

National Diabetes Audit, 2016-17

Report 1: Care Processes and Treatment Targets

England and Wales

14th March 2018

Learning Disability - Supplementary Information

Prepared in collaboration with:



The Healthcare Quality Improvement Partnership (HQIP). The National Diabetes Audit (NDA) is part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP) which is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and funded by NHS England. 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 NCAPOP 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 trading name for the Health and Social Care Information Centre (HSCIC). NHS Digital managed the publication of the 2016-17 annual report.



Diabetes UK is the charity leading the fight against the most devastating and fastest growing health crisis of our time, creating a world where diabetes can do no harm.

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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.

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

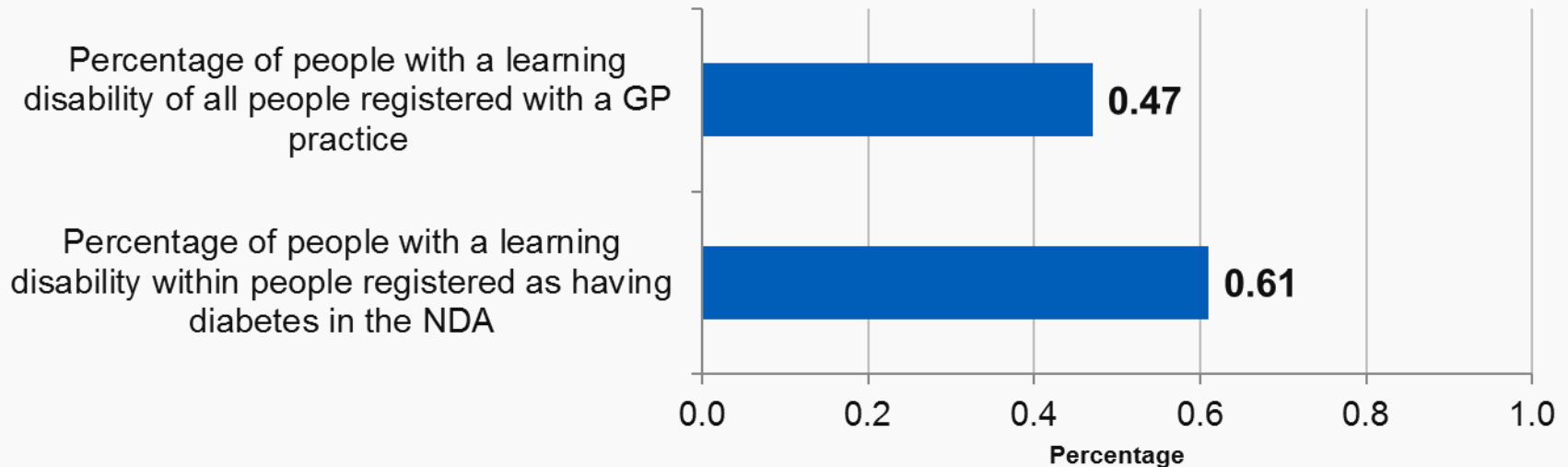
- Services should be aware that the audit data shows that a learning disability is more common in people with diabetes than in the general population as presently reported in the Quality and Outcomes Framework (QOF)*.
- Services should ensure that they are able to support people with a learning disability and Type 2 diabetes complete all their annual checks.
 - **Who:** General practices supported by CCGs/LHBs
 - **What:** Implement systems that better ensure in people with Learning Disability all annual diabetes checks are completed
 - **Where/when:** In General Practices, now

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

Prevalence of Learning Disability

Learning disability is around forty per cent more common in people with diabetes than in the general population⁵.



Of the 3,136,070 people with diabetes registered at a GP practice in the NDA 2016-17, 18,985 were diagnosed with a learning disability. Of these 1,970 have Type 1 diabetes and 17,015 have Type 2 or other.

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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 shortly after diagnosis.

