHS Digital

Figure 10 shows that type 2 Diabetes percentages in Harrow (blue) is higher than England but rates over the last few years show a slight reduction in Harrow whereas they are increasing in England.

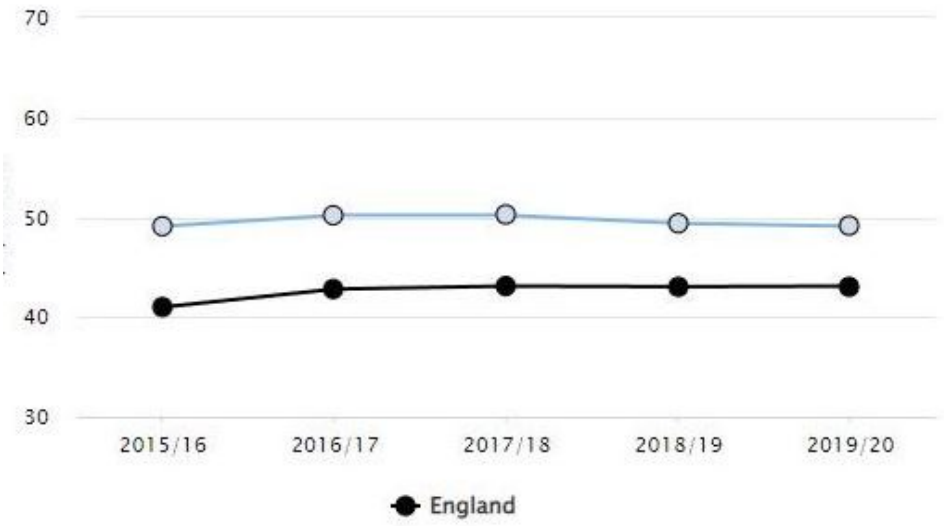


Figure 11 - Diabetes: Type 2 40 to 64 (%)

Source: National Diabetes Audit (NDA) NHS Digital

Figure 11 shows that Type 2 Diabetes in Harrow (in blue) has remained almost the same since 2015/16, although higher than that of England, whereas there has been a slight increase in the England value, closing the gap.

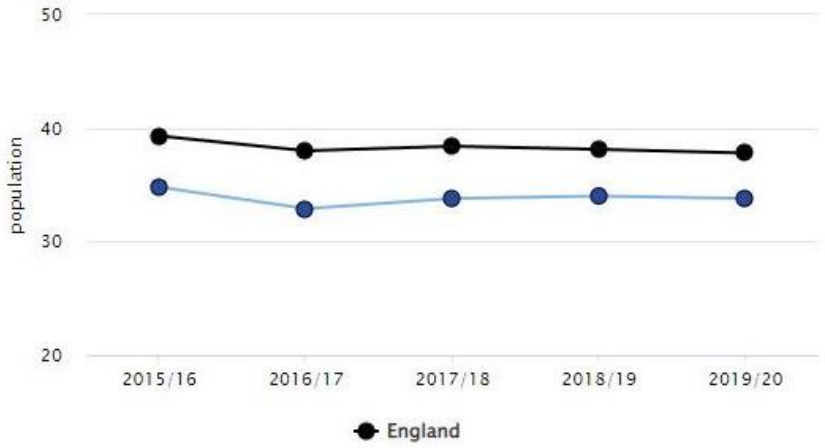


Figure 12 - Diabetes: Type 2 65 to 79 (%)

Source: National Diabetes Audit (NDA) NHS Digital

Figure 12 shows that type 2 Diabetes percentages in Harrow (in blue) are lower than in England for the 65 to 79 year-olds confirming previous comments and rates in Figure 4.

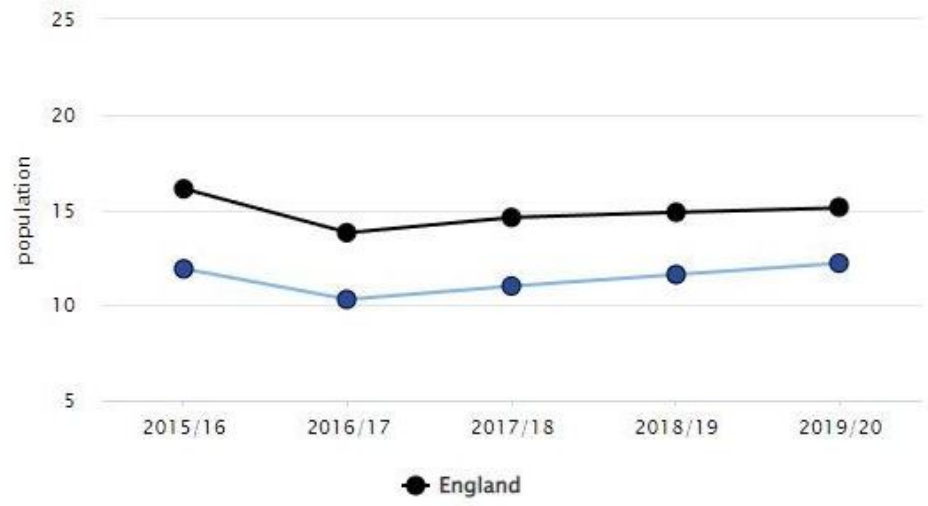


Figure 13 - Diabetes: Type 2 Over 80s (%)

Source: National Diabetes Audit (NDA) NHS Digital

Figure 13 shows that type 2 Diabetes percentages in Harrow is lower for the over 80s than England but is on the increase.

