



How good is diabetes care in England and Wales?

A summary of findings from
the National Diabetes Audit:

Care Processes and Treatment Targets
report 2015–16

ABOUT THIS REPORT

This report is for people with diabetes and their families, and anyone interested in the quality of diabetes care provided by the NHS. It summarises the latest findings of the National Diabetes Audit (NDA) for England and Wales and explains:

- the national guidelines for good quality diabetes care,
- recommendations for improvements to diabetes treatment and care.

The latest findings for the NDA are for 2015-16, which were published in January 2017 and can be downloaded [here](#).

At the back of the report is a glossary explaining some of the technical words and medical terms we have used. There is also a list of organisations that can provide further information.

Diabetes UK met and talked to people with diabetes, asking what audit information they wanted to see, and the best way of presenting it. We used their views to help create this report.

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ABOUT THE NATIONAL DIABETES AUDIT

What is the National Diabetes Audit?

The National Diabetes Audit (NDA) is a national clinical audit. Each year, the NDA collects information from GP practices and hospitals about the care they provide for people with diabetes. Specifically, it gathers information on:

- how many people with diabetes are registered at a GP practice or hospital diabetes clinic.
- whether each person registered has had the annual diabetes healthcare checks (or care processes) – we explain what these healthcare checks are on [page 6](#).
- whether each person with a diagnosis of diabetes in the past year has been offered diabetes structured education and whether they have attended.
- whether each person having these annual checks also achieved the national targets for blood glucose, blood pressure and blood cholesterol control. We explain what these targets are on [page 10](#).
- whether people with diabetes who have a learning disability receive the same level of care.

The 2015–16 audit collected information on nearly 2.72 million people with diabetes. This means the NDA gives a really good picture of diabetes care across England and Wales for this period.

NHS Digital (formerly the Health and Social Care Information Centre (HSCIC)) carries out the data collection, analysis and reporting for the NDA. Diabetes UK is a key partner in the NDA, working with NHS Digital to make sure there are contributions from both diabetes clinicians and people with diabetes to the NDA, and helping to communicate the report's findings.

Why audit diabetes services?

Clinical audits collect information about the quality of care provided to patients by the NHS. The reason why the NDA collects this information and produces reports is to:

- highlight where diabetes care is good and meets national guidelines
- show where care needs to improve



The [National Institute for Health and Care Excellence \(NICE\)](#) produces the guidelines for diabetes care in England. The Welsh Assembly government has published national guidelines in [Together for Health – A Diabetes Delivery Plan](#).

Doctors, nurses and other healthcare staff should follow these guidelines to make sure that the care they provide to people with diabetes meets the national standards. The information collected by the NDA shows whether services are meeting these standards.

The NDA findings are sent to every Clinical Commissioning Group (CCG) and GP practice that takes part in the audit in England. The findings are also sent to all Local Health Boards (LHBs) in Wales. The NDA asks all those who manage and provide diabetes care to review the findings and to look at where diabetes care is not meeting the standards. All services are encouraged to make plans to bring their service up to standard, where improvement is needed.

For more information about the NDA visit <http://content.digital.nhs.uk/nda>.

Diabetes UK and its volunteers use NDA evidence to support campaigns for better services. For more information about Diabetes UK's campaigns, visit www.diabetes.org.uk/Get_involved/Campaigning

A few things to note before reading this report

Data recording The NDA uses information about diabetes care that is routinely recorded on GP and hospital patient records. We know that information about diabetes care does not always get recorded on the patient record. Information that is not recorded won't be included in the NDA data. This is especially the case if diabetes care is delivered outside of a GP practice.

For example, courses to help people manage their diabetes (diabetes structured education) are often delivered in the community. Information about who attended these courses may be sent back to the GP practice, but not recorded on the relevant patient's record. The NDA team are working to make sure that all relevant information is recorded in future.

Diabetic eye screening Information about who has received their diabetic eye screening and the results of the screening is collected separately by the [NHS Diabetic Eye Screening Programme](#). The eye screening information is not currently included in the NDA reports. NDA team are working with the NHS, so that we can include data on diabetic eye screening in future reports.










If you would like to know more about how the data is collected and analysed, further information can be found in NHS Digital's [Methodology](#) report.

DIABETES HEALTHCARE CHECKS

AT LEAST
ONCE
A YEAR

What are the guidelines?










