

Converting strategy into better outcomes for CYP with diabetes – reducing inequalities based on deprivation and ethnicity

Dr Fulya Mehta
Consultant Paediatrician, Alder Hey Children's Hospital
National Speciality Advisor, Children and Young People, NHS
England

NHS England Children and Young Adults Diabetes Workstream



1.

Address diabetes health inequalities in children and young adults



2.

Reduce variation in care and outcomes between paediatric diabetes departments



3.

Improve care for those transitioning from paediatric to adult care



4.

Improve care for children and young adults with Type 2 diabetes

Mean HbA1c for children and young people with type 1 diabetes by ethnic category and deprivation quintile

Ethnicity	Most deprived	Second most deprived	Third least deprived	Second least deprived	Least deprived
White	66.6	64.5	62.9	61.7	59.8
Asian	66.4	64.6	62.1	62.1	60.0
Black	70.6	70.6	66.6	69.9	66.5
Mixed	68.2	68.1	66.8	62.6	61.6
Other	64.9	63.7	61.9	60.6	58.8

* The colour scale (red-white-green) indicates mean HbA1c levels (higher-mid-lower).

REDUCING HEALTHCARE INEQUALITIES FOR CHILDREN AND YOUNG PEOPLE

CORE20

The most deprived 20% of the national population as identified by the Index of Multiple Deprivation



The Core20PLUS5 approach is designed to support Integrated Care Systems to drive targeted action in healthcare inequalities improvement

Target population

PLUS

ICS-chosen population groups experiencing poorer-than-average health access, experience and/or outcomes, who may not be captured within the Core20 alone and would benefit from a tailored healthcare approach e.g. inclusion health groups



CORE20 PLUS 5

Key clinical areas of health inequalities

1



ASTHMA

Address over reliance on reliever medications and decrease the number of asthma attacks

2



DIABETES

Increase access to Real-time Continuous Glucose Monitors and insulin pumps in the most deprived quintiles and from ethnic minority backgrounds & increase proportion of children and young people with Type 2 diabetes receiving annual health checks

3



EPILEPSY

Increase access to epilepsy specialist nurses and ensure access in the first year of care for those with a learning disability or autism

4



ORAL HEALTH

Address the backlog for tooth extractions in hospital for under 10s

5



MENTAL HEALTH

Improve access rates to children and young people's mental health services for 0-17 year olds, for certain ethnic groups, age, gender and deprivation

Children & Young People Diabetes Toolkit

Practical advice and guidance for Integrated Care Systems

Enablers

[Funding](#)

[System leadership](#)

[Data](#)

[Workforce](#)

Areas of Focus



1. [Health inequalities](#)

Address diabetes health inequalities in children and young adults



2. [Variation](#)

Reduce variation in treatment, care and outcomes across health systems



3. [Transition](#)

Improve treatment and care for young adults, including people transitioning from paediatric to adult services



4. [Type 2 Diabetes](#)

Improve treatment and care for children and young adults with Type 2 Diabetes

Additional resources

[ICS checklist](#)

Who is the toolkit aimed at?

The toolkit is designed to support ICSs to design, plan, and deliver high-quality treatment and care for CYA aged 0-25 years with all types of diabetes.

The toolkit may also be of interest to clinicians, healthcare planners and commissioners in related clinical areas, healthcare public health professionals, those working in local authority or voluntary sector organisations, and those with lived experience of diabetes.

What's included?

- A general overview of an ICSs role in delivering high quality care within CYA diabetes services
- Details of the key Areas of Focus and actions to take by ICSs to support in the delivery of CYA diabetes services
- A section on enablers to support commissioning and delivery of high-quality care
- A checklist to help ICSs pinpoint where to focus to improve diabetes treatment and care
- Links to key guidance, policy documents, and other useful resources

Advancing equity
in diabetes care
for Black populations



TOOLKIT

Advancing equity in diabetes technology



FIRST EDITION

“At the core of this toolkit is a comprehensive checklist that helps teams systematically evaluate their current practices and identify opportunities for improvement.”

Sept 24

Proud to Support



DigiBete



Proudly Supporting CYP and Young Adults Living with Type 1 and 2 Diabetes

Now **90%** Patient Uptake in **England & Wales**

Based on revised NPDA numbers

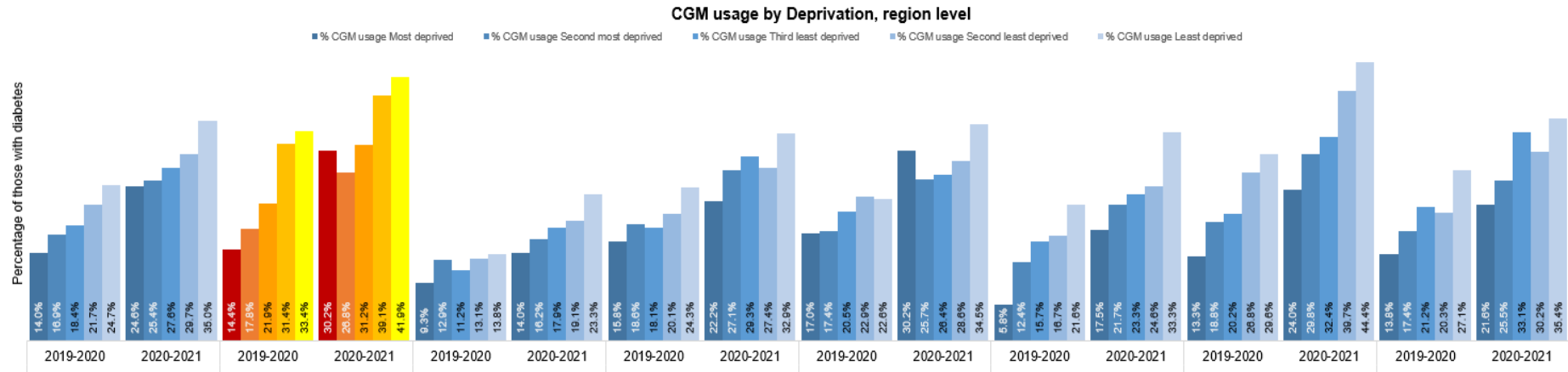
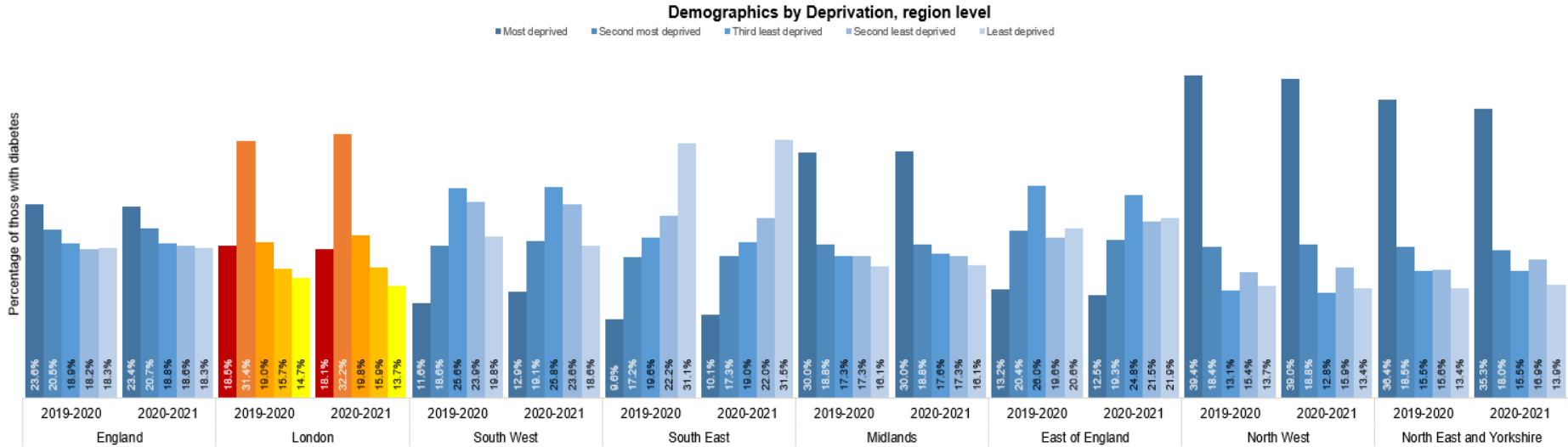


