

Diabetes

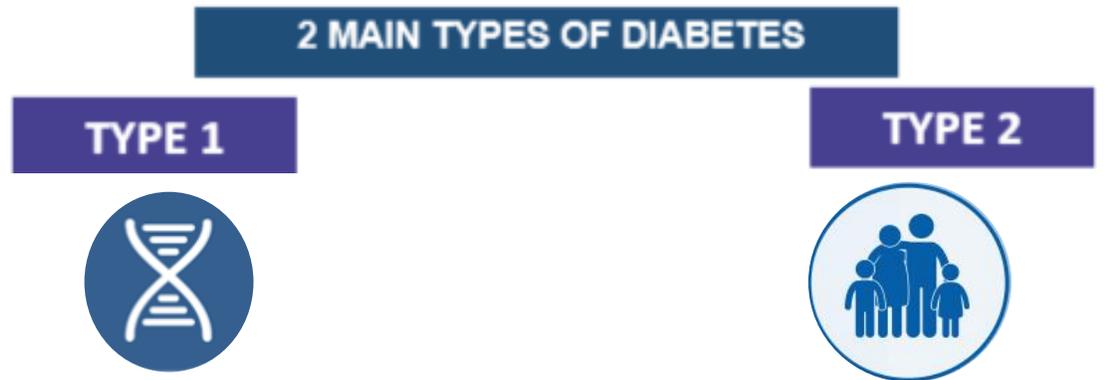
Brent JSNA
2019/2020



NHS
Brent
Clinical Commissioning Group

Summary

- Diabetes is a lifelong condition that causes an individual's blood sugar levels to become too high.



Type 1 diabetes – where the body's immune system attacks and destroys the cells that produce insulin.

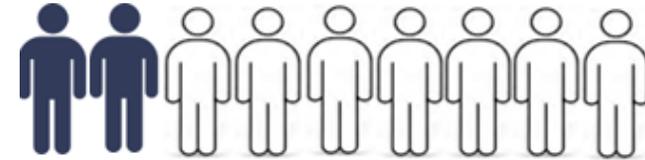
Exact cause is not known by gene plays a big factor

Type 2 diabetes – where the body does not produce enough insulin, or the body's cells do not react to insulin

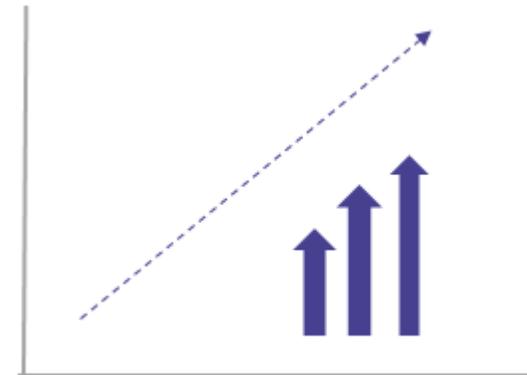
Can be inherited by family member or caused by an unhealthy lifestyle

- This can cause ill health, premature death and disability.

In Brent, 17% of all deaths are attributable to diabetes.



