National Diabetes Audit, 2015-2016

Report 1: Care Processes and Treatment Targets Learning Disability - Supplementary Information

England and Wales

31 January 2017

Prepared in collaboration with:

The Healthcare Quality Improvement Partnership (HQIP). The National Diabetes Audit is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit Programme (NCA). HQIP is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. Its aim is to promote quality improvement, and in particular to increase the impact that clinical audit has on healthcare quality in England and Wales. HQIP holds the contract to manage and develop the NCA Programme, comprising more than 30 clinical audits that cover care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England, the Welsh Government and, with some individual audits, also funded by the Health Department of the Scottish Government, DHSSPS Northern Ireland and the Channel Islands.

NHS Digital is the new name for the Health and Social Care Information Centre. NHS Digital managed the publication of the 2015-16 National Diabetes Audit (NDA) annual report.

Diabetes UK is the largest organisation in the UK working for people with diabetes, funding research, campaigning and helping people live with the condition.

Supported by:

The national cardiovascular intelligence network (NCVIN) is a partnership of leading national cardiovascular organisations which analyses information and data and turns it into meaningful timely health intelligence for commissioners, policy makers, clinicians and health professionals to improve services and outcomes.

Introduction

For the first time this year information has been collected on learning disabilities within the National Diabetes Audit.

The diabetes care received by people with a learning disability can now be compared with the care received by all people with diabetes.

Key Findings

- A learning disability is more common in people with diabetes than in the general population.

- People with a learning disability who have Type 1 diabetes are more likely to receive their annual checks whilst those with Type 2 and other diabetes are less likely to receive them.

- People with a learning disability who have either Type 1 or Type 2 and other diabetes are more likely to achieve their treatment targets than their peers.

Recommendations

- Services should be aware that the audit data shows that a learning disability is more common in people with diabetes than in the general population as presently reported in QOF*

- Services should ensure that they are able to support people with a learning disability within the diabetic care they provide.

*http://www.content.digital.nhs.uk/catalogue/PUB22266 in England
http://gov.wales/statistics-and-research/general-medical-services-contract/?lang=en in Wales

