

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

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T1D Exchange QI Learning Session

November 14-15, 2023

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, results from a retrospective review including 806 children and adolescents with T1D or T2D screened for food insecurity (July 2020 to June 2021) showed:
 - 11.3% of T1D (n=701) scored positive for food insecurity
 - 22% of T2D (n=105) scored positive for food insecurity

HgbA1c Levels Stratified by Type of Diabetes and Food Insecurity Status at RCHSD

	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

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

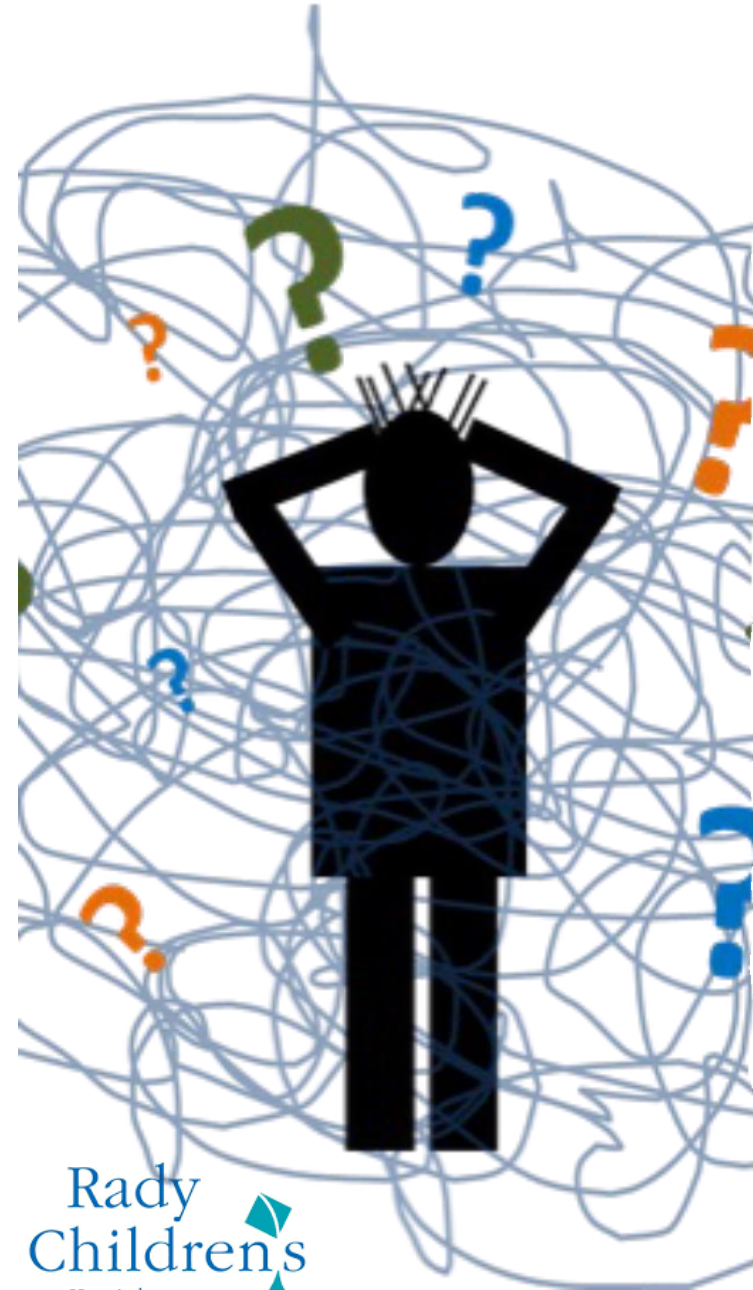
Adding a reminder to the clinic schedule tracker to ensure performance

Who should be screened?

EPIC Health maintenance (aka care gaps) is the tool and background process used to identify **who** to screen and **how often** they should be screened

- Who?
 - All **active** patients (seen in the last 3 years or scheduled in the next 6 months)
- Frequency
 - At least every 6 months
 - Recommendation from the food insecurity task force

We want to be mindful of changes to economic circumstances but reduce burden of screening



Health Maintenance

- Health maintenance runs in the background to calculate when the screening was last completed and when it will be due again
- Hunger Vital Sign (*Hager et al. Pediatrics 2009*)

Health Maintenance

Address Topic Remove Override Edit Modifiers Report Refresh

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... 10
Asthma Follow-up Intermittent	Next due on 11/4/2022	6 month(s)	5/4/2022 - Mild in... 1/
Food Insecurity Screening	Next due on 11/11/2022	6 month(s)	5/11/2022 - DM S... 10
WELL CHILD CHECK REMINDER 3-17 YEARS	Next due on 2/17/2023	1 year(s)	2/17/2022 - Enco... 10
Meningococcal Vaccine (2 - 2-dose series)	Next due on 7/16/2025	Imm Details	11/12/2020 - Men... 10
DTaP/Tdap/Td Vaccines (7 - Td or Tdap)	Next due on 11/12/2030	Imm Details	11/12/2020 - Tdap 10

Health maintenance is used for a variety of screenings, testing, and immunizations

- 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)

Food Insecurity

For an upcoming appointment with Dr. J Huang on 7/20/2022

* Indicates a required field.

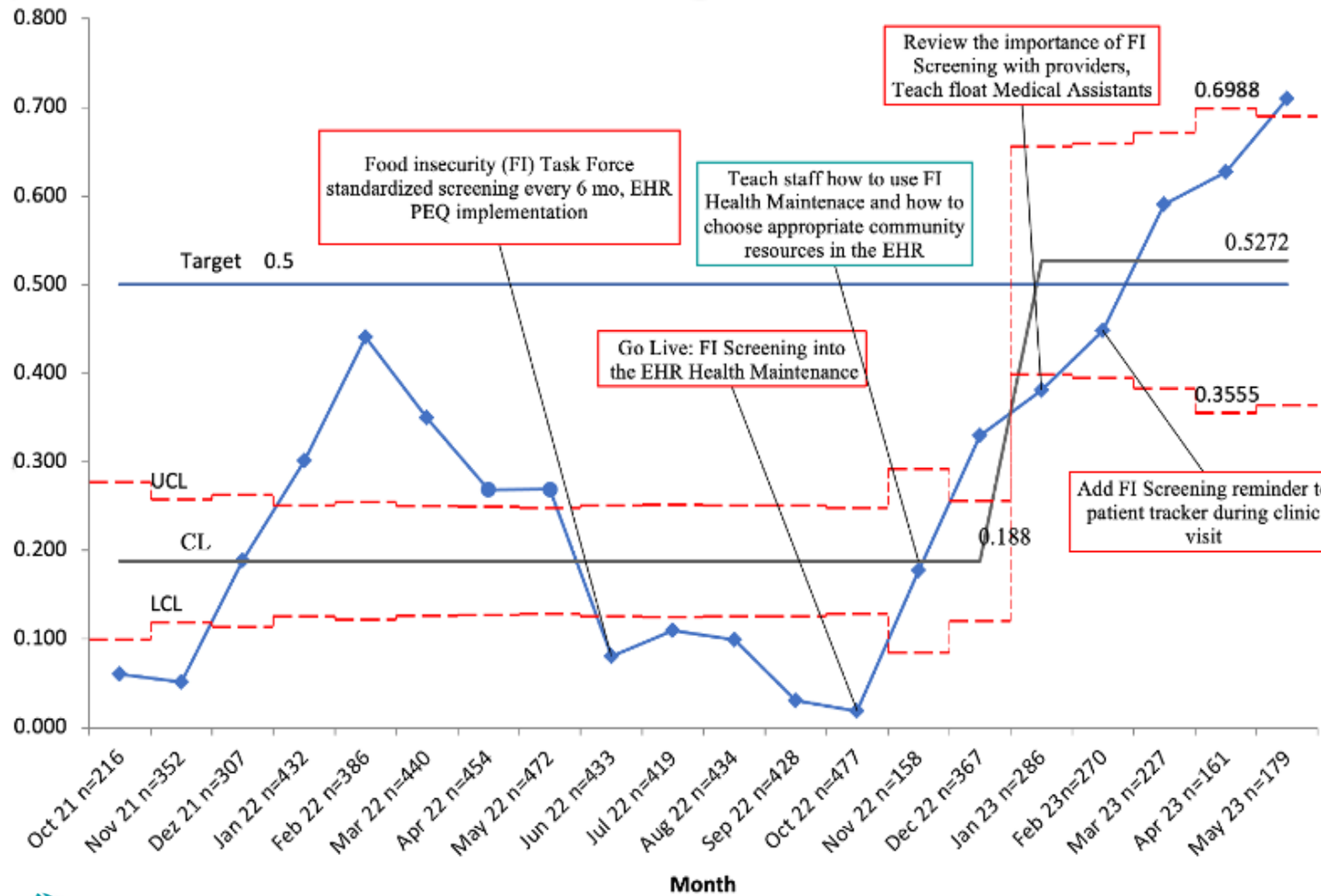
* Within the past 12 months, we worried whether our food would run out before we got money to buy more

Often true Sometimes true Never true I don't know I prefer not to answer

* Within the past 12 months, the food we bought just didn't last and we didn't have money to get more

Often true Sometimes true Never true I don't know I prefer not to answer

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

Next Steps

- Continuous staff education and training to promote sustainability
- Collaboration with RCHSD Food Navigation Program
- Use the same approach to screen for other SDOH (transportation, housing)

Thank you!

