T1D Exchange

Cohort 2 Equity Project Kick-off

2/3/2022

Agenda

- Rationale
- Pilot Project Update
- Participating sites
- Timeline
- Project expectation
- Deliverables
- Data status
- Feedback
- Questions

- Why are you interested in being a part of this project

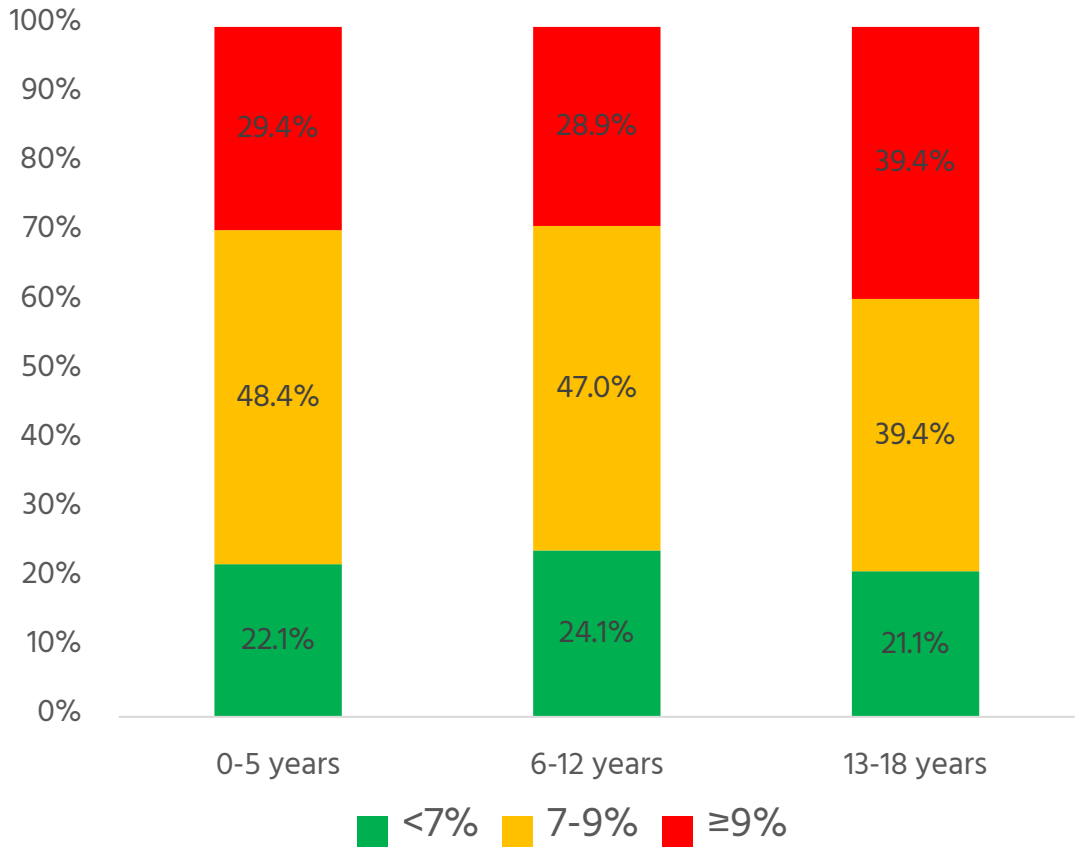
Project Rationale

- The incidence of T1D is increasing in the United States across all populations, most significantly in Hispanic youth.. When compared to non-Hispanic white patients, Non-Hispanic Black and Hispanic patients use CGM less frequently

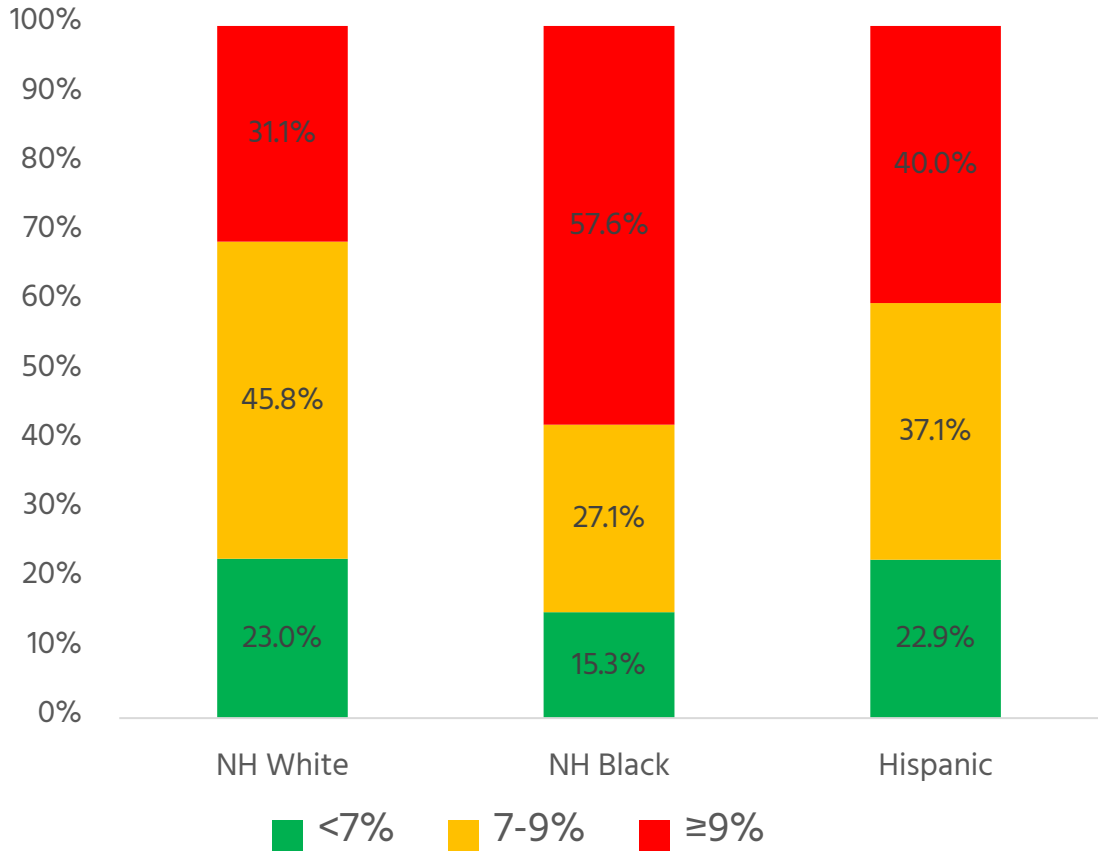
- Despite an overall increase in the use of Pumps and CGM, NHB patients had the lowest rate of CGM use (NHB 17%; Hispanic 37%; NHW 40%; $p<0.001$) and Insulin pump use (NHB 41%; Hispanic 56%; NHW 60%; $p<0.001$)

