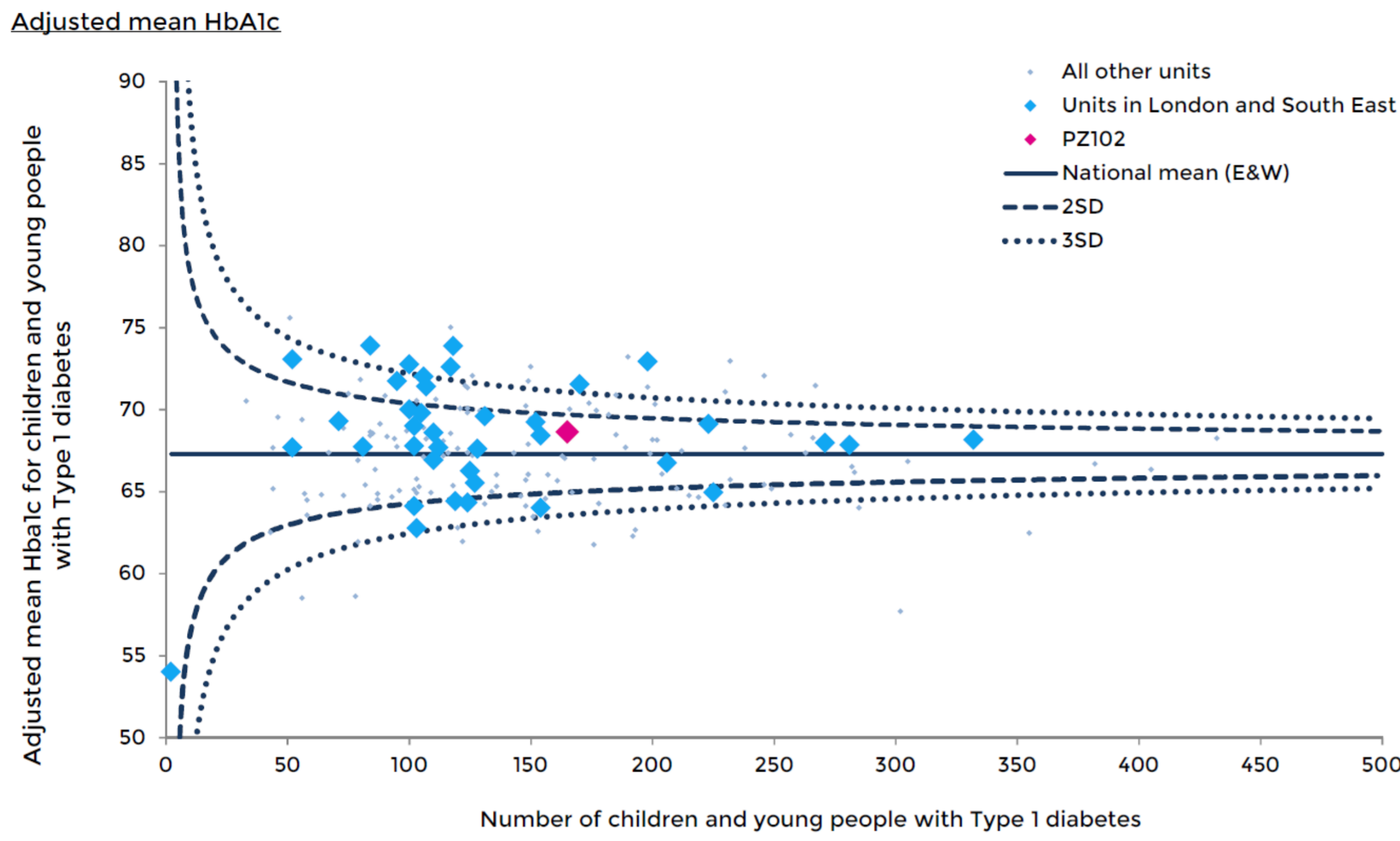


Our Quality Improvement Journey

Improving HbA1c and quality of life in our cohort of children and young people living with diabetes (CYPD)