The NICE Clinical Guidelines outline the healthcare checks or care treatment targets for people with diabetes. According to these guidelines, every person over 12 years old with diabetes should receive the following nine healthcare checks at least once a year:

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

You can view and download all the NICE guidelines for diabetes care, including summary guidance for the public, from their [website](#).

What has the NDA found?

In 2015-16, the NDA provided data on eight of the nine diabetes checks in the reports. The table below shows the percentage of people with diabetes having each of the recommended checks in 2015–16, and compares these rates between those with Type 1 and Type 2 diabetes.

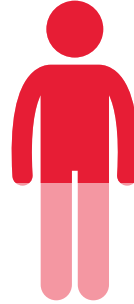
Care process recorded	Type 1	Type 2
 All 8 care processes	37%	54%
 HbA1c	84%	95%
 Blood pressure	89%	96%
 Cholesterol	79%	93%
 Kidney function	81%	95%
 Urinary albumin	50%	67%
 Foot exam	73%	87%
 Body mass index (BMI)	75%	83%
 Smoking review	78%	85%

The audit found that people with Type 1 diabetes are less likely than people with Type 2 diabetes to receive all of the eight¹ health checks.

ALL EIGHT DIABETES HEALTHCARE CHECKS

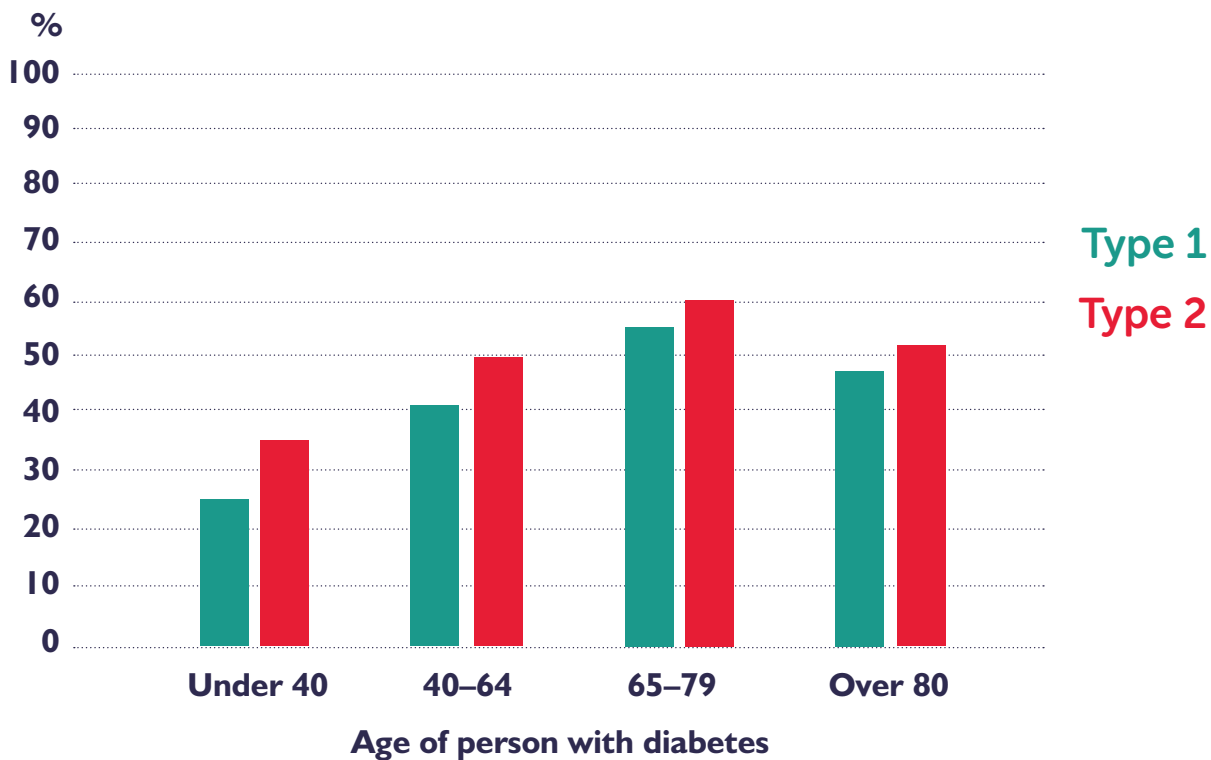


Type 1
37%



Type 2
54%

The audit also found that younger people are less likely to receive their annual diabetes checks than older people. The chart below shows that people with diabetes under the age of forty were less likely to have received all their checks than older people with diabetes.

