

The Paediatric Diabetes Service in England and Wales Learning from Sweden's Improvement Journey

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A gradual reduction of national median HbA1c levels in England and Wales since 2009 can be attributed to the development of a network approach to care supported by the National Paediatric Diabetes Audit (NPDA) and a Best Practice Tariff in England, introduced by the Department of Health in 2012. This delivery of a co-ordinated national programme of support for 173 multi-disciplinary teams distributed across over 140 NHS Trusts and Health Boards, has been at risk of plateauing in recent years (see Figure 1). To maintain the momentum towards achieving improvements comparable to international results, a new way to engage teams and their host organisations was required.

Evidence from Sweden, which has reduced its HbA1c levels markedly in recent years, demonstrates the impact that a programme of Quality Improvement can have on stimulating units to improve outcomes. In 2017, a Quality Improvement Collaborative model was developed in partnership with colleagues from Linköping University Hospital in Sweden. 16 teams applied to participate in a pilot Quality Improvement Collaborative with 10 ultimately chosen to begin a 9-month programme of training from November 2017.

All members of the 10 successful multi-disciplinary teams were expected to attend the programme of training together; comprising 2 residential weekends and 2 one-day events, lunchtime webinars for team champions and access to a secure online platform to share resources and ideas between events.

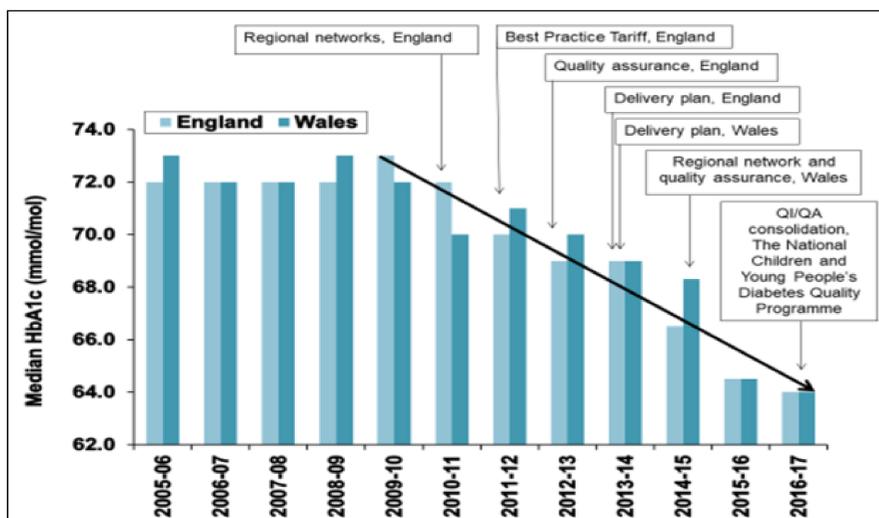


Figure 1: Median HbA1c for children and young people with all types of diabetes in England and Wales 2009/10 to 2016/17.

The aim of the programme was to provide teams with the QI methodology to identify, design and analyse their own interventions specific to their teams and to the needs of the children and young people and their families that they care for (see Figure 2).



Figure 2: Examples of social media activity from Diabetes QI Collaborative team training days November 2017 to June 2019.

Each of the teams highlighted very individual areas of focus ranging from the newly-diagnosed patient pathway, self-management resources in the community, Diasend download education and access, support for patients on pumps and the outpatient clinic experience (see Figure 3).



Figure 3: Examples of multi-disciplinary team posters reflecting on their QI journeys over the 9-month course of the Diabetes QI Collaborative.

Initial run-chart data has shown up to 10% reduction in mean and median HbA1c post-Collaborative. As part of the new National Children and Young People's Diabetes Quality Programme that includes annual self-assessment with external verification and a peer review process, the pilot Quality Improvement Collaborative model has now been adapted for rollout to over 100 units across England and Wales. It is our hope that this will be the stimulus to drive sustainable development of paediatric diabetes services in England and Wales and help bring transformative improvements to care of children and young people with diabetes and their families in the future (see Figure 4).

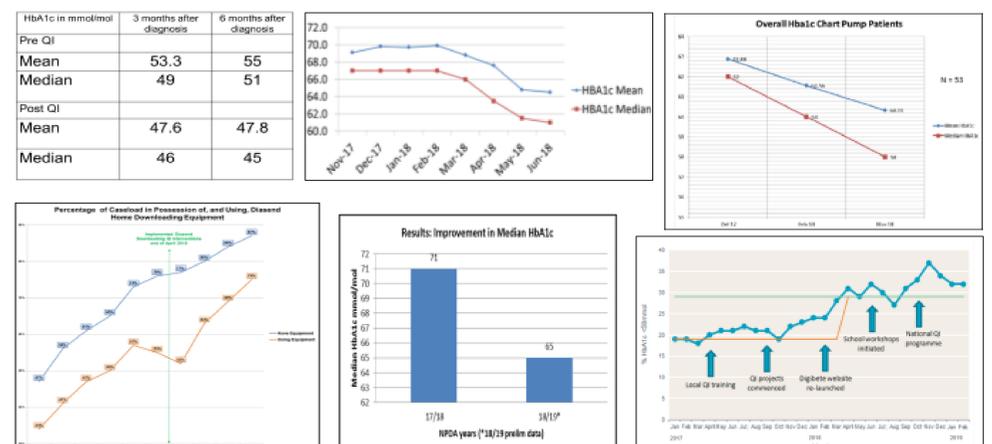


Figure 4: Examples of improvement recorded in raw individual unit outcome data pre and post-Diabetes QI Collaborative from participating teams.