Technology dashboard – CGM and pump usage by IMD quintile and ethnicity, NPDA 2019/20 and 2020/21

Select region, demographic variable or technology from the drop downs to update graphs and tables. These drop downs control the ICS, CCG and UNIT dashboards.

Region:
 Demographic variable:
 Technology:

On this page, technology **graph** is below demographic graph. Scroll down for technology (pump or CGM)



Geographies

- Region, ICS & Unit

Demographics

- Ethnicity & Deprivation

Technology

- Pump & CGM

Targeted projects to improve equity of CYP tech uptake

North West

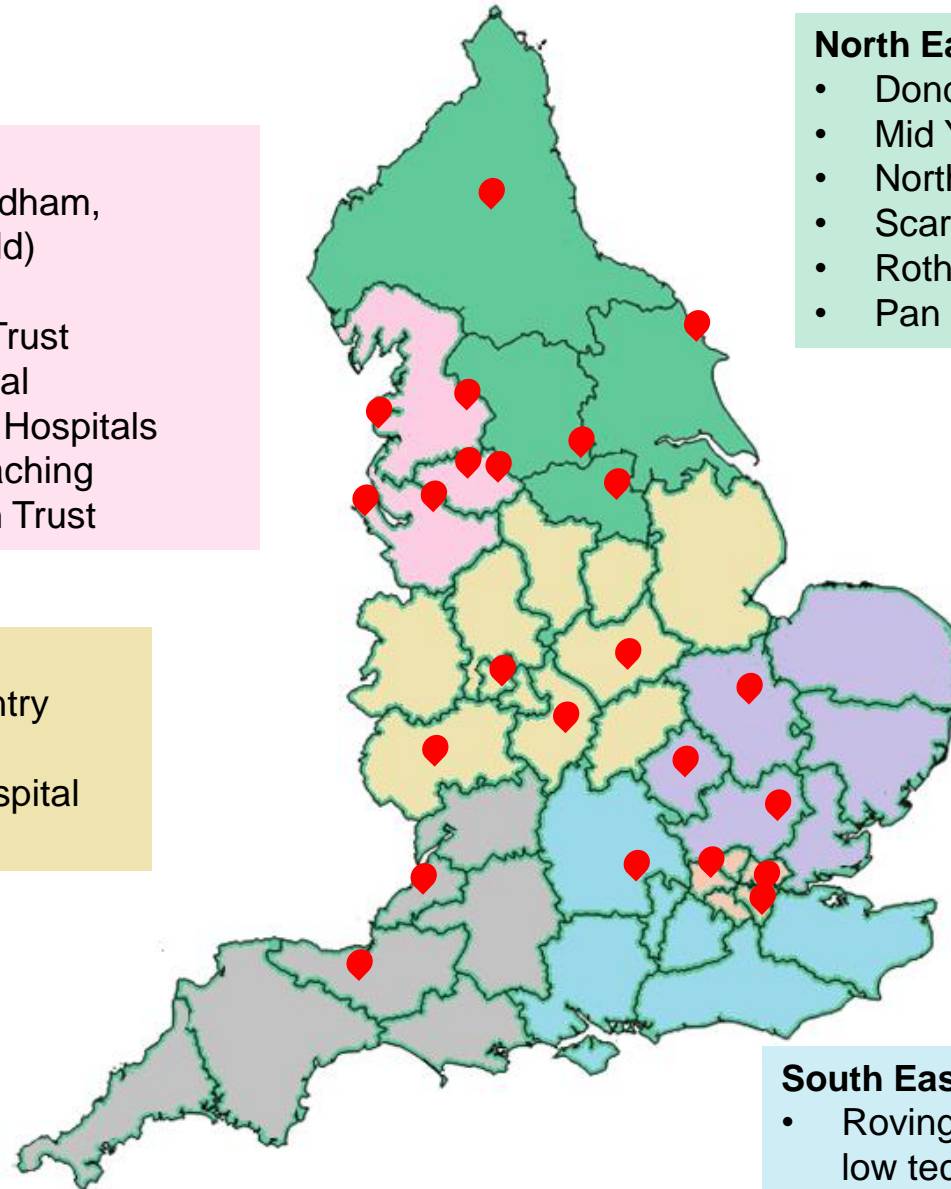
- Northern Care Alliance (Oldham, Rochdale and Bury Fairfield)
- Salford Royal
- East Lancashire Hospital Trust
- Blackpool Teaching Hospital
- Wirral University Teaching Hospitals
- Warrington and Halton Teaching Hospitals NHS Foundation Trust

Midlands

- University Hospital Coventry
- City Hospital Birmingham
- Worcestershire Acute Hospital
- Leicester Royal Infirmary

