



**T1D**  
*Exchange*

# QI Project: Screening for stage 1 And stage 2 type 1 diabetes

**November 22, 2024**

# Agenda

- Welcome
- Project Aim
- Monthly Data Reporting/Smartsheet Overview
- Center PDSA Cycles
- Coordinating Center Updates
- Preliminary Results
- Next Steps

## AIM Statements

---

Increase, by at least 15% (from baseline,) the proportion of people screened for T1D in 18 months. (June 2024 - December 2025)

---

Increase, by at least 30% (from baseline,) the proportion of eligible people monitored for progression to stage 3 T1D over 18 months. (June 2024 -December 2025)

Timeline	Expectations
October 2024	<ul style="list-style-type: none"><li>• Attend monthly coaching calls</li><li>• Teams report on their recent intervention activities.</li><li>• The group will continue to test PDSA Cycles.</li></ul>
November-December 2024	<ul style="list-style-type: none"><li>• Attend monthly coaching calls</li><li>• The group will continue to test PDSA Cycles.</li><li>• Reporting Data on Smartsheet</li><li>• Preliminary Survey Results</li></ul>
December 2024-January 2025	<ul style="list-style-type: none"><li>• Attend monthly coaching calls</li><li>• The group will continue to test PDSA Cycles.</li><li>• Reporting Data on Smartsheet</li><li>• Participate in Focus groups.</li></ul>



# Monthly Data Reporting/Smartsheet Overview

# Data Reporting by Center

Centers	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24
Children's National										
Texas Children's										
Lurie Children's										
University of Indiana										



# Center PDSA Cycles



# Texas Children's



## T1D Screening Project: Implementation Rolling Action Item List

**AIM: Increase by at least 15% (from baseline) the proportion of people screened for T1D in 18 months. ( June 2024-December 2025)**

Key Driver	Intervention	PDSA	Point Person	Progress Note	Next Steps	Next Report T1Dx	Status
PCPs unaware of need for T1D screening	PCP education on T1D screening, staging, and prevention	<ol style="list-style-type: none"> <li>TCP live Webinar (August 29, 2024) led by Lauren Culbreth and Dr. Aguirre</li> <li>Webinar was shared with external Pediatric offices (October 2024)</li> </ol>	Daniel DeSalvo		• xxx		Adopted
No current model for T1D prevention clinic or mechanism for referral	Utilize new referral mechanism for PCPs	<ol style="list-style-type: none"> <li>PCP referral type update: "Screening and staging to delay type 1 diabetes" (August 2024)</li> <li>Algorithm for central scheduling at TCH update to schedule into SIT Down T1D clinic (August 2024)</li> <li>Education about new referral type at TCP Webinar (August 2024)</li> <li>Education about new referral type to TCH Pediatric Endocrinology faculty and fellows (September 12, 2024)</li> </ol>	Curtis Yee (practice administrator)		• xxx		Adopted
Patients/families unaware of need for T1D screening	Multimodal education to patients and families	<ol style="list-style-type: none"> <li>New onset binder (July 2024)</li> <li>Flier in exam rooms (September 2024)</li> <li>Future: MyChart letter to current T1D patients</li> </ol>	Melissa Marshall (Clinic Manager)		• xxx		In-process
No current model for T1D prevention clinic or mechanism for referral	Schedule pre-diabetes referrals with normal BMI in SIT Down clinic	<ol style="list-style-type: none"> <li>Meet with clinical lead for pre-diabetes (Dr. Horne)</li> <li>Revise protocol so that pre-diabetes referral with BMI &lt;90th% goes to SIT Down clinic</li> </ol>	Dr. Horne and Curtis Yee				
Patients/families	Psychology involvement	<ol style="list-style-type: none"> <li>Meet with diabetes psychologists (Drs. Gallagher and Carreon)</li> <li>Consider having separate telemedicine vs. shared medical/psychology visit</li> </ol>	Dr. Gallagher				



# Children's National

# Children's National

## T1D Screening Project

**AIM: Increase by at least 15% (from baseline) the proportion of people screened for T1D in 18 months. ( June 2024- December 2025)**

