Diabetes

Introduction

Diabetes is a condition where the amount of glucose in blood is too high because the body cannot use it properly. This is because the pancreas does not produce any insulin, or not enough, to help glucose enter the body's cells – or the insulin that is produced does not work properly (known as insulin resistance).

There are three main kinds of diabetes: Type 1 diabetes is commonly treated with insulin and often diagnosed in people aged under 30. Type 2 diabetes can be treated with diet alone, tablets or insulin injections and can be diagnosed at any age, but most commonly from middle-age onwards. Type 2 diabetes can be associated with being overweight. Gestational diabetes affects pregnant women and often goes away after birth. Women who've suffered gestational diabetes have an increased risk of going on to develop type 2 diabetes in later life.

Diabetes is a common life-long health condition. There are 3.8 million people diagnosed with diabetes in the UK and an estimated 900,000 people who have the condition but don't know it.

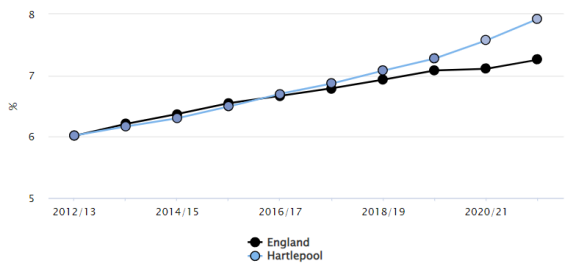
Health spending on people with diabetes is typically higher than average. With type 2 diabetes particularly affecting older people, and the number of older people set to rise, having robust plans to meet the future needs of people with this illness is essential.

Main Issues

Hartlepool's prevalence of adults diagnosed with diabetes was 7.9% in 2021/22. This has increased every year throughout the 10 year reporting period. The gap between Hartlepool and England in 2021/22 is the largest in the reporting period. Hartlepool had been in the middle quintile for diabetes prevalence from 2012/13 to 2019/20, but has been in the 2nd highest quintile since 2020/21.

Diabetes: QOF prevalence (17+ yrs)