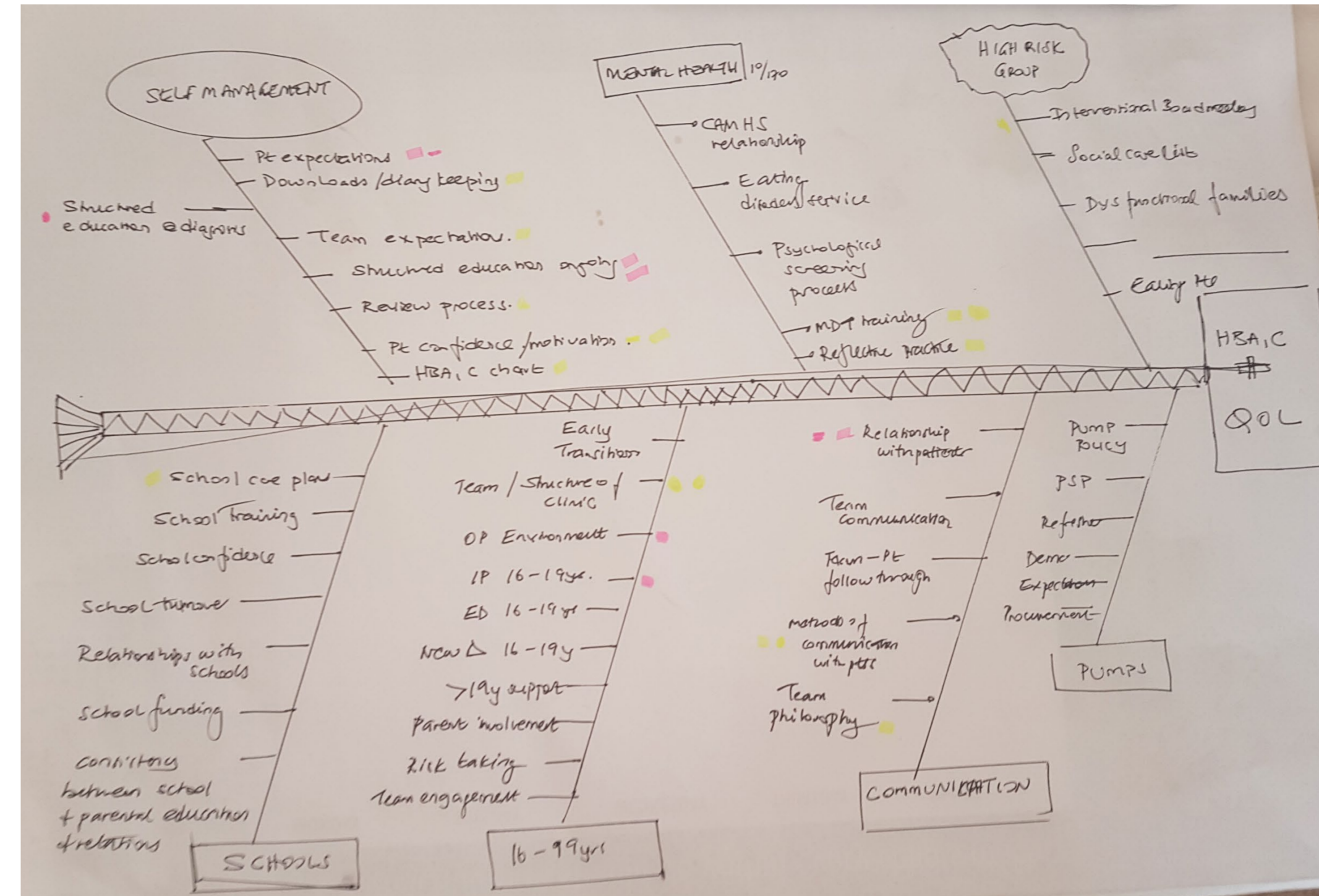


Background



- Caseload of 173 CYP living with diabetes
- 1/3rd patients on continuous subcutaneous insulin infusion (CSII)
- Above national median & mean HbA1c (NPDA16/17)
- High deprivation index

Analysis & plan



A whole service fishbone analysis with PDSA cycles for individual areas of work was completed at a team away day.

