

Introduction

Diabetes mellitus (diabetes) is a condition where the amount of glucose in your blood is too high because the body cannot use it properly.

Around 32,000 children and young people with diabetes in England and Wales receive treatment from a paediatric clinic. That's 1 in every 500 children. About 95% have Type 1 diabetes, and around 5% have Type 2 diabetes or other rare forms of diabetes.

Type 1 diabetes is an autoimmune condition where the pancreas cannot produce insulin. Type 2 diabetes in children and young people has stronger genetic causes and is linked to having excess weight and being obese.

On page 29) o P i P ö ö Û ® Š Đ ö ::Š 2 o Ĩ ò μ o i 2®: Š ® H used in this report relating to diabetes care.

Overview

The National Paediatric Diabetes Audit (NPDA) takes place annually in England and Wales.

This report covers care provided between April 2020 and March 2021,

including the impact of the COVID-19 pandemic. The audit is a national audit of the care of children and young people with type 1 diabetes in England and Wales. The audit is a national audit of the care of children and young people with type 1 diabetes in England and Wales. The audit is a national audit of the care of children and young people with type 1 diabetes in England and Wales.

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The reports show how clinics and regions compare to each other

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Increasing numbers with diabetes in 2020/21



There were 3662 children and young people newly diagnosed with

diabetes in 2020/21. This is an increase of 10% on the 3328 children and young people diagnosed in 2019/20. The increase is driven by a rise in type 1 diabetes from 2019/20 to 2020/21, with 1,100 children and young people newly diagnosed, compared with 980 in 2019/20. Type 2 diabetes cases also increased, from 1,348 in 2019/20 to 1,562 in 2020/21. Gestational diabetes cases remained stable, with 1,280 children and young people newly diagnosed in 2020/21, compared with 1,268 in 2019/20.

The increase in type 1 diabetes is due to a rise in the number of children and young people diagnosed with the condition in the 16 to 19 age group, from 480 in 2019/20 to 520 in 2020/21. This is due to an increase in the number of children and young people diagnosed with the condition in the 16 to 19 age group, from 480 in 2019/20 to 520 in 2020/21. The increase in type 2 diabetes is due to a rise in the number of children and young people diagnosed with the condition in the 10 to 15 age group, from 1,068 in 2019/20 to 1,242 in 2020/21. This is due to an increase in the number of children and young people diagnosed with the condition in the 10 to 15 age group, from 1,068 in 2019/20 to 1,242 in 2020/21.

Health checks 2020-21

The care your child should receive

The NPDA annual care processes and outcomes report 2020-21 provides information about the key health checks that your child should receive.

The National Institute for Health and Care Excellence (NICE) recommends several health checks which should be performed at least once annually for children and young people with diabetes.

The NPDA describes six of these to be 'key' annual checks for children and young people with Type 1 and Type 2 diabetes in the report.

Key health checks your child should receive



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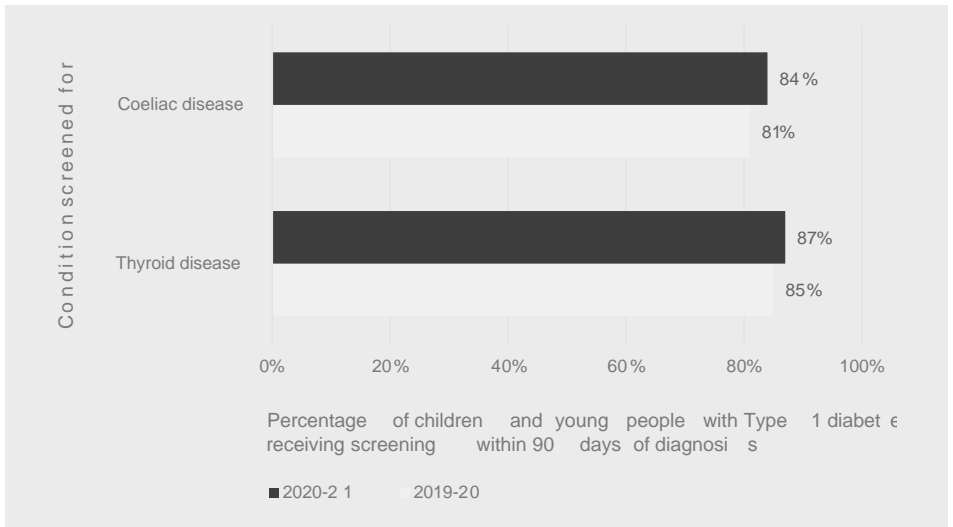
At diagnosis:

