



Diabetes

1. Introduction

Diabetes is a long term condition in which the amount of glucose in the blood is either too high (because the pancreas does not produce any insulin), not enough (to help glucose enter the body's cells) or the insulin that is produced does not work properly (known as insulin resistance). Diabetes is a serious and growing public health issue, and increases a person's risk of heart attack, stroke and the risk of eye, limb and kidney problems. Diabetes often causes distress, disability and premature death, all of which can be prevented through evidence-based care.

There are two main types of diabetes:

- *Type 1 diabetes* – This type of diabetes accounts for between 5-15% of all people with the condition. Type 1 diabetes develops when the body is unable to produce insulin. The causes of this are currently unknown, however it is likely that there is a genetic link. Type 1 diabetes usually appears in childhood, and is treated by daily insulin injections, a healthy diet and regular physical activity.
- *Type 2 diabetes* – Around 85-95% of diabetes sufferers have this second type of diabetes. Type 2 diabetes develops when insulin is produced, but does not work properly (known as insulin resistance). Type 2 diabetes usually appears in people over the age of 40. South Asian and Black populations are at a higher risk of developing Type 2 diabetes, and often develop the condition at a younger age (usually from 25 years). Similar to Type 1, Type 2 diabetes is treated with a healthy diet and increased physical activity, often in combination with medication and/or insulin.

Since 1996, the number of people diagnosed with diabetes in the UK has increased from 1.4 million to 2.6 million. Estimates suggest that the prevalence of diabetes will increase to 3.8 million people (8.5% of the adult population) by 2020 and 4.6 million people (9.5% of the adult population) by 2030. It is expected that most of these cases will be Type 2 diabetes because of the ageing population and rapidly rising numbers of overweight and obese people.

Curbing the increasing number of people with diabetes requires an increased awareness of diabetes risk factors, widespread changes in lifestyle, diet and behaviour, improved self-management among people with diabetes and better access to integrated diabetes care services.

2. The Local Picture

2.1 Prevalence rates

The prevalence of diagnosed diabetes in people aged 17 years and over in Hounslow is 6%, higher than both the national average of 5.4% and the London average of 5.2% ([Table 1](#)). However, this is lower than the 6.7% prevalence in PCTs with similar diabetes risk factors.



By GP practice, Hounslow has a greater indirectly standardised rate of diabetes than both the London and national practice average at 432.6 per 10,000 people, compared with 238.6 and 369.3 per 10,000, respectively. ([Table 2](#))

In 2010/11, there were around 12,000 people over the age of 17 years with a diagnosis of diabetes in Hounslow – an increase of 28% since 2007/08. ([Table 3](#)) However, modelled estimates based on Hounslow's population, ethnicity and levels of deprivation suggest there are around 3,000 adults with undiagnosed diabetes in the Borough.¹

2.2 Mortality

Throughout England, people with diabetes are twice as likely to die between the ages of 20 and 79 years (premature deaths) compared with people without the condition. It is estimated that during 2005 in Hounslow, there were 115 deaths in this age group that would have been avoided (15% fewer deaths in the Borough overall) if those with diabetes had the same mortality rates as those without the condition.¹

There has not been a clear pattern in mortality rates where diabetes was the underlying cause during the last eight years in Hounslow. The data on mortality is likely to be greatly influenced by reporting, as diabetes is likely to be mentioned as co-morbidity at least as often as it is mentioned as an underlying cause. For men, the standardised rates of death with diabetes as an underlying cause have decreased from 16 per 100,000 population since 2002-2004 to 12 per 100,000 population in 2008-2010. For women the rate has increased from 11 per 100,000 population in 2002-2004 to 14 per 100,000 in 2008-2010. ([Figure 2](#))

2.3 Primary care

QOF data In Hounslow, data for 2009/10 indicates that 47% of all people diagnosed with diabetes over the age of 16 years had an HbA1c reading² of 7 or less (equivalent to 53 mmol/mol). This is significantly lower than in PCTs with similar diabetes risk factors¹, the London average (52%) and significantly lower than the England average of 54%. ([Table 1](#))

The proportion of its diabetes patients who have had a retinal screening in the past 15 months was 87%, compared with 89% in London and 91% in England as a whole. ([Table 1](#))

Prescribing costs for diabetes are above the London average but slightly lower than the national figure ([Table 9](#)).

2.4 Hospital care

During 2010/11, there were around 3,000 emergency admissions of diabetics to hospital in Hounslow. In total, there were 5,428 admissions for diabetic patients (an average of 1.8 admissions per individual). Over half (54%) were emergency admissions, however, this has decreased steadily since 2007/08 (63%). Between 2007/08 and 2010/11, Hounslow's rate of diabetes admissions more than doubled, from 1,867 to 3,239 per 100,000 population. The costs associated with these diabetes admissions have increased by 53% over the same period, to £10,538,100 in 2010/11. ([Table 3](#))

¹ Yorkshire & Humber Public Health Observatory (2011) Diabetes Community Health Profile for Hounslow PCT.

² Glycated haemoglobin (HbA1c) is a form of haemoglobin which is measured to identify a person's glucose concentration over prolonged periods of time.

There were 63 emergency admissions for diabetic ketoacidosis³ and coma in Hounslow during 2010/11, equivalent to a rate of 28.5 per 100,000 population. ([Table 4](#))

During the same year, there were 15 admissions for diabetes-related amputations, a rate of 8.8 per 100,000 population. This was a reduction from the 2007/08 rate of 11.5 per 100,000. ([Table 6](#)) For lower limb amputations, there were 2.2 amputations per 1,000 people with diabetes between 2007–10, fewer than the 2.5 per 1,000 across England as a whole.¹

Analysis of total spending on diabetes care mapped with HbA1c outcomes shows that in 2009/10, Hounslow spent less than the England average on diabetes (£244 compared with £254 per registered diabetic patient), but outcomes, in terms of the management of blood glucose (HbA1c) levels, were poorer than the England average.

2.5 Community (intermediate) care

During 2010/11, around 575 diabetics attended the Community Diabetes Service with four visits on average for each individual. The total number of appointments attended has increased significantly over the last two years, from 1,348 in 2009/10 to 2,292 in 2010/11. ([Table 6](#))

3. Strategic Leadership and Collaboration

In line with national guidance, Hounslow has developed a Diabetes Intermediate Care Service. The key aim of this service is to offer diabetic patients a high quality of treatment from appropriate healthcare professionals in either a local or community-based setting.

The key objectives of the Service are to:

- Provide an improved patient pathway for diabetic patients supported by national guidance (National Service Framework) and based on local needs;
- Provide a consultant-led community based service that is convenient and accessible for diabetic patients and their carers;
- Manage the diabetes budget effectively so as to release resources from secondary care and investing them into primary and community diabetes care;
- Effectively triage all diabetes referrals from GPs and allied health professionals to ensure patients are seen in appropriate settings;
- Provide training and education to primary care clinicians and other health care professionals;
- Offer group education programmes to all newly diagnosed Type 2 diabetic patients and to others who may benefit from further lifestyle management, taking into consideration language barriers, with clearly documented patient reported outcomes; and
- Offer group education for patients with impaired fasting glycaemia (slightly raised blood sugar).

4. Priorities

In 2011/12, the key priorities in diabetes in Hounslow will be:

³ A complication of diabetes that occurs when the body cannot use sugar (glucose) as a fuel source



- To improve patient education about diabetes and increase the number of patients participating in an Expert Patients Programme; and
- To improve the management of diabetes in primary care by increasing the number of GPs who can manage the condition.

5. Summary of Need

The following table summarises the needs in Diabetes in the London Borough of Hounslow.

SUMMARY OF NEED: CHECKLIST	
Is need increasing over time?	Yes
Is need greater than the London average?	Yes
Is there qualitative intelligence indicating that need is substantially unmet?	Yes
Is there an external inspection or report suggesting need is unmet?	Yes
Are quality indicators worsening over time?	Yes
Are quality indicators worse than the London average?	Yes
Is there an intervention of proven effectiveness to address the need which is not currently delivered in Hounslow (or not delivered enough)?	Yes