Key Driver	Intervention	PDSA	Point Person	Progress Note	Next Steps	Next Report T1Dx	Status
Integrative EMR system	Create Cerner early stage powerform and add variables into dashboard	1) Submit Cerner request form (TBD)		Cerner team not willing to move any powerform requests forward given potential EMR platform migration. Tracking currently done via Excel sheet	Continue Excel tracking and explore feasibility of temporary data integration using Tableau/another analytics tools.		Paused
	Streamline ordering process	1) Consider building order set to include autoantibodies, A1c and education (talking points) (TBD)					Not yet started
Patient and family awareness of need to screen for T1D	Education for families on screening and prevention opportunities	1) Create screening handout, translate (October 2024)		Screening handout awaiting feedback from larger early stage team before going to translation.			In progress
		2) Handout in new onset binder & exam rooms (December 2024)					
		3) CDCES educational materials for early stage T1D patients (TBD)					
		4) Portal message blast (TBD)					
Specific, streamlined workflow	Develop and implement succinct policies and procedures. While in process, determining team member roles and responsibilities	1) Identify and engage key stakeholders (clinical director, admin staff, providers, nurses). (January 2024). Determine specific roles in the workflow (TBD)		Protocol obtained from ID attending re: infection guidelines/recommendations before and during Tzielid infusion. To be added to policy & procedure draft.			In progress
		2) Draft, pilot and launch policies and procedures. Monitor success (TBD)					



# Lurie Children's



# Preliminary Data

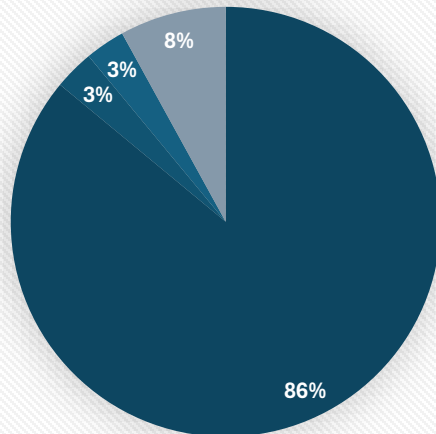
# Preliminary Findings among Confirmed Positive Results

- **270** individuals screened
- **29** screened positive with confirmed positive results (multiple autoantibodies)
- **10.7%** positivity rate

# Preliminary Results- Demographics among Confirmed Positive Results

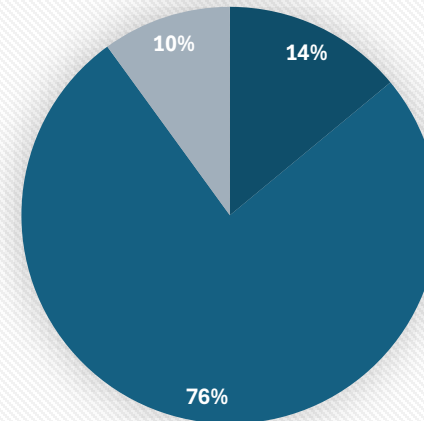
- Mean age of individuals was 11 years old
- Age ranged from 3 years old to 18 years old
- The majority of individuals were White (86%) and Non-Hispanic (76%)