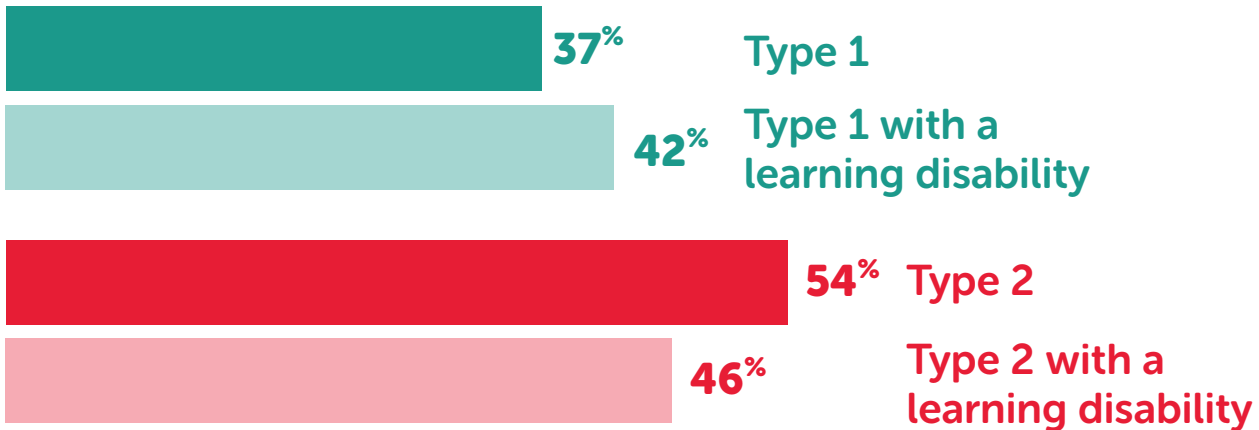


¹ The NHS Diabetic Eye Screening Programme collects data on eye screening
<http://diabeticeye.screening.nhs.uk/>

People with learning disabilities

This year, the NDA collected data about people with a learning disability who have diabetes. The audit found that people with a learning disability who have Type 1 diabetes are more likely to get their annual diabetes checks than the general population of people with diabetes. However, those with Type 2 diabetes and a learning disability are less likely to get their checks.

ALL EIGHT DIABETES HEALTHCARE CHECKS



Is diabetes care the same across the country?

The NDA also looks at the data for each CCG area in England and LHB area in Wales, and compares the findings between CCGs/LHBs. The audit found that there is a lot of difference between areas, with more people getting all of the diabetes checks in some areas compared to others. At best, 61% of people with Type 1 diabetes received all the care checks in one CCG/LHB area and at worst it was 13% in another CCG/LHB area. For people with Type 2 diabetes, it varied from 88% getting all the checks to only 25% in the worst CCG/LHB area.

If you are interested in finding out how your CCG or LHB compares, please visit the NHS Digital [website](#) to view your CCG/LHB report. If you live in England, you can also find out whether your GP practice participated and look at how they compare to others.

DIABETES TREATMENT TARGETS

What are the guidelines?

There are treatment targets recommended in the NICE Clinical Guidelines. They are recommended because achieving them reduces the risk of future complications. The targets are:

- an HbA1c of 58mmol/mol (or 7.5%) or less
- a total cholesterol level of below 5mmol/l
- blood pressure reading of less than 140/80mm/Hg¹



Why are diabetes healthcare checks and treatment targets important?

If a person with diabetes has prolonged periods of time with higher than normal glucose levels, or high blood cholesterol or blood pressure, it can eventually cause problems. These include health complications, such as blindness, kidney failure, amputation, heart disease and stroke.

This is the main reason why it is essential that everyone with diabetes receives the nine healthcare checks every year. The results of the checks can show whether they are at risk of developing health complications and whether they have developed the earliest stages of complications. For example, the blood pressure check will show if a person needs medication to bring their blood pressure level down. Or a foot check may show an increased risk of ulcers, which may require regular follow-up with a podiatrist.

