



ACCESS TO
CLINICAL CARE
CHANGE PACKAGE

NOVEMBER 2020



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INTRODUCTION

A change package is a document that describes the improvement methodology for a clinical or operational process.

It includes a collection of ideas and resources that have a high likelihood of resulting in system improvements. These ideas have either been tested by a Learning Collaborative, sourced from evidence-based research literature, or developed by experts in the field. The change package is intended to be a pragmatic guide of best practices, testable ideas, tools, and strategies that can be adapted to a new setting, thereby

accelerating implementation. The Access to Care Change Package represents shared learning from seven clinical centers participating in the T1D Exchange Quality Improvement Collaborative (T1DX-QI). This document aims to give a strong framework for successfully implementing the elements described to reliably implement interventions targeting access to care in a variety of clinical practice environments.

HOW TO USE THIS CHANGE PACKAGE

This document should be used by teams who are seeking ideas for changes to test for improvement efforts. It is best used in combination with other tools, including skills and experience with quality improvement methodology.

Clinical sites should consider the following to determine readiness to implement a change package:

- Strategic alignment with institutional goals
- Identification of a champion and motivated team
- Consensus around the relevance of project aims and desire to implement change
- Development of a specific, measurable, achievable, realistic, time-bound (SMART) aim
- Personnel with skills to map existing clinical processes, identify potential failures and opportunities
- Organizational willingness to try small tests of change (PDSA cycles); adapt what works and abandon what doesn't
- Personnel with analytic capabilities to measure and display data over time for learning
- Infrastructure to spread successful interventions to eligible clinic population and sustain over time
- Partnership with patients and families to increase patient engagement and readiness

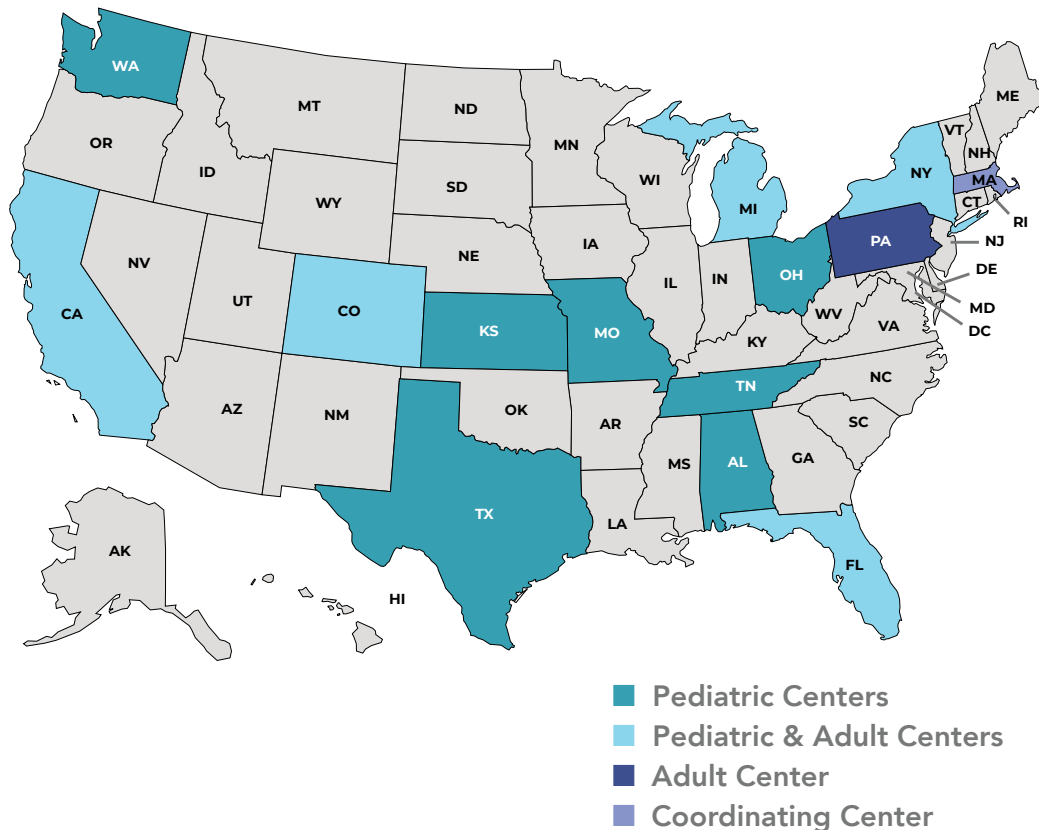
BACKGROUND & MODEL

The T1D Exchange is a Boston-based nonprofit with the mission to improve outcomes of people with type 1 diabetes (T1D) through facilitating better care and accelerating new therapies. The Exchange was created in 2009 and has generated extensive capability to accelerate research, drug, and device development, including a network of 80+ adult and pediatric practices, 28,000+ patients, a data coordinating center, a biorepository, and an online network of patients interested in participating in research. The Exchange has created the largest registry of patients with T1D in the US and has collected information about health outcomes for this population since enrollment began in 2010.