- Although there are 73% non-Hispanic White (NHW); 8% non-Hispanic Black (NHB), 9% Hispanic, 10% Other in T1DX database, A1C was significantly different between NHW, NHB and Hispanic patients. NHB, Hispanic patients with T1D (NHB 10.3%; Hispanic 9.2%; NHW 8.3%; $p<0.001$)

A1C distribution by age in Pediatrics

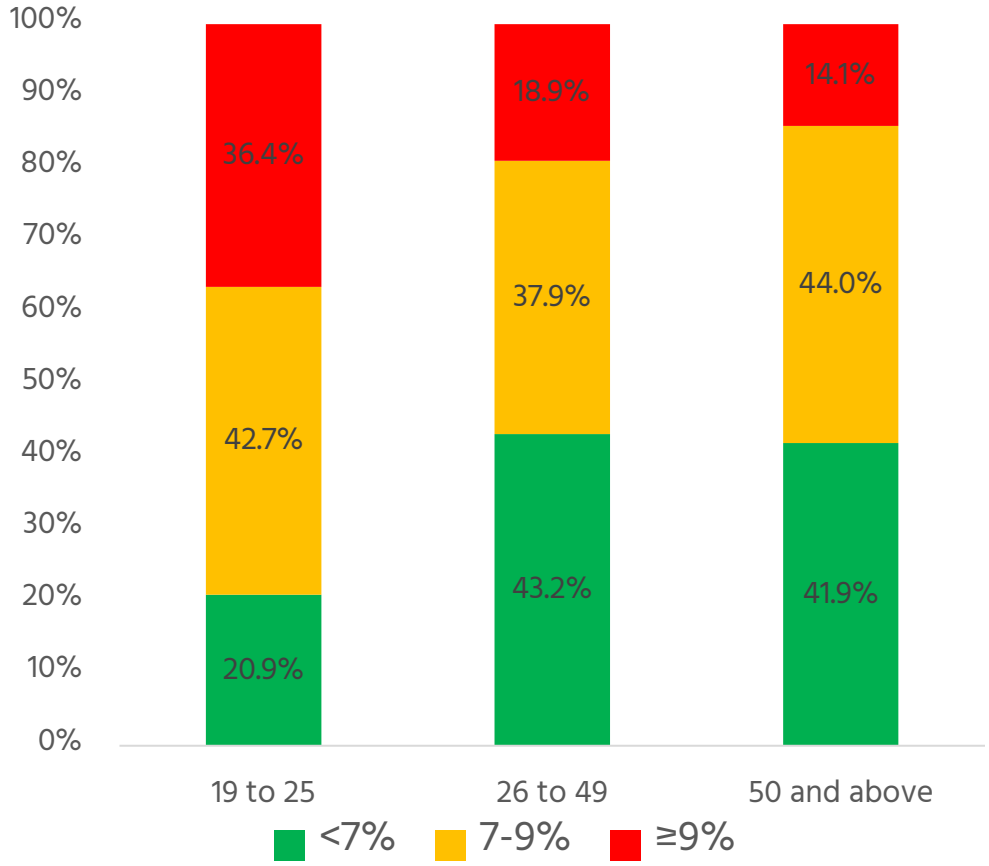


A1C by race/ethnicity in Pediatrics

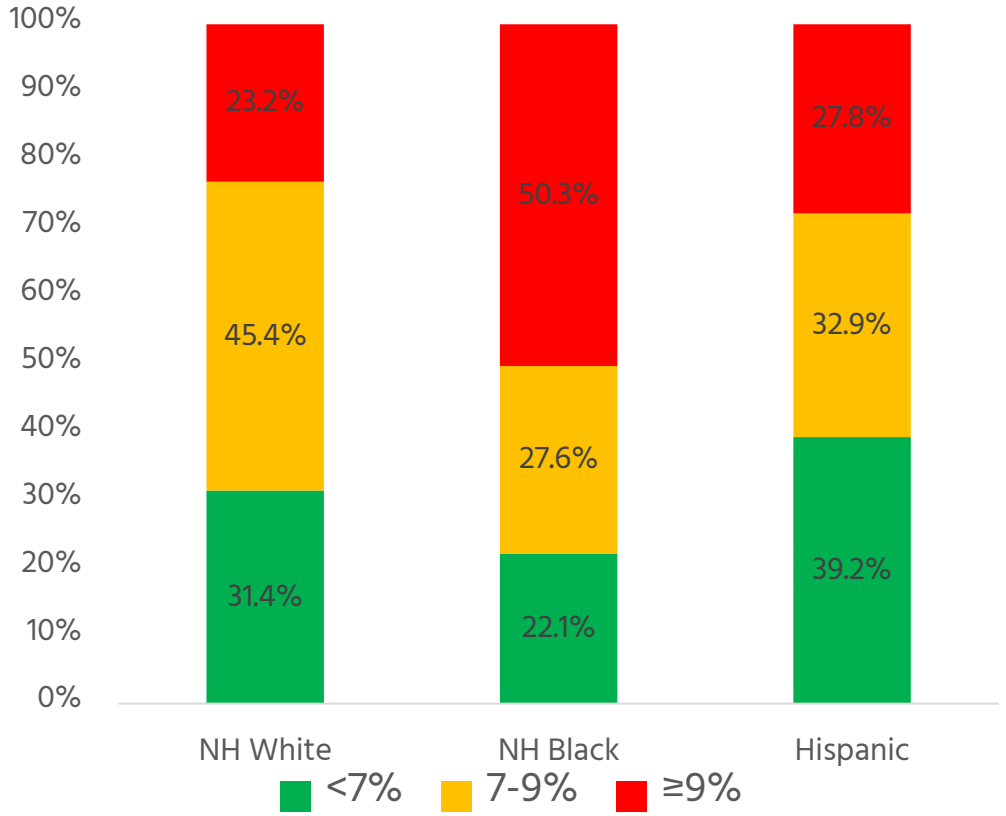


NHW-70%
NHB- 40%
Hispanic-60%

A1C distribution by age in Adults



A1C by race/ethnicity in Adults



NHW -77%
NHB- 49%
Hispanic-71%

Pilot Project Highlight

Participating Sites

Children's Healthcare of Atlanta

UPSTATE MEDICAL UNIVERSITY

Nationwide Children's
When your child needs a hospital, everything matters.

