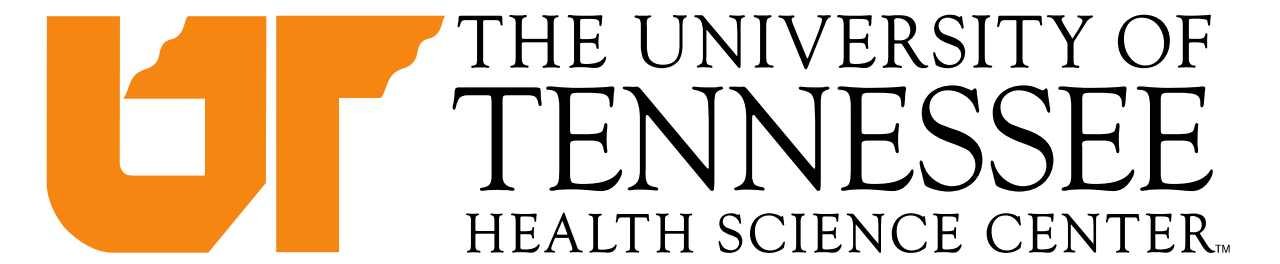


Using a Shared Decision Making Model to Increase Pump Use

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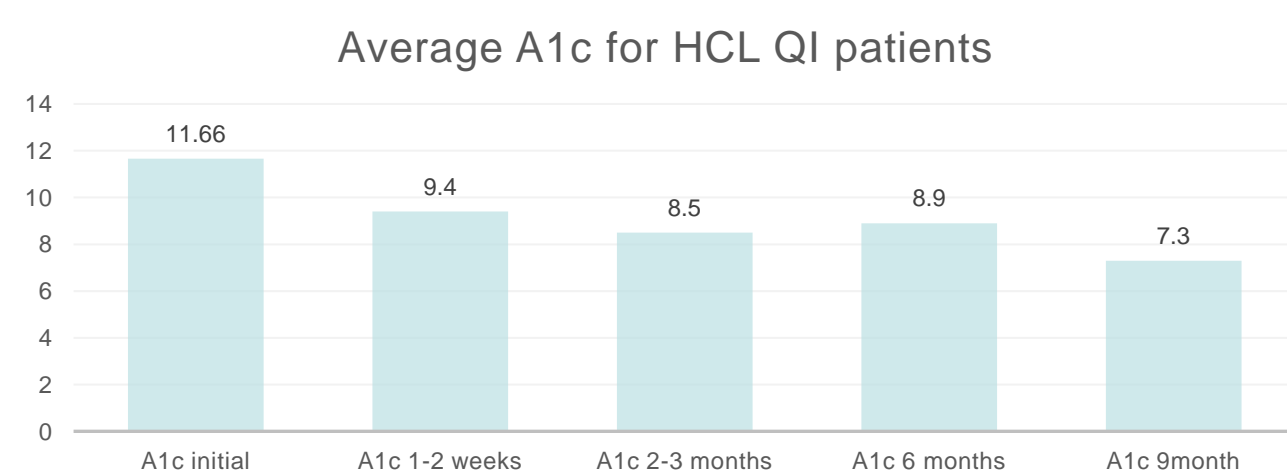


Introduction

- Technology use has improved outcomes for patients with T1D. However, race disparities exist. This was evident by the discrepancy in non-Hispanic Black patients on insulin pumps (7%) vs non-Hispanic white patients (21%) in our clinic. Our goal is to safely and equitably increase the number of patients using insulin pumps

Methods

- March 2021: We met with a multidisciplinary group to establish criteria and identified a group of 10 NHB patients interested in the insulin pump, who previously would not be considered candidates (A1c over 9.0). We started with a group of 10 patients and added more over time. As we demonstrated safety of HCL in patients with A1C over target we worked to expand pump use in general.
- February 2022: This led to removal of the previous termed "pump screen" that disqualified patients with elevated A1Cs from pump use.
- August 2022: Using the "my diabetes journey" questionnaire in conjunction with a brief technology handout we fostered conversations about technology options that allowed for shared decision making
- August 2022: OP5 launched in US, restriction for insurances
- Fall 2022: Broader insurance coverage for OP5 system
- On-going: Continued clinic-wide education so entire staff was more comfortable with the new technology.