Diabetes by Sex

Type 1 diabetes is more common in males than females. In Harrow CCG, 58.9% of people with type 1 diabetes are male. Type 2 diabetes is also more common in males than females, 54.4% of people with type 2 diabetes in this CCG are male. However, when both genders have diabetes, women are much more likely to suffer from a variety of health problems.

The biggest worry is cardiovascular disease. Diabetic women can be up to twice as

likely as diabetic men to coronary heart disease. Researchers also found that women with diabetes tend to die sooner than men with the same diagnosis. Figure 12 Percentage of people with Type 1 and Type 2 diabetes by sex, Harrow CCG and England 2020/21.

It confirms that there are higher rates in Males than Females.

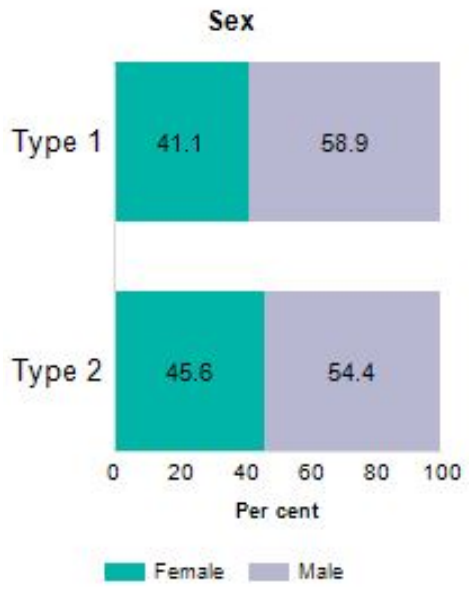


Figure 14 shows figures for a point in time (2020/21)

Source: Office for health improvement and disparities – CVD Profiles - Diabetes

Figure 14 shows for the single year 20/21and that males have a higher rate for both types 1 and 2 in that single year.

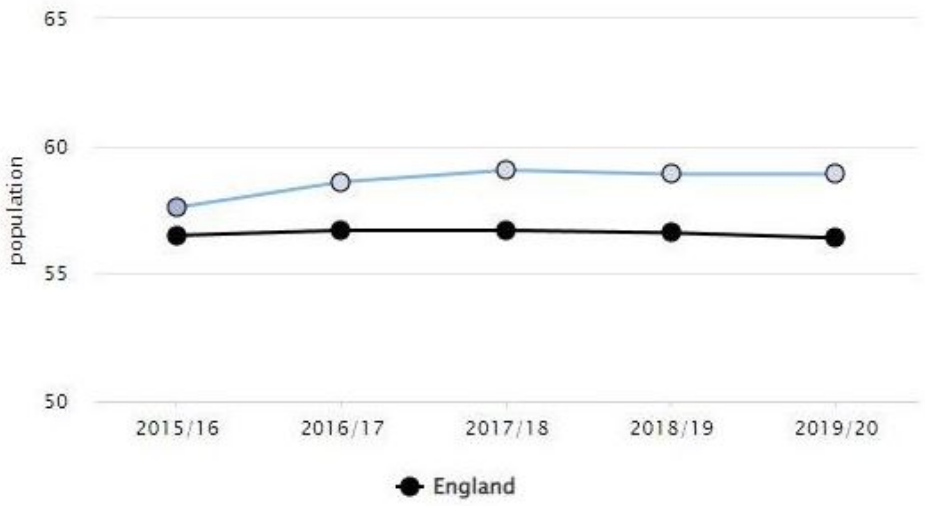


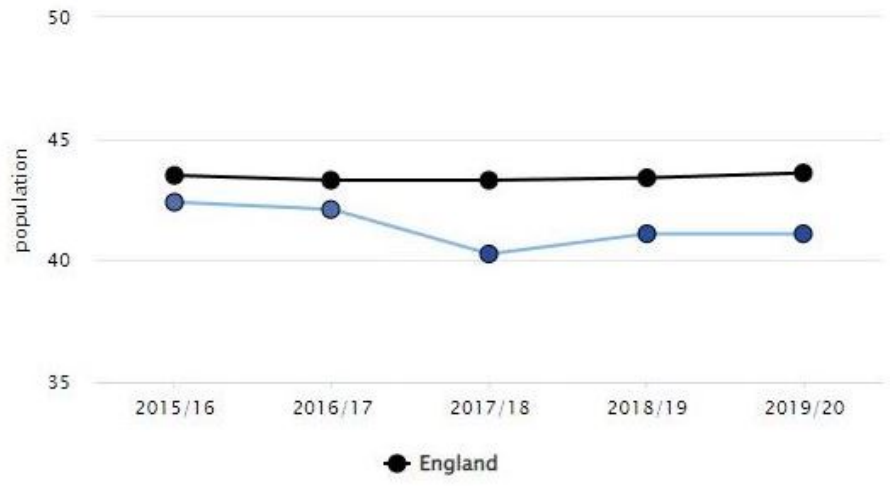
Figure 15 - Diabetes: Type 1 who are Male (%)

Source: National Diabetes Audit (NDA) NHS Digital

Figures 15 and 16 provide some trend analysis from the year 2015/16 to the present.

Figure 15 shows type 1 Diabetes percentage of males and indicates that Harrow (in blue) has a higher % than England although there was a steadying off in 2019/20.