Cincinnati Children's

Montefiore

Le Bonheur Children's Hospital

UAB THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

T1D Exchange

Contributing Factors

FIGURE 6 PAIN POINTS CONTRIBUTING TO INEQUITABLE CGM USE

Tier 1	Finding out specific pharmacy/DME covered by insurance	Providers not aware when CGM has been approved or denied	Lag time between prescription and initiation of paperwork
Tier 2	Need for multiple electronic prescription	High burden of complex paperwork/ insurance denials	Language barrier for non-English speakers

FIGURE 7 PAIN POINTS CONTRIBUTING TO INEQUITIES IN PUMP UPTAKE

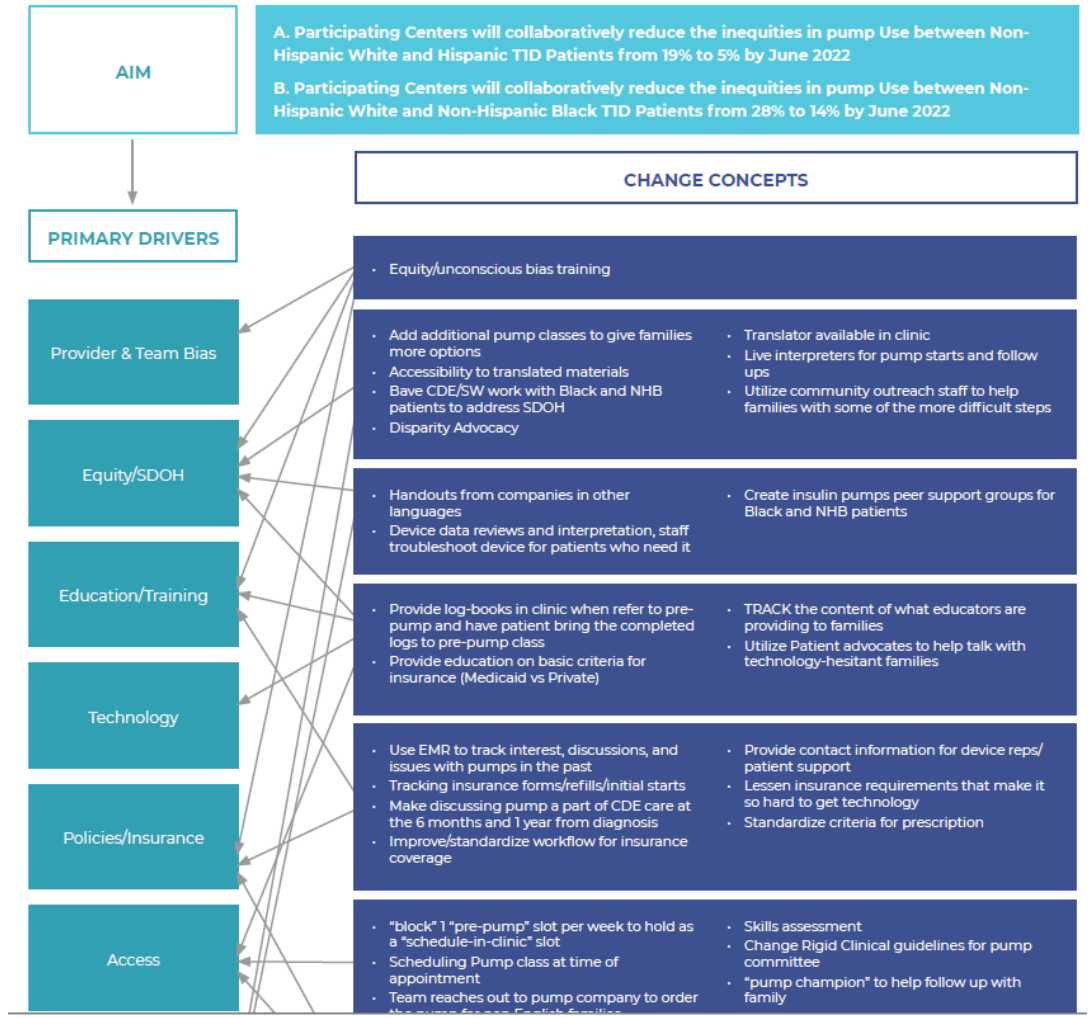
Tier 1	Difficulty contacting patients for pump classes, visits, and shipment of device	Communication to and from pump vendors to clinic/patients	Insurance issues/ denials	Stringent guidelines/ multiple paperwork for patients on public insurance
Tier 2	Language barrier/Lack of interpreter/materials not in other languages	Provider bias in offering pumps	Multiple visits/travel cost/missed school/ work	Staffing challenges/ staff turnovers
Tier 3	Lack of standardized screening tools to assess pump readiness	Provider concerns about pump safety	Patient refusal/ believes/want nothing attached to their body	Out of pocket cost for uninsured or underinsured patient

