

Gloucestershire Paediatric Diabetes Team: J. Brown, D. Harris, R. Rookes, S. Cheney, K. Dembinski, S. Adams, H. Tellwright, I. Odeny, I. Kasperek, S. Matthai, M. Balapatabendi, N. Dobbin, E. Yiend, J. Padmore, F. Cave, R. Shield, S. Harrison, A. Wood, V. AbithaKujambal



Introduction: In recent years Gloucestershire Paediatric Diabetes Team have implemented a number of changes to develop our service, such as carbohydrate counting from diagnosis, high HbA1c meetings, annual review clinics, team meetings, quarterly patient newsletter, parents' evening, PGL camp and family events. These interventions have helped to improve patient outcomes.



As part of the RCPCH Quality Improvement programme, we wanted to focus on making our service more patient-centred and improve patient engagement.

Aim: To improve the clinic experience for patients, their families and staff, based on their own input, thereby encouraging greater engagement and patient attendance. To this end we surveyed patients, families and staff to ascertain what they felt were the main areas for improvement. From this emerged our Interventions.

Interventions		
Aim	Areas Identified for Improvement	Solutions Implemented
To improve the clinic experience	Reduce time spent waiting during MDT clinics	Amend appointment letters to request patients arrive 15 minutes early for clinic
	Clinics feeling 'interview-like'	Surveyed clinic layout and re-organised furniture into a more 'coffee table' setting
	Patient engagement with clinic – wanting greater involvement in care decisions	Development of a 'Getting Ready for Clinic' sheet [Fig.3] to provide clear written action plans to be taken away from clinic
	Need for patients to have greater ownership of their diabetes management	Providing instruction leaflets and guidance on downloading in clinic [Fig.2] to eventually enable all patients to download from home Introduction of HbA1c record charts [Fig.4] in clinic



Results: We surveyed patients/families' opinions of our implementations using a smiley face scale. Our interventions have been very well received. Responses to the changes in clinic furniture layout were 88% positive and 12% neutral. Similarly, our 'Getting Ready for Clinic' sheet yielded 94% positive responses and 6% neutral,[Fig.4] with comments such as, "It let us have a voice in the clinic".

Verbal and written feedback indicates that patients and their families feel "highly motivated" by the HbA1c log charts [Fig.2] in clinic.

Requesting that patients arrive 15 minutes early for appointments has yielded no improvement on clinic duration. [Fig.6] The greatest impact on this is the length of time spent in with the consultant, reflecting the complexity of our patients' needs. Our next step is to consider effective use of waiting time, perhaps with micro-teaching.

Analysis of Clinic Timings (Minutes)							
	Median Total Duration	Max Total Duration	Median Ht, Wt, BP	Max Ht, Wt, BP	Median Nurse Time	Max Nurse Time	Median Consult Time
Jan/Feb	00:56	01:27	00:03	00:10	00:08	00:30	00:24
Sep	00:54	01:32	00:04	00:10	00:06	00:17	00:25

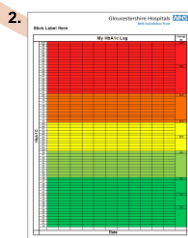
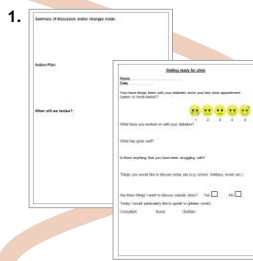


Conclusion: By listening to patients, families and staff, we have been able to improve the patient experience in the clinic setting. In addition to numerical data, verbal and written feedback has shown families and children are engaging in their diabetes management to a greater extent. They are more relaxed and have found their voice. The project has also enabled us to improve our team working.

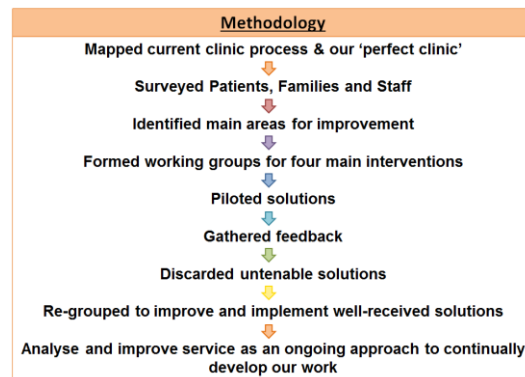
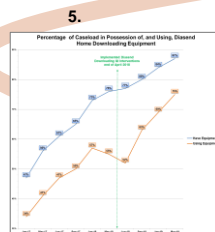
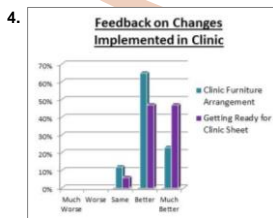
The Future: We have a number of further projects in motion: We have expanded our QI activity by remodelling our annual review clinics and also started new CGM service. We aim to continue to evaluate and improve our service to our patients with Type 1 diabetes.

2017/18 NPDA data has shown that Median HbA1c for our patients was 59mmol/mol, lower than the national average of 64 mmol/mol, and 42.1% of our patients had a HbA1c of less than 58 mmol/mol. Improved patient engagement through our QI process could indirectly make a positive impact on HbA1c outcome in future.

Our QI experience has provided a fantastic opportunity to share ideas about service improvements with other motivated Trusts; our thanks to all involved, especially the families and children who have joined us on this journey!



HbA1c Chart adapted from Hillingdon Hospital NHS Trust's design, with their permission.



Results show Diasend downloading instruction in clinic was valuable and 72% of those surveyed indicated that they would now be happy to download at home,[Fig.7] with some indicating that knowing they would need to download in clinic would encourage them to do it at home prior to clinic.

Figure 5 indicates that the number of patients now using Diasend to download at home has increased since our intervention, from 55% of the caseload, to 75%.

We have also begun recording monthly clinic HbA1c averages, with a view to monitoring the impact of future interventions on this key aspect of diabetes management.