Proportion - %

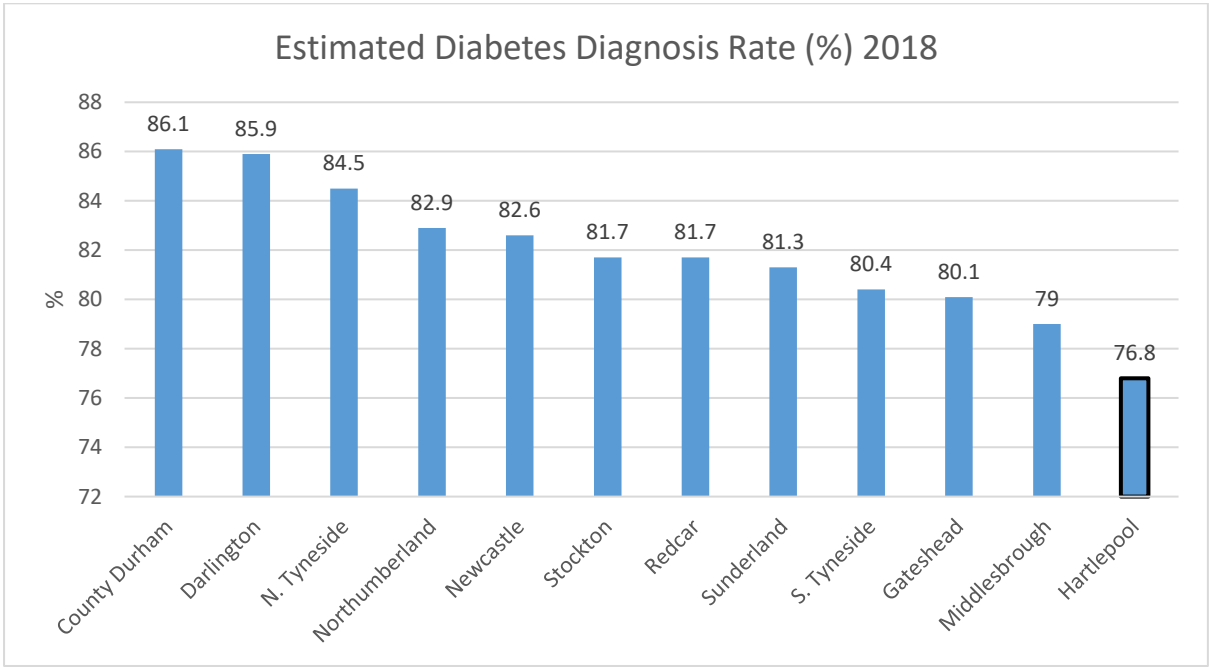


Recent trend: Increasing

Period		Hartlepool Count	Value	95% Lower CI	95% Upper CI	North East	England
2012/13		4,588	6.0%*	5.9%	6.2%	6.4%*	6.0%
2013/14		4,730	6.2%	6.0%	6.3%	6.5%	6.2%
2014/15		4,838	6.3%	6.1%	6.5%	6.7%	6.4%
2015/16		5,003	6.5%	6.3%	6.7%	6.9%	6.5%
2016/17		5,163	6.7%	6.5%	6.9%	7.1%	6.7%
2017/18		5,310	6.9%	6.7%	7.1%	7.2%	6.8%
2018/19		5,496	7.1%	6.9%	7.3%	7.4%	6.9%*
2019/20		5,658	7.3%	7.1%	7.5%	7.6%	7.1%
2020/21		5,903	7.6%	7.4%	7.8%	7.8%*	7.1%
2021/22		6,211	7.9%	7.7%	8.1%	8.0%*	7.3%

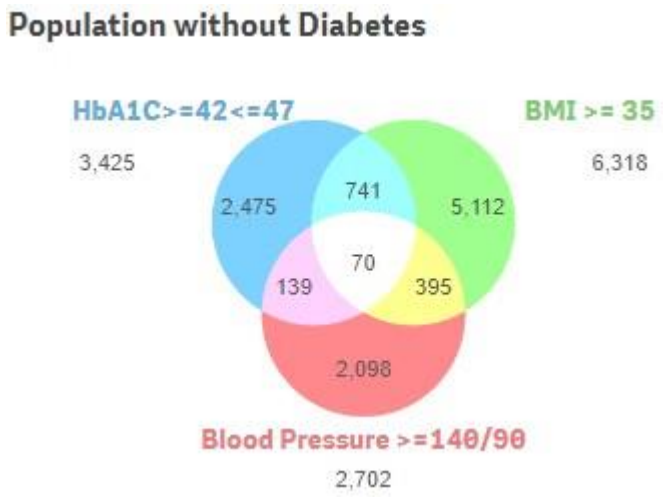
Source: Quality and Outcomes Framework (QOF), NHS Digital

However Hartlepool has the lowest diabetes diagnosis rate in the north east at 76.8%, which means that from a prevalence rate of 7.9%, there is estimated to be a further 1.8% of Hartlepool's adult population who have undiagnosed diabetes.



Source: OHID, 2023

Examining the population not diagnosed with diabetes, estimates can be made by applying three of the largest early indicators of diabetes. A BMI greater or equal to 35, blood pressure greater or equal to 140/90 and an HbA1c score greater than or equal to 42 but less than or equal to 47, HbA1c is the glycated haemoglobin test which looks at plasma glucose concentration, can be used as early warning for diabetes.