T1D Exchange

Key Interventions

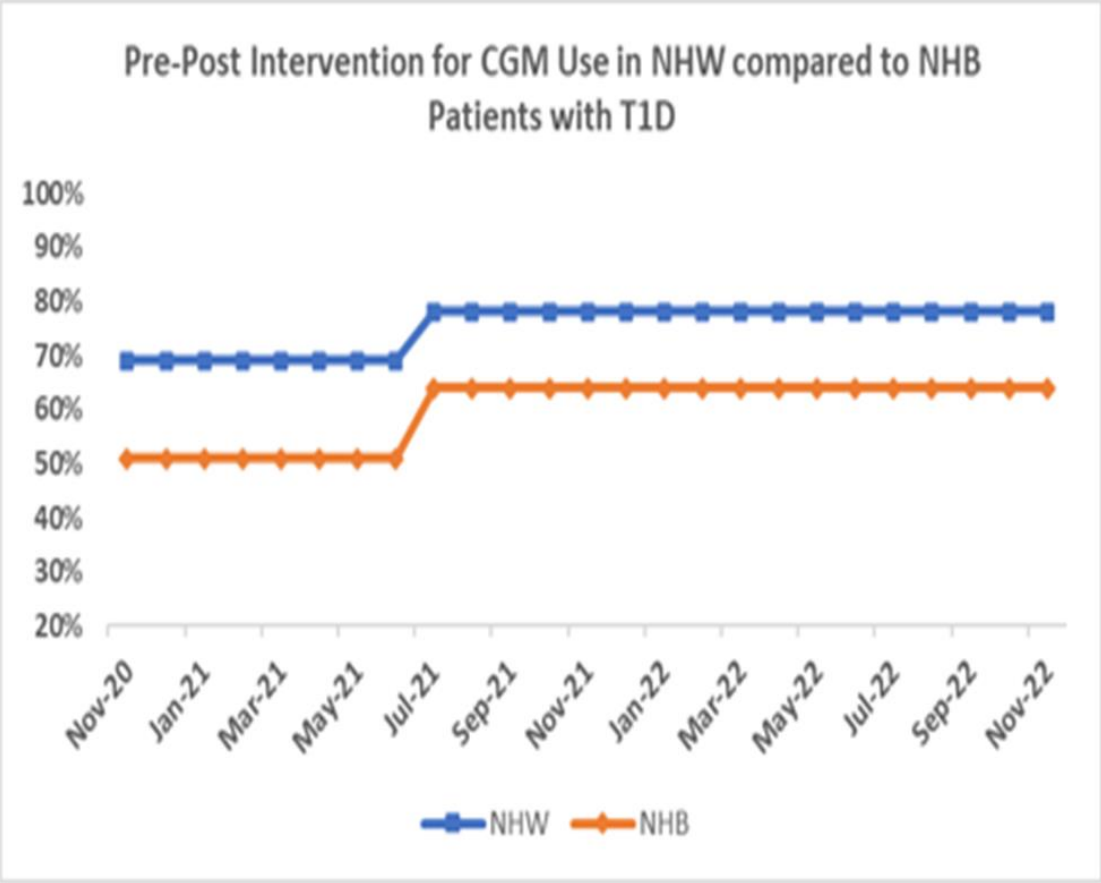
DRIVER: TECHNOLOGY

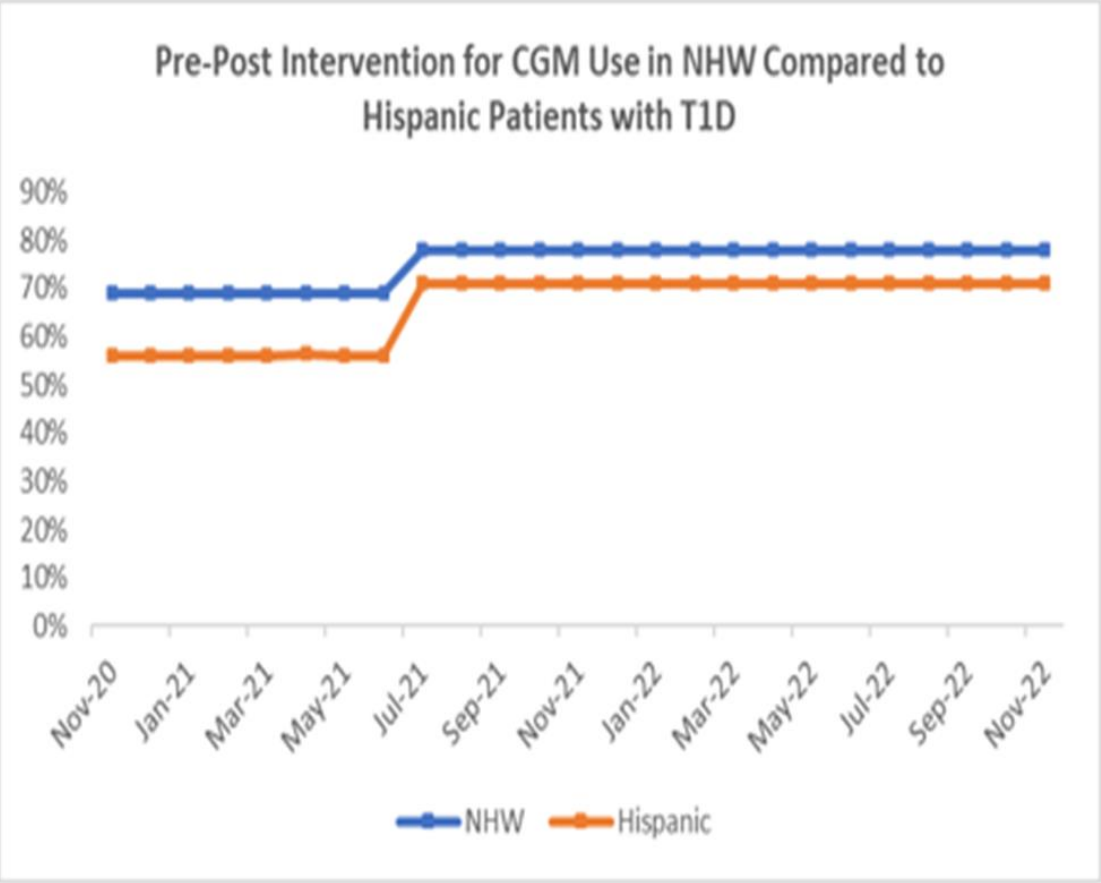
INTERVENTIONS	TOOLS/RESULT/CHALLENGES	CENTERS WHO TESTED
Discuss CGM regularly at the clinic		Site 1, 3, 4, 6, 7
Provide early access to CGM at T1D diagnosis		Site 4
Provided starter kits to patients (CGM Trial Program)		Site 1
Increase communication with DME companies through Weekly reports by DME companies to help the education team to follow up with patients and improve CGM uptake.	Weekly reporting by DME companies helped to know if the order is a refill or a new sensor.	Site 6, 7
Utilized DME to complete new and refill CGM authorization, provides weekly updates on approvals, and track authorization process. Admin staff sends update to providers when devices are delivered to patients		Site 6
Utilized pump company representative to improve post insulin pump class process and efficiency and as a resource for insulin pump initiation		Site 4,5
Standardized criteria for insulin prescription		Site 3
Increase patient engagement on Mychart to improve patient-provider communication. Messages and information such as pump flyers are shared through Mychart	https://trello.com/c/jbbaZXnP/37-choa-mychart	Site 2



T1DX-QI Equity Project: Cohort 1

The median increased by 7% in NHW, 12% in NHB, and 15% in Hispanic patients. The gap between NHW and NHB closed by 5% and the gap between NHW and Hispanic patient closed by 6%.





Examples of T1DX-QI CGM Equity QI Projects

Practice Type	Number of T1D Patients	Intervention Period (months)	Intervention Examples	Outcome
Pediatric	613	12	• Patient education folders for families • CGM champion built a relationship with DME company	• 6% Increase in NHB CGM use. • 10% increase in overall center CGM Use.
Pediatric	1886	22	• Multidisciplinary team approach • Targeted patient education • Onboarding assistance for NHB	• 50% reduction in equity gaps between NHW and NHB persons.
Pediatric	2784	12	• CGM submission process for high-risk patients • CGM evidence-based practice summary submitted to state level	• >50% increase in CGM use for publicly insured patients.
Pediatric	1500	9	• Improving provider understanding of requirements for CGM coverage • Assist patient with documentation	• Reduced CGM disparity between public and privately insured patients from 36% to 12%.
Adult	280	23	• Single provider streamlining paperwork to one location. • Including Social Worker to streamline process	• Increase in CGM usage from 12% to 57% in NHB on public insurance.
Adult	900	31	• Conducting social needs assessments and management, • Training support staff to place trial CGMs at the point of care, • Optimizing prescription workflows, and • Educating providers on CGM	• 30% increase in NHB CGM use. • 13% increase in Hispanic CGM use.