Diabetes prevalence is projected to rise

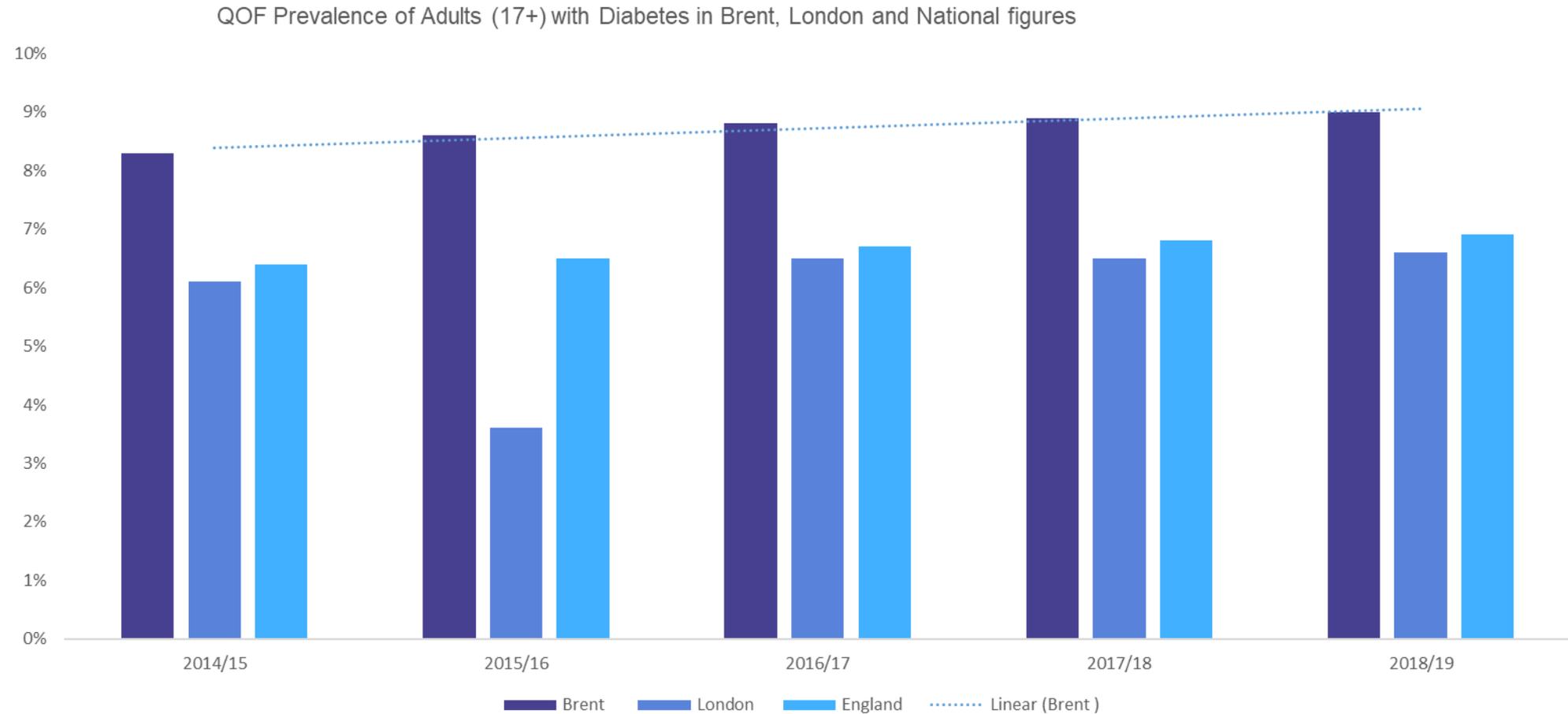


By 2030

It is estimated that nearly **15% of people** aged 16 and over in Brent will have diabetes.

Prevalence of diagnosed diabetes

The chart below shows the prevalence of diabetes in NHS Brent. The data is taken from GP records. Rates in Brent are much higher than London and England and are rising.

