



# Elevated Anxiety Levels Associated with Higher A1cs



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# Conflicts of Interest

- Dr. Osagie Ebekozen is the PI for research projects funded through his institution by Dexcom, Eli Lilly, and Medtronic and is also a member of the Medtronic Diabetes Health Inequity Advisory Board.
- Dr. Tamara Hannon is an Advisory Panel member for Eli Lilly and Company
- No other potential conflicts of interest relevant.

# Background

- This multi-center study aims to investigate association between anxiety and glycemic outcomes for people with type 1 diabetes (PwT1D).
- Higher anxiety levels have been associated with suboptimal glycemic control in adolescents with type 1 diabetes (T1D).<sup>2</sup>
- The Generalized Anxiety disorder scale (GAD-7) is a 7 – question screening tool for anxiety. Scores can range from 0-21 and are broken down into 4 categories: 0-4 minimal; 5-9 mild; 10-14 moderate; and 15-21 severe.<sup>1</sup>

# Methods

- Electronic medical record (EMR) data from April 2017-June 2023 was analyzed
- 738 distinct people with type 1 diabetes (PwT1D) from 9 clinics with ages ranging between 12-75 years
- Anxiety was classified as minimal vs elevated (Mild, moderate, and severe)
- Most recent GAD-7 score was used along with a corresponding A1c
- Chi-square test and Fisher's Exact test were used to see significant differences between the two groups.
- Logistic regression was used with A1c < 7% and > 9% as the binary outcome and anxiety level as the predictor variable for an unadjusted model and an adjusted model with variables for race/ethnicity, insurance type, gender, and device use.

# Results

- The elevated anxiety group had a significantly higher percentage of individuals with A1c>9% (p<.01) with 41% compared to 30% in the minimal anxiety group (Table 1).

	Minimal Anxiety (N=379)	Elevated Anxiety (N=359)	p-value
<b>Mean Age (SD)</b>	21 (9.6)	21 (8.5)	
<b>Age Category (Years) – n (%)</b>			
12-17 years	110 (29)	126 (35)	0.09
18-24 years	234 (62)	200 (56)	0.11
25-75 years	35 (9)	33(9)	1
<b>Gender – n (%)</b>			
Male	206 (54)	120 (33)	<0.01
Female	173(46)	239 (67)	<0.01
<b>Race/Ethnicity- n (%)</b>			
NH White	263 (69)	242 (67)	0.62
NH Black	60(16)	81(23)	0.03
Hispanic	29 (8)	20 (6)	0.32
Other	21 (6)	12 (3)	0.20
<b>Insurance Type- n (%)</b>			
Public	133 (35)	120 (33)	0.69
Private	190(50)	181(50)	1
Other	23 (6)	23 (6)	0.97
<b>Mean A1c (SD)</b>	8.6 (2.1)	9 (2.3)	
<b>Median A1c (IQR)</b>	8 (2.7)	8.6 (3)	
<b>A1c &lt;7%- n (%)</b>	76 (20)	69 (19)	0.85
<b>A1c &gt;9%- n (%)</b>	115 (30)	148 (41)	<0.01
<b>CGM- n (%)</b>	252 (67)	215 (60)	0.08
<b>Insulin Pump – n (%)</b>	185(49)	165(46)	1
<b>DKA- n (%)</b>	30 (8)	34(10)	0.53
<b>SH- n (%)</b>	0 (0)	3 (.84)	0.12

**Table 1.** Comparison of elevated and minimal anxiety levels



# Results

- Anxiety level was not significantly associated with odds of A1c < 7% in the unadjusted and adjusted models (Table 2).
- Odds ratio (OR) is >1 for both the unadjusted and adjusted model, showing that PwT1D in the elevated group have increased odds of having an A1c > 9% compared to the minimal anxiety group (Table 3).

**Table 2:** Factors Associated with Glycemic Outcomes (A1c<7%) in PwT1D

Model A*	OR (95% CI)	p-value	Model B*	OR (95% CI)	p-value
minimal anxiety (ref)	-		minimal anxiety (ref)	-	
elevated anxiety	0.94 (0.65,1.35)	0.74	elevated anxiety	0.89 (.56,1.43)	0.63

\*Model A is the unadjusted model and Model B is the adjusted model for race/ethnicity, insurance type, gender, device use.

**Table 3:** Factors Associated with Glycemic Outcomes (A1c>9%) in PwT1D

Model A*	OR (95% CI)	p-value	Model B*	OR (95% CI)	p-value
minimal anxiety (ref)	-		minimal anxiety (ref)	-	
elevated anxiety	1.60 (1.18,2.17)	0.02	elevated anxiety	1.86 (1.19,2.85)	< 0.01

\*Model A is the unadjusted model and Model B is the adjusted model for race/ethnicity, insurance type, gender, device use.

# Conclusions

- The findings show that PwT1D with elevated anxiety levels showed higher A1c levels compared to those with minimal anxiety, supported findings are in existing literature.<sup>3</sup>
- A high percentage of PwT1D with elevated anxiety and A1c levels are female.
- Further analysis should be done to determine a causal relationship between anxiety and glycemic outcomes, as stated in existing literature.<sup>3</sup>
- Prospective research should be done to find effective post screening interventions in PwT1D.

## Acknowledgements

- T1DX-QI Collaborative and T1DX-QI Population Health Team
- This study was sponsored by The Leona M. and Harry B. Helmsley Charitable Trust

For questions/comments:

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Quality Improvement Data Intern, T1D Exchange

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# References

1. Sapra A, Bhandari P, Sharma S, Chanpura T, Lopp L. Using Generalized Anxiety Disorder-2 (GAD-2) and GAD-7 in a Primary Care Setting. *Cureus*. 2020 May 21;12(5):e8224. doi: 10.7759/cureus.8224. PMID: 32582485; PMCID: PMC7306644.
2. Herzer M, Hood KK. Anxiety symptoms in adolescents with type 1 diabetes: association with blood glucose monitoring and glycemic control. *J Pediatr Psychol*. 2010 May;35(4):415-25. doi: 10.1093/jpepsy/jsp063. Epub 2009 Aug 14. PMID: 19684117; PMCID: PMC2858435
3. Rechenberg K, Whittemore R, Grey M. Anxiety in Youth With Type 1 Diabetes. *J Pediatr Nurs*. 2017 Jan-Feb;32:64-71. doi: 10.1016/j.pedn.2016.08.007. Epub 2016 Sep 20. PMID: 27663096; PMCID: PMC5743322.



# **Improving Depression Screening in patients with Type 1 Diabetes Mellitus**

Sheila Dennehy, RN, MSN, CDCES, Lori Benzoni MPH,  
Ulka Kothari, MD, Danielle Alessio, LCSW, Siham Accacha, MD

# Introduction

- Depression is one of the most common mental illnesses in the pediatric population, particularly amongst adolescents.
- Longitudinal studies of community samples of children and adolescents suggest an average age of onset between 11 and 14 years old.
- Youth with type 1 diabetes (T1D) have significantly higher rates of depression over the general population and having depression may impact the management of diabetes.
- Despite its high prevalence, depression is widely undertreated in this population: about 40% of pediatric patients with this disorder are not treated.
- The Patient Health Questionnaire 9 for Adolescents (**PHQ-9A**) is a widely used, validated tool used to monitor and measure the severity of depression.
- A score of 10 or above has a sensitivity of 89% and a specificity of 77% for major depression.

