Y’all *READDY* for This?

Embedding Transition Readiness Screening Across Sites in a Pediatric Diabetes Practice

Andrew Lavik, MD, PhD; Andrea Mucci, MD, MASc, MEd; Cheryl Switzer, MSN, CPNP, CDCES; Alyssa Rowe, MSN, APRN.CPNP-PC; and Don Buckingham, MBOE, CPHQ, CSSBB

Cleveland Clinic Children’s

Welcome to:

Cleveland Clinic Children's

Providers: 8 MD (2 part time), 4 NP

Nurses: 4 RN

Educators: 3 CDE

Dieticians: 1

Social Workers: 1

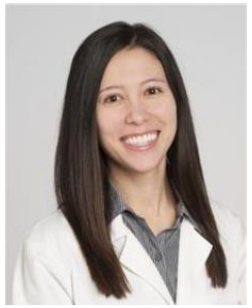
Psychologists: 1

Patient/Family Representatives: 2 volunteers on Advisory Committee


Andrea Mucci


Andrew Lavik


Cheryl Switzer


Alyssa Rowe

Research Manager	Barbara Bevier
Research Coordinators	Blair Martin Mary Kate O'Malley
Data Scientist	Lyla Mourany

Cleveland Clinic Children's

University Hospitals Rainbow Babies & Children's

Akron Children's

T1D at

Population

Total: ~625

Age 15 years +: ~250

New Onsets/Year: ~50

Demographics

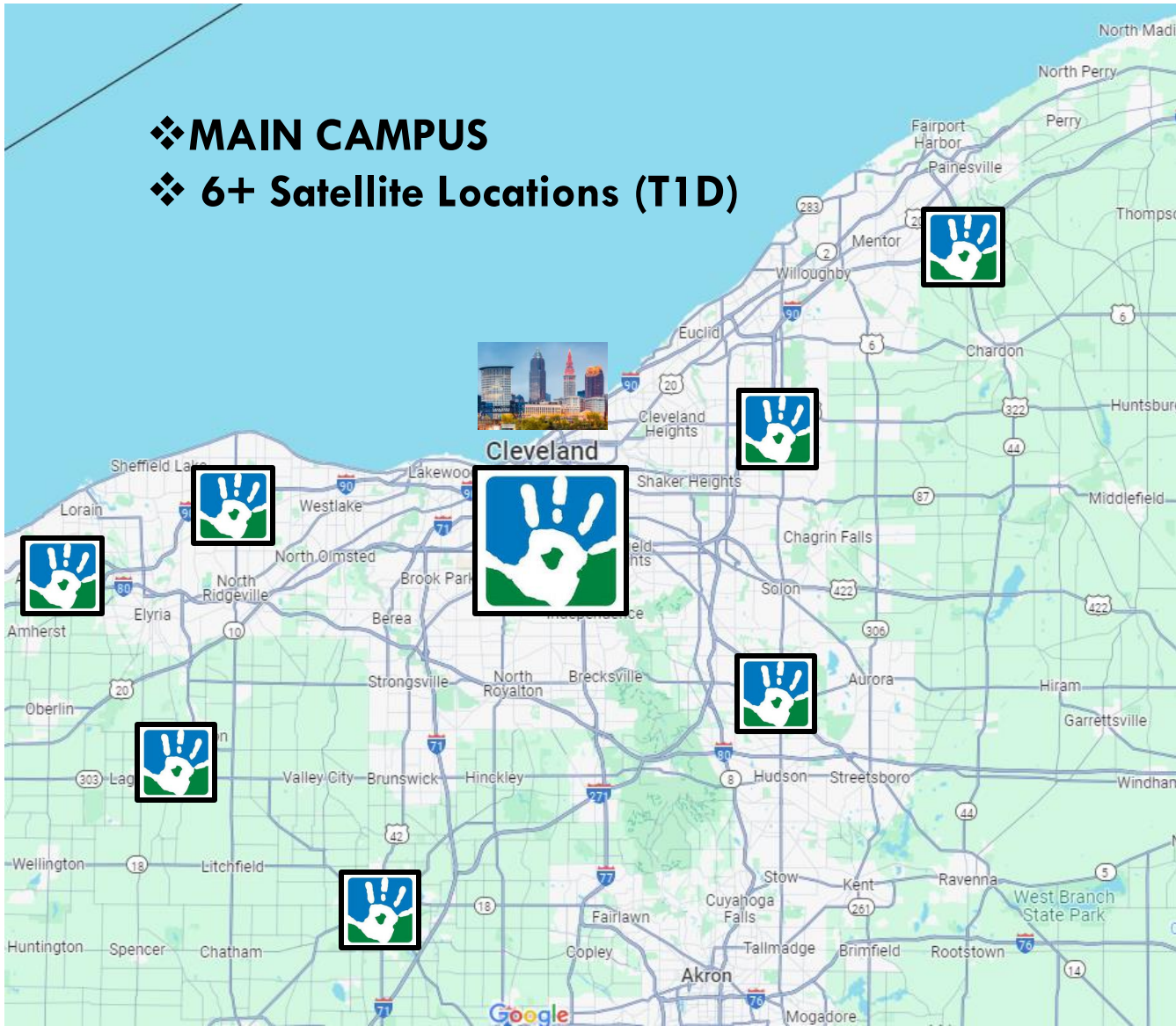
~35% Public Insurance

~80% White

~10% Black

~10% Other

Cleveland Clinic Children's T1D Clinics



Background

- Adolescents with T1D must transition from pediatric to adult care, but this process is fraught with challenges
- A critical step in preparing for transition is to assess one's readiness to transition
- The *Readiness Assessment of Emerging Adults with Type 1 Diabetes Diagnosed in Youth (READDY)* tool is an increasingly used method to assess transition preparedness in individuals with T1D
- We sought to begin refreshing the Cleveland Clinic Children's diabetes transition process with the *READDY* tool

READDY: READINESS ASSESSMENT OF EMERGING ADULTS WITH TYPE 1 DIABETES DIAGNOSED IN YOUTH

READDY- V1.1 for distribution

Name:

DOB:

Date:

How ready are you for transition to adult diabetes care?

Transition **R**eadiness assessment for **E**merging **A**dults with **D**iabetes **D**iagnosed in **Y**outh

Listed below are some knowledge or skill items that are useful in keeping you healthy with diabetes over your lifetime. This is not a test. There are not right or wrong answers. Please try to answer honestly. Be sure to ask your provider if you need more help in any of these areas.

Knowing the facts about diabetes (Knowledge) ***I am able to:***	Yes, I can do this	Somewhat, but I need a little practice	No, I still needs lots of practice	I plan to start	Haven't thought about it
Describe diabetes in my own words					
Explain what Hemoglobin A1c (HbA1c) measures					
Recall my most recent HbA1c					
State my target HbA1c					
Understand my current health status					
Describe three long term problems that might come from high HbA1c					
Teach a friend or roommate about signs of hypoglycemia					
Teach a friend or roommate about treatment of hypoglycemia, including use of Glucagon					
Tell someone how alcohol effects blood glucose					
Explain long-term impact of tobacco on heart health in people with diabetes					
Explain the impact of diabetes on sexual health/function					
Explain the impact of glucose control before and during pregnancy (female patients)					
List examples of tests done in routine visits to identify or prevent complications of diabetes					

Corathers SD, Yi-Frazier JP, Kichler JC, et al. Development and Implementation of the Readiness Assessment of Emerging Adults With Type 1 Diabetes Diagnosed in Youth (READDY) Tool. *Diabetes Spectr*. 2020;33(1):99-103. doi:10.2337/ds18-0075

SMART Aim

To increase the percentage of patients aged 15 years and older with T1D followed in our pediatric practice who receive the READDY tool from 0% to 100% by Sept 30th, 2024.

- **Secondary Aim:**

  To document the READDY questionnaire for each patient into the EMR.

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T1D Exchange

Methods

With expertise from the T1D Exchange QI Collaborative Team, we:

- Employed QI methods to review current practices at our diabetes clinics
- Created a key driver diagram reflecting our theory for improvement
- Completed Plan-Do-Study-Act cycles targeting key drivers
- Tracked our progress on a run chart

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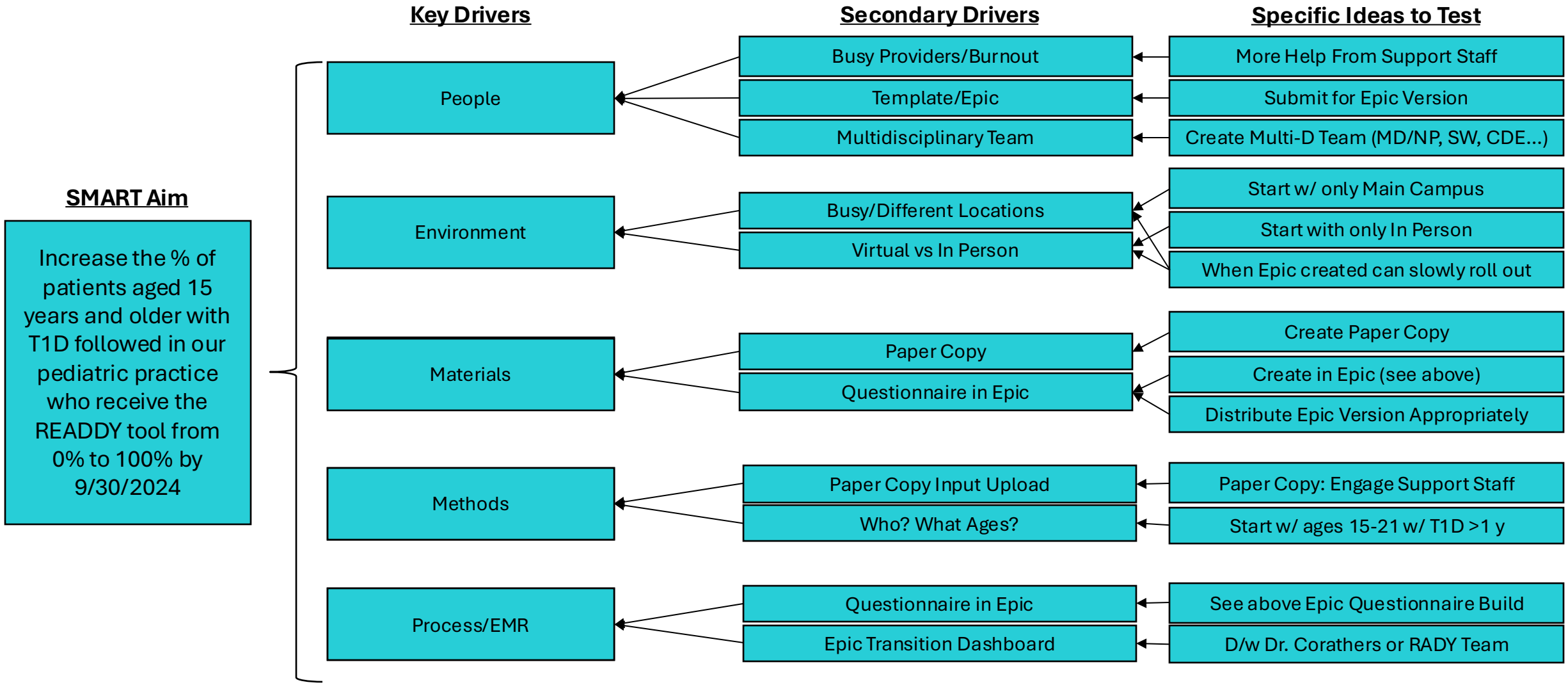
T1D Exchange



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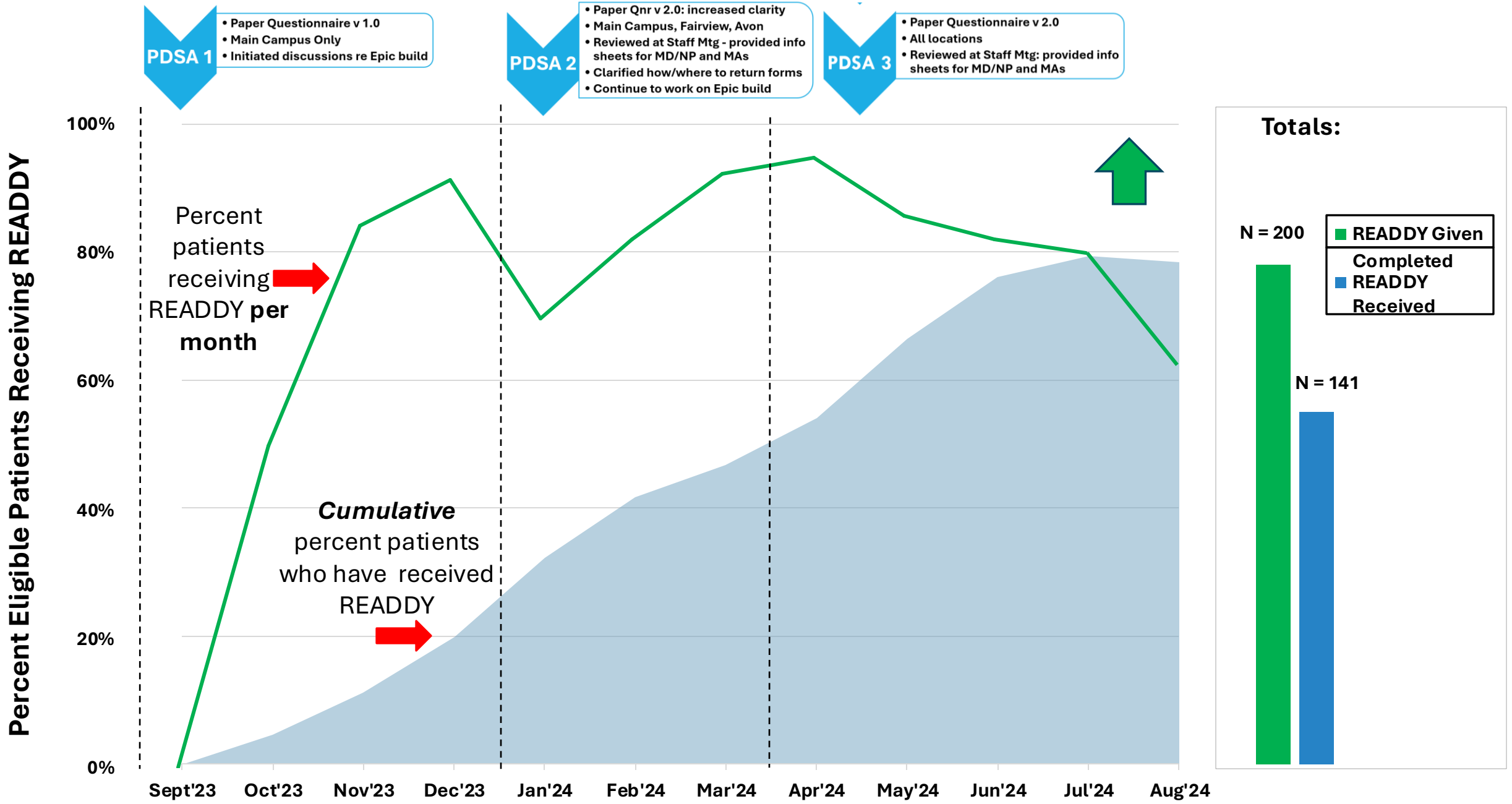
T1D Exchange

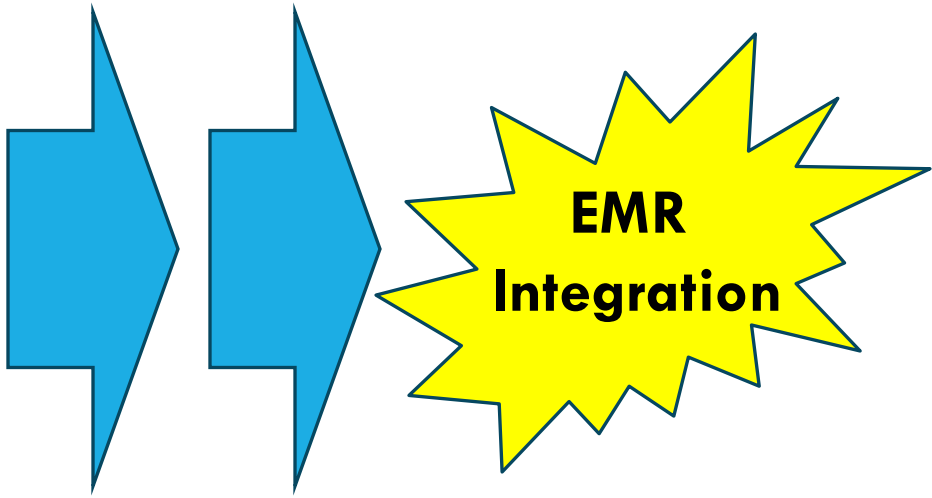
Results:


PDSA 1
• Paper Questionnaire v 1.0
• Main Campus Only
• Initiated discussions re Epic build
PDSA 2
• Paper Qnr v 2.0: increased clarity
• Main Campus, Fairview, Avon
• Reviewed at Staff Mtg - provided info sheets for MD/NP and MAs
• Clarified how/where to return forms
• Continue to work on Epic build
PDSA 3
• Paper Questionnaire v 2.0
• All locations
• Reviewed at Staff Mtg: provided info sheets for MD/NP and MAs
Percent Eligible Patients Receiving READDY
100%
80%
60%
40%
20%
0%
Percent patients receiving READDY per month
Cumulative percent patients who have received READDY
Sept'23
Oct'23
Nov'23
Dec'23
Jan'24
Feb'24
Mar'24
Apr'24
May'24
Jun'24
Jul'24
Aug'24
Totals:
N = 200
N = 141
READDY Given
Completed READDY Received

Results

CHALLENGES WITH READDY FORM COMPLETION/DOCUMENTATION

- Missing name/MRN→ addressed now by putting sticker on
- Youth vs Parent completing the form?
- Missing back side of form or otherwise incomplete
- Returning forms from satellite clinics to Main
- Returning forms for patients who didn't complete forms in clinic
- Forms not scanned into EMR



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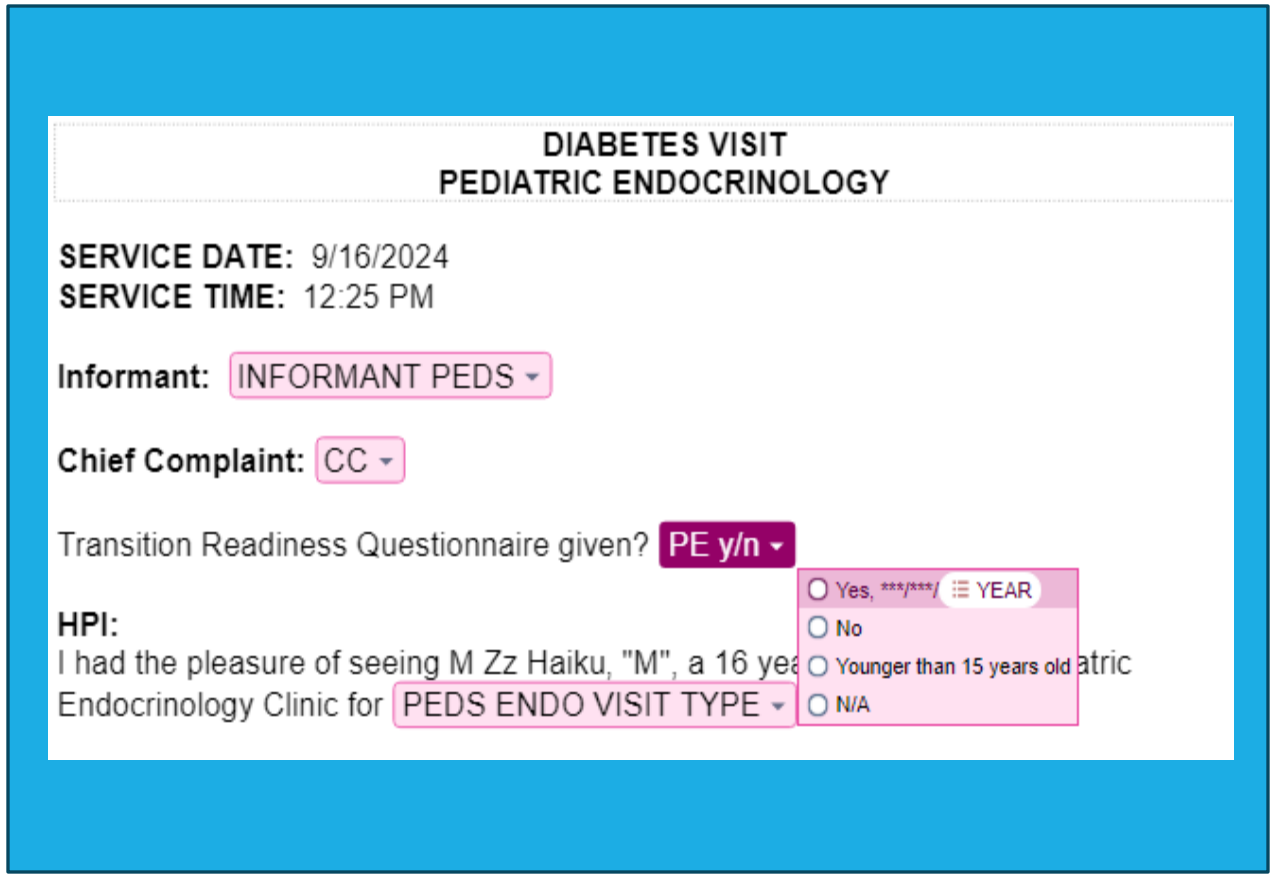
T1D Exchange

Key Learnings

- Getting our feet wet with paper copies of READDY
- The most effective strategies for the roll out of READDY:
  - Step-wise rollout from: one → many → all locations
  - Team role-specific tip sheets
  - Regular discussion at staff meetings
  - SmartPhrases embedded in note templates for tracking
  - Standardized process for storing completed questionnaires
- Barriers:
  - Epic build process
  - Multiple locations/variation of process/staff



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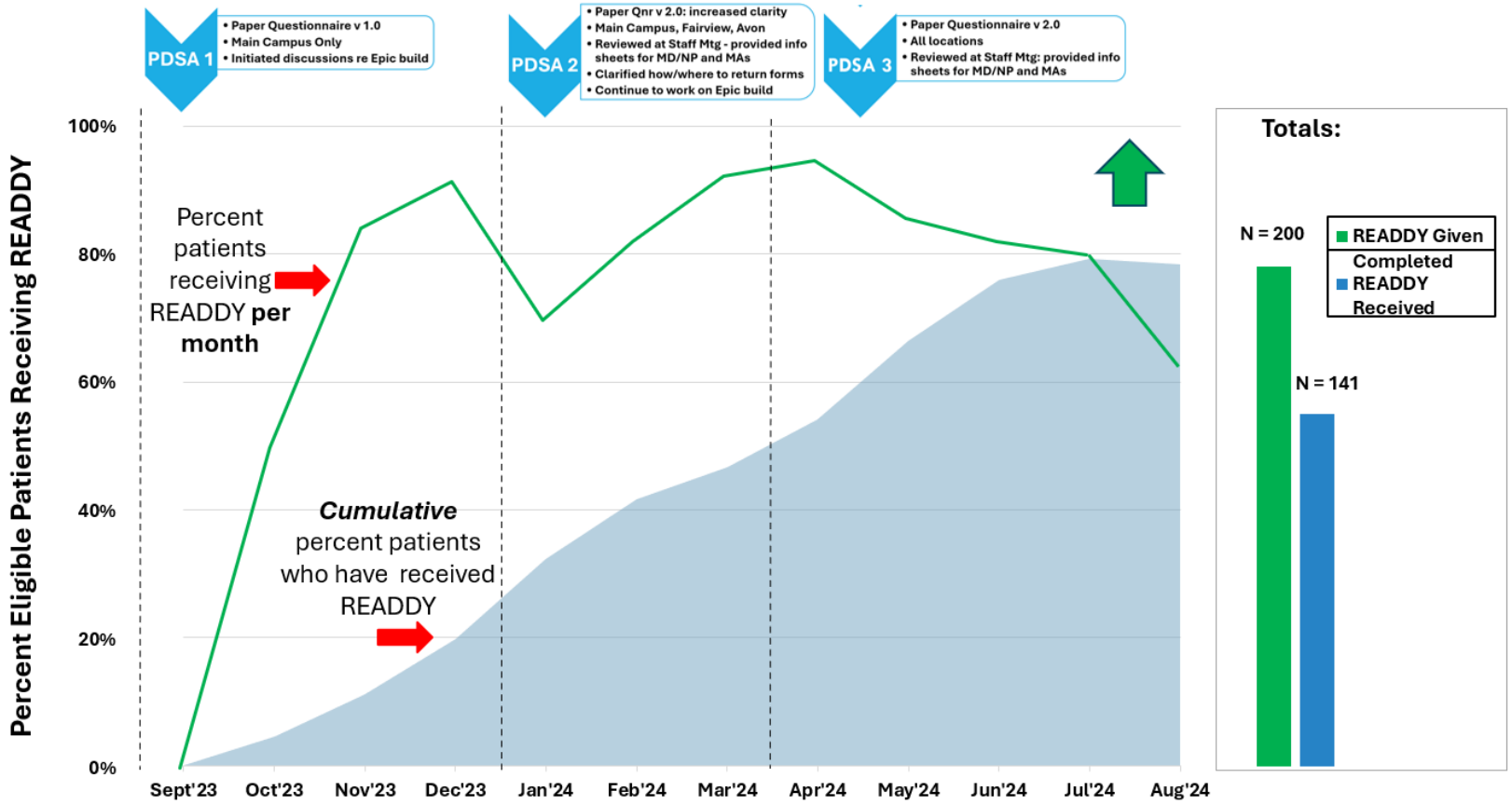
T1D Exchange

Next Steps

- *READDY* to be built into Epic!
  - To be fired in Epic Captive Mode
  - Annual collection, monitoring, and intervention

- Phase 2: Addressing Readiness Gaps



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T1D Exchange

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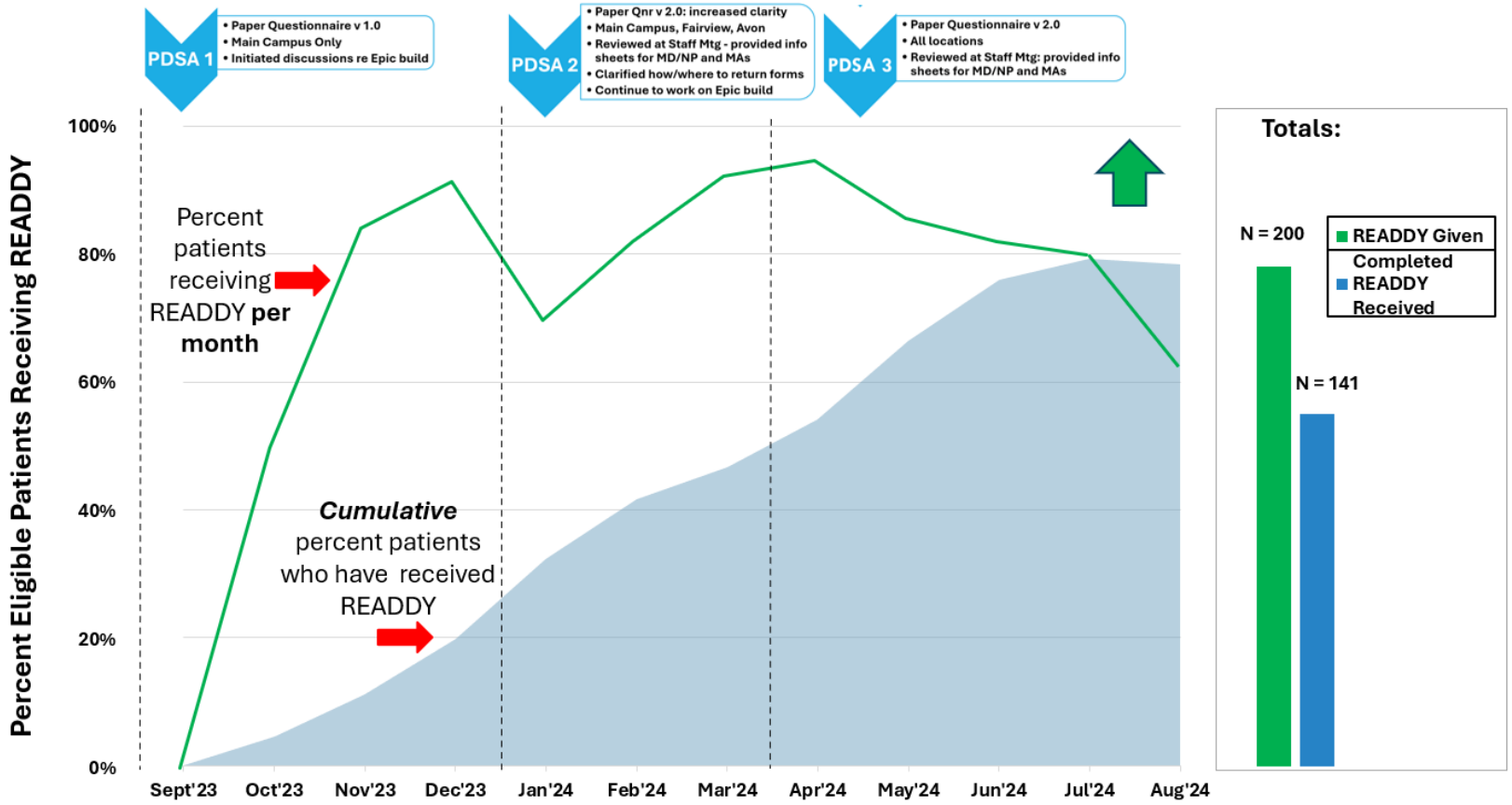

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T1D Exchange

Initial Results “Phase 2”:

The aggregate transition readiness of our cohort:

Name:

DOB:

Date:

How ready are you for transition to adult diabetes care?

Transition **R**eadiness assessment for **E**merging **A**dults with **D**iabetes **D**iagnosed in **Y**outh

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State my target HbA1c					
Understand my current health status					
Describe three long term problems that might come from high HbA1c					
Teach a friend or roommate about signs of hypoglycemia					
Teach a friend or roommate about treatment of hypoglycemia, including use of Glucagon					
Tell someone how alcohol effects blood glucose					
Explain long-term impact of tobacco on heart health in people with diabetes					
Explain the impact of diabetes on sexual health/function					
Explain the impact of glucose control before and during pregnancy (female patients)					
List examples of tests done in routine visits to identify or prevent complications of diabetes					

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T1D Exchange

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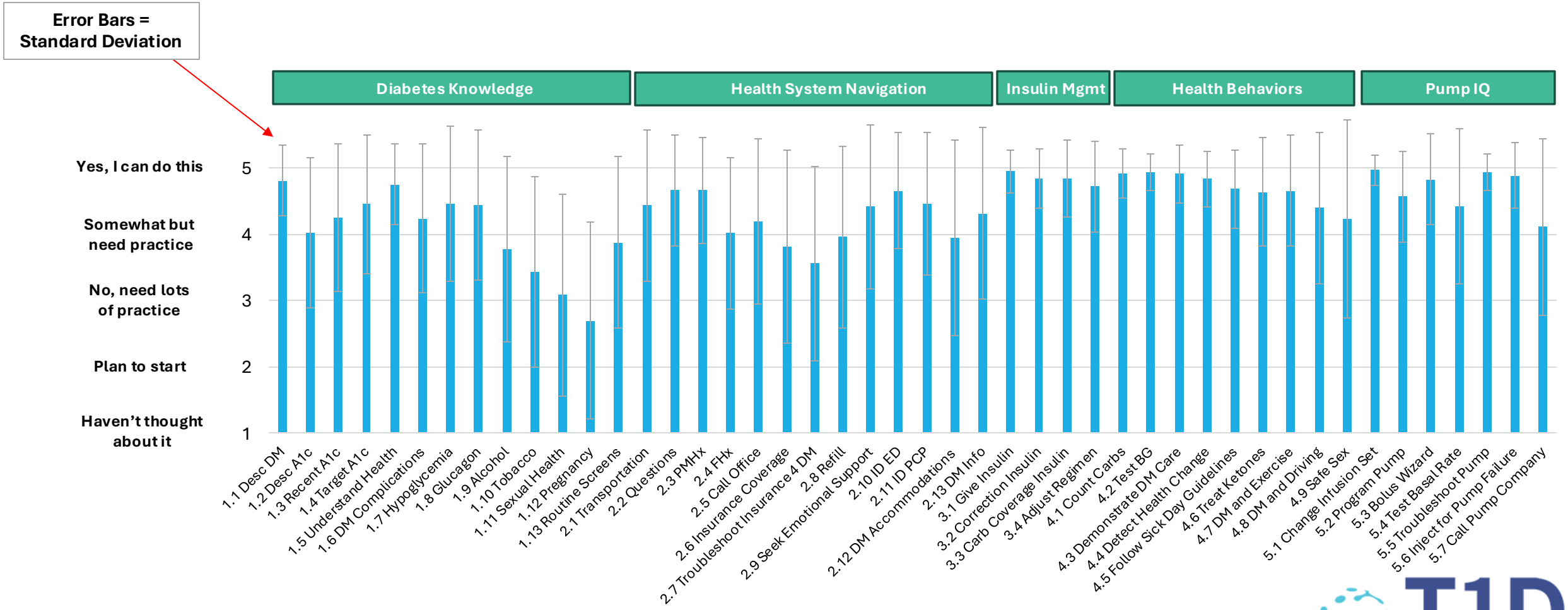
The aggregate transition readiness of our cohort:



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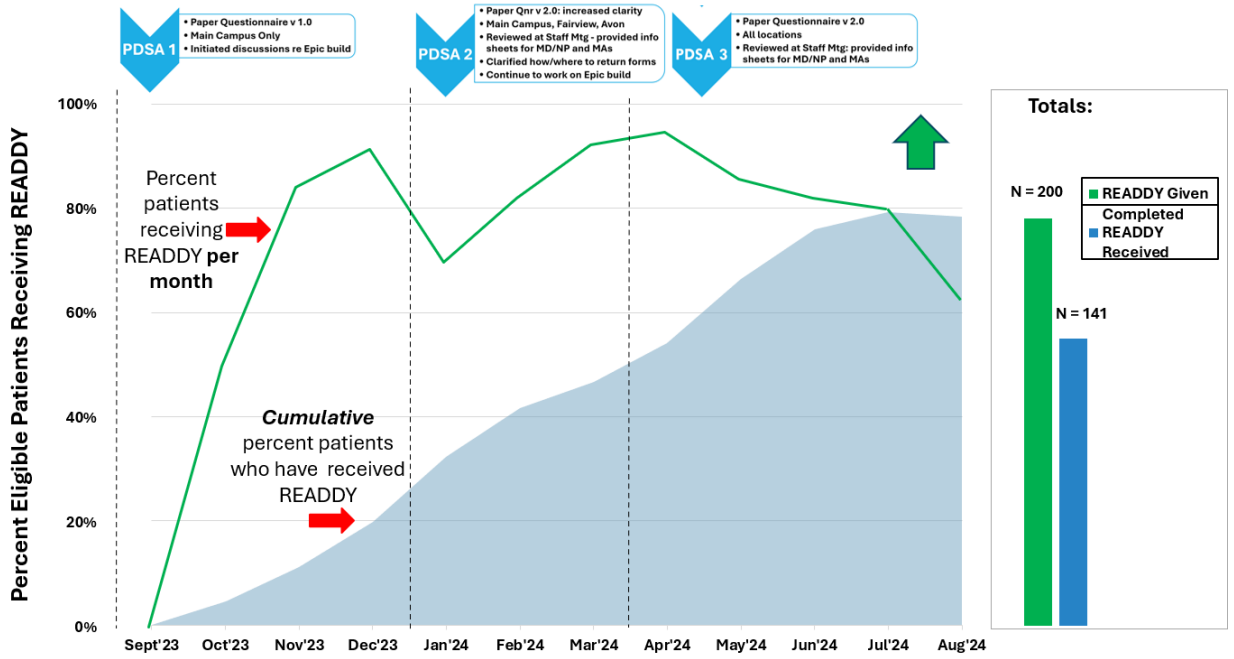
T1D Exchange

Summary:

Embedding Transition Readiness Screening in T1D Clinic

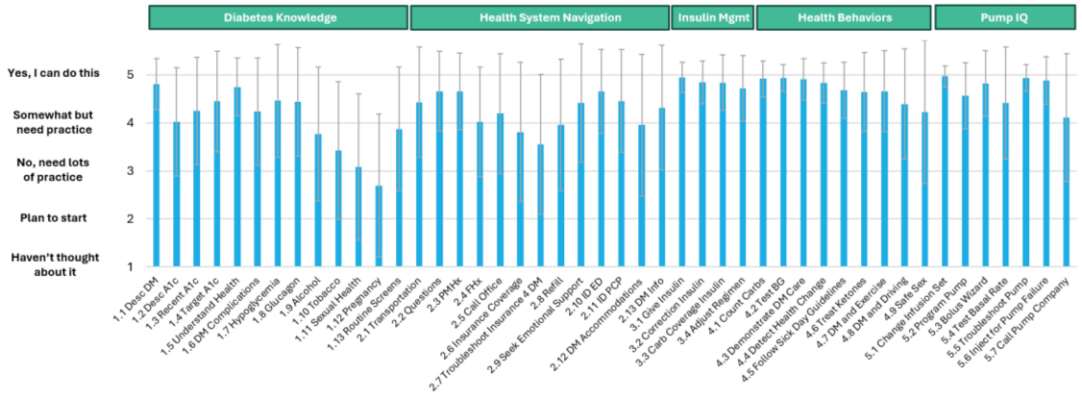
SMART Aim

To increase the percentage of patients aged 15 years and older with T1D followed in our pediatric practice who receive the READDY tool from 0% to 100% by Sept 30th, 2024.



Next Up:

- *READDY* built into Epic!
- Phase 2: Addressing Readiness Gaps



- Transition Dashboard

… and smoother transitions to adult care

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T1D Exchange

STRIDE: Supporting Transition Readiness in Diabetes Education

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Fellow, PGY-6, Pediatric Endocrinology and Diabetes

Montefiore Medical Center

Albert Einstein College of Medicine

Co-Authors: Molly Regelmann, MD, Charlotte Chen, DO, Laurie Cohen, MD, and Shivani Agarwal, MD, MPH

The Children's Hospital at Montefiore

THE PEDIATRIC HOSPITAL FOR EINSTEIN

Albert Einstein College of Medicine

Disclosures

- I have no financial disclosures or conflicts of interests related to this presentation

The Children's Hospital at Montefiore

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Albert Einstein College of Medicine

Healthcare Transition

- The purposeful, planned movement of adolescents from child-centered to adult-oriented healthcare
- 83% of youth with special healthcare needs did not meet criteria for successful transition
- 45% of youth with type 2 diabetes (T2D) vs. type 1 diabetes (T1D) 70% with met criteria for successful transition

https://www.gottransition.org/

American Academy of Pediatrics; American Academy of Family Physicians; American College of Physicians; Transitions Clinical Report Authoring Group; Cooley WC, Sagerman PJ. Supporting the health care transition from adolescence to adulthood in the medical home. Pediatrics. 2011 Jul;128(1):182-200. doi: 10.1542/peds.2011-0969. Epub 2011 Jun 27. PMID: 21708806.

Pundyk KJ, Sellers EAC, Kroeker K, Wicklow BA. Transition of Youth With Type 2 Diabetes: Predictors of Health-Care Utilization After Transition to Adult Care From Population-Based Administrative Data. Can J Diabetes. 2021 Jul;45(5):451-457. doi: 10.1016/j.jcjd.2021.03.001. Epub 2021 Mar 9. PMID: 34001461.

Adverse Effects Associated with Incomplete Healthcare Transition

- Extreme glucose fluctuations leading to emergency room visits
- Increased risk of long-term complications
  - Long-term microvascular and microvascular complications
- Discontinuity of care and problems with medical adherence
- Limitations in health and well being
- Patient dissatisfaction
- Higher emergency department and hospital use
- Higher health care costs

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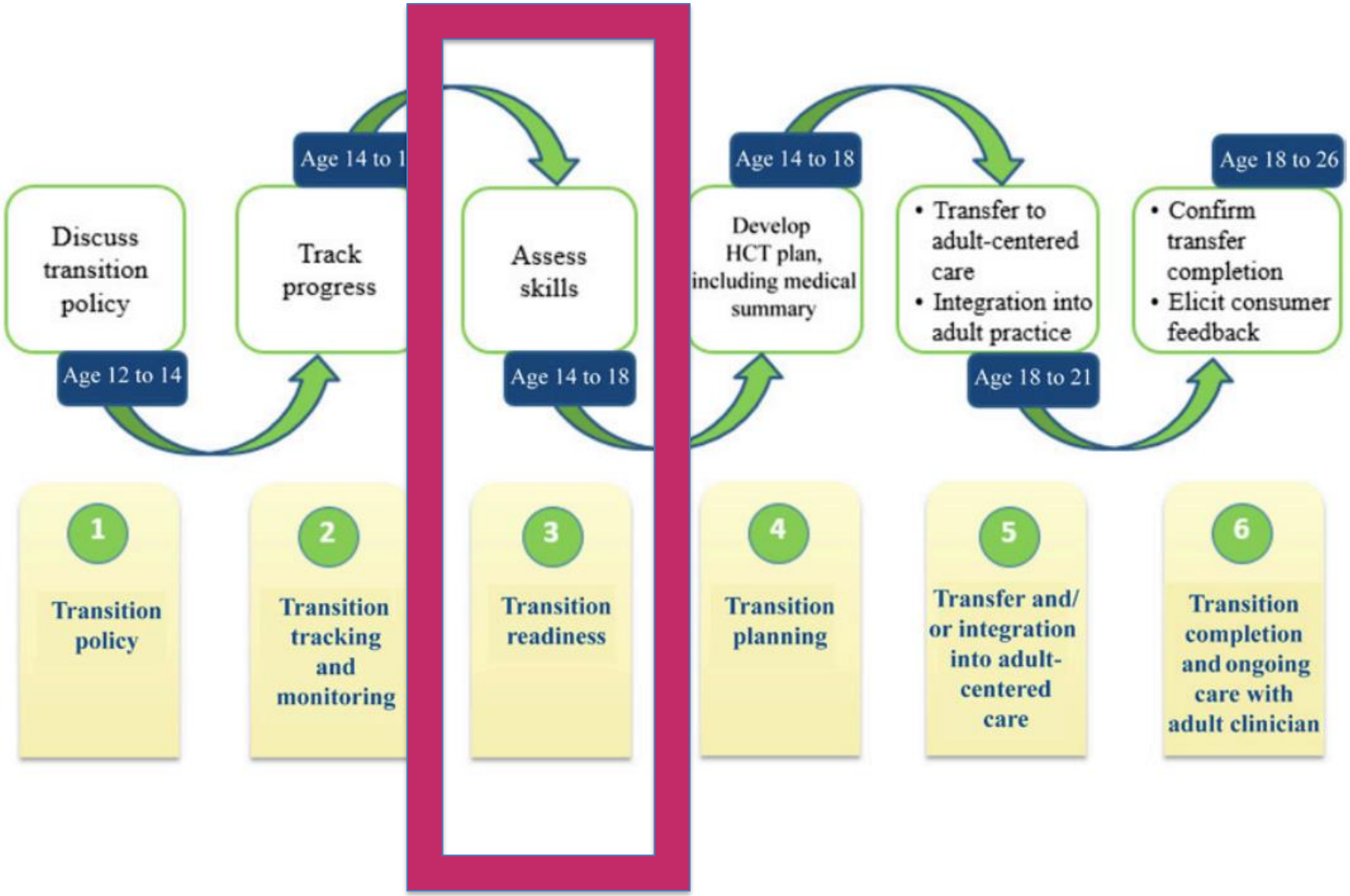
American Academy of Pediatrics; American Academy of Family Physicians; American College of Physicians; Transitions Clinical Report Authoring Group; Cooley WC, Sagerman PJ. Supporting the health care transition from adolescence to adulthood in the medical home. Pediatrics. 2011 Jul;128(1):182-200. doi: 10.1542/peds.2011-0969. Epub 2011 Jun 27. PMID: 21708806.
Snelgrove, R. K., McGill, D. E., & Laffel, L. M. B. M. B. (n.d.). Chapter 60: Adolescence and Emerging Adulthood: Diabetes in Transition (5th ed.). essay.

The Six Core Elements of Transition

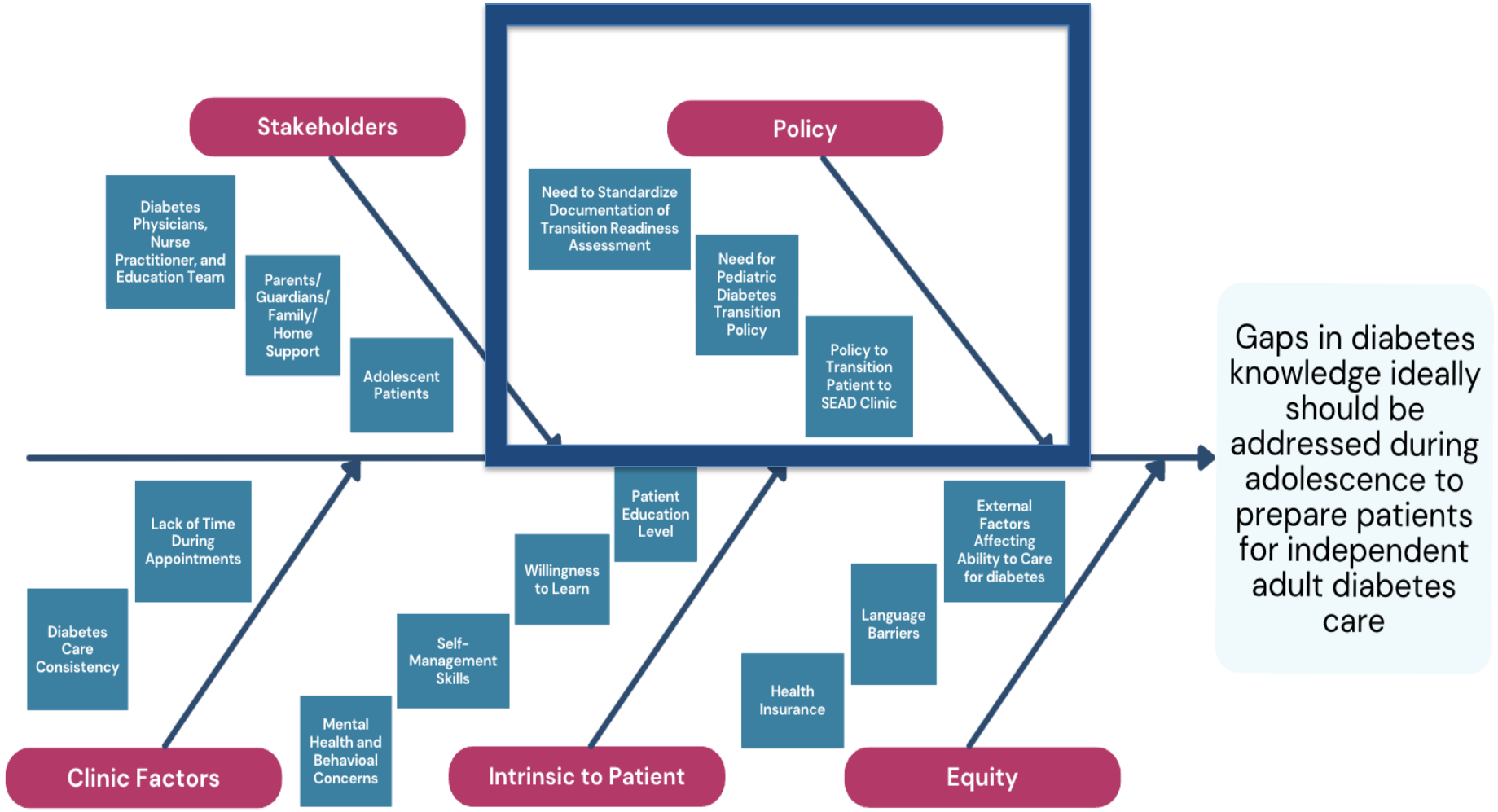


https://www.gottransition.org/

Background on Montefiore Diabetes Clinics

- Children's Hospital at Montefiore (CHAM) Clinic - through 21 years of age
  - Education at diagnosis is dependent on the developmental age of the patient
  - Parents are expected to manage diabetes
- Supporting Emerging Adults with Diabetes (SEAD) Clinic - 18-35 years of age
- Process is already in place for scheduling appointment for those graduating from CHAM to SEAD clinic or Adult Diabetes Clinic