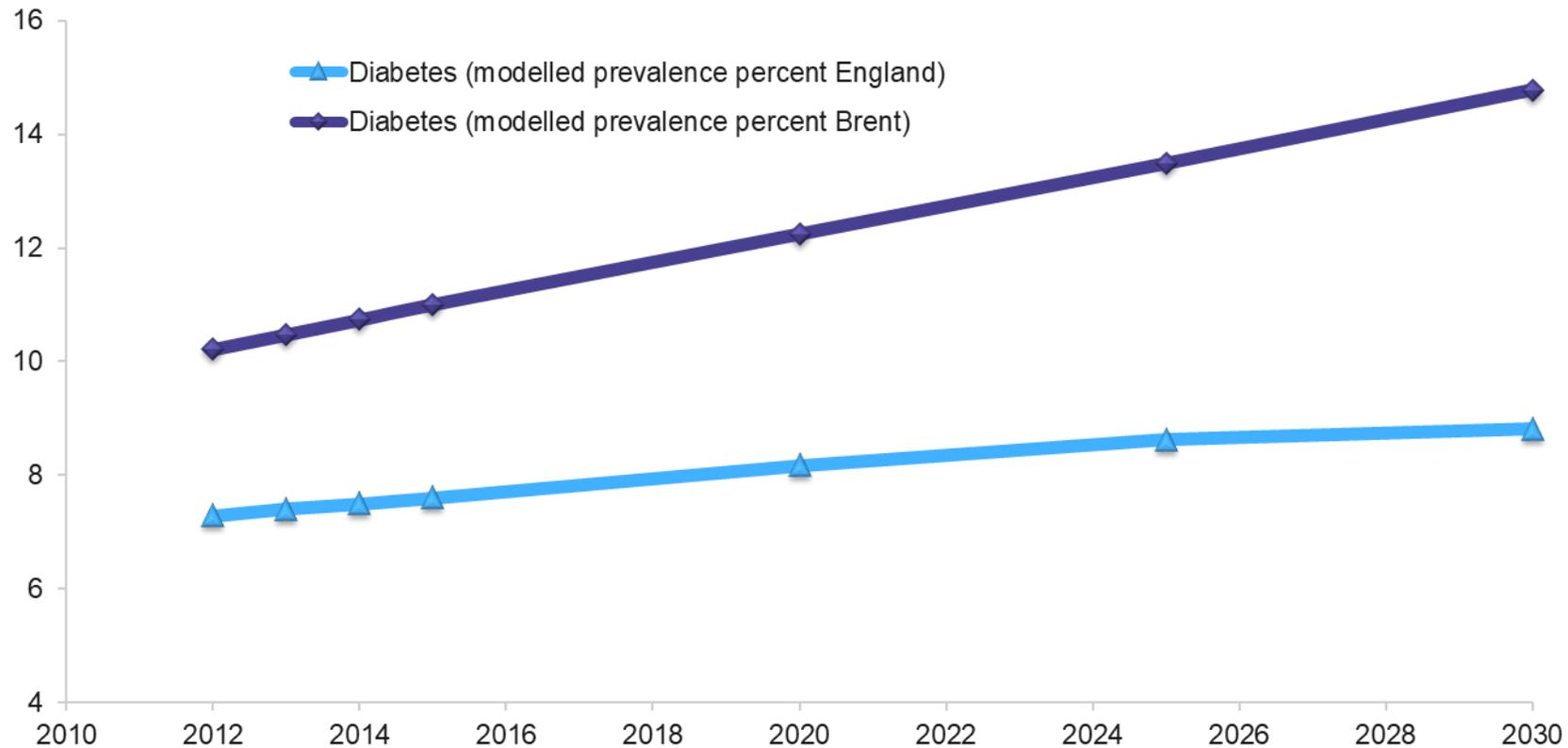


Modelled estimated prevalence of diabetes

Modelled estimated prevalence of diabetes: Brent compared to England

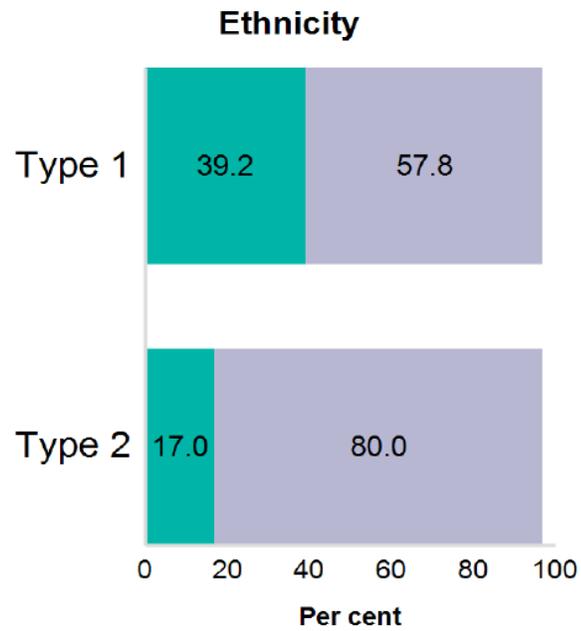
- The prevalence of diabetes is projected to rise significantly in Brent over the next 10 to 15 years, reflecting the ageing of the population, increasing numbers of people who are overweight or obese and the high proportion of Black and South Asian ethnic groups in the borough who are more at risk of diabetes.

