Increasing Scheduling of Adult Diabetes Care Prior to Graduation from Pediatric Diabetes Care for Emerging Adults with Type 1 Diabetes: A Quality Improvement Project

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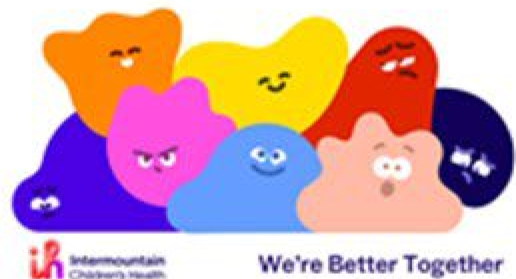


Objectives

- Discuss the transition process at PCH Diabetes Clinic
- Discuss our QI team, aim, and interventions
- Review outcomes thus far
- Identify steps going forward

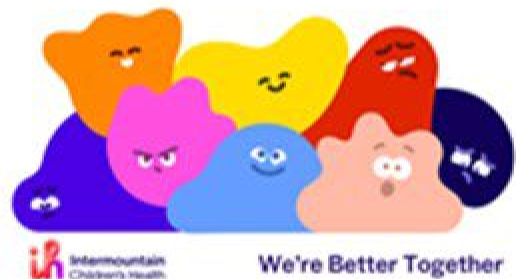
Primary Children’s Hospital Diabetes Clinic

- 2700 type 1 diabetes patients
- ~250-300 patients turn 18 every year
- Outreach Clinics: **Lehi,** Logan, Layton, St. George
- Large referral base from surrounding states

IDAHO
Legend
Full-Time Clinic
Outreach Site
Logan
Ogden
Salt Lake City
Vernal
Provo
Price
COLORAD
UTAH
EVADA
Cedar City
St. George
WWW.FREEWORLDMAPS.NET

History of Transition Process

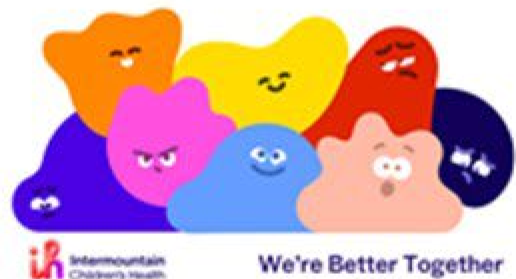
- No formal process
- Unique to each provider and educator
- Graduated from pediatric care generally around age 18 years or when complete high school
- Adult care is dispersed across systems throughout the state or surrounding states
  - No record of where these patients go if outside of Intermountain system



QI Team Formation

- Pediatric endocrinologists, fellow, adult endocrinologist, transition nurse care coordinator, RN manager, CDCES, medical assistant, social worker, parent partner, data manager

- Global aim: Improve the healthcare transition from pediatric to adult diabetes care.



Barriers

Patients
- Comfort with peds
- Location
- Insurance
- Comfort with autonomy
- Comfort level with scheduling
- Decision fatigue
- competing priorities

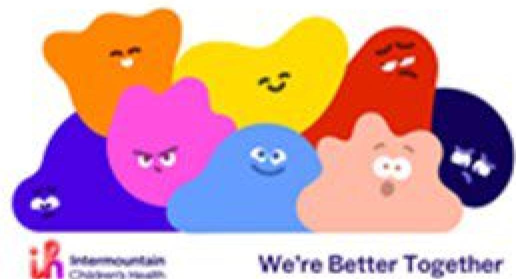
Systems
- Insurance acceptance
- Different health systems
- Lack of clear process
- Peds or PCP continue to rx
- Cost
- Medicaid vs private

Families
- Parent-child dynamics
- Having ROI in place
- Parents "owning" management ie appts/Rx
- Guardianship/ Living situation
- Support system
- Cultural/ Language
- Transportation

Poor Transition to Adult Care

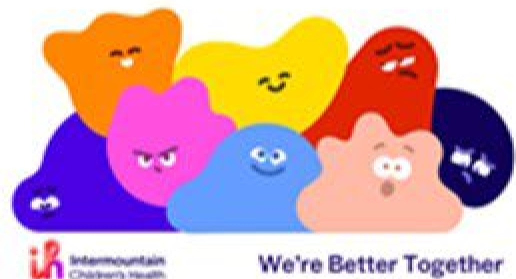
Technology
- Comfort with current tech
- Ordering tech supplies
- Navigating tech accounts

