

T1D Exchange: Foster Connectivity with Technology to Improve Outcomes: More Than Just Numbers

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Background

Frequent Insulin dose titration is needed in pediatric T1D patients for a variety of reasons including growth, puberty, sports activities, stress, illness and periodic changes in routine.

Benefits to ongoing shared glucose information include more accurate patient advice, ability to help patient's adjust doses between visits and improve glycemic control.

In a representative sample of 463 T1D patients seen at our Dallas campus between Dec 2023 and Feb 2024: 288 (62%) were actively sharing CGM data (Dexcom) and serves as baseline.

AIM Statement

Increase shared CGM data between T1D families and clinician staff by 15% over a 9-month timeframe compared to baseline.

Fishbone Diagram



Key Drivers: People, Processes, Policies, Equipment, Supplies, Measurements

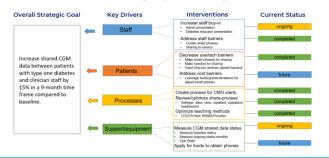
Patient Characteristics

1908 T1D patients (2023-2024) 40% non- commercially insured 77% CGM users (86% Dexcom)

Age	Percentage of patient population
0-5 years	15%
6-12 years	35%
13-18 years	46%
18+ years (in transition process)	4%

Key Driver Diagram

TIDX-QI: CGM Data Sharing Key Driver Diagram



Implementation



PDSA #1

- · Baseline data collection
- · Build awareness and team buy-in

PDSA#2

- · Create bilingual CGM-sharing smart phrases-utilize initially one site, one clinic, one physician
- · Build check-box in diabetes summary/EPIC for reportable CGM share-status

PDSA#3

- Implement smart phrases & website resources for clinic patients
- · Gain insight from clinic staff to assist with CGM sharing and update checkbox during check in process

PDSA #4

- · Identify patients with SDOH/potential barriers to sharing, offer share-help post clinic
- · Offer appointment-share option for patients without computer access
- Onboard patients to remote patient monitoring platform

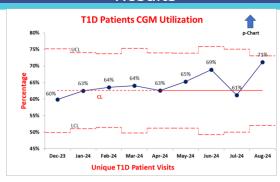
Current Status

CGM sharing has increased 11%; team working to achieve sustained increase and maintained sharing status.

Receiver patients less likely to share as some may also lack computer access for sharing incrementally at home Appointment-share option for these patients is being piloted.

Future state includes a phone drive or grant exploration for repurposed mobile devices that to allow easier CGM sharing access.

Results



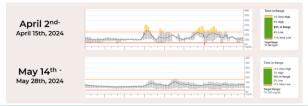
Dexcom CGM sharing has increased by 11% over the past 5 months of intervention period;

PDSA #4 currently-in progress.

Case Study

9 v/o Male, New Onset Type 1 Diabetes Mellitus

- Diagnosed with stage 3 T1D on 3/24/2024
- PMHX including brain tumor, cancer, stroke
- Dexcom G7 initiated on 3/25/2024 with receiver at home
- Clinic sharing code given on 4/18/2024 and sharing started with cell phone
- Increased time in range to 90% by 5/28/2024 with weekly insulin titration check-ins
- Reduction in low blood sugars



Lessons Learned/ Next Steps

- Fostering continued buy-in from team members is of the utmost importance.
- Offering support to patients is made more difficult as patients have different views of reporting software
- Change is difficult to institute due to human nature and habits.
- Devoting energy to improve CGM utilization, processes and overall engagement has effectively positioned our center to launch RPM-based interventions for improved glycemic control.