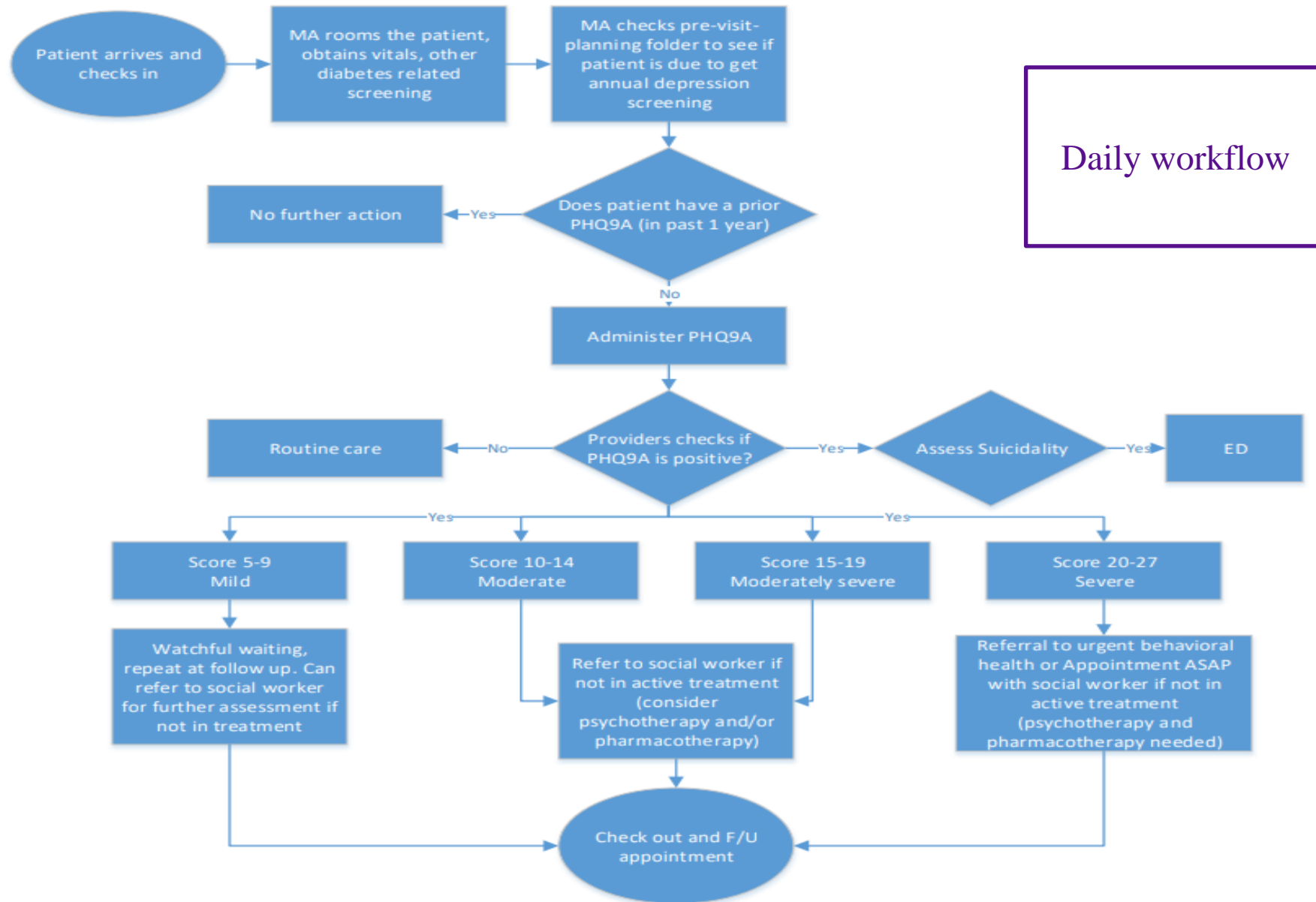
## Purpose

To improve recognition of adolescent depression in patients, with T1D, ages 12-17yo, through implementation of standardized annual screening for depression using PHQ-9A from baseline of 0% to 75% by August 2023.

## Method

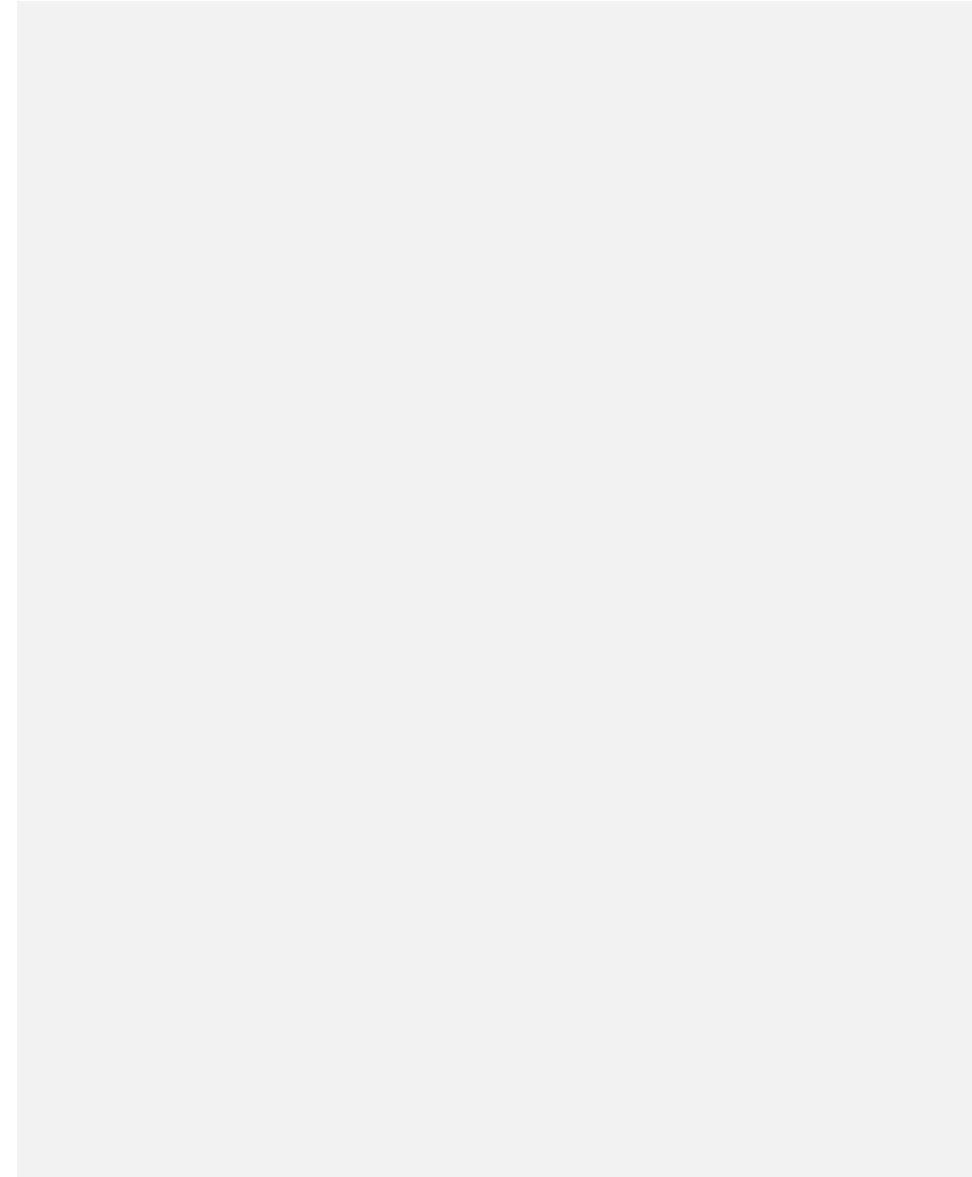
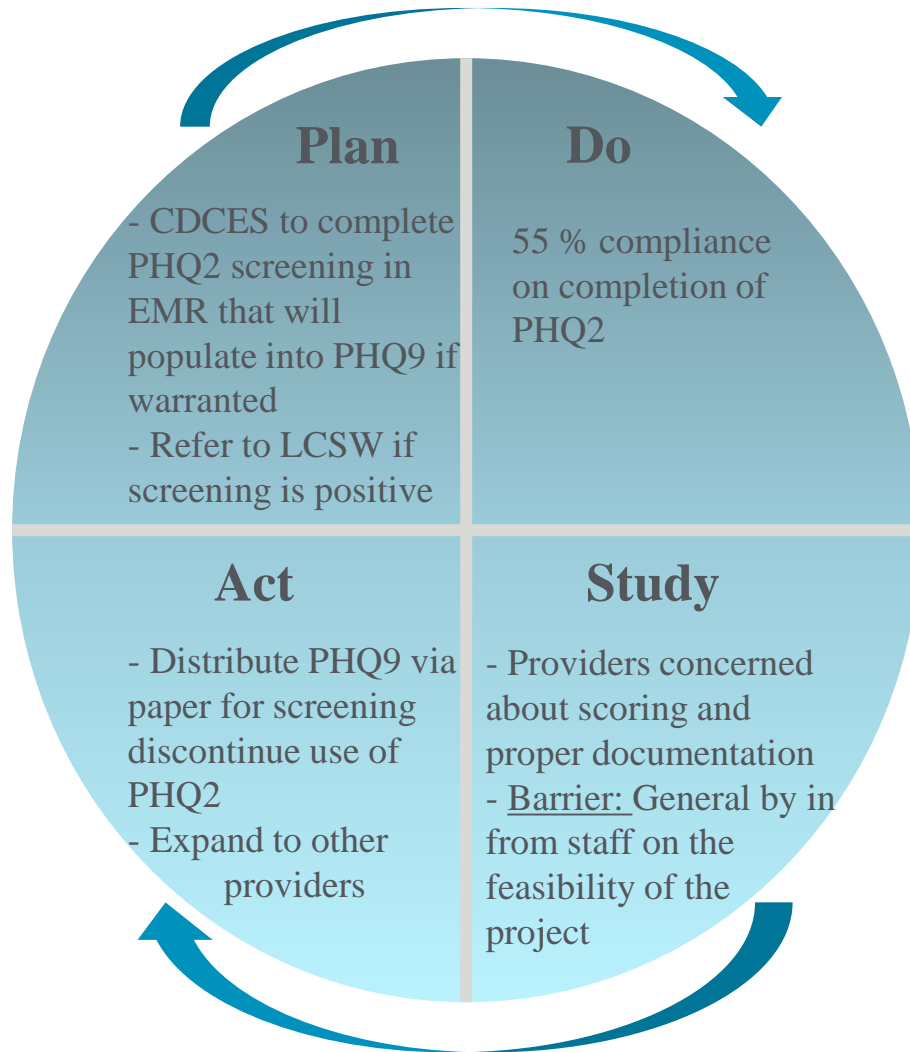
A multidisciplinary team of physicians, RN, CDCES, medical assistants, and social worker was created.

Many PDSA cycles were conducted for education, folder for resources, written algorithm, EMR changes, and referral to mental health specialists.