Providers
- Different adult vs. peds
- Comfort with young adults
- Different clinic structure
- Different clinical support
- Locations
- Fear of unknown



SMART Aim

- We will increase the percentage of eligible patients 17.5 years of age and older who have a scheduled appointment with an adult diabetes provider prior to their last pediatric visit from our baseline to 75% by 04/30/2025



Key Driver Diagram

Smart Aim

We will increase the percentage of eligible patients 17.5 years of age and older who have a scheduled appointment with an adult diabetes provider prior to their last pediatric visit from our baseline to 75% by 04/30/2025.

Barriers

- Lack of Clear Transition Process
- Fear of Unknown Adult Provider
- Patient comfort with autonomy
- Patient Comfort with scheduling

Interventions

- Adult Provider List
- Customized transition education packets
- Implementation of new education packets
- READDY survey starting at age 15
- Implementing a workflow for transition
- Orientation to the adult clinic- map, visit, video orientation
- Education for clinical team
- Improving handoff to adult provider- standardized form, provider conference
- “Meet the adult provider” insert
- Graduated responsibility checklist- goal setting and accountability
- Scheduling with parent
- Access patient portal for adult care

Global Aim Statement

Improve the healthcare transition from pediatric to adult diabetes care.

Process flow map

Transition Process for Patients age 17+/senior in high school (Eccles)

Patient >/+17yrs or senior in HS

MA gives readiness assessment to all & age-appropriate packet

MA to ask if pt has chosen adult provider/ has appointment & documents on intake form

Pt has an adult visit scheduled

YES

CDE collects adult endo info – send details to Steph and Aileen in iCentra

Steph & Aileen record in shared spreadsheet for tracking

Referral sent to adult provider

NO

Provider receives assessment (from MA or pt room)

What happens with transition assessment. Review with pt vs with CDCES

CDCES reviews transition process in last year

CDCES will review adult transition list including adult appt scheduling

CDE determines if pt eligible for nurse care coordinator *see criteria below

Yes

Pt given flyer and message sent to Stephanie in iCentra

NO

Follow up determined: Do they have adult provider scheduled?