Figure 16 - Diabetes: Type 1 who are Female (%)



Source: National Diabetes Audit (NDA) NHS Digital

Figure 16 shows the % of type 1 Diabetes who are female and clearly indicates that Harrow has a lower % than England and confirming that in Harrow females tend to have a lower rate than males.

Figure 17 - Diabetes: Type 2 who are Male (%)

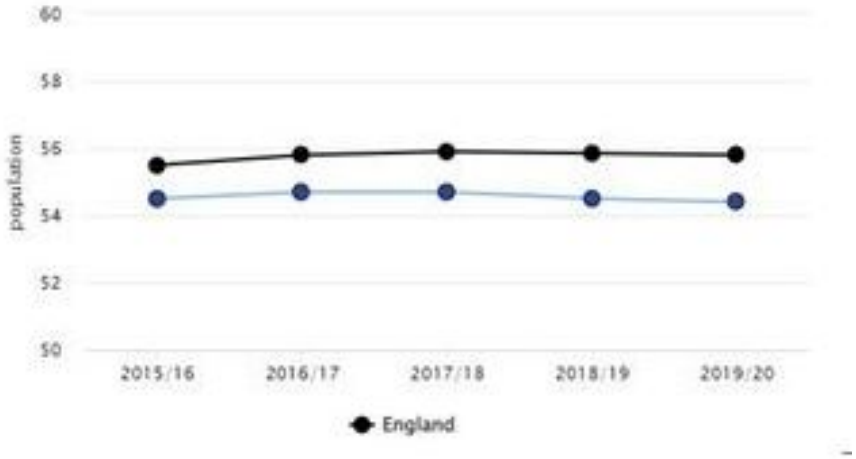
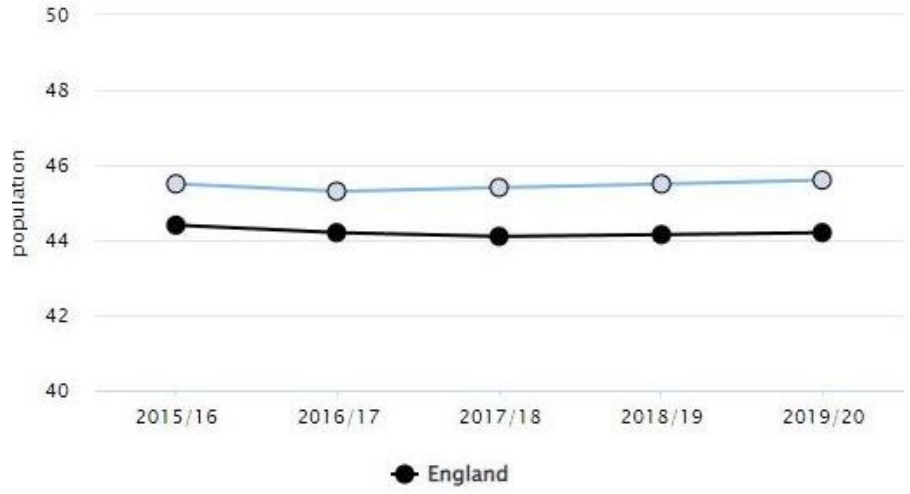


Figure 17 shows that Type 2 Diabetes males have a lower rate in Harrow than in England and that there has been a slight decrease in percentages in the last few years.

Source: National Diabetes Audit (NDA) NHS Digital

Figure 18 - Diabetes: Type 2 who are Female (%)



Source: National Diabetes Audit (NDA) NHS Digital

Figure 18 shows that Type 2 females in Harrow have a higher rate than England but less than Harrow males.

Diabetes by Ethnic group

Global studies on ethnic groups and minorities and the rising incidence of diabetes have revealed one factor in particular; ethnicity can increase or decrease one's risk of developing diabetes. Whilst in some cases this can be explained by access to healthcare and other socio-economic factors, studies have proved that even with equal access prevalence of diabetes differs between people of different ethnicity.

Ethnicity increases your risk of type 2 diabetes. Family history, and social and environmental factors play a part. But it is still not clear why people from certain ethnic backgrounds have an increased risk.

People from South Asian backgrounds for example are more likely to experience insulin resistance at a younger age. This could be linked to how fat is stored in the body and particularly around the middle. This is known as visceral fat and it can build up around important organs like the liver and pancreas. Having too much of this type of fat is just one of the factors that can affect your health and increase the risk of type 2 diabetes.

The prevalence of diabetes amongst ethnic minorities can also cause problems in terms of treatment and healthcare. The problems can stem from language barriers and non-ethnically sensitive prevention and treatment policies.

Studies have repeatedly shown that the key to stemming the flow of global diabetes is early prevention, education and awareness. (Source: https://www.diabetes.co.uk/diabetes-and-ethnicity.html).

It is the responsibility of every nation's healthcare system to recognise the ethnic minorities most at risk and develop culturally appropriate treatment programs for them.

In NHS Harrow CCG, 50.7% of people with type 1 diabetes are of white ethnicity and 45.2% are from a minority ethnic group, the remaining ethnicities are unknown. For people with type 2 diabetes, 22.3% are of white ethnicity and 74.3% from a minority ethnic group, the remaining ethnicities are unknown (figure 17).