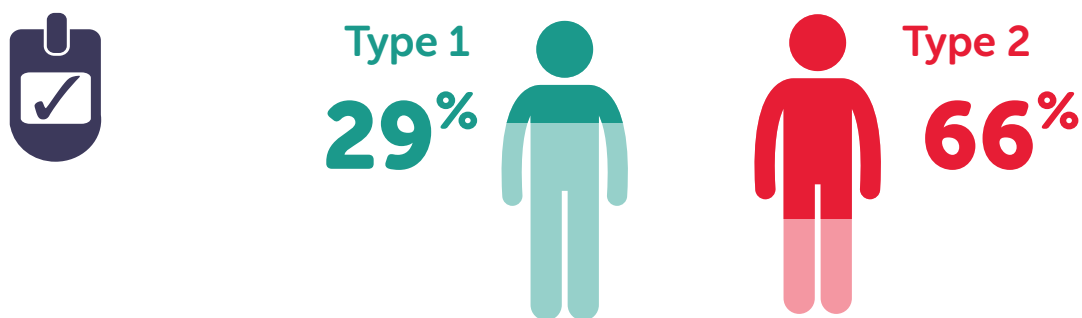
Healthcare professionals should work in partnership with people with diabetes to agree a personalised care plan to help them achieve the recommended targets.

What has the NDA found?

Under a third (29%) of people with Type 1 diabetes are achieving the recommended HbA1c target of 58 mmol/mol (7.5%) or less. This means that 71% of people with Type 1 diabetes have an increased glucose level, which can lead to an increased risk of developing complications.

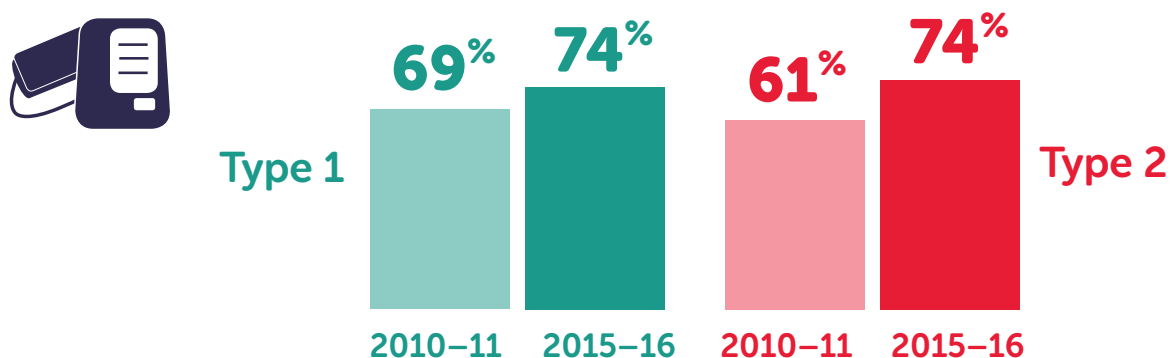
¹ The blood pressure target used by the NDA does not exactly match the NICE guidelines. The target used is $\leq 140/80$, which is the same as the relevant QOF indicator. More information can be found [here](#).

HbA1c 58MMOL (7.5%) OR LESS



Approximately three quarters of all people with diabetes are achieving the blood pressure target. The infographic below shows that there has been a big improvement in the past five years.

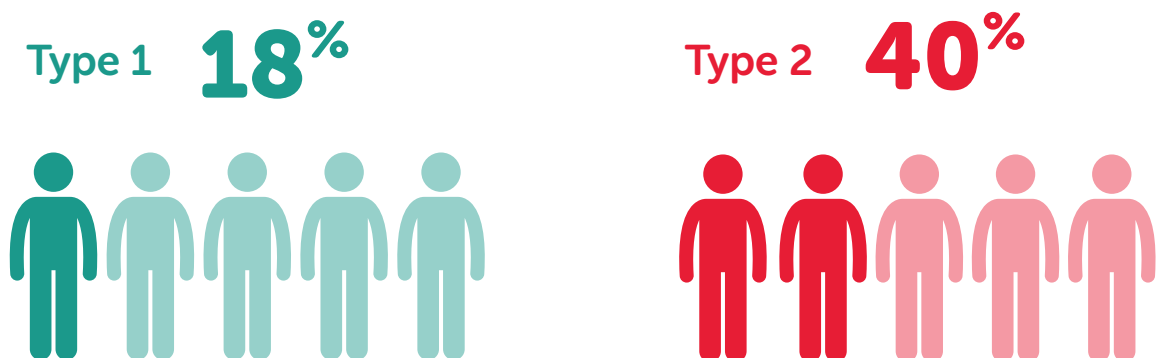
BLOOD PRESSURE 140/80 OR LESS



A similar percentage are achieving the cholesterol target of less than 5mmol/mol, with 71% of people with Type 1 and 77% of people with Type 2 achieving the recommended target.