Lessons Learned

- Quality Improvement tools were useful in increasing equitable CGM and insulin pump use
- Clinic processes and policies are different for participating sites, and interventions can be tailored to the guidelines and procedures
- Monthly team meetings was useful for sharing improvement ideas and to foster learning
- Patient/parent participation is important in brainstorming change ideas, and to understand barriers and contributors to inequities
- Timely data reporting and a dedicated and engaged QI team accelerate the success of QI
- https://trello.com/c/9dNVDdWK/45-equity-change-package

Equity Project Cohort 2 Sites

Participating Centers

Adult Centers

Penn Medicine

Wayne State University

UHealth
University of Miami Health System

Barbara Davis Center for Diabetes
University of Colorado Anschutz Medical Campus

Grady

Boston Medical Center

UCSF Health

Pediatric Centers

Children's Mercy Hospitals & Clinics
Kansas City

C.S. Mott Children's Hospital
Michigan Medicine

Rady Children's Hospital San Diego

CookChildren's
Health Care System

T1D Exchange

Timeline	Expectations
June 2022 –January 2023 (7 months)	• All participating sites will report project baseline data using the smart sheet. All participating sites will review their existing data. The baseline data review will be stratified by race/ethnicity
February 2023	• Hold Kick off meeting/Plan recurring monthly meeting • Each site will identify champions for the QI project, including at least one patient/parent who identifies as Black or Hispanic
March/April 2023	• Hold Equity/unconscious bias training (5-10 participants per site) • Baseline data analysis • Each site will identify champions for the QI project, including at least one patient/parent who identifies as Black or Hispanic
April 2023	• Teams map out current process and annotate pain points in the process. • Teams will share process map at meeting in April
May 2023	• Team will perform a fishbone activity/ create KDD and set SMART Aims
June- End of the project	• Use PDSA Cycle to test intervention starting with one provider and scaling across the clinic. Weekly/bi-weekly Plan-Do-Study-Act cycles; Each team will complete at least 15 PDSA cycles
June –End of the Project	• QI documentation: Each site will share PDSAs results with other team at monthly meetings and share updates using RAIL tool
Deliverables	• Abstracts, manuscripts, change package, patient focus group

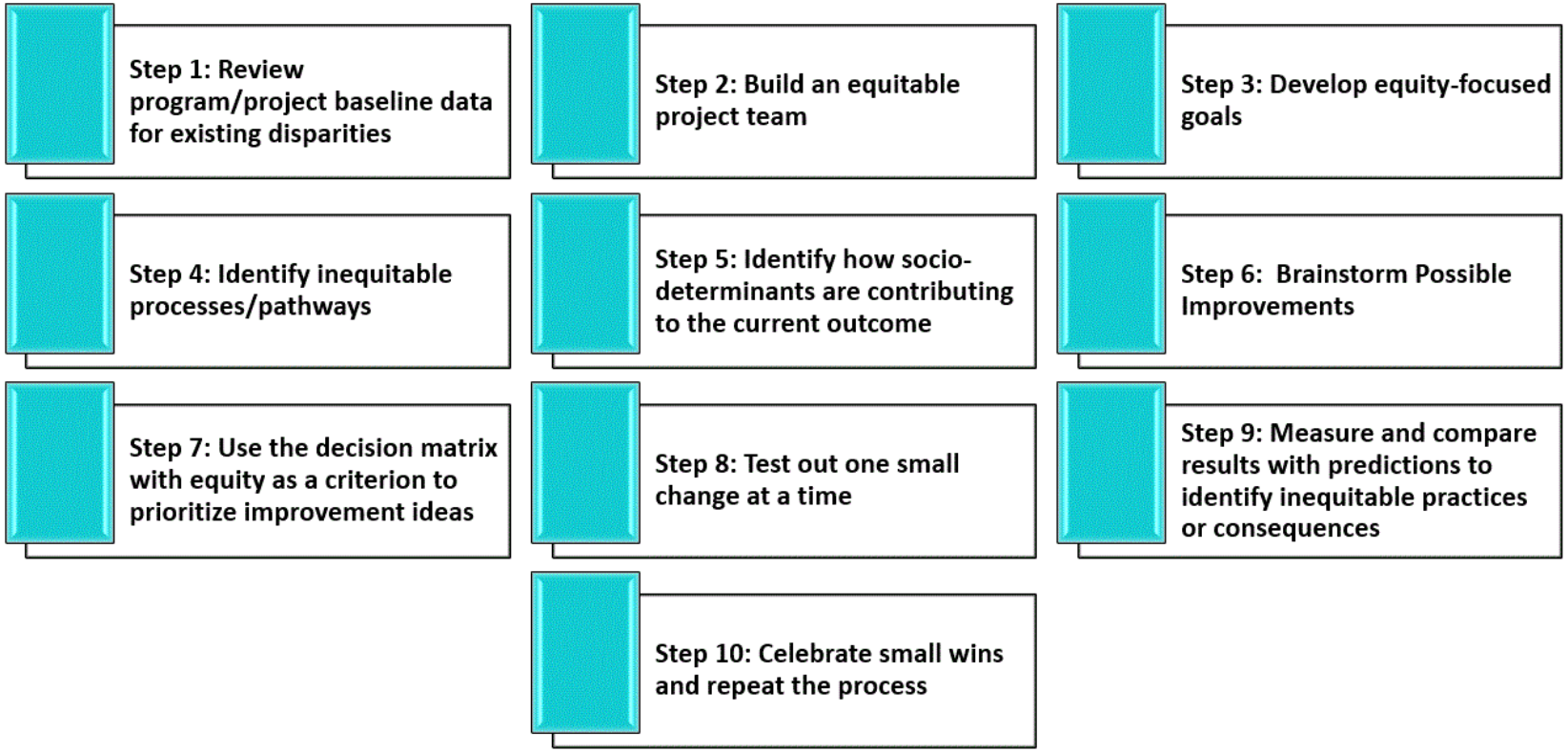
Equity/Unconscious Bias Training

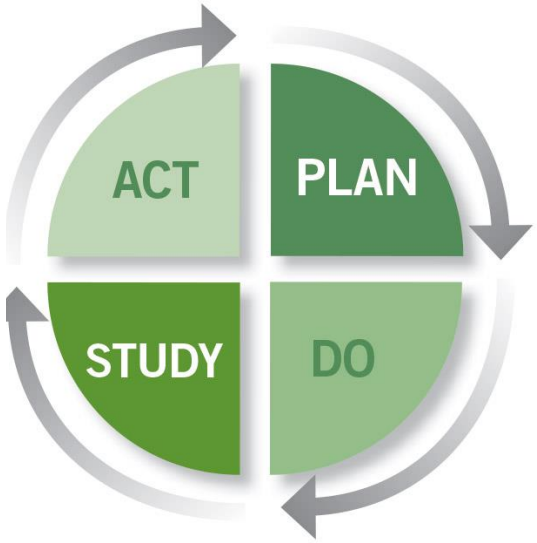
Driving Equity Consulting

Training will hold in March
Morning or Afternoon session
At least 5-10 members per site
Survey to participants before the training

T1D Exchange Equity Framework:

Figure 3: Equity Framework





Ebekozien OA, Ori Odugbesan et al Equitable Post COVID-19 Care: A Practical Framework to integrate Health Equity in Diabetes Management. Journal of Clinical Outcomes and Management Nov 2020 https://doi:10.12788/jcom.0025