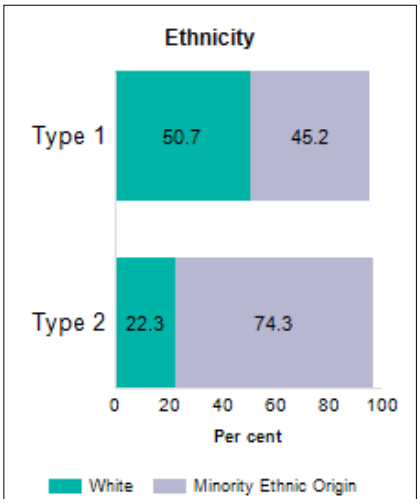
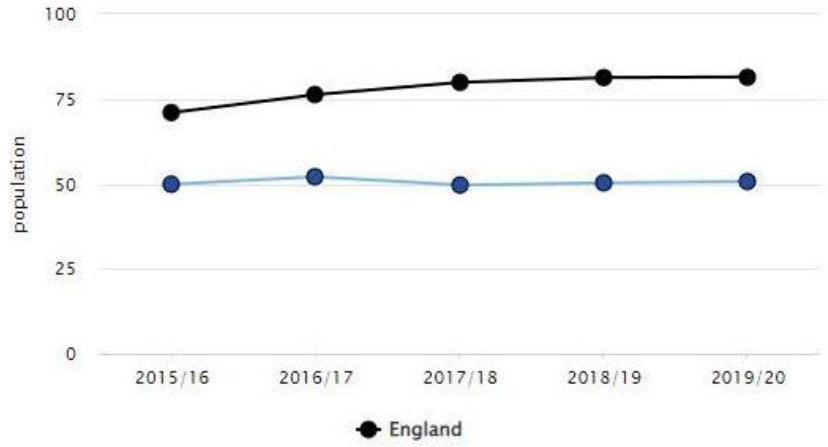


Figure 18 Percentage of people with Type 1 and Type 2 diabetes by Ethnicity, Harrow CCG and England 2020/21



Source: Office for health improvement and disparities – CVD Profiles - Diabetes

Figure 19 - Diabetes: Type 1 White (%)

Source: National Diabetes Audit (NDA) NHS Digital

Figure 19 (Harrow in blue) shows that type 1 Diabetes percentage for the white population is lower than England but higher than the ethnic population of Harrow (shown in Figure 20).

The percentage of the Ethnic population with type Diabetes in Harrow is well above that of England.

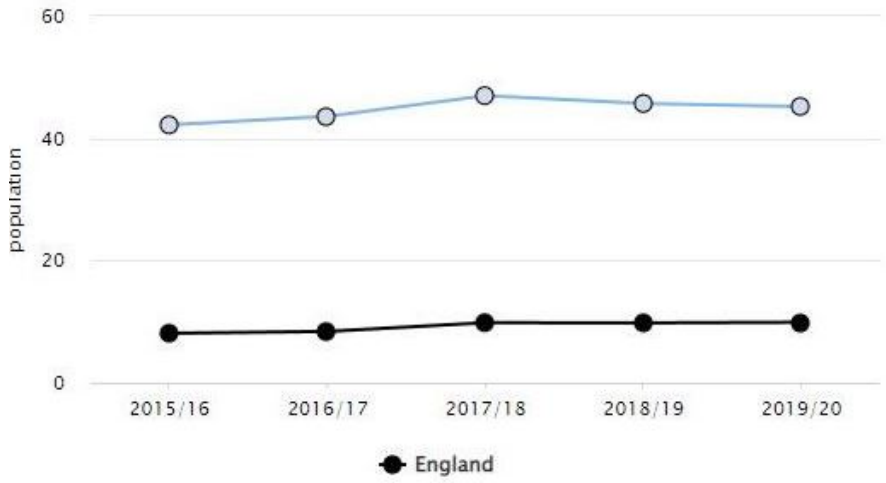


Figure 20 - Diabetes: Type 1 Ethnicity (%)

Source: National Diabetes Audit (NDA) NHS Digital

Figure 21 shows that there is a comparatively low percentage rate for Harrow type 2 White residents compared to England. However, that this is reversed when comparing those of ethnic origin having type 2 Diabetes as shown in Figure 22.

The rates for Harrow are very much higher than that of England and the Ethic population have much higher rates than the white population of Harrow.

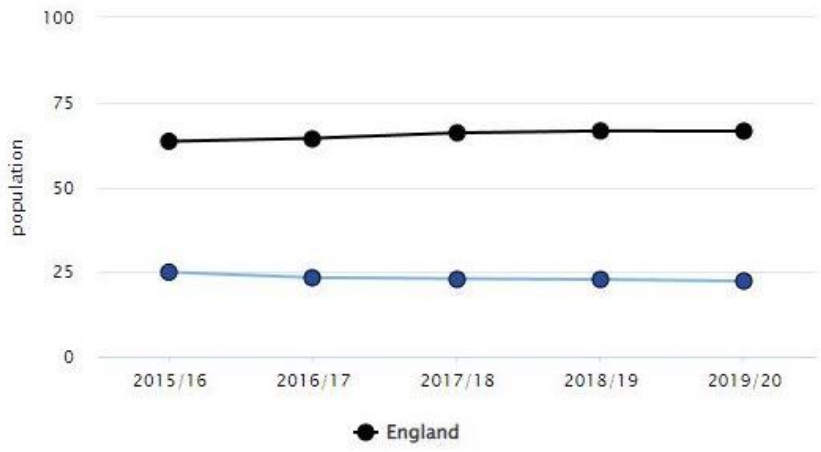
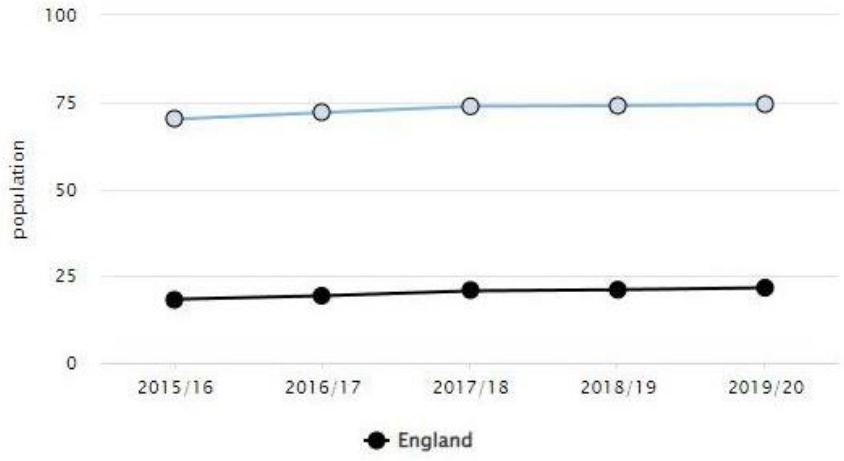