Model estimated prevalence in Brent and England

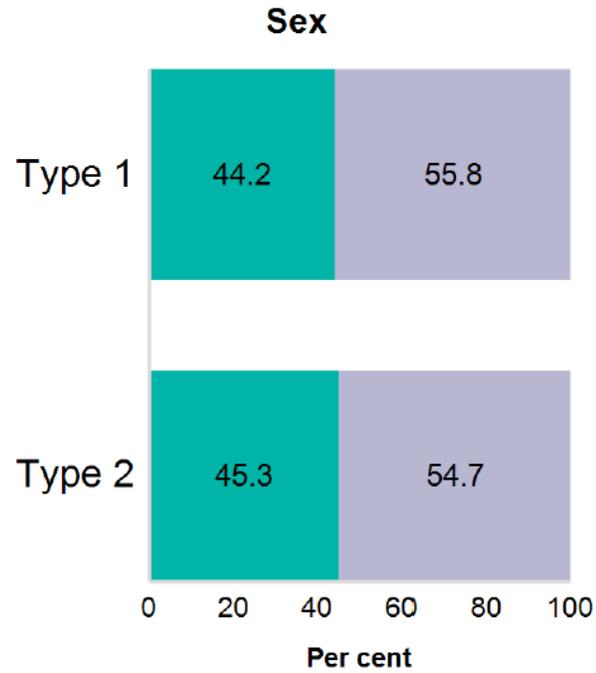


Diabetes and ethnicity, age, sex

Brent is a diverse borough with 59% of the population in Brent from ethnic minority backgrounds. Research shows that people of South African, African, African Caribbean and Middle Eastern descent have a higher than average risk of Type 2 diabetes.

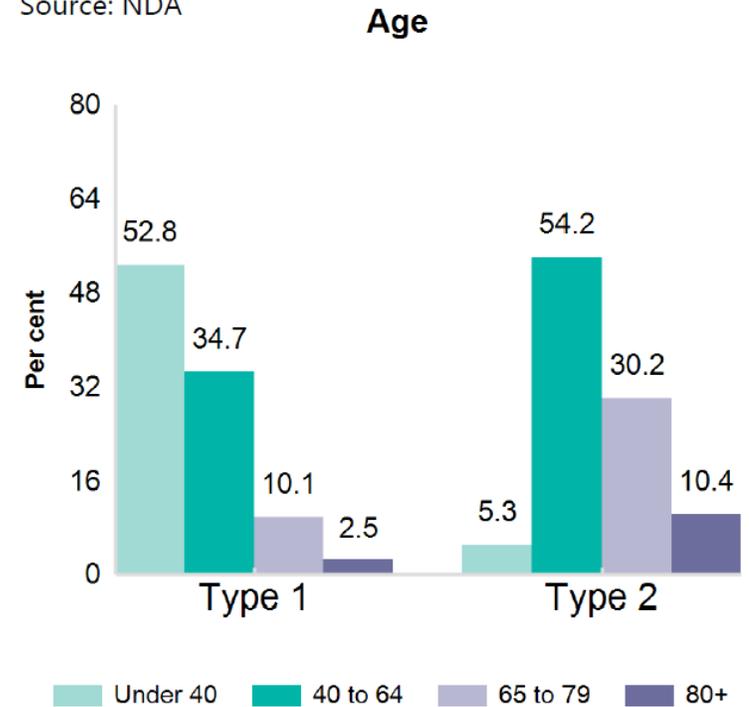


White Minority Ethnic Origin



Female Male

Source: NDA



Under 40 40 to 64 65 to 79 80+

Diabetes risk factors



Overweight



South Asian

Although Type 2 diabetes tends to affect the middle aged or older people, national statistics indicate that diabetes is now being diagnosed in younger overweight people and in South Asians at a younger age.