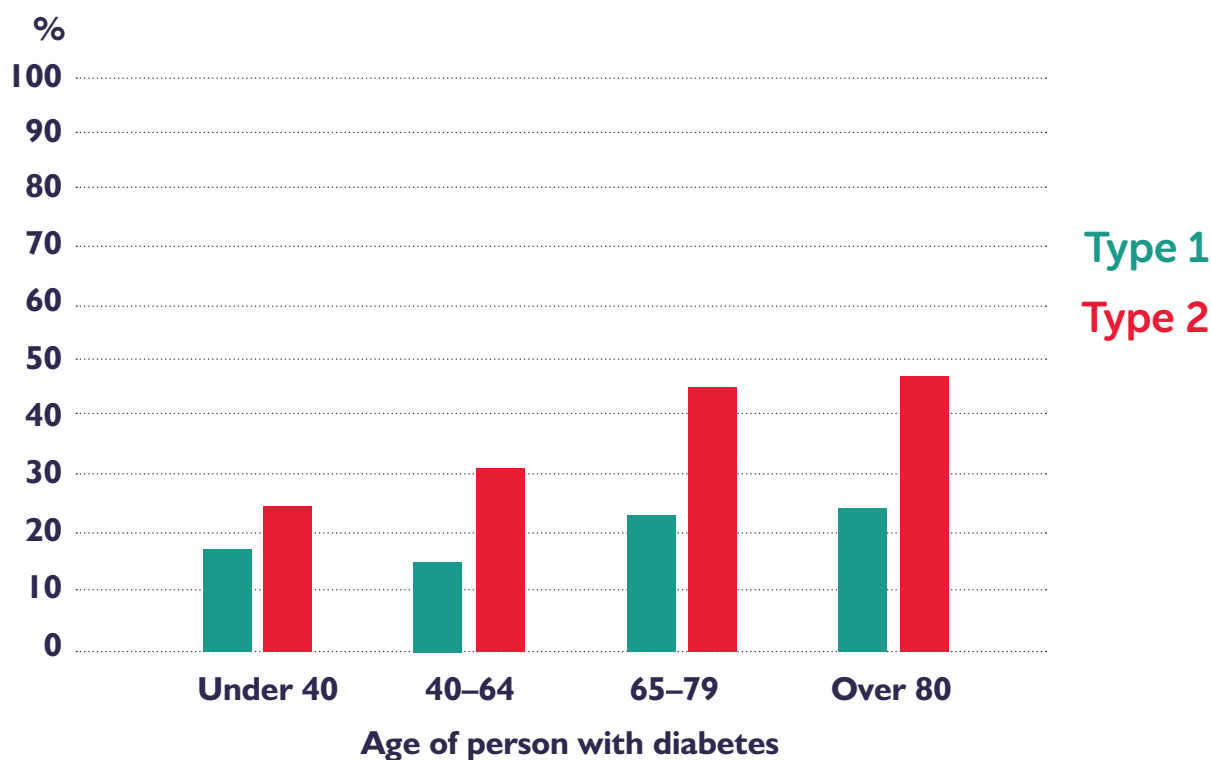
However, the percentage of people with diabetes achieving all three treatment targets is much lower. More than four in five (82%) of people with Type 1 and three in five (60%) people with Type 2 **not** meeting the targets.

MEETING ALL THREE TREATMENT TARGETS



This means that the risk of developing health complications could be reduced in 82% of people with Type 1 diabetes and 60% of people with Type 2 diabetes.

