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

A summary report of the National Diabetes Audit: Care Processes and Treatment Targets 2017/18
Contents

Report at a glance 2017/2018 3

Background 4
- About this report 4
- Diabetes healthcare checks 5

The results 6
- GP recording 6
- Annual diabetes healthcare checks 6
- Diabetes treatment targets 7
- Structured education 8

Our recommendations 9
- For people with diabetes 9
- For diabetes services 9
- For commissioners 10
- Factors for a successful specialist service 10

Further information 11
- What is the National Diabetes Audit? 11
- Why do we audit care for people with diabetes? 11
- Where to go for more information 11
- Explanation of words used in this booklet 12
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**

**ENCOURAGING**

- **HbA1c checked annually**
  - 85% Type 1
  - 95% Type 2

- **Blood pressure targets**
  - 74% achieving targets

- **Structured education**
  - Increase in people offered structured education within 1 year of diagnosis

**IMPROVEMENT NEEDED**

- **Recommended annual health checks**
  - Only 2 in 5 Type 1
  - Only 3 in 5 Type 2

- **Achieving all three targets**
  - Less than 1 in 5 Type 1
  - Less than 2 in 5 Type 2

- **Structured education**
  - Less than 1 in 10 (10%)

**WE SAY**

These results show that there have been some improvements in diabetes care but there is still a need for considerable improvements in many areas. There are big differences in outcomes between services, between:

- Younger and older people with diabetes and
- People with Type 1 and Type 2 diabetes.

Finding out why will be an important part of improving diabetes care.
In June 2019, NHS Digital published the National Diabetes Audit (NDA): Care Processes and Treatment Targets 2017/18 report. This report has been prepared by Diabetes UK and summarises the information 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?
- For people with diabetes, what are the rates of acute and long term complications (disease outcomes)?

As well as the national level report, NHS Digital has 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.

### Background

In June 2019, NHS Digital published the National Diabetes Audit (NDA): Care Processes and Treatment Targets 2017/18 report. This report has been prepared by Diabetes UK and summarises the information 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?
- For people with diabetes, what are the rates of acute and long term complications (disease outcomes)?

As well as the national level report, NHS Digital has 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.

### About this report

In this report we explain:

- What the national guidelines say about good quality diabetes care
- The main findings from the 2017/18 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 2017/18 audit includes information on nearly 3.4 million people with diabetes, which is 6.8% of the population of England and Wales. The prevalence of diabetes has generally increased year on year since the first audit.

Over 98% of all GP practices in England and Wales submitted their information to us. This means that the audit gives a really good picture of diabetes care across England and Wales during this period. Data is also collected from specialist diabetes services. These services generally take the lead in care for people with Type 1 diabetes and also often for young people with Type 2 diabetes.

Annual diabetes healthcare checks

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

Only 4 in 10 people with Type 1 diabetes receive all 8 diabetes healthcare checks. Nearly 6 in 10 people with Type 2 diabetes receive these checks. The table below shows the percentage of people with diabetes having each one of the recommended checks in 2017/18. 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 2012/13. A blue line means the percentage has stayed the same.

<table>
<thead>
<tr>
<th>HEALTHCARE CHECK COMPLETED</th>
<th>TYPE 1</th>
<th>TYPE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 8 healthcare checks</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>HbA1c</td>
<td>85%</td>
<td>95%</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>91%</td>
<td>96%</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>80%</td>
<td>93%</td>
</tr>
<tr>
<td>Kidney function</td>
<td>83%</td>
<td>95%</td>
</tr>
<tr>
<td>Urinary albumin</td>
<td>51%</td>
<td>66%</td>
</tr>
<tr>
<td>Foot exam</td>
<td>74%</td>
<td>86%</td>
</tr>
<tr>
<td>Body mass index (BMI)</td>
<td>82%</td>
<td>95%</td>
</tr>
<tr>
<td>Smoking review</td>
<td>90%</td>
<td>95%</td>
</tr>
</tbody>
</table>

The percentage of people with Type 1 diabetes receiving all 8 diabetes healthcare checks has only risen slightly since 2012/13. For people with Type 2 diabetes the rates have fallen slightly in this time. Too many people are missing out on these important health checks and there is too much variability between different services and localities. Younger people are less likely to receive their annual diabetes healthcare checks than older people. Compared to the general population with Type 2 diabetes those with a learning disability and Type 2 diabetes are less likely to receive all 8 healthcare checks. The same is true for people with a severe mental illness and Type 2 diabetes.
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. Commissioners, specialist services and GP practices should look at their benchmarked local data and choose a priority for improvement.

**Diabetes treatment targets**

Do people with diabetes meet the NICE defined treatment targets?

The results

**WE SAY**

**NICE Guidelines** recommend treatment targets for glucose control, blood pressure and cardiovascular disease (CVD) risk reduction. The treatment targets were updated by NICE in 2015/16 and now differ between **Type 1** and **Type 2** diabetes.

<table>
<thead>
<tr>
<th>TREATMENT TARGETS ACHIEVED</th>
<th>TYPE 1</th>
<th>TYPE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c</td>
<td>29.9%</td>
<td>65.8%</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>74.8%</td>
<td>73.8%</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>70.3%</td>
<td>40.1%</td>
</tr>
<tr>
<td>All 3 OLD treatment targets</td>
<td>18.6%</td>
<td>40.1%</td>
</tr>
<tr>
<td>Statins for combined prevention of CVD</td>
<td>68.9%</td>
<td>76.1%</td>
</tr>
<tr>
<td>All 3 NEW treatment targets</td>
<td>17.1%</td>
<td>39.5%</td>
</tr>
</tbody>
</table>

Target HbA1c reduces the risk of all diabetes complication (eyes, kidney and nerve damage) and reduces cardiovascular risk.

Target blood pressure reduces cardiovascular risk and reduces the progression of eye and kidney disease.

Statins reduce cholesterol and cardiovascular risk.

The 2017/18 audit is the first time the new treatment targets have been reported on. Less than 1 in 5 people with Type 1 diabetes meet all 3 treatment targets. 2 in 5 people with Type 2 diabetes meet these targets.

The table below shows the percentage of people with diabetes meeting each of these targets in 2017/18. It compares the rates between those with Type 1 and Type 2 diabetes. Next to each treatment target is an arrow that shows whether the percentage of people meeting the target has improved (green upwards arrow) or got worse (red downwards arrow) since 2012/13. A blue line means the percentage has stayed the same. The percentages for stations for combined prevention of CVD and all 3 new treatment targets is black because this is the first time this data has been reported on so comparisons with previous audit years cannot be made.

These targets are recommended because achieving them reduces the risk of future complications.
The results

There were similar levels of people meeting all 3 old treatment targets between 2012/13 and 2017/18 for people with Type 1 and Type 2 diabetes
Only 3 in 10 people with Type 1 diabetes meet the HbA1c target rate compared with over 6 in 10 people with Type 2 diabetes
Lower rates of statins prescribed for CVD risk reduction for people with Type 1 diabetes compared to Type 2 diabetes, despite greater CVD risk

Healthcare professionals should work in partnership with people with diabetes to agree a personalised care plan to help them achieve the recommended targets. Achieving these targets reduces the risk of future complications.

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.

In 2017/18 50% of people with Type 1 diabetes and 90% of Type 2 diabetes had been offered a structured education course at some point.

<table>
<thead>
<tr>
<th></th>
<th>TYPE 1</th>
<th>TYPE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offered structured education within 1 year of diagnosis</td>
<td>38%</td>
<td>75%</td>
</tr>
<tr>
<td>Offered structured education (no time limit)</td>
<td>49%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Offers of structured education have improved since 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.

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.

We Say
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
- Review the results for your local service and consider asking questions locally if your area appears to need improvement

For diabetes services

- 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 check
- 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
- Seek new approaches to improving management for younger people
- Choose a priority for improvement then develop and implement improvement plans
- Use the [NDA Quality Improvement](#) guides to help plan and test improvements
- Continue to offer patients structured education, advocating it enthusiastically
- Check that people have attended their structured education course and that this is recorded in the clinical system
- Work with commissioners and education service providers to improve ways of recording attendance at diabetes structured education courses
Our recommendations

For commissioners

- Challenge services in your area which are in the lowest quartiles
- Spread knowledge of the systems used by those services in the upper quartiles
- Ensure structured education programmes can be easily accessed
- Support trials of new approached to improving the management of younger people

Factors for a successful specialist service

In 2018 specialist services with the highest HbA1c target achievement rates, which had more than 500 patients with Type 1 diabetes were asked to identify factors that they believed contributed to their success.

Responses were received from two thirds of these specialist Type 1 services. They identified a number of themes that they believe contribute to their relative success.

**ALL SERVICES REPORTED:**
- Commitment to Type 1 diabetes care
- Desire to do better
- Dedicated pump clinics
- Importance of structured education

**AT LEAST 50% OF SERVICES REPORTED:**
- Type 1 service DSN training and rotation
- Dedicated medical staff for Type 1 diabetes care
- Psychology service availability
- Integration with community services
- Multi-Disciplinary Team working style
- Advice/support available via phone/email/Skype
- Continuous Glucose Monitors and/or DIASEND

**WE SAY**

It would be good to reduce the wide disparities between services. We hope that this feedback may be helpful to all specialist Type 1 service providers.
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 2003/04 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 NDA supports improvements in the quality of diabetes care by enabling NHS services to:

- Assess local practice against NICE guidelines
- Compare their care and outcomes with similar services

Where to go for more information

The National Diabetes Audit


Diabetes UK

For more information about diabetes, including living with diabetes, go to [www.diabetes.org.uk/guide-to-diabetes](http://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](http://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](http://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

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

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.

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.

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.

Type 1 diabetes
Type 1 diabetes develops when the body permanently destroys its own insulin-producing cells. When this happens a person needs regular insulin, given either by injection or an insulin pump.

Type 2 diabetes
A condition in which the body either makes too little insulin, or cannot use the insulin it produces to turn blood glucose into energy. Diet and exercise is often enough to control a Type 2 diabetes condition, but some people also need diabetes medication or insulin.
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.

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

Please contact:
Alex Berry
Diabetes UK
Wells Lawrence House
126 Back Church Lane
London E1 1FH

T: 020 7424 1013
E: alex.berry@diabetes.org.uk

NDA PUBLICATIONS

NDA: National Diabetes Audit
Care processes and treatment targets
Complications and mortality
Insulin pump
Transition

NPID: National Pregnancy in Diabetes Audit

NDFA: National Diabetes Foot Care Audit

NaDIA: National Diabetes Inpatient Audit

NDPP: National Diabetes Prevention Programme Audit