Agreed focus areas:

- An audit identified that CSII CYP were not achieving target HbA1c & we had incongruous internal processes
- Improving consistency in team education & communication to CYP

Interventions

For CSII CYP:

- Agreed CSII policy to improve consistent implementation amongst team
- Mandatory CSII refreshers with revised content
- Implemented a **Pump Support Plan (PSP)** for patients requiring support
- Introduced group pump demo to optimise nursing time

Other areas of focus:

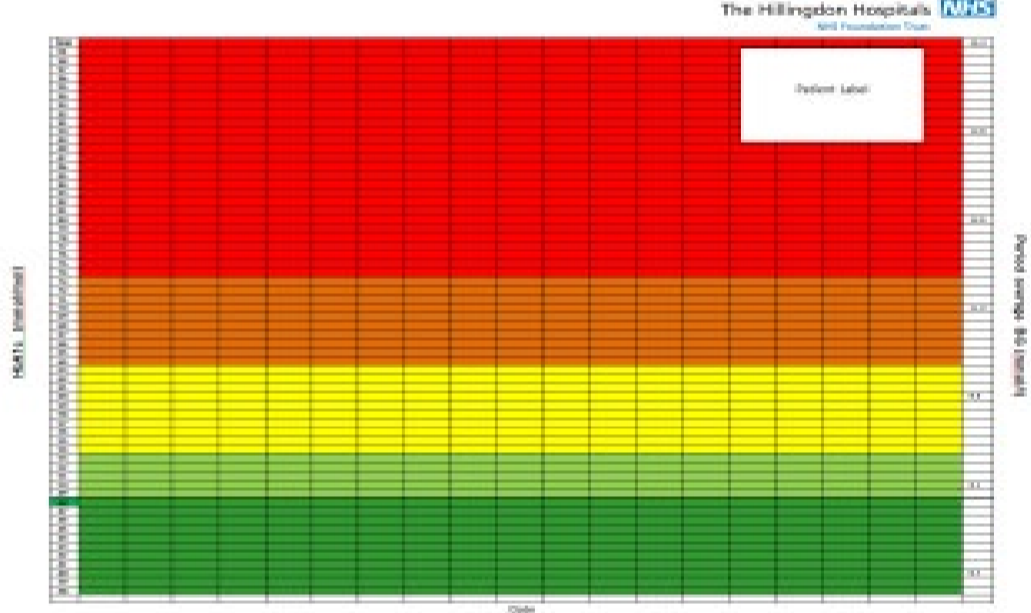
- Encouraging CYP to reflect on average blood glucose (BG) readings (as learnt at QI) using the developed average BG chart for home monitoring
- Modified existing hospital clinic HbA1c chart to influence tighter targets
- Further adapted our intervention pathways (based on HbA1c, age, trends)