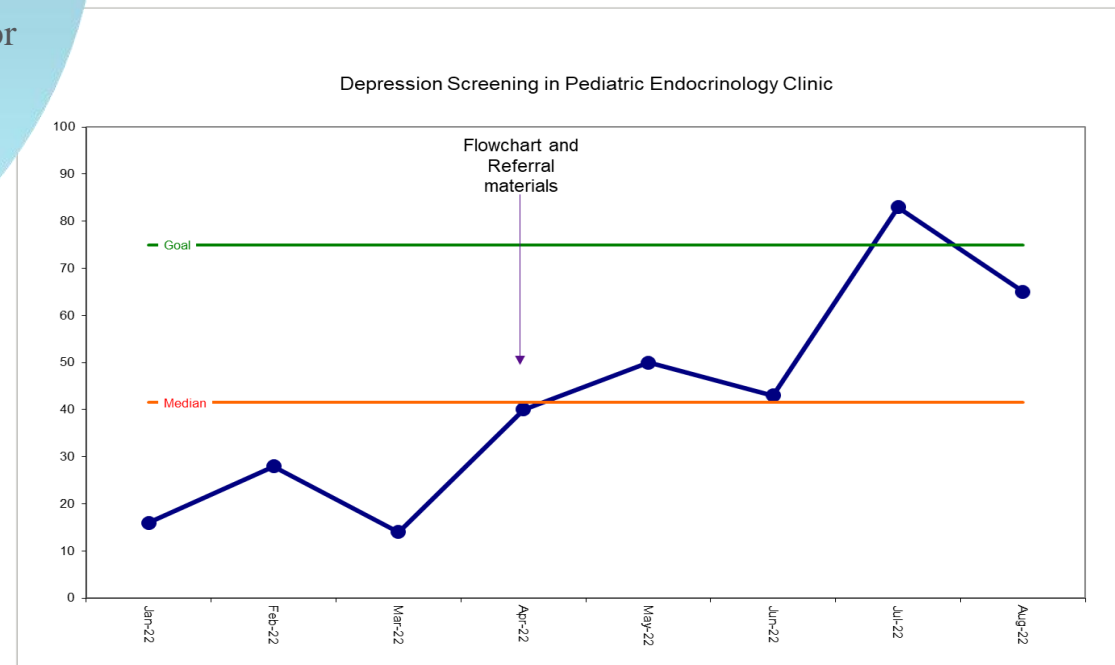
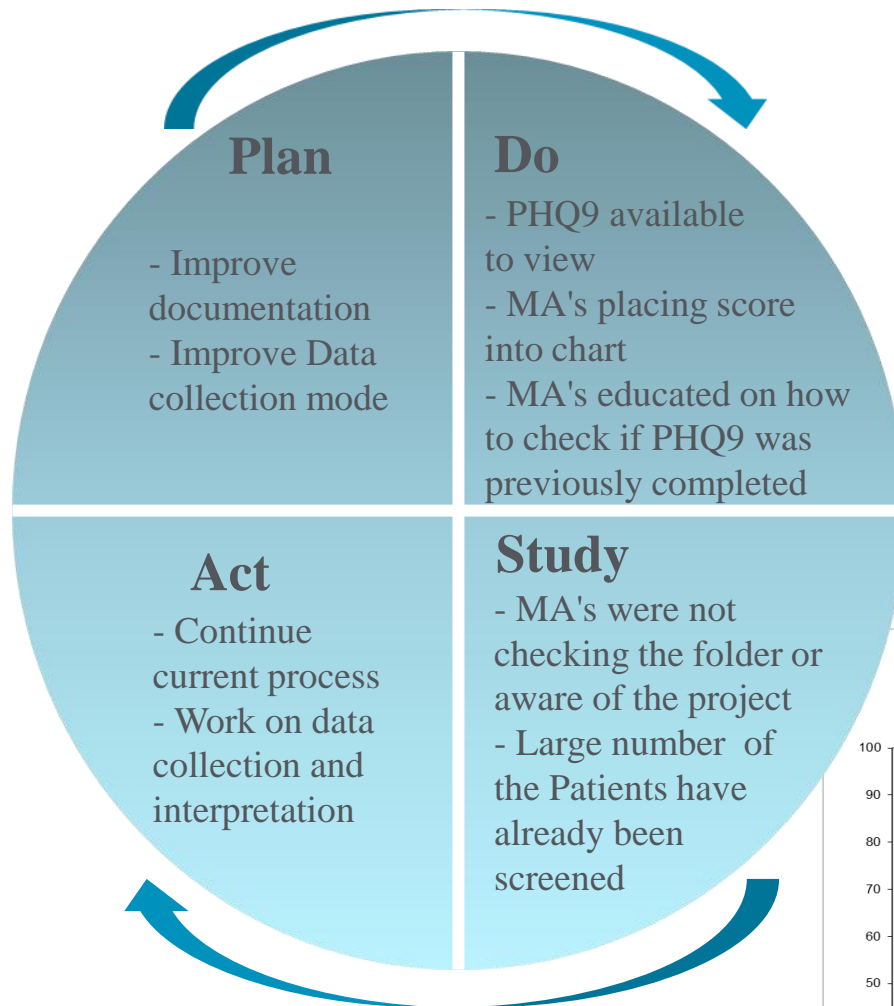


