

# Improving Engagement with Annual Electronic Psychosocial Screening among Youth with T1D

Kelsey R. Howard, PhD;<sup>1,2</sup> Monica Bianco, MD;<sup>1,2</sup>; Sean DeLacey, MD;<sup>1,2</sup> Laura Levin, DO;<sup>1,2</sup> Mary McCauley, MD;<sup>1,2</sup> Jillian S. Merrick, PhD;<sup>1</sup> Paula Petrie, RN, CDCES;<sup>1</sup> Wendy Perez, MHA;<sup>1</sup> Mayra S. Ramos, MS;<sup>1</sup> Jill Weissberg-Benchell, PhD, CDCES;<sup>1,2</sup> Naomi Fogel, MD<sup>1,2</sup>  
<sup>1</sup>Ann & Robert H. Lurie Children's Hospital of Chicago; <sup>2</sup>Northwestern University Feinberg School of Medicine



## Project Initiation

### Problem Statement

Youth with Type 1 diabetes have higher rates of depression than their peers. In addition, poor glycemic control is further associated with depression. Diabetes-specific emotional distress is also strongly associated with poor glycemic outcomes (in both youth and their parents). Psychosocial screening for youth is recommended. Our clinic screens for a number of psychosocial outcomes; however, identifying eligible patients is a challenge. Survey completion rates are as low as 11% for depression.

### Aim

Overall Aim: Increase the percentage of patients 12 and older with Type 1 diabetes who complete the annual psychosocial screeners, including the depression screen, to  $\geq 80\%$  by August 31, 2025.

Current Aim: Increase youth with T1D's engagement with the psychosocial screening instrument after reducing the number of psychosocial instruments in the questionnaire battery.

### Project Scope

Annual psychosocial screening is recommended for youth with Type 1 Diabetes (T1D)<sup>1,2</sup>

- Diabetes distress and depression are associated with diabetes outcomes (e.g., glycemic outcomes)<sup>3-5</sup>

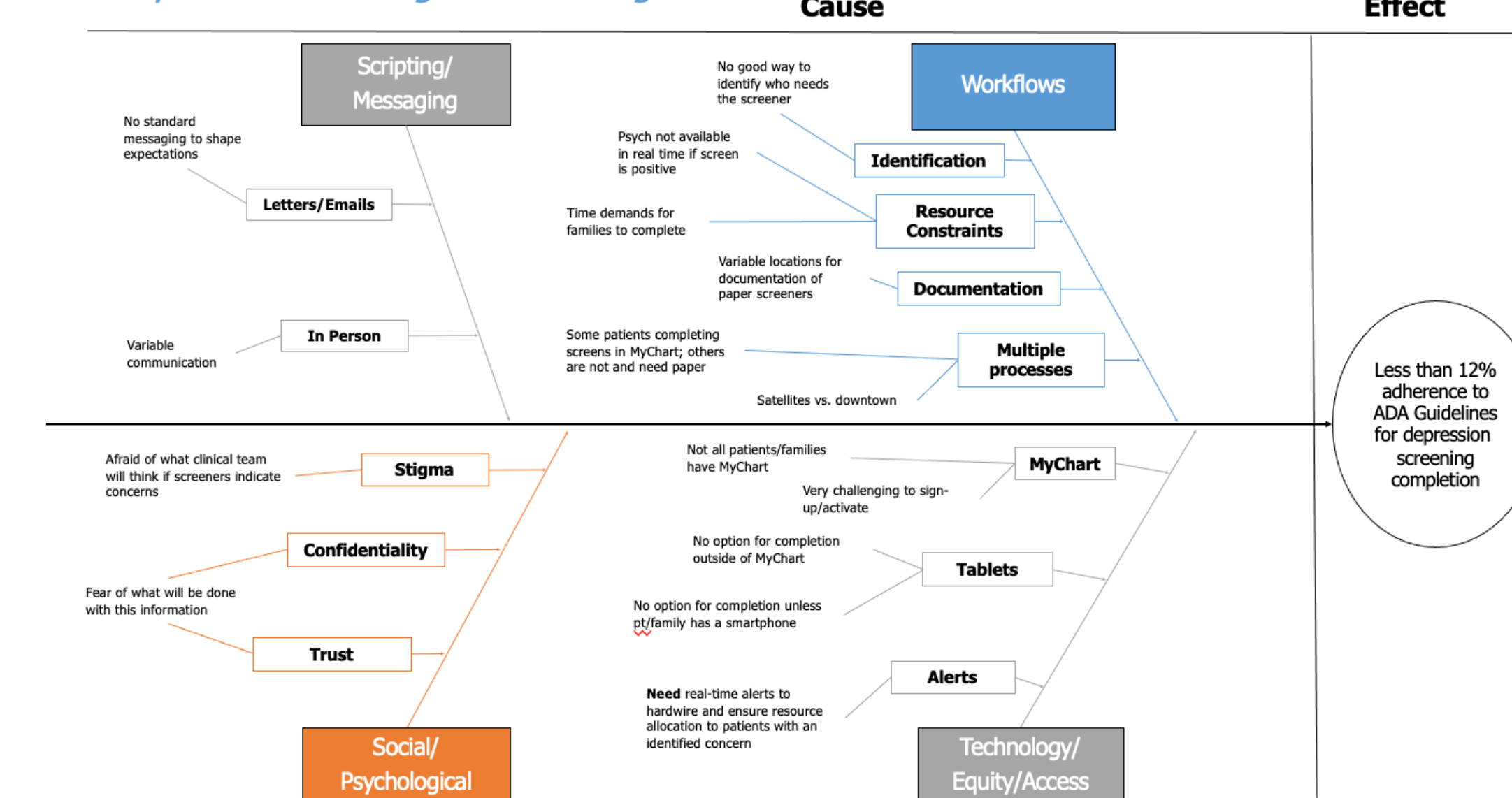
Establishing and implementing screening protocols can be challenging

