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Background

- Utilization of diabetes technology, including insulin pumps, are known to improve glycemic control in youth with type 1 diabetes (T1D), which subsequently improves short- and long-term outcomes.
- There remain significant socioeconomic disparities in the use of diabetes technologies. Studies have shown lower rates of pump use in patients with lower socioeconomic status. Public insurance is an often-used proxy for socioeconomic status.

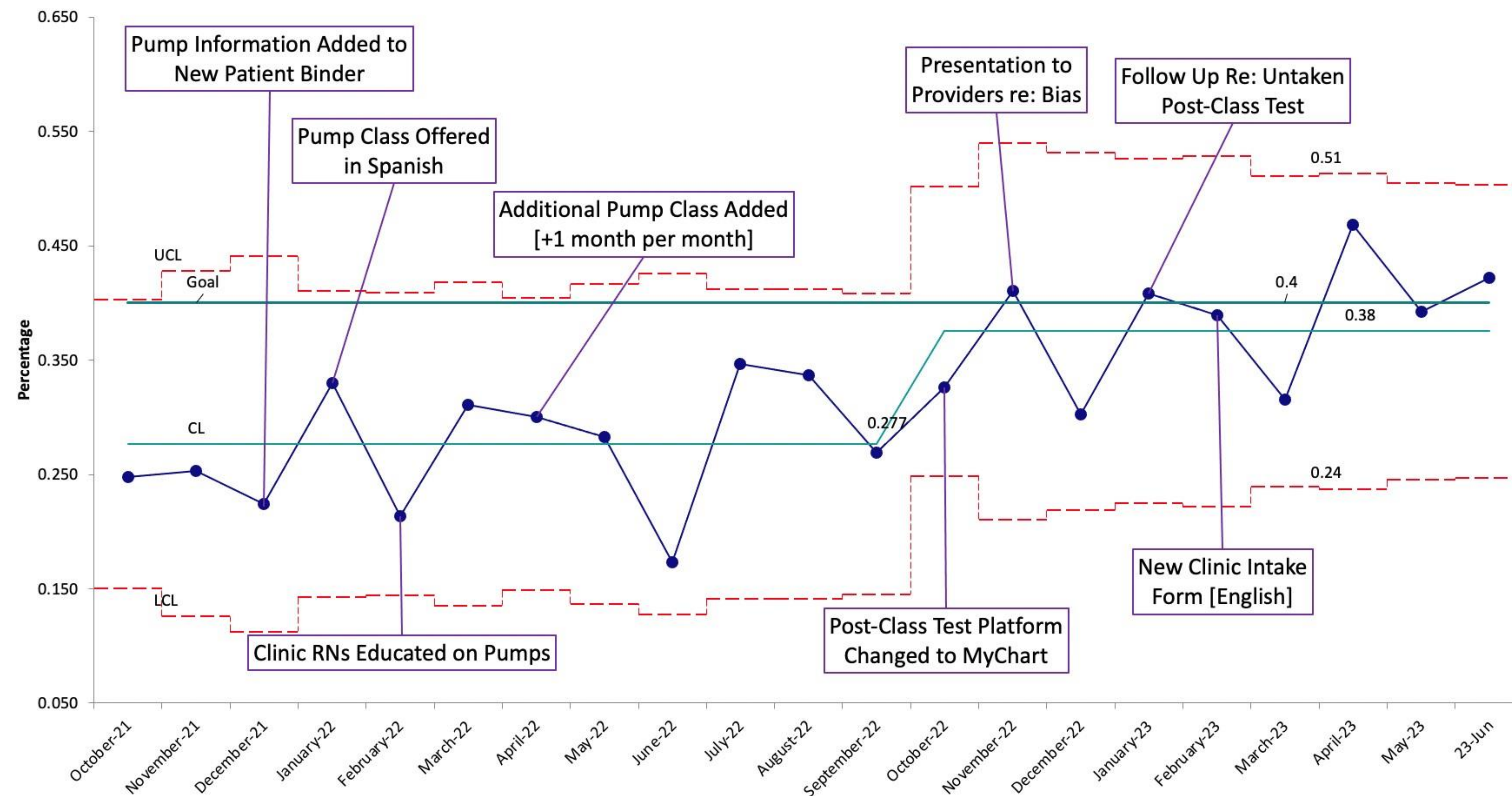
Aim Statement

To increase the percentage of public insured children and adolescents with T1D utilizing an insulin pump from a baseline of 30% to 40% in 12 months (April 2022 to May 2023).

Methods

- As a participating clinic of the T1D Exchange QI Collaborative, we obtained monthly aggregate data over the intervention period using the electronic health record.
- A multidisciplinary team was formed to define the existing process, and with feedback from patients, providers and staff, we identified key change concepts to reduce disparities and increase access to insulin pumps. These were tested in series of PDSA cycles.

Interventions & Results



As of June 2023, the percentage of public insured children with T1D utilizing an insulin pump increased from 30% in April 2022 to 42% in June 2023 (exceeding our goal of 40%).

Conclusions

- Health equity-focused interventions and addressing provider bias can impact diabetes technology access.
- Staff training and efficient workflow substantially increased insulin pump use among all public insured children and adolescents with T1D.
- Continued new strategies to address health inequities and increase technology use in T1D are needed to improve outcomes.