South West

- Somerset Foundation Trust
- Bristol Children's Hospital



North East and Yorkshire

- Doncaster Royal Infirmary
- Mid Yorkshire NHS Hospitals Trust
- North East North Cumbria ICS
- Scarborough General hospital
- Rotherham NHS Foundation Trust
- Pan regional training

East of England

- Luton and Dunstable Hospital
- West Hertfordshire Teaching Hospitals NHS Trust
- Peterborough City Hospital
- Pan regional events

London

- North West London Network
- Barking Havering and Redbridge University Hospitals NHS Foundation Trust
- Lewisham and Greenwich Trust

South East

- Roving expert team to work with paediatric units with low technology uptake across the region

Hybrid Closed Loop

- 5-year implementation programme commenced in April 2024
- Oversight through an expert reference group
- Negotiations with industry concluded in May 2024
- FAQ document on FutureNHS
- For HCL queries please contact: england.digitaldiabetes@nhs.net

News

NHS rolls out artificial pancreas in world first move

📅 2 April 2024

Diabetes

Tens of thousands of children and adults living with type 1 diabetes across England are set to receive an 'artificial pancreas' in a world-first initiative being rolled out by the NHS.

The groundbreaking device continually monitors a person's blood glucose, then automatically adjusts the amount of insulin given to them through a pump.

Local NHS systems will start identifying eligible people living with type 1 diabetes who health chiefs believe could benefit from the Hybrid Closed Loop system- sometimes called an artificial pancreas – from today. There are currently 269,095 people living in England with type 1 diabetes.

The technology will mean some people with type 1 diabetes will no longer need to inject themselves with insulin but rely on technology to receive this life saving medication.

This can also help prevent life-threatening hypoglycaemic and hyperglycaemia attacks, which can lead to seizures, coma or even death for people living with type 1 diabetes.

NHS England has provided local health systems with £2.5 million so they are ready to start identifying patients that can benefit.

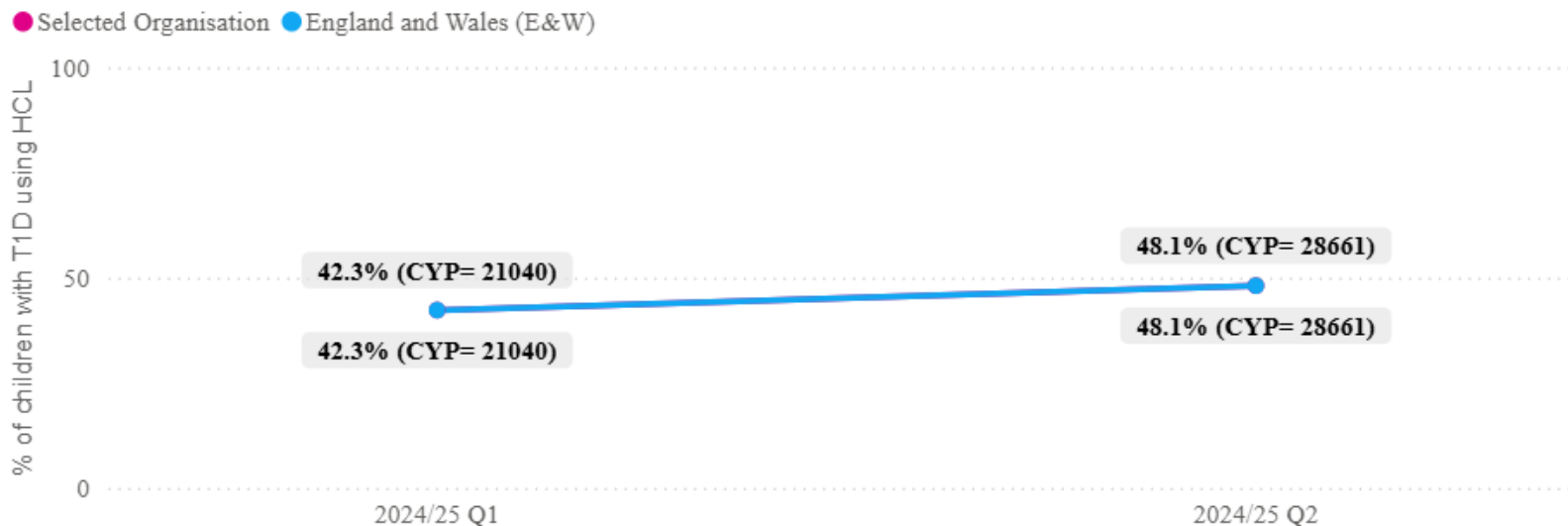
The mass rollout of the artificial pancreas builds on a successful pilot of the technology by NHS England, which saw 835 adults and children with type 1 diabetes given the opportunity to improve the management of their condition.

Each year, the NHS in England spends over £1 billion on the entire budget for type 1 diabetes.

Hybrid closed loop system (%)

Percentage of children and young people with Type 1 diabetes using a hybrid closed loop system (HCL)
based on their most recent reported observation

England and Wales



Previous audit year results	2023/24 Q1	2023/24 Q2	2023/24 Q3	2023/24 Q4
England and Wales	17.5%	22.6%	28.3%	35.6%

Select organisation

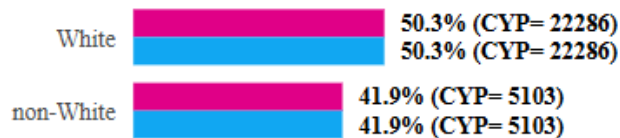
Search

- 1.PDU
- 2.ICB/LHB
- 3.Networks
- 4.NHS regions
- 5.Country
 - England
 - Jersey
 - Wales
- 6.England and Wales