YES

Graduation certificate awarded

Follow up with adult provider

NO

Have they seen Dr. Canter for transition appointment

YES

Scheduled with MD or NP for follow up

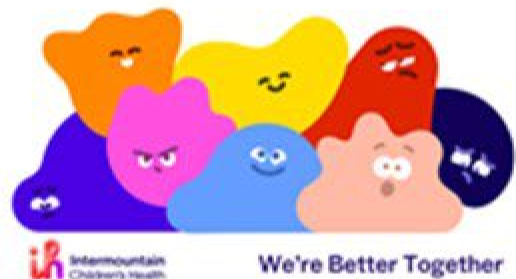
NO

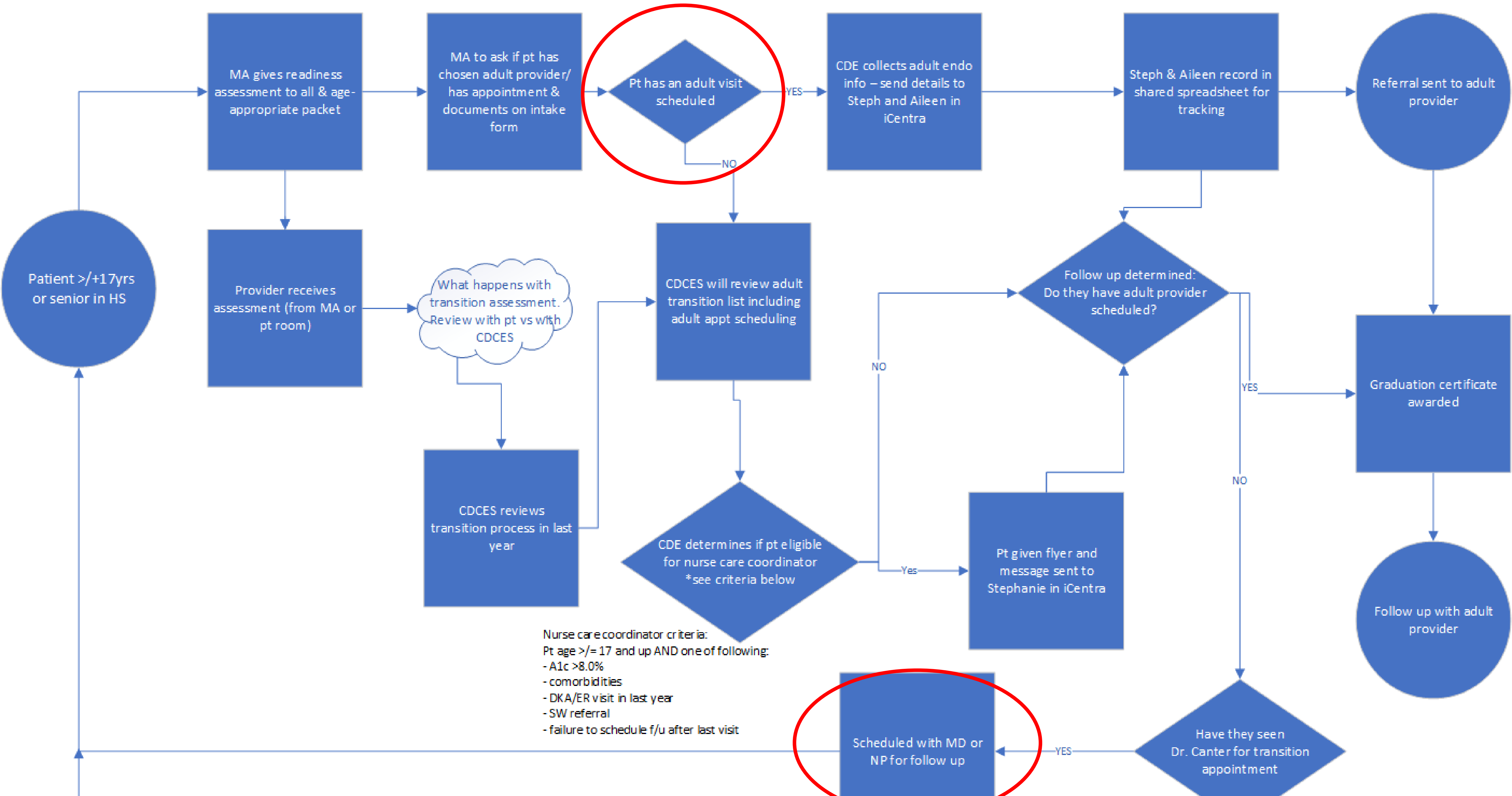
Send message to scheduling asking for PRQ slot for Dr. Canter's transition appointments

Nurse care coordinator criteria:
Pt age >/= 17 and up AND one of following:
- A1c >8.0%
- comorbidities
- DKA/ER visit in last year
- SW referral
- failure to schedule f/u after last visit

PDSA 1: Disseminating process flow map

- Rescheduling in pediatric clinic if no adult appointment is scheduled
- Establishing dedicated staff point-of-contacts for questions related to transition





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Scheduled with MD or NP for follow up
YES
Have they seen Dr. Canter for transition appointment

PDSA 2: Adult diabetes appointment tracking

- Capturing adult provider appointments
- Message log requested for patients

Date: ______________

Patient Name: ______________________________________ Patient MRN: ______________________

Adult Provider Appointment Made? Yes ☐ No ☐

Name of Provider: ____

Date and Time of Appointment: ____

Notes: ____

PDSA 3-6: Tracking adult appointments in the EMR

- Using standardized documentation to easily track adult appointments as well as guide nurse care coordination efforts

Please send this message to Stephanie Sund and Aileen Edwards

Adult diabetes care appointment

[Pt Name] does (does not) have an adult diabetes appointment scheduled. (Please reschedule patient in pediatric clinic if no adult appointment) .Patient will be following up with Dr.Smego in June.