**Race of Screened Individuals with Confirmed Positive Results**



■ White ■ Black or African American ■ Other ■ Unknown

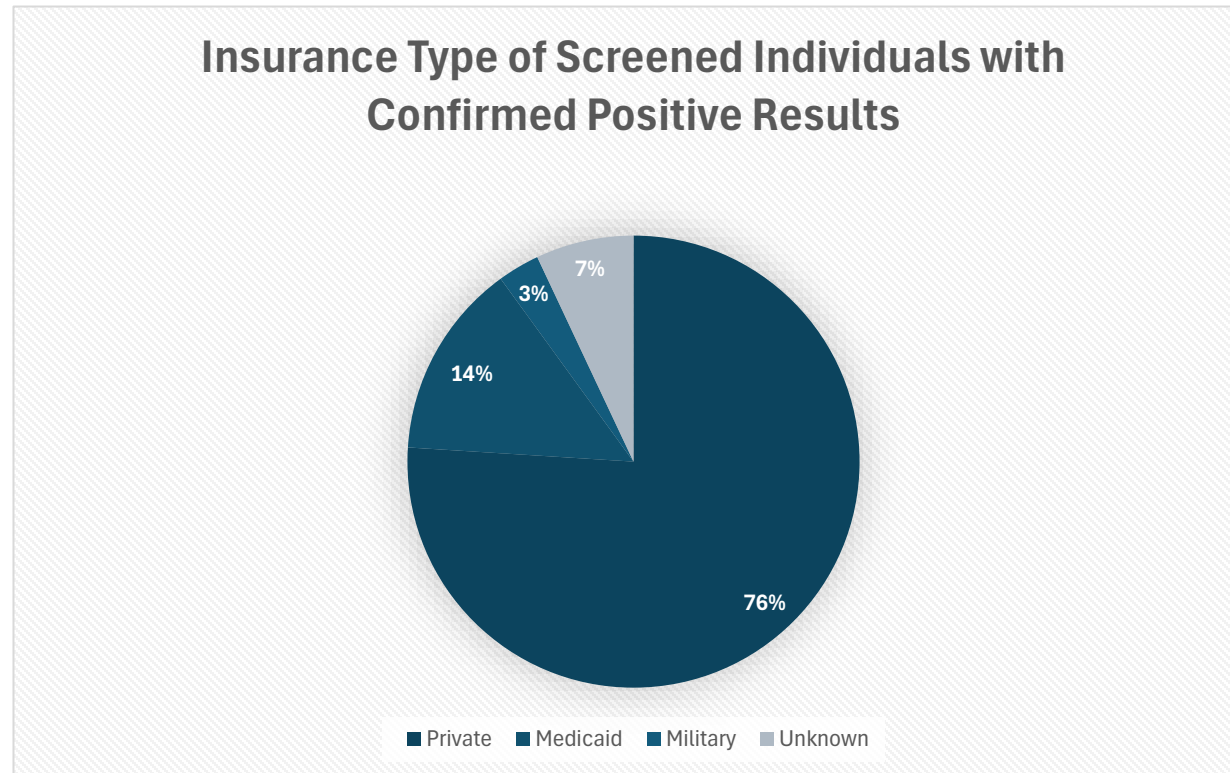
**Ethnicity of Screened Individuals with Confirmed Positive Results**



■ Hispanic or Latino ■ Non-Hispanic or Latino ■ Unknown

# Preliminary Results- Demographics among Confirmed Positive Results

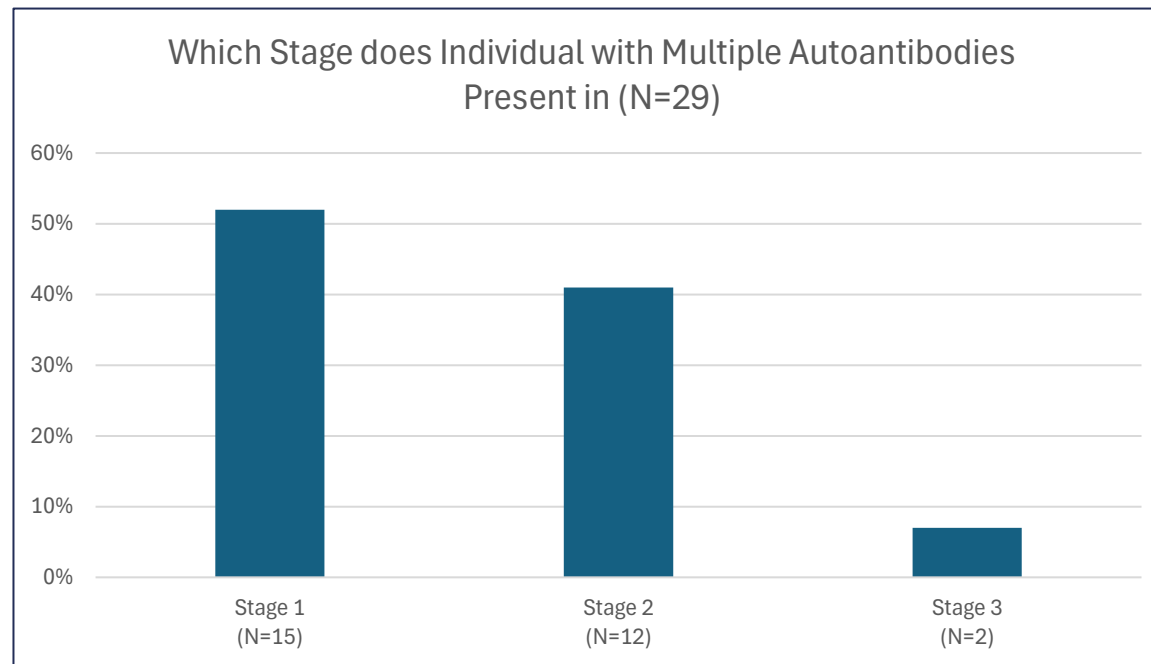
- The majority of individuals had private insurance (76%)