Fishbone Diagram/Cause and Effect Diagram



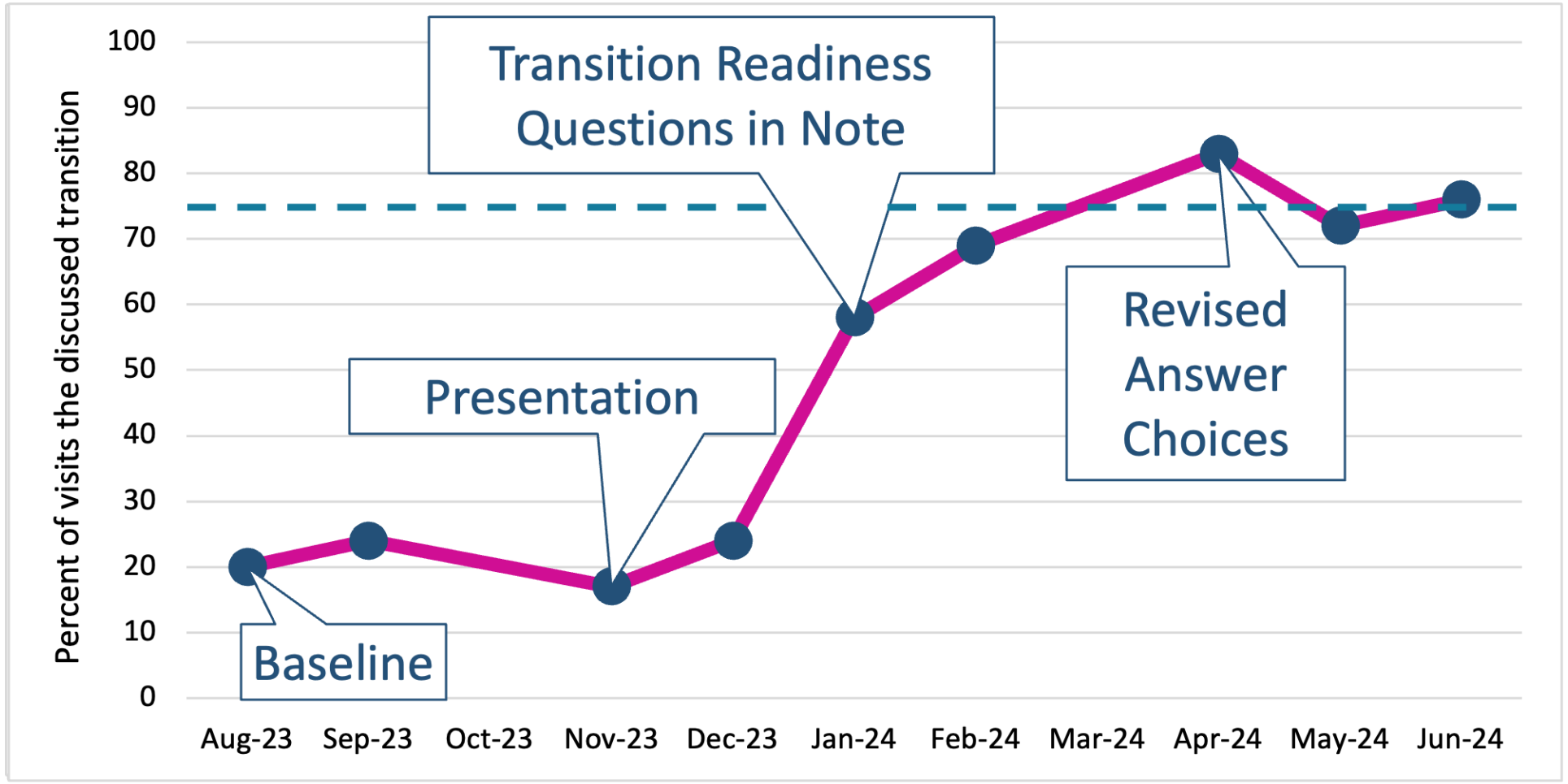
Baseline Data

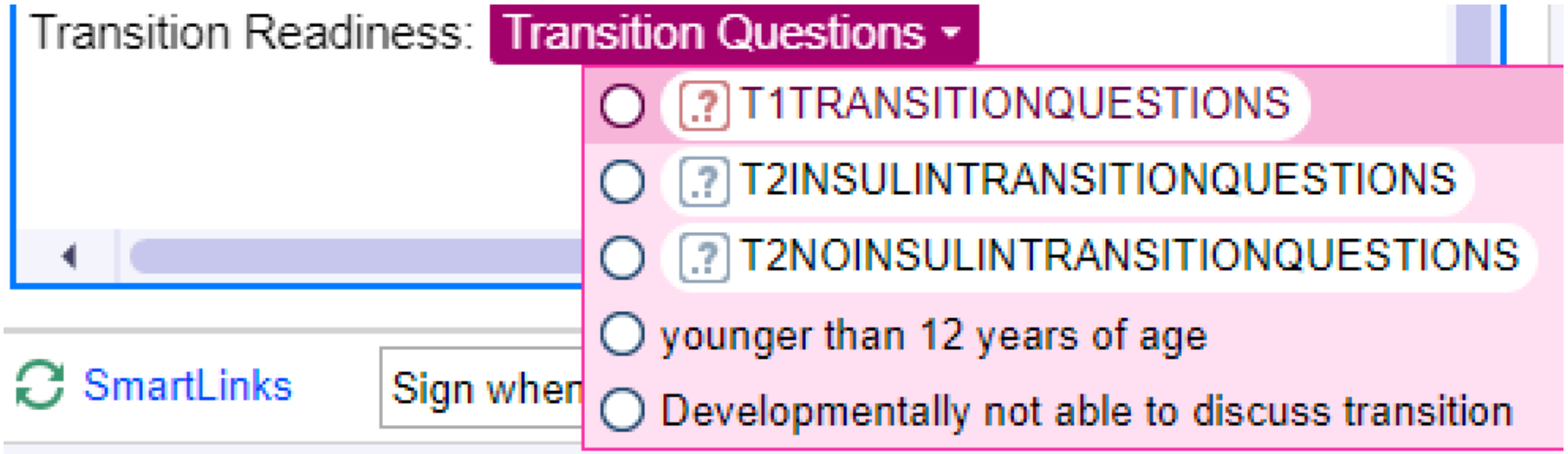
- August 2023 - Chart review of patients with T1D & T2D age 12-21 years for transition discussion
  - Key words “adult,” “transition,” “SEAD,” and “prepare”
  - ICD 10 code for transition
- T1D:
  - 24% of visits discussed transition
  - 5% of visits used ICD-10 code
- T2D:
  - 6% of visits discussed transition
  - 0% of visits used ICD-10 code

Stakeholders and Smart Aims

- **Stakeholders** – pediatric and adult physicians, nurse practitioners, program coordinator
  - Brainstorming session to identify education gaps in young adults arriving in SEAD Clinic
- **Smart Aims**
  - Assess and track patients T1D and T2D transition readiness education at least annually starting at age 12 years with an initial goal of 75% in the first year (August 2023 to August 2024)
  - Secondary aim was to also increase pediatric coding of transition readiness (ICD-10 code: Z71.87 “transition of care counseling to adult model of care”)

Run Charts T1D Transition Discussion




Transition Readiness:
Transition Questions
T1TRANSITIONQUESTIONS
T2INSULINTRANSITIONQUESTIONS
T2NOINSULINTRANSITIONQUESTIONS
younger than 12 years of age
Developmentally not able to discuss transition
SmartLinks
Sign when

Preparation of Transition to Adult Care Topics Addressed Today (12 years and older) (Total 8 questions):

1. Patient can explain their medical history in their own words: yesnoneedsreview

2. Patient can name their medications: yesnoneedsreview

3. Patient has someone who can support them when their diabetes becomes too much, and feels comfortable asking them for help: yesnoneedsreview

4. Patient knov

5. Patient can
feel low blood

6. Patient knov
than 250 mg/d

4. Patient knows what a HgA1c/time in range means and whether their HgA1c/ time in range are at goal: yesnoneedsreview

5. Patient can identify how diff
exercise) affect their blood sug
sugars: yesnoneedsreview

- Reviewed on ***, patient competent
- Reviewed on ***, plan to review in the future
- Not yet reviewed

7. Patient knows where to find the phone numbers of their pharmacy and doctors or nurse practitioner: yesnoneedsreview

8. Patient knows their health insurance and how to renew their health insurance: yesnoneedsreview

Preparation of Transition to Adult Care (SEAD Clinic) Topics Addressed Today (12 years and older) (Total 8 questions):

1. Patient can explain their medical history in their own words: Reviewed on October 28, 2024, patient competent

2. Patient can name their medications/supplies and uses including my emergency/back up medications: Reviewed on October 28, 2024, plan to review in the future

3. Patient has someone who can support them when their diabetes becomes too much, and feels comfortable asking them for help: Not yet reviewed

4. Patient knows what a HgA1c/time in range means and whether their HgA1c/ time in range are at goal: Not yet reviewed

5. Patient can identify how different things (drugs, sleep, and exercise) affect their blood sugar and their ability to feel low blood sugars: Not yet reviewed

6. Patient knows what to do in case of emergencies such as forgetting insulin, pump failure, CGM failure, DKA, hypoglycemia, and how to teach someone to use their glucagon: Not yet reviewed

7. Patient knows where to find the phone numbers of their pharmacy and doctors or nurse practitioner and what medications and supplies come from which pharmacy: Not yet reviewed

8. Patient knows their health insurance and how to renew their health insurance: Not yet reviewed

Future Plans

- Streamline documentation of pediatric summary of care to SEAD clinic
- Consider adding steps for patients who will need guardianship papers
- Expanding format to include other endocrine disorders (i.e., adrenal insufficiency and thyroid dysfunction)

Thank You

- Dr. Molly Regelmann, MD
- Dr. Charlotte Chen, DO
- Dr. Laurie Cohen, MD
- Dr. Shivani Agarwal, MD, PhD
- CHAM and SEAD Clinics
- T1DX

Questions?

TRANSITION OF CARE OF T1D PEDIATRIC POPULATION TO ADULT SERVICES

ANGELA MOJICA, MD

November 11th, 2024

TRANSITION PROGRAM TEAM:
Pediatrics - Dr. Angela Mojica and Dr. Nisha Patel
Adults: Dr. Jason Sloane

Dr. Roberto Izquierdo
Kathryn Fredenburg
Karen Kemmis
Jessica Reis
Beth Wells
Joseph Erardi
Emilie Hess
Jerusha Owusu-Barnie
Melissa Stacy

Disclosures

- I have no financial or personal relationships to disclose related to this presentation

TRANSITION FROM PEDIATRIC TO ADULT CARE: AN UNDERESTIMATED CHALLENGE

Pediatric Patients with Type 1 Diabetes Mellitus are a very susceptible population

- Evidence regarding gaps in care and need for structured transition programs:

- Glycemic control tends to be the worst of all age in patients in the transitioning groups

- There is a 2.46-fold elevated risk of poor glycemic control by the time of their first adult visit (rise in hemoglobin A1c from 7.5% to 9.2% by their first adult visit).

In our practice mean HbA1c for 21-25 years old patients is ~8.5% (n=312)

- Risks of diabetes complications amongst transition age patients is already elevated: nearly one-third of patients have evidence of one early diabetes-related complication.

- More vulnerable to lapses in care: 21% of patients have a gap in care >6 months.

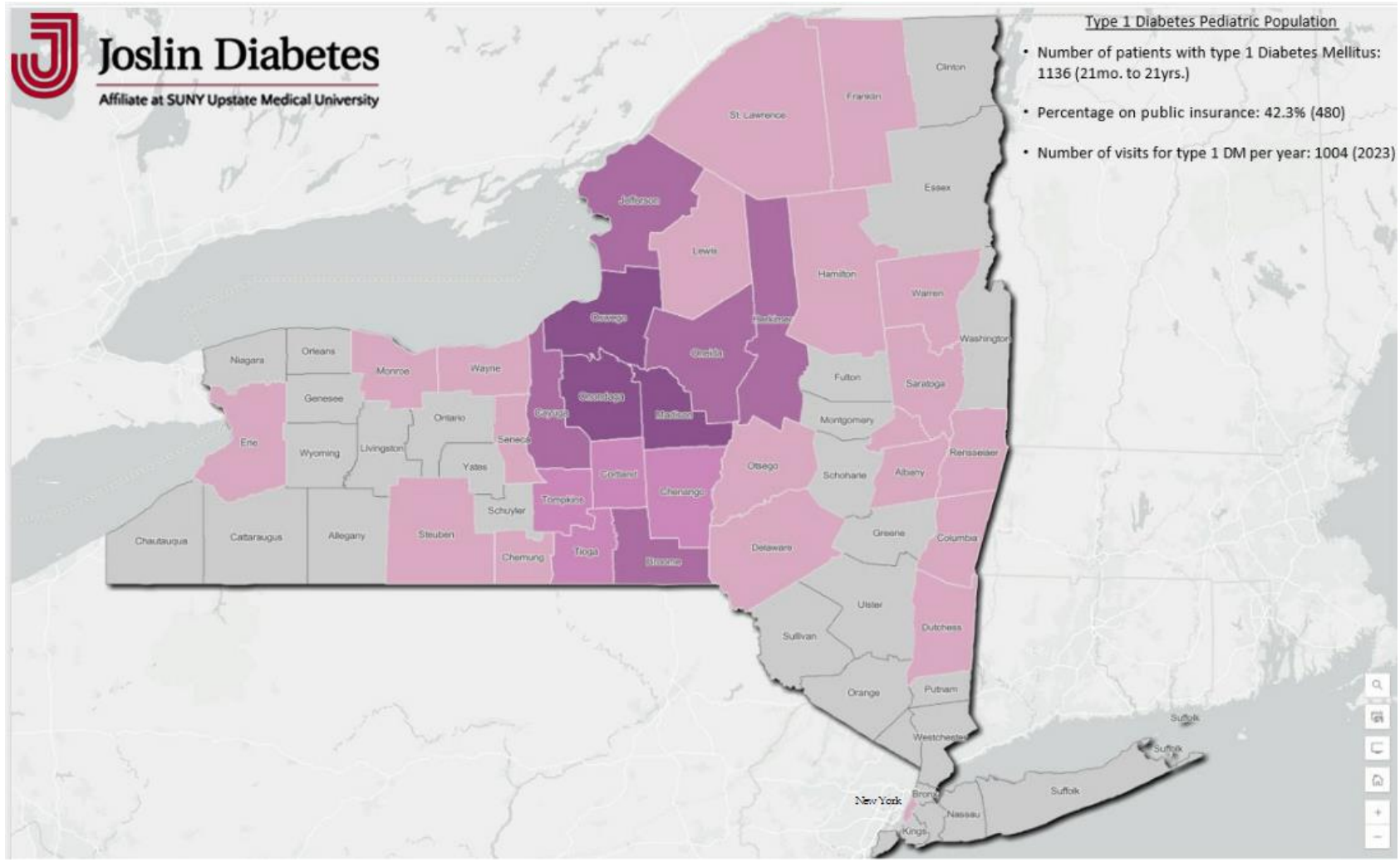
In our practice no show percentage to first adult clinic patient for 21 years old patients with T1D was as high as 50 to 60% (2022)

- More than one-third of the patients don't feel adequately prepared to transition to adult care.

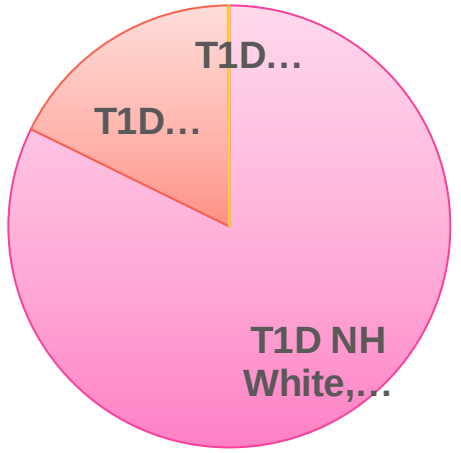
TRANSITION OF CARE OF T1D PEDIATRIC POPULATION TO ADULT SERVICES

OBJECTIVE

To have a documented transition plan for 20% of 16 to 21 years old with T1D in 12 months



Percent of Transition Population by Race and Ethnicity



47.3% (525/1109) eligible for Transition

4 PEDIATRIC ENDOCRINOLOGISTS

6 ADVANCED PEDIATRIC PRACTITIONERS

5 CERTIFIED DIABETES EDUCATORS

3 NUTRITIONIST

PEDIATRIC PSYCHOLOGIST

PEDIATRIC SOCIAL WORKER

CHILD LIFE SPECIALIST

TRANSITION PROGRAM FOR TYPE 1 DM

THE BEGINNING:
GOAL: CREATE AN EDUCATION PROGRAM TO BUILD INDEPENDENCE IN LATE ADOLESCENCE PATIENTS

TRANSITION POLICY AND PROCESS:

❑Transition visits to start at age 16

❑Goal: transition around age 21

Appointment with CDE after visit with Diabetes provider every 6 months:

❑**ENDOCRINE SOCIETY validated Provider Assessment of Patient Skill Set:**

- Basic Knowledge
- Experience in diabetes care skills: including insulin injections, insulin pump and use of continuous glucose monitor.
- Plan for emergencies and illnesses
- Ability to arrange for medical care.

❑Assessment of self-care skills and knowledge: **ENDOCRINE SOCIETY Self Assessment for Diabetes type 1 Transition:**

- Questions about diabetes knowledge and skills are too general
- Options for answers (Yes, Maybe and No) don't allow accurate measurement of patient readiness or tracking of this process

❑**Readiness Assessment for Emerging Adults with Diabetes Diagnosed in Youth TOOL: READDY**

Provider Assessment of Patient Skill Set

ENDOCRINE SOCIETY

This form is suggested to help assess the teen/emerging young adult's knowledge and skills regarding diabetes and its management. The tool is intended as an aide to help assess the readiness of older teens/emerging young adults in the transition and to be transferred from pediatric to adult diabetes care providers. Note that some questions may not apply to patients with type 2 diabetes or other forms of diabetes.

At the end of this document, please write your name along with discipline and initials, then provide the date along with your initials when each item is assessed.