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 risk of kidney disease)
2. Blood Pressure (measurement for cardiovascular risk)	6. Foot Risk Surveillance (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 (NHS England, Public Health England)
(the screening registers are drawn from practice registers but the outcomes are recorded in screening management systems that presently cannot export data to the NDA)

9. Digital Retinal Screening
(photographic eye test for early detection of eye disease)

Care Processes

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, 2016-17

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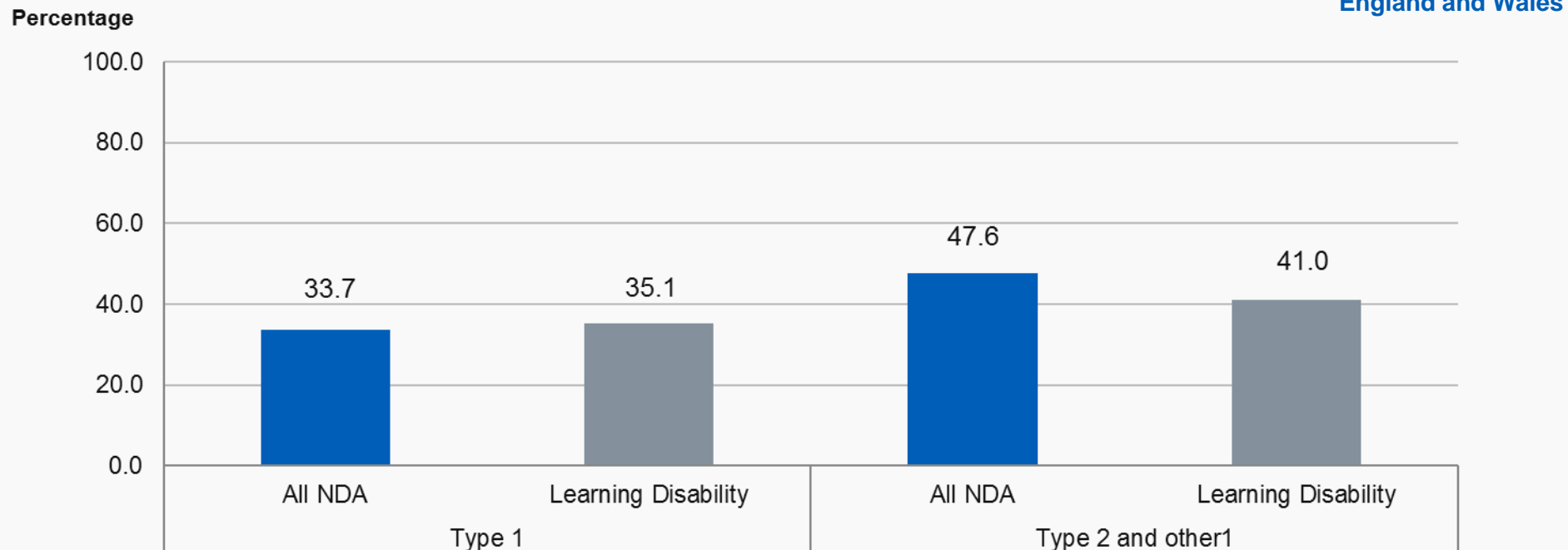
	Type 1		Type 2 and other ³	
	All NDA	Learning Disability	All NDA	Learning Disability
HbA1c	84.3	85.3	95.1	94.7
Blood pressure	90.3	91.3	96.2	97.0
Cholesterol	79.9	81.9	92.7	91.5
Serum creatinine	82.7	85.0	95.0	94.5
Urine albumin*	50.1	48.9	65.2	55.6
Foot surveillance	69.5	71.0	79.4	76.8
BMI	75.3	81.3	83.1	84.6
Smoking	79.2	85.5	85.5	88.2
Eight care processes⁴	33.7	35.1	47.6	41.0

Care Processes

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 diabetes population.