The other risk factors associated with the increased risk of developing diabetes are

social exclusion

lifestyle

social deprivation

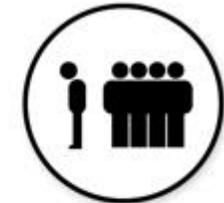
lack of physical activity

And a family history of diabetes.

Men with a waistline greater than 94cm (37 inches) or 90 cm (35 inches) for men of South Asian heritage are particularly at risk. For women having a waistline greater than 80cm (31.5 inches) increases the risk.



lifestyle



Social exclusion



Physical Activity



Family History

Common complications



Diabetic foot disease

- Diabetes is widely recognized as an emerging epidemic that has a cumulative impact of all ages. It is estimated that half of patients with diabetes are unaware of their disease and are thus more prone to developing diabetic complications such as foot disease. It is also a major cause of lower limb amputation as well as reduced resistance to infections. (Papatheodorou et al. 2018).
- In Brent from 2015 - 17 there were 218 hospital admissions for diabetic foot disease per 10,000 population. This was higher than the national rate of 156.

Diabetic retinopathy

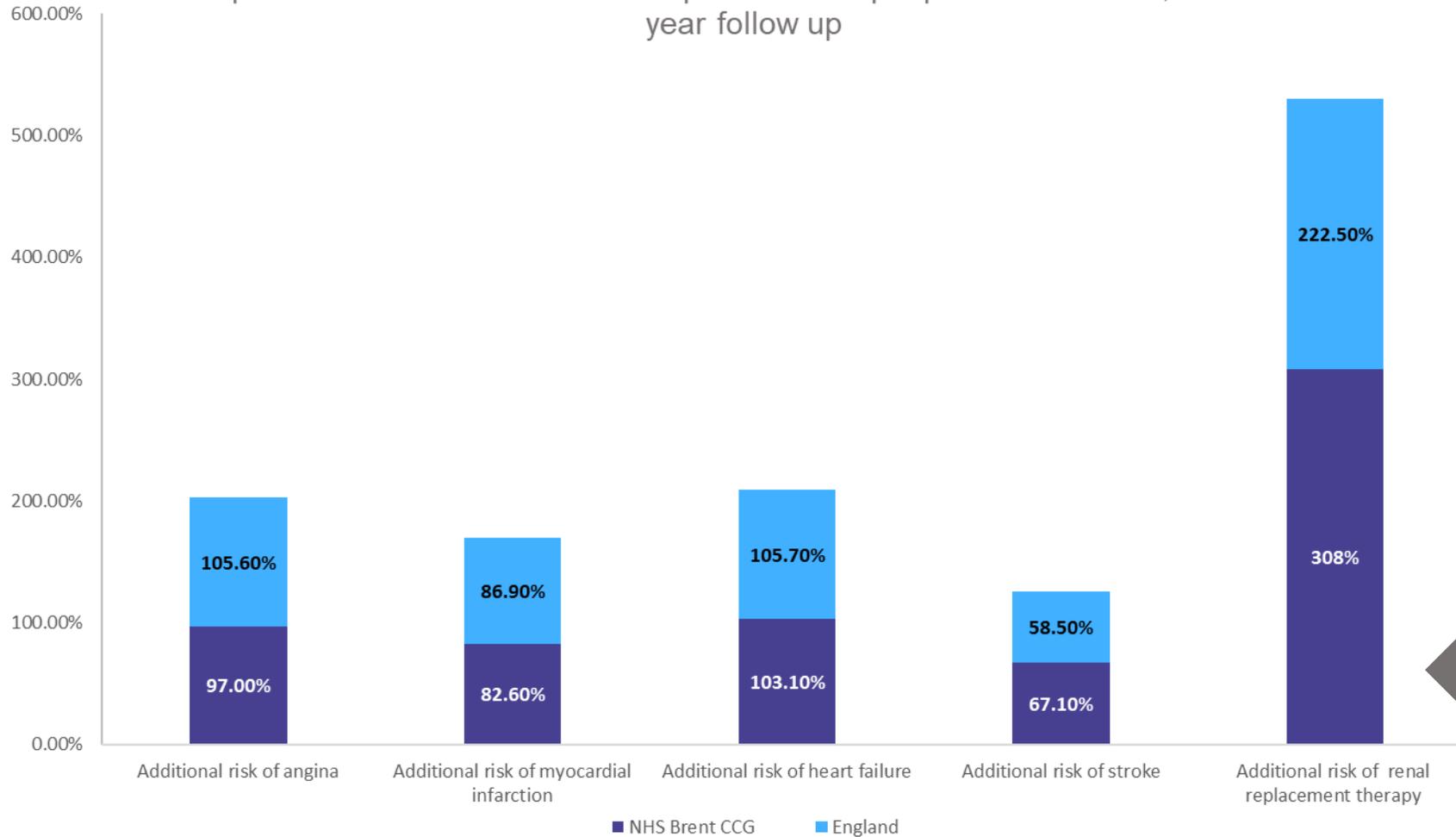
One of the most common complications of diabetes is diabetic eye disease including diabetic retinopathy. Diabetic retinopathy occurs when blood vessels in the retina (back of the eye), leak, or become blocked as a result of prolonged high blood glucose levels (Cheloni, Gandolfi, Signorelli & Odone, 2019).

