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# The Paediatric Diabetes QI Collaborative: A National Pilot of 10 Paediatric Diabetes Units in England

## National CYP Diabetes Quality Programme

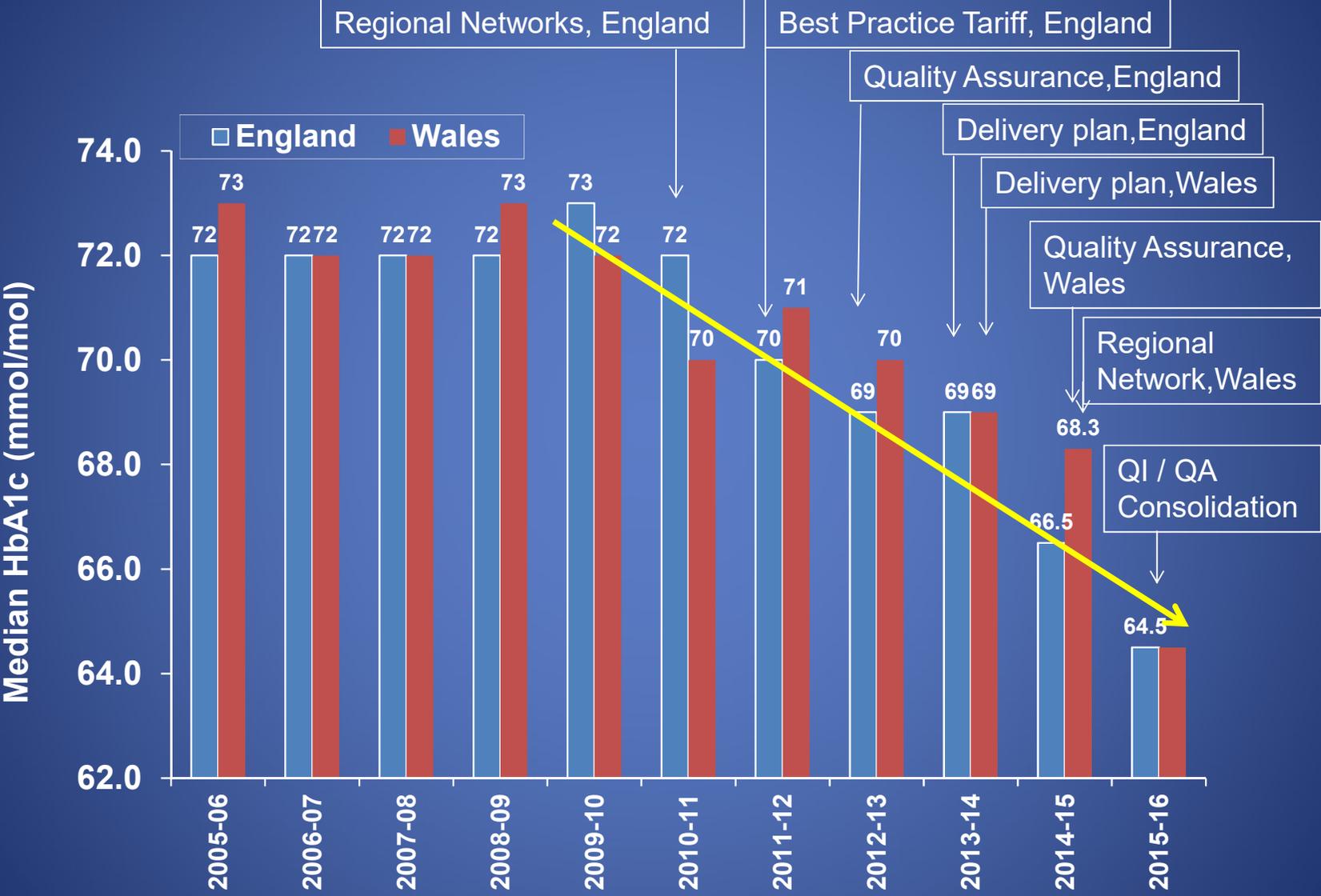
**ABCD Autumn Meeting November 9<sup>th</sup> 2018**