CARE INNOVATIONS | FEBRUARY 01 2020

Development and Implementation of the Readiness Assessment of Emerging Adults With Type 1 Diabetes Diagnosed in Youth (READDY) Tool FREE

Sarah D. Corathers ✉; Joyce P. Yi-Frazier; Jessica C. Kichler; Lisa K. Gilliam; Gail Watts; Andrea Houchen; Sarah Beal

Corresponding author: Sarah D. Corathers, sarah.corathers@cchmc.org

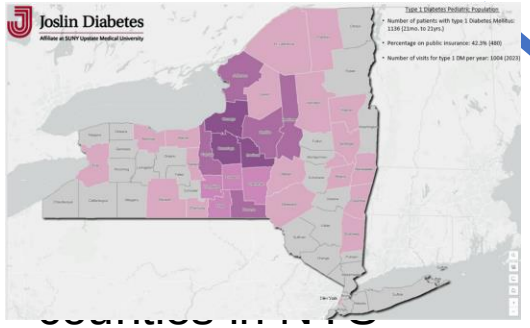
Diabetes Spectr 2020;33(1):99–103
https://doi.org/10.2337/ds18-0075
PubMed:32116461

Fishbone Diagram

Provider/Staff

- Lack of staffing levels to be able to handle appointments
- No set reminders for referrals

Patient



Patients are required to transition from pediatrics to adult by age 21

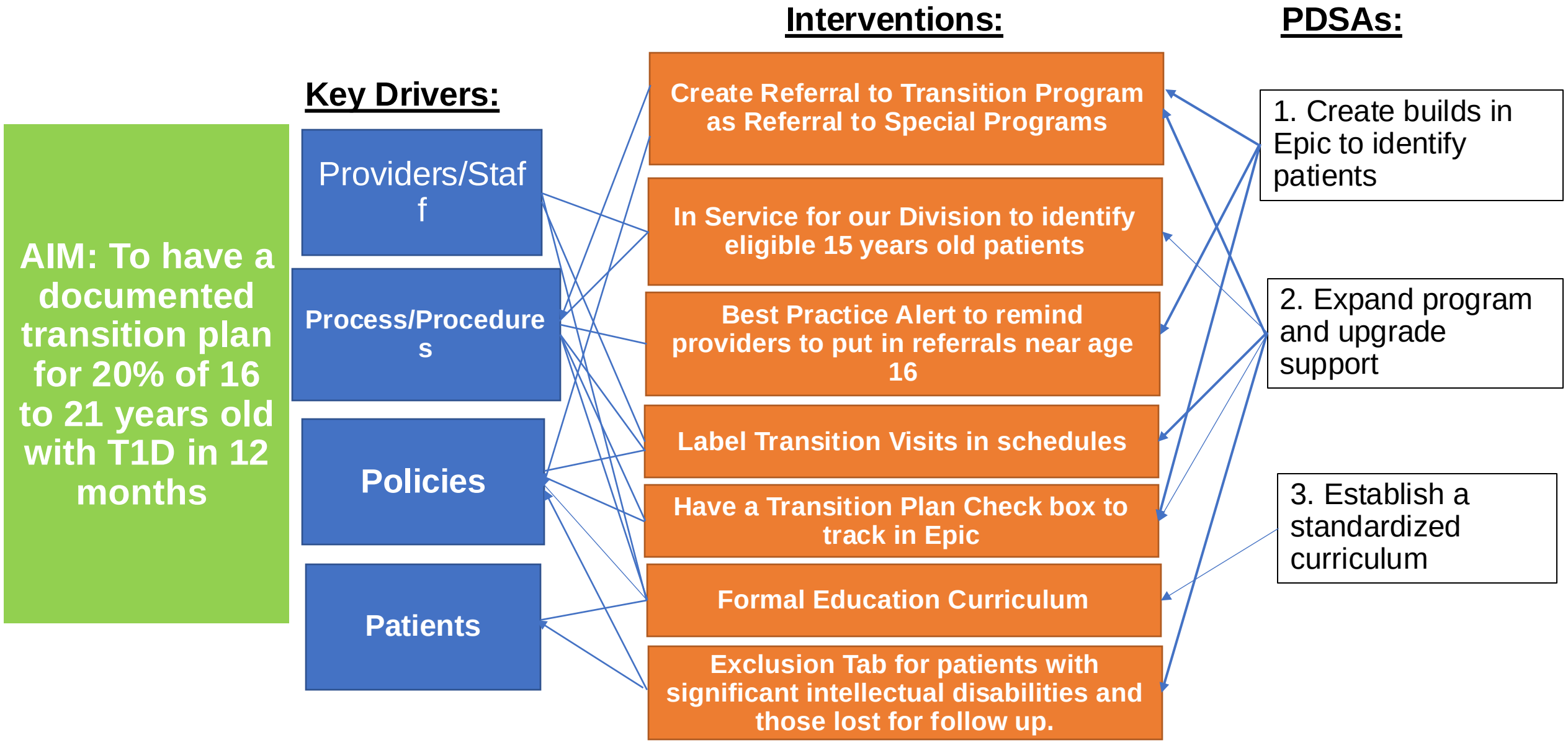
Process/Procedure

- Lack of systematic way of tracking transition population.
- Missed opportunities to enroll transition eligible patients in a timely manner

Policies

- No process/policy to reschedule missed first transition program visit.
- No standardized curriculum for transition visits

KDD: Transition Program



RESULTS

Objective: To have a documented transition plan for 20% of 16-to-21-year old's with T1D in 12 months, beginning in January 2024, for those enrolled in the Transition program for T1d pediatric patients.

❑Total population eligible for transition:

July 2024: 516 patients

September 2024: 525 patients.

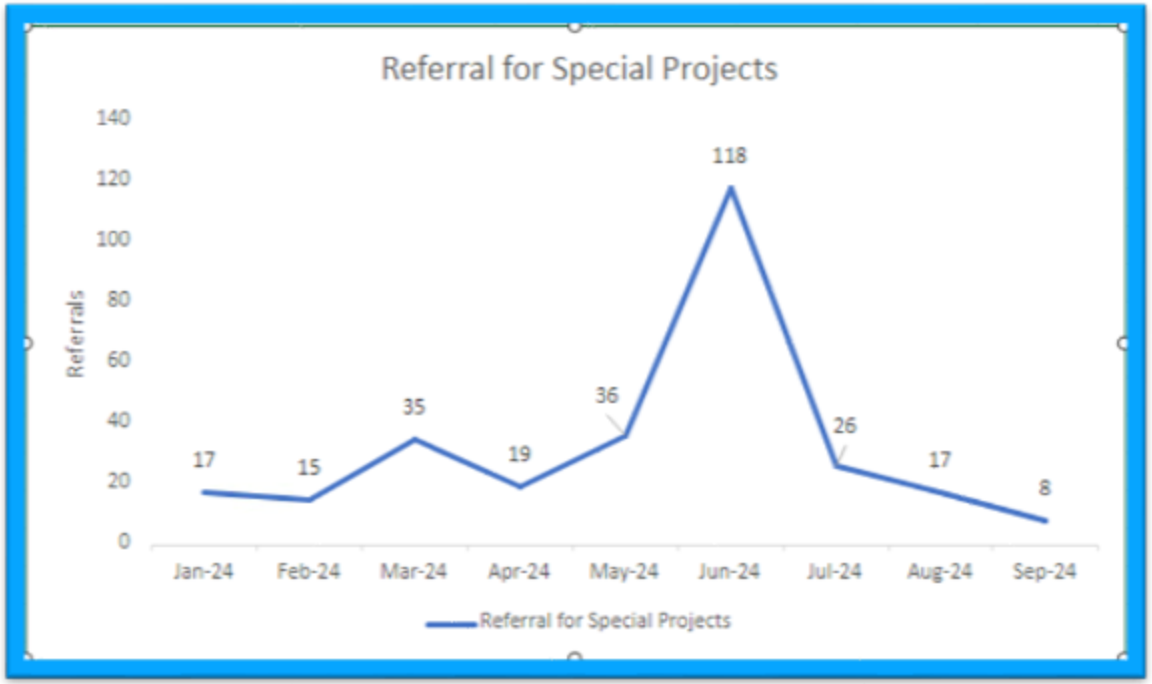
❑Referral to Special Projects (Transition Program):

240 (January - July 2024) and 291 (January – September 2024)

❑16-21 year old patients with T1D with documented transition Plan:

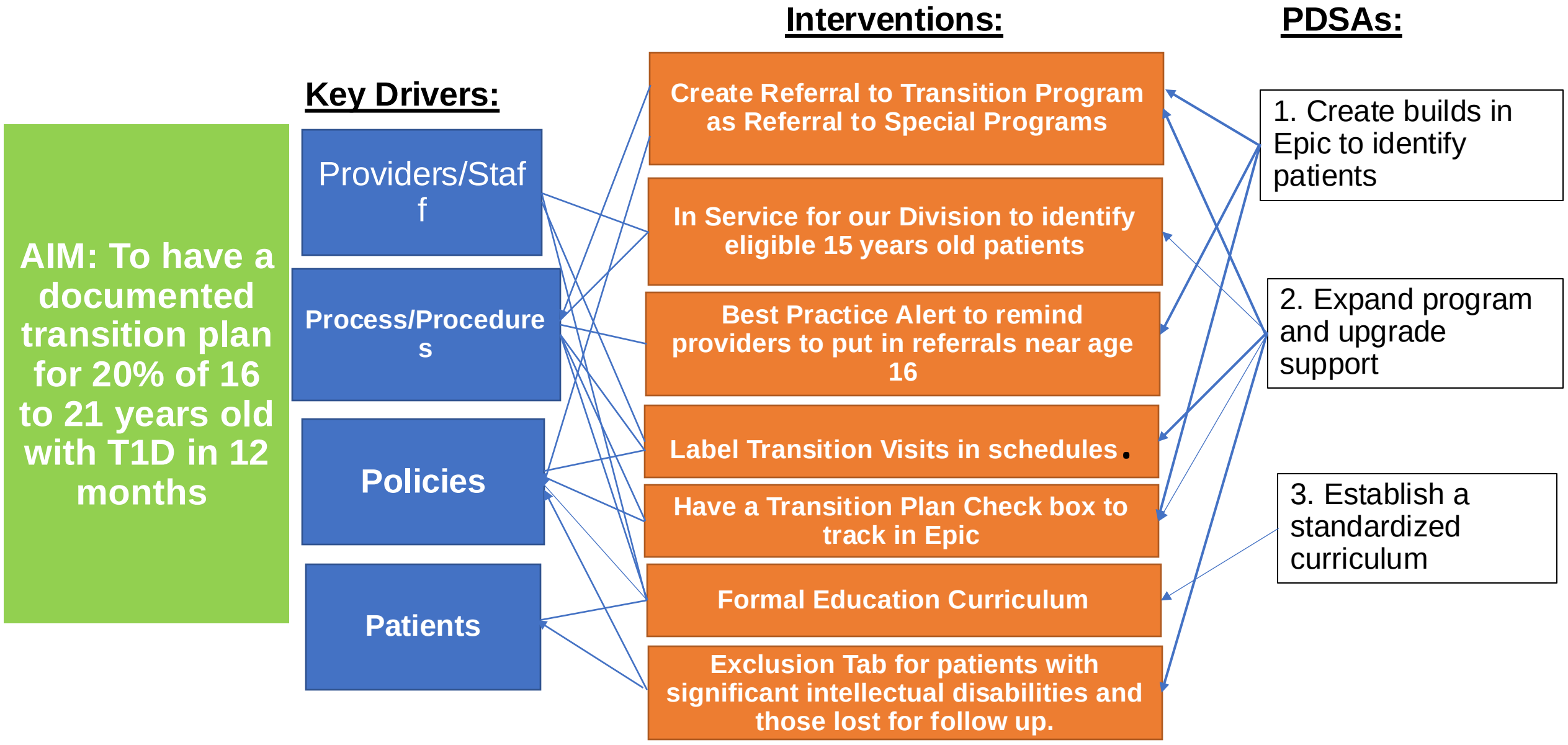
January to July 2024: 93 patients.

January to September 2024: 154 patients



❑**With a total population size of 525 patients, the current percent of our T1D population with a documented transition plan is 29.3%**.

KDD: Transition Program



BUILDING THE TRANSITION EDUCATION CURRICULUM

IMPROVEMENTS

CURRICULUM STRUCTURED IN MULTIPLE VISITS BY AGES:

- Visits shorter and focused with specific transition goals per visit or age. Supports a developmentally appropriate and systematic process.
- Divided in 12 visits to start at age 16 and finish at age 21:

- Patients that start transition visits at age 16, will follow program of visits divided by age.

- Patients that start transition visits after age 16, will still start with Visit 1 and will have visits every 3 months to catch up.

- Match READDY assessment to visit goals. Shorter questionnaire and patients more likely to answer with intention.
- Easier to track individual progress.
- Allows multidisciplinary approach without overwhelming patient with long clinic days. Certain visits are assigned to nutrition, psychology or social work depending on the age and goal.
- Shorter and more efficient documentation. Still a work in progress.

TRANSITION EDUCATION CURRICULUM: 12 VISITS – IN BRIEF

- **AGE 16 (3 visits):**

- Focus on Basic Diabetes knowledge and skills in insulin administration and calculation.

- Nutrition visit: carbohydrate counting, insulin dosing and healthy eating

- Ketones monitoring

- Behaviors: Driving and alcohol

- **AGE 17 (3 visits)**

- Knowledge about diabetes complications and surveillance

- More advanced skills about insulin pump management, programming insulin pump, glucose and insulin pump download.

- Navigation of health system skills: ask questions and communicate with medical team

- Tobacco, sexual health and pregnancy

- Behavioral Health visit: Diabetes care in peer pressure environment or public, emotional support systems

- **AGE 18 (2 visits)**

- Describe own health status, family history, autoimmune conditions associated with type 1 DM.

- Sick days management and teach friends about hypoglycemia treatment

- Adjust insulin doses independently

- Formal and detailed emergency plan

- Communication with doctor's office, appointments planning, prescriptions.

- **Age 19:** Reinforce all prior material and complete READDY to see what might be missing before moving on to last visits.

- **Age 20 (2 visits)**

- Detailed information about own medical providers, insurance, medication and supplies, coverage.

- Insurance transition

- Identify reliable support groups for type 1 Diabetes.

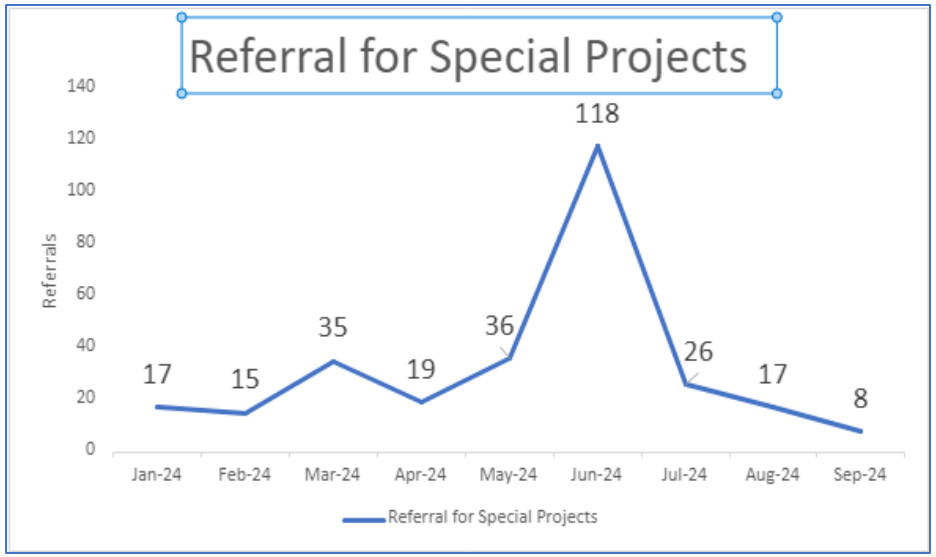
- **Age 21:**

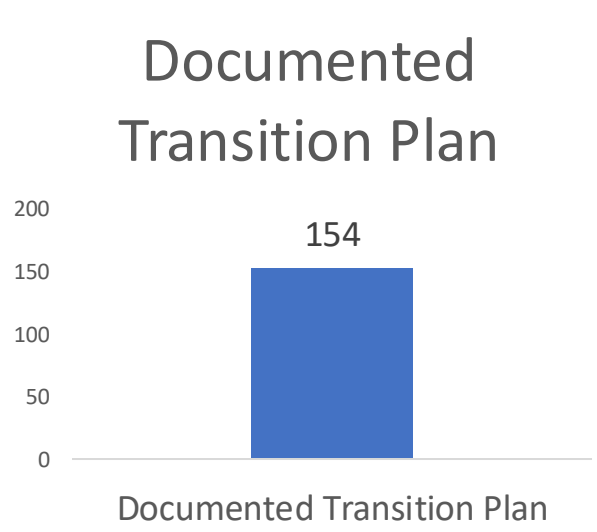
- Fill out READDY again and check on areas of improvement.