- Screen for thyroid and coeliac disease iPHØP ÉÀ ®Šo: İ®PŠĐ :P as children and young people with Type 1 diabetes have a higher risk İHØµ:µ ŠPH PÿÿP µ § ®PHP :.
Type 1
- Provide Level 3 carbohydrate counting education L HØP: Šöö i: /ŠHPµ H: Š® İŠÿPöPµ: H §Šö§PöŠHµ HØµ §Š2! Øo® : Š§ò: Š®®2P ò:) Š® ÿŠH§Ø HØP: H P :PöP 2µ1P :HŠ2H iPHØP ÁÄ®Šo: İ®PŠĐ :P:.
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Within the audit year:

- Complete a psychological screening assessment since problems such as anxiety, depression and disordered eating can be more §ÿÿ P §ØPö®2µ Š® o P Đ /µ /öµ iPHØ®PŠ!µHµ:
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- Ask about smoking, : HØŠH :P// 2H İ 2 2µ®P§P Đ 2 1PbHH :ÿ òP Đ §Š !µ İİµ2µ® Pİ µ§µ::Š2o.
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Type 1 & Type 2
- Provide 'sick-day rules' advice H Šöö i İŠÿPöPµ: H :µöİLÿŠ ŠĐP®PŠ!µHµ:®P2P Đ HØµ2 Pöö µ:: :P§Ø Š: §PĐØ: Š®
Type 1 & Type 2
- Offer at least one additional dietetic appointment with a 2µĐP:Hµ2µ®®PµHbHbŠ .
Type 1 & Type 2
- Offer training in the use of blood ketone testing strips. mŠ§ò İP :PöP öµŠ®: H HØµ /2®P§HP İ òµH µ: ketones in the blood can lead to a serious condition called diabetic òµH Š§P® :P: @(j A. !ØPö®2µ Š® o P Đ /µ /öµ iPH Š2µ /Š2HP§PöŠ2öo ŠH 2P:ò İ (j ŠH Hbÿµ: İ HØµ2 ÿŠo µµ® H P:µ Y:P§ò®Šo 2Pöµ:Z H /2µhµ H HØP: 2Pöµ:Z iPöö P §öP®µ P İ 2ÿŠHP òµH µ Hµ:Hb Đ
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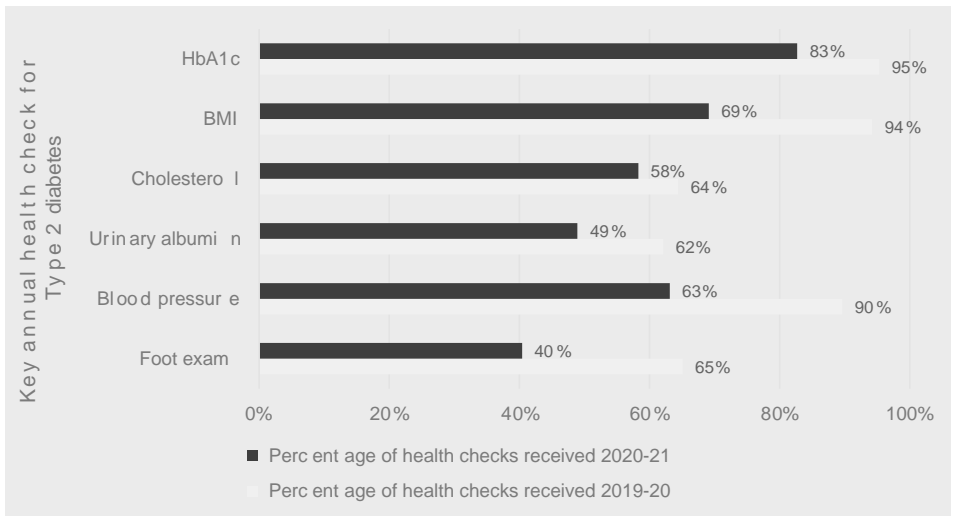
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Completion of health checks