Pump support plan letter



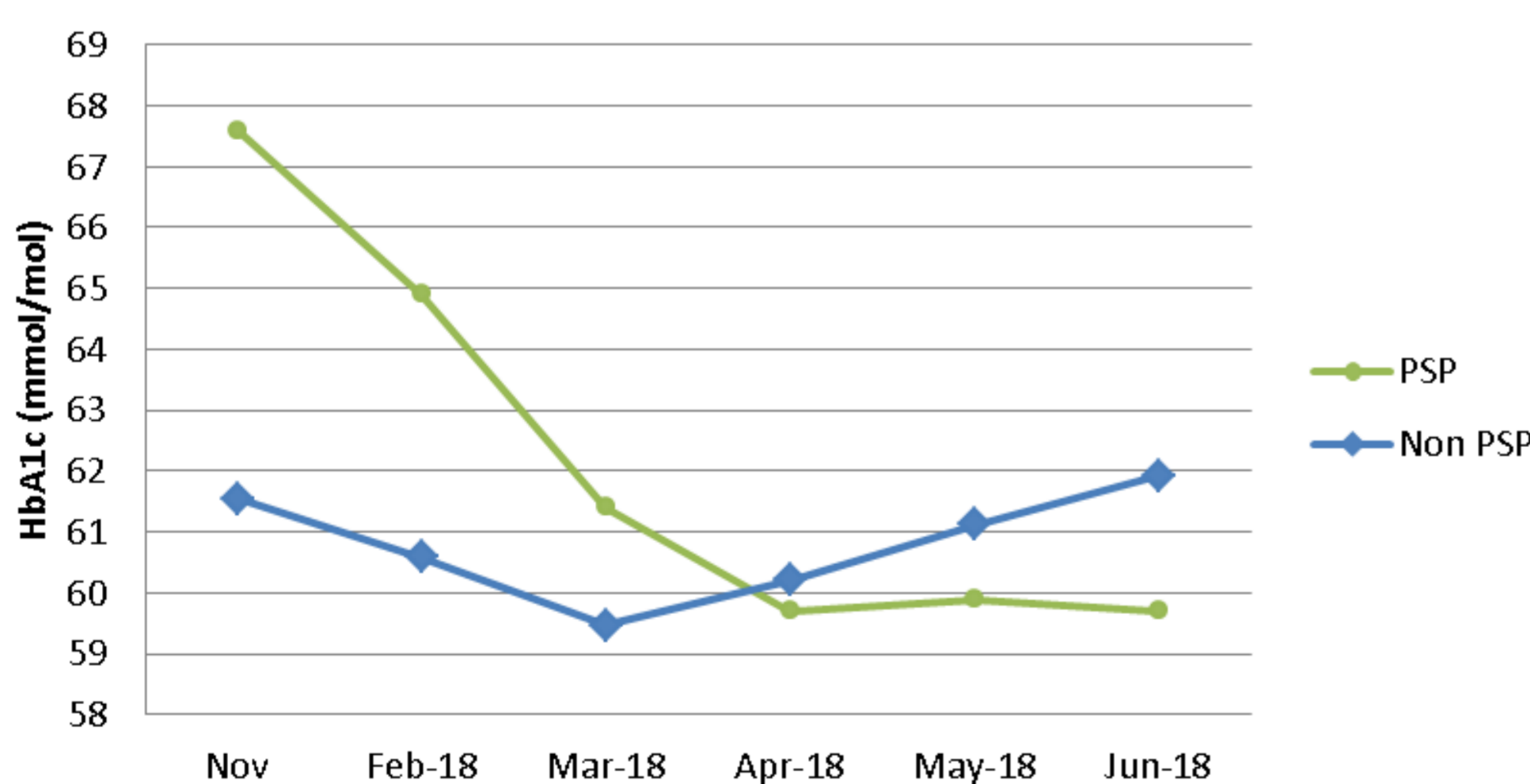
Modified Hospital clinic HbA1c charts



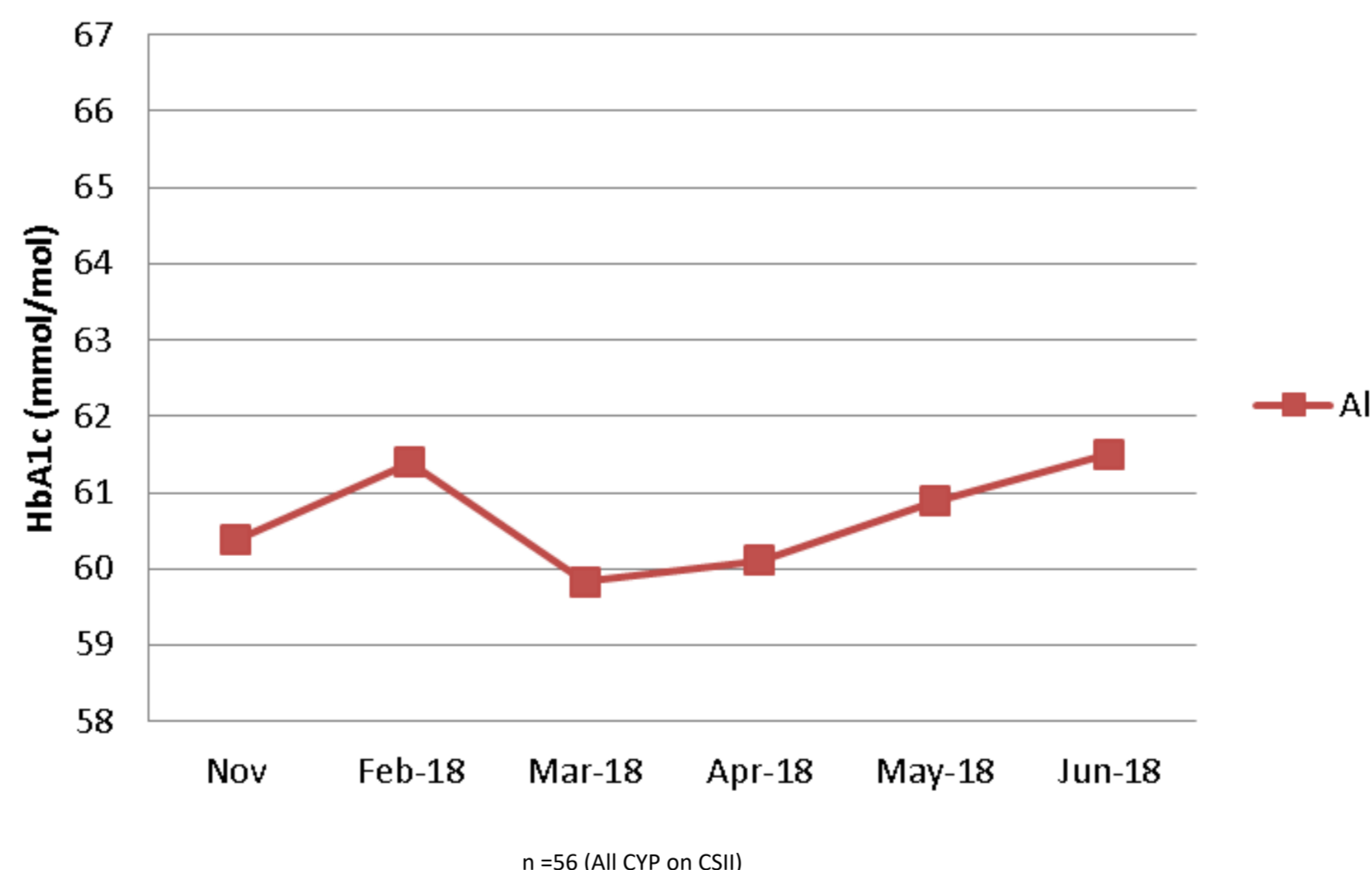
Mum & dad home clinic average BG chart

Data and results

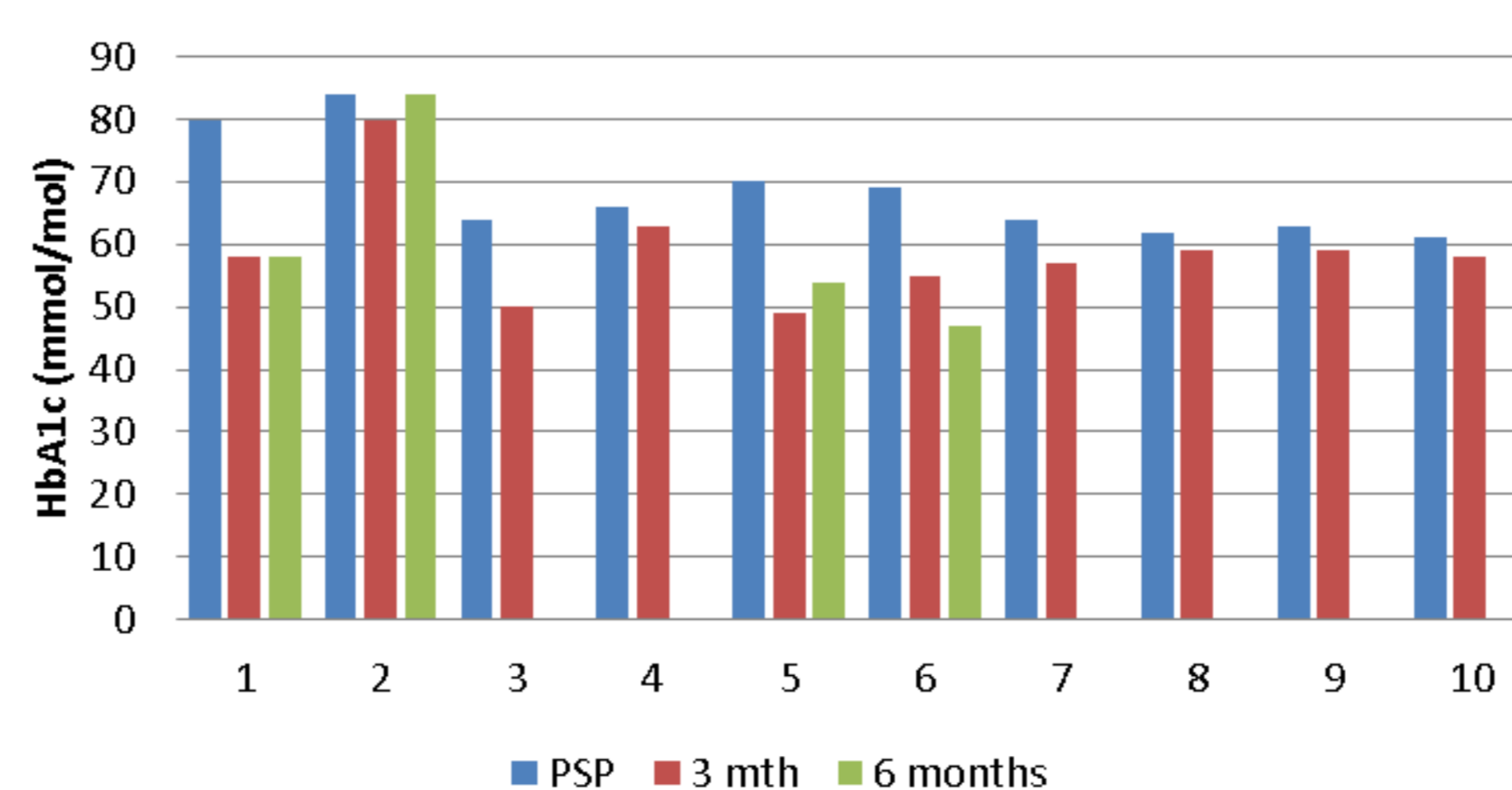
PSP Vs Non PSP



Mean HbA1c for all CSII patients



HbA1c individual tracker



So far:

- **Pump Support Plan (PSP)** PDSA started November 2017
- CYP commenced PSP on different dates
- 10 CYP have completed a PSP (3 months)
- 10/10 remained on CSII following PSP
- 10/10 showed reduction in HbA1c
- 4/10 have had a 6 month follow up. All but 1 showed sustained improvements
- A further 3 CYP have commenced PSP in May

Effect of changes

- It is motivating to see our QI data showing significant improvements for PSP supported CYPD
- Initially time consuming but our journey has demonstrated resultant streamlining and efficient use of resources to maximise benefits for CYPD

Key messages

- QI principles drive service changes
- Time spent on QI is time saved later
- Regular PDSA reviews are important
- Team cohesion and resilience is vital