RCHSD Diabetes Clinic QI Team

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UC San Diego
SCHOOL OF MEDICINE





Establishing Social Determinants of Health Screening to Improve Pediatric Diabetes Patient Outcomes

Blake Adams, BSN; Margaret Shepherd, BS; Fatina Caldwell-Jones, DNP; Grace Nelson, MD;

University of Tennessee Health Science Center and Le Bonheur Children's Hospital



Introduction

- Our mission at Le Bonheur Diabetes Clinic is to partner with families and support them in finding ways to best manage their diabetes care.
- Despite the existing research correlating social factors with suboptimal glycemic control, our clinic had not been screening for Social Determinants of Health (SDOH) in our diabetic patient population.
- Our AIM was to screen 10% of our total patients with type 1 and type 2 diabetes for Social Determinants of Health based on a set of specific criteria from June 2023 through August 2023.



Methods

- Met bimonthly with a multidisciplinary team to establish screening parameters. We decided to focus screening on patients who had been diagnosed for at least 6 months and also had an A1C greater than 9.5%, a lapse in care for at least 6 months, or their anniversary of diagnosis date within 3 months of their appointment.
- Items explored included food insecurity, transportation barriers, household financial strain, social isolation, and both physical and mental/emotional abuse.
- Partnered with University of Michigan and utilized their “Partner’s in Care” surveys.
 - Surveys for 0–10-year-olds were filled out by the caregivers.
 - Surveys for 11–17-year-olds were filled out by the patients.



PDSA Cycle 1

Act:

Converted the final survey question that made intervention with resources or referrals optional into a statement.

Study:

14 completed screens with 4 positive (28%) and 3 referrals made. None of the patients and families elected for an optional social work consult.



Plan:

Met with multidisciplinary group to establish SDOH screening guidelines.

Met with staff to consider clinic flow and determine survey administration process.

Do:

The Medical Student screened 2 providers' schedules for 2 weeks ahead of time and gave the list to our clinic scheduler.

The scheduler created folders with age-appropriate surveys and gave them to our Medical Assistant for distribution during check-in. Surveys were placed in a basket for the Medical student to review.



PDSA Cycle 2

Act:

Added a “Provider Only” section to the survey to allow for document of interview (referral made or resource offered).

Added resource handouts to our online shared drive as well as hard copies to our clinic resource center, so clinical staff had access in case of SW unavailability or a resource-only request from patient or family.

Reminded providers to clearly chart resources given in EMR.

Study:

19 completed screens with 12 positive (63%). 10 referrals made.



Plan:

Added SDOH surveys with: “If needed our team will give you information and resources that can help. Let us know if you have any questions.” Screened for 2 weeks and reassessed.

Do:

Screened for 2 weeks.



PDSA Cycle 3

Act:

Reminded providers to fill out “Provider Only” section on surveys and reminded staff to prompt families to complete surveys.

Added a list of available resources to survey to pique interest, encourage honesty, and reduce hesitancy.

Study:

19 completed surveys with 6 positive (31%) and 5 referrals made.



Plan:

Added “Provider Only” section to survey to document referral vs. resource offered.

Added resource handouts to our online shared drive as well as hard copies to our clinic resource center, so clinical staff had access in case of SW unavailability or a resource-only request from patient or family.

Reminded providers to clearly chart resources given in EMR.

Do:

Screened for 2 weeks.



PDSA Cycle 4

Act:

Decided to simplify our criteria in order to continue expanding SDOH screening. We centered screening on patients with A1C >9.5.

Study:

13 completed surveys, 3 positive (23%) and 3 referrals



Plan:

Reminded providers to fill out “Provider Only” section on surveys and reminded staff to prompt families to complete surveys.

Added a list of available resources to survey.

Do:

Screened 2 weeks.

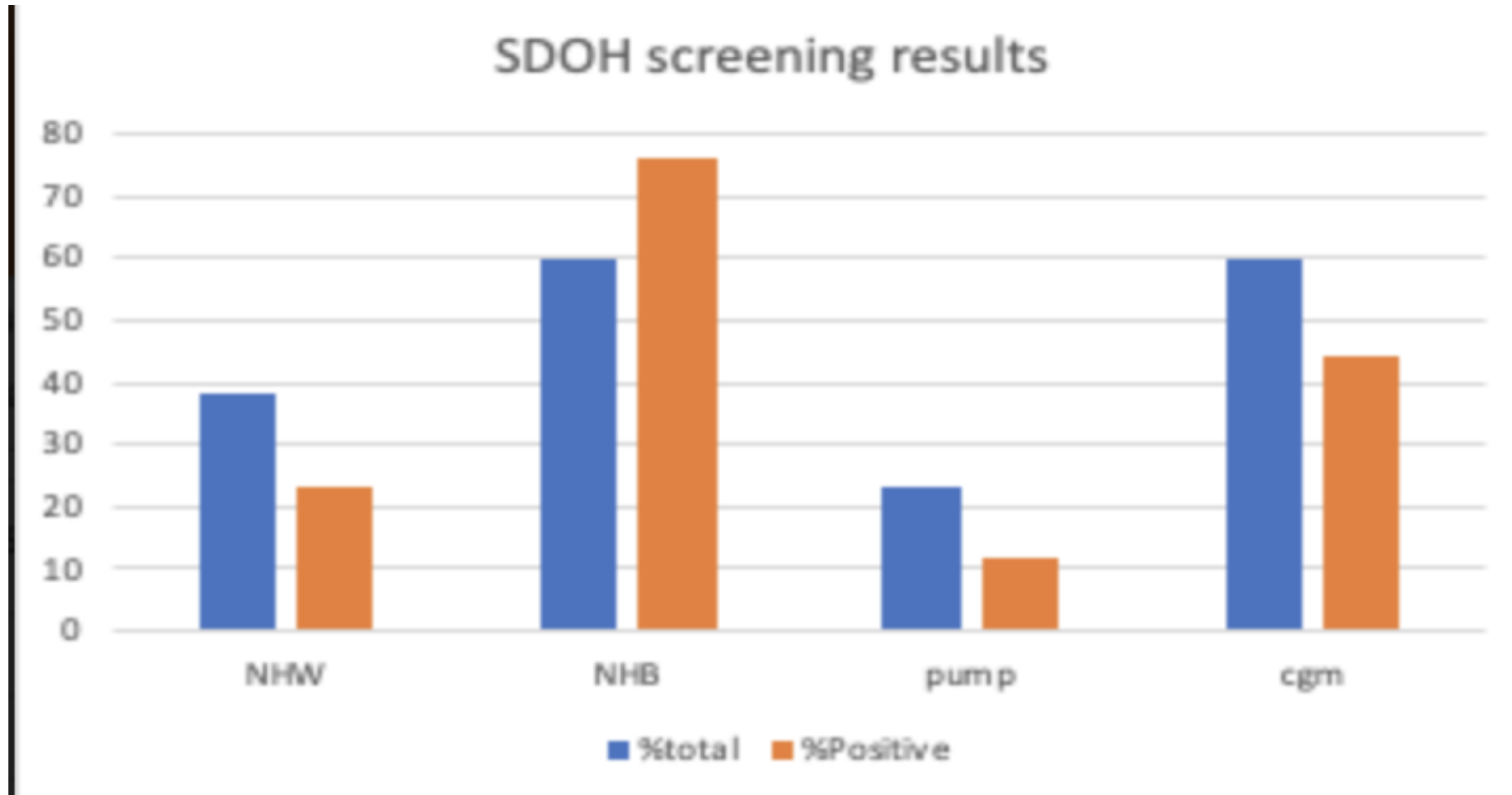


Results

- We successfully increased our clinic's SDOH screening rate from 0% to approximately 4.3%.
- 51.6% of eligible patients completed screens.
- 38.5% of completed screens were positive.
- 84% of patients that screened positive were offered social work referrals and/or appropriate resources.