cumulative

quarterly

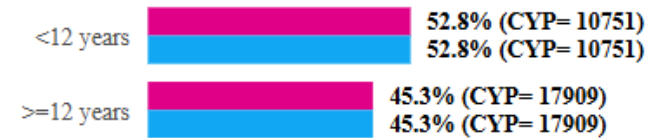
Ethnicity



Deprivation



Age group



% of children using HCL

Selected Organisation E&W

% of children using HCL

Selected Organisation E&W

% of children using HCL

Selected Organisation E&W



Home

At a glance

Health checks

HbA1c median

Treatment targets

Insulin Pump

CGM

Closed loop system

DKA at diagnosis

DKA post diagnosis

DKA per 100 children

Type 2 diabetes in children and young people

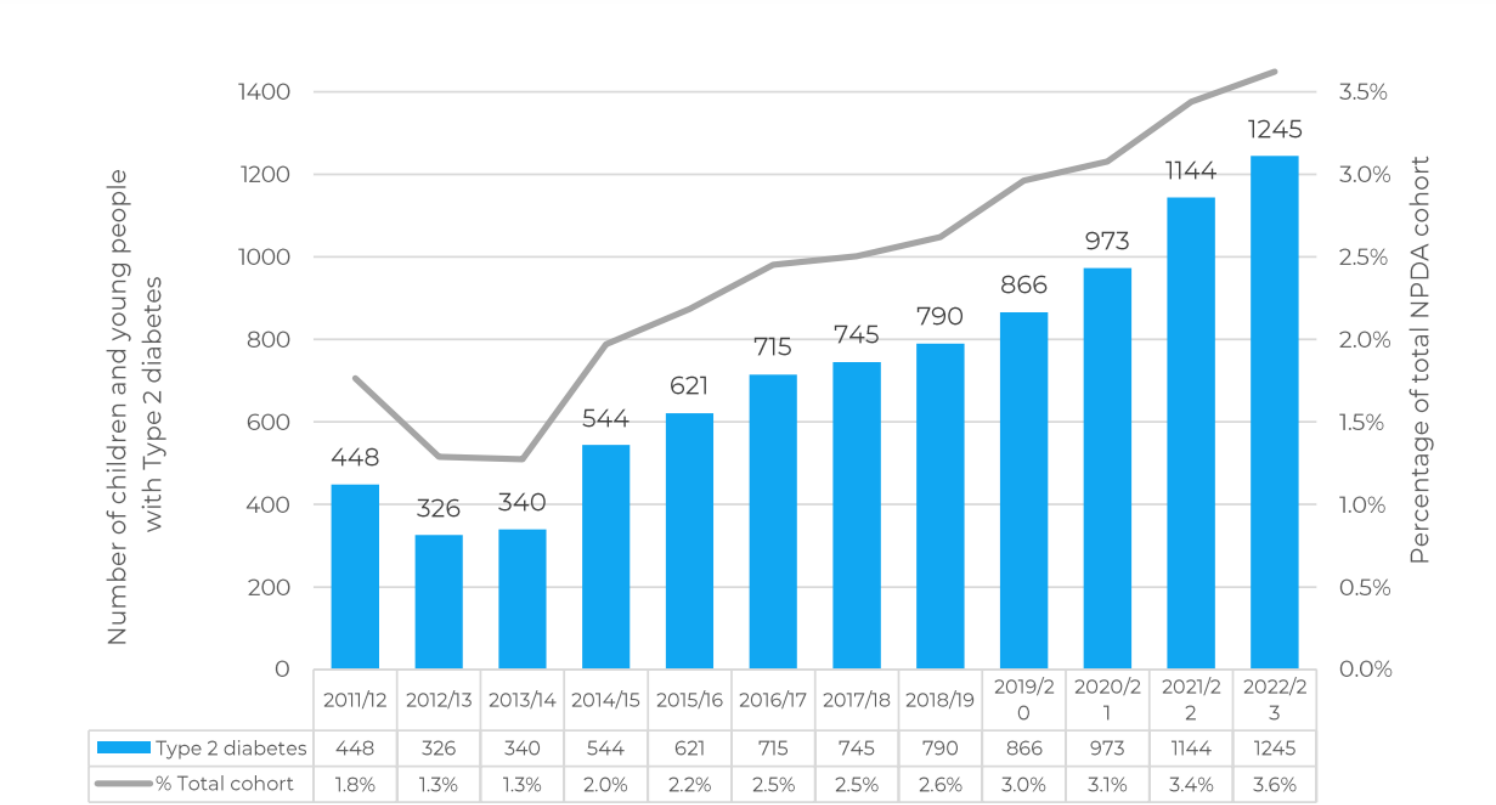


Figure 11: Numbers of children and young people with Type 2 diabetes included in the NPDA, 2011/12- 2022/23