The T1D Exchange facilitated a Quality Improvement Collaborative starting with ten clinical sites (clinic site profiles in Appendix A) to increase the capacity of quality improvement in their type 1 diabetes practice sites. Originally, there were seven pediatric and three adult sites from different geographical locations in the United States¹. The Collaborative has now expanded to 25 clinical sites and continues to incorporate new centers to build and learn from each other. (Figure 1)

In designing the Collaborative, the T1D Exchange mobilized endocrinologists, patient/families living with T1D, information technology experts, diabetes educators, and quality improvement

FIGURE 1 T1D EXCHANGE QI COLLABORATIVE MEMBERS



experts amongst others to design broad “interventions” that can result in the highest impact for patients and lead to improved organizational quality improvement culture². Participating organizations received quality improvement training from T1D Exchange staff and Institute for Healthcare Improvement (IHI) faculty. The teams engaged in monthly calls, completed a QI Organizational Readiness survey, received feedback from the collaborative faculty leaders, and shared resources using an online learning platform, Trello.



ACCESS TO CARE

Regular outpatient appointments and medication management are crucial for patients with type 1 diabetes, and the American Diabetes Association (ADA) recommendation is for pediatric patients to be seen at least four times per year³. Unfortunately, many patients fail to receive the services they need because of barriers to access.

Barriers to access include time of travel, cost of travel, the concern of missing work or school, and childcare for other family members. Telemedicine may help alleviate these barriers. Benefits of telemedicine are reduced time and travel to attend appointments, increased attendance rates, decreased patient costs, and increased patient satisfaction⁴. Glycemic outcomes, such as hemoglobin A1c results, have been similar to those experienced with in-person visits, thus demonstrating that telemedicine does not hinder glycemic management amongst reported populations⁵. Telemedicine, however, is not always accessible for reasons including adequate reimbursement, state licensure requirements, consent, privacy and security⁶. Consequently, diabetes clinics have taken advantage of relaxed telemedicine restrictions during the recent 2020 COVID-19 pandemic and tested and observed the rapid implementation of telemedicine in the diabetes community. This natural experiment in population based telemedicine during the pandemic is an active area of evaluation.

Transition from pediatric to adult clinical care is another barrier to care continuity. The transition can occur at a variety of ages, but generally

begins at ≥ 18 years of age, and is instigated by either patient or provider. Many pediatric patients struggle in taking that next step to transition to an adult provider due in part to challenges navigating a new health system, life changes including starting college or new jobs, and additional competing priorities⁷. They have seen their pediatric endocrinologist for many years and have established a trusting relationship with them, making transitioning care to a new office and provider daunting. This contributes to patients discontinuing care, or longer durations between routine care. In response, pediatric diabetes clinics have established transition programs to help their patients transition their diabetes care. Highlights of these programs have included utilizing transition coordinators to establish the process; implementing “transition clinics” to prepare patients for adulthood; starting discussions at an early age to improve transition ease; monitoring education-based needs, and providing adult clinic provider and clinic recommendations⁸⁻¹⁰.

Type 1 diabetes is a complex disease that requires consistent self-management, and this can be overwhelming for patients and caregivers. Patient factors, such as socioeconomic status, health literacy, and social support can make success in managing their disease even more difficult and can play a large role in decreased appointment attendance¹¹. Sometimes, specific patients may need additional extra help navigating the health care system to increase their perceived value of the visit. The Patient Navigator (PN) role has been designed to improve patient engagement in the management of their health. Patient navigation

improves visit attendance, clinic engagement, and glycemic control¹². Diabetes clinics have started to use this PN role to assist underserved patient populations in navigating barriers to care, provide better access to resources, and establish trust between the clinic and patient¹³. Not all clinics have PNs.