**Dr Megan Peng**

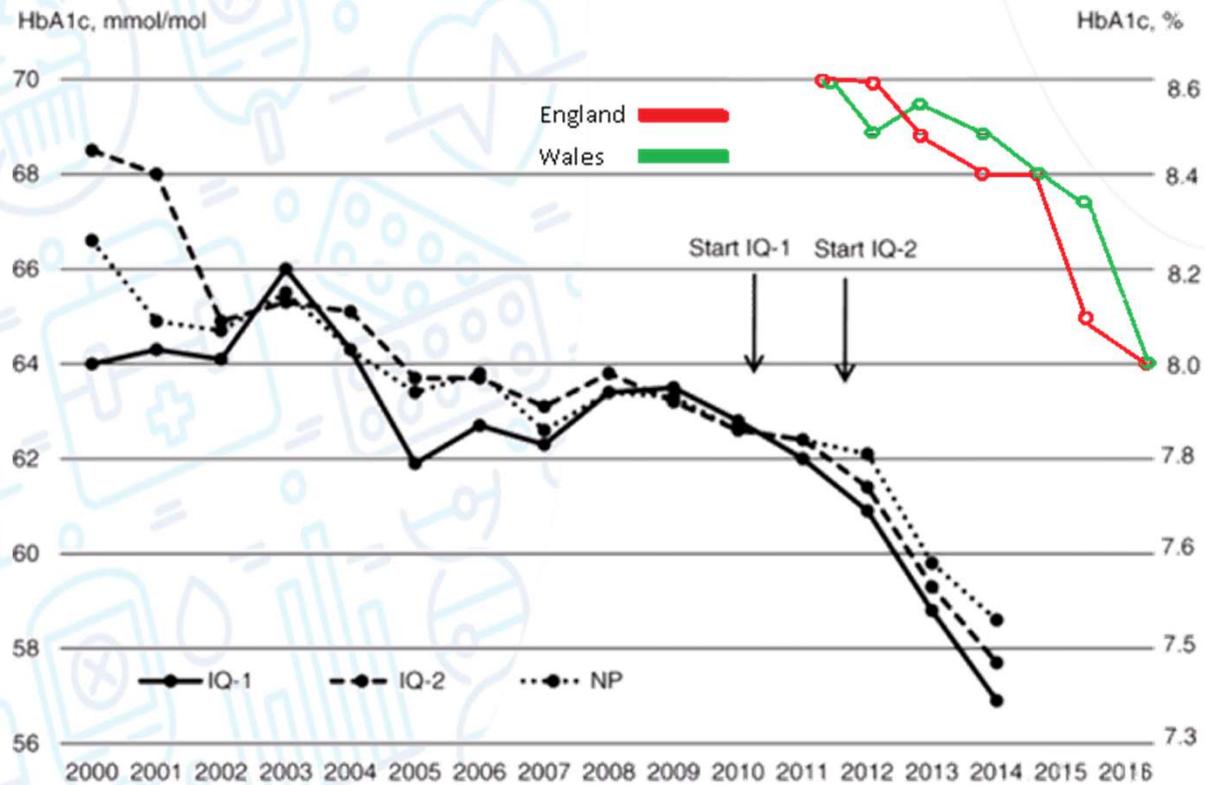
# Objectives

- Timeline of Quality Improvement initiatives so far
- Overview of Swedish QI Collaborative (QIC) initiative
- Overview of the UK pilot QIC initiative 2017-2018
- Snapshot of the achievements of the 10 pilot QIC teams
- Outcomes and Feedback from 10 pilot QIC teams
- Post-pilot QIC plans beyond 2018

# Median HbA1c England & Wales



# Swedish CYP Diabetes Outcomes



## What Worked in Sweden?

- Clear and consistent messages from every member of the Multi Disciplinary Team
- Every staff member felt involved and valued
- Positive 'can-do' attitude from the team
- Perception of a well-functioning team
- Reduced targets for HbA1c
- Robust national audit and identifiable unit comparisons
- Supportive regional networks prepared to share good practice with a view to improving outcomes and reducing regional variation

# First Steps – Phase 1 Pilot Outline



16 teams applied  
10 units selected (100 healthcare professionals)