Hemoglobin A1c: 8.2 %

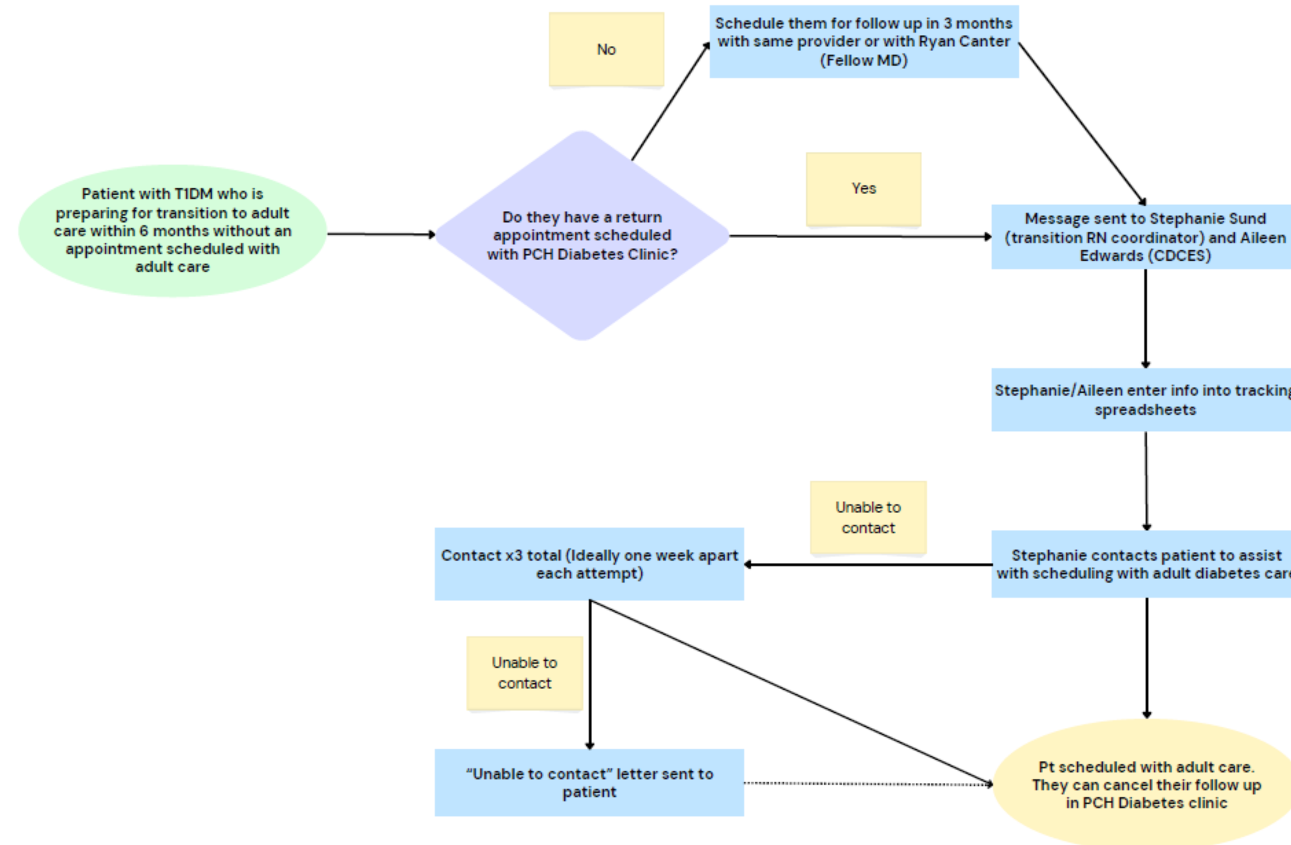
Adult diabetes provider: _

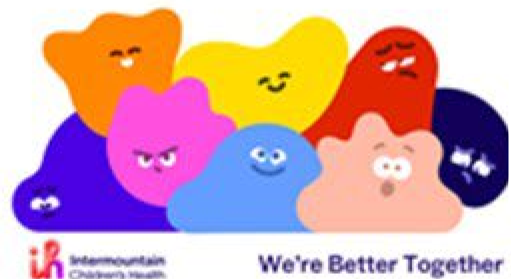
Date: _

Time: _

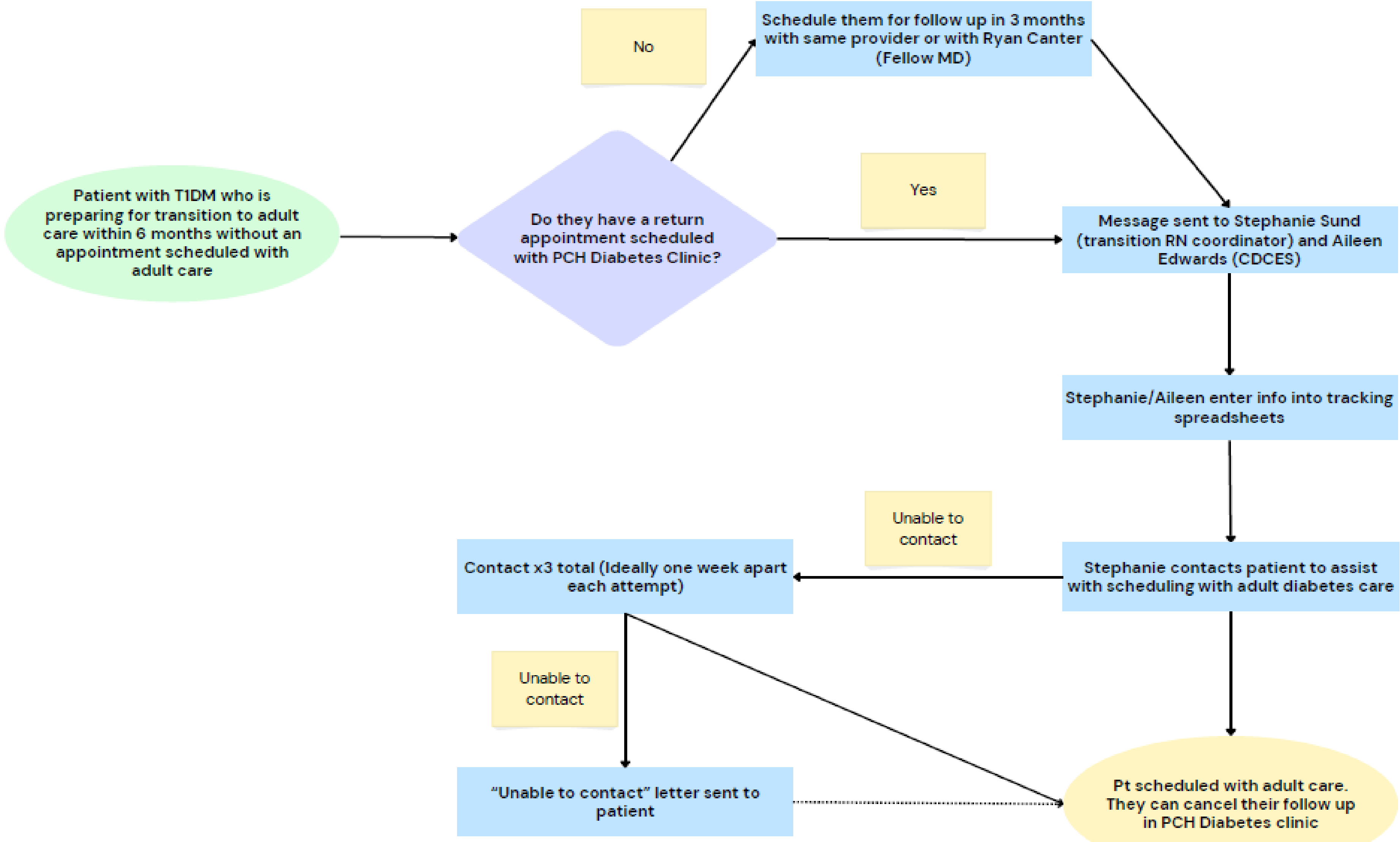
- Nurse care coordinator contacting patients based on message logs

PDSA 3-6: Tracking adult appointments in the EMR





Transitioning T1DM Patients Without Scheduled Adult Care



PDSA 7:

- Healthcare Transition Nurse Care Coordinator flyer

Stephanie Sund

Nurse Care Coordinator

Work Cell:
385-266-5149

Email:
stephanie.sund@imail.org

Hello!

I am here to help guide you on your journey from pediatric to adult healthcare!

About Me

I am a pediatric nurse and worked with Type 1 Diabetes youth for over 20 years. I have a strong passion in overall well-being, self-management skills, self-advocacy, and topics related to healthcare transition. I am also trained in health coaching, supporting goal setting along a youth's healthcare transition journey. I bring a special care, connection, and love to youth and their families.

How Can I Help?