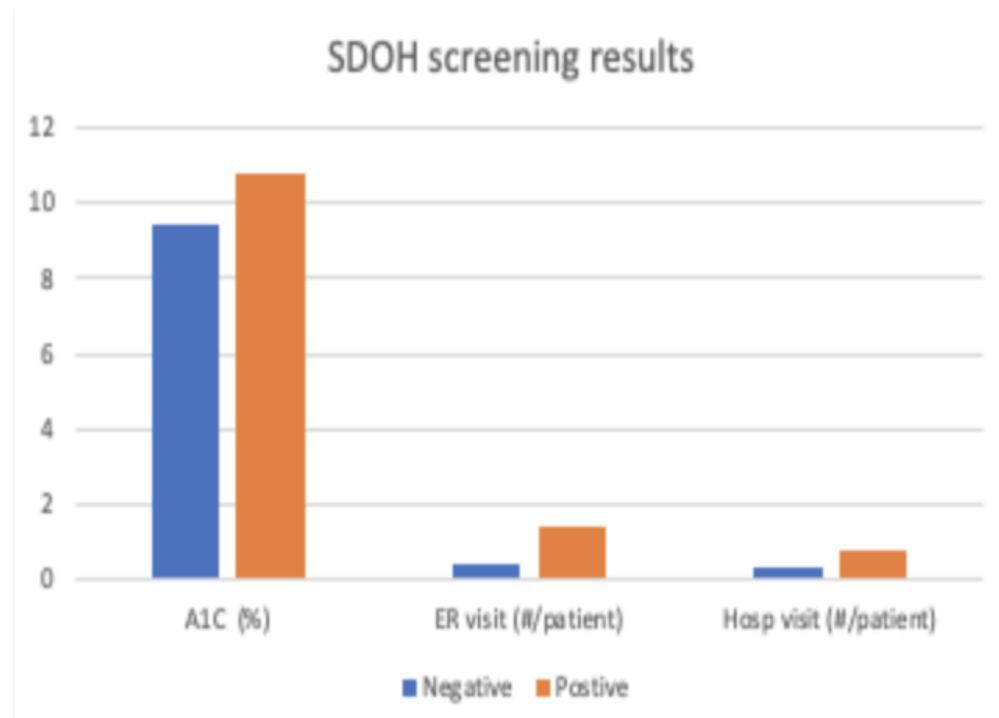


SDOH results based on Race and Technology Use



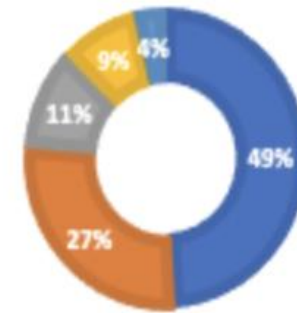


Data collected from SDOH Screening



REASON FOR NOT COMPLETING SCREEN

- No show to appt.
- Rescheduled appt.
- Cancelled appt.
- Screen not administered
- Incomplete screen returned





Conclusion

- Though we did see an improvement in our SDOH screening for our Type 1 and Type 2 diabetes patients, we haven't reached our goal rate of 10%.
- While we are anticipating an EMR transition that will support annual survey administration, we will focus on screening patients with an A1c over 9.5%.



References

- Hershey, Jennifer A., Jennifer Morone, Terri H. Lipman, and Colin P. Hawkes. “Social Determinants of Health, Goals and Outcomes in High-Risk Children With Type 1 Diabetes.” *Canadian Journal of Diabetes* 45, no. 5 (July 2021): 444-450.e1. <https://doi.org/10.1016/j.jcjd.2021.02.005>.
- Sokol, Rebeccah L., Mehdipanah, Roshanak, Bess, Kiana, Mohammed, Layla, and Miller, Alison. “When Families Do Not Request Help: Assessing a Social Determinants of Health Screening Tool in Practice.” *Journal of Pediatric Healthcare Partners Volume 35, Issue 5, P471-478, (September 2021)*. <https://doi.org/10.1016/j.pedhc.2021.05.002>.

Screening for Social Determinants of Health in Adults with Diabetes

Ruth S. Weinstock MD PhD, Beth Wells MSN RN, Jamie Romeiser PhD, MPH, Emilie Hess MS, Joseph Erardi BS.

November 14, 2023

Goal: To improve diabetes outcomes by identifying and addressing social needs.

Objectives:

1. To screen for social determinants of health (SDOH) at routine visits

2. To provide resources and social worker support for those who have material needs.

Future: To determine if there is resolution/reduction in social needs and improved diabetes outcomes after referring adults with identified needs to our clinic social worker.

Methods

- **Population: Adults with T1D and T2D with visits from August 2022-April 2023.**
- **SDOH: 8 questions related to food, housing, finance, and transportation insecurities asked at routine medical visits by LPN.**
 - Positive screen: defined as a (+) response to any SDOH question.
- **Adults with an identified need (+ screen): offered referral to clinic social worker.**
- **Demographic & clinical characteristics obtained from EMR.**
 - Differences in characteristics were assessed by type of diabetes (Fisher Exact Test or Chi Square)
- **Predictors of Social Work referral acceptance in adults with (+) SDOH screen assessed using exploratory multivariable logistic regression.**

Cohort Characteristics

	All (%) [n=4704]	Type 1 (%) [n=1659]	Type 2 (%) [n=3045]
Screened	83.2	86.4	81.4
Age (Years, Median)	58	41	63
Female	51.8	49.2	53.3
African American	13.1	5.7	17.4
White	79.2	90	73.0
Private Insurance	39.3	57.9	28.5
Medicaid Insurance	17.4	20.9	15.3
Medicare Insurance	42.0	19.7	54.9
CGM Use	53.5	83.6	36.1
Pump Use	21.0	53.6	2.2

Results

Majority who screened positive had >1 material need

- 13.4% (n=192) T1D screened (+) (vs T2D 16.0% (n=396, p=0.03)
- T1D with (+) screen, 56.2 % (n=108) had >1 material need [vs T2D 60.4 % (n=239)]

African Americans were more likely to screen positive than Whites

- T1D: 31.7% AA (n=26) vs. 12.2% White (n=158; p <.0001)*
- T2D: 24.2% AA (n=104) vs 13.6% White (n=246; p<.0001)*

Adults with public (Medicare/Medicaid) insurance were more likely to screen positive than those with private insurance

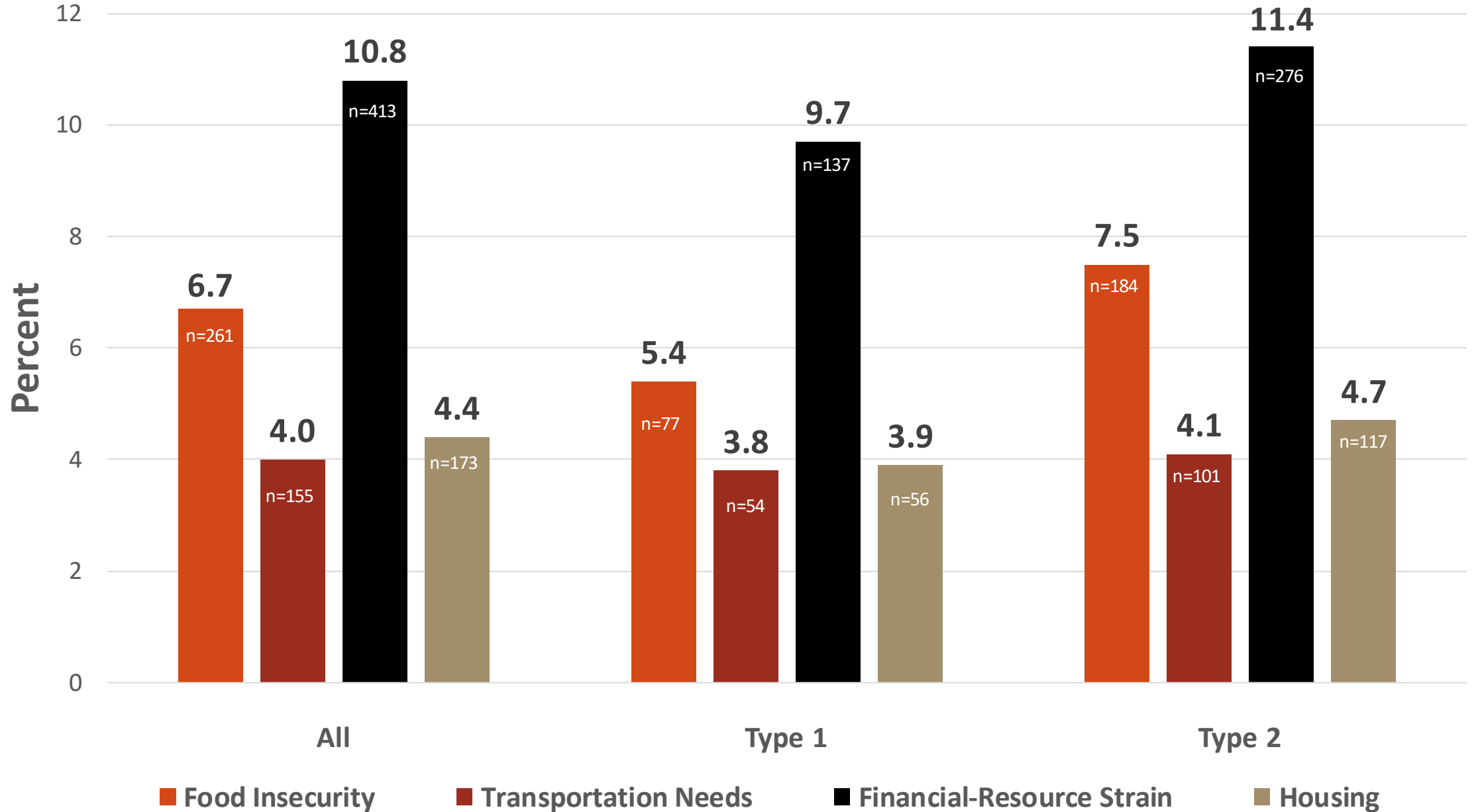
- T1D: 8.0% Private Insurance (n=66) vs. 21.0% Public Insurance (n=122) screened SDOH (+)(p<.0001)**
- T2D : 10.7% Private Insurance (n=75) vs. 18.2% Public Insurance (n=316) screened SDOH (+)(p<.0001)**