# PDSA Cycles

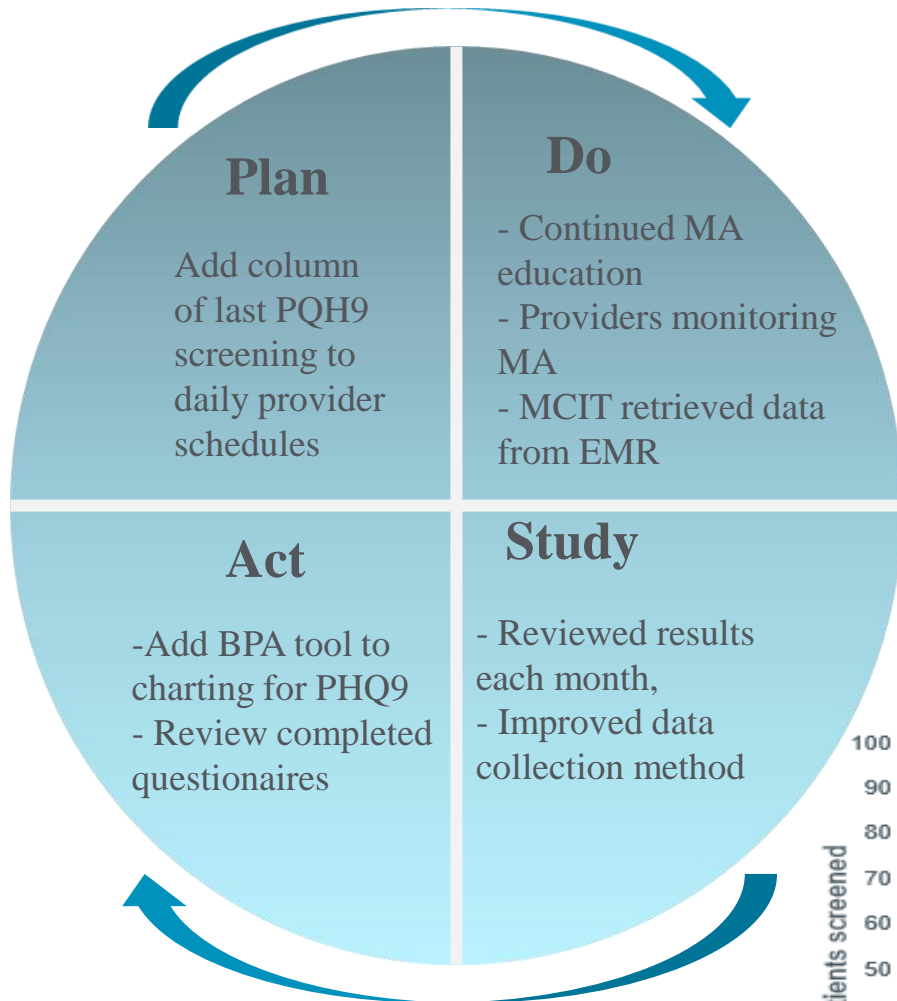
## PDSA cycle #1 - 1/1/22-3/31/2022



## PDSA cycle #3– 5/16/2022-7/2022

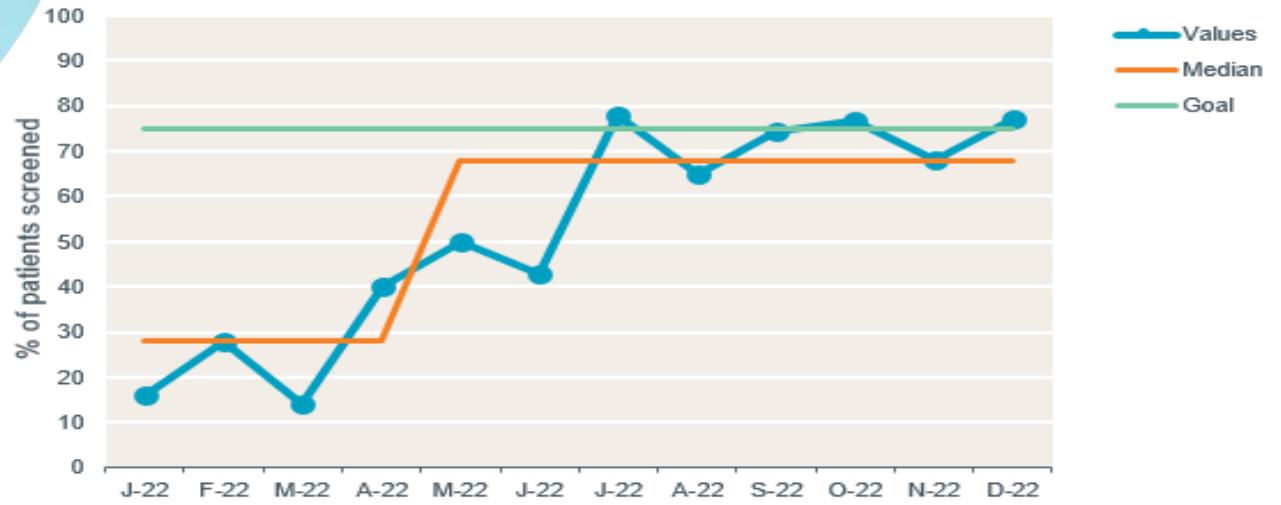




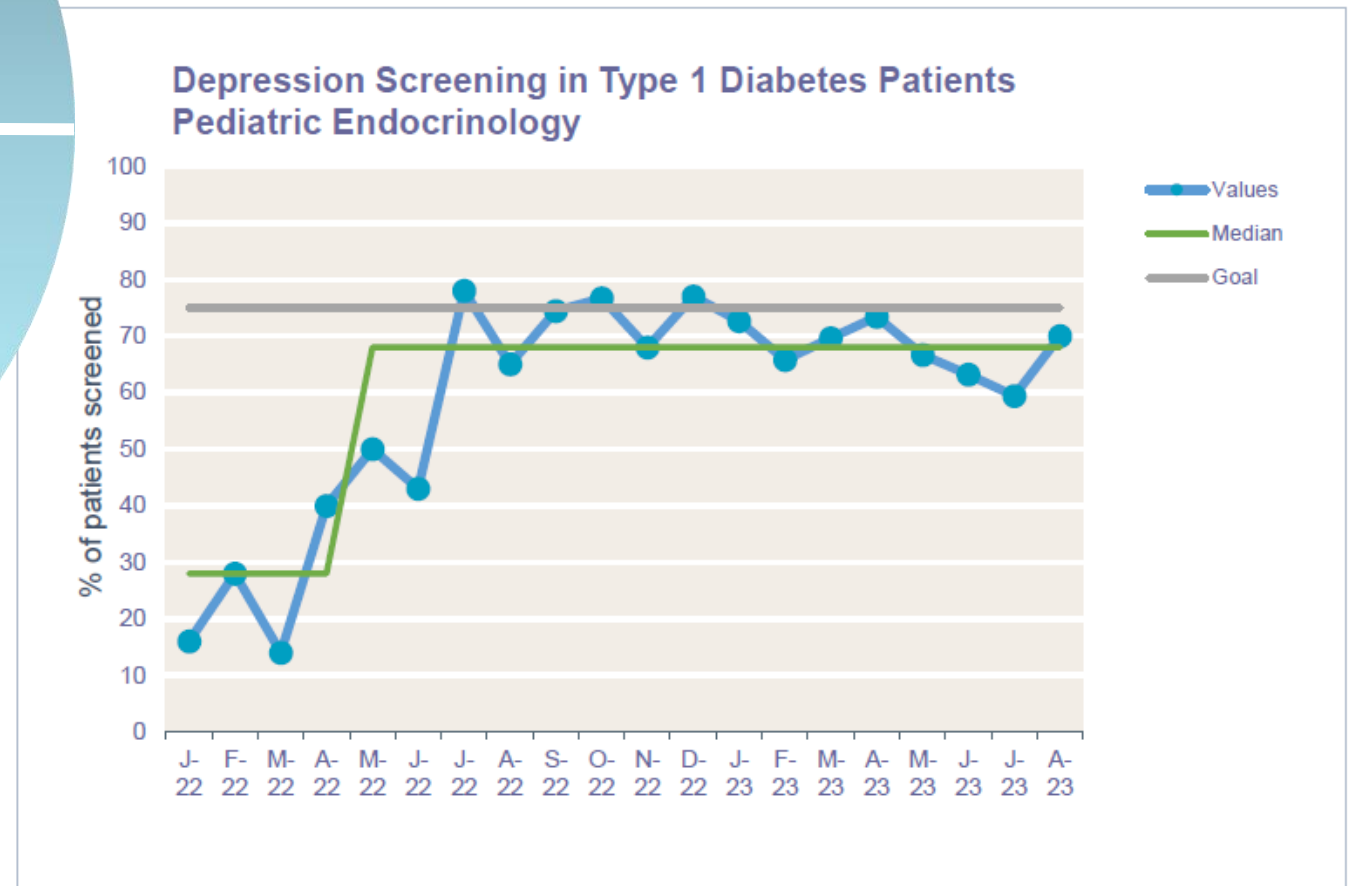
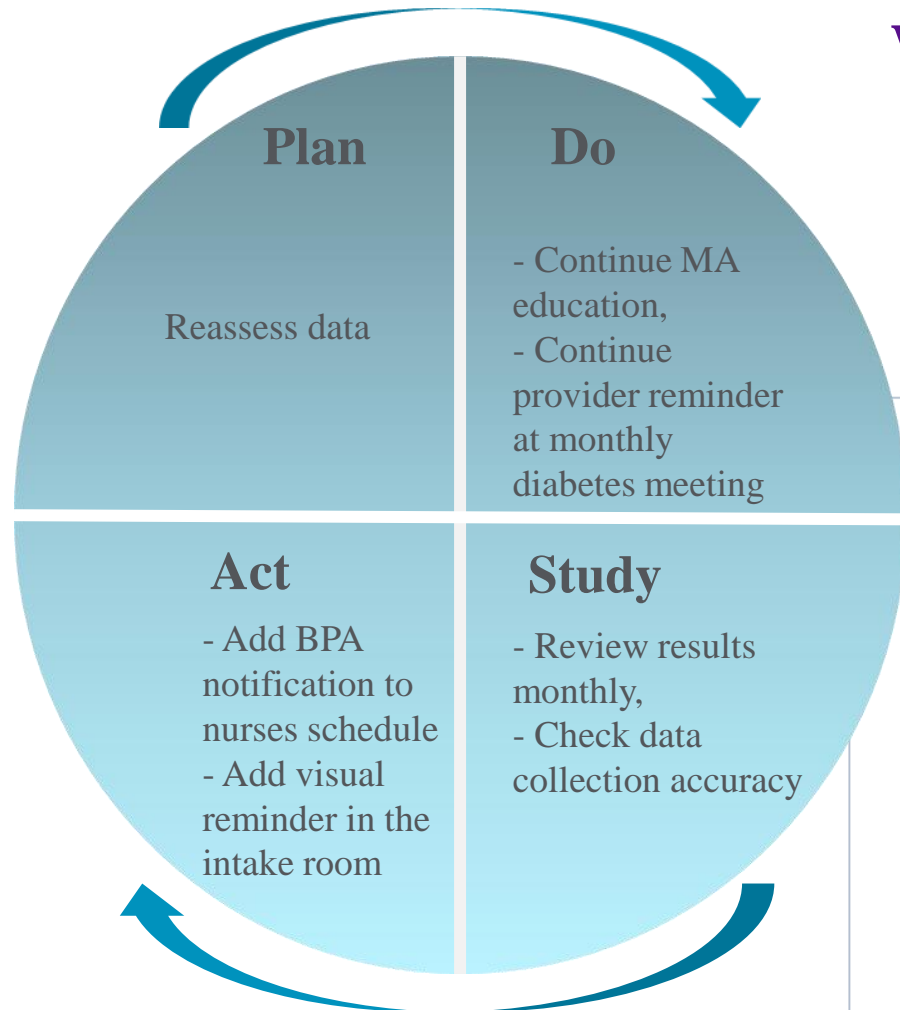


## PDSA cycle #4– 8/2022- 12/2022

**Depression Screening in Type 1 Diabetes Patients Pediatric Endocrinology**



## Where we are now:



## Results

- Systematic processes and multiple PDSA cycles led to increase in the number of patients screened for depression.
- Many patients with elevated scores were noted to already be connected with a mental health provider and receiving therapies/ medications.
- Depression was noted in the chart as a co-morbidity, in these patients with type 1 diabetes, allowing focus on whole person care in addition to diabetes alone.
- Making changes in EMR facilitated better recognition of patients due for an annual screening.
- However, we are not meeting the benchmark (75%) consistently yet.

## Conclusions

- Multidisciplinary approach to chronic disease management is key to improving patient outcomes.
- Co-location of mental health provider helps facilitate timely screening, referral and follow up for patients with depression.

Tracking data and ongoing PDSA cycles helped initiate and improve screening for depression in adolescent patients with type 1 diabetes.

EMR can aid in provider decision support about patients who are due for screening. However, we are not meeting the benchmark (75%) yet for the following reasons:

- Patients already being managed by a psychiatrist
- Patients refusing screening, or inability to complete screening
- BPA (Best practice alert) that fires for all patients (not just those with diabetes), and ancillary staff do not recognize that the screening is for patients with T1D
- Review and reminder for ancillary staff put in place
- BPA were not notifying our nurse educators: ticket was created

## References

1. Bitsko RH, Claussen AH, Lichtstein J, Black LJ. Surveillance of Children's Mental Health – United States, 2013 – 2019 MMWR, 2022 / 71(Suppl-2);1–42.
2. Olfson M, Blanco C, Wang S, et al. National trends in the mental health care of children, adolescents, and adults by office-based physicians. *JAMA Psychiatry* 2014; 71:81.
3. O'Connor BC, Lewandowski RE, Rodriguez S, Tinoco A, Gardner W, Hoagwood K, Scholle SH. Usual Care for Adolescent Depression From Symptom Identification Through Treatment Initiation. *JAMA Pediatr.* 2016 Apr;170(4):373-80.
4. Merikangas KR, Nakamura EF, Kessler RC. Epidemiology of mental disorders in children and adolescents. *Dialogues Clin Neurosci.* 2009;11(1):7-20.
5. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. *J Gen Intern Med.* 2001;16(9):606-613.