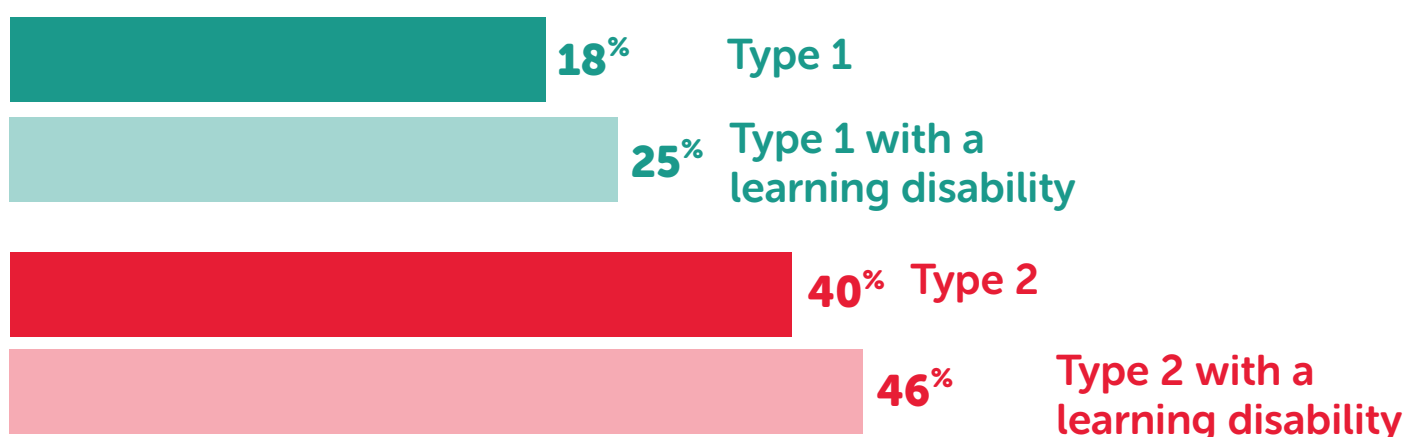
The audit also found that younger people with diabetes were less likely than their older people to achieve all three NICE treatment targets. The chart below shows that those over 65 were more likely to achieve all targets. However, for those with Type 1 diabetes this is less than 40% whatever their age.



People with learning disabilities

The audit found that people with a learning disability who have either Type 1 or Type 2 diabetes are more likely to achieve all 3 treatment targets than the general population of people with diabetes.

MEETING ALL THREE TREATMENT TARGETS



Is achievement of the treatment targets the same across the country?

There is a huge variation in the rate of achievement of all 3 treatment targets across England and Wales. For people with Type 1, this varies from 10% achieving all 3 treatment targets in one CCG/LHB to 34% in another.

The variation between CCGs/LHBs is smaller for people with Type 2, ranging from 33% to 49% achieving the three targets.



DIABETES STRUCTURED EDUCATION

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

What are the guidelines?

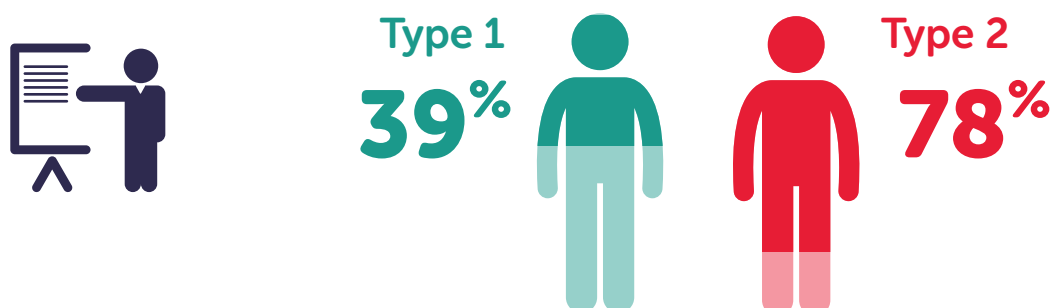
NICE Clinical Guidelines recommend that people with diabetes are offered a course to help improve their understanding of diabetes and how to manage it in everyday life. These courses are called diabetes structured education and include courses such as DAFNE for Type 1 or DESMOND/XPERT for Type 2. Diabetes structured education should be offered to people with diabetes within a year of diagnosis.

What has the NDA found?

The NDA shows that there has been a large increase in the percentage of people with diabetes being offered diabetes structured education within one year of diagnosis. This increase may be due to an increase in the number of people recorded as having been offered diabetes structured education (see box on [p5](#)).

In 2009, only 5% of people with Type 1 diabetes were offered structured education within one year of diagnosis. In 2014, this has risen to 39%. More people with Type 2 diabetes were offered education than people with Type 1 diabetes.