E-learning module available on the NHS Learning Hub

elfh **Managing Type 2 Diabetes in Children and Young People**



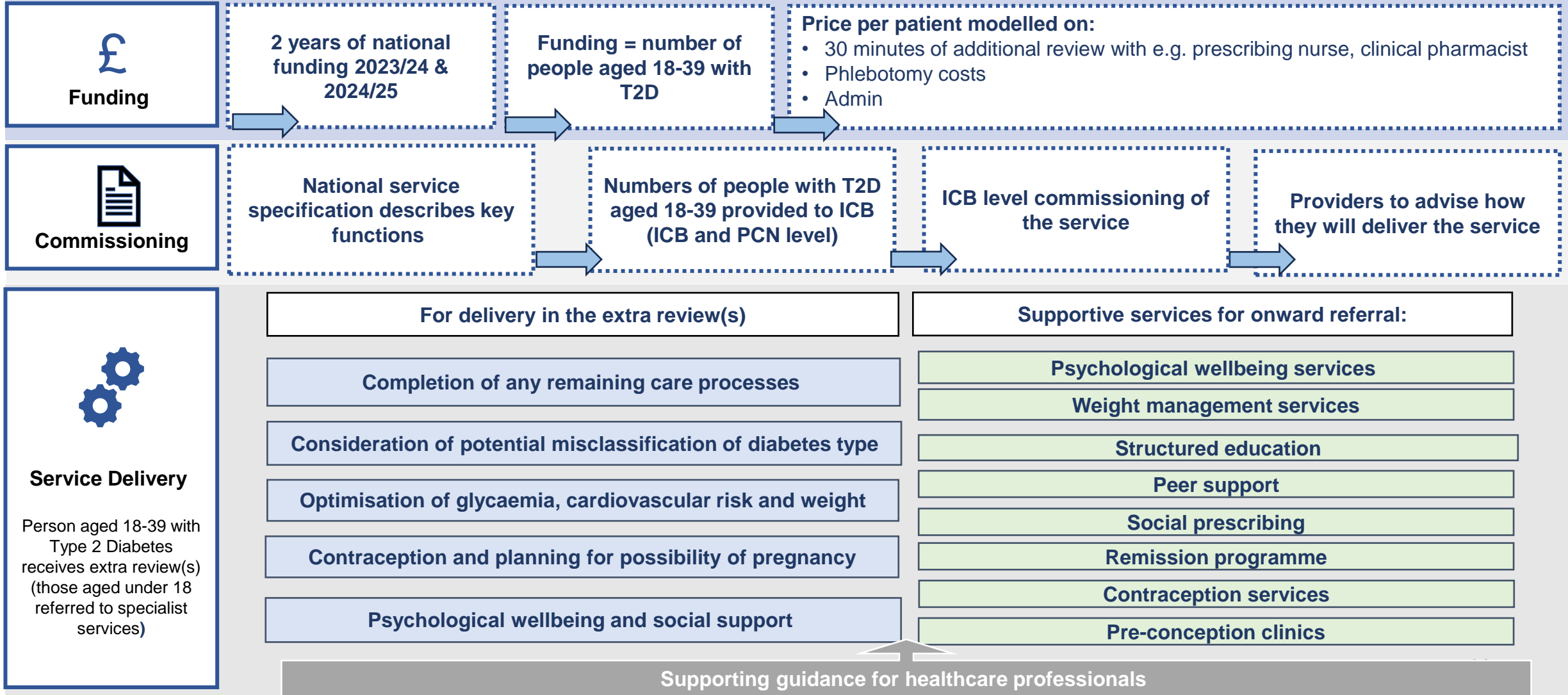
England



Supported by
DIABETES UK
KNOW DIABETES. FIGHT DIABETES.

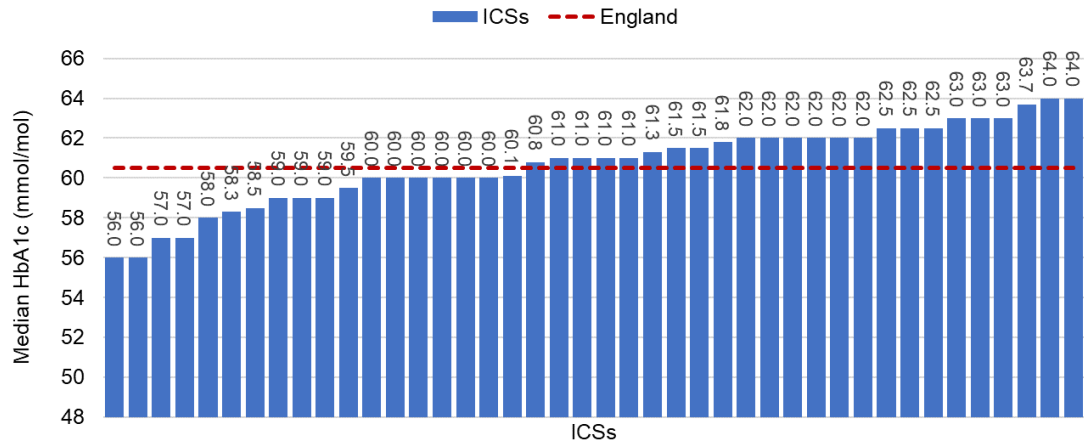
T2Day overview

T2Day: Type 2 Diabetes in the Young



Variation in care and outcomes

Median HbA1c for children and young people with Type 1 diabetes in England 2022/23 by ICS (NPDA)



Developing a Children Young Adults Diabetes GIRFT programme

- GIRFT provides a national mechanism for identifying, understanding and addressing variation in line with the national NHS infrastructure for improvement
- The GIRFT CYA Diabetes Programme will be a key vehicle for supporting systems to reduce unwarranted variation in care and outcomes
- Scope will be 0-25yrs and reviews will be at ICB level
- Reviews based on programme key areas of focus



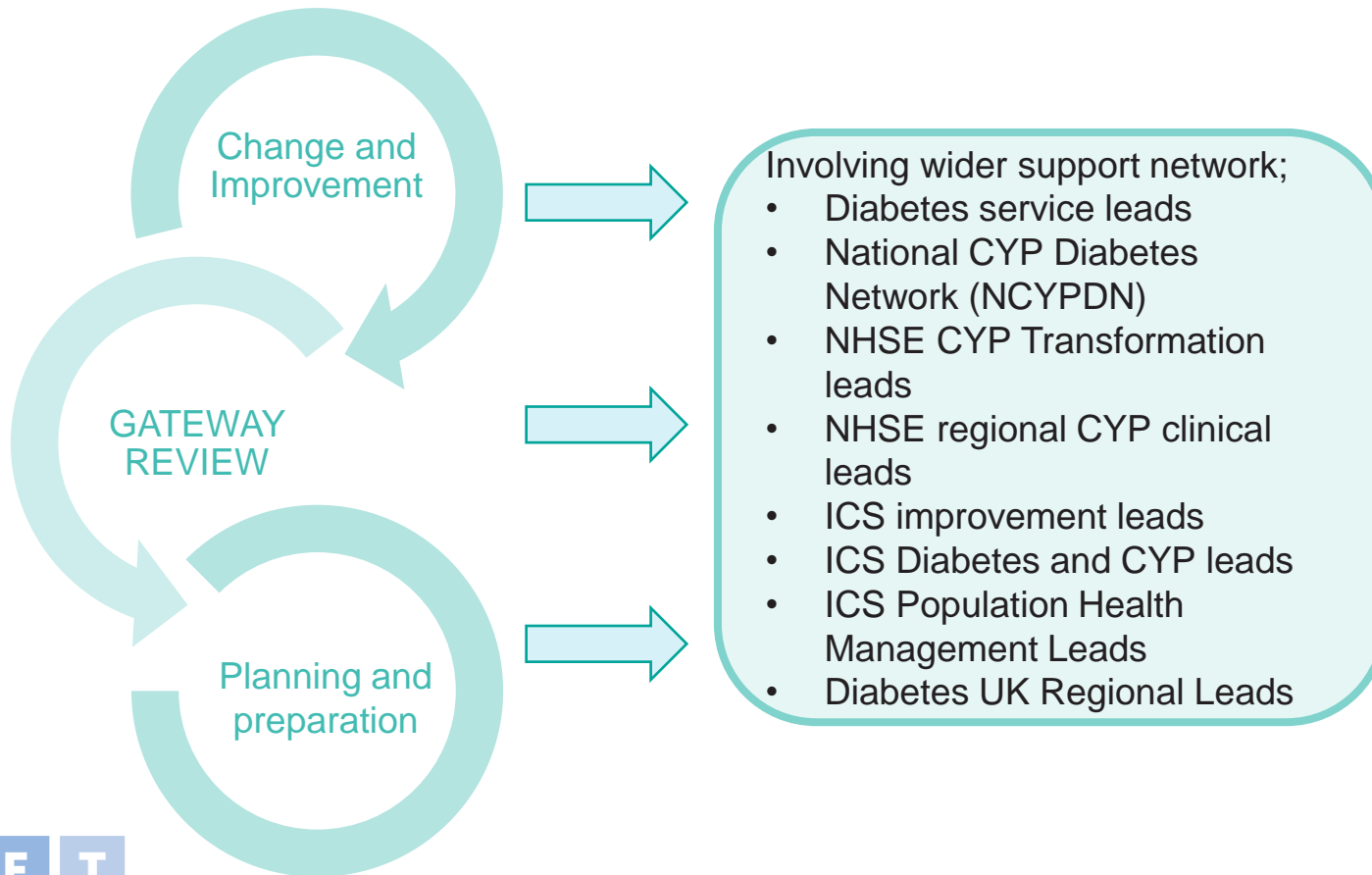
Developing a Children Young Adults Diabetes GIRFT programme