Adults not using a pump were more likely to screen positive than those using a pump

- T1D: 17.1 % vs. 10.2 % not using (n=114) vs using (n=78) pump therapy screened SDOH (+) (p<.0001)**

* FISHER EXACT TEST, ** CHI SQUARE

Percent of Adults with Positive Screen by Social Need



Social Work Referrals for T1D Adults with ≥ 1 Material Need

25.5% accepted referral to social work: similar percent by sex, race, ethnicity, age, and CGM and pump use.

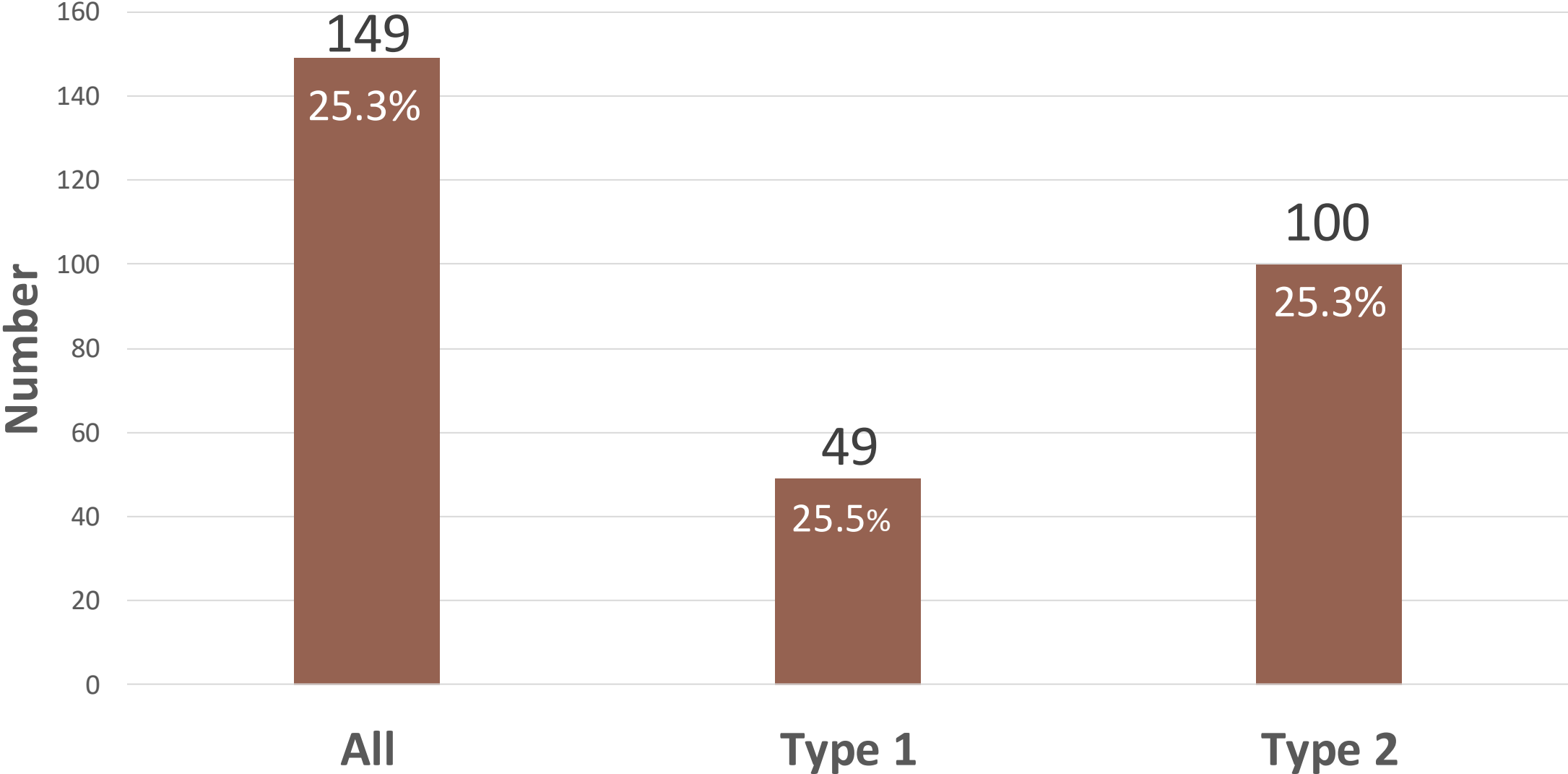
77.6% who accepted a referral to SW had > 1 social need.

Those with public insurance were 3.04 times as likely to accept a referral compared to those with private insurance ($p=.01$).

Adults with transportation needs were 2.29 times more likely to accept a referral compared to those who did not ($p=.02$).

Those with housing needs were 2.23 times more likely to accept a SW referral compared to those who did not ($p=.03$).

Acceptance of Social Work Referral in Adults with (+) SDOH Screen



Conclusions

Material needs are common in adults with diabetes.

Next steps:

Improve screening (offer confidential screening) and reduce barriers to acceptance of social work referral

Improve accessibility of social worker at the time of the visit, acceptance of referrals and provision of needed resources

Determine if those who accepted social work referrals had a subsequent reduction in social needs and improvement in outcomes (A1c, CGM metrics, PHQ).

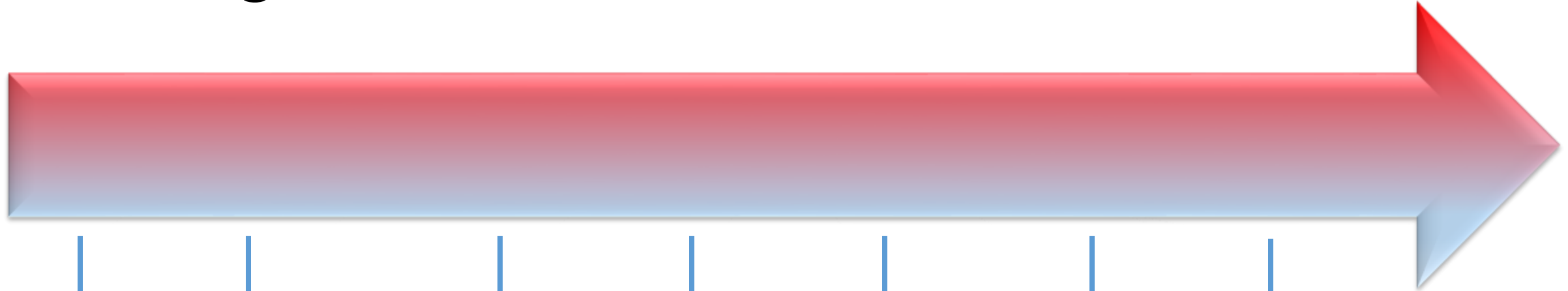
REACH Registry: Using EMR-Based Tools To Improve Outreach Services

Selorm Dei-Tutu MD, MPH, Rebecca Butler LMSW, Amelia Martinez RN, BSN, Kelly Timmons RN, BSN, Meghan Craven MD, MPH.

Texas Children's Hospital / Baylor College of Medicine



Background



2013
RI-PGC
developed
and in Epic

2015
Extra Care
cohort
developed
with
dedicated SW

2019
RI-DKA
developed.

2021
RI-DKA
officially in
Epic

Nov 2021
HR
navigation
team (SW
and RN) start
using RI-DKA
with
patients;
risk score 10

Sept 2022
Risk score
threshold
9.8 - 10

April 2023
Pt outreach
encounter
developed;
registry built;
risk score
threshold
now 9 -10

RI-DKA Score

› [Clin Diabetes](#). 2022 Spring;40(2):204-210. doi: 10.2337/cd21-0070. Epub 2022 Apr 15.