# Preliminary Results- Which stage does the individual present with?

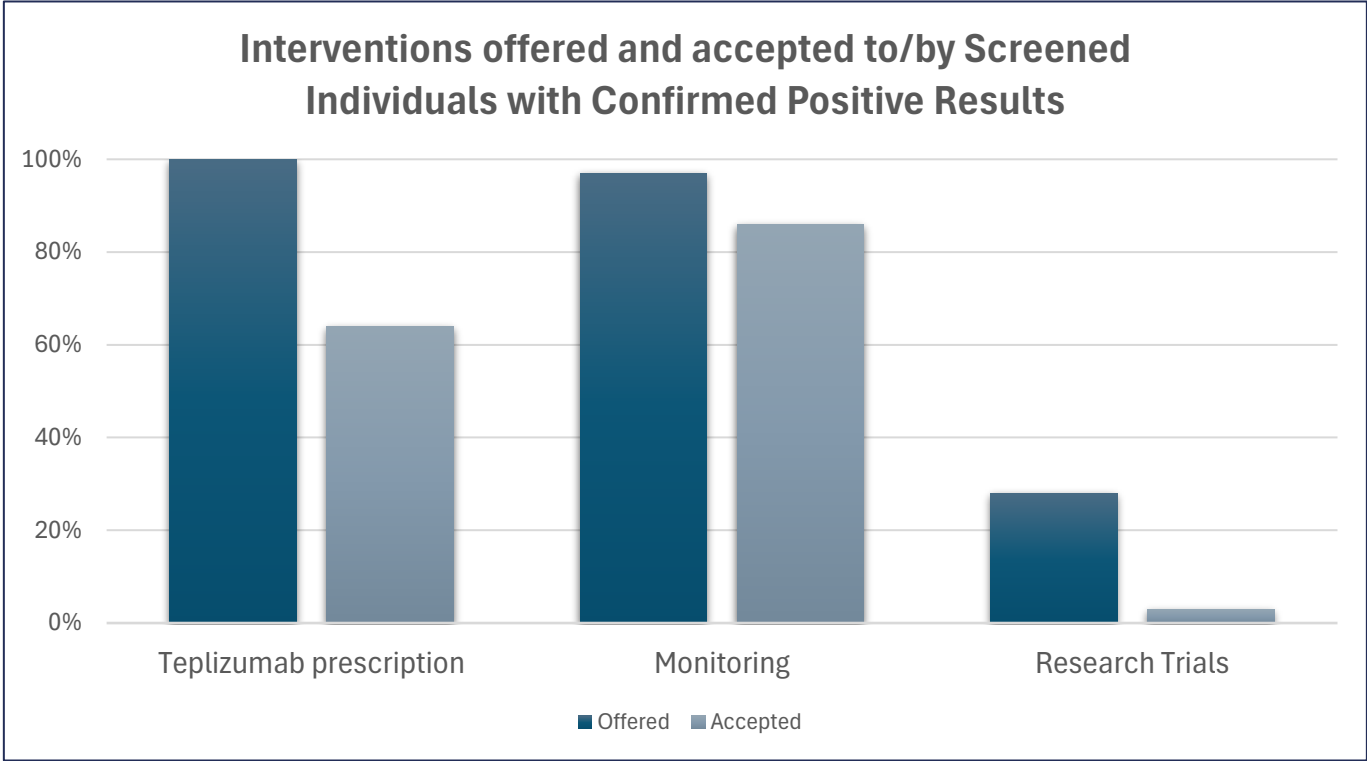
- **Stage 1** (normal blood glucose)
- **Stage 2** (abnormal glucose tolerance or HbA1c 5.7-6.4%)
- **Stage 3** (blood glucose above ADA diagnostic threshold or HbA1c  $\geq 6.5\%$ )



# Preliminary Results- Which Autoantibodies are Present?

Type of Autoantibody	Percent of Screened Individuals
GADA	86%
ZNT8A	55%
IA2A	52%
IAA	31%
ICA	21%

# Preliminary Results- Was the individual offered any interventions?





# Coordinating Center Updates



# Questions?