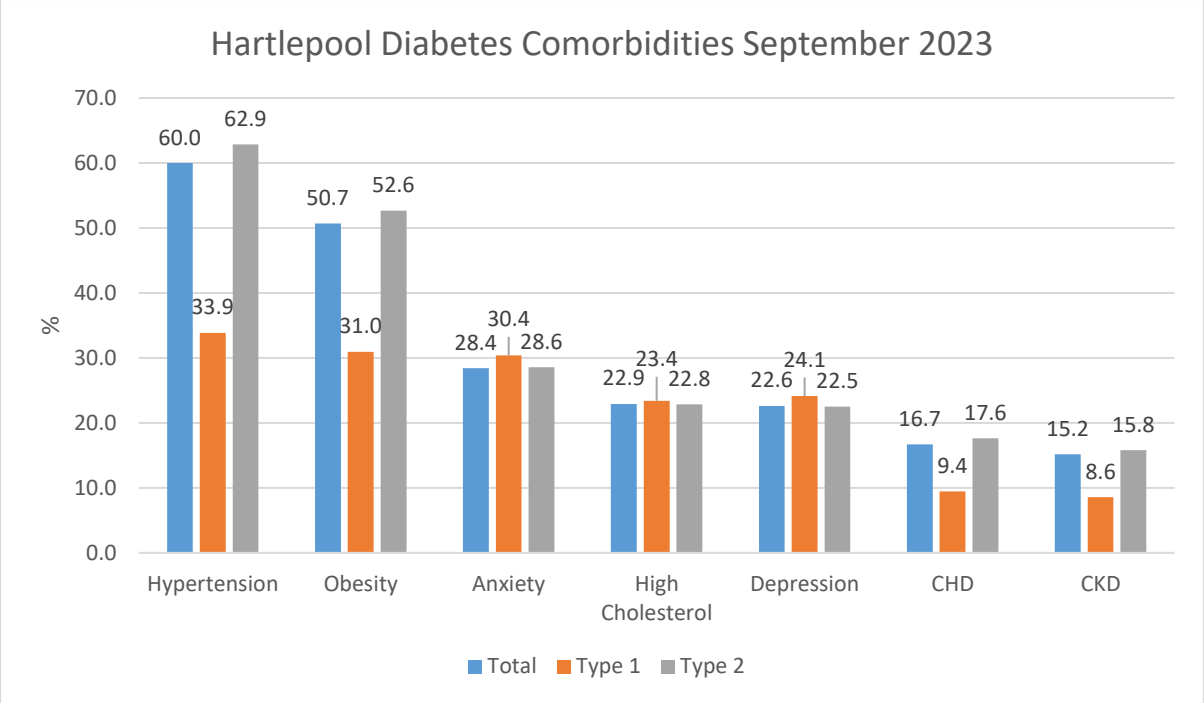
Source: NHS, 2023

When this is applied to Hartlepool, there are 741 with both HbA1c and BMI measures, 395 with BMI and blood pressure measures, 139 with blood pressure and HbA1c measures, and 70 with all 3 measures. This is a strong indicator that those 70 with all 3 indicators especially, are at a high risk of diabetes and currently undiagnosed.

NHS data from August 2022-July 2023 show that Hartlepool has a diagnosed diabetes population of 6,651 people, 688 with type 1 diabetes, 6,128 with type 2 diabetes, and 225 with both type 1 and type 2 diabetes.

During this period there were 146 hospital admissions for diabetes, an increase on the previous 12 months of 22.7%. Breaking these down to type specific admissions, there were 77 type 1 diabetes admissions, up from 70 in the previous 12 months, an increase of 10% and for type 2 diabetes there were 68 admissions, up from 45, an increase of 51.1%.

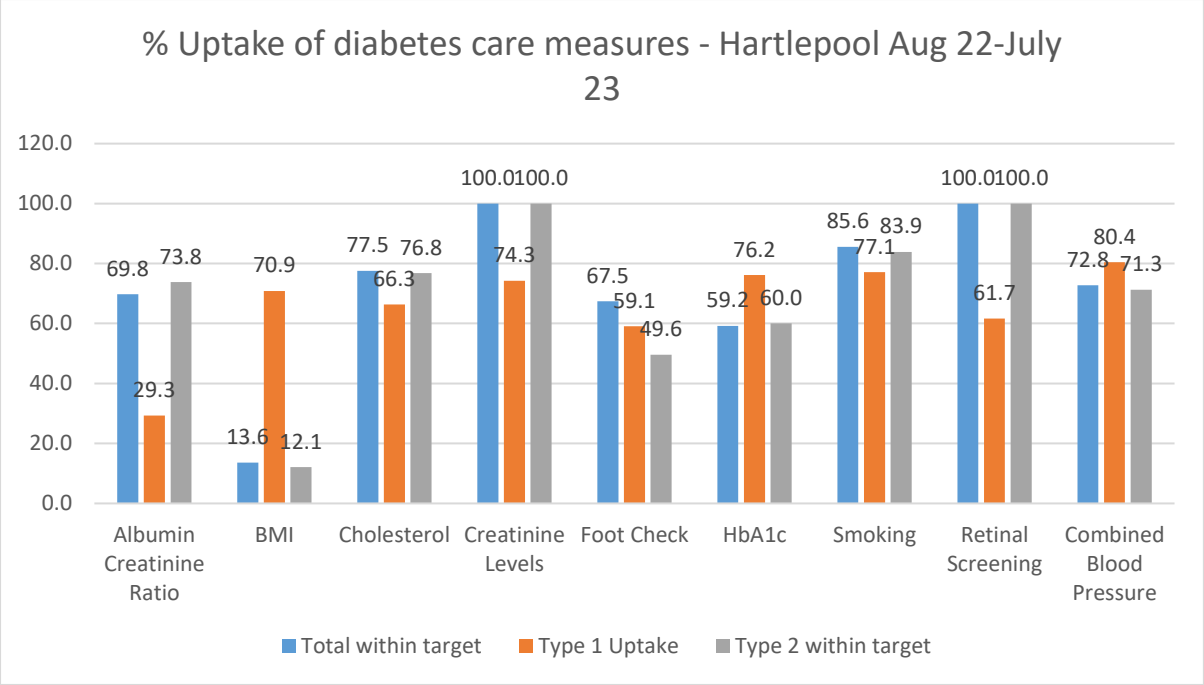
The two largest co-morbidities for diabetes in Hartlepool are hypertension (high blood pressure) and obesity. Hypertension is present in 60.0% of Hartlepool's diagnosed diabetes population, and obesity is an issue for 50.7%. Coronary heart disease was present in one in six of Hartlepool's diagnosed diabetes population, 16.7%, and chronic kidney disease in 15.2%.



