

Rachael Turner, MD¹, Melissa Mroz, MD MPH², Katherine Hazen, MD², Amber Crowley, PharmD³, Christina Krueger, RN³, Heather Dawley, RN³

¹Department of Medicine, University of Rochester Medical Center; ²Strong Internal Medicine

Background

Continuous Glucose Monitors (CGMs) have been shown to significantly improve glycemic control among patients with diabetes mellitus on basal insulin and noninsulin therapies.¹ Strong Internal Medicine is a resident-faculty practice with approximately 10,500 patient, with approximately 1900 patients with diabetes mellitus. In July through September 2023, only 49.9% had an A1c of <7% and 69% of <8%. The practice did not have a centralized way to monitor patients with personal CGMs. There are several barriers to prescribing CGMs, including provider and patient knowledge, insurance coverage, and access to data interpretation software.

Objectives

Our primary goal was to increase the number of patients using personal CGMs in the Strong Internal Medicine faculty and resident practices and enroll patients for monitoring. We also aimed to monitor the effects on A1c control of patients with CGMs.

Methods

- Created informational packets for residents and faculty on how to prescribe CGMs
- Created a guide on insurance coverage of CGMs
- Created a practice account for Dexcom Clarity and LibreView
- Monitored A1c in a subset of patients prescribed CGMs in one resident's patient panel
- Monitored glycemic control rates in the practice

Results

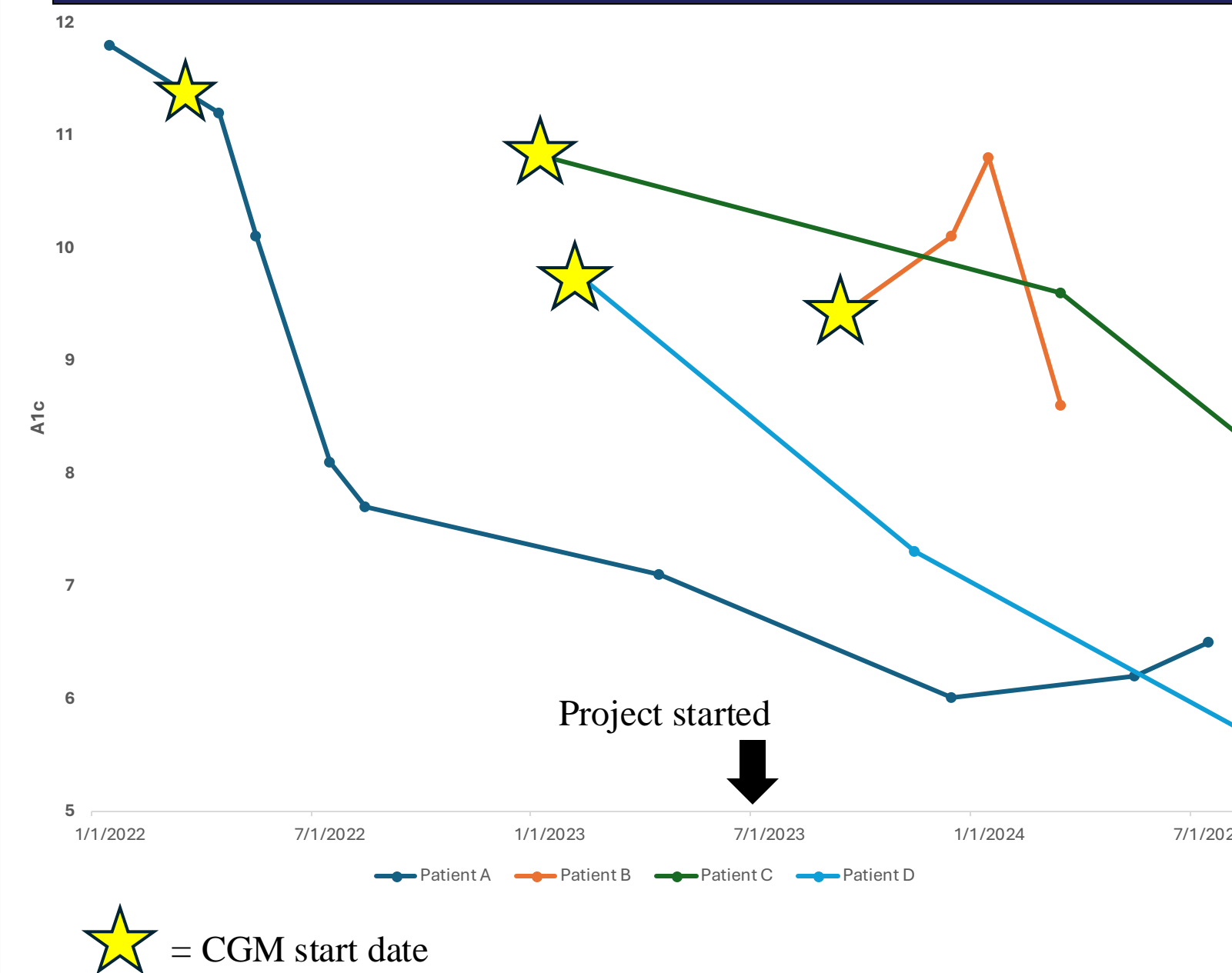


Figure 1. A1c values over time in patients utilizing CGMs from one resident patient panel