The model consists of five key strands:

- Broad **data gathering and analysis** exercise which generates a detailed picture of current practice, outcomes and other related factors;
- Direct **clinical engagement** via meetings between clinical specialists and individual hospital trusts, which are based on the data
- A **national report** that draws on both the data analysis and the discussions with the hospital trusts to identify opportunities for improvement across the relevant services;
- An **implementation** phase where the GIRFT team supports trusts, commissioners, and integrated care systems to deliver the improvements recommended and
- **Best practice** guidance and support for standardised/integrated patient pathways

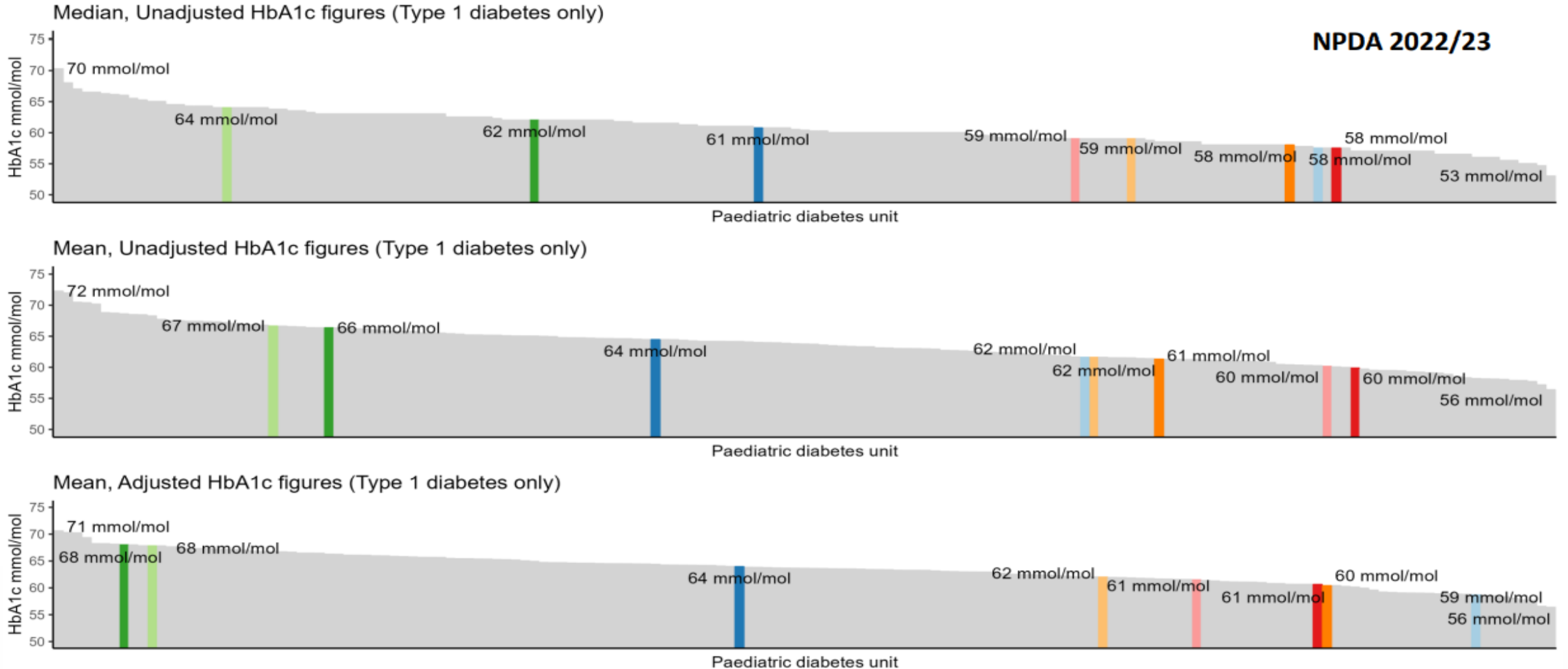
Improvement support

It is expected that the GIRFT review forms a small part of a much wider improvement cycle, with a range of system partners and stakeholders forming a support network, engaged in understanding and driving forward change across the ICS and acting on the national recommendations from the visit.