Type 2 diabetes

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There has been a drop in children and young people with Type 2

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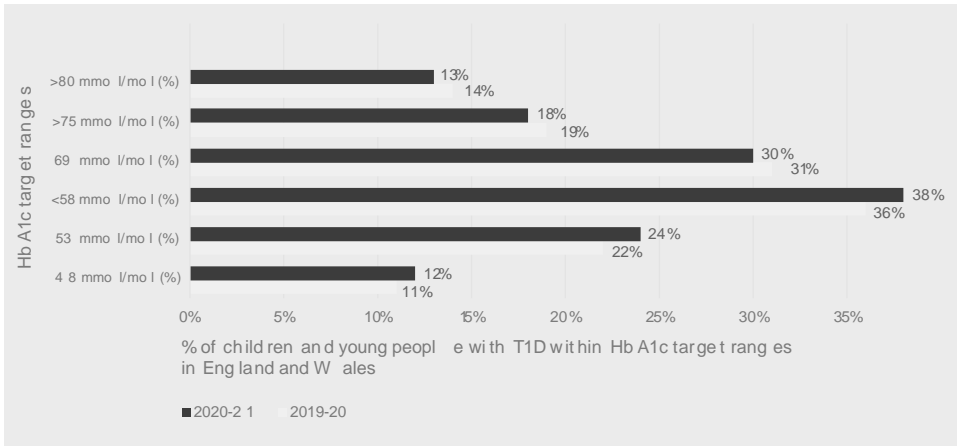
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Outcomes - HbA1c

HbA1c results

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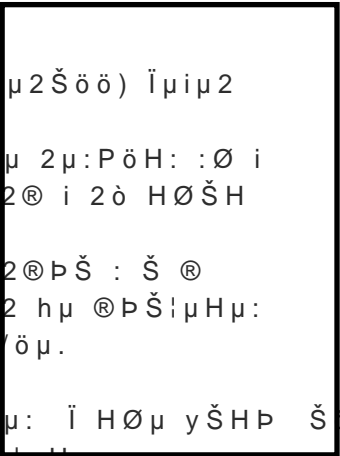
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has been carried out by children and young

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Ask your diabetes clinic about their involvement in these activities.

Diabetes-related technologies

There are technologies for supporting the management of diabetes. They can monitor current blood glucose levels, alert you to highs/lows, show blood glucose trends over time, and/or help deliver insulin automatically. The audit looked into the diabetes-related technologies used in England and Wales, including:

- Insulin pump therapy - attaching a small electronic device to the body, which continuously delivers insulin beneath the skin.
- Continuous glucose monitors (CGM) – Small devices worn on your skin. They measure your glucose levels continuously. These devices let you see trends in your levels and

Diabetes-related technologies

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In the 2020-21 audit year, in England and Wales:

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- Children and young people with Type 1 diabetes using 5 tCGM

Percentage of children and young people with Type 1 diabetes achieving HbA1c targets by RtCGM use

	≤ 5.7 mmol/mol	>48 & ≤ 53 mmol/mol	>53 & ≤ 58 mmol/mol	>58 & ≤ 69 mmol/mol	>69 & ≤ 79 mmol/mol	> 79 & ≤ 80 mmol/mol	>80 mmol/mol
Using rtCGM	95%	95%	95%	95%	95%	95%	95%
Not using rtCGM	95%	95%	95%	95%	95%	95%	95%

When using continuous glucose monitoring (CGM) technologies, speak to your diabetes teams about the options available to you.