Source: NHS, 2023

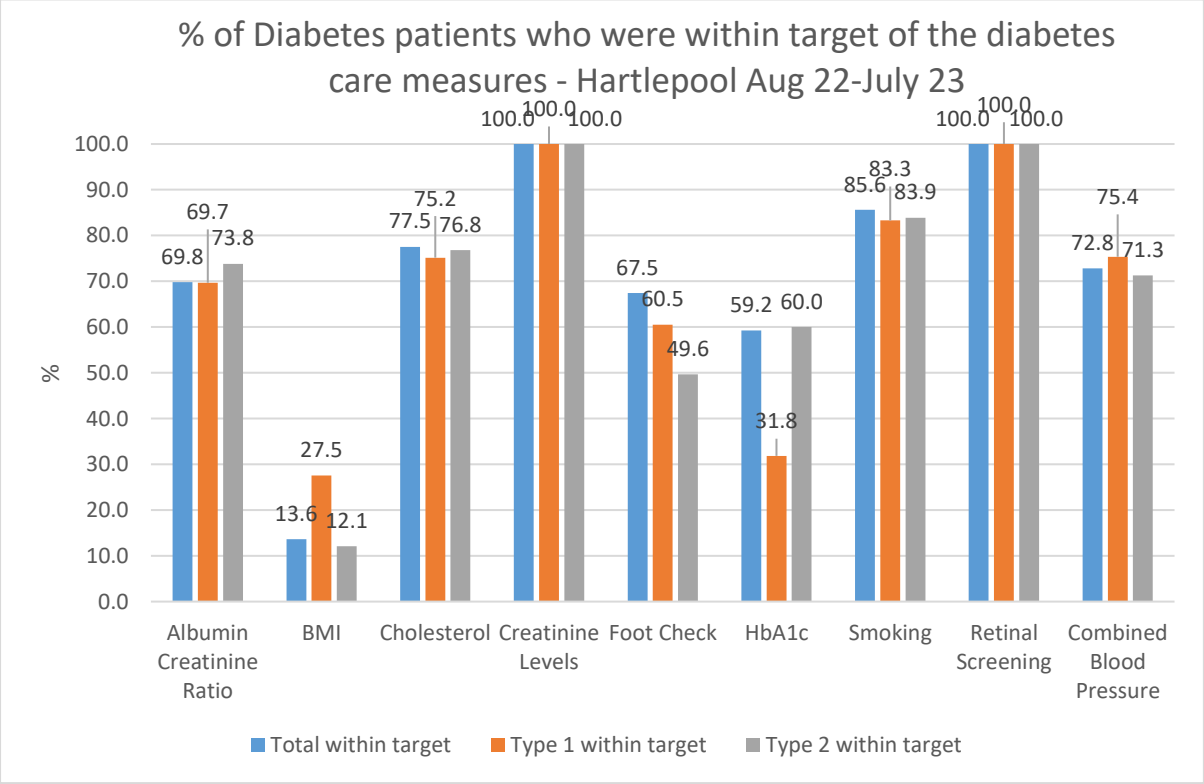
For type 2 diabetes the co-morbidity prevalence of hypertension and obesity increase to 62.9% and 52.6% respectively. However for type 1 this prevalence falls to 33.9% for hypertension and 31% for obesity.