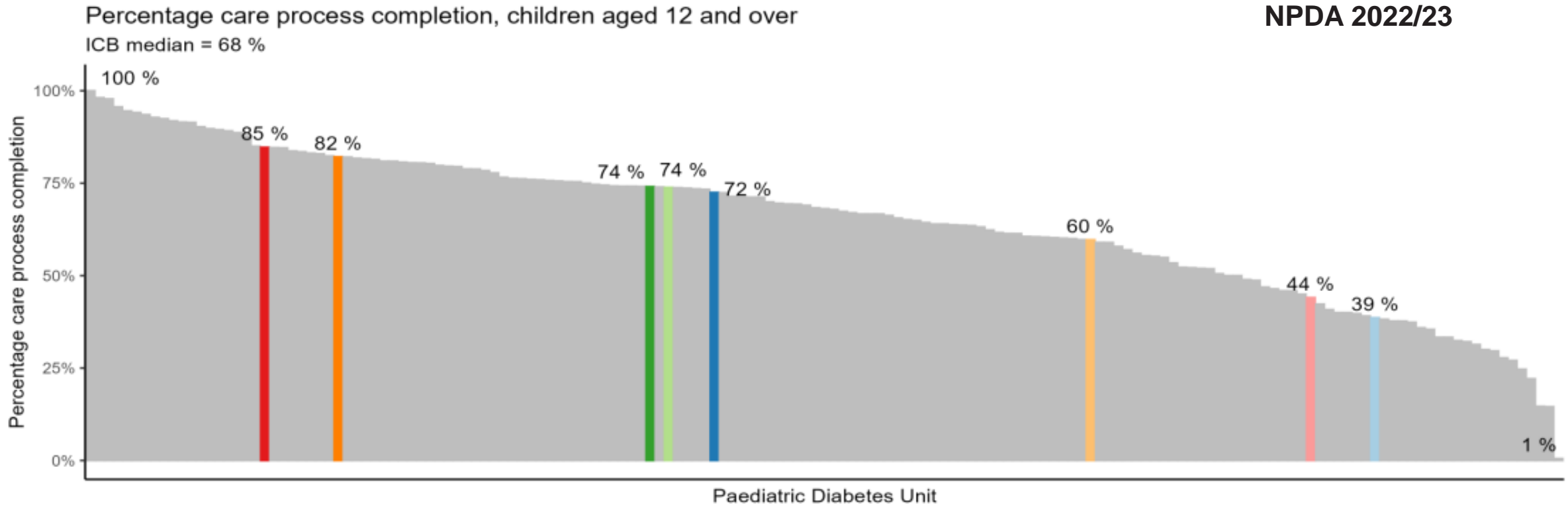
Variation within ICBs

Median HbA1c (provider level)



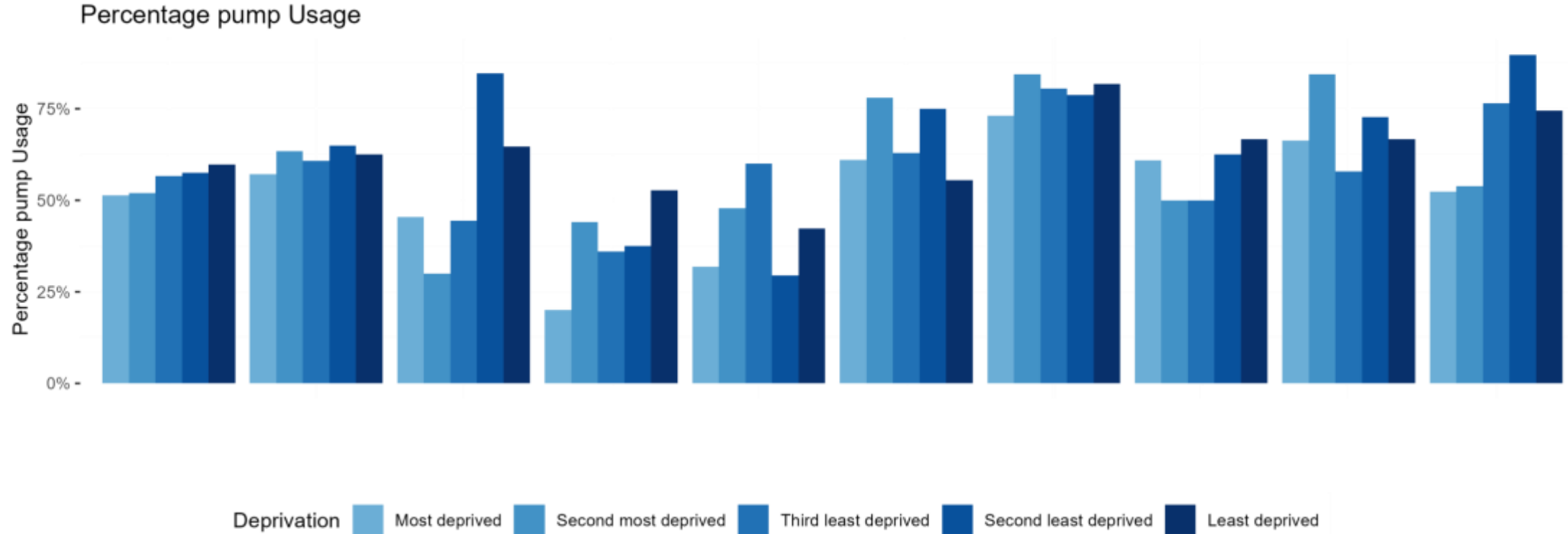
Variation within ICBs

Care Process Completion (provider level)



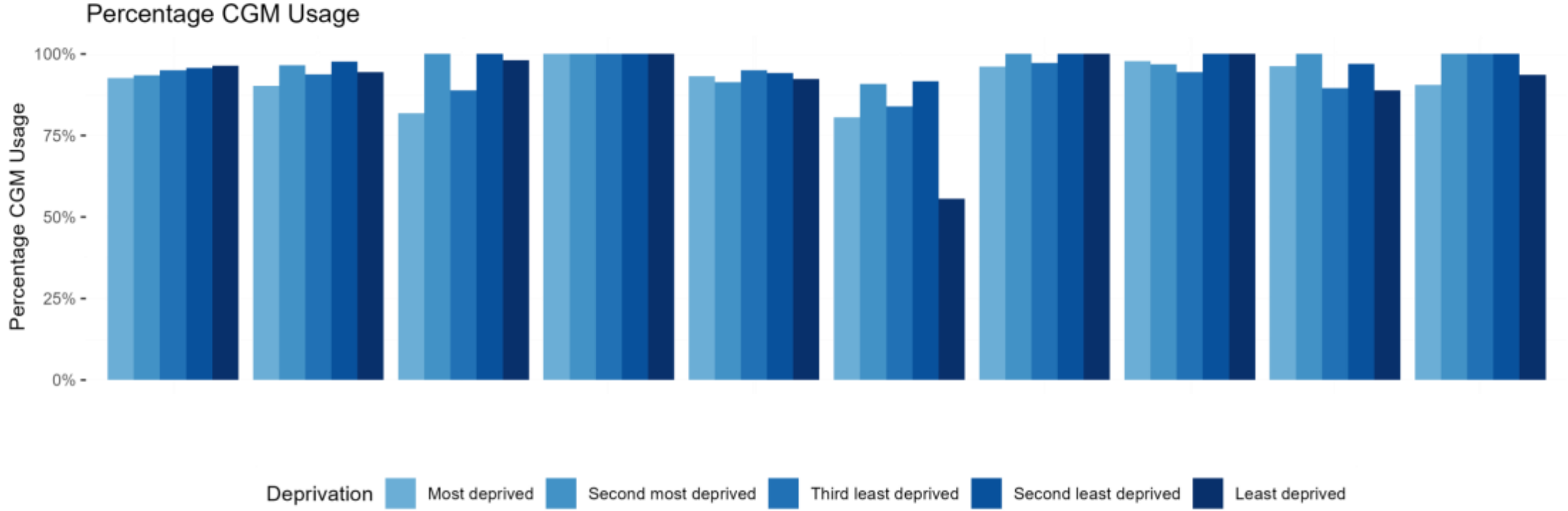
Variation within ICBs

Pump use: Deprivation



Variation within ICBs

CGM use: Deprivation



Source: GIRFT analysis of 2023/24 NPDA data. Type 1 patients, aged 0-18. Based on most recent observation, includes flash, other CGM and HCL users.