**Thank You**



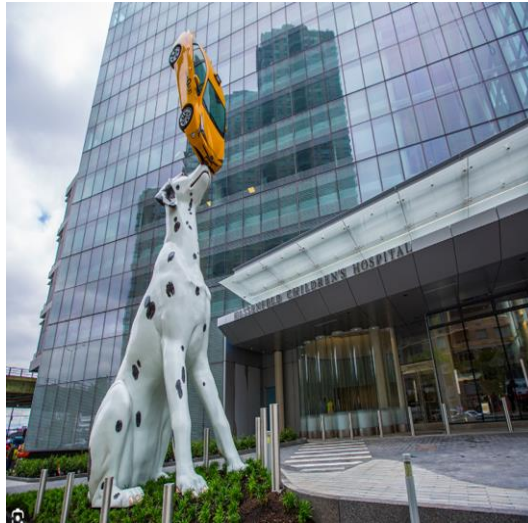


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# Ongoing Efforts for Improving Depression Screening at a Pediatric Diabetes Center

Dr. Mary Pat Gallagher - Director, Robert I. Grossman, MD  
and Elisabeth J. Cohen, MD Pediatric Diabetes Center

# Hassenfeld Children's Hospital at NYU – Pediatric Diabetes Center



Multidisciplinary Team Members	Volume and Demographics
<p><b>Ped Endo MD: 5</b>  <b>PNP: 1</b>  <b>Ped Endo Fellows: 3</b></p> <p><b>CDCES: 3 RD, 2RN</b>  <b>Staff RN: 1</b>  <b>Social Worker: 1</b>  <b>Psychologist: 0.5 FTE</b>  <b>Child/Adol</b>  <b>Psychiatrist: 0.2 FTE</b>  <b>Neuropsych: 0.1 FTE</b></p> <p><b>Child Life: shared</b>  <b>Family Advisors: 5</b>  <b>Research Team: 2.2</b></p>	<p>~450 patients with T1D for more than one year receiving ongoing care            ~600 patients seen at Diabetes Center</p> <p><b>Newly diagnosed patients per year:</b>            ~70</p> <p><b>Insurance:</b>            ~ 50% public</p> <p><b>Race:</b>            ~ 50% White            ~ 10% Black            ~ 5% Asian            ~ 35% Unknown/Other</p>

# Depression Screening - Background

- Prior to 2021 there was no tool in place to screen for anxiety or depression for our patients even though our patients are at higher risk.
- PDSAs included:
  - identification of a screening tool (the PHQ4)
  - administration using paper screener
  - online screener (REDCap) option
  - use of a QR code for REDCap web version
  - eventual integration into the Electronic Medical Record (EMR).
- Screening completion rates increased from 0-2% to 50% over six months.

# PHQ-4

PHQ-4				
Over the last 2 weeks, how often have you been bothered by the following problems? (Use "✓" to indicate your answer)	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Little interest or pleasure in doing things	0	1	2	3
4. Feeling down, depressed, or hopeless	0	1	2	3

## Scoring:

Total distress scores: mild = 3-5, moderate 6-8, severe 9-12

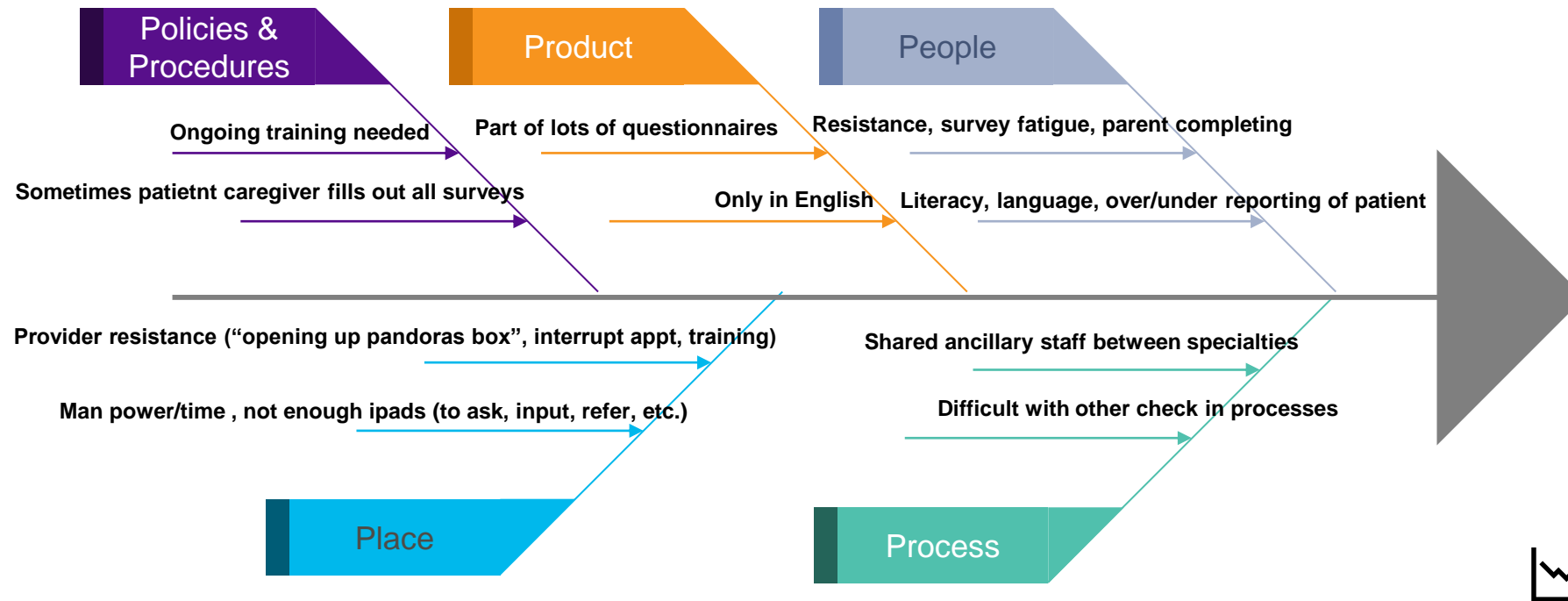
- Anxiety subscale: items 1+2 (score 0-6)
- Depression subscale: items 3+4 (score 0-6)
  - A score of 3 or higher on either subscale is considered positive (and the GAD7 or PhQ9 will cascade open)

PHQ scales were developed by Drs. Robert L. Spitzer, Janet B.W. Williams and Kurt Kroenke and colleagues. Free to use.

# PHQ-4 and screeners

- PHQ4
  - Asks the first two questions of the GAD7 - to assess for anxiety
  - Asks the first two questions of the PHQ9 - to assess for depression
  - Cascades open to GAD7 and/or PHQ9 if score elevated
- Used to screen all diabetes center patients for depression and anxiety screening for patients ages over 11.
- Yearly screening is done for suicide screening using the ASQ. This is done by Medical Assistants using BPA alerts in the EMR