Project Expectation/Team

Example of Diverse Team for a Participating Site

Patient Advisors

Physician Champion:

Social Worker:

Nurses/Nurse Educator:

Nutrition Educator/Dietician:

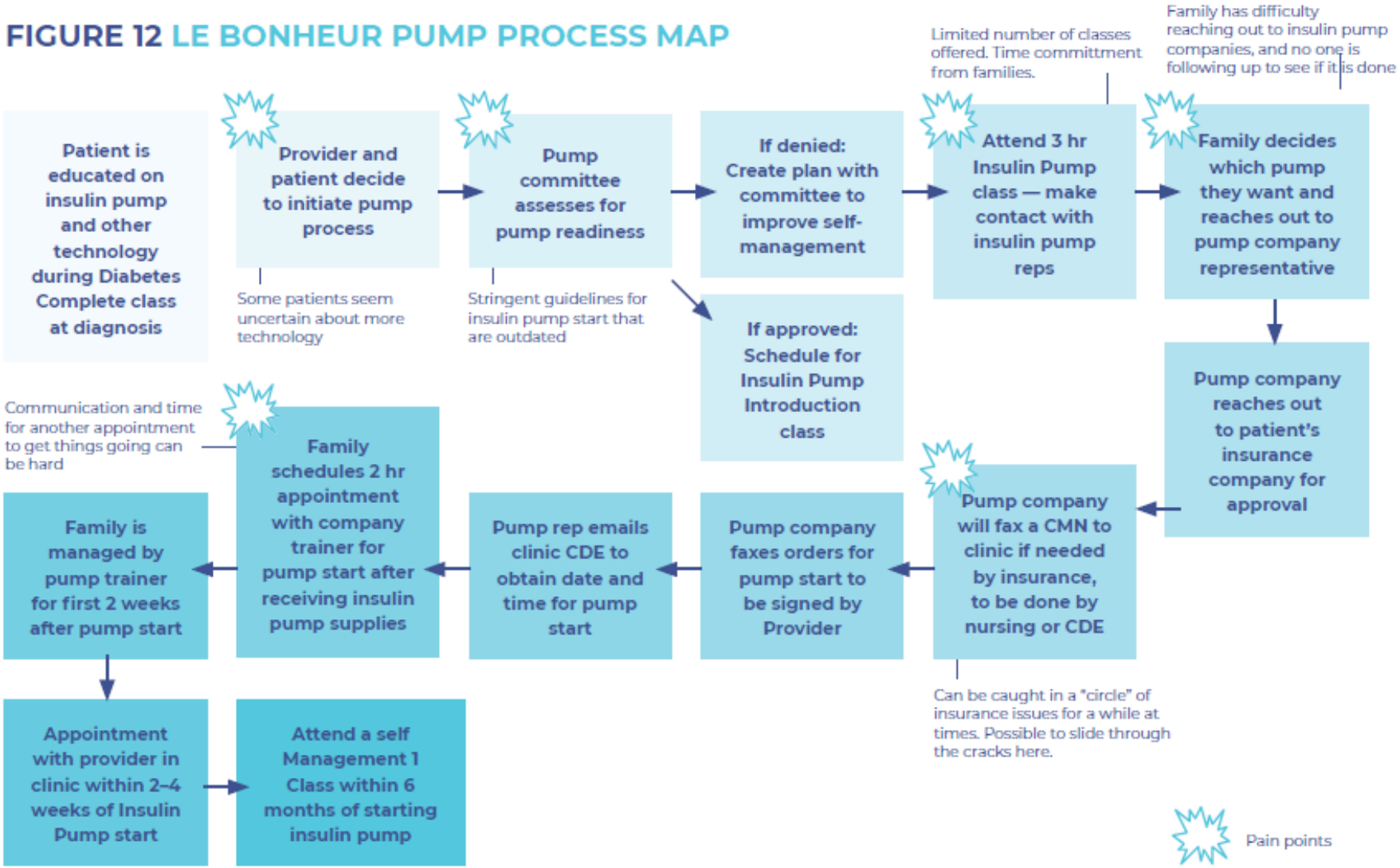
Data Systems Analyst

QI Coordinator:

**We expect every team to have patients who identify has NHB or Hispanic to be a part of the project for advisory patient feedback on equity barriers and improvement suggestions*