Insulin Pump (%)

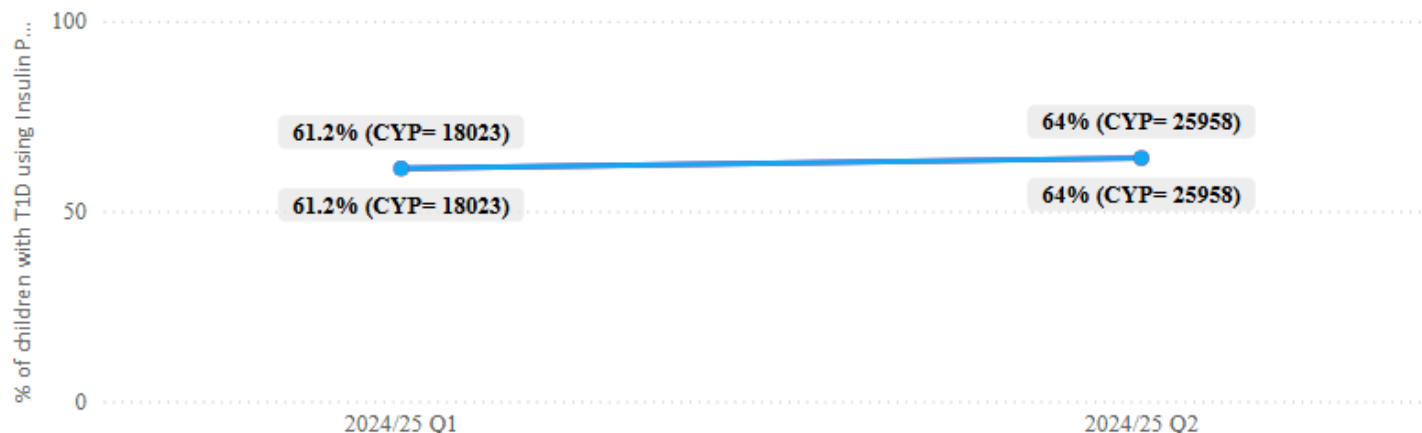
Percentage of children and young people with Type 1 diabetes using an insulin pump based on their most recent reported observation, including those using hybrid closed loop (HCL).

- Home
- At a glance
- Health checks
- HbA1c median
- Treatment targets
- Insulin Pump
- CGM
- Closed loop system
- DKA at diagnosis
- DKA post diagnosis
- DKA per 100 children



England and Wales

Selected Organisation ● England and Wales (E&W)



Previous audit year results	2023/24 Q1	2023/24 Q2	2023/24 Q3	2023/24 Q4
England and Wales	49.9%	51%	52.6%	54.8%

Select organisation

Search

- 1.PDU
- 2.ICB/LHB
- 3.Networks
- 4.NHS regions
- 5.Country
- 6.England and Wales

cumulative

quarterly

Ethnicity



% of children using Pump

Selected Organisation ● E&W

Deprivation



% of children using Pump

Selected Organisation ● E&W

Age group



% of children using Pump

Selected Organisation ● E&W

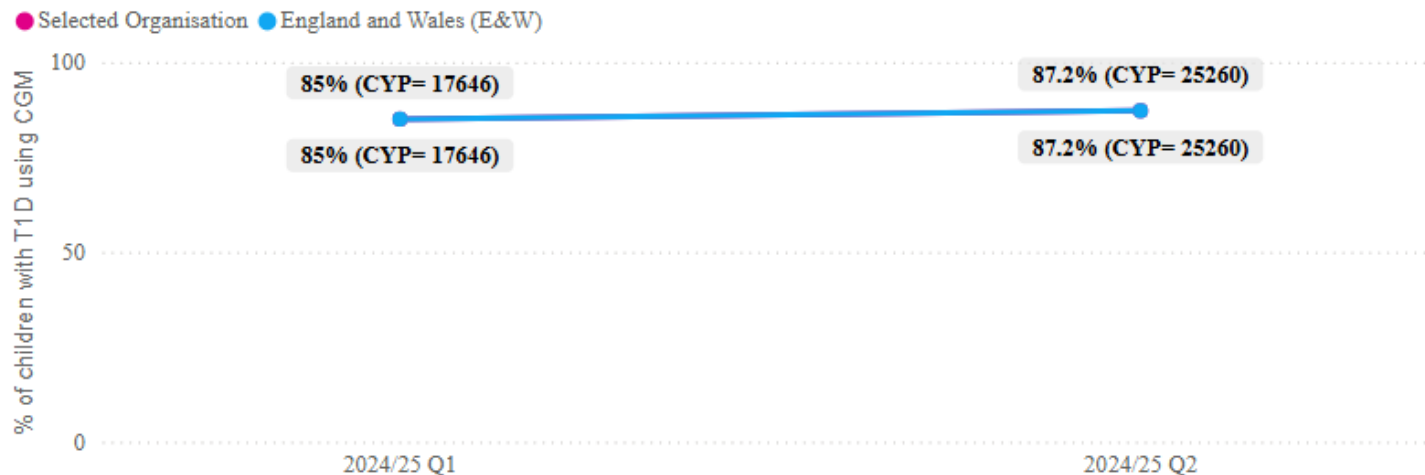
Continuous Glucose Monitoring (CGM) %

Percentage of children and young people with Type 1 diabetes using a real time CGM with alarms based on their most recent reported observation (excludes flash, includes HCL users)

- Home
- At a glance
- Health checks
- HbA1c median
- Treatment targets
- Insulin Pump
- CGM**
- Closed loop system
- DKA at diagnosis
- DKA post diagnosis
- DKA per 100 children



England and Wales



Previous audit year results	2023/24 Q1	2023/24 Q2	2023/24 Q3	2023/24 Q4
England and Wales	65%	70.2%	75.5%	78.7%

Select organisation

- Search
- 1.PDU
 - 2.ICB/LHB
 - 3.Networks
 - 4.NHS regions
 - 5.Country
 - 6.England and Wales

cumulative

quarterly

Ethnicity



% of children using CGM

Selected Organisation E&W

Deprivation



% of children using CGM

Selected Organisation E&W

Age group



% of children using CGM

Selected Organisation E&W

Thank You