In Brent, the rate of preventable sight loss due to diabetic eye disease in those individuals aged 12 years and over was 4.5 per 100,000 population in 2012/13. This is above the England average of 3.5 per 100,000 population (Department of Health: Unify2 data collection).



Other complications

Comparison of additional risk of complications for people with diabetes, with a one year follow up



People with diabetes are also at risk of a range of other associated complications. Early diagnosis and self management can reduce the risk of complications, which include heart disease, stroke, kidney disease and angina.

People with diabetes in NHS Brent CCG are less likely to have cardiac complications than people with diabetes in England.

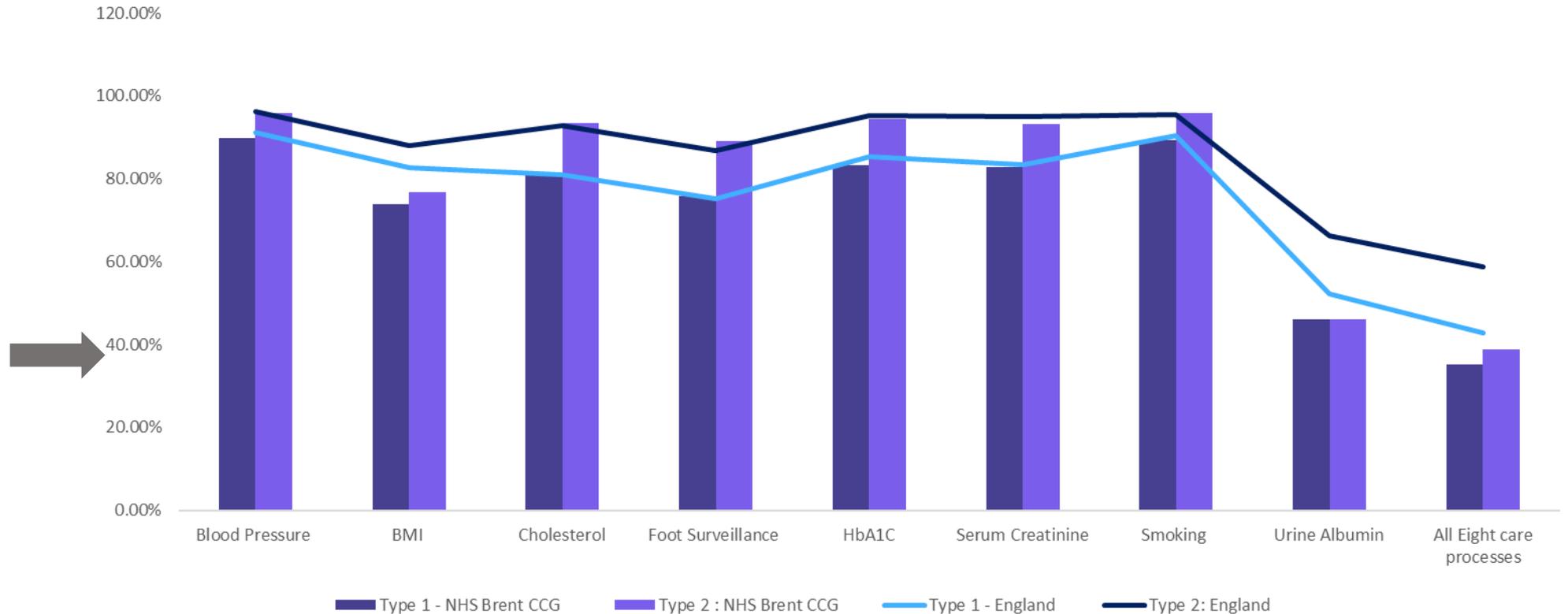
Among people with diabetes, NHS Brent CCG had an higher risk of stroke and of renal replacement therapy in comparison to England.