Team Expectation/Process Maps

Example of Insulin pump process map



Example of CGM process map

FIGURE 16

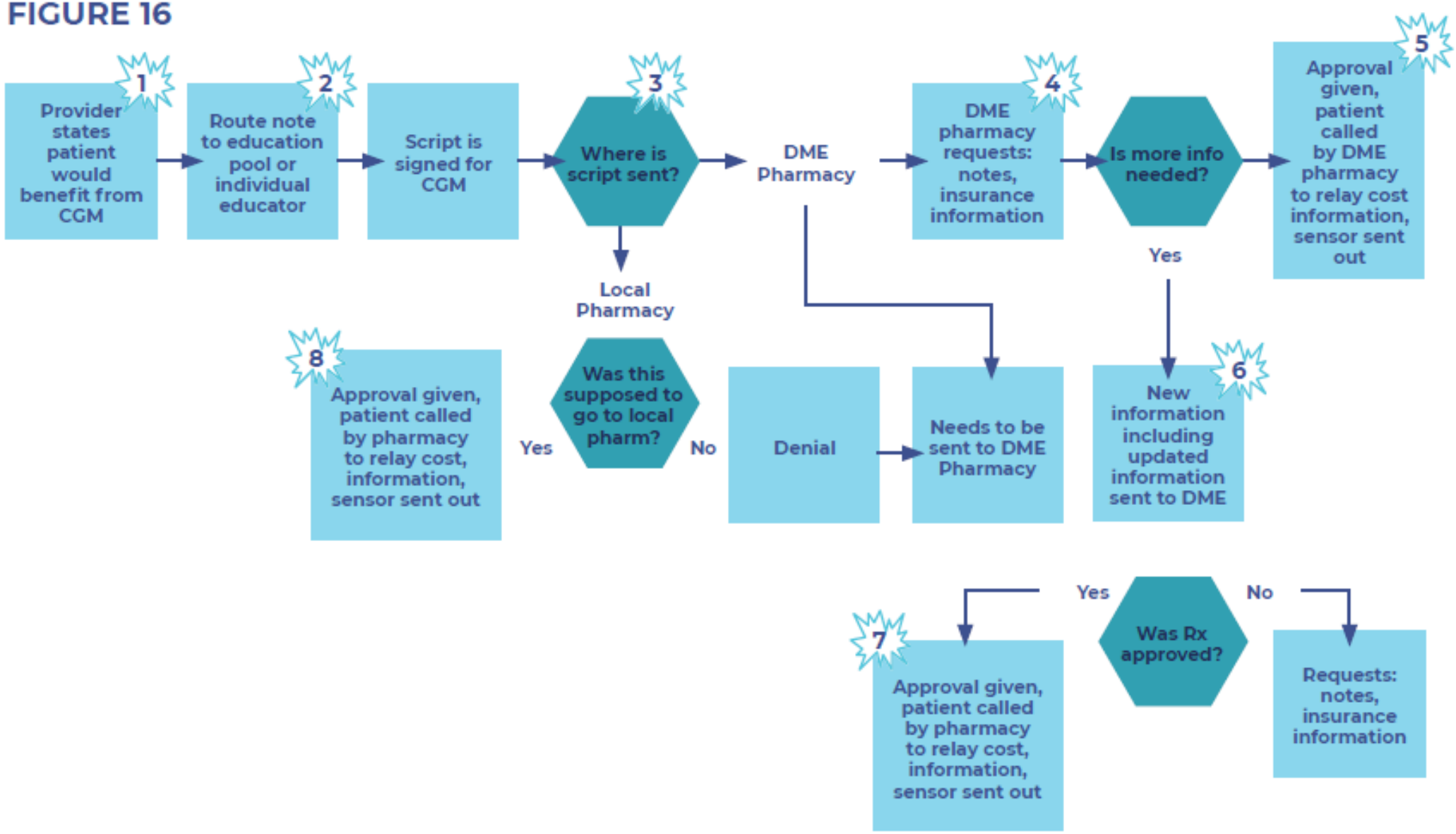
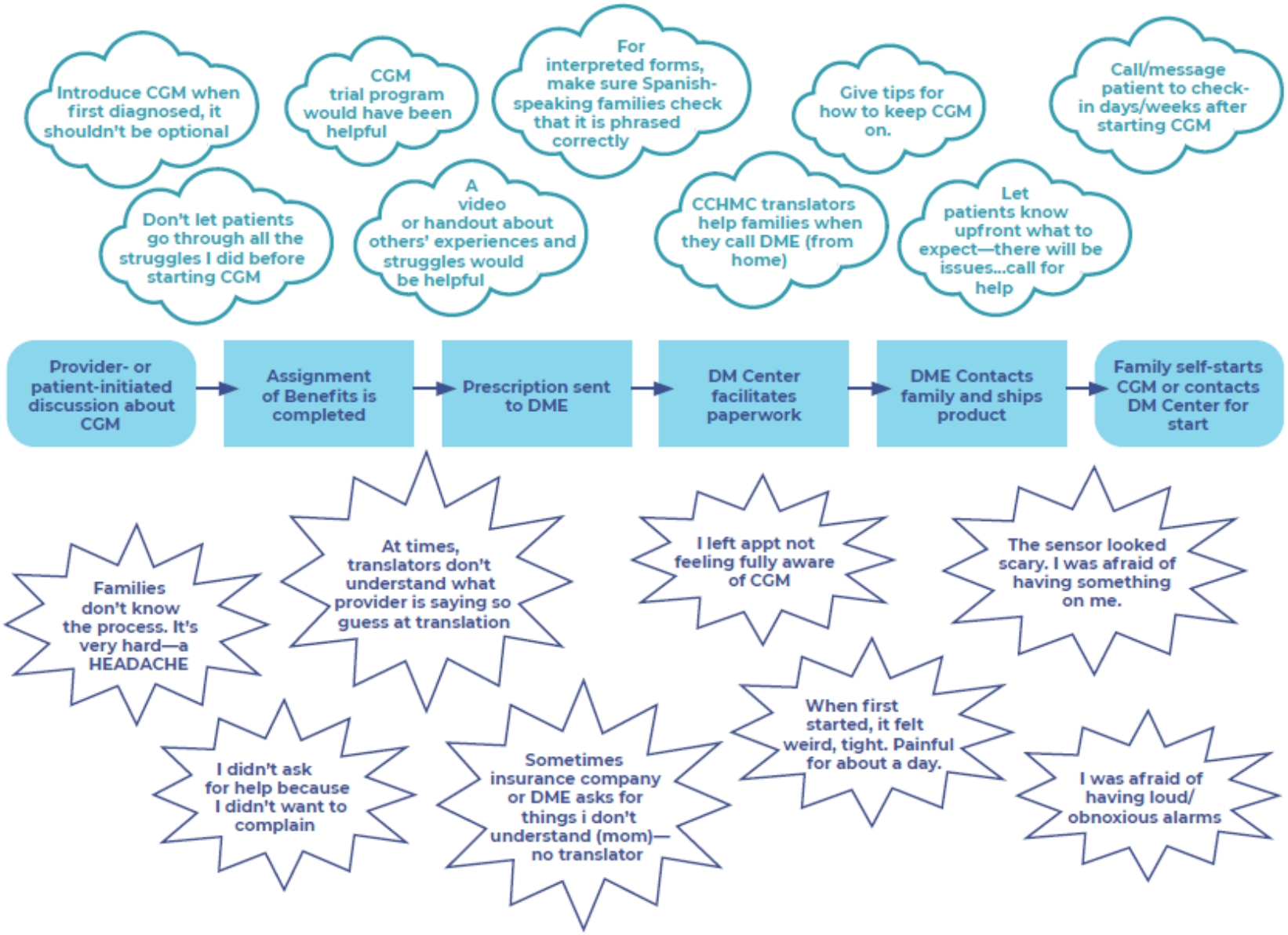
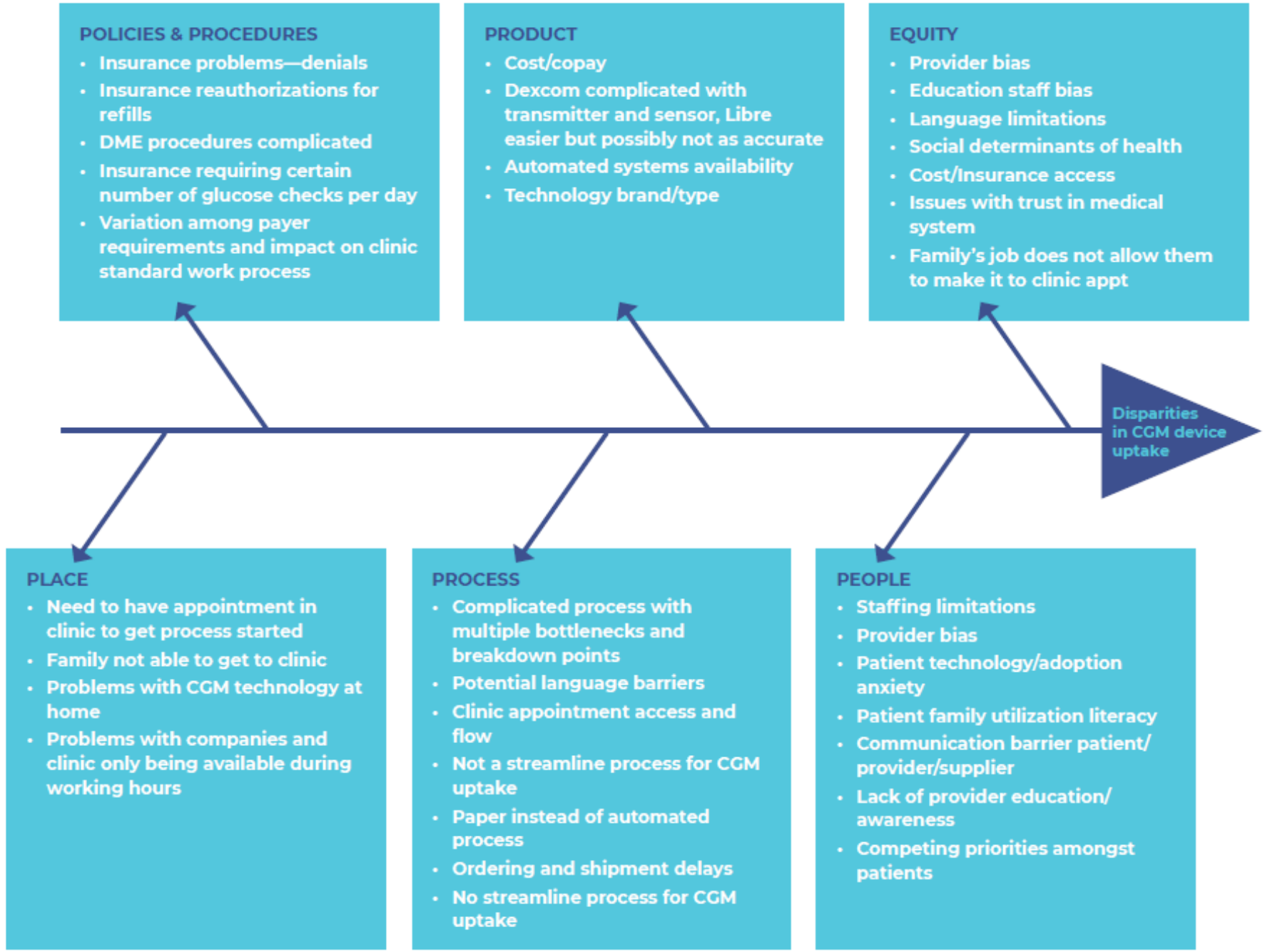