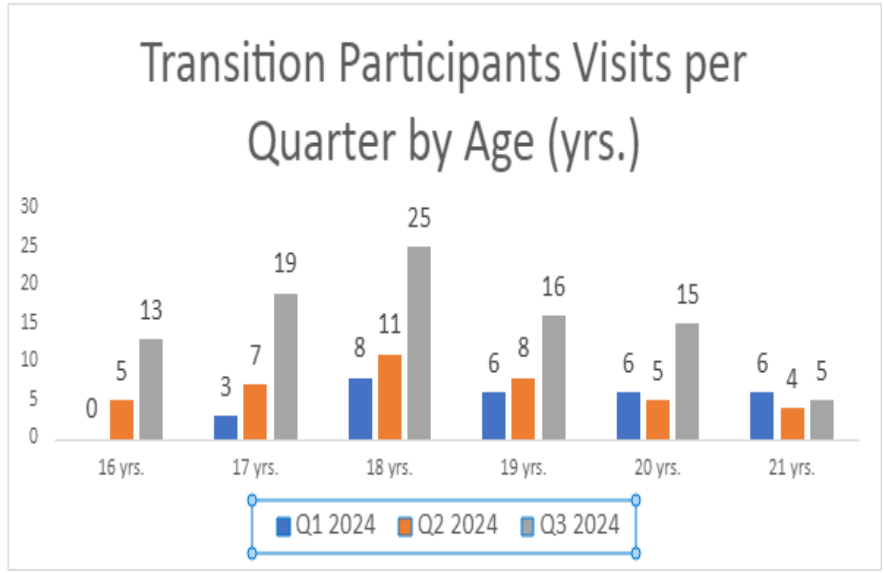
- Determine need of Nutrition and Social Work visit

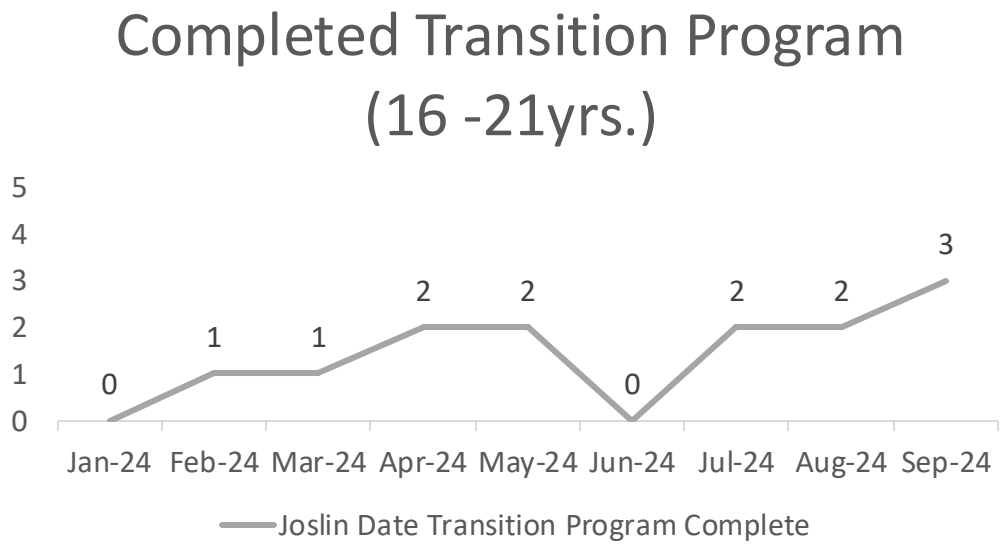
<u>Shorter and more efficient documentation. Still a work in progress</u>

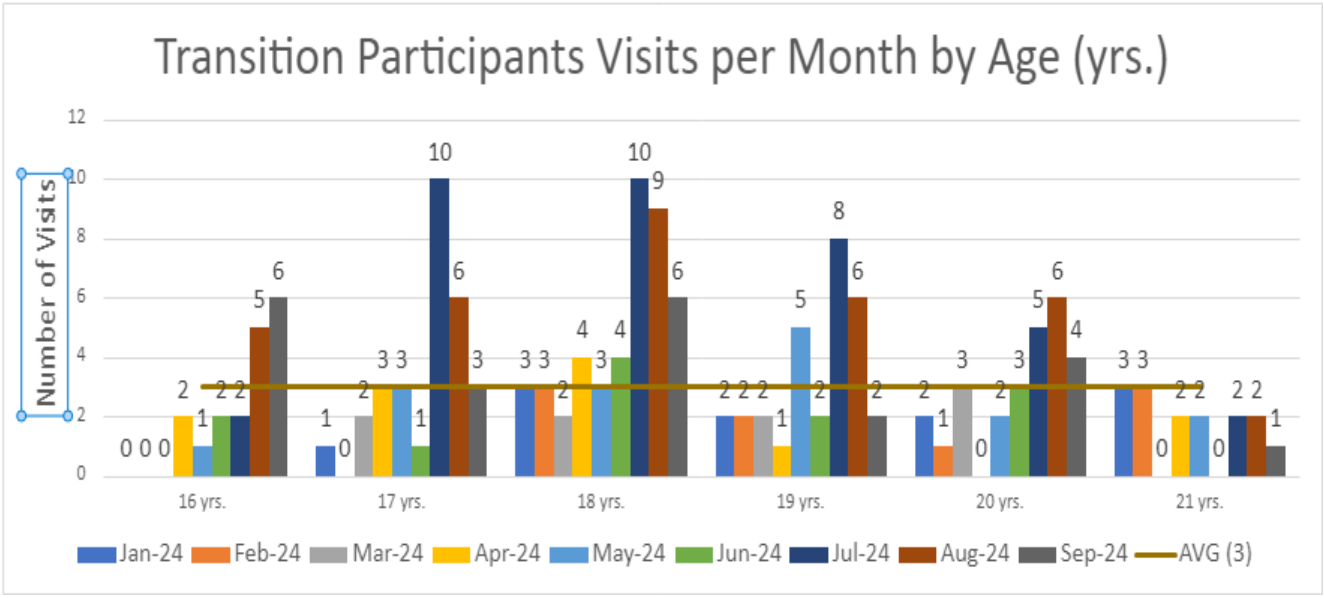
- Working with IMT on building a Flowsheet in EPIC according to education curriculum by age/visits:
- Reduce time consuming documentation
- Easier tracking among all the multidisciplinary team.


Referral for Special Projects
Referrals
140
120
100
80
60
40
20
0
17
15
35
19
36
118
26
17
8
Jan-24
Feb-24
Mar-24
Apr-24
May-24
Jun-24
Jul-24
Aug-24
Sep-24
Referral for Special Projects


Documented Transition Plan
200
150
100
50
0
154
Documented Transition Plan


Transition Participants Visits per Quarter by Age (yrs.)
30
25
20
15
10
5
0
0 5 13
3 7 19
8 11 25
6 8 16
6 5 15
6 4 5
16 yrs.
17 yrs.
18 yrs.
19 yrs.
20 yrs.
21 yrs.
Q1 2024
Q2 2024
Q3 2024


Completed Transition Program (16 -21yrs.)
5
4
3
2
1
0
0
1
1
2
2
0
2
2
3
Jan-24
Feb-24
Mar-24
Apr-24
May-24
Jun-24
Jul-24
Aug-24
Sep-24
Joslin Date Transition Program Complete


Transition Participants Visits per Month by Age (yrs.)
Number of Visits
12
10
8
6
4
2
0
0 0 0 2 1 2 2 5 6
1 0 2 3 3 1 10 6 3
3 3 2 4 3 4 10 9 6
2 2 2 1 5 2 8 6 2
2 1 3 0 2 3 5 6 4
3 3 0 2 2 0 2 2 1
16 yrs.
17 yrs.
18 yrs.
19 yrs.
20 yrs.
21 yrs.
Jan-24
Feb-24
Mar-24
Apr-24
May-24
Jun-24
Jul-24
Aug-24
Sep-24
AVG (3)

BUILDING THE BRIDGE BETWEEN PEDIATRIC TO ADULT CARE

❑Structured transition program to build independence in diabetes care and readiness to transition to adult care:

154/525 patients started transition program ~29%

❑Decrease lapses of care during transition period:

Best practice alert to remind providers to order referral to adult endocrine at age 20

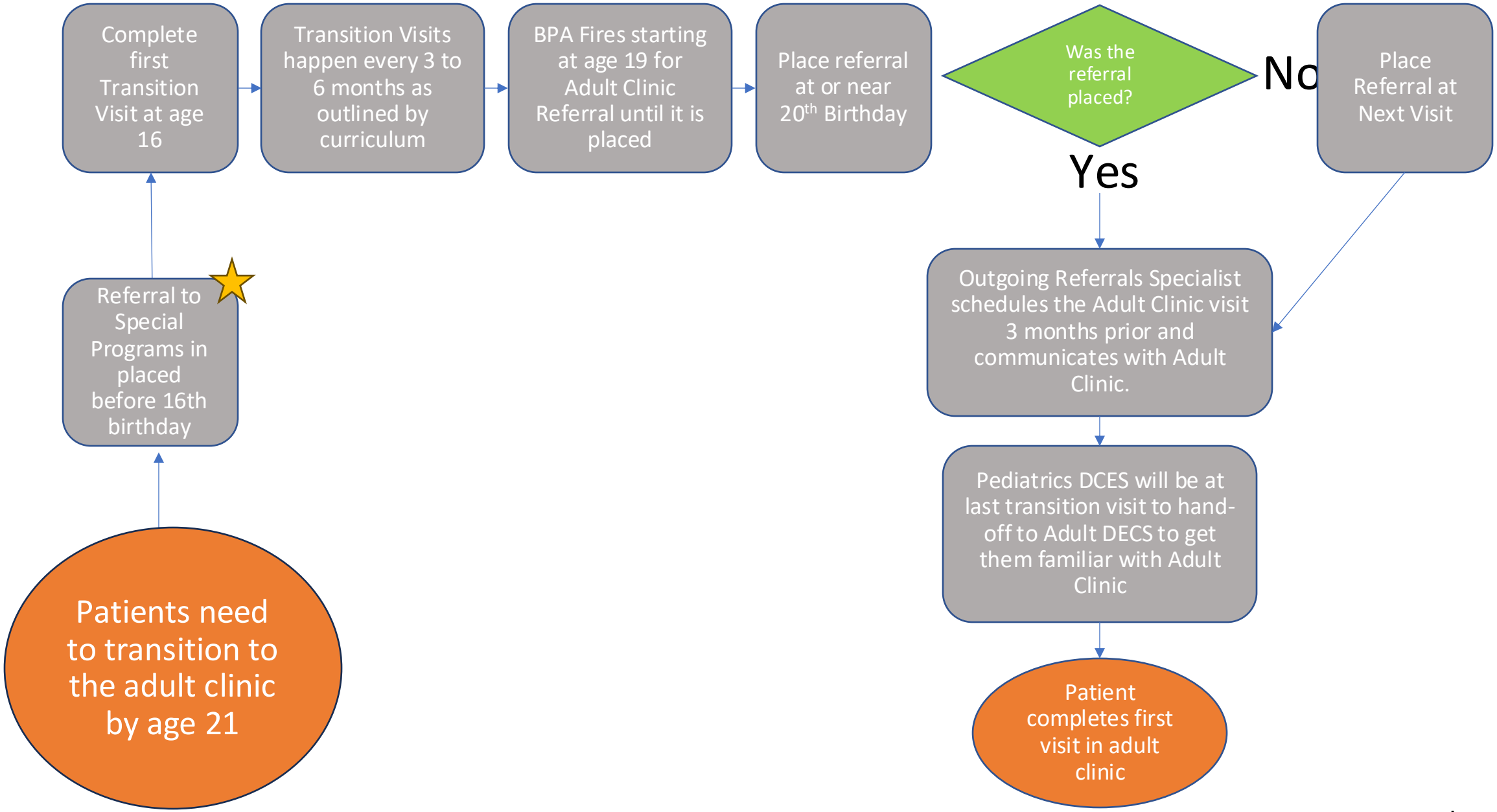
Create list of adult endocrine providers in other counties as a resource for families. Network with adult clinics in CNY: Binghamton adult clinic.

More personalized introduction to adult clinic providers: introductory videos.

Label new transition visits on adult clinic side to track no show rates

Assessment of readiness to transition using READDY tool. Continuity in adult care about this process for patients unable to complete the transition program.

- 32 pediatric patients with type 1D had had at least 1 visit with adult endocrinology in 2024.
- 20 of those patients enrolled in the transition program.
- The no show rate in adult clinic decreased from 50-60% in 2022 to 17.5%



Updated Oct 2024

NEXT STEPS

- ❑ Increase percentage of patients with documented transition plan up to 50% of the total population eligible for transition in the next 12 months.

Need to assess capacity of transition appointments with Diabetes educators for demands of transition curriculum.

- ❑ Build a flowsheet in EPIC for the new structured curriculum
- ❑ Formal evaluation of the transition visits curriculum by the patients.

- ❑ Create more personalized introduction to adult clinic: introductory videos, bio information with pictures.
- ❑ Network with adult endocrine clinics in CNY area to minimize gaps in care.

THANK YOU!

QUESTIONS?

KDD: Transition Program

AIM: To have a documented transition plan for 20% of 16 to 21 years old with T1D in 12 months

Key Drivers:

- Providers/Staff
- Process/Procedures
- Policies
- Patients

Interventions:

- Create Referral to Transition Program as Referral to Special Programs
- Introduce a validated transition tool – READDY
- IMT created Provider Assessment in Epic Flowsheet
- Best Practice Alert to remind providers to put in referrals at or near age 20
- Label Transition Visits in schedules.
- Have a Transition Plan and document it in Epic
- Formal Education Curriculum
- Exclusion Tab for patients with significant intellectual disabilities and those lost for follow up.

PDSAs:

1. Implement tools that assess diabetes knowledge and transition readiness.
2. Create builds in Epic to identify patients
3. Establish a standardized curriculum
4. Expand program and upgrade support

•BUILDING THE TRANSITION EDUCATION CURRICULUM

ASSESSMENT TOOL TO EVALUATE KEY DIABETES TASKS AND KNOWLEDGE

Basic diabetes knowledge

- Glucose monitoring, insulin administration (injections and insulin pump)
- Sick day and emergency management
- Risk of other autoimmune conditions and surveillance.

Provider Assessment of Patient Skill Set

ENDOCRINE SOCIETY

This form is suggested to help assess the teen/emerging young adult's knowledge and skills regarding diabetes and its management. The tool is intended as an aide to help assess the readiness of older teens/emerging young adults in the transition and to be transferred from pediatric to adult diabetes care providers. Note that some questions may not apply to patients with type 2 diabetes or other forms of diabetes.

At the end of this document, please write your name along with discipline and initials, then provide the date along with your initials when each item is assessed.

ASSESSMENT OF SELF-CARE SKILLS AND KNOWLEDGE - TRANSITION READINESS TOOL (READDY)

The READDY survey consists of 4

1. Diabetes Knowledge
2. Health System Navigation
3. Insulin Self-Management
4. Health Behaviors


CARE INNOVATIONS | FEBRUARY 01 2020

Development and Implementation of the Readiness Assessment of Emerging Adults With Type 1 Diabetes Diagnosed in Youth (READDY) Tool FREE

Sarah D. Corathers; Joyce P. Yi-Frazier; Jessica C. Kichler; Lisa K. Gilliam; Gail Watts; Andrea Houchen; Sarah Beal

Check for updates

Corresponding author: Sarah D. Corathers, sarah.corathers@cchmc.org

Diabetes Spectr 2020;33(1):99–103

https://doi.org/10.2337/ds18-0075

PubMed:32116461

Response options for each item consist of a five-point Likert scale: 1 = Haven't thought about it; 2 = I plan to start; 3 = No, I still need lots of practice; 4 = Somewhat, but I need a little practice and 5 = Yes, I can do this.