Diabetes and care processes

The National Institute for Health and Care Excellence (NICE) recommends nine care processes for diabetes. Five of these care processes link 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, foot surveillance).

Percentage of people with Type 1 and 2 diabetes in Brent who received the eight recommended care process

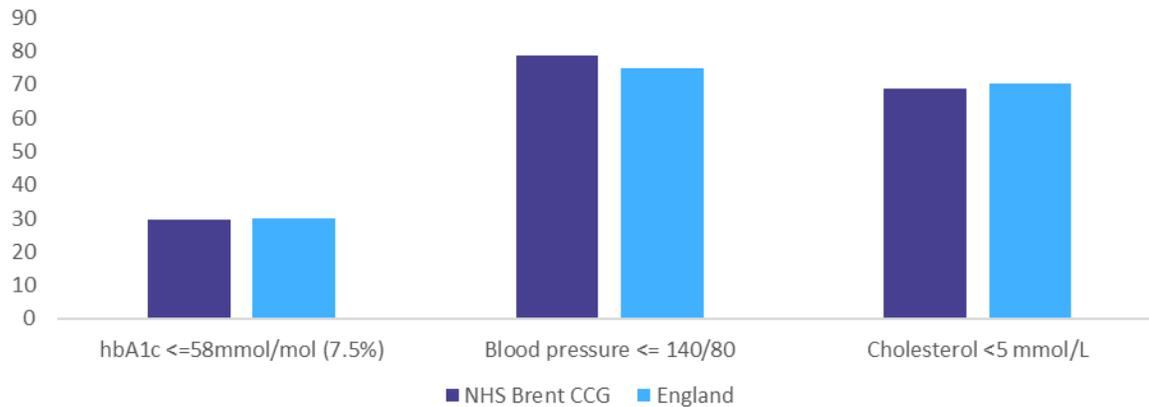
The chart illustrates fewer people with Type 1 than with type 2 receive annual checks. The urine albumin check is completed much less frequently in both type 1 and 2 than other checks as well as a eight care processes.



Treatment targets

NICE recommends treatment targets for HbA1c (glucose control), blood pressure and serum cholesterol. In NHS Brent CCG, 19.5% of people with type 1 diabetes achieved all three treatment targets. In people with type 2 diabetes, 42.2% achieved all three treatment targets.