- Logistics (e.g., identification of patients)
- Time to score or provide feedback
- Triage for elevated screeners

Questionnaire length and content of instruments are factors associated with response rate<sup>6</sup>

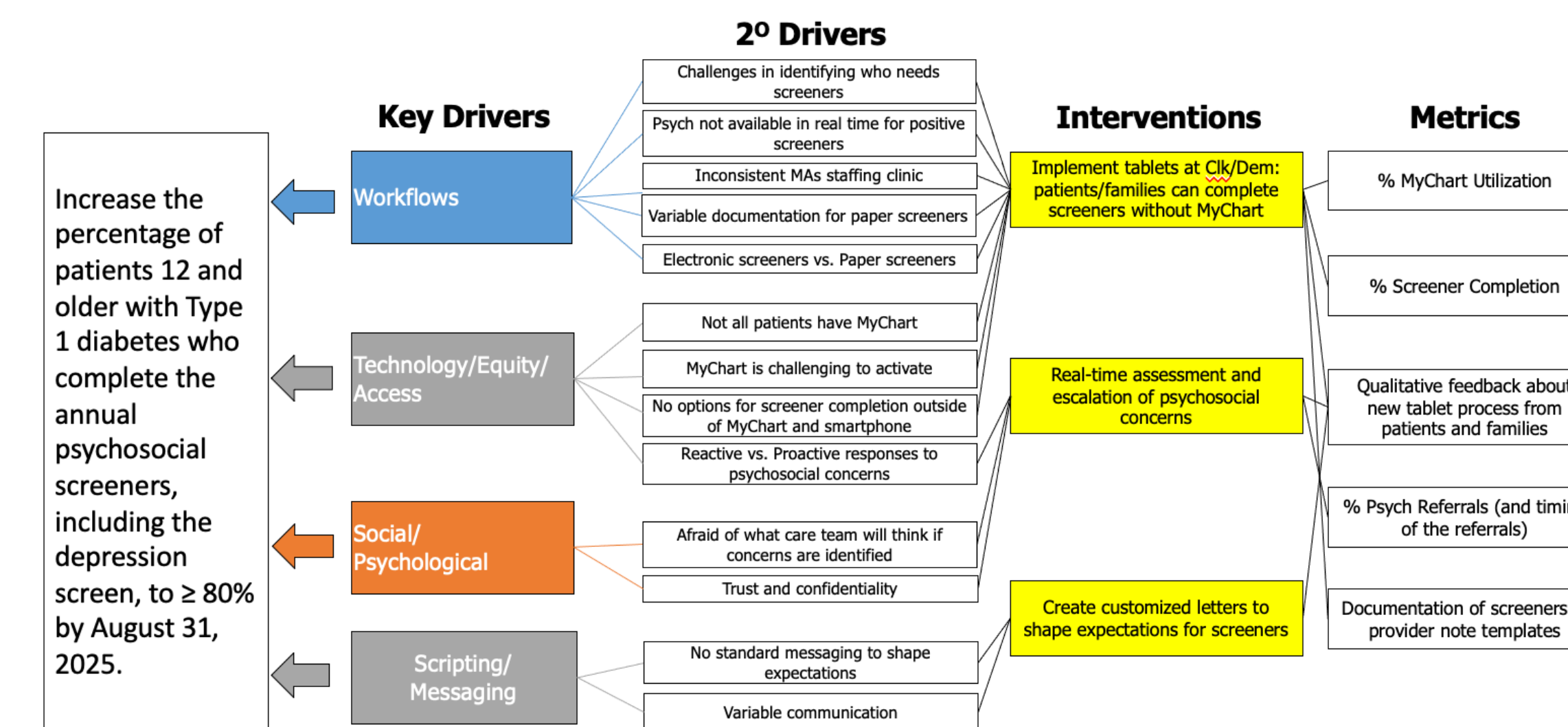
## Current State Analysis

T1D Depression Screening Fishbone Diagram



## Current State Analysis (cont.)

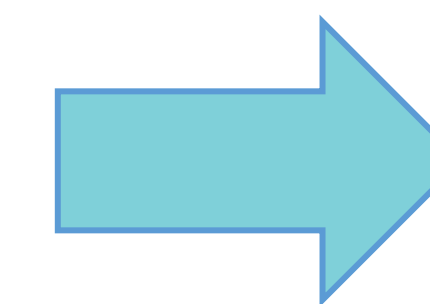
T1D Exchange: Depression Screening Key Driver Diagram



## Measurement

- All data collected at an academic children's hospital in a large midwestern city
- Patients were invited to complete annual psychosocial questionnaires via MyChart
- We examined rates of psychosocial screening survey completion during two nine-month periods before and after the implementation of QI intervention to reduce questionnaire burden on families
- QI intervention completed from 6/2022 to 1/2024
  - o Pre-intervention: 6/2022 - 3/2023
  - o Post-intervention : 4/2023 - 1/2024

6/2022- 3/2023



4/2023- 1/2024

### Self-Report

- o Anxiety Symptoms (PROMIS Anxiety)
- o Depressive Symptoms (PROMIS Depression)
- o Diabetes-Related Executive Functioning Scale (DREFS)
- o Diabetes-Specific Emotional Distress (PAID-T)
- o Diabetes-Specific Family Conflict (DCFS)
- o Diabetes Strengths and Resilience (DSTAR)
- o Insulin Omission

### Self-Report

- o Depressive Symptoms (PROMIS Depression)
- o Diabetes-Specific Emotional Distress (PAID-T)

### Parent-Report

- o Diabetes-Specific Emotional Distress (P-PAID-T)
- o Diabetes-Specific Family Conflict (DCFS-P)
- o Social Support

## Results

### Prior to the Intervention

40.17% ( $n = 192$ ) of 478 patients completed at least one screening instrument.

### Post Intervention

45.89% ( $n = 249$ ) of 543 patients completed at least one screening instrument.

## Conclusion & Implications

Reducing questionnaire burden is associated with increased completion of psychosocial screeners, which can inform provider knowledge and recommendations for youth with T1D.

Following interventions to reduce questionnaire burden, we observed an:

- **Increased** number of patients identified for survey completion
- **Increased** rate of completion

Barriers in QI processes included:

- Technology: Unable to implement tablets in clinic

Future QI work should address the ongoing barriers to survey completion and continue to improve workflow around psychosocial screening.

## References

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