An Automated Risk Index for Diabetic Ketoacidosis in Pediatric Patients With Type 1 Diabetes: The RI-DKA

David D Schwartz¹, Rosa Banuelos², Serife Uysal³, Mili Vakharia³, Kristen R Hendrix^{3 4},
Kelly Fegan-Bohm³, Sarah K Lyons³, Rona Sonabend³, Sheila K Gunn³, Selorm Dei-Tutu³

Affiliations + expand

PMID: 35669298 PMCID: [PMC9160557](#) DOI: [10.2337/cd21-0070](#)

[Free PMC article](#)

Score	Category
-3.5 – 2	Low risk
2.5 – 6.5	Medium risk
7 – 10	High risk
10.5 – 14	Very high risk

Diabetes DKA Risk Score

11.5

+6.63

Last 3 months

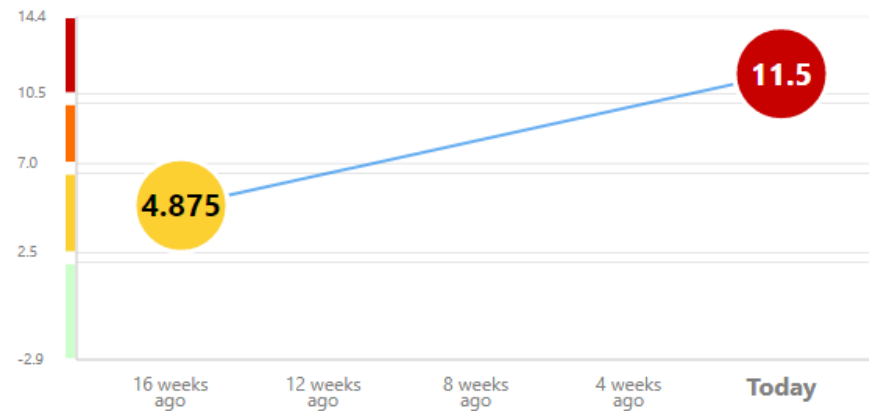
[Calculator Simulator](#)

Last 3 months

Last 12 months

Last 2 years

Last 5 years



Changed In Last 3 Months

Value	Factor	Last Changed
1	Number of DKA Encounter in Past 2 Years	8 days ago
11.5% ^	Hemoglobin A1c	8 days ago

Additional Factors

Value	Factor	Last Changed
Yes	Patient is on Public/Self Pay/Charity	5 years ago

Interventions

- 2-week post DKA follow up by phone
- Monthly check ins via phone calls
 - Facilitate diabetes education
 - Facilitate prescription management
 - Facilitate psychosocial care
- In-person check-ins during clinic appointments
 - Pre-visit planning w/ passport
- Appointment reminders and facilitate transportation

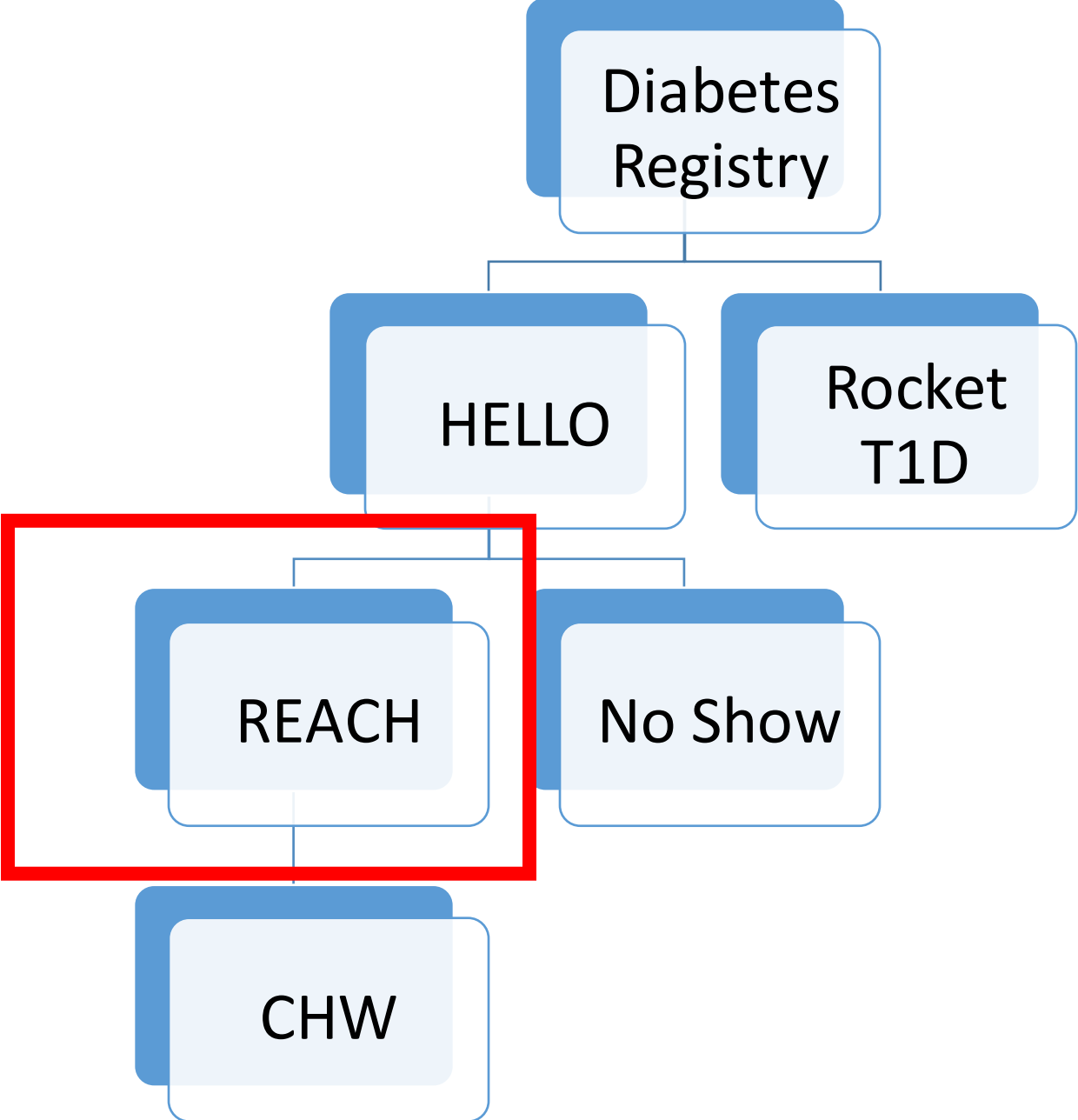
Room # _____

Patient Name: _____ Provider: _____

Appointment Time: _____ Patient Label: _____

Diabetes Clinic Checklist

	To be Done today:	Completed today:	Notes:		
Lipid Panel:	<input type="checkbox"/>	<input type="checkbox"/>			
TSH:	<input type="checkbox"/>	<input type="checkbox"/>			
Micro-albumin:	<input type="checkbox"/>	<input type="checkbox"/>			
Retinal Exam:	<input type="checkbox"/>	<input type="checkbox"/>	Last Retinal Exam: _____		
Flu Vaccine:	<input type="checkbox"/>	<input type="checkbox"/>			
Psychology:	<input type="checkbox"/>	<input type="checkbox"/>			
PHQ- 9:	<input type="checkbox"/>	<input type="checkbox"/>	<table border="1" style="border-collapse: collapse;"> <tr> <td style="padding: 2px;">PHQ-9 Score: _____</td> <td style="padding: 2px;">DKA Risk Score: _____</td> </tr> </table>	PHQ-9 Score: _____	DKA Risk Score: _____
PHQ-9 Score: _____	DKA Risk Score: _____				
Social Worker:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Please See Provider First		
			<input type="checkbox"/> Insulin affordability <input type="checkbox"/> Diabetes burnout/distress/non-adherence <input type="checkbox"/> Depression/suicidal ideation <input type="checkbox"/> Basic Need Insecurity (Transportation/food scarcity risk) <input type="checkbox"/> Lack or no insurance <input type="checkbox"/> Transition to adult care/college <input type="checkbox"/> Disability <input type="checkbox"/> Support groups <input type="checkbox"/> Medical power of attorney <input type="checkbox"/> Immigration <input type="checkbox"/> 504 Plan <input type="checkbox"/> Other: _____		
Care Coordinator:	<input type="checkbox"/>	<input type="checkbox"/>	_____		