## Training Event 1: November 2017

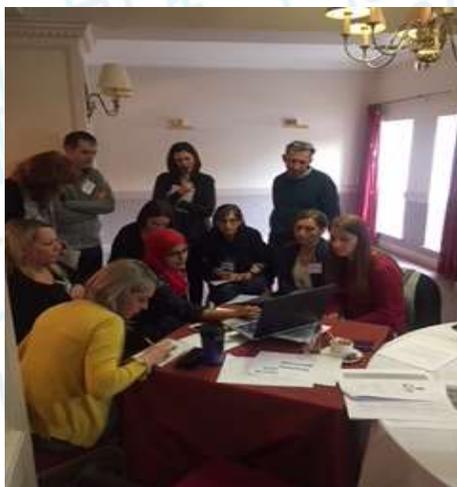
- Microsystems at work and improving outcomes in complex systems
- A focus on team dynamics – the values and behaviours of high performing teams
- Improvement methods in healthcare
- Process mapping and fishbone analysis
- The PDSA cycle



## Training Event 2: February 2018

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- Team sharing – The World Café
- Human Factors in clinical practice
- The ‘Six Thinking Hats’ principle
- Time ordered data and outcome measures



## Training Event 3: April 2018

- Shared the Swedish experience with Dr Lena Hanberger, Linköping University
- Team presentations about their QI journey
- ‘Making improvement our core business’
- ‘How to sustain and spread improvement’



# Training Event 4: July 2018

- Team feed back on progress and achievements using poster presentations
- How to disseminate learning and share within regional networks and beyond
- Learning about the habits of a continuous improver
- The engagement of children and young people with the RCPCH &Us Team



# Team Posters

## Paediatric Diabetes Education and Empowerment Quality Improvement Project

**Basildon and Thurrock University Hospitals NHS Foundation Trust**

S Ahmed, L White, B Van Meijgaarden, G Sedgwick, E Daniel, S Rawal, M E-Smith, T Bagridge, B Kyaw, S Radley, M Fernandes, S Shah, L Hunt

**Aim:** To empower our patients/parents to self manage and improve their diabetes by providing them with required knowledge and skills.

**Method:** We identified 10 motivated, newly diagnosed T1DM families. We contacted them weekly for 6 weeks and fortnightly for another 6 weeks (phone/mail). We trained them how to identify patterns in their blood sugars by looking at their DIASEND downloads and to make adjustments in their doses. We assessed their competence objectively during this period. We also conducted questionnaires at the beginning and at the end of project to take qualitative feedback from families about effectiveness of this project.

**Our improvement journey - the steps we took**

**PDCA and Fishbone diagram**

**Results**

**Are families able to identify trends in blood sugars?**  
80% able to identify patterns in blood sugar for week 5

**Did family make any changes in insulin doses (self management)?**  
80% able to identify changes in insulin doses for week 5

**75% of the blood sugar...**

**45% of the opposite...**

**Feedback**

**Interventions**

**Other areas of focus:**

**Data and results**

**Effect of changes**

**Key messages**

**Feedback (PSP)**

## Our Quality Improvement Journey

### Improving HbA1c and quality of life in our children and young people living with diabetes

**Background**

**Our focus**

**What next?**

**Data and results**

**Effect of changes**

**Key messages**

**Feedback (PSP)**

## QI initiative 2017-2018

**NHS East Sussex Healthcare NHS Trust**

### Working together to live well with diabetes

Nadia Muhi-Iddin (Paediatrician), Stephanie Gill (Paediatrician), Elaine Papps (PDSN), Elaine Wrenn (PDSN), Nicola Orr (PDSN), Sarah Bushell (Dietician), Danielle Drinkwater (Psychologist), Penny Boxall (Co-ordinator).