Many of the above barriers affect patient attendance and provider continuity in diabetes care. They can contribute to “Lost to follow up” (LTFU), which refers to patients who were once active patients (or research participants) attending a clinic for regular follow up but became “lost” to routine appointments. This is a frequent problem in research and the clinical settings and maybe detrimental to the patient, who is at risk for both acute complications: severe hypoglycemic (seizures, loss of consciousness) and hyperglycemic (diabetic ketoacidosis) events that can lead to hospitalization and death, as well as long-term complications from missed opportunities for screening and prevention³. Prevalence of LTFU in



type 1 diabetes is not well described, but ranges from 10-30% in the clinics who have begun tracking this metric¹⁴⁻¹⁷. As an example of what application of quality improvement methods can do in a specialty clinic, one pediatric endocrine clinic was able to reduce their LTFU rate for congenital hypothyroidism, another condition that requires regular follow up to ensure optimal outcomes, from 12% to <6%¹⁸.

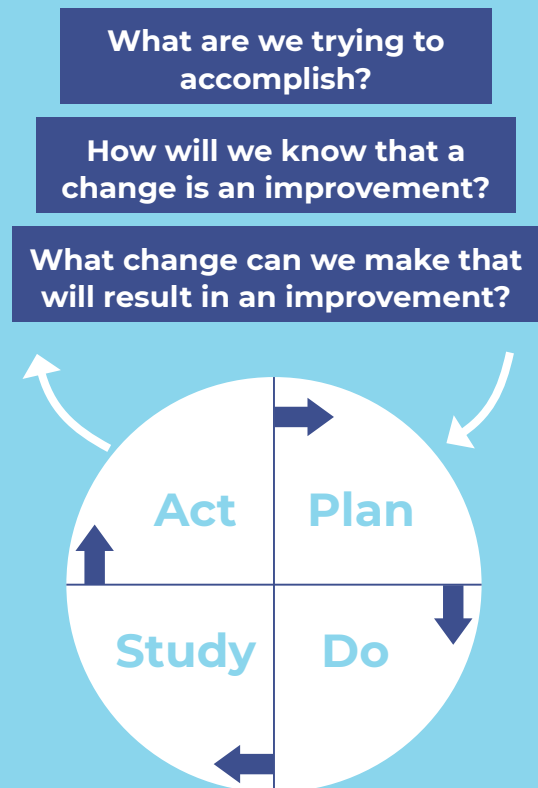
It is important to understand the problem of access to care and the potential health consequences for patients who do not regularly attend clinic appointments. This initiative identifies barriers to access that may shed light on health inequities embedded in our healthcare system. Low clinic attendance due to poor access can negatively impact medical clinics through provider idle time and lost revenue. It is important for clinics to evaluate and design targeted interventions to address this problem.

T1D EXCHANGE QI MODEL

The T1D Exchange QI Collaborative model is an adaptation of the Institute for Healthcare Improvement's (IHI) Breakthrough Series Model. This change package was developed by the Collaborative faculty and team members. It includes test ideas employed by the different participating sites and their experiences in building internal quality improvement capacity. The major change themes identified were QI team structure, QI foundation, test, and spread test ideas. This publication and Collaborative is possible by the generous support of The Leona M. and Harry B. Helmsley Charitable Trust and the project is led by T1D Exchange Boston.