FIGURE 14 CGM PROCESS: BARRIERS AND CHANGE IDEAS



Group Expectation/Fishbone

Contributing Factors



Team QI project Documentation/RAIL Tool

PDSA Worksheet

PDSA Worksheet

Project Title:		**Test Cycle Number:**	
Change Idea:			
Test Cycle Start Date		**Test Completion Date:**	

PLAN *(to be completed before the test cycle)*

Describe the intent and structure of the test cycle: What are you trying to accomplish? Action steps to carry out the test cycle (who, what, where & when)

What do you predict will happen in this cycle? (Make sure its realistic)

DO: *(to be completed after the test cycle)*

What happened? Describe your observations and data. Was there anything that occurred that was not part of the plan?

STUDY: (to be completed after the test cycle)

Did the results match your prediction? ☐ Yes ☐ No

How did the results compare to your prediction? Was the process efficient? Did you encounter unexpected effects? What where your general observations? What did you learn?

ACT: *(to be completed after the test)*

Debrief with the team and decide on next steps based on what you observe from the study phase

T1D Continuous Glucose Monitoring (CGM) Equity - Rolling Action Item List

AIM: Reduce the inequity of CGM technology access/utilization among White and Black T1D patients

Key Driver	Interventions	PDSA	Point Person	Progress Note	Next Steps	Next Report T1Dx	Status
CGM initiation	Standardize criteria and educational documents for CGM initiation for providers and patients -- Best Practice Alert reminder -- Ongoing CGM patient education	1. Review status of each intervention to assure operational	Kajal	Each intervention in place, measurable, monitored.	Schedule periodic management review to assure consistancy	1/19/2021	
Verbal and Written Language Comprehension	Translation of written education and after-visit instrudctions	2. Translation materials and class into Somali and Spanish	Beth			1/19/2021	
	Translation of supplier instructions	3. Reach out to suppliers to inquire possibilities	Beth			1/19/2021	
	Verbal translation services available in clinic and during telehealth care visits	4. Check to see availability	Beth			1/19/2021	
	Clear understanding and implementation of attendant social derminates of health	5	Don			1/19/2021	
Access to Technology	Early access to CGM at T1D diagnosis through sample program	6. Inpatient telemerty program	Justin Travis Tyler			1/19/2021	

https://trello.com/c/z23qlYlN/46-pdsa-worksheet-rail-template

T1D Exchange

CGM EQUITY HUDDLE BOARD

AGENDA	BIRTHDAYS		
Celebrations	Janis- 1/7	Rajvi- 2/2	Laura- 2/25
Data	Kyle- 4/29	Alison- 6/5	Catherine- 6/25
Financial Counseling	Amanda- 7/9	Gail- 7/11	Desireé- 7/22
Co-Production/ Voice of the Customer	Amy- 11/1	Jen- 12/1	Molly- 12/3
RAIL and Misc. Action Items	Sarah- 12/10	Nana- 12/22	Susan-
Next Best for Technology Barriers			

STATUS LEGEND

	ISSUE PRESENT: Leadership removes barrier to progress or reassess solution
ESCALATE	**ESCALATE:** Issue cannot be resolved at this level. Leadership escalates to the next level

Implementation Rolling Action Item List (RAIL)

Key Driver	Intervention	PDSA	Owner	Deadline	Progress Notes	Next Steps	Status
Accurate understanding of CGMs for patients/families							
Comprehensive understanding of CGMs for staff/providers							
Shared decision making between staff/providers and families/patients							
Effective and continuous communication about CGM process	Utilize coordinator roles for the CGM process: Financial counselor, insurance navigator, care coordinator			10/1/2022	New Insurance Navigator has been hired. Will begin orienting her when her current posititon is filled. Met with financial counselor to learn how they can support our project.	Diseminate information from financial counselor during faculty and staff meetings.	

Team Expectation/Data Reporting

Data Status

Participating Center	Smart Sheet Data Reporting	Most recent Month	Who is reporting Data?
BDC Adult		November 2022	T1DX
BMC		October 2022	T1DX
Grady			T1DX
Miami Adult			
U Penn			Site
Wayne State		November 2022	Site
CMH (Peds)		November 2022	T1DX
Rady (Peds)		February 2022	T1DX
Michigan (Peds)			Site
Cook (Peds)			T1DX

Next Steps

Continue	Map out	Recruit	Attend
Continue monthly data reporting	Map out current clinic process for CGM, insulin pump and smart insulin Pen prescription	Recruit NHB and Hispanic patient advisors	Attend group monthly meetings

Questions?

T1D Exchange