**Type 1 Diabetes
HELLO Cohort**

Help for youth with Elevated glucose Levels to improve Outcomes

RI-DKA >6
OR
2+ DKA in the past year

**Type 1 Diabetes
REACH Cohort**

Resources And Care to improve Health outcomes

RI-DKA >9
plus 2 Years from Diagnosis
OR
RI-DKA >6 plus DKA in past year (365 days)
plus 1 year from Diagnosis
OR
2 or more DKA in past year (365 days)
regardless of risk score and date of diagnosis

**Type 1 Diabetes
No Show Cohort**

RI-DKA >6 OR 2+ DKA in past year (365 days)
PLUS No show in past 6 months
AND No appointment in next 6 months

New REACH Patients

Report completed: Wed 9/6 02:38 PM

 **19** New Patients

RN/CDCES Outreach Tasks

Report completed: Wed 9/6 02:38 PM

16 Overdue | **0** Due Today | **0** Due Next 10 Days

REACH Registry Summary


Report completed: Tue 9/5 02:33 PM | Results expired: Wed 9/6 02:33 PM

REACH Patients (All)	242
Active Patients	50
Inactive Patients	8
[No Value]	184

Registry Reports

REACH Registry Panel Metrics

Last Refresh: 02:47:20 PM

	Jun	Jul	Aug	MTD
REACH No Show Rate	 7.66 %	11.72 %	10.25 %	10.70 %

Diabetes REACH Cohort Intake

Extra Care Cohort Intake

Extra Care Cohort Status

active dismissed

Reason for enrollment

social needs | technology needs | learning deficit | **DKA**
risk score | other

Enrollment Date

1/18/2023

Primary location of care

Medical Center | West Campus | Woodlands | Sugar Land
Clear Lake | Cy Fair | Austin

Close

Diabetes REACH Cohort: All Patients [25297297] as of Tue 9/5/2023 2:33 PM

[Chart](#)
[Encounter](#)
[Communication](#)
[Synopsis](#)
[Results Review](#)
[Place Orders](#)
[Questionnaire Series](#)
[Research Studies](#)

MW - Next Endo Appt

[Detail List](#)
[Explore](#)
[DKA Risk Summary](#)
[Enrollment](#)
[Dismissal](#)
[Status](#)
[Documented Time This Month](#)
[Primary Location](#)
[Total Patients](#)
[Next Appt Dept](#)

[Filter](#)
[Clear All Filters](#)

[Re-run Report](#)
[Refresh Selected](#)
[Select All](#)

SW Next Outreach	RN/CDE Next Outreach	Enrollment Reason	DKA Risk Score	Location	Status	Enrollment Date	Next Endo Appt	Next Endo Appt Dept	Last Endo OV	Last DKA Past 12m	Last Outreach	Monthly Outreach	RN/CDC Time This M
07/05/2023		DKA	10	Medical Center	active	06/05/23	↑ Scroll to selected row	MW ENDOCRINE CLNC	05/24/2023	07/12/2023	08/28/2023	appointment reminder	0
07/05/2023	08/01/2023	social needs	9.9	Medical Center	active	04/17/2023	10/25/2023	MW ENDOCRINE CLNC	08/16/2023		07/18/2023	visit questions/concerns	0
07/12/2023	06/08/2023	DKA	9.8	Medical Center	active	06/12/2023	09/13/2023	MW ENDOCRINE CLNC	07/28/2023	10/30/2022	06/06/2023	monthly outreach	0
07/14/2023		DKA	10	Medical Center	active	06/14/2023	09/11/2023	MW ENDOCRINE CLNC	07/13/2023	10/16/2022	08/22/2023	appointment reminder	0

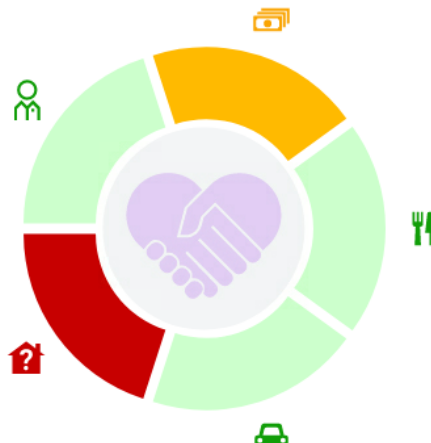
[LPOC](#)
[Demo / Social](#)
[Care Team / Visit Details](#)
[Labs](#)
[Risk Profile](#)
[DKA Risk Trend](#)
[Depression Screen](#)
[Registry Details](#)

Care Coordination Notes

Recent Visits

Telemedicine

Social Determinants of Health



Outpatient Medications

Meds Overview

Enable clinical decision support by reconciling outside information

Accu-Chek FastClix Lancets MISC Last Edited 1 month ago
 USE TO CHECK BLOOD GLUCOSE UP TO 6 TIMES PER DAY in case of CGM failure

acetone (urine) (KETOSTIX) TEST STRIP 1 month ago
 CHECK KETONES WHEN ILL OR WHEN BG > 250

BAQSIMI ONE PACK 3 MG/DOSE POWD 2 weeks ago
 GIVE 3MG IN ONE NOSTRIL AS NEEDED FOR SEVERE HYPOGLYCEMIA

Blood Glucose Monitoring Suppl (FREESTYLE LITE) w/Device KIT 1 month ago
 USE AS DIRECTED PER PACKAGE INSTRUCTIONS OR AS DIRECTED BY PRESCRIBER

REACH Outreach

Outreach topic

appointment assistance	visit questions/concerns	return call	form processing
appointment reminder	monthly outreach	referral	refill request
2 wk DKA follow up			

Diabetes Management

Overall feeling

well	not well
------	----------

Diabetes management since last visit

good	fair	frustrating	difficult
------	------	-------------	-----------

How do you get your insulin?

pump	shots
------	-------

Do you have enough insulin supplies for the month?

yes	no
-----	----

Do you have enough testing supplies for the month?

yes	no
-----	----

Are you taking short acting insulin as recommended?

yes	no	sometimes
-----	----	-----------

Are you taking long-acting insulin as recommended?

yes	no	sometimes
-----	----	-----------

Who is supervising/giving long-acting insulin on the weekends?

guardian	self	sibling	family friend	other
----------	------	---------	---------------	-------

Are you on CGM?

yes	no
-----	----

How has it been going?

good	fair	technical problems
------	------	--------------------

Do you visit the school nurse?

yes	no	sometimes
-----	----	-----------

Referrals

Referral(s) made

yes	no
-----	----

Time/Follow Up

Social Work

SW time spent with patient/care coordination

30

Care Management

Clinic Visit Topic(s) Discussed	adherence	giving long-acting insulin	giving short-acting insulin	diabetes distress/burnout
	utilizing school nurse	home environment	Rx financial assistance	troubleshooting technology
	DKA assessment goal	refill request	camps	school orders/accommodations
	referral to CDCES	referral to dietitian	mental health referral	coordination to other clinic
	school nurse contact	insurance assistance	transition/adult care	financial counseling
	medicaid resources	form completion	SDOH referral	transportation assistance
	parking assistance			
Coordination of Services	camps	school orders/accommodations	referral to CDCES	referral to dietitian
	mental health referral	coordination to other clinic	school nurse contact	financial counseling
	medicaid resources	form completion	SDOH referral	transportation assistance
	parking assistance	insurance assistance		
Outcome	patient's visit kept	completion/review of labs	decrease A1c	increase A1c
	met with high risk RN	met with high risk SW	met with dietitian	met with CDCES
	no DKA 6 months	no DKA 7-12 months	advised family/patient on diabetes home mgmt	no ER visit
	ordered supplies/refills	referral to community resource/agency	transportation/parking	use CGM more than 50%
	attended mental health appointment			
Goal Met at Visit	no DKA <3 months	advised family/patient on diabetes home management	referral to interdisciplinary team member	reviewed goals
	no ER visit	reviewed labs	referral to community resource/agency	unmet need
	met family's needs/questions/concerns	ordered supplies/refills	transportation/parking	no need met
	advocacy for patient			

Time/Follow Up

Social Work

SW time spent with patient/care coordination

SW next outreach date

RN/CDCES

RN/CDE time spent with patient/care coordination

Conclusions and Future Directions

- Epic tools can be leveraged for population health management
 - Track REACH specific outcomes through our internal QI data application
- Community Health Worker as an extension of the Extra Care team, focus on 5 goals:
 - Improve **appointment management** and **communication** with the care team
 - Increase **access to healthy food** options
 - Navigate current barriers to access in **diabetes technology**
 - Apply for **public benefits** and patient assistance programs
 - Identify adult insurance plan for **transition** and schedule with an adult care provider

Acknowledgements



- Extra care team
- Kelly Timmons, BSN, RN
- Helmsley Diabetes Care Innovation Award (G-2206-05307)

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HELMSLEY
CHARITABLE TRUST

To Contract or Not to Contract?: Paying for NICH to Address the Social Drivers of Diabetes Outcomes