# Fishbone Diagram (Ongoing Depression Screening)

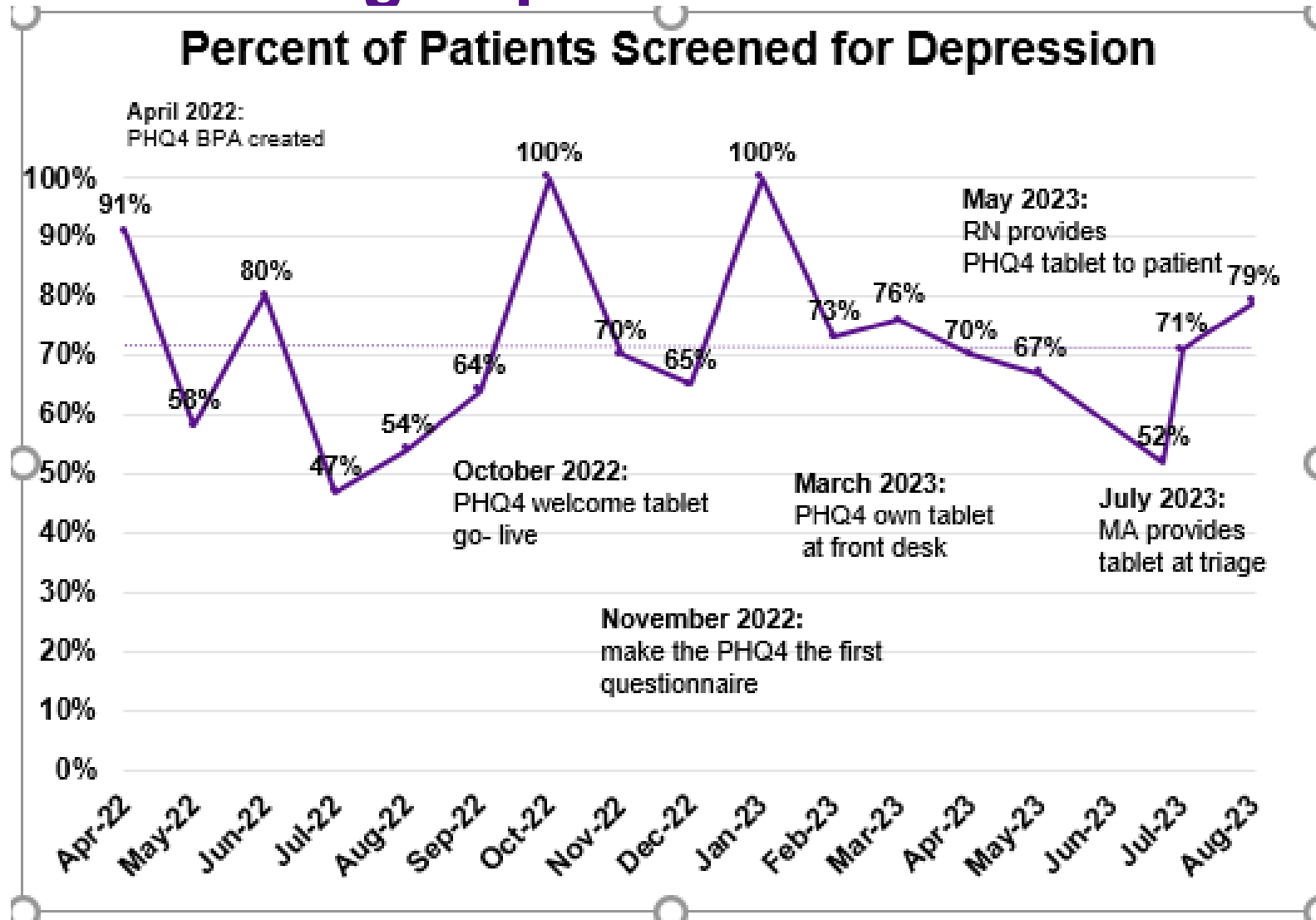




# QI Project:

- Aim: In the ongoing QI project presented here, we aimed to show another 10% increase in screens completed from April 2022–2023 using EMR features.
- Multiple Plan-Do-Study-Act (PDSA) cycles were performed to optimize EMR integration
  - Creation of a best practice advisory (BPA)
  - Completion of the PHQ4 along with other forms on a Welcome tablet at check-in
  - Completion of the PHQ4 on a separate tablet to be handed directly to the patient at check-in
  - Administration of PHQ4 on separate tablet by RN
  - Administration of PHQ4 on separate tablet by Medical Assistant (MA) at triage.

# Increasing Depression Screens



# Results

- The trend of screening completion rates continued to increase slightly through April 2023.
- Ongoing efforts, however, indicate a need for continued QI work.
- Screening rates ranged from 65-100% from November 2022 to April 2023; however, after moving the PHQ4 to a separate tablet, in April 2023, the screening rate began to decrease.
- The latest PDSA cycle, which has the PHQ4 tablet being provided to the patient by the MA during or after appointment triage, has led to increases in screening rates during the last two months reported.

# Conclusion

- EMR integration helped increase depression screening rates when compared to previous efforts using paper or web-based applications.
- Clinicians reported improvement in workflow as provider entry into the EMR was removed.
- Providing the PHQ4 on a separate tablet at check-in to ensure the patient completed it (and not a caregiver), initially decreased completion rates, however, when administering the PHQ4 screener tablet during triage rates began to improve.

# Future PDSAs

- Continue to increase screening using the PHQ4 patient facing tablet at triage
- Include all behavioral health screens or patient answered screens on same tablet as well as physical activity vital sign or PAVBS.
- Additional tablets
- Additional languages
- Additional Resources, referrals etc.
  - Coping Posters
  - Additional handouts and referral options



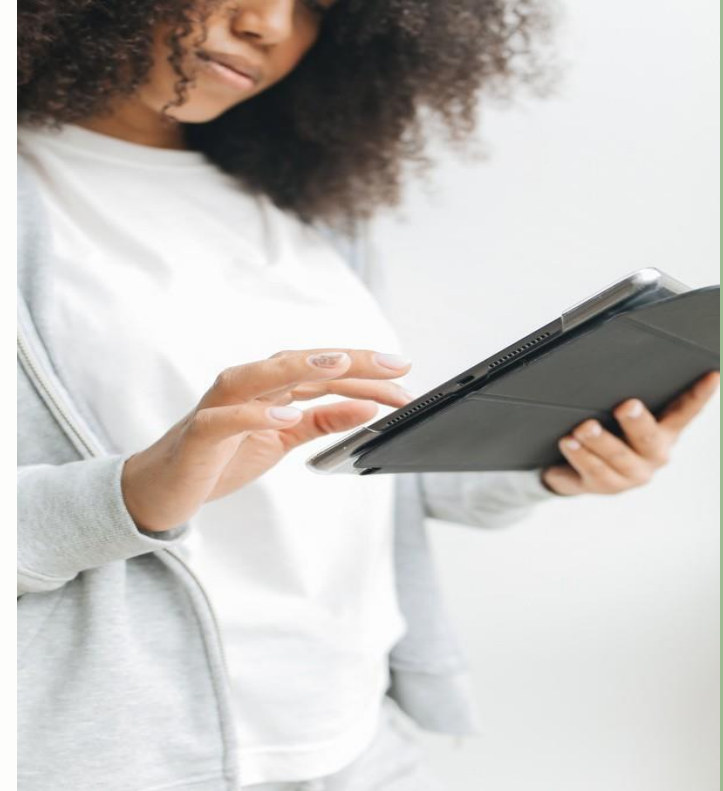
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**Thank you!**

# Systematically Developing and Piloting an Eating Disorder Screening Process at a Large Pediatric Diabetes Clinic

Paige Trojanowski, PhD, Bailey Tanner, BS, Rebecca  
Campbell, BS, G. Todd Alonso, MD, Holly K. O'Donnell,  
PhD

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Medical Campus*



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# Background



- People with type 1 diabetes (T1D) are at **increased risk for eating disorders**
- This can lead to severe medical complications
- Most pediatric diabetes clinics **do not screen** for disordered eating
- Of those who do, **less than half** use a validated measure



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# Objective

- 1:** Describe the process for developing an eating disorder screening protocol
- 2:** Report preliminary results piloting the protocol
- 3:** Describe provider response to screening



# Methods

- Gap analysis
- Select a validated measure
- Determine a screening process



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## Methods cont'd

- Train team members on screening procedures
- Create a current state process map
- Gather feedback from team members



# BARRIERS AS IDENTIFIED BY CLINIC MEMBERS

## RESOURCES

- Availability of/Access to resources if patient answers positively
- Lack of screening tool

## NEXT STEPS

- Fear of what to do for positive screens
- Patient follow-through with therapy

## TIME

- Not enough time for providers to address the topic during clinic encounters
- Not enough time to screen patients
- Check-in delays, especially problematic on busy days

## PEOPLE

- Patients answering honestly
- Patients being distracted while completing a screen
- Patients who are not engaged at the clinic visit
- Patients in denial about having an eating disorder
- Stigma related to eating disorders

## PEOPLE CONT'D

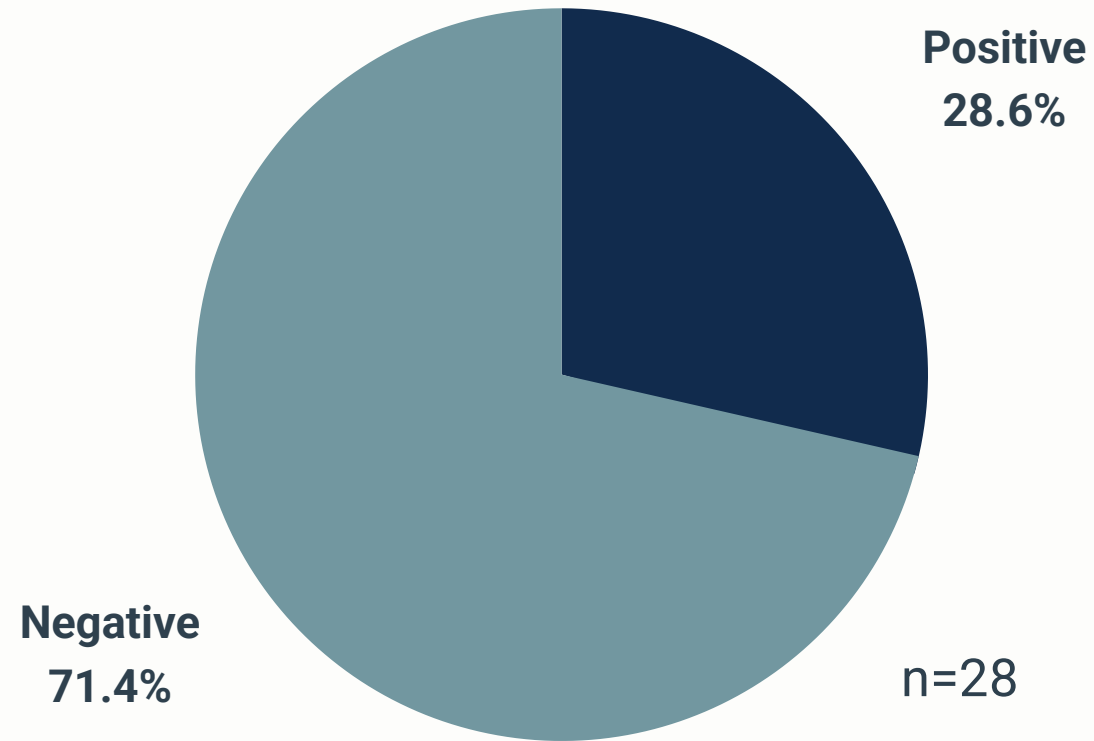
- Not enough MA staff to screen
- Variable clinic flow
- Staff knowledge of how to administer screening
- Lack of behavioral health personnel to follow up on positive screens (especially at outreach sites)