OFFERED STRUCTURED EDUCATION WITHIN ONE YEAR OF DIAGNOSIS (2014)



The audit also looked at whether people with diabetes had been offered diabetes structured education at any time. 46% of people with Type 1 diabetes and 90% of people with Type 2 diabetes have been offered structured education at any time.

The data that is collected on people *attending* diabetes structured education shows that less than 10% of people (diagnosed in 2014) attended structured education within a year of being diagnosed.

The data for the audit is collected from GP practices and we are aware that not all information about structured education is kept on GP records. This means that the actual percentage is likely to be higher. We are working to improve the recording of structured education, so that in future years, we will have a more accurate picture.

Diabetes UK's campaign *Taking Control* is working to make sure that more people with diabetes are both offered and go on to attend diabetes education courses. If you'd like to find out more, please visit the [Diabetes UK website](#).

LESS THAN
10%
ATTENDED

RECOMMENDATIONS

For people with diabetes

If you have diabetes, it is important to keep blood glucose, blood pressure and blood cholesterol levels within the recommended target. This will help reduce the risk of developing complications. Lifestyle changes such as stopping smoking, cutting down on salt and alcohol, and taking regular exercise can help reduce risks.

Diabetes management starts with knowing the results of your annual health checks. The results of the checks will provide important information about whether adjustments to your diabetes management are needed. If you do need to make adjustments, your doctor or nurse should work with you to agree an individual care plan. Your care plan should take into account the results of your checks and your individual circumstances.

Diabetes UK recommends that people with diabetes use the [15 healthcare essentials](#) checklist. This gives details of the nine NICE recommended annual health checks, along with other important parts of diabetes care that should be provided as a minimum to all people with diabetes.

If you have any questions or concerns about your checks or if there are any checks you are not getting, it is important to speak to your doctor or nurse. You may find it helpful to take a copy of the checklist with you to help with your discussion.



Have a look at the NDA findings for your GP practice

Diabetes UK have produced an easy to access tool, which provides this information for each GP practice in England, CCG and LHB area and shows how each area compares with the rest of England and Wales. Go to Diabetes UK's [Diabetes Watch Online Tool](#).

Help to improve care in your local area

People with diabetes can also help make a difference to diabetes services and care by joining Diabetes Voices. This is a network of volunteers working with Diabetes UK to campaign for, and influence change. Go to [Diabetes Voices](#) to find out more and join.

For diabetes services

All general practices and hospital diabetes services should take part in the NDA. Providing data on the diabetes care they provide will allow them to compare their services with others and to see where improvements in care are needed.

The findings of the NDA 2015–16 highlight where improvement in diabetes care needs to be made. Diabetes services should:

- look at how they organise yearly treatment reviews for people with diabetes, ensuring that patients are offered all nine healthcare checks, with their results recorded and shared with the patient or their carer.
- encourage people with diabetes to attend structured patient education – the aim is to support people in diabetes self-management to give them the best chance of achieving the treatment targets and reduce their risk of developing health complications.
- identify ways to improve access and uptake of diabetes checks for people with diabetes of working age and younger.
- explore ways to support people with diabetes of working age and younger 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 nine healthcare checks and the person's circumstances.



People with diabetes must be encouraged to take part in discussions about their diabetes care. They should also have support and information to help them decide about their treatment and care. Getting all the checks, seeing the right healthcare professionals receiving structured education and understanding their condition are all essential in helping people manage their diabetes.

GLOSSARY

Explaining technical words and medical terms used in this report

Clinical audit

A way to measure the performance and the quality of care of local NHS organisations against national guidelines and use the information to suggest improvements.

Blood creatinine

A substance found in blood plasma and urine. Raised levels of creatinine in the blood can be a sign of kidney disease.

Blood glucose

The main sugar the body makes from the food we eat. Glucose moves around the body through the bloodstream, delivering energy to all the body's living cells. However, to release the glucose the cells must also have insulin.

Blood pressure

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

Body mass index (BMI)

A measure of total body fat that includes a person's weight and height. For adults, a BMI of 30 or more is obese. For children, proper determination of BMI depends on the child's age and sex. A BMI that is too high or too low can lead to increased health risks.

Cholesterol

A substance similar to fat found in the blood, muscles, liver, brain, and other body tissues.