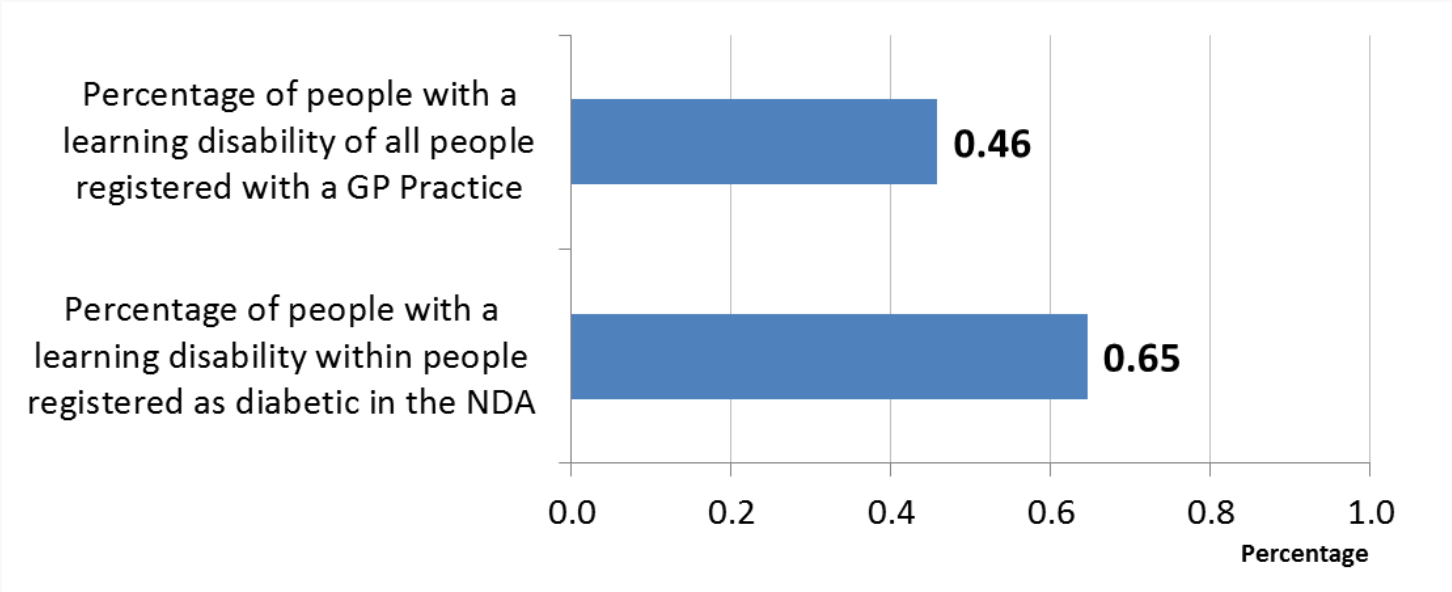
National Diabetes Audit 2015-2016

What is the prevalence of learning disabilities in people with diabetes?

Prevalence of Learning Disability

Key Finding

Learning disabilities is about forty per cent more common in people with diabetes than in the general population[5].



Of the 2,646,701 people registered at a GP practice in the NDA 2015-16, 17,078 were diagnosed with a learning disability. Of these 1,785 have Type 1 diabetes and 15,293 have Type 2 or other.

#. Please see full list of footnotes in the definitions and footnote section

National Diabetes Audit 2015-2016

Is there a difference in the care process completion for those with a learning disability?

Care Processes

All people with diabetes aged 12 years and over should receive all of the nine NICE recommended care processes[1,2] and attend a structured education programme when diagnosed.

Nine Annual Care Processes for all people with diabetes aged 12 and over	
Responsibility of Diabetes Care providers (included in the NDA 8 Care Processes)	
1. HbA1c (blood test for glucose control)	**5. Urine Albumin/Creatinine Ratio** (urine test for kidney function)
2. Blood Pressure (measurement for cardiovascular risk)	**6. Foot Risk Surveillance** (foot examination for foot ulcer risk)
3. Serum Cholesterol (blood test for cardiovascular risk)	**7. Body Mass Index** (measurement for cardiovascular risk)
4. Serum Creatinine (blood test for kidney function)	**8. Smoking History** (question for cardiovascular risk)
Responsibility of NHS Diabetes Eye Screening (screening register drawn from practices)	
9. Digital Retinal Screening (photographic eye test for eye risk)	

1,2. Please see full list of footnotes in the definitions and footnote section

Care Processes

Key Finding

People with a learning disability who have Type 1 diabetes are more likely to receive all their annual checks whilst those with Type 2 diabetes are less likely to receive them.

The main discrepancy is in the rate of urine albumin checks in Type 2 diabetes.

Table 1: Percentage of people with diabetes receiving NICE recommended care processes by care process, diabetes type and learning disability diagnosis, standardised by age and sex, 2015-2016

England and Wales

	Type 1		Type 2 and other[3]	
	Learning disability	NDA	Learning disability	NDA
HbA1c	87.7	83.7	93.7	95.0
Blood pressure	89.2	89.1	95.9	95.7
Cholesterol	80.8	79.1	90.6	92.7
Serum creatinine	83.1	81.5	94.0	94.7
Urine albumin*	53.1	50.2	57.1	66.7
Foot surveillance	74.5	72.9	82.8	86.7
BMI	80.7	75.2	83.4	82.7
Smoking	82.8	78.5	86.3	85.2
Eight care processes [4]	**41.7**	**36.5**	**46.0**	**53.7**