# Results

- <1% of patients had disordered eating documented in their medical record
- Selected the **Diabetes Eating Problems Survey - Revised (DEPS-R)**
- Determined administration method Developed a
- screening process
- Providers reported **neutral to positive** feedback



# Results cont'd





# NextSteps



- Ongoing individual team coaching via **QI Improvement Academy** to improve our process
- Welcome Mobile



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# DiabetesWisePro



**Stanford**  
University

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**HELMSLEY**  
CHARITABLE TRUST



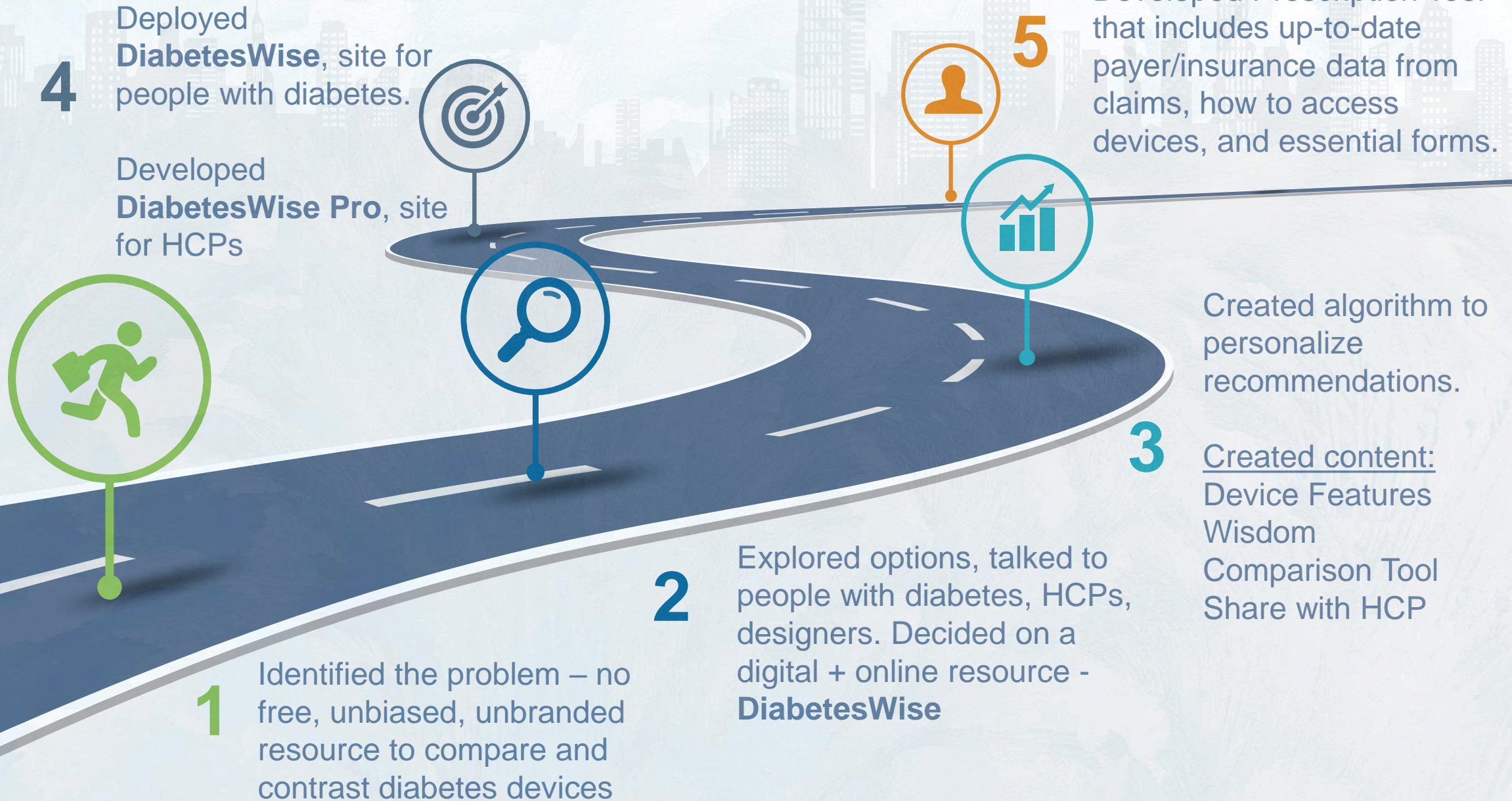
**UPSHIFT**  
Web + Brands + Apps



**healthmade.**



# Our Journey



## OVERVIEW

### DiabetesWise for people with diabetes

Launched June 2019

## Features

- Check Up
- Sensors
- Device Finder
- Wisdom
- Resources

## 5 questions about...

- Current Devices
- Distress
- Priorities
- Concerns

# DiabetesWise

The screenshot shows the DiabetesWise.org website in a browser window. The browser's address bar displays "diabeteswise.org". The website's navigation menu includes "Check Up", "Sensors", "Device Finder", "Wisdom", and "Resources". A blue arrow points from the "Features" section on the left to the "Check Up" link in the navigation menu. Below the navigation menu, there are social media icons for Facebook, Twitter, and LinkedIn. The main heading reads "Helping You Find The Right Diabetes Devices For Your Life." Below this, a section titled "CHECKUP" asks "DO YOUR DEVICES STILL WORK FOR YOUR LIFE?" and encourages users to "Take a quick quiz to see what might be your next diabetes care upgrade." A blue "Check Up" button is positioned below this text. To the right of the text are illustrations of various diabetes devices: a glucometer, an insulin pen, an insulin pump with a sensor, and an insulin vial. Below the "CHECKUP" section, a section titled "WISDOM" states "CHOOSING YOUR DEVICES IS AN INCREDIBLY PERSONAL DECISION." and invites users to "Hear what people with similar experiences are saying."

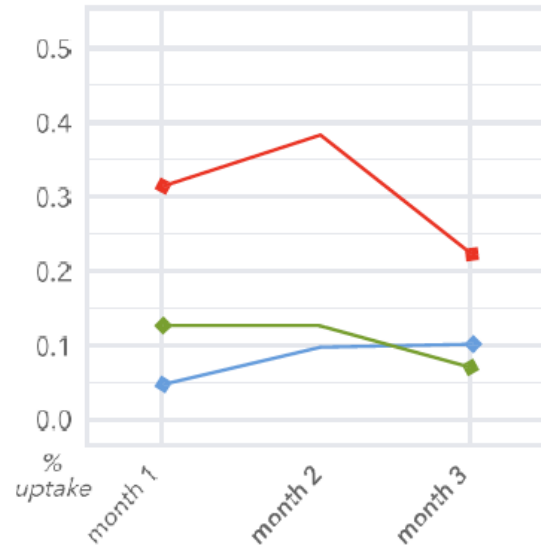
## RESULTS

### Clinical Research Study on [DiabetesWise](#)

Complete data on 458 people  
with insulin-requiring diabetes.

- 75% on injections
- 2% on CGM
- 59% care outside specialty clinic
- 41% income below 50k
- good geographic representation

# DiabetesWise



- ◆ Initiating a conversation with provider
- ◆ Getting a prescription for a device
- ◆ Starting a device

### Most likely to engage with platform:

- People with fewer diabetes resources
- People receiving diabetes care through primary care
- People using meter & injections

Received: 17 January 2023 | Revised: 12 April 2023 | Accepted: 19 April 2023

DOI: 10.1111/1753-0407.13401

ORIGINAL ARTICLE

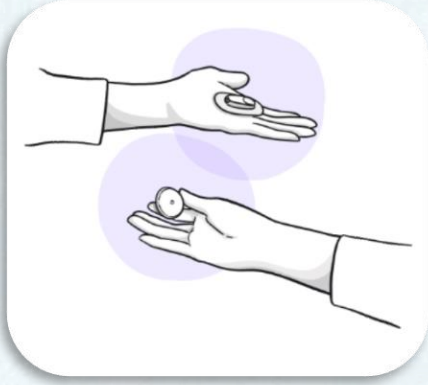
Journal of Diabetes WILEY

## DiabetesWise: An innovative approach to promoting diabetes device awareness

Jessie J. Wong<sup>1</sup> | Ananta Addala<sup>1</sup> | Sarah J. Hanes<sup>1</sup> | Sara Krugman<sup>2</sup> |  
Diana Naranjo<sup>1</sup> | Sierra Nelmes<sup>1</sup> | Kyle Jacques Rose<sup>3</sup> |  
Molly L. Tanenbaum<sup>4,5</sup> | Korey K. Hood<sup>1,2</sup>