Proteins carry cholesterol through your bloodstream, and when the two combine, we call them lipoproteins. There are both harmful and protective lipoproteins – known as LDL and HDL – and also called 'bad' and 'good' cholesterol.

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.

Clinical commissioning group (CCG)

CCGs commission most of the hospital and community NHS services needed in a local area. They decide on the services needed, and arrange for their provision. All GP practices now belong to a CCG.

Complications of diabetes

These are potentially harmful physical conditions that can develop as a side effect of diabetes.

Some, like hypoglycaemia, can happen any time. Others develop when a person has had diabetes for months or year. 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 to the normal range as possible helps prevent, slow, or delay harmful effects to the body including eyes, kidneys, nerves, heart and brain.

Diabetes

The short name for the health condition called diabetes mellitus. Diabetes results when the body cannot use blood glucose as energy because of having none or too little insulin, or being unable to use insulin fully. See also Type 1 diabetes and Type 2 diabetes.

HbA1c test

A test that shows the average glucose level in the blood over the last three months. The result will show if blood sugar is within the recommended levels.

Local Health Board (LHB)

LHBs are responsible for delivering all NHS healthcare services within a defined geographic area of Wales.

National service framework (NSF) for diabetes

A document describing all the different diabetes services that local health services should provide throughout the country.

National Institute for Health and Care Excellence (NICE)

NICE provides national guidance and advice to improve health and social care. It develops standards, and information on ways to promote healthy living and prevent ill health.

Primary care

The professional health services including, GPs, dentists, opticians and pharmacists you receive that are not part of a main hospital service.

Retinopathy

A disease of the small blood vessels in the retina of the eye, which can lead to blindness if not treated correctly.

Secondary care

Care you receive at a hospital, either as an outpatient or in-patient.

Treatment targets

The recommended levels or measurement for each of the healthcare checks. Achieving them helps a person with diabetes avoid health problems or complications.

Type 1 diabetes

A condition in which the pancreas makes little or no insulin so the body can't use blood glucose as energy. A person must control Type 1 diabetes by taking daily insulin.

Type 2 diabetes

A condition in which the body either makes too little insulin or can't use the insulin it makes to use blood glucose as energy. Type 2 diabetes is often successfully controlled through diet and exercise. Some people with type 2 diabetes have to take medicine or insulin.

Urinary microalbumin

A protein found in blood plasma and urine. The presence of microalbumin in the urine can be a sign of kidney disease.

WHERE TO GO FOR MORE INFORMATION

Community Health Councils (Wales)

If you live in Wales and have a question about local health services or an enquiry about health matters [Community Health Council](#)

Diabetes UK

For more information about diabetes and living with the condition go to <https://www.diabetes.org.uk/Guide-to-diabetes>

or call Diabetes UK's Careline on **0345 123 2399** for advice and support.

If you want to help make a difference to diabetes services and care, find out more about joining [Diabetes Voices](#)

Find out more about Diabetes UK's work in [your area](#)

Diabetes UK Cymru

Find out more about Diabetes UK's work in [Wales](#)

Healthcare Quality Improvement Partnership (HQIP)

To find out more about clinical audits and patient involvement in national clinical audits. [HQIP website](#)

National Diabetes Audit (NDA)

Information about the NDA, and copies of their current and previous reports, are on NHS Digital's [website](#)

National Institute for Health and Care Excellence (NICE) guidelines

There is more information about NICE and how they develop guidelines on their [website](#)

Guidelines about diabetes include:

- *Type 2 Diabetes in Adults: Management. NICE guidelines (NG28 – 2015)*
- *Type 1 Diabetes in Adults: Diagnosis and Management. NICE guidelines (NG17 – 2015)*
- *Diabetes in Adults Quality Standard (QS6)*

You can download the full guidance or a summary for the public from the [diabetes](#) section of their website.

NHS Choices (England)

Provides information about your health, and finding and using NHS Services in England.

[NHS Choices](#)

Patient Advice and Liaison Service (PALS)

If you have a question about local health services or an enquiry about health matters

[PALS](#)

Together for Health: a Diabetes Delivery Plan (Wales)

Sets out the Welsh Government's expectations of the NHS in Wales to tackle diabetes

[Together for Health – A Diabetes Delivery Plan](#)

We welcome your views on how we can improve this report. Please contact:

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