Michael A. Harris, PhD

David V. Wagner, PhD

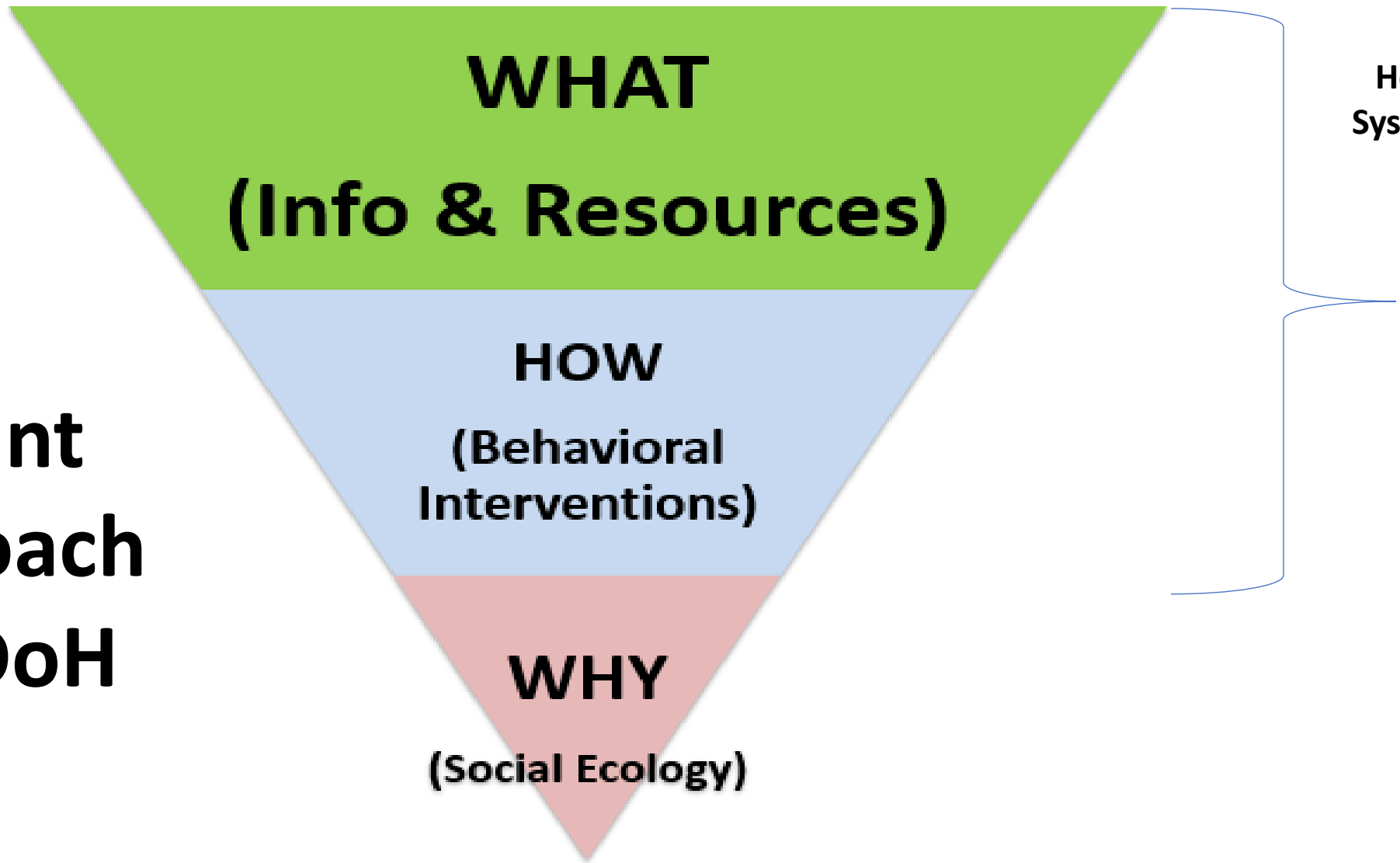
Samantha Barry-Menkhaus, PhD



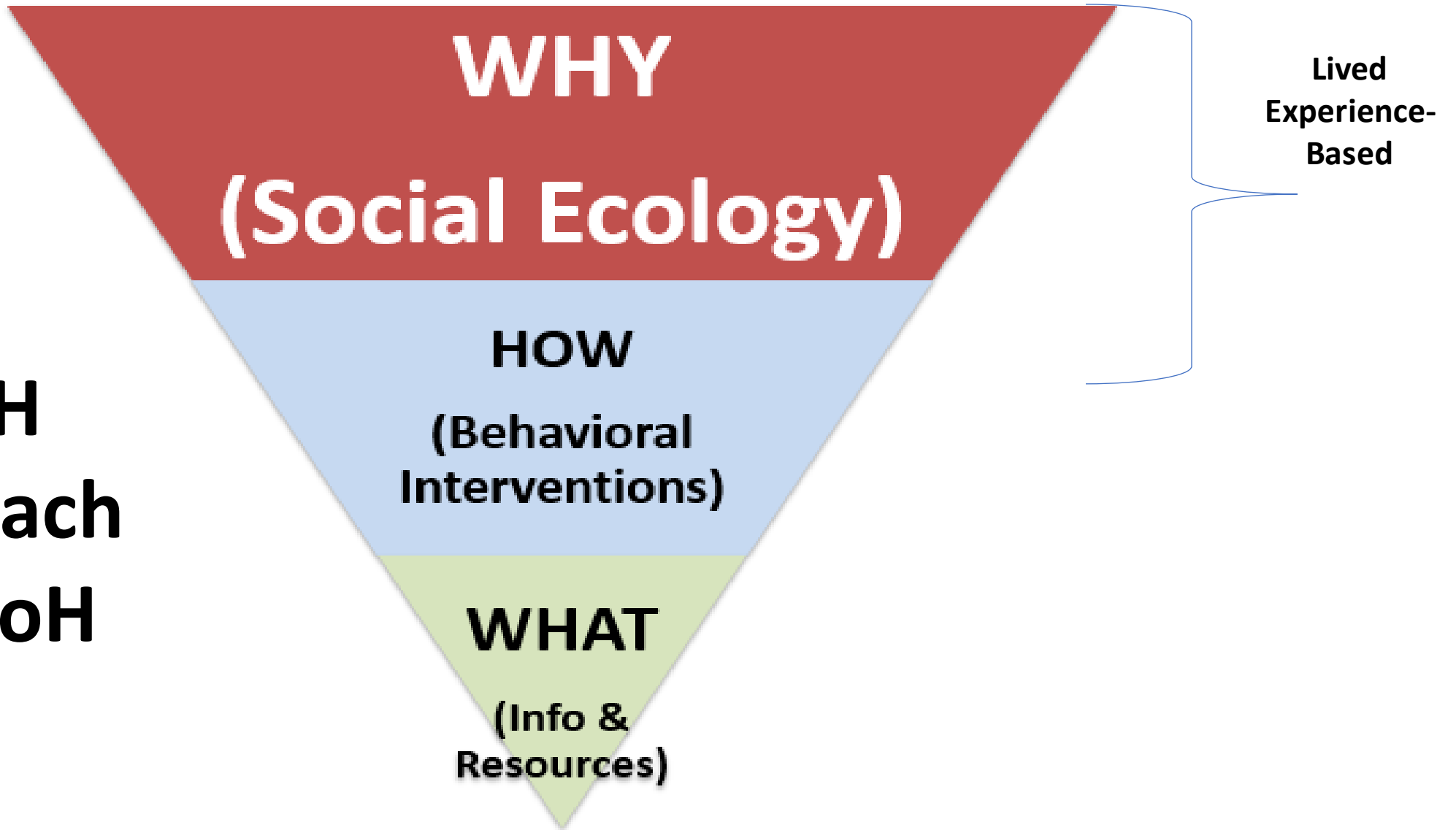
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Extant Approach to SDoH