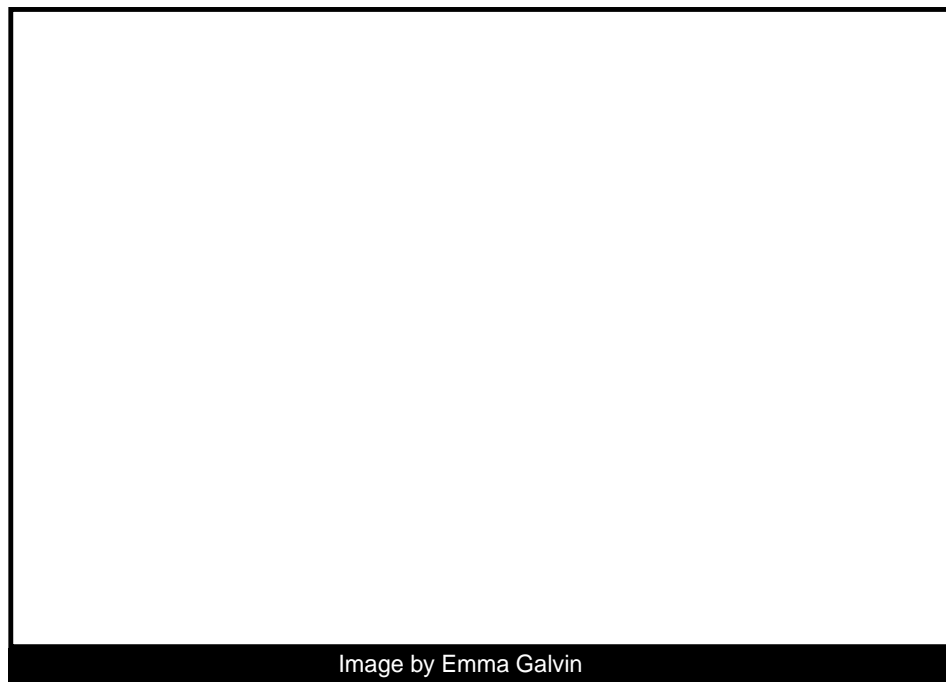


Image by Emma Galvin

Type 1 diabetes

Eye disease

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High cholesterol

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High blood pressure

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Overweight (having a BMI of 25 or over)

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Type 2 diabetes



Eye disease

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High cholesterol

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High blood pressure

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Overweight (having a BMI of 25 or over)

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and clinicians to compare the care provided by their clinic to others in
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Glossary

Albuminuria

*See Urinary albumin

Body Mass Index (BMI)

A measure of someone's size based on their weight and height. It is used to determine if someone is a healthy weight for their height.

$BMI = \text{weight/height}^2$

Care process

A care process is an essential healthcare check that should be performed at least once per year e.g. HbA1c or height and weight check. There are some healthcare checks which only start once your child reaches 12 years, such as eye screening. Please ask your clinic for further details or see [pages 6 and 7](#).

Cholesterol

A fatty substance which is vital for the normal functioning of the body. Excessively high levels of cholesterol can have an adverse effect on health.

Clinical Commissioning Groups (CCGs)

Clinical Commissioning Groups are clinically-led NHS bodies responsible for the planning and commissioning of health care services for their local area in England.

Coeliac disease

An autoimmune disease (meaning that the immune system mistakenly attacks healthy tissue in the body) caused by the gut's reaction to gluten.

Continuous glucose monitor (CGM) / real time continuous glucose monitor (rtCGM)

A small device that you wear just under your skin. It measures your glucose levels continuously throughout the day and night, letting you see trends in your levels and alerts you to highs and lows.

Diabetic ketoacidosis (DKA)

A serious condition that can occur in people with diabetes, indicating a severe lack of insulin. This can occur if insulin is not given when needed or during episodes of other illnesses. *See Ketones.

Glucose

A blood sugar which acts as a major source of energy for the body.

Healthcare Quality Improvement Partnership (HQIP)

An independent established organisation to promote quality in healthcare, to increase the impact that clinical audit has on healthcare quality improvement.

Ketones

A ketone is a chemical substance that the body makes when it does not have enough insulin in the blood. It comes from the breakdown of fat.

Key health checks

The National Paediatric Diabetes Audit is commissioned and sponsored by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit Programme.

The programme is funded by NHS England and the Welsh Government.

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