My Diabetes Journey Handout: Date: _____

My Diabetes Journey

For my diabetes, I am doing well with:

I am _____ (circle any number of choices):

Skipping insulin for food because of the math	Skipping insulin for high sugar because of the math	Not sure how to take care of diabetes when I am sick	Not sure how to take care of diabetes outside of home or school
"Over" diabetes	Needing more help taking care of diabetes at home	Tired of checking blood sugar	Having a hard time taking my real-acting (bolus) insulin
Afraid of low blood sugars	Having a hard time taking long-acting (basal) insulin	Needing more help taking care of diabetes at school	Not sure how to take care of diabetes when I exercise or play

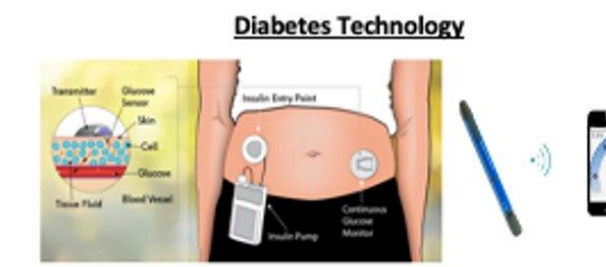
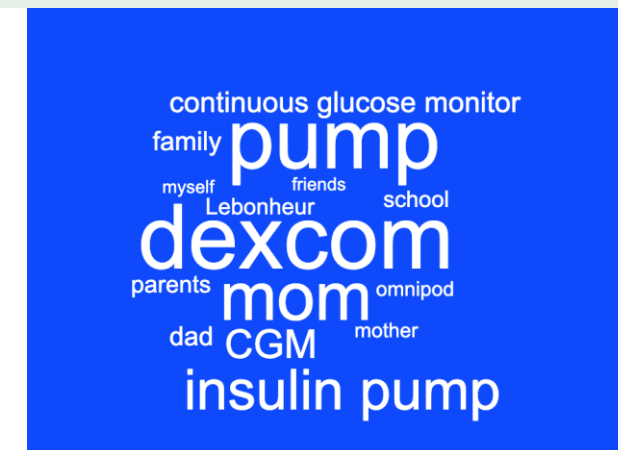
I currently have and/or am using _____ (circle any number of choices):

A continuous glucose monitor	Smart insulin pen	A sliding scale for high blood sugar corrections (rather than a correction factor)
An insulin pump	Alarms for insulin doses	Fixed insulin doses for meals (rather than a carb ratio)

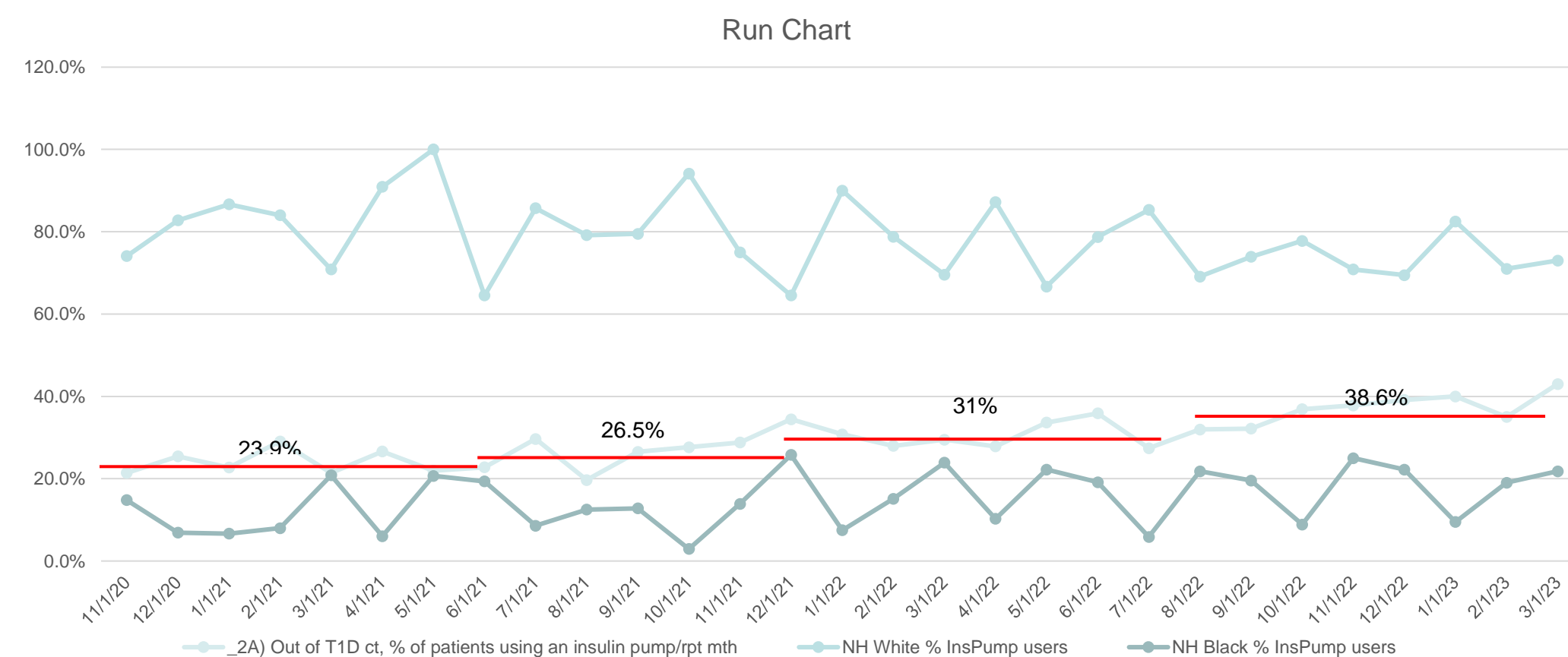
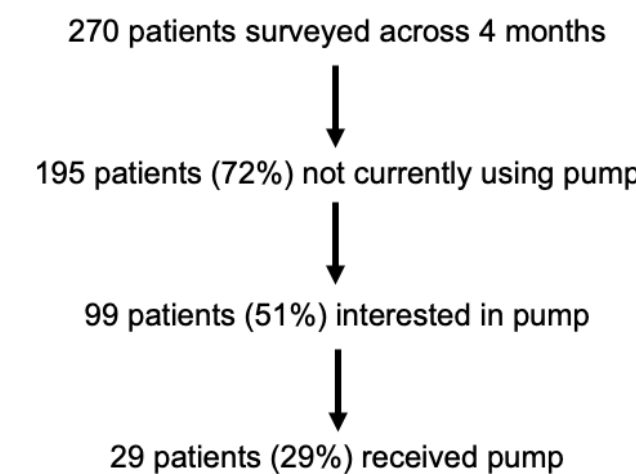
I would like to try or have _____ (circle any number of choices):

