



Improving Food Insecurity Screening in Children and Adolescents with Type 1 and Type 2 Diabetes



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Background

- Families raising a child with diabetes face higher health care costs and are more likely to be food insecure.
- At Rady Children's Hospital San Diego (RCHSD), 806 children and adolescents with T1D and T2D were screened for food insecurity (between July 2020 and June 2021) with 11.3% of T1D (n=701) and 22% of T2D (n=105) patients showing a positive screen .
- Mean HbA1c was significantly higher among the FI screen positive group with T1D and T2D when compared with the negative screen group:

	Negative		Positive	
	T1D (N=621)	T2D (N=82)	T1D (N=80)	T2D (N=23)
HgbA1c				
Mean (SD)	8.04 (2.27)	7.37 (3.24)	8.66 (2.62)	9.40 (2.32)

p-values : T1D= 0.005**, T2D = 0.004**

Aim Statement

To Increase the percentage of children and adolescents with T1D and T2D screened for food insecurity and documented resources provided for positive screens during diabetes clinic visit from 27% on April 2022 to 50% by May 31, 2023.

Methods

- RCHSD uses the Hunger Vital Sign™ tool for food insecurity screening (FIS).
- A care gap checklist identifies patients due for FIS and an electronic medical record (EMR) data dashboard tracks rate of FIS performance and whether FI resources are provided.
- A multidisciplinary team identified key change targets for interventions which were tested in several Plan-Do-Study-Act cycles. .

Interventions

Standardizing screening performance at 6-month intervals

Obtaining monthly data report on completion of food insecurity screening and resource provision for positive screens

Health Maintenance created in the EMR

Automating assignment of patient-entered questionnaires (PEQ) in English and Spanish to clinical encounters

EMR documentation of resource provision

Provider and staff engagement and training

Adding a reminder to the clinic schedule tracker to ensure performance

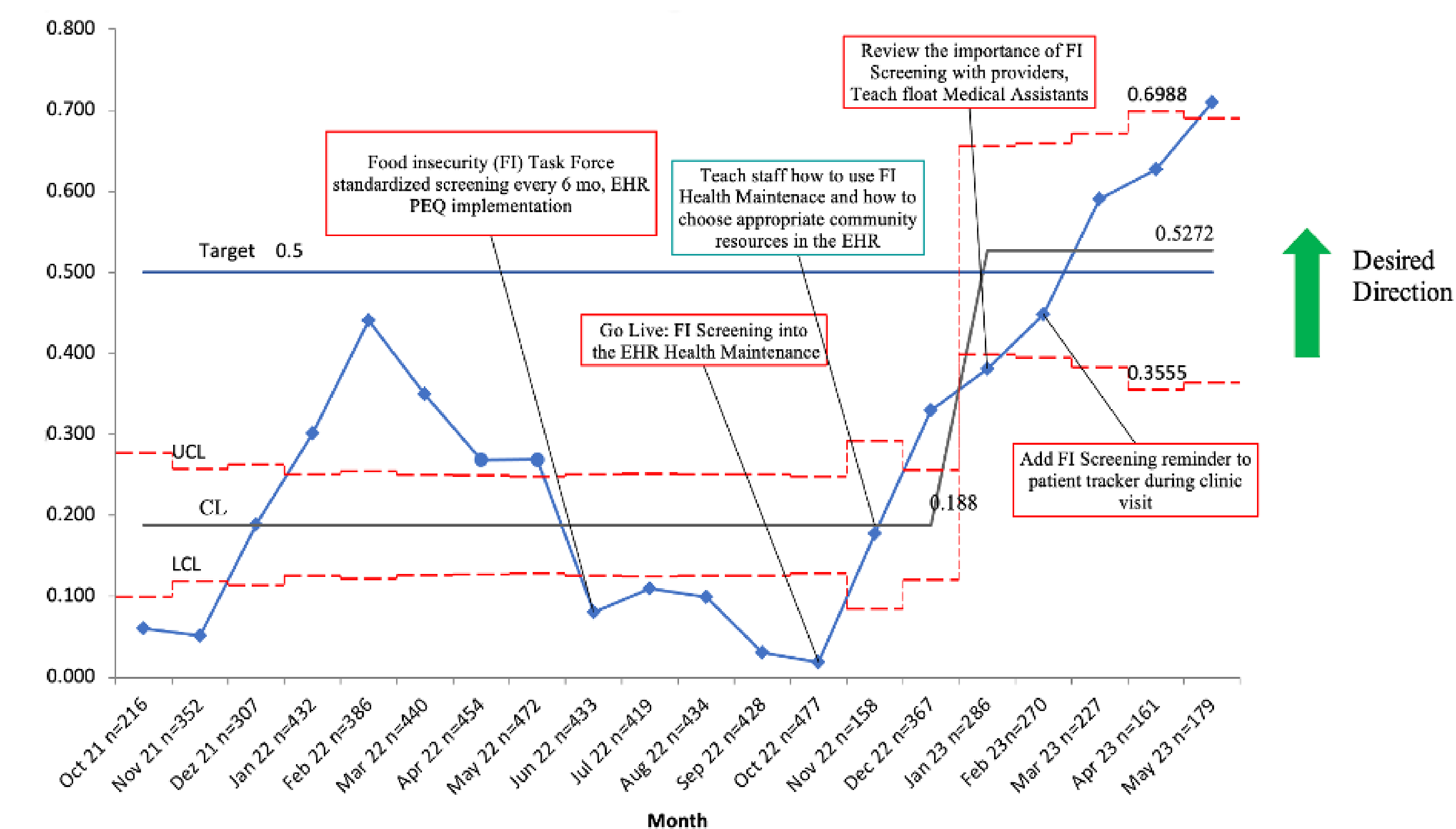
EMR Health Maintenance

Topic	Due Date	Frequency	Date Completed
Current Care Gaps			
COVID-19 Vaccine (1)	Overdue - never done		Imm Details
Upcoming			
HPV Vaccine (2 - 2-dose series)	Next due on 8/17/2022		Imm Details 2/17/2022 - HPV...
Seasonal Influenza Vaccine (1)	Next due on 9/1/2022		Imm Details 2/17/2022 - Influe... 1f
Asthma Follow-up Intermittent	Next due on 11/4/2022	6 month(s)	5/4/2022 - Mild in... 1f
Food Insecurity Screening	Next due on 11/11/2022	6 month(s)	5/11/2022 - DM S...
WELL CHILD CHECK REMINDER 3-17 YEARS	Next due on 2/17/2023	1 year(s)	2/17/2022 - Enco... 1f
Meningococcal Vaccine (2 - 2-dose series)	Next due on 7/16/2025		Imm Details 11/12/2020 - Men...
DTaP/Tdap/Td Vaccines (7 - Td or Tdap)	Next due on 11/12/2030		Imm Details 11/12/2020 - Tdap 1f

- Patients can be screened for food insecurity using a Patient Entered Questionnaire (PEQ)
 - Removes stigma associated with asking & answering sensitive questions
- Available in English and Spanish (automatically adjusts based on documented patient language)

Results

Percentage of children and adolescents with T1D or T2D screened for food insecurity



As of May 2023, the percentage of youth with diabetes screened for food insecurity increased by 44% from May 2022 baseline of 27% to 71% (goal of 50%)

Conclusions

- Application of QI methodology enabled improved food insecurity screening rates at our diabetes center.
- Utilizing EMR tools and data collection enabled automation to help standardize food insecurity screening protocols and data tracking.
- Screening success can be potentiated by the EMR.

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