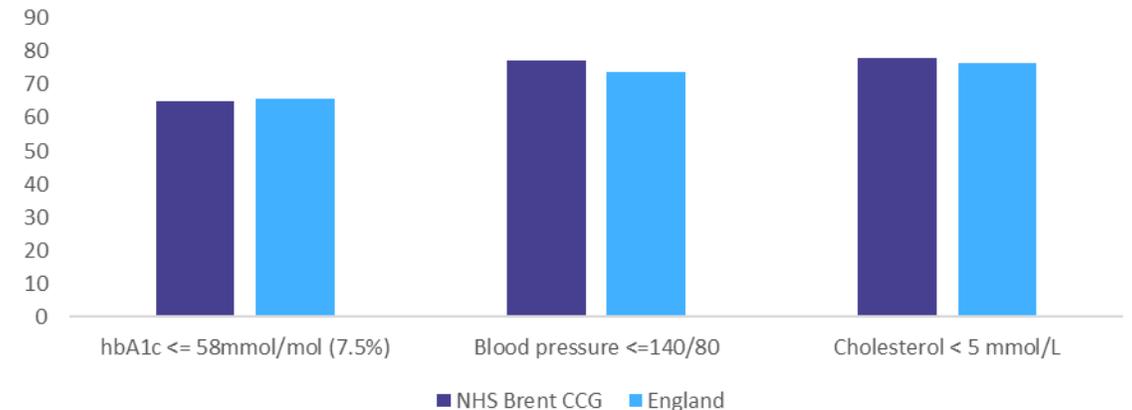
Percentage of people achieving their treatment targets for **Type 1** diabetes, 2017/18



Type 1 diabetes
Similar levels of three target achievement in England and Brent CCG.
Much lower HbA1c target achievement rate than for people with Type 2 diabetes.

Type 2 diabetes
Similar levels of three target achievement in England and NHS Brent CCG.

Percentage of people achieving their treatment targets for **Type 2** diabetes, 2017/18



Priorities and Recommendations

- As people from black and south Asian ethnic groups are at the greatest risk of developing diabetes, people from these communities should be screened at the earliest possible stage. Early screening and diagnosis would also reduce the risk of diabetes related complications.
- People who are overweight or obese in the borough should also be screened at an earlier age than the general population.
- Continue to work with Diabetes UK to raise awareness of the risks of diabetes throughout Brent.
- Explore further opportunities which could be put in place to better promote healthy eating amongst the local population.
- Existing programmes in place in Brent which aim to encourage physical activity include: healthy led walks, exercise referral schemes at Brent leisure centres and the installation of outdoor gyms throughout local parks and green spaces. Improved promotion of these opportunities through the NHS may be beneficial

Technical notes

Meaning

QOF	The Quality and Outcomes Framework (QOF) is a voluntary system for the performance management and implementing good practice in GP surgeries.
Diabetic Retinopathy	Diabetic retinopathy is a complication of diabetes, caused by high blood sugar levels damaging the back of the eye (retina). It can cause blindness if left undiagnosed and untreated.
NICE	National Institute for Healthcare and Excellence make evidence-based recommendations on a wide range of topics, from preventing and managing specific conditions, to providing social care to adults and children, and planning broader services and interventions to improve the health of communities.

Data sources

Cheloni, R., Gandolfi, S., Signorelli, C., & Odone, A. (2019). Global prevalence of diabetic retinopathy: protocol for a systematic review and meta-analysis. *BMJ Open*, 9(3), e022188.

Papatheodorou K, Banach M, Bekiari E, Rizzo M and Edmonds M: Complications of Diabetes 2017. *Journal of Diabetes Research* 2018; 3086167: 1-4.

Public Health England (national cardiovascular intelligence network - NCVIN), Diabetes Prevalence Model for Local Authorities and CCGs 2012 to 2030

[NHS conditions: Diabetic retinopathy](#)

[NICE Guidance](#)

[PHE Fingertips](#)