I can work with you in-between clinic visits to set goals!

- Navigating the healthcare system (finding an adult provider, insurance, etc.)
- Building confidence in self-management

I work in the diabetes clinic

Fun Facts About Me

I have over 50 house plants!
I am an Army Veteran
I love to garden
I have 4 kiddos!

Intermountain Children's Health Teen to Adult Healthcare Transition Program

PDSA 8: Transition skills checklist

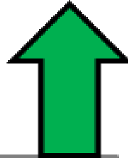
- Establishing standardized CDCES transition education
  - Introduction, Intermediate, Advanced, Graduation
- Focused on graduated responsibility and continued discussion of transition as a moving target

Transition Education Outline- Introduction (give at 15 years old or older)

Discuss Transition Program

- Why start now?
  - Becoming fully independent takes time. Many young adults wish they had started these skills sooner, so they were better at them before they moved away from home, went to college, went on missions, etc.
  - Our goal is to help you to feel comfortable by the time you are 18 and graduated from high school. That is when we encourage you to transfer to an adult provider.
- We will use Readiness Assessments and education at every visit to help prepare you.

Progress



Pediatric to Adult Healthcare Transition
Adult Appointment Documentation

Percentage of elibible patients with documented adult visit scheduled

80
70
60
50
40
30
20
10
0

PDSA 1: Process flow map reviewed with staff & hung in clinic ↓

PDSA 2: Adult appt message log requested ↓

PDSA 3: Steph calling pts to f/u ↓

↑ PDSA 4/6: Autotext created for message logs

PDSA 5: Sending UTC letters to pts ↓

← PDSA 7: add transition RN paper to folders

← PDSA 8: Transition skills education pilot

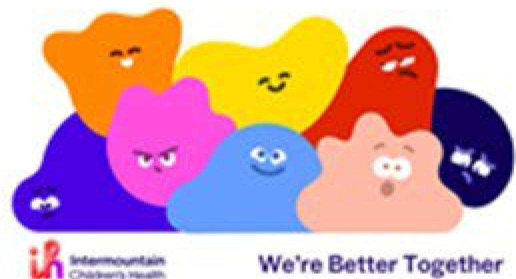
3/24 (n=00)
4/24 (n=00)
5/24 (n=21)
6/24 (n=16)
7/24 (n=06)
8/24 (n=06)
9/24 (n=10)
10/24 (n=06)
11/24 (n=04)
12/24 (n=00)
1/25 (n=06)

Monthly percentage

Percentage with adult visit scheduled
Goal
Percentage trend

Going Forward

- Eliciting patient feedback
  - QR code on transition education
- Identifying patients lost in process
  - How can we avoid this?



Future: Transition Summary

Clinical Summary for Adult Diabetes Care Team

Intermountain Children's Health

Patient Name ____ **Date of Birth** ___________

Diabetes Type

☐ Type 1 ☐ Type 2 ☐ Other ___________________________________

Date Diabetes Diagnosed __________________________________

Diabetes Complications/Other Chronic Conditions

____

____

Social/Mental Health

____

Last PHQ-9:_____ Last GAD:_____ Therapy? ☐ Yes ☐ No

Mode of Insulin Therapy

☐ Insulin Pump ☐ Multiple Daily Injections ☐Other _____________________________

Continuous Glucose Monitoring? ☐ Yes ☐ No Note:_________________________________

Recent Clinical Exam/Test Results

Blood Pressure (Date)	Retinopathy Screening (Date)	
Current Weight (Date)	Height (Date)	BMI (Date)