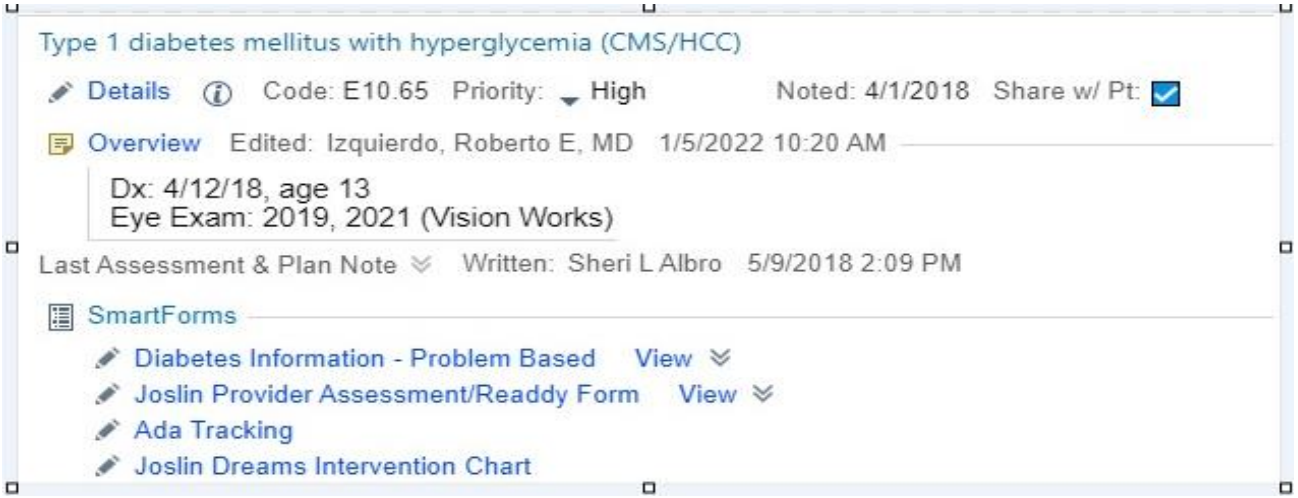
The mean score in each domain is calculated to guide target areas for intervention, with priority for areas of lowest patient-reported confidence

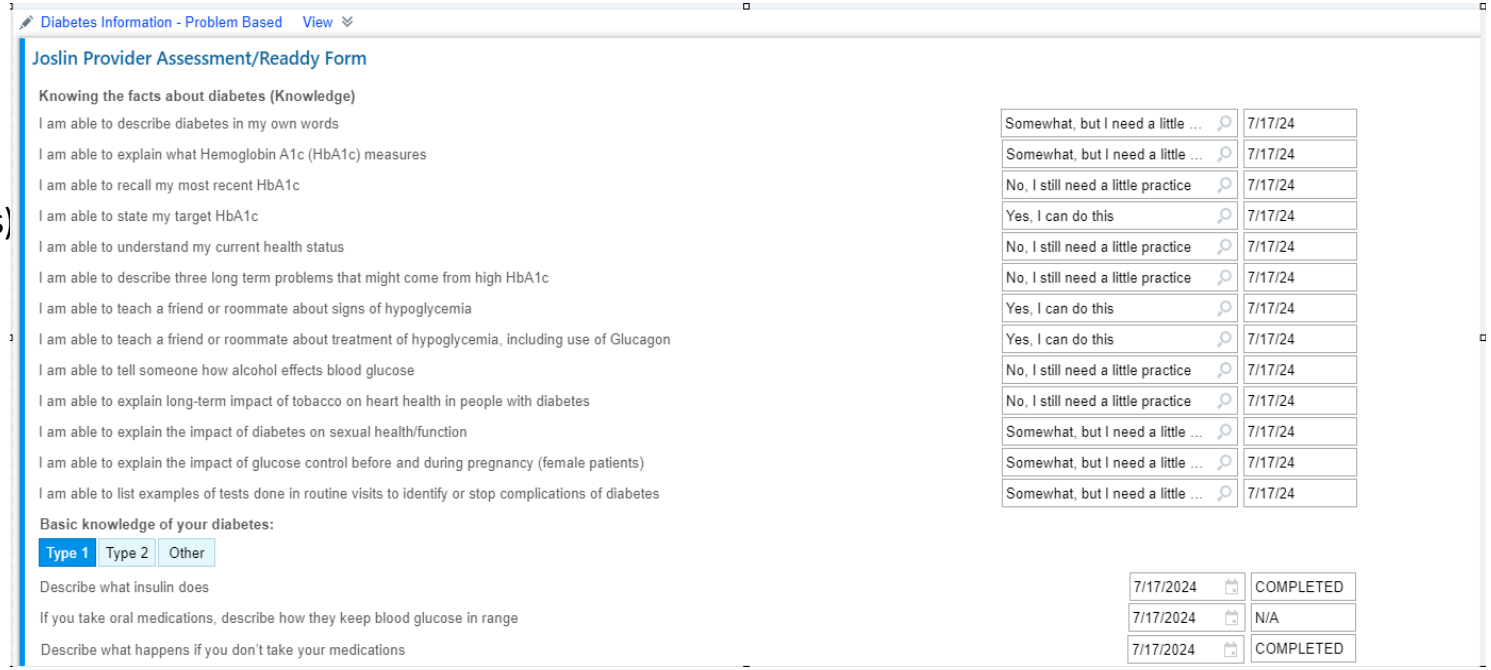
- IMT created Provider Assessment in Epic Flowsheet

Provider assessment/READDY form

Knowing the facts about diabetes (Knowledge)

- Insulin/Diabetes management Skills (Insulin and Injections)
- Sick day and emergency management.
- Health behaviors
- Health system navigation
- **Response options**
- 1 = Haven't thought about it.
- 2 = I plan to start
- 3 = No, I still need lots of practice
- 4 = Somewhat, but I need a little practice
- 5 = Yes, I can do this.





Assessing Readiness to Transition to Adult Care among Young Adults with T1D

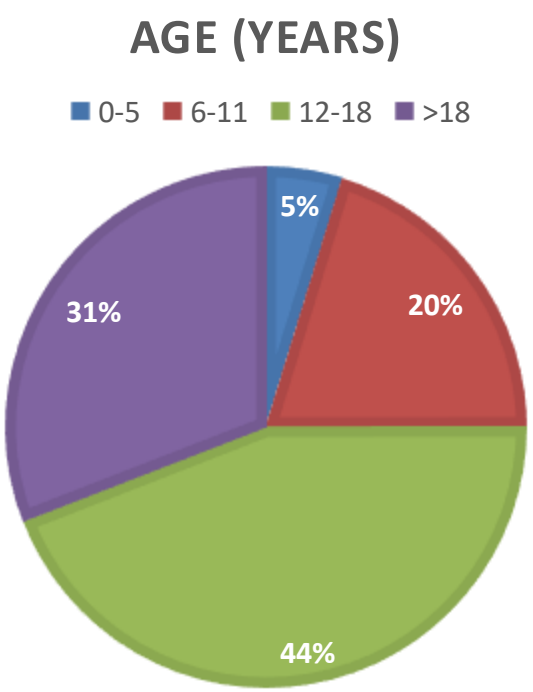
Jody Beth Grundman, MD, MPH; Amanda Perkins, CPNP, CDCES, MPH; Sarah Lydia Holly, BSN, RN; Mai Tran, PharmD, BCACP, BCGP, CDCES; Rachel Longendyke, MD; Julie Harlam, CPNP; Alyssa Danner, BSN, RN; Jennifer Reilly, RD, CDCES; Shideh Majidi, MD, MSCS

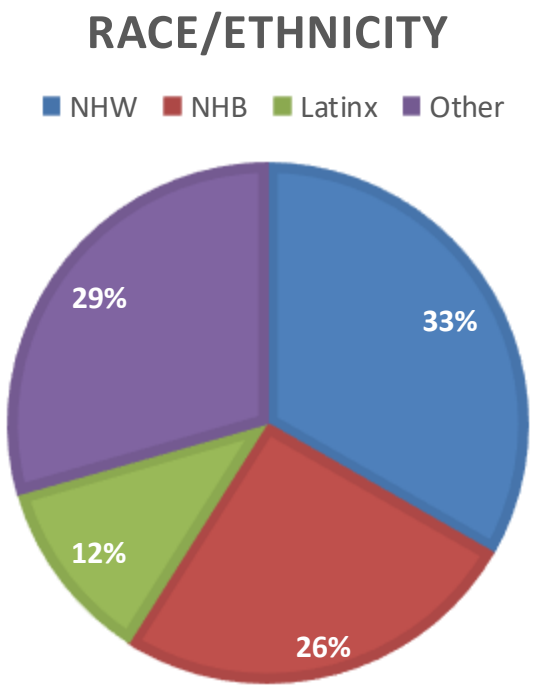
T1DX-QI November Learning Session
Chicago, IL ,
November 11, 2024

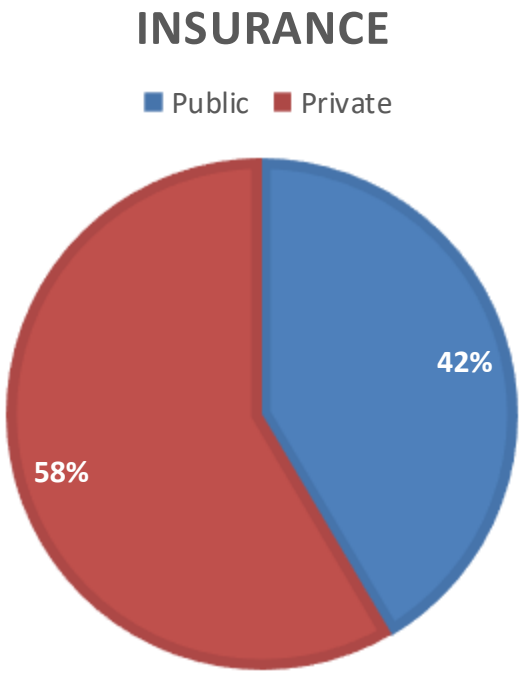
Children's National

Children's National Hospital, Washington, DC

- ~2000 youth with type 1 diabetes







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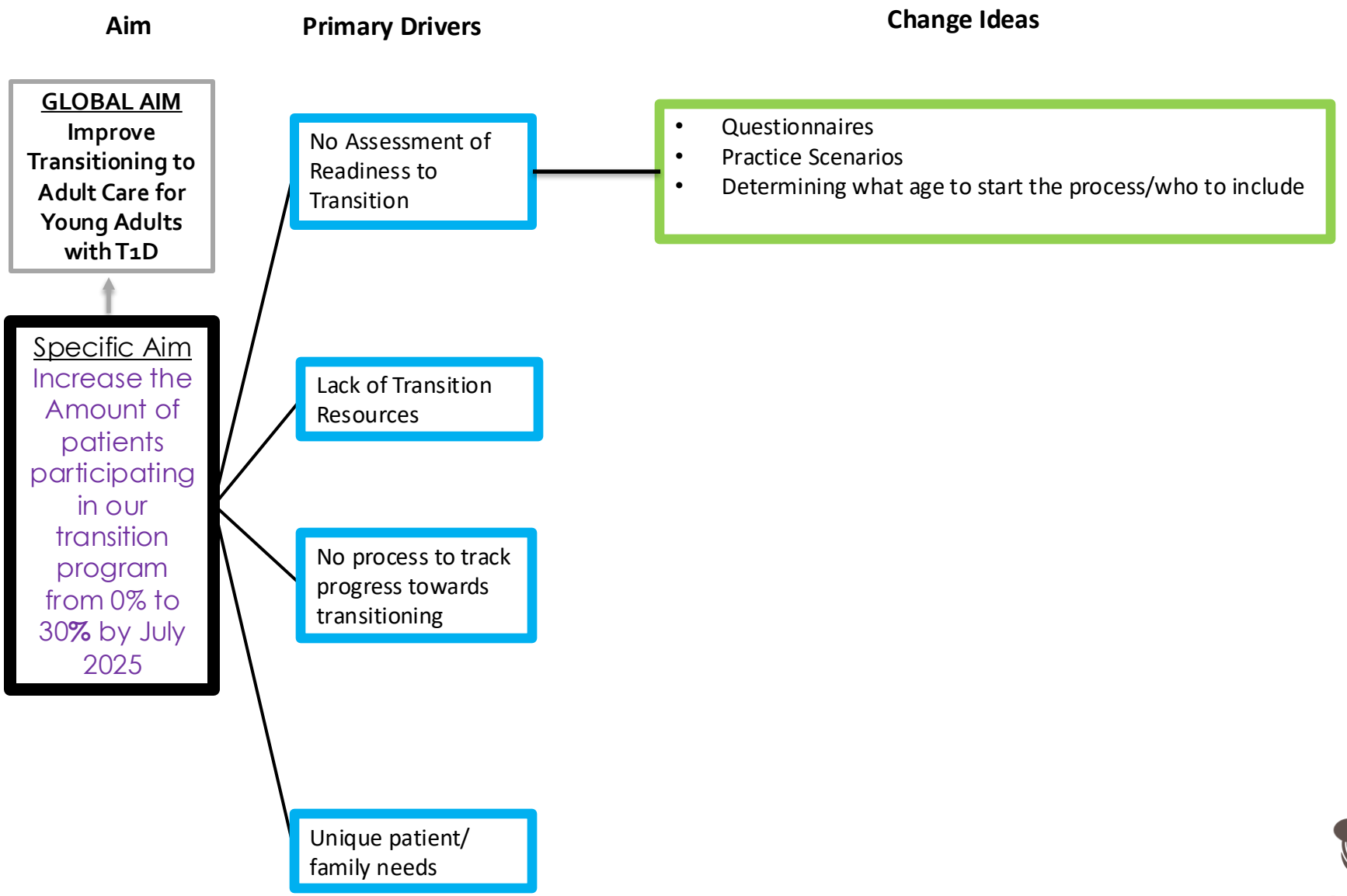
Problem Analysis: Key Driver Diagram



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Assessing Transition Readiness: READDY Questionnaire

- 46 questions

- Sub-sections:
  - Diabetes knowledge
  - Insulin Management
  - Pump Skills (if applicable)
  - Health system and health history navigation
  - Health behaviors

READDY Questionnaire

READDY- V1.1 for distribution

Name:

DOB:

Date:

How ready are you for transition to adult diabetes care?

Transition **R**eadiness assessment for **E**merging **A**dults with **D**iabetes **D**iagnosed in **Y**outh

Listed below are some knowledge or skill items that are useful in keeping you healthy with diabetes over your lifetime. This is not a test. There are not right or wrong answers. Please try to answer honestly. Be sure to ask your provider if you need more help in any of these areas.

Knowing the facts about diabetes (Knowledge) ***I am able to:***	**Yes, I can do this**	**Somewhat, but I need a little practice**	**No, I still needs lots of practice**	**I plan to start**	**Haven't thought about it**
Taking care of diabetes on my own (Navigation) *I am able to:*	**Yes, I can do this**	**Somewhat, but I need a little practice**	**No, I still needs lots of practice**	**I plan to start**	**Haven't thought about it**
Insulin/Diabetes Management Skills (Insulin Management) *I am able to:*	**Yes, I can do this**	**Somewhat, but I need a little practice**	**No, I still needs lots of practice**	**I plan to start**	**Haven't thought about it**
Diabetes Management (Health Behaviors) *I am able to:*	Yes, I can do this	Somewhat, but I need a little practice	No, I still needs lots of practice	I plan to start	Haven't thought about it
Insulin Pump Skills (answer *only* if you use one) *I am able to:*	Yes, I can do this	Somewhat, but I need a little practice	No, I still needs lots of practice	I plan to start	Haven't thought about it

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Methods

- Modified to 29-items to enhance its usability in the outpatient clinical care setting
- The questionnaire was pilot-tested by a staff member with diabetes of similar age to the target population to confirm its clarity
- Feasibility was confirmed, with an average completion time of 2.5 minutes

Knowing the facts about diabetes (Knowledge) ***I am able to:***
Describe diabetes in my own words
Explain what Hemoglobin A1c (HbA1c) measures
Recall my most recent HbA1c
State my target HbA1c
Understand my current health status
Describe three long term problems that might come from high HbA1c
Teach a friend or roommate about signs of hypoglycemia
Teach a friend or roommate about treatment of hypoglycemia, including use of Glucagon
Tell someone how alcohol effects blood glucose
Explain long-term impact of tobacco on heart health in people with diabetes
Explain the impact of diabetes on sexual health/function
Explain the impact of glucose control before and during pregnancy (female patients)
List examples of tests done in routine visits to identify or prevent complications of diabetes

Methods: Plan-Do-Study-Act (PDSA) Cycles

- Started with 18-20-year-olds with T1D scheduled for a visit in a single outpatient setting by two providers

- Expanded distribution to young adults seen by all providers

- Tracking: sub-section scores, survey distribution rates, patient demographics
  - Age
  - Duration T1D
  - Biologic sex
  - Race/ethnicity
  - Primary language
  - CGM use (Y/N)
  - Insulin Regimen
  - HbA1c