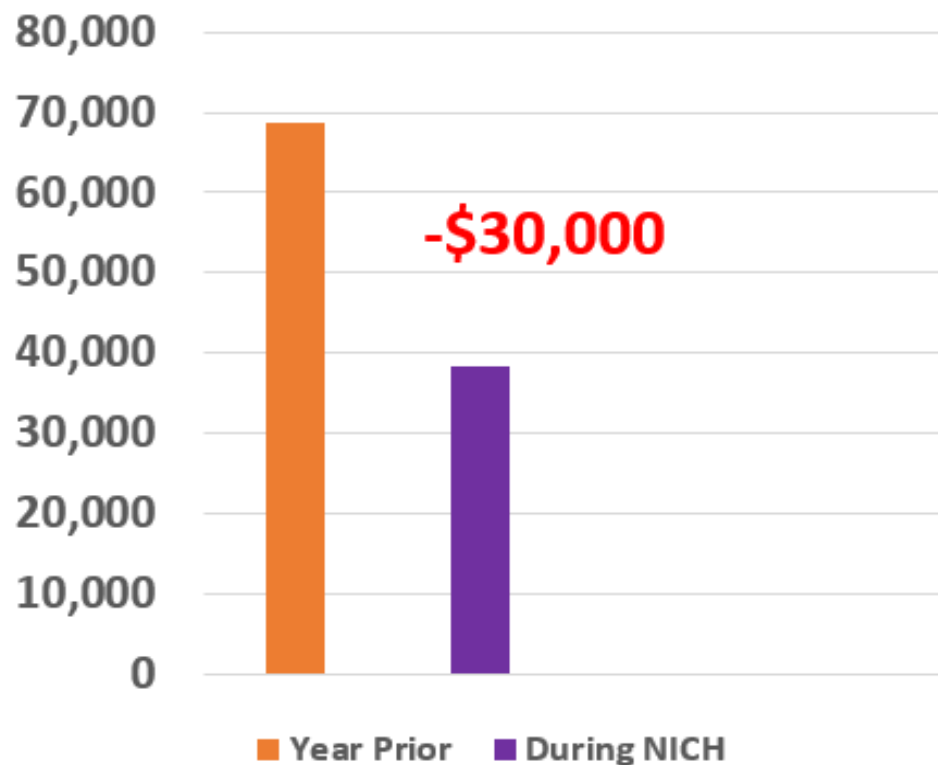


NICH Approach to SDoH

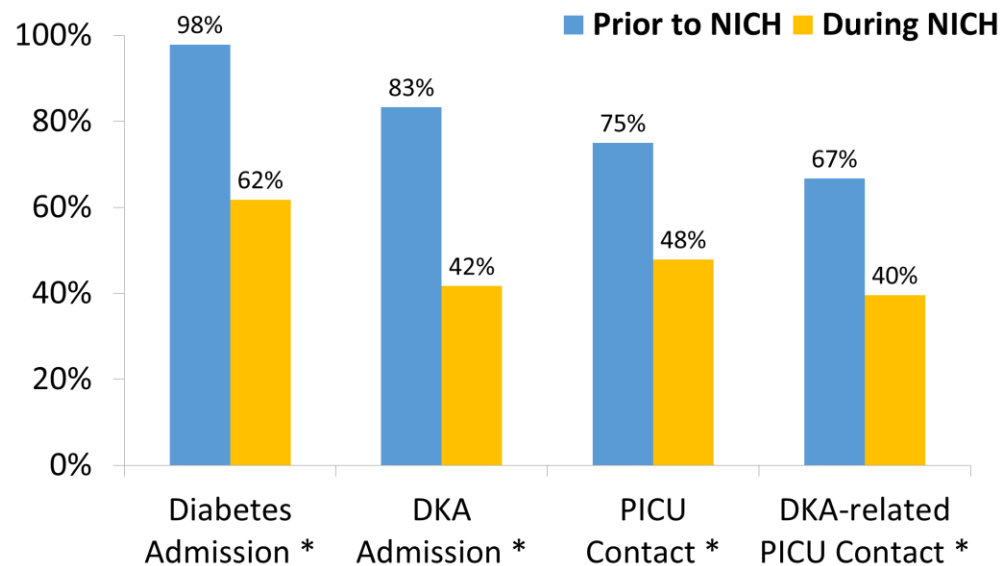


Results

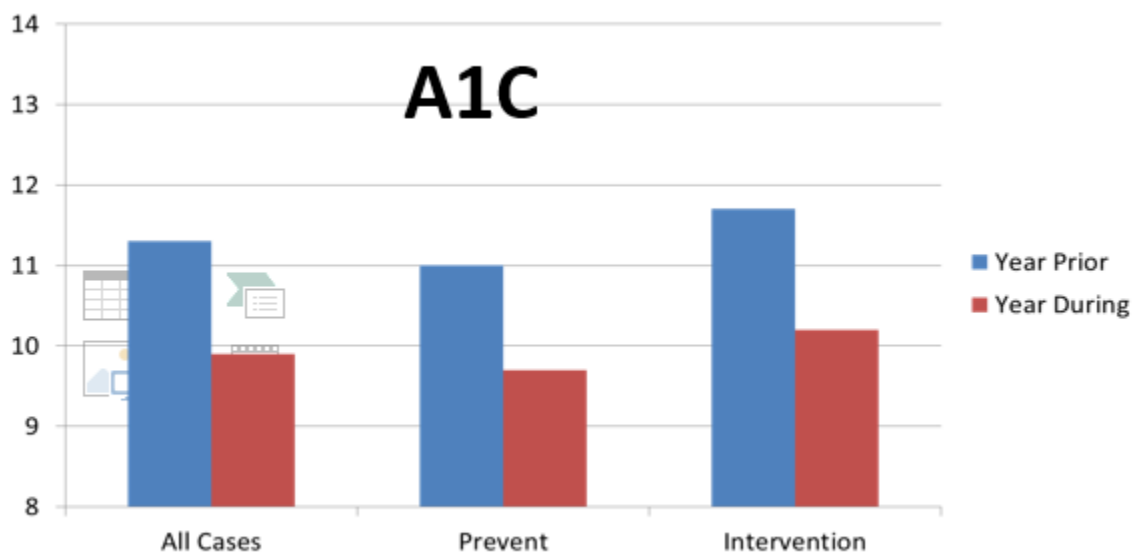
Cost Savings



Percent of Youth Who Experienced Acute Events



A1C



Challenges

NICH



Budget Dust



Go after the most costly



Lack of Ownership



Demonstrate value to health care system including hospital and payors

Medical Centers do Medical Care

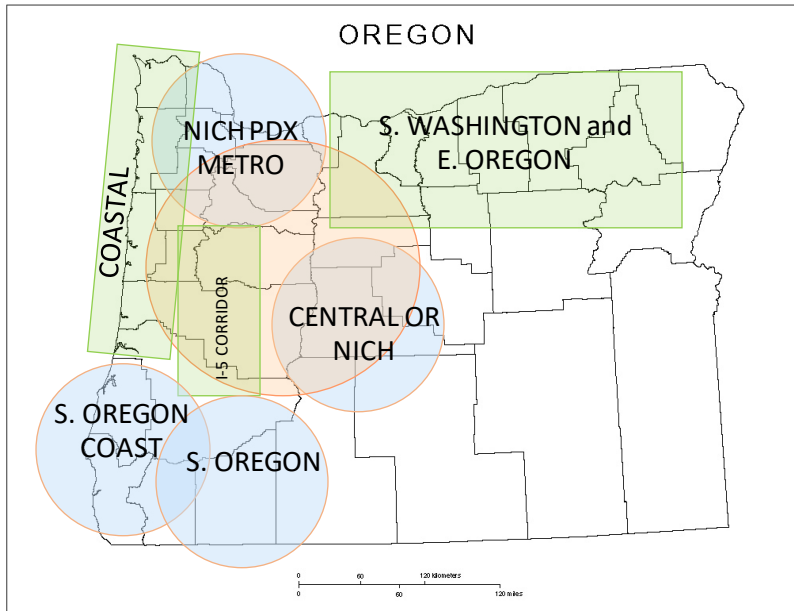


Provides infrastructure to address social challenges



Service Area

- Established NICH site
- Unofficial NICH territory, service with some remote work
- Expansion opportunities



Why aren't people falling over themselves to get NICH?



To Contract or Not to Contract?

- **Reduce costs**
- Improve health
- Improve care
- Reduce provider burnout
- Decrease health disparities



To Contract or Not to Contract?

- **Reducing avoidable utilization**
- Taking pressure of ED/PICU
 - *Keeping patients out of ED/PICU for avoidable reasons*
- Reducing LOS
 - *Freeing up beds for higher acuity patients*
- Decreasing no shows - outpatient
- Billing Codes – G codes
 - *Successfully getting Medicaid to pay for service*
- ↓ Physician Burnout, ↑ Physician QOL
 - *Sig costs in turnover (~ \$250k-\$800k in direct costs)*
- Health Disparities and Health Equity is Hot
- Foundation Support
 - *Highly appealing to donors*



To Contract or Not to Contract?

- **Reduce costs**
- **Improve health**
- **Improve care**
- **Reduce provider burnout**
- **Decrease health disparities**



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 - **Sig costs in turnover (~ \$250k-\$800k in direct costs)**
- **Health Disparities and Health Equity are priorities (kinda)**
- **Foundation Support**
 - *Highly appealing to donors*





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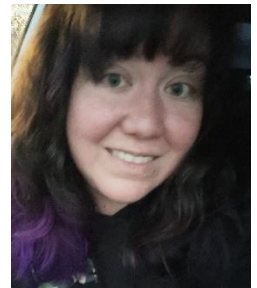
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Thank You.



Novel Interventions in Children's Healthcare