A continuous glucose monitor	Smart insulin pen	A sliding scale for high blood sugar corrections (rather than a correction factor)	More school nurse supervision	Less school nurse supervision
An insulin pump	Alarms for insulin doses	Fixed insulin doses for meals (rather than a carb ratio)	More parent/caregiver supervision	Less parent/caregiver supervision

I think _____ has most helped me improve my diabetes self-management.



- Benefits of Insulin pump:**
- Basal changes for time of day
 - Bolus options
 - Site changes every 2-3 days rather than 4+ shots
- Benefits of Continuous Glucose Monitor:**
- Updated glucose readings every 5 minutes
 - BG threshold alarms
 - Reduction of finger sticks
- Benefits of Smart Insulin Pen:**
- Rapid-acting insulin dose calculator
 - Tracks active insulin
 - Built-in reporting software

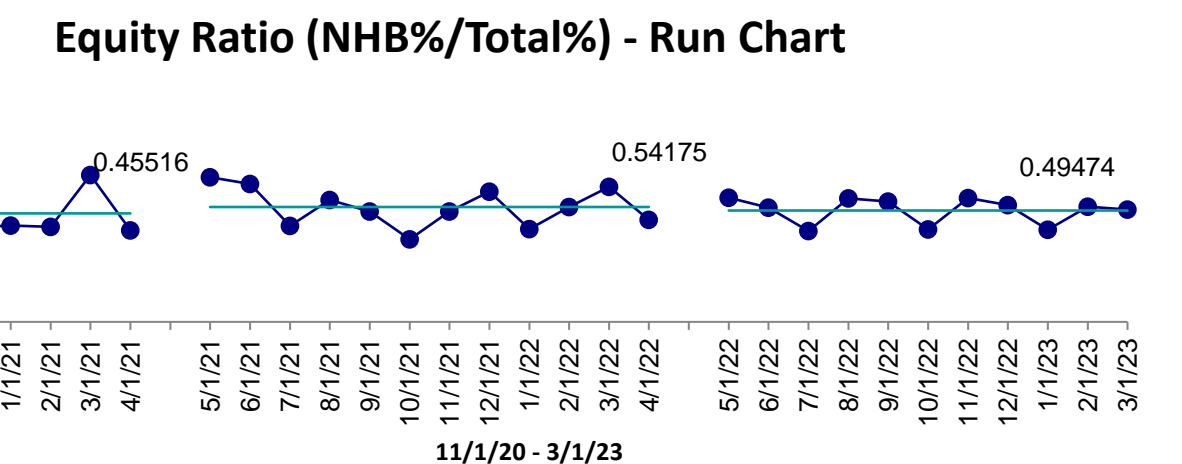


Started QI project with 10 patients

Removed A1c requirement from all pump starts

OP5 more widely available

Started using MDJ OP5 released



Results

- As of March 2023, we have helped >35% of our interested patients navigate the process of obtaining insulin pumps.
- Patient's are now taught about insulin pumps earlier in education and there are no longer A1C cutoffs to "allow" pump starts.
- Total pump use has increased from 23% to 38.6%. Equity is stable to slightly improved with Equity ratio almost 50%.

Conclusion

- Utilizing shared decision-making can help to identify patients who might not initially be considered for technology. We have demonstrated that many interested patients can safely initiate pumps which will help improve their diabetes management.
- We are continually adjusting our processes to improve equity in pump use and increase the number of patients utilizing pumps in our clinic
- The change in culture within the clinic was vital for success and the addition of continued education.
- Next steps include focusing on patients with A1c over 9.5 and screening/effectively addressing SDOH.

References

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