# VALUE PROPOSITIONS



- **HCPs who take care of people with diabetes** use **DiabetesWisePro** to improve matching to devices.
- **HCPs access the prescription tool** in **DiabetesWisePro** for more efficient prescription of diabetes devices.
- **HCPs access insurance data** in **DiabetesWisePro** to determine insurance coverage information based on published policy data

[diabeteswise.org](https://diabeteswise.org)

[pro.diabeteswise.org](https://pro.diabeteswise.org)

[kkhood@stanford.edu](mailto:kkhood@stanford.edu)

# FEATURES

1. Browse Devices
2. Browse Wisdom
3. Compare Devices
4. Choose the right fit
5. Prescribe

Are you a person with Diabetes? [Visit DiabetesWise.org](https://www.diabeteswise.org)

## DiabetesWisePro

Devices Prescriptions Resources About Us




Device Library **ALL DEVICES** 20 options **GLUCOSE MONITORING** 7 options **INSULIN DELIVERY** 9 options **AUTOMATED SYSTEMS (AID)** 4 options [Compare 2 Devices](#)

Selection Options

**Device Details**

- Overview**  
basics about each diabetes device or system
- Affordability and Access
- Data Monitoring Options
- Data View Options
- Duration and Storage
- Vision / Auditory / Dexterity

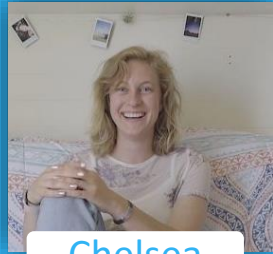
**Glucose Monitoring Devices**

	<b>Dexcom</b> Dexcom G6	Small sensor can be worn in multiple areas.	<a href="#">See Details</a> >	<a href="#">Add to Compare</a> +
	<b>Abbott</b> Freestyle Libre 2	All-in-one glucose sensor/transmitter with low and high blood glucose alarms can be worn on the upper arm.	<a href="#">See Details</a> >	<a href="#">Add to Compare</a> +
	<b>Abbott</b> Freestyle Libre 3	Smallest, thinnest, all-in-one glucose sensor/transmitter with low and high blood glucose alarms can be worn on the upper arm.	<a href="#">See Details</a> >	<a href="#">Add to Compare</a> +

**Patient Considerations**

## FEATURES

1. Browse Devices
- 2. Browse Wisdom**
3. Compare Devices
4. Choose the right fit
5. Prescribe



Chelsea

"I DIDN'T DECIDE TO GET A PUMP UNTIL MY DOCTOR SAID TO ME, "YOU ARE GIVING YOURSELF THE BEST CARE POSSIBLE WHILE ON INJECTIONS. IF YOU WANT YOUR NUMBERS TO GET BETTER, THE TYPE OF TECHNOLOGY YOU'RE USING HAS TO CHANGE."

"I have yet to find an individual who could not benefit from at least one of the potential diabetes related technology devices out there."

**Dr. Sumera Ahmed**  
MD, BC-ADM

### Fact:

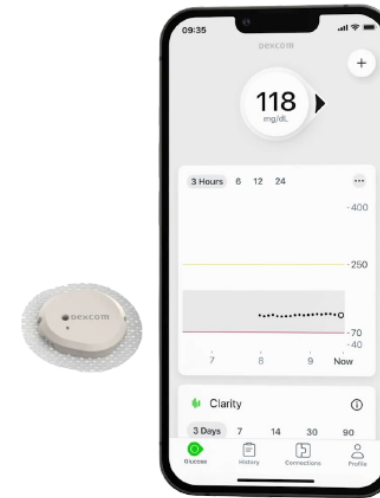
Devices are tested in a process called Human Factors testing that the FDA requires to be usable by the majority of people, safely. Using technology may take a bit to learn, but once you do, almost anyone can use them.

# FEATURES

1. Browse Devices
2. Browse Wisdom
- 3. Compare Devices**
4. Choose the right fit
5. Prescribe

Dexcom G7

Freestyle Libre 3



## Components

### \*Available in early 2023 Sensor



Sensor uses a thin, flexible filament inserted just under the skin to measure glucose levels every minute. Push-button applicator allows sensor to be placed on the body in one step.



### Sensor

Sensor uses a thin, flexible filament inserted just under the skin to measure glucose levels every minute. Push-button applicator allows sensor to be placed on the body in one step.

## Patient Considerations

 **Active Lifestyle**

**Waterproof** when submerged in 2.4 meters of water and must be within 20 (unobstructed) feet of the receiver or mobile device.

**Water-resistant** for up to 3 feet deep for 30 minutes and light on the body, does not get in the way of activity.

 **Avoiding Highs and Lows**

**Custom alerts** can be set for highs, lows, and rapidly rising or falling glucose levels. Trend arrows show the direction glucose is heading, with the rate of change.

**Optional glucose alerts** for low and high glucose levels. Trend arrows show the direction glucose is heading, with the rate of change.

 **Comfort**

**Low profile** and low maintenance sensor application.

**Lowest profile** sensor and smallest adhesive (about the size of two stacked U.S. pennies).

# FEATURES

1. Browse Devices
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[← Back to Device Library](#)

[Print](#) [Share](#)

## Dexcom G6

This sensor lasts for 10 days and only needs finger sticks as a backup. Dexcom G6 has 3 parts - sensor, transmitter, and receiver. Data can be viewed on a compatible mobile device or a separate receiver. Optional low and high blood sugar notifications are available for this system.

\*FDA approved for insertion on the abdomen (indicated for patients age 2 years and older) or the upper buttocks (ages 2-17 years).

- Compatible with Tandem t:slim X2, Control IQ, Omnipod 5, Loop
- Supports English (United States)



### What is Needed to Start

#### Sensor

Sensor uses a thin, flexible filament inserted just under the skin to measure glucose levels every minute. Push-button applicator allows sensor to be placed on the body in one step.



#### Transmitter

Sends readings from sensor to device, clips into sensor. Can be used for 90 days.



#### Receiver

Receives data automatically from the transmitter. Can be substituted by compatible smartphone and smartwatch. Available for both iOS and Android devices.





# PRESCRIPTION TOOL

1. Browse Devices
2. Browse Wisdom
3. Compare Devices
4. Choose the right fit
5. **Prescribe**

- **Choose an insurance**
- Gather details
- Send prescription

**Input:** Select the device type, state, plan type, and payer information

Select a Device

**Dexcom G6** ▾

Select a State

**California** ▾

Insurance Plan

**Medicaid** **Medicare** **Private Insurance**

Insurance Provider

**Anthem** ▾

**Anthem in California has Dexcom G6 on their formulary and is distributed by IngenioRx. All policies require prior authorization.**




**Output:** Summary of coverage will appear based on data from

# PRESCRIPTION TOOL

# DiabetesWisePro

Fill out forms and send them to the vendor.

Devices often come in parts or Components, each needing it's own prescription. The following is a list of components and prescription information and forms. It is best to submit paperwork all together and have a dedicated staff member follow up.

	Component	Quantity	NDC Code (Pharmacy)	HCPCS Code (DME)	Refills
	Sensor	3 per box	08627-0053-03	K0553	Every 30 days
	Transmitter	1	08627-0016-01	K0553	Every 3 months
	Receiver	1	08627-0091-11	K0554	Once a year (optional)

1. Browse Devices

2. Browse Wisdom

3. Compare Devices

4. Choose the right fit

5. Prescribe

- Choose an insurance
- **Gather details**
- Send prescription

## Forms & Documents

Certificate of Medical Necessity



Detailed Written Order form for Dexcom. Includes fields for Member ID, Patient Name, Date of Birth, Address, Insurance, and Physician Information. Radio buttons for 'Rescribe (Member)' and 'Supply a device for this specific Continuous Glucose Monitor (CGM)'. Includes 'ORDER DATE' and 'SET LENGTH OF NEED (in MONTHS)'.

[View Sample](#)

Prior Authorization Form



PRESCRIPTION PRIOR AUTHORIZATION REQUEST FORM. Instructions: Please fill out all applicable sections completely and legibly. Attach any additional important documents for review, e.g., chart notes or medical data, to support the prior authorization request. Sections include Member Information, Provider Information, and Device Information.

[View Sample](#)

## PRESCRIPTION TOOL

# DiabetesWisePro

1. Browse Devices
2. Browse Wisdom
3. Compare Devices
4. Choose the right fit
- 5. Prescribe**

- Choose an insurance
- Gather details
- **Send prescription**

\* If more information is needed before prescribing, direct links to policy documents will also be provided in the prescription tool output

### Blood Glucose Device Insurance Policy Documents applicable to Blue Shield California in California (2)

**Blue Shield California** - Continuous or Intermittent Monitoring of Glucose in Interstitial Fluid - Prior Authorization (PA) Form

Plan Types: PRIVATE\_INSURANCE

[View PDF](#)

**Blue Shield California** - Continuous Glucose Monitoring - Medical Policy

Plan Types: PRIVATE\_INSURANCE

[View PDF](#)

### Blood Glucose Device Insurance Formulary Documents applicable to Blue Shield California in California (0)

No results found

# SUMMARY

- DiabetesWisePro was built to inform and improve the **prescription process** for diabetes devices
- **Features** include device library, comparison tools, and prescription support
- Supported by Helmsley so we can be **free, unbranded** and untethered to device manufacturers
- Our only bias is that we need to get more people on devices by increasing **access and awareness**