Diabetes health checks are 9 measurements that should be performed regularly, at least annually, on anyone diagnosed with diabetes. In 2023, within Hartlepool's diagnosed diabetes population, 20.3% of people have had all 9 measures within the last 12 months. For those with type 1 diabetes this falls to 12.6%, but for those with type 2 diabetes this increases to 21.2%. Within Hartlepool's diagnosed diabetes population 2.1% have received none of the measures in the last 12 months. For those with type 1 diabetes this increases to 4.7%, but for those with type 2 diabetes this falls to 1.8%. Albumin creatinine ratio check and retinal screening are both below 50% for their uptake rates, and foot check has a 67.8% uptake rate. Creatinine levels, HbA1c, blood pressure and smoking are all above 89% for their uptake rates.



Source: NHS, 2023

In all three results, foot check, BMI and HbA1c have low levels of target success. Target success forHbA1c for type 1 diabetes is almost half of that for type 2, though type 1 BMI success is more than twice that of type 2. Creatinine levels and retinal screening both have 100% success rates.



Source: NHS, 2023

Current Services

Hartlepool Borough Council – Preventative & Community Based Service

Community Wellbeing Team – *Escape Diabetes Act Now (EDAN) Project*

The project offer is community based support to improve the health of residents who are either identified as being at risk of developing Type 2 diabetes, or those who have already been diagnosed with Type 2 Diabetes with apparent poor self-management skills; relating to either an inactive lifestyle or poor food choices or both.

Both patient groups can benefit from the intervention as the desirable outcome of weight loss and a better understanding of Type 2 Diabetes encourages positive change reducing further health risks.

Health Professionals can refer patients into the programme with the relevant base line information which is subsequently reassessed for those who achieve compliance with the programme. There is also a self-referral pathway whereupon the access criteria is verified using a Diabetes risk score tool questionnaire which confirms whether the EDAN programme is best suited to meet the needs of the individual.

The project consists of supervised exercise for up to 12 months and educational healthy eating workshops offering either 1:1 or group support over a six week period at a time that fits for the client. The combination of increased daily activity and an exploration of eating patterns assist the service users to make changes which can be realistically maintained in the long term. Both elements of the programme are applicable to all clients. The exercise component is delivered as an additional strand to the existing Exercise Referral programme. On completion of the first 12 weeks of the programme patients are then eligible for a free gym membership to provide the opportunity to increase their physical activity levels independently in addition to continued supervised activity.

Numbers through the service in 15/16 were 30 – for 16/17 this increased to 102. Current funding is in place for 2019/20. Public Health does not commission a specific number of places for this programme, however capacity would allow for a maximum of 200 referrals per year with the understanding that there is an expected

50% reduction when converting to consistent attendances. However for 18/19 the figures dipped to 80, partly due to the implementation of the NDPP. The EDAN programme administration team actively supports access to the NDPP.

Hartlepool Borough Council – Community Led Support

Community Connector x3 / Lifestyle Intervention officers x2

There are four community hubs buildings across the town which provide support and information to residents – Established weekly health walks and Social groups are provided free of charge. The Community hubs are drop in centres whereupon further 1:1 appointments are available to explore ‘what matters most’ to the individual in terms of achieving positive behaviour change. The offer from the Wellbeing team is based on the Social Prescribing model. This non-clinical approach provides the opportunity for residents to find out about all services which may be of benefit to them. The emphasis is on empowerment and to increase knowledge of the range of choices available.

The use of motivational interviewing skills assist to find the root cause of any issue for the client. Community Connectors encourage and ‘sign post’ to other professional and voluntary sector agencies; this includes a ‘buddy up’ system for those who have some level of anxiety or lack of confidence to try something new. There is no criteria around access as the Wellbeing team operate from a holistic view which enables a fully inclusive; accessible service for all.

Future Intentions

Partners from the public, private and third sector are coming together to work on a coordinated approach to tackle the causes of obesity in the town. The Whole Systems approach will see action taken on the wide ranging causes of obesity ranging from biological and individual lifestyle factors to social and community factors and living and working conditions. Reducing the number of people who are overweight or obese will have a significant impact on the incidence of diabetes in the town. Part of this work will include identifying those programmes delivering work related to diabetes prevention and better understand ding how they work as part of the system,.

The NHS Diabetes prevention programme is a group programme to support people identified as having pre-diabetes. People attend sessions provided locally which enables them to obtain up to date information on diabetes and how to manage their condition. The programme is currently provided by Ingeus and will be out for tender in 2020.