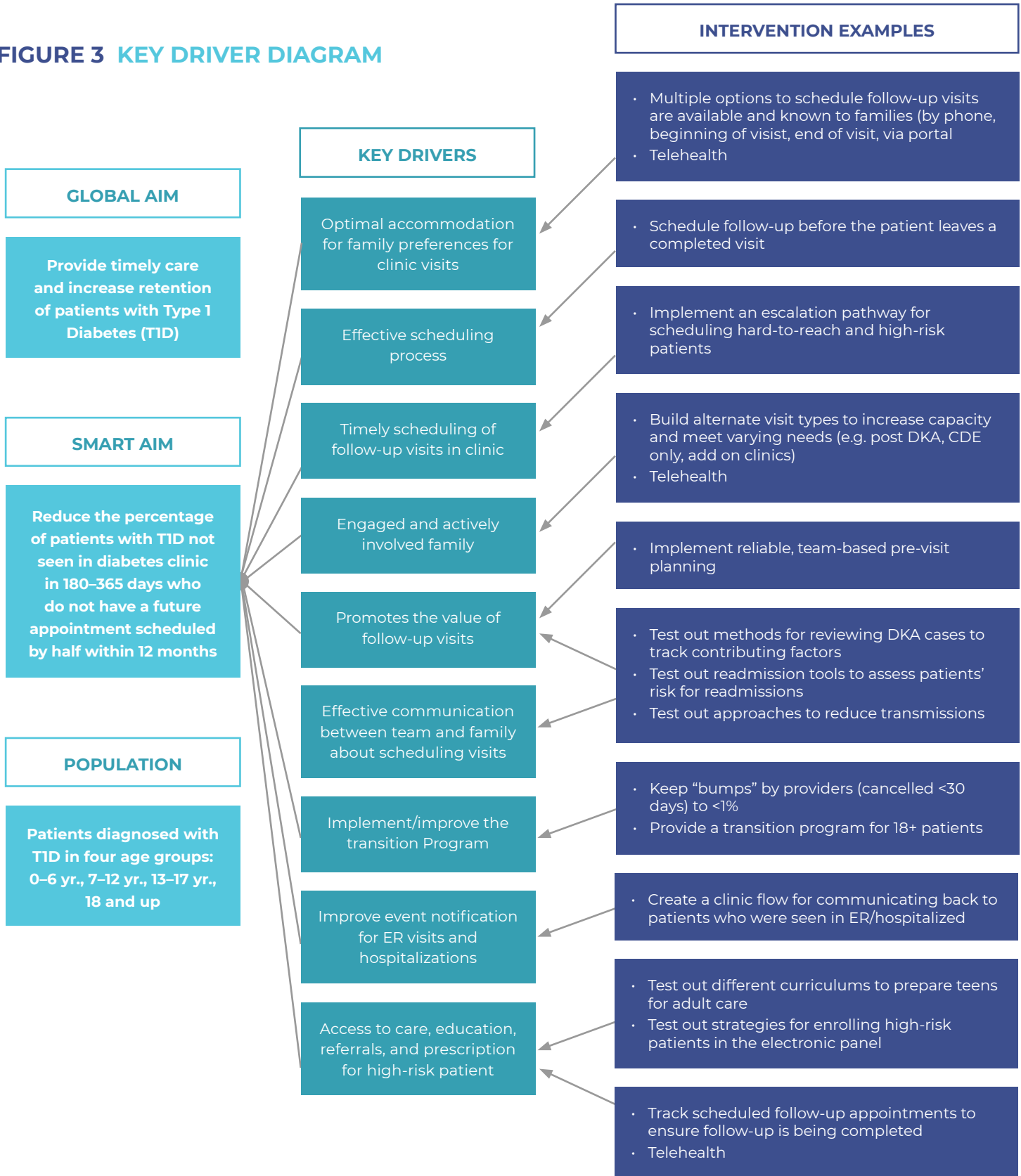
Hospital administrators, clinicians and administrative staff caring for people living with type 1 diabetes are the intended audience for this report. Quality improvement experts, advocacy groups, and researchers working to improve T1D outcomes will also find sections of this report useful. To use this change package, review the different tested change ideas with your improvement team, and determine possible ideas to test or adapt to your organization. These change ideas can be tested quickly using the Institute of Healthcare Improvement model of improvement¹⁹.

FIGURE 2 INSTITUTE FOR HEALTHCARE IMPROVEMENT MODEL OF IMPROVEMENT



KEY DRIVER DIAGRAM

FIGURE 3 KEY DRIVER DIAGRAM



A Key Driver Diagram (KDD) is a theoretical model for improving the process.

The left side of the figure includes a **SMART** (specific, measurable, achievable, realistic, time-bound) aim. The aim should be a precise statement of what the team hopes to achieve as determined by measurable changes that can be accomplished in a given time frame with available resources (people, time, support).

The center column lists **key drivers** that are essential components for the aim to be accomplished.

For access to care, these include:

1. Provide optimal accommodations for patients/families for routine clinic visits (i.e. provider continuity, appointment locations, appointment date/times, etc.)
2. Maintain an effective scheduling process for patients/families to easily schedule appointments
3. Encourage timely scheduling of follow-up visits by establishing clinic processes that encourage patients/families to schedule their next follow-up at their current appointment
4. Provide optimized clinical care that creates engaged and actively involved family and clinical team members (i.e. different appointment types, phone support, device data analysis, patient check-ins, etc.)
5. Create a positive clinical atmosphere that promotes the value of routine follow-up visits
6. Ensure effective communication between the clinical team and family about scheduling visits, and establish standard recommendations to reduce provider variance
7. Implement/improve the transition from pediatric to adult care
8. Improve event notification for ER visits and hospitalizations and implement a plan to have staff ensure patients/families have appropriate follow-up care scheduled
9. Ensure access to care, education, referrals, and prescription for high-risk patients/families

Lastly, the right-hand column lists potential **interventions**, or testable ideas, that relate to each of the drivers.

PROJECT INTERVENTIONS AND KEY LEARNINGS

Interventