



2016-17

NDA

NATIONAL DIABETES
AUDIT

**SUMMARY
REPORT**

DiABETES UK
KNOW DIABETES. FIGHT DIABETES.

National Diabetes Audit:
are services providing good
quality diabetes care?

A summary report of the National Diabetes Audit:
Care Processes and Treatment Targets 2016-17

nda
NATIONAL DIABETES AUDIT

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**Note: All results in this document
 are taken from the National Diabetes
 Audit 2016–17: Care Processes and
 Treatment Targets Report**

Report at a glance 2016–2017

The National Diabetes Audit measures the quality of care provided to people with diabetes. The information in the audit is collected and submitted by GP practices and specialist diabetes services in England and Wales.

The results (of respondents to the 2016–2017 audit)

This report includes information on nearly



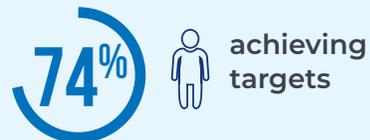
3.2M
PEOPLE WITH DIABETES

ENCOURAGING

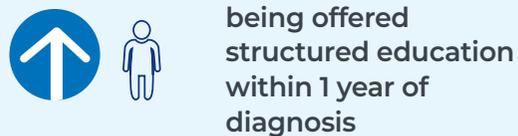
HbA1C CHECKED ANNUALLY



BLOOD PRESSURE TARGETS

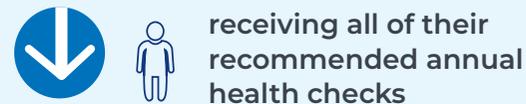


STRUCTURED EDUCATION



IMPROVEMENT NEEDED

RECOMMENDED ANNUAL HEALTH CHECKS



ACHIEVING ALL THREE TARGETS



STRUCTURED EDUCATION



WE SAY

There have been some improvements in diabetes care. But there is still a need for big improvements in many areas. There are differences in outcomes between:

- DIFFERENT SERVICES
- YOUNGER AND OLDER PEOPLE WITH DIABETES
- PEOPLE WITH TYPE 1 AND TYPE 2 DIABETES

Finding out why will be an important part of improving diabetes care.

Background

In March 2018, NHS Digital published the [National Diabetes Audit \(NDA\): Care Processes and Treatment Targets 2016-17 report](#). This summary report has been prepared by [Diabetes UK](#) and summarises the information in the report in a way that is more accessible for people with diabetes. This report is also for anyone interested in the quality of diabetes care provided by the NHS in England and Wales.

We try to answer the following questions:

- 🌐 Is everyone with diabetes diagnosed and recorded on a diabetes register at the GP practice?
- 🌐 Do people with diabetes receive the care and treatment recommended in the guidelines?
- 🌐 Do people with diabetes meet the NICE defined treatment targets?
- 🌐 Are people with diabetes offered a structured education course and do they attend it?

As well as the national level report, we have also published findings for each service that took part. This means that staff from each service can look at the quality of the care they provide, what they are doing well and what they need to improve on.

DIABETES: THE BASICS

Type 1 diabetes – this is a serious, lifelong condition where your blood glucose level is too high because your body can't make a hormone called insulin. When this happens a person needs regular insulin given either by injection or an insulin pump.

Type 2 diabetes – this is a serious, lifelong condition where the insulin your pancreas makes can't work properly, or your pancreas

can't make enough insulin. There are different ways of treating Type 2 diabetes. Some people can manage it by healthier eating, being more active and losing weight. Eventually most people will need medication to bring their blood glucose down to a safe level.

Other types of diabetes – In addition to Type 1 and Type 2 diabetes there are a range of other rarer types such as MODY (maturity onset

diabetes of the young) and Wolfram Syndrome. For more information about Type 1, Type 2 and other types of diabetes please visit the [Diabetes UK website](#).

Note: When the data in the report refers to Type 2 this will also include data on the other types of diabetes (MODY etc).

About this report

In this report we explain:

- 🌐 What the national guidelines say about good quality diabetes care
- 🌐 The main findings from the 2016–17 NDA report
- 🌐 Recommendations for improvements to diabetes treatment and care

Before writing this summary report, we talked to people with diabetes to find out what information they wanted to see and how to present the findings.

At the back of the report we explain what the audit is and why it is important to look at the care that is provided to people with diabetes. There is also a glossary and details of where to find more information.

Diabetes healthcare checks

All people with diabetes should receive the following healthcare checks at least once a year. These healthcare checks are recommended in the [NICE Guidelines](#).

1 	HbA1c test to measure overall blood glucose levels over the past 8 to 12 weeks	2  Blood pressure measurement	3  Cholesterol test to check for levels of harmful fats in the blood
4 	Eye screening (retinal screening) using a special, digital camera to look for any changes to the back of the eye (retina)	5  Foot examination – to check the skin, circulation and nerve supply of legs and feet	6  Kidney function (blood creatinine) – a blood test to measure how well the kidneys are working
7 	Urinary albumin – a urine test to check for protein, which may be a sign of kidney problems	8  BMI (body mass index) measurement, to see if you are a healthy weight	9  Smoking review , including advice and support if you are trying to stop or reduce smoking

We are unable to access information about eye screening so this report will refer to the 8 diabetes healthcare checks that we are able to report on. Having diabetes can lead to health complications such as blindness, kidney failure, heart disease and stroke. It is essential that everyone with diabetes receives the healthcare checks every year.

The results of the checks can show whether someone is at risk of developing health complications or whether they have developed the early stages of health complications. For example, the blood pressure check will show if a person needs medication to bring their blood pressure level down.

The results

GP recording

 Is everyone with diabetes diagnosed and recorded on a diabetes register at the GP practice?

The 2016–17 audit includes information on nearly 3.2 million people with diabetes. 7,375 GP practices submitted their information to us which is over 95% of all GP practices in England and Wales. This means that the audit gives a really good picture of diabetes care across England and Wales during this period.

Annual diabetes healthcare checks

 Do people with diabetes receive the care and treatment recommended in the NICE guidelines?

Fewer people with Type 1 diabetes (34%) receive all 8 diabetes healthcare checks than those with Type 2 diabetes (48%). The table below shows the percentage of people with diabetes having each one of the recommended checks in 2016–17. It compares the rates between those with Type 1 and Type 2 diabetes. Next to each healthcare check is an arrow that shows whether the percentage of people receiving the check has improved (green upwards arrow ) or got worse (red downwards arrow ) since the start of the audits in 2011/12. A blue sideways arrow () means the percentage has stayed the same.

HEALTHCARE CHECK COMPLETED	TYPE 1	TYPE 2
All 8 healthcare checks	34% 	48% 
HbA1c	84% 	95% 
Blood pressure	90% 	96% 
Cholesterol	80% 	93% 
Kidney function	83% 	95% 
Urinary albumin	50% 	65% 
Foot exam	70% 	79% 
Body mass index (BMI)	75% 	83% 
Smoking review	79% 	86% 

The percentage of people with Type 1 and Type 2 diabetes receiving all 8 diabetes healthcare checks has fallen since the first audit in 2011/12. This means that fewer people are receiving all the checks that are recommended. Younger people are less likely to receive their annual diabetes healthcare checks than older people. There is also a huge variation in the rate of people receiving their annual diabetes healthcare checks across different geographic localities in England and Wales.

WE SAY

It is vital that all people with diabetes receive all 8 healthcare checks annually as this is the basis of effective diabetes care. There are many opportunities to reduce variations and improve diabetes care:

-  **Between services and localities**
-  **For younger people with diabetes**
-  **For people with Type 1 diabetes**

The results

Diabetes treatment targets

Do people with diabetes meet the NICE defined treatment targets?

[NICE Guidelines](#) recommend treatment targets for glucose control, blood pressure and cholesterol. The targets are:

- HbA1c of 58.0 mmol/mol or less
- Blood pressure reading of less than 140/80
- Total cholesterol level of below 5 mmol/l

These targets are recommended because achieving them reduces the risk of future complications. If a person has prolonged periods of time with higher than normal glucose levels, high blood pressure or high cholesterol, it can eventually cause problems.

The table below shows the percentage of people with diabetes achieving each of the recommended treatment targets in 2016-17. It compares the rates between those with Type 1 and Type 2 or other diabetes. Next to each treatment target is an arrow that shows whether the percentage of people receiving the check has improved (green upwards arrow ) or got worse (red downward arrow ) since the start of the audits in 2011-12. A blue sideways arrow () means the percentage has stayed the same.

TREATMENT TARGETS ACHIEVED	TYPE 1	TYPE 2
All 3 treatment targets	19% 	41% 
HbA1c	30% 	67% 
Blood pressure	76% 	74% 
Total cholesterol level	80% 	93% 

Targets for blood glucose levels are achieved in people with Type 1 diabetes (30%) less than half as often as in people with Type 2 or other diabetes (67%). Over 2 in 3 people with Type 1 diabetes and 1 in 3 people with Type 2 or other diabetes have an increased blood glucose level.

75% of all people with diabetes are achieving the blood pressure target. Since the audit began in 2011-12 there has been a big improvement in people achieving this target.

There has been a small decrease in the rate of all people with diabetes achieving the target since the audit began in 2011-12.

The percentage of people achieving all 3 treatment targets are very low. 4 in 5 people with Type 1 diabetes and 3 in 5 people with Type 2 diabetes are not achieving all 3 treatment targets, which can lead to an increased risk of developing complications.

Younger people are less likely to achieve all 3 treatment targets than older people. There is also huge variation in the rate of people achieving their treatment targets across different localities in England and Wales.

WE SAY

Healthcare professionals should work in partnership with people with diabetes to agree a personalised care plan to help them achieve the recommended targets. There are many opportunities to reduce variations and improve achievement of treatment target:

- Between services and localities
- For younger people with diabetes
- For people with Type 1 diabetes

The results

Structured education

Are people with diabetes offered a structured education course and do they attend it?

[NICE Guidelines](#) recommend that people with diabetes are offered a structured education course to help improve their understanding of diabetes and how to manage it in everyday life. The guidelines recommend that a structured education course should be offered to people with diabetes within a year of diagnosis. Examples of these courses include DAFNE for Type 1 diabetes and DESMOND/XPERT for Type 2 diabetes.

Diabetes structured education courses make living with diabetes easier. The courses provide support and information to help people manage their diabetes well. People who have been on a course feel more confident about looking after their condition and are less likely to develop health complications.

40% of people diagnosed with Type 1 diabetes in 2015 were offered structured education within a year of diagnosis. Similarly, 77% of people diagnosed with Type 2 diabetes in 2015 were offered structured education within a year of diagnosis.

Offers of structured education have improved since the start of the audit (2011) but this improvement has not yet been matched by records of attendance. Less than 10% of people with both Type 1 and Type 2 diabetes are recorded as attending a structured education course. The number of people attending structured education may be higher than suggested by the results of the audit because of poor recording of attendance on GP records. Healthcare providers need to work together to improve the recording of attendance.

WE SAY

People with diabetes live with their condition all day, every day. Structured education courses help give people with diabetes the knowledge and skills they need to manage their diabetes themselves. All people diagnosed with diabetes must be offered a structured education course and encouraged to attend it.

Our recommendations



For people with diabetes

- ✓ Make sure you get all the **annual healthcare checks** you need
- ✓ Ask for the **results of your healthcare checks** so you have information about whether adjustments to your diabetes management are needed
- ✓ We have developed a [15 healthcare essentials checklist](#) which gives details of the recommended annual healthcare checks, along with other important parts of diabetes care. Take this with you when you go to see your GP or nurse
- ✓ Work with your **doctor or nurse** to develop a personalised plan to help you to meet the **blood glucose, blood pressure and cholesterol targets**
- ✓ Make any **lifestyle changes** needed to help reduce your risk of developing complications. For example, stopping smoking, taking regular exercise and cutting down on salt and alcohol
- ✓ Speak to your doctor or nurse if you have any **questions** about your checks or if there are checks you are not getting



For diabetes services

- ✓ Continue to **submit data to the National Diabetes Audit**
- ✓ Use the service level data available on the NHS Digital website to **compare your services** with others and to see where **improvements** in care are needed
- ✓ Ensure all people with diabetes are offered all **9 healthcare checks**
- ✓ Identify ways to **improve access and uptake of diabetes checks** for people of working age with diabetes
- ✓ Explore ways to **support people of working age** with diabetes to achieve their treatment targets
- ✓ Agree a **personalised care plan for every person with diabetes** and review it annually, taking into account the results of the healthcare checks and the person's circumstances
- ✓ Offer **structured education courses** to every person with diabetes within 12 months of diagnosis and encourage them to attend the course offered
- ✓ Work with **commissioners and education service providers** to improve ways of recording attendance at diabetes structured education courses

Further information

What is the National Diabetes Audit?

The audit is a project that checks the quality of care provided to people with diabetes by GP practices and hospitals in England and Wales. The first audit took place in 2011 and has collected information annually since then about the quality of care for people with diabetes. Specifically, we look at:

- How many people with diabetes are registered at a GP practice or hospital diabetes clinic
- Whether people with diabetes receive their annual health checks
- Whether people with diabetes achieve treatment targets for blood glucose, blood pressure and cholesterol control
- Whether people have been offered a diabetes structured education course within 12 months of diagnosis and whether they have attended

Why do we audit care for people with diabetes?

The [National Institute for Health and Care Excellence \(NICE\)](#) produces guidelines for diabetes care. All GP practices and specialist diabetes services should follow these guidelines to provide good quality diabetes care. In the audit we check whether people with diabetes get the care and treatment recommended in the NICE guidelines.

The findings from the audit show GP practices and specialist services how they compare with other services. The information collected helps highlight areas where diabetes care for patients is good and where there is a need for improvement and changes that will help GP practices and specialist services raise their overall standards.

The audit findings are publically available, so you can see the results for your local GP practice or specialist service. You can find this on the [NHS Digital](#) website.

Where to go for more information

The National Diabetes Audit

Information about the National Diabetes Audit and copies of the full reports are available on the NHS Digital website <https://digital.nhs.uk/data-and-information/clinical-audits-and-registries/our-clinical-audits-and-registries/national-diabetes-audit>

Diabetes UK

For more information about diabetes, including living with diabetes, go to www.diabetes.org.uk/guide-to-diabetes or call Diabetes UK's Helpline on 0345 123 2399 for advice and support.

For information about getting involved in making a difference to diabetes treatment and care, go to www.diabetes.org.uk/get_involved/campaigning/diabetes-voices

To find out more about Diabetes UK's activities in your area, go to www.diabetes.org.uk/in_your_area

National Institute for Health and Care Excellence (NICE) guidelines

For information about how NICE develops guidelines, go to www.nice.org.uk. Guidelines about diabetes care in hospital include:

[Diabetes in adults quality standard \(QS6\)](#)

[NICE Guidelines NG19](#)

Further information

Healthcare Quality Improvement Partnership (HQIP)

To find out more about clinical audits – and patient involvement in national clinical audits – you can visit the HQIP website at www.hqip.org.uk/involving-patients

Patient Advice and Liaison Service (PALS)

If you have a question about local health services or an enquiry about health matters, you can contact PALS. Find more information or your local PALS at www.nhs.uk

Community Health Councils (CHC) in Wales

If you need help and advice about NHS Services in Wales, you can contact CHC. Find out more at www.wales.nhs.uk

NHS Choices (England)

NHS Choices provides information about your health, including finding and using NHS Services in England. Find out more at www.nhs.uk/pages/home.aspx

NHS Wales

NHS Wales provides information about your health, including finding and using NHS Services in Wales. Find out more at www.wales.nhs.uk

Explanation of words used in this booklet

Audit

A way of gathering information and measuring local NHS organisations' performance and quality of care against national guidelines, from which come recommendations for improvements.

Blood glucose

The main sugar the body makes from the food we eat. Glucose travels in the bloodstream, providing energy to all the body's living cells. However, the cells cannot use glucose without the help of insulin.

Blood pressure

The force of the blood against artery walls. When you have your blood pressure measured, there are two numbers. The highest is for the heart pumping blood into the blood vessels and the lowest if for the heart at rest.

Body Mass Index

A measure of total body fat that includes a person's weight and height. For adults a BMI of 30 or more is obese. A BMI that is too high or too low can lead to health risks.

Cholesterol

A substance similar to fat found in the blood, muscles, liver, brain and other tissues. Proteins carry cholesterol through your blood stream and when the two combine we call them lipoproteins. There are both harmful (LDL) and protective (HDL) lipoproteins. LDL carries cholesterol from your liver to the cells that need it. If there is too much cholesterol for the cells to use, it can build up in the artery walls, leading to disease of the arteries.

Further information

Complications of diabetes

Harmful effects that may happen when a person has diabetes.

Some effects, such as hypos, can happen any time. Others develop when a person has had diabetes for a long time. These include damage to the retina of the eye (retinopathy), the blood vessels (angiopathy), the nervous system (neuropathy), and the kidneys (nephropathy).

Studies show that keeping blood glucose levels as close as possible to those of a person without diabetes may help prevent, slow, or delay harmful effects to the eyes, blood vessels, kidneys, and nerves.

Diabetes

Diabetes is the shortened name for the health condition called diabetes mellitus. Diabetes happens when the body cannot use blood glucose as energy because of having too little insulin or being unable to use insulin. See also Type 1 diabetes and Type 2 diabetes.

HbA1c test

The HbA1c test uses a blood sample to measure a person's average blood glucose level over the previous 2 to 3 months. The result is given in mmol/mol or as a percentage.

NICE

The National Institute for Health and Care Excellence (NICE) is the independent regulatory body providing national guidance to the NHS on new and existing medicines, treatments, and procedures.

NDA PUBLICATIONS

NDA: National Diabetes Audit

Care processes and treatment targets

Complications and mortality

Insulin pump

Learning disability

Severe mental illness

Transition

NPID: National Pregnancy in Diabetes Audit

NDFCA: National Diabetes Foot Care Audit

NaDIA: National Diabetes Inpatient Audit

We welcome
your views on how
we can improve
this report

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The National Diabetes Audit (NDA) is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit (NCA) programme.

The NDA is managed by NHS Digital, formerly known as the Health and Social Care Information Centre (HSCIC), in partnership with Diabetes UK and is supported by the National Cardiovascular Intelligence Network (NCVIN), Public Health England.

The NDA receives invaluable support from people with diabetes, clinical staff and other health professionals across England and Wales.