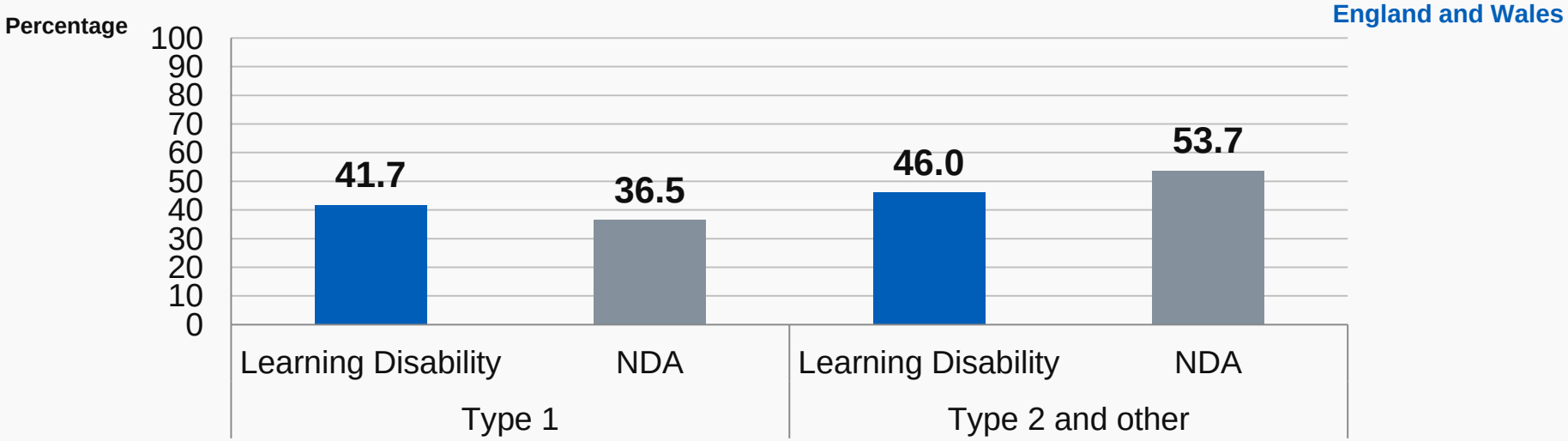
3,4. Please see full list of footnotes in the definitions and footnote section

Care Processes

Key Finding

People with learning disability who have Type 1 diabetes are more likely to receive their annual checks whilst those with Type 2 and other diabetes are less likely to receive them compared to the general diabetic population.

Figure 1: Percentage of all people with diabetes receiving all eight NICE recommended care processes[4] by diabetes type, and learning disability, standardised by age and sex, 2015-2016



4. Please see full list of footnotes in the definitions and footnote section

Structured Education

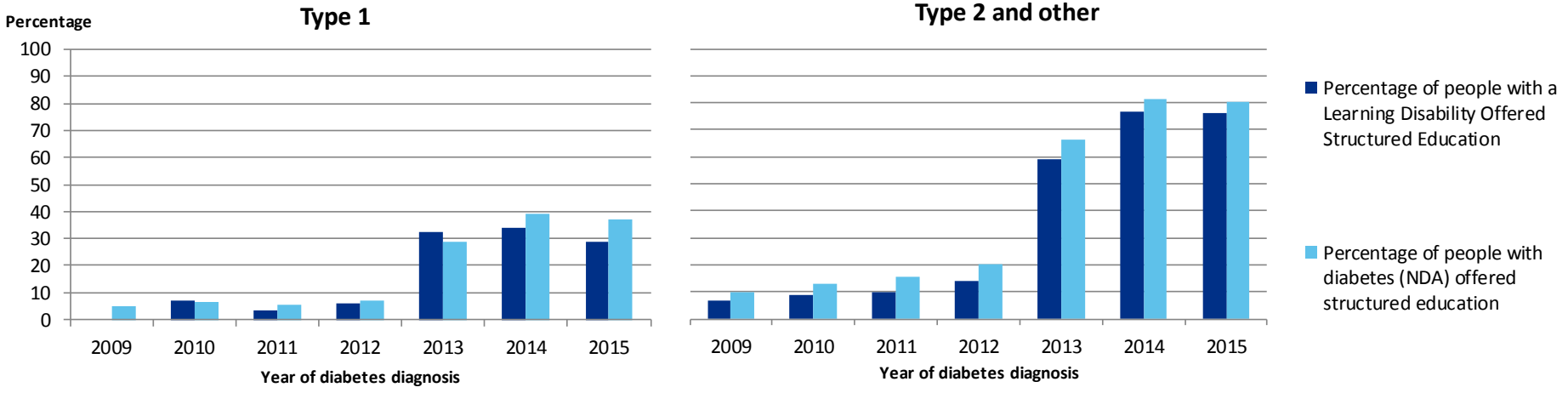
Key Finding

People with a learning disability are similarly likely to be offered structured education as those without.

The data completeness for attendance at structured education is low across the entire audit. Therefore meaningful analysis is not possible for people with a learning disability.

Figure 2: Percentage of people diagnosed with diabetes that have been offered structured education within one year of diagnosis by learning disability, 2015-16

England and Wales



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Is there a difference in the achievement of the NICE defined treatment targets for glucose control, blood pressure and blood cholesterol for those with a learning disability?

Treatment Targets

NICE recommends treatment targets for HbA1c (glucose control), blood pressure and serum cholesterol:

- Target HbA1c reduces the risk of all diabetic complications.
- Target blood pressure reduces the risk of vascular complications and reduces the progression of eye disease and kidney failure.
- Target cholesterol reduces the risk of vascular complications.

Treatment Targets

Key Finding

People with a learning disability who have Type 1 or Type 2 diabetes are more likely to achieve each of their treatment targets.

Table 2: Percentage of people with diabetes achieving their NICE recommended treatment targets by diabetes type and learning disability diagnosis, standardised by age and sex, 2015-2016

England and Wales

	Type 1		Type 2 and other[3]	
	Learning Disability	NDA	Learning Disability	NDA
$HbA1_c$ ≤ 58 mmol/mol	31.8	29.2	69.5	65.7
Blood Pressure ≤ 140/80*	80.2	75.6	77.1	73.6
Cholesterol < 5mmol/L	76.1	70.8	81.5	77.1
Meeting all three treatment targets	**24.7**	**18.1**	**46.0**	**40.2**

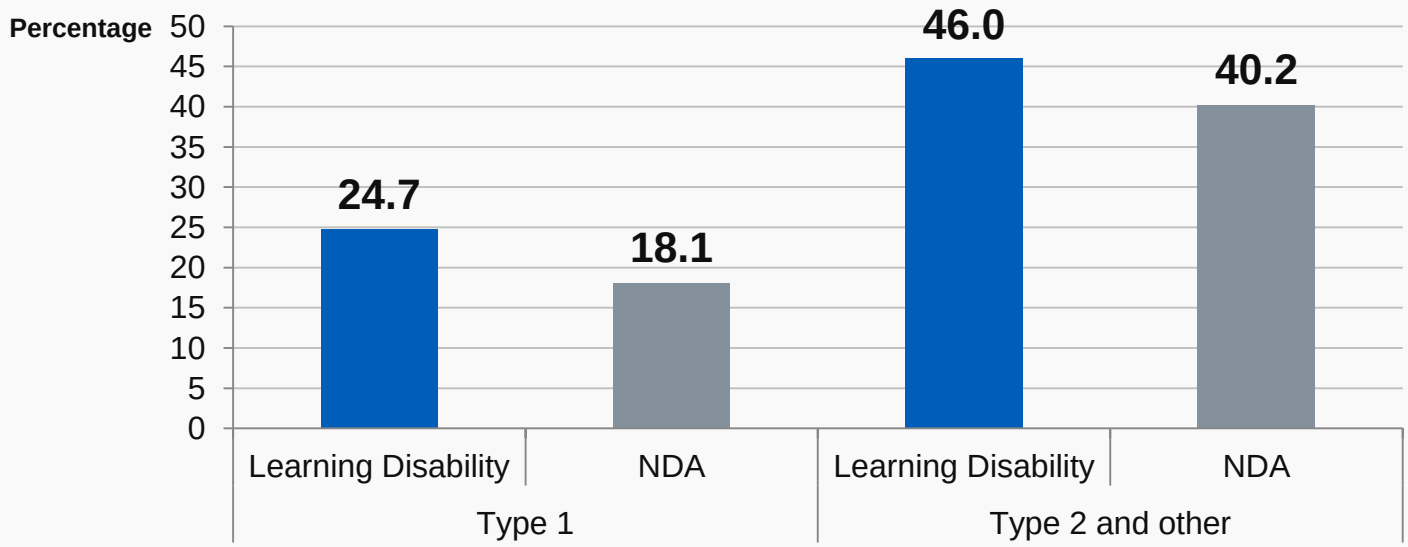
3,4. Please see full list of footnotes in the definitions and footnote section

Treatment Targets – Learning disability

Key Finding

People with a learning disability who have Type 1 or Type 2 and other diabetes are more likely to achieve all three of their treatment targets compared to their peers.

Figure 3: Percentage of all people with diabetes achieving all three treatment targets by diabetes type and learning disability, standardised by age and sex, 2015-2016



England and Wales

4. Please see full list of footnotes in the definitions and footnote section

National Diabetes Audit 2015-2016

Definitions, footnotes, data sources and further reading

Definitions

Care Processes (NICE recommends all of these at least once a year)

Blood Pressure is a measurement of the force driving the blood through the arteries. Blood pressure readings contain two figures, e.g.130/80. The first is known as the systolic pressure which is produced when the heart contracts. The second is the diastolic pressure which is when the heart relaxes to refill with blood.
BMI measurement – Body Mass Index calculated from weight and height to classify under, normal and over-weight
Serum creatinine – this blood test is used as measure kidney function
Urinary albumin – this urine test detects the earliest stages of kidney disease
Cholesterol - this blood test measures a type of fat that can damage blood vessels
Foot check - this examination checks the blood supply and sensation (feeling) in the feet. Loss of either is a risk for foot disease
Smoking Status - this records whether the person is a smoker. Smoking increases the diabetic risk for heart attacks and stroke
HbA1c – this is a blood test for average blood glucose levels during the previous two to three months.

Urine Albumin-to-Creatinine Ratio (UACR)

UACR is a ratio between two measured substances urine albumin and urine creatinine. Unlike a urine dipstick test for albumin, UACR is unaffected by variation in urine concentration.

Definitions

Treatment Targets (NICE defines target levels to reduce risks of complications for people with diabetes)

HbA1c - the closer this is to normal (less than 42mmol/mol) the lower is the risk of all long term complications of diabetes

Cholesterol – reducing cholesterol levels lowers the risk of heart attacks and strokes

Blood Pressure – high levels are a risk for heart attacks and strokes; they also drive progression of eye and kidney disease

Diabetes

Is a condition where the amount of glucose in the blood is too high because the pancreas doesn't produce enough insulin. Insulin is a hormone produced by the pancreas that allows glucose to be used as a body fuel and other nutrients to be used as building blocks. There are two main types of diabetes: Type 1 diabetes (no insulin); Type 2 diabetes (insufficient insulin)

Learning Disability

A learning disability usually has a significant impact on a person's life. A person with a learning disability finds it harder than others to learn, understand and communicate.

People with profound and multiple learning disabilities need full-time help with every aspect of their lives, including eating, drinking, washing, dressing and toileting etc.

Footnotes

1. NICE recommended care processes http://www.nice.org.uk/guidance/conditions-and-diseases/diabetes-and-other-endocrinal--nutritional-and-metabolic-conditions/diabetes

2. National Service Framework (NSF) for Diabetes
   https://www.gov.uk/government/publications/national-service-framework-diabetes
   NICE Clinical Guidelines – GN17: Type 1 diabetes in adults: diagnosis and management
   http://www.nice.org.uk/guidance/ng17
   NICE Clinical Guidelines – NG28: Type 2 diabetes in adults: management
   http://www.nice.org.uk/guidance/ng28
   NICE – Diabetes in Adults Quality Standard http://guidance.nice.org.uk/QS6

3. Type 2 diabetes includes people with Maturity Onset Diabetes of the Young (MODY), other and non specified diabetes type.

4. The eye screening care process is not included; therefore ‘eight care processes’ comprises of the eight care processes excluding eye screening.

5. The prevalence of people with learning disabilities is published in the Quality Outcomes Framework (QOF) http://www.content.digital.nhs.uk/catalogue/PUB22266 in England and http://gov.wales/statistics-and-research/general-medical-services-contract/?lang=en in Wales.

Additional information

The following documents are available from http://digital.nhs.uk/pubs/ndauditcorerep1516

- Supporting data in Excel
  - Supporting Information – National tables and charts
  - Supporting information – Learning disability tables and charts
  - CCG/GP practice level interactive spreadsheet
  - LHB level interactive spreadsheet
  - Specialist Service (England) interactive spreadsheet
  - CCG/LHB level – All 8 care process completion and all 3 treatment target achievement by age group
- PowerPoint version of this report
- PowerPoint version of the learning disability supplementary report (including pdf version)
- PowerPoint presentation giving an overview of the NDA programme
- Data Quality Statement (pdf)
- Methodology (pdf)

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