Figure 21 - Diabetes: Type 2 White (%)

Source: National Diabetes Audit (NDA) NHS Digital

Figure 22 - Diabetes: Type 2 Ethnic (%)



Source: National Diabetes Audit (NDA) NHS Digital

Care processes and treatment targets

NICE proposes a bundled indicator of eight checks for people with diabetes, they are: **H**bA1c. Blood Pressure. Cholesterol. Serum Creatinine. Urine albumin. Foot surveillance. BMI. Smoking. NHS Digital report on the above care processes through The National Diabetes Audit.

Care processes 1-3 are part of the CCG Improvement Assessment Framework (CCG IAF) treatment targets for diabetes.

Diabetes is a long-term and progressive condition that can potentially have damaging effects on health. However, evidence shows that many of the complications associated with diabetes can be prevented or delayed through a combination of foot and eye screening, attending appointments with your health care professional, self-managing your condition and the appropriate use of medicines and technology. Therefore, annual assessment of these processes of care is important.

Five of these care processes relate to risk factors (body mass index, blood pressure, smoking, glucose levels (HbA1c) and cholesterol) and the remaining four relate to tests to identify early complications (urine albumin creatinine ratio, serum creatinine, foot nerve and circulation examination and eye screening - held by NHSDES and not included in the data presented).

In NHS Harrow CCG, 30.1% of people with type 1 diabetes had the eight recommended care processes compared to 42.3% in England. For people with type 2 diabetes, 45.2% people had the eight recommended care processes compared to 58.5% in England (figure 23).

Figure 23 - Percentage of people who had the eight recommended care processes by diabetes type, 2019/2020

	CCG	STP	England
Type 1	30.1	46.4	42.3
Type 2	45.2	61.3	58.5

Source: Office for health improvement and disparities – CVD Profiles - Diabetes

Taking account of patient related factors when reviewing Care Process completion rates

The NDA has investigated whether results are influenced by patient characteristics. The statistical models derived showed that patient characteristics did impact on whether the eight recommended care processes took place but did not impact on the treatment results (HbA1c, BP, Cholesterol).

The bandings (in Figure 22) within the tables below show whether the CCG is performing "as expected", "lower than expected" or "higher than expected" based on what we know of the characteristics of their diabetic populations.

The statistical models used to predict care process completion take into account the age, sex, ethnicity, Indices of Multiple Deprivation (IMD), smoking status and Body Mass Index (BMI) of the person with diabetes.

This provides a way of correcting for the factors that are outside the control of the GP. The bandings should not be treated as an absolute assessment of performance, but rather as a tool to aid local investigation.

How to interpret the bandings

If a CCG has a banding of "lower than expected" this means that the CCG is not achieving as high a rate of completion as would be expected given the demographics of their diabetic population. This does not mean that the CCG is under performing, but may indicate that further investigation could be beneficial.

If a CCG has a banding of "as expected" this means that, given the demographics of the diabetic population, the CCG is performing as expected. This does not mean that performance cannot be improved, but is in line with other CCGs given the characteristics of their diabetic population.

If a CCG has a banding of "higher than expected" this means that the CCG is performing better than would be expected given the demographics of their diabetic population. In NHS Harrow CCG, 30.1% of people with type 1 diabetes received all eight care processes taken in 2019/20. This was lower than expected given the characteristics of their diabetic population.

	Type 1			Type 2 and other		
	Local	Banding	England	Local	Banding	England
All Eight Care Processes	**30.1**	Lower	**42.9**	**45.2**	Lower	**58.8**
Blood Pressure	90.5	As Expected	91.1	95.0	Higher	96.3
BMI	73.0	Lower	82.7	78.3	Lower	88.0
Cholesterol	76.6	As Expected	81.1	92.2	Higher	92.9
Foot Surveillance	73.7	As Expected	75.1	86.1	Higher	86.8
HbA1c	82.2	As Expected	85.4	95.1	Higher	95.3
Serum Creatinine	80.3	As Expected	83.5	93.8	Higher	95.1
Smoking	85.4	As Expected	90.4	94.9	As Expected	95.5
Urine Albumin	41.6	Lower	52.3	55.1	Lower	66.2

Source: National Diabetes Audit (NDA) 2019/20

Figure 24 shows that rates for people with both type 1 and type 2 diabetes which was lower than expected. Type 1 were also lower in BMI and Urine Albumin.