**Background**

**Our Team**

**Our projects so far**

## Derbyshire Children's Hospital

### Better Team Working to Improve the Quality of Diabetes Care

**Pre & Post Clinic Communication**

**Pump Service**

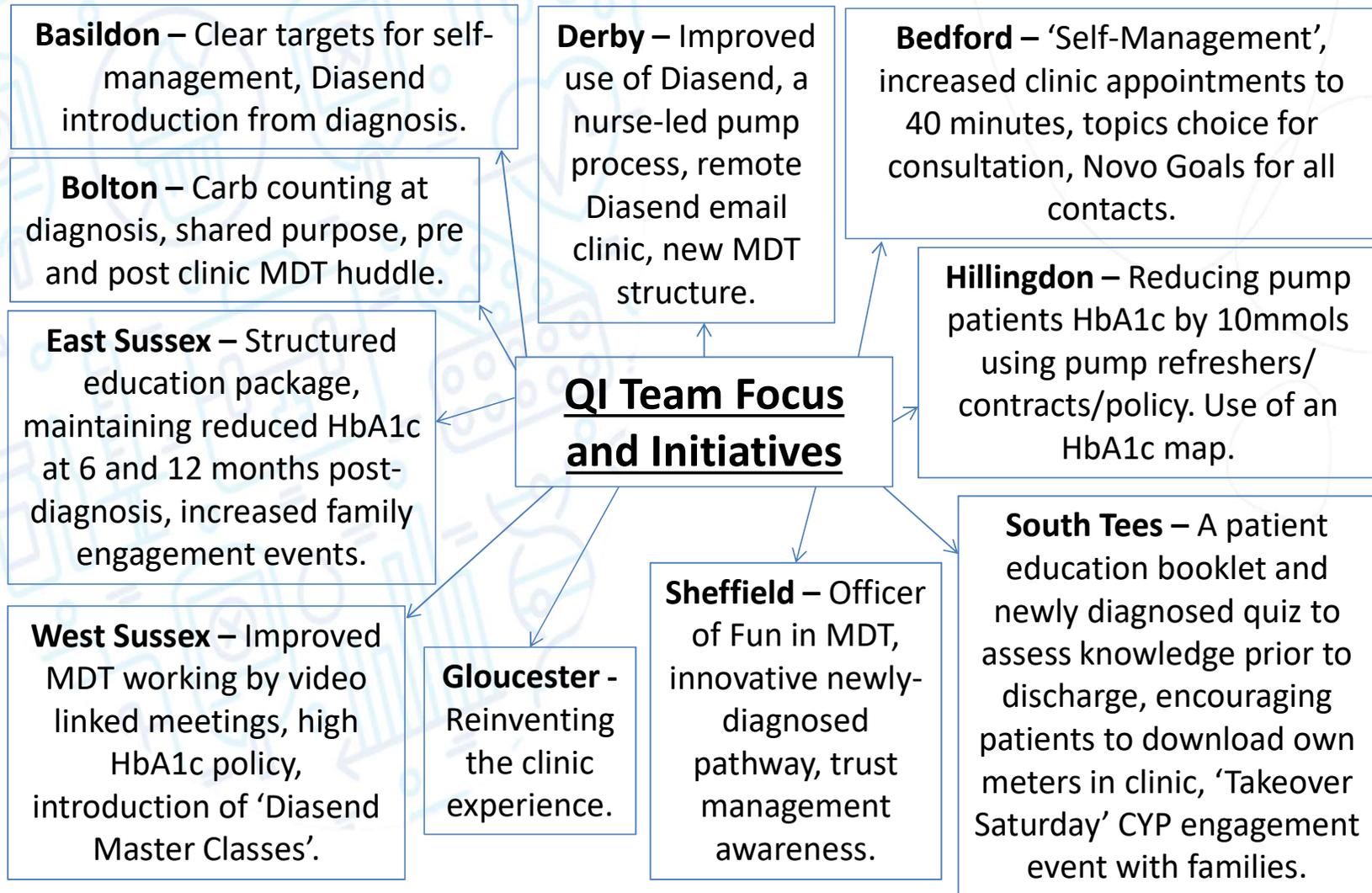
**Carb Counting at Diagnosis**

**PDAS**

**Our purpose is to improve outcomes for Children & Young People in Derbyshire, as measured by HbA1c, by enhancing self-management skills to encourage patients to be proactive experts in their own care using all available technology.**