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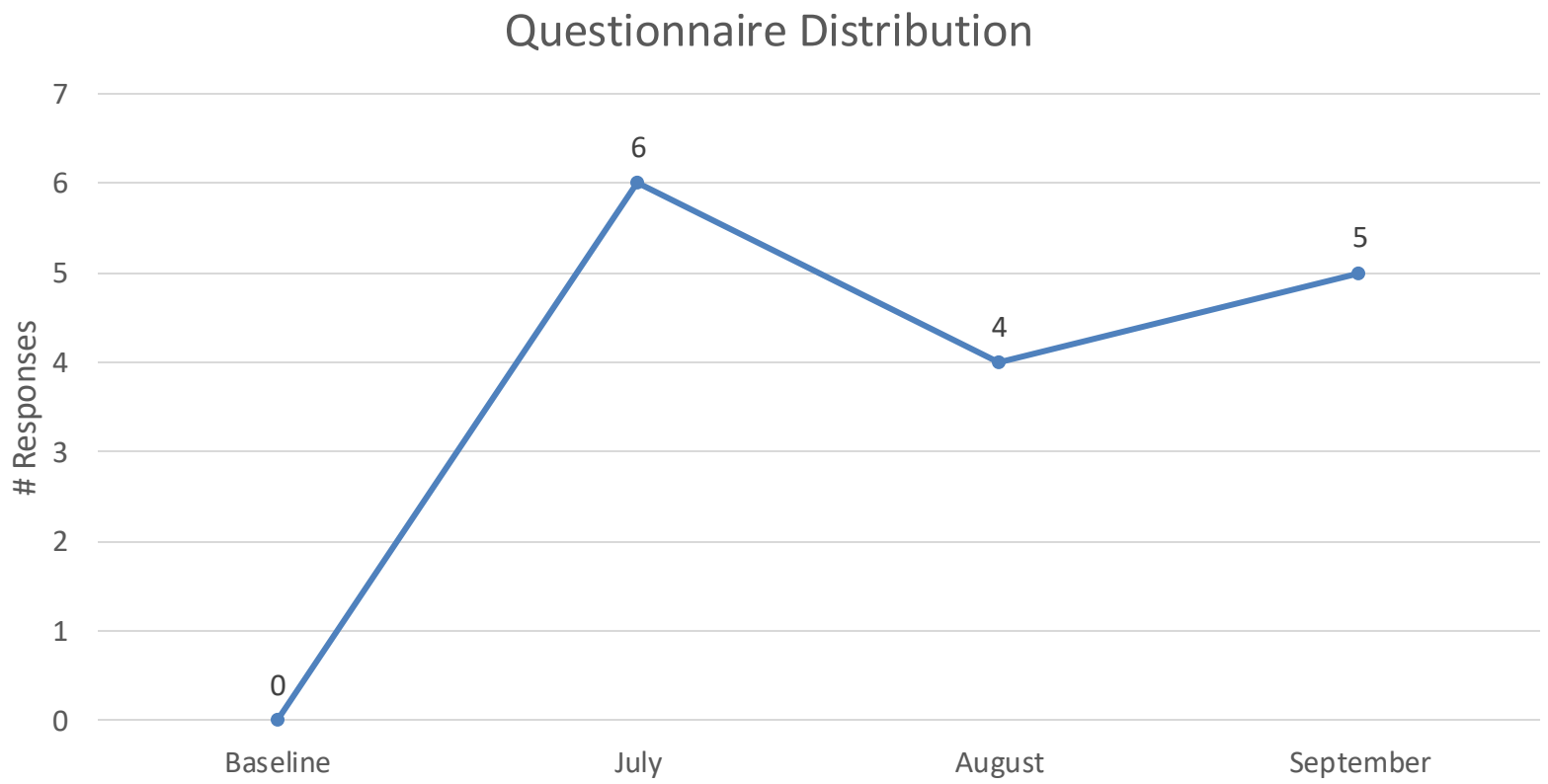
Results



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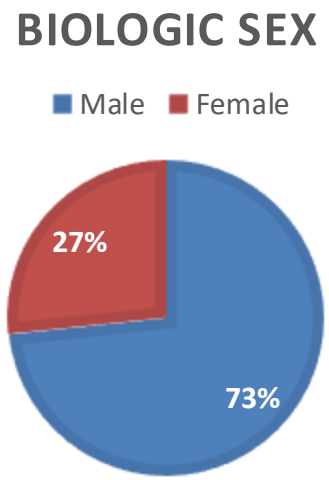
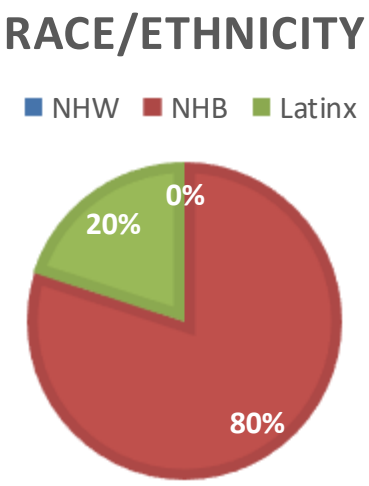
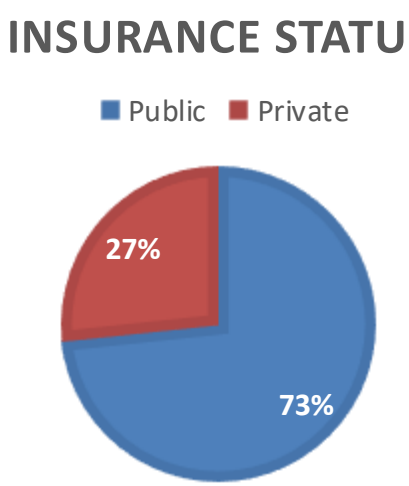
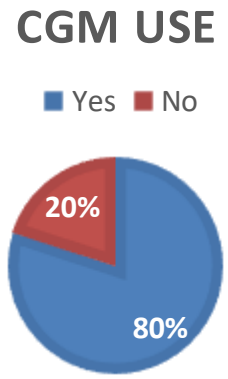
Results: Respondent Demographics

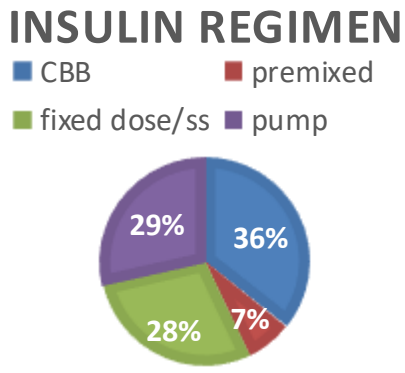
Characteristic	Median, IQR
Age, years	19.64 (19.19,19.88)
T1D Duration, years	10.63 (6.87, 11.59)
HbA1c	8.6 (7.8, 9.3)











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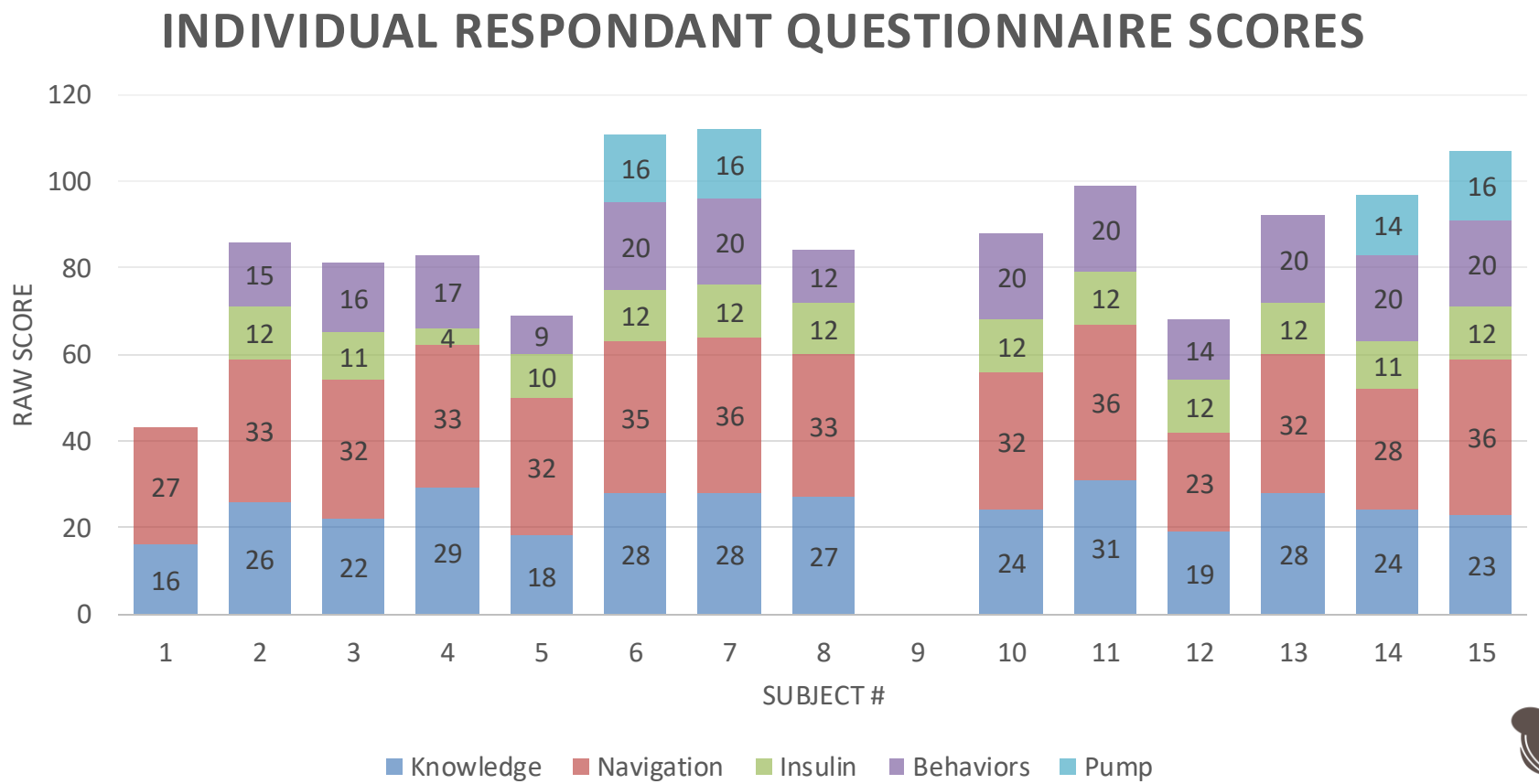
Results: Questionnaire Responses

	Knowledge (32)	Navigation (36)	Insulin (12)	Behaviors (20)	Pump (16)
Raw Score (Median,IQR)	22 (22,28)	33 (32,35)	11 (11,12)	16 (15,20)	16 (15.5,16)



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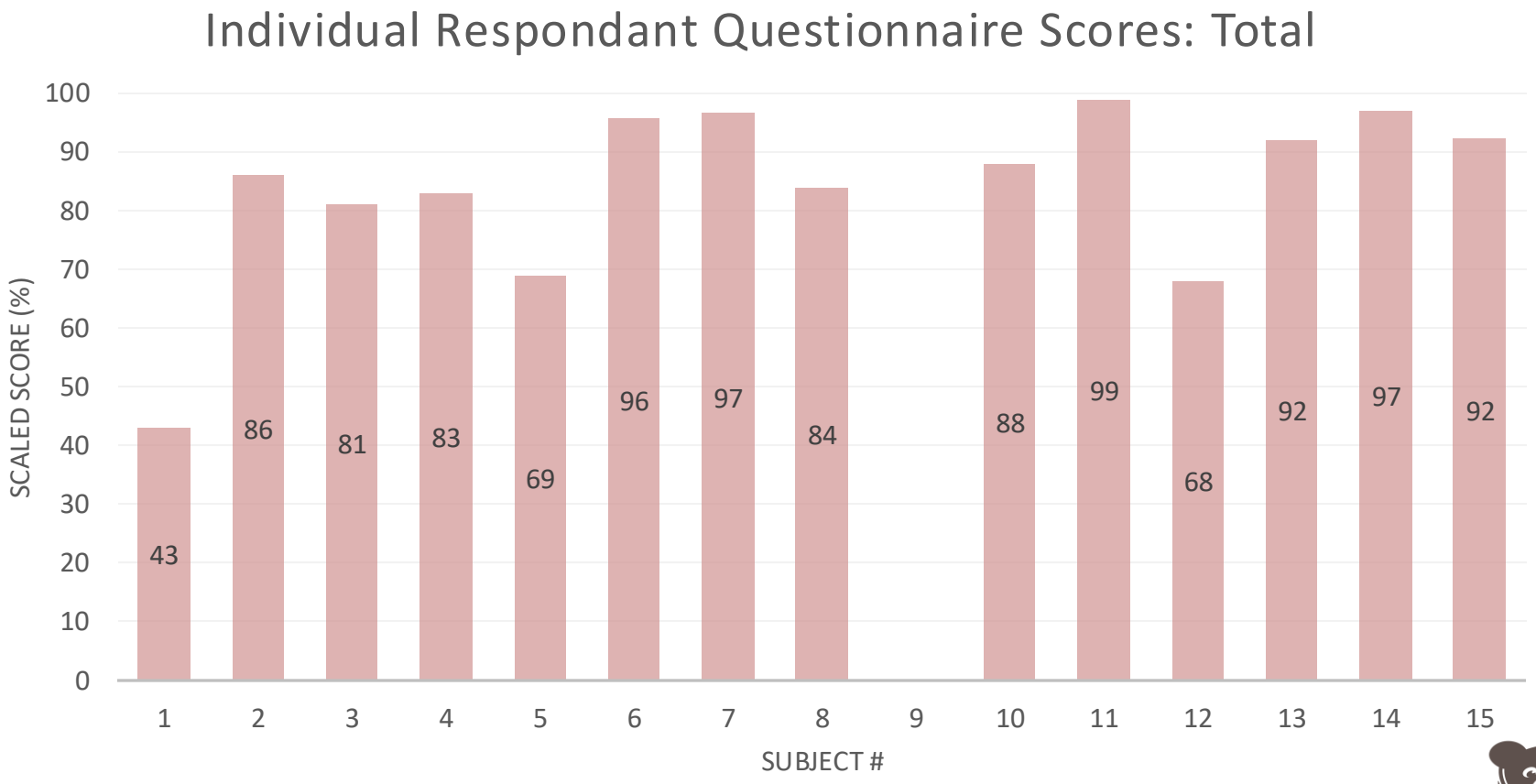
Results: Questionnaire Responses

Median (IQR)	82 (82,99)



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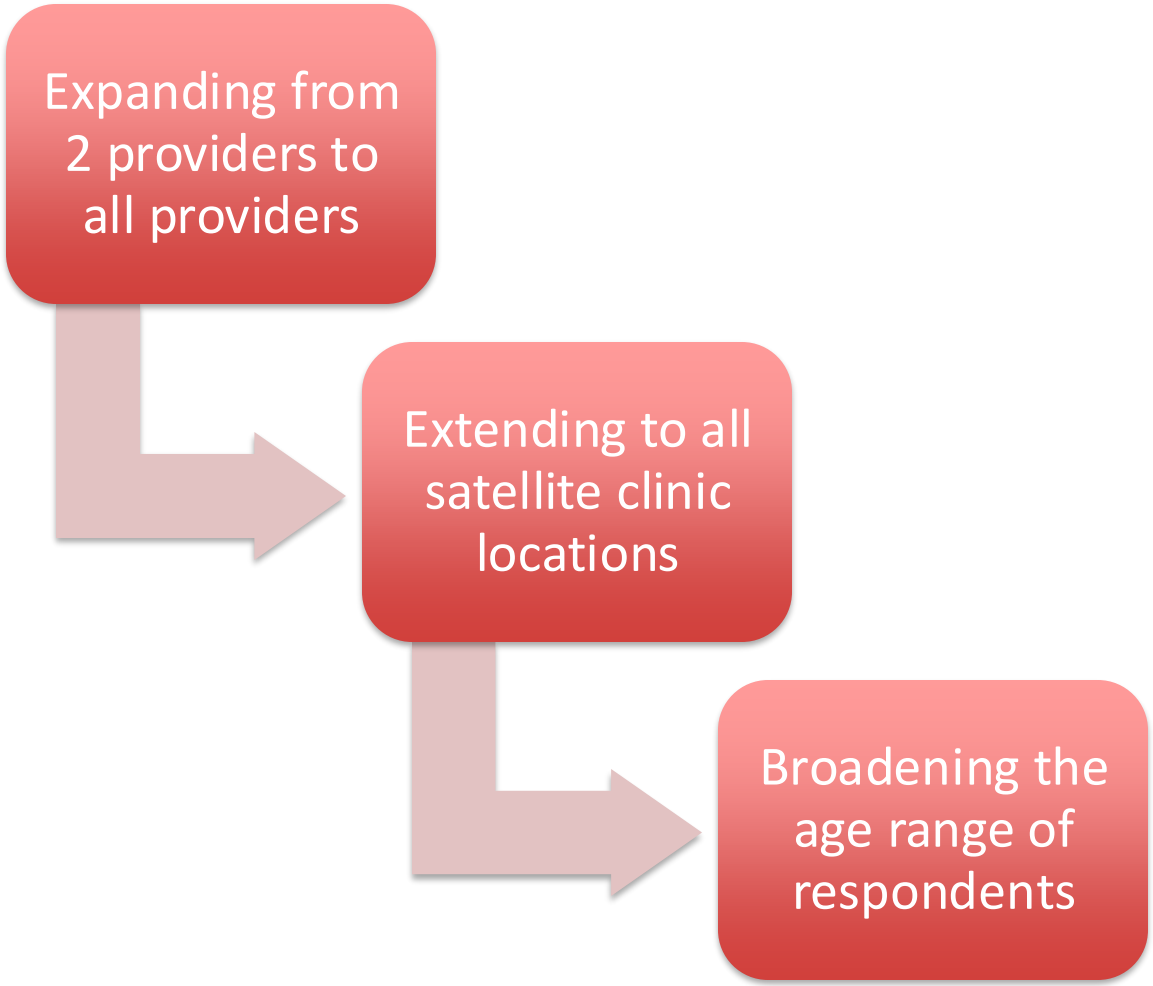
Next Steps



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