Most Recent Laboratory Values

Date	A1c	Urine Microalb/Cr Ratio	LDL/ Triglycerides	TSH	Celiac screening

Final Pediatric Appointment Date:_______________

First Adult Appointment Date:_________________

Patient Signature and Date

____

Referring Physician Signature and Date

____

Contact Information 801-662-1640 option 7

Opportunities & Challenges

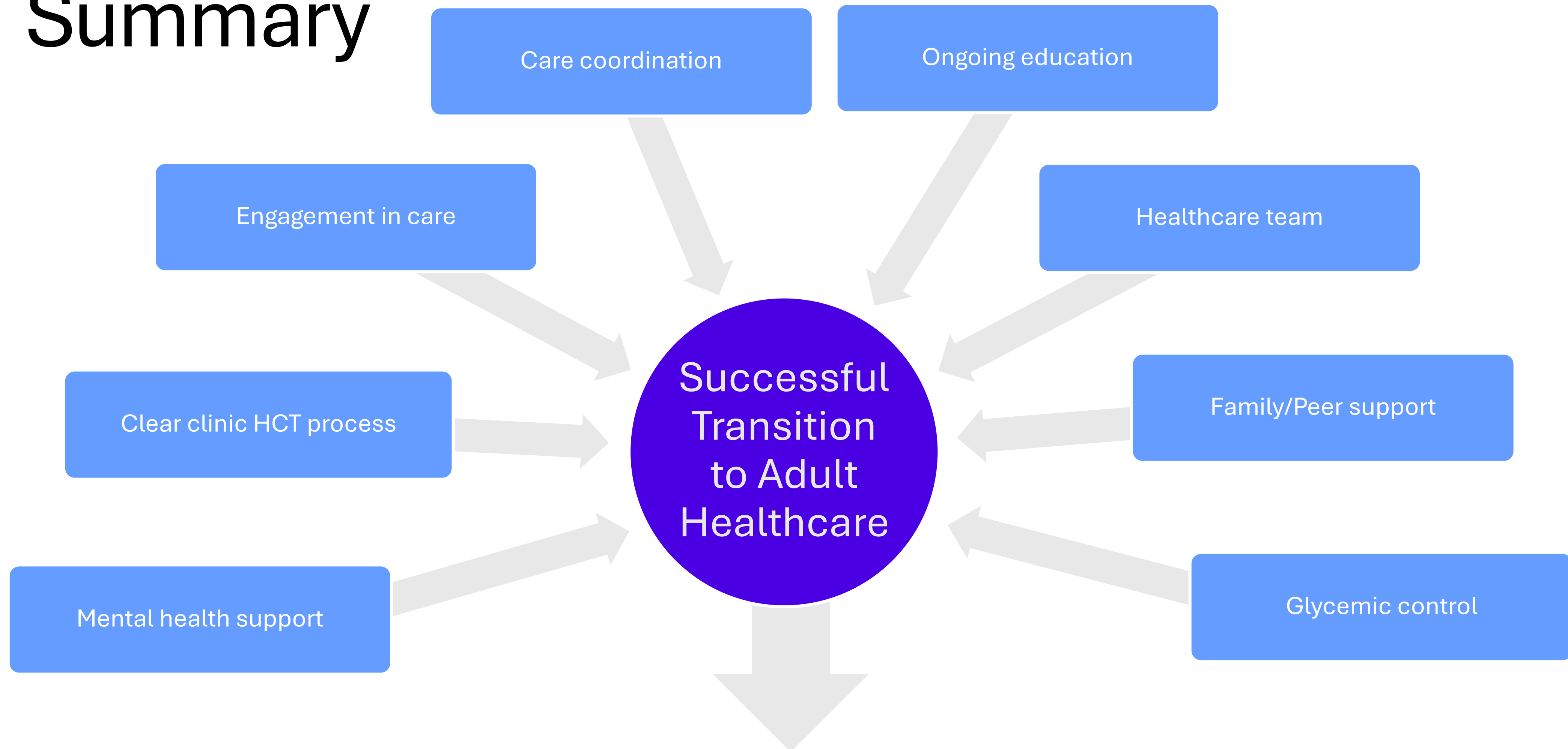
- Building a robust transition program
  - Lots of ideas/areas for change
- Staying focused on SMART AIM
- Adult patients seen over large geographical area by different providers (endo, family med, adult medicine)

Patient Story

18-year-old patient with Type 1 Diabetes

- Never made adult appointment after leaving the pediatric clinic
  - Ran out of insulin and supplies
- Transition Coordinator helped them get refills and make adult appointment
  - Appointment was not for 6 months
  - Recommended one more follow-up visit with pediatric diabetes clinic
- Transition completed to adult provider
- Pt thankful for assistance
  - Reports if Stephanie had not reached out, she may have taken a much longer time to transition
  - May have rationed her insulin leading to poor control and risk of complications

Summary



Continuity of care
Post-transition glycemic control
Avoidance of complications
Patient & family satisfaction

We're Better Together

HEALTH
UNIVERSITY OF UTAH

Questions/Comments