Three treatment targets

NICE recommends treatment targets for HbA1c (glucose control), blood pressure and serum cholesterol.

Figure 25 - Percentage of people achieving their treatment targets for type 1 Diabetes.

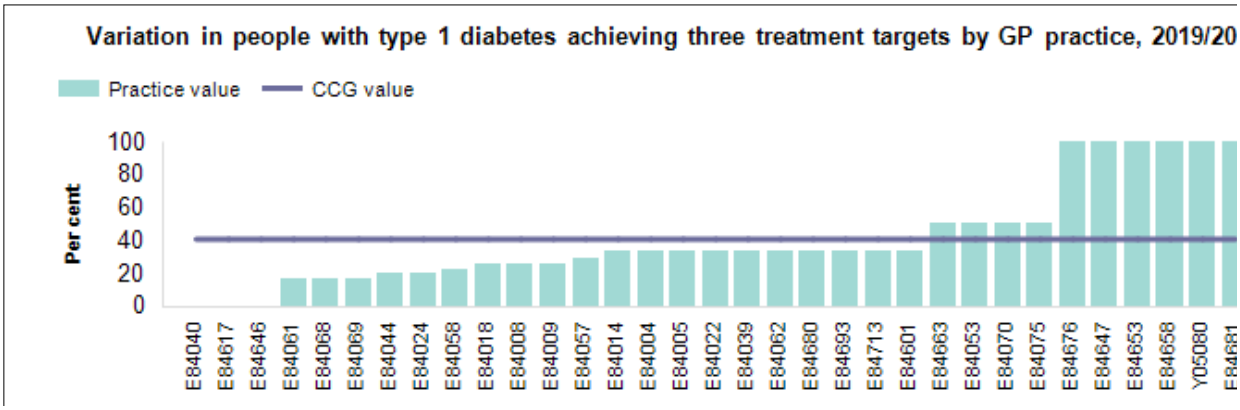
For type 2 bandings were higher in many areas including blood pressure, cholesterol and HbA1c.

Type 1 diabetes	CCG	STP	England
HbA1c <= 58 mmol/mol (7.5%)	30.0	35.1	31.6
Blood Pressure <= 140/80	79.0	77.7	73.9
Cholesterol < 5 mmol/L	75.0	72.8	72.3
All Three Treatment Targets	19.2	22.4	19.8

Figure 25 indicates that in NHS Harrow CCG, 19.2% of people with type 1 diabetes achieved all three treatment targets. In people with type 2 diabetes, 44.4% achieved all three treatment targets.

Source: Office for health improvement and disparities – CVD Profiles - Diabetes

Figure 26 – Variation in people with Type 1 Diabetes.



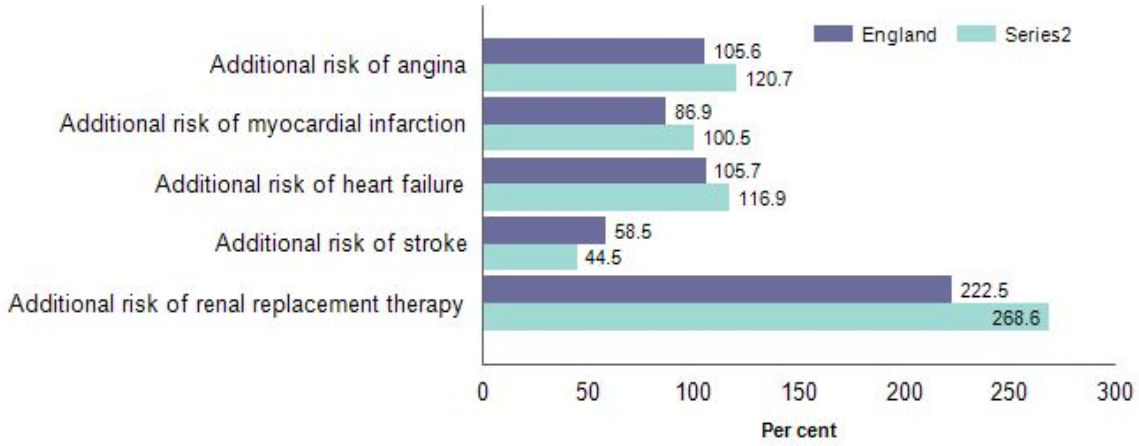
Type 2 diabetes	CCG	STP	England	
HbA1c <= 58 mmol/mol (7.5%)	66.8	65.9	65.6	
Blood Pressure <= 140/80	76.1	74.7	73.6	
Cholesterol < 5 mmol/L	81.9	79.1	77.5	
All Three Treatment	44.4	41.6	40.3	

Figure 27 - Percentage of people achieving their treatment targets for type 2 diabetes

Additional risk of complications

A person with diabetes has a higher risk of cardiovascular complications (heart attack, angina, heart failure and stroke) and microvascular (amputation and renal disease) complications. The chart below compares the additional risk of complications for a person with diabetes to people without diabetes in the same CCG over a one-year period. The figures have been adjusted to allow for the local variations in the age and sex of the population. Further information on diabetic footcare and amputation risk can be found in the diabetic foot care profiles: Among people with diabetes in NHS Harrow CCG the risk of a stroke was 44.5% higher and the risk of a heart attack was 100.5% higher compared to people without diabetes during the one-year follow up of the 2014/15 audit.