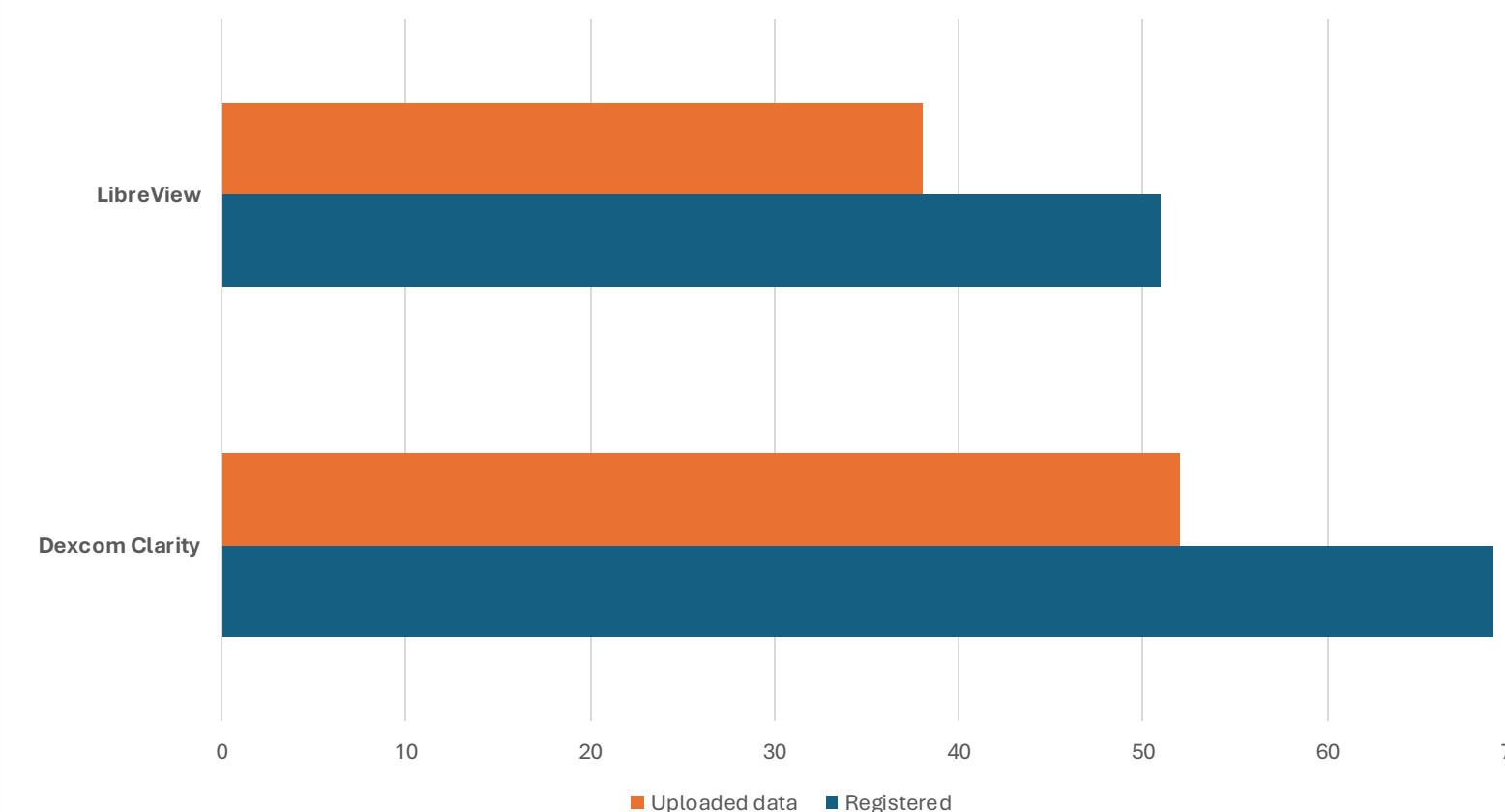


Figure 2. Number of users who were registered for and had uploaded data to LibreView and Dexcom Clarity as of September 2024.

Conclusions

The CGM initiative led to 120 patients enrolling in remote monitoring of glycemic control and of those enrolled, 75% successfully uploaded data. This shows feasibility of the initiative within our practice. The subset of patients monitored in detail had a significant decrease in A1c. This suggests that CGMs are of benefit in our patient population, as indicated in prior studies.

Limitations

- This project is in preliminary stages and glycemic control data has not yet been obtained for the whole practice
- Insurance coverage remains a limiting factor as CGMs are often not covered for patients not on insulin
- Only faculty were able to obtain access to LibreView and Clarity to view CGM data. Residents would view this data while staffing with faculty

Future Directions

- Hold education sessions with the faculty and residents on CGM prescribing
- Obtain specific data on a practice-wide level of glycemic control in only the patients who regularly utilize CGMs
- Help residents gain access to CGM interpretation software
- Survey the residents and faculty on their experiences with CGM prescribing and barriers encountered

References

- 1: Wright EE Jr, Kerr MSD, Reyes JJ, Nabutovsky Y, Miller E. Use of Flash Continuous Glucose Monitoring Is Associated With A1C Reduction in People With Type 2 Diabetes Treated With Basal Insulin or Noninsulin Therapy. *Diabetes Spectr.* 2021 May;34(2):184-189. doi: 10.2337/ds20-0069. Epub 2021 Feb 10. PMID: 34149259; PMCID: PMC8178717.