**Average HbA1c with QI interventions 2017/2018**

## What Were Pilot Teams Working On?



## Team Feedback

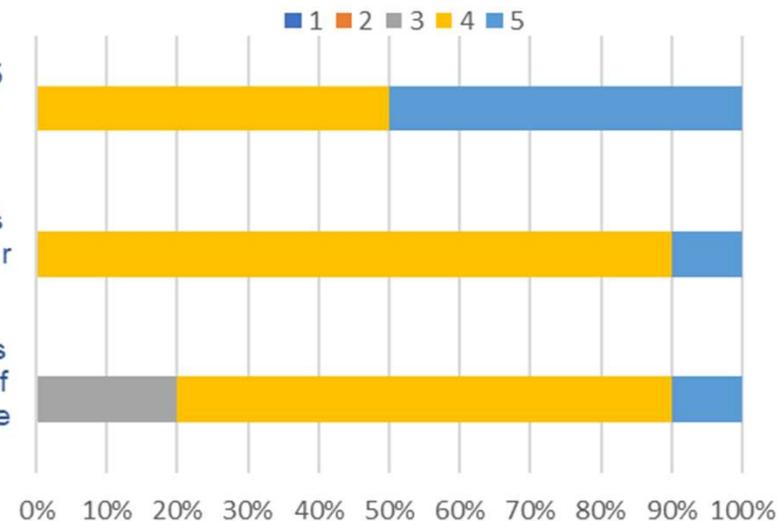
“We were able to understand the basic problems when we did the mapping exercise. We are more focused, learned a common skill set, increased team motivation, improved team cohesion and now have a common language and goals.”

“We have a stronger focus now and clearer shared goals. We are giving more consistent advice to patients and families. By doing the QI we have spent more time analysing our HbA1c and tracking our progress in a more formal way, which has provided motivation and direction.”

On a scale of 1 to 5, where 1 is 'not very useful' and 5 is 'extremely useful', how would you rate your overall experience of participating in the QI programme?

On a scale of 1 to 5, where 1 is 'not likely' and 5 is 'very likely', how likely are you to continue with your QI activities after the programme finishes?

On a scale of 1 to 5, where one is 'not at all' and 5 is 'significantly', how much would you say your ways of working as a team have changed in the course of the QI programme?



# Quality Improvement Collaborative

2018 - 2021



**RCPCH**  
Royal College of  
Paediatrics and Child Health  
*Leading the way in Children's Health*

National Children  
and Young People's  
Diabetes Quality Programme

[:h.ac.uk](http://h.ac.uk)

## Post-pilot plans - Overview

- **All units enrolled in the National CYPD Quality Programme are entitled to apply for a place in the QI Collaborative**
- **Application process:** statement of purpose, declaration of commitment from all of the team and support from their Trust Medical Director to take part
- **Two options for participation:** national and regional

## QI Collaborative – Waves 2 and 3

- **Modelled on the pilot QIC** (110 healthcare professionals) **with the same master trainer** who developed and delivered the pilot with support from RCPCH QI staff
- **2 National Waves** starting in October 2018 involving 14 new teams (180 healthcare professionals) across all 11 CYP Diabetes Regional Networks in England & Wales
- **1 residential weekend, 3 one-day events**

## Regional QI Collaboratives – Waves 4 to 12

- **2019 – 2021 up to 10 waves** starting in March 2019
- **3 waves per year of 4 one-day events**
- **Expert trainer** delivering the core content with support from the RCPCH QI staff
- **Regional cohorts from diabetes networks:**
  - South West and Wessex
  - East of England and Thames Valley
  - London and South East
  - North East and Cumbria, North West
  - Yorkshire and Humber
  - East and West Midlands
  - Wales

# THANK YOU

Dr Fiona Campbell  
Dr Tricia Woodhead  
Dr Justin Warner  
Dr Neil Hopper  
Dr Lena Hanberger  
Kasia Muszynska  
Sue Eardley



# QUESTIONS?

[megan.peng@rcpch.ac.uk](mailto:megan.peng@rcpch.ac.uk)



# What is the NCYPD Quality Programme?

The last piece in the jigsaw to drive and monitor improvement in paediatric diabetes outcomes

A three-year integrated programme transforming teams to improve outcomes and deliver best practice care efficiently

National Programme benefits, supported by clinical teams, managed centrally with proven methods



**Peer Review**  
- three year cycle



**External Verification**  
- annually



**Self Assessment**  
- annually

**Quality Improvement Collaborative**