Figure 28 - Comparison of the additional risk of complications for people with diabetes, with a one-year follow-up, 2014/15

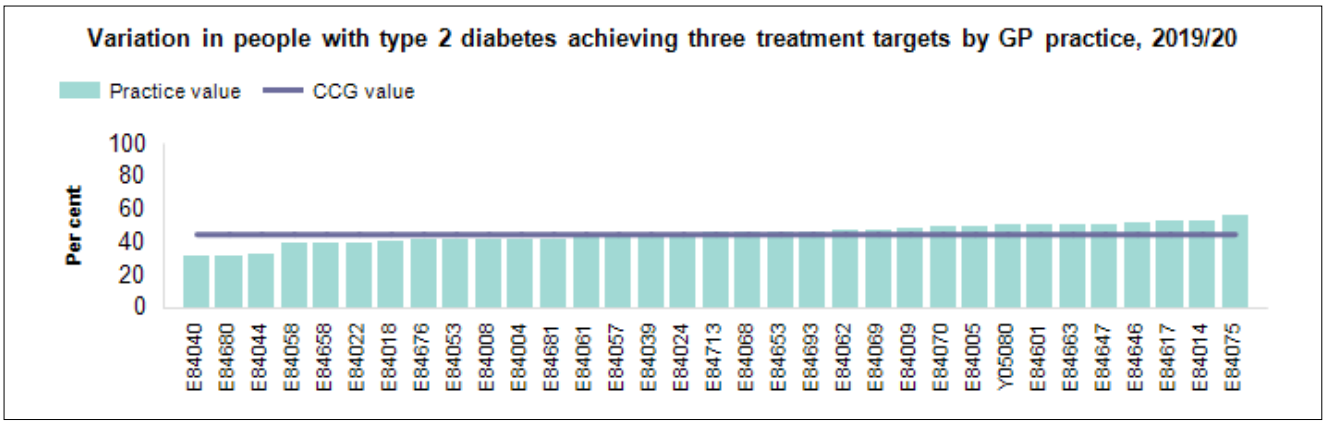


Source: NDA

People with diabetes (regardless of what type they have) are no more likely to catch coronavirus than anyone else. The majority of people who do get coronavirus – whether they have diabetes or not – will have mild symptoms and don't need to go into hospital.

However, everyone with diabetes, including those with type 1, type 2, gestational and other types, is more vulnerable to developing a severe illness if they do get coronavirus, but the way it affects you can vary from person to person.

For most people, coronavirus is a mild illness. But some people develop a more serious illness and sadly could die. Research shows that having the vaccine reduces the risk of getting seriously ill with coronavirus. In adults with diabetes, there are certain factors that increase risk of serious illness like being older, having a high HbA1c, or having a history of diabetes-related complications. There are other factors too, like your BMI and ethnicity, that research shows can have an impact on your risk. In children with diabetes, the risk of becoming seriously ill with coronavirus is very low.



There are some risk factors that you can't change, but others where you can reduce your risk.

Being ill can make your blood sugar go all over the place. Your body tries to fight the illness by releasing stored glucose (sugar) into your blood stream to give you energy. But your body can't produce enough or any insulin to cope with this, so your blood sugars rise.

Your body is working overtime to fight the illness, making it harder to manage your diabetes. This means you're more at risk of having serious blood sugar highs and lows, potentially leading to DKA (diabetic ketoacidosis) or HHS (hyperosmolar hyperglycaemic state).

Source: Diabetes UK (February 2022)

Mortality

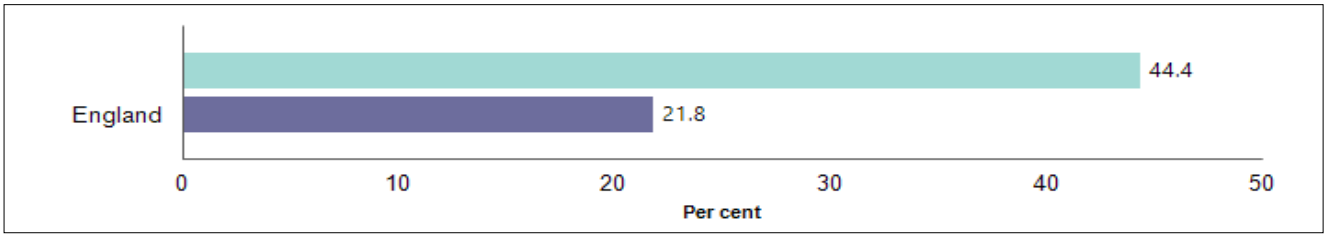
People with diabetes rarely die as a direct result of diabetes. Most die from complications such as heart disease, stroke and kidney failure. People with diabetes are more likely to die than their peers of the same age and sex in the general population.

Key findings of the National Diabetes Audit (NDA) 2015/16 report (1) indicate that:

- Diabetes remains responsible for a large number of additional deaths, with the greatest relative risk in younger people.

- Deaths in people with diabetes under the age of 80 years are more often due to cardiovascular disease than in the general population.
- The relative risk of cardiovascular disease in people with diabetes as compared to people without diabetes is increasing. One year follow-up of the 2012/13 and 2013/14 audits shows that the additional risk of mortality for people with diabetes was 44.4% in NHS Harrow CCG; for England, the additional risk was 21.8% (figure 12 below).

Figure 29 - Comparison of the additional risk of mortality in people with diabetes, with a one-year follow-up of the 2012/13 and 2013/14 audits



Source: NDA

Non-Diabetic Hyperglycaemia

Non-diabetic hyperglycaemia, also known as pre-diabetes or impaired glucose regulation, 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.

They are also at increased risk of other cardiovascular conditions.

In 2015, Harrow Borough had 27,935 of residents over the age of 16 with Non-Diabetic Hyperglycaemia (around 14% prevalence) whereas England had a prevalence of 11.4% (Public Health England).

Services for people with diabetes

NHS Harrow CCG has worked with patients, providers, and fellow commissioners across North West London to produce an integrated service specification for prevention of Type 2 diabetes and treatment and care of people with diabetes.

15. Appendix 2 – Tiers of services

Tier 1 - Primary Care Those clinical situations that would be the responsibility of primary care On-going Care of people with Type 2 diabetes	Tier 2/3 - Specialist support in the community Those clinical situations where primary care would remain responsible for the care of the individual but where primary care would be able to access support On-going Care of people with Type 1 diabetes		Tier 4 - Specialist support in Secondary Care Those clinical situations where secondary care would be responsible for the care of the individual Specialist Care for time limited interventions
Service Provision	**Service Provision**	**Who**	**Service Provision**
Type 2 Diabetes Prevention (Non-Diabetic Hyperglycaemia) Diabetes risk calculation Register maintenance Annual review and referral to NWL Diabetes Digital Hub	**Type 1 – diagnosis (unless inpatient)**	GP / DSN / Consultant / PN with competency ***as part of specialist team***	
	Routine type 1 care planning & co-ordination	GP / DSN / Consultant / PN with competency ***as part of specialist team***	
Type 2 Diabetes Management x2 HbA1c above 48 mmol/mol or fasting glucose 7mmol **Care planning & co-ordination** Annual review and supporting patients to receive the 9 diabetes care processes and mental health Care planning – goal setting and action planning **Medicines Optimisation** Initiating all oral medication and titrate in a timely manner Review for hypoglycaemia symptoms **Achievement of 3 NICE treatment targets** HbA1c ≤ target (variable), blood pressure ≤140/80, cholesterol ≤4mmol/L **Review within 3 months if off target** **Education & lifestyle advice** Referral to NWL Diabetes Digital Hub	**Support for complex patients:** • ED visits • Hospitalisation • HbA1c > Individualised target • Microalbumin > 30 • BMI > 35 for weight management **Specialist input:** • Insulin and GLP-1 initiation • Diagnostic uncertainty • Pre-pregnancy counselling • Psychological assessment, intervention and coaching where required **Group consultations** **T2DM remission programmes** **Diabetic foot protection team (community podiatry)** **Support for level 1 practices:** • Virtual clinics • Clinician mentoring • Advice	**MDT to consist of the following:** GP with competency Practice Nurse with competency Diabetes Specialist Nurse Consultant Diabetes Specialist Dietician Psychiatric nurse or doctor Clinical Psychologist/IAPT Health Coach Diabetes Mentor Practice based pharmacist Podiatry	Routine type 1 care planning & co-ordination Insulin pump initiation and management (type 1) Autonomic neuropathy e.g. gastroparesis (type 1) Antenatal care (diabetes patient becomes pregnant or gestational diabetes) HbA1c above target with CKD4/5 Transition service paediatrics to adults (up to 19yrs) In-patient care MDT management of active foot disease
	Eye service screening	NWL DESP (NHSE Commissioned)	

Currently Harrow does not have a Tier 1 service in primary care, and the Tier 2/3 service that is in place does not contain all of the healthcare professionals that would constitute a true multidisciplinary team.

A business case is being developed for 2020/21 and beyond which will attempt to address these issues.

Future plan

- To compare the observed risk of diabetes with expected by practice (and PCN) level
- To compare the rate of hospital admissions of the diabetes patients at practice (and PCN) level
- Estimate the prevalence of Non-Diabetic Hyperglycaemia by practice (and PCN) which can lead to Type 2 Diabetes. Diabetes Type 2 is high in Harrow so there needs to assess why this is, is it not being picked up early enough in Primary Care.

Summary

It is clear from the report that in terms of Type or Type 2 Diabetes, Harrow residents are doing worse than the national average (shown primarily in the key findings at the start of this assessment. Further work needs to be done on the prevalence of Diabetes in our GP practices and PCNs and reflected in prevalence's for Harrow Borough.

Harrow females are doing better than men in both type 1 and 2.

Type 1 Ethnic populations in Harrow are doing much worse than the Ethnic population in England generally but they are doing better than Harrow the type 1 white population. Type 2 Harrow males are doing much better than their Ethic counterparts and the rate for England.

Efforts should be made to identify why the prevalence of Diabetes is high in Harrow, whether that be due to financial deprivation or lack of proper education by the CCG and Harrow Borough.

Further information on Diabetes:

- https://fingertips.phe.org.uk/profile/cardiovascular
- https://fingertips.phe.org.uk/profile/diabetes-ft
- https://fingertips.phe.org.uk/profile-group/cardiovascular-disease-diabetes-kidney-disease
- https://fingertips.phe.org.uk/profile-group/cardiovascular-disease-diabetes-kidneydisease/profile/diabetes-ft
- Further information on diabetic footcare and amputation risk can be found in the diabetic foot care profiles: https://fingertips.phe.org.uk/profile/diabetes-ft

Sources

1 National Diabetes Audit, 2015-16 Report 2a: Complications and Mortality (complications of diabetes), England and Wales, 13 July 2017, available at: https://www.hqip.org.uk/wp-content/uploads/2018/02/TIwCJZ.pdf (last accessed: 23/09/2019)