Figure 1: Percentage of all people with diabetes receiving all eight NICE recommended care processes⁴ by diabetes type, and learning disability, standardised by age and sex, 2016-17

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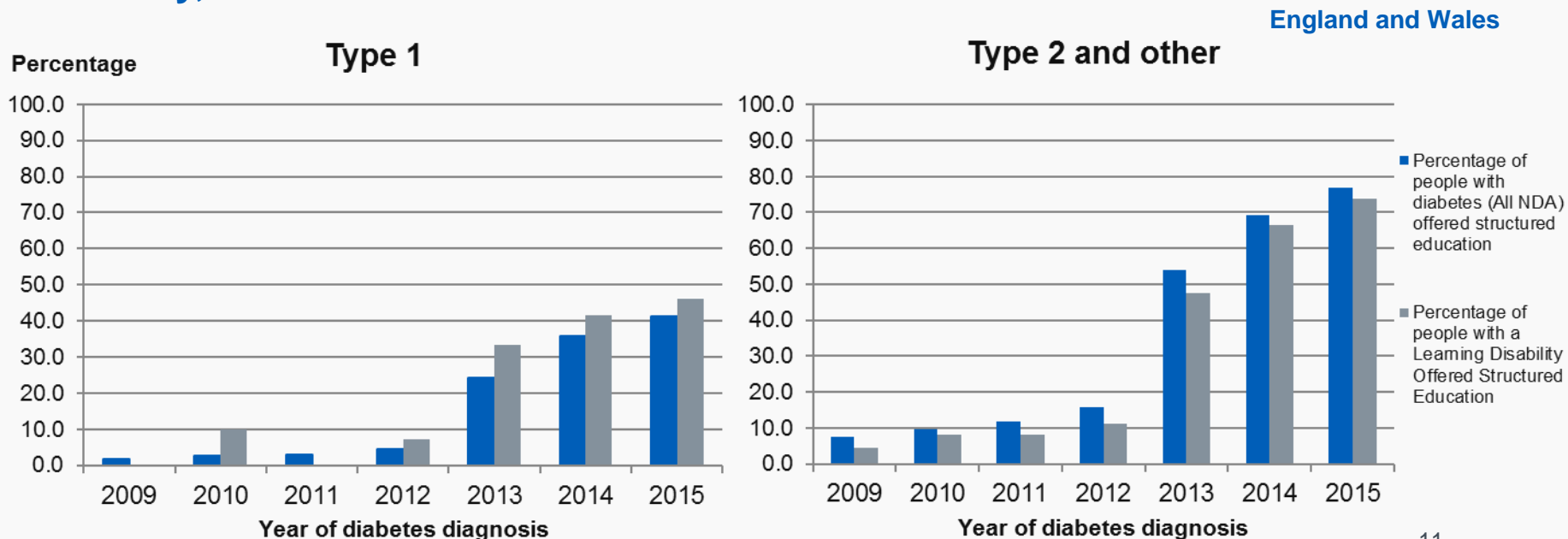
4. Please see full list of footnotes in the definitions and footnote section

Structured Education

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, 2016-17



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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

People with a learning disability who have Type 1 or Type 2 diabetes are more likely to achieve their treatment targets. The exception being HbA1c for people with Type 1 diabetes.

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, 2016-17

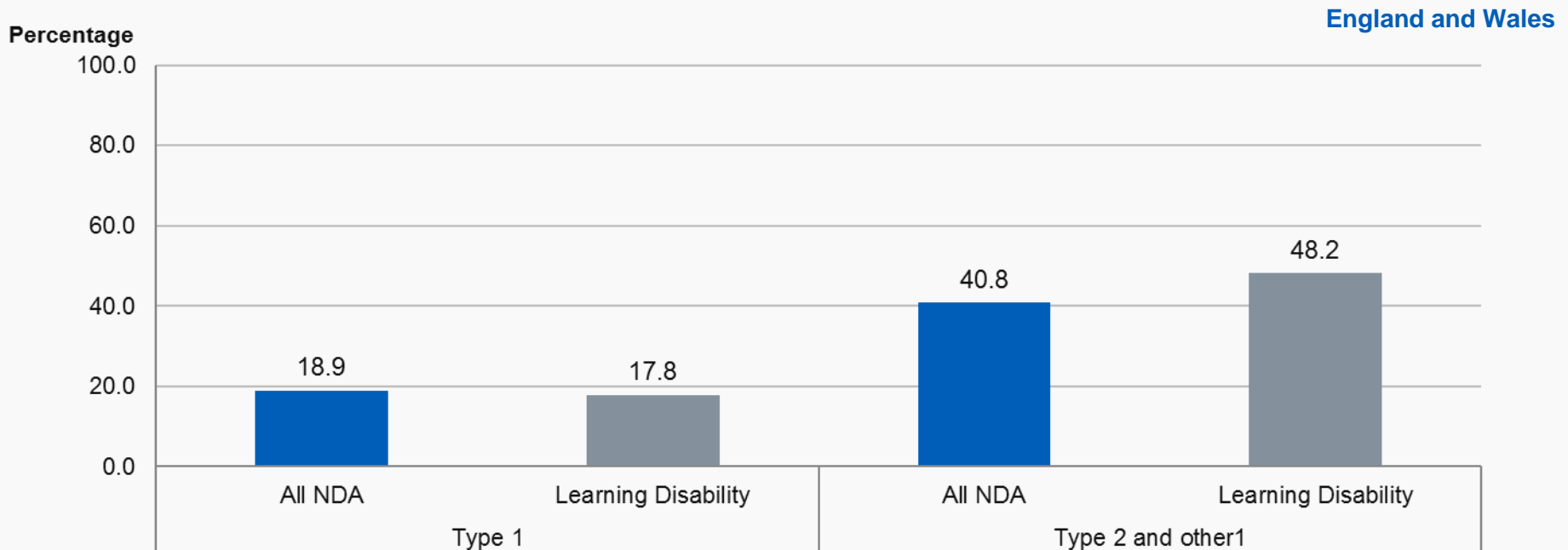
England and Wales

	Type 1		Type 2 and other ³	
	All NDA	Learning Disability	All NDA	Learning Disability
HbA1 _c ≤ 58 mmol/mol	30.2	27.2	66.8	70.7
Blood Pressure ≤ 140/80	75.8	81.5	74.2	78.2
Cholesterol < 5mmol/L	69.4	77.5	76.0	82.0
Meeting all three treatment targets	18.9	17.8	40.8	48.2

Treatment Targets – Learning Disability

People with a learning disability who have Type 2 and other diabetes are more likely to achieve all three of their treatment targets compared to their peers. The reverse is true for people who have Type 1 diabetes.

Figure 3: Percentage of all people with diabetes achieving all three treatment targets by diabetes type and learning disability, standardised by age and sex, 2016-17



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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 overweight.

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 – NG17: 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) <https://digital.nhs.uk/catalogue/PUB30124> 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://www.digital.nhs.uk/pubs/ndauditcorerep1617>

- Supporting data in Excel
 - Supporting Information – National tables and charts
 - Supporting Information – Learning Disability tables and charts
 - Supporting Information – Severe Mental Illness tables and charts
 - CCG/GP practice level interactive spreadsheet
 - LHB level interactive spreadsheet
 - Specialist Service (England) interactive spreadsheet
- PowerPoint version of this report
- PowerPoint version of the Learning Disability supplementary report (including pdf version)
- PowerPoint version of the Severe Mental Illness supplementary report (including pdf version)
- One page summary of the NDA 2016-17 key findings and recommendations (pdf)
- Data Quality Statement (pdf)
- Methodology Report (pdf)

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For further information

digital.nhs.uk

0300 303 5678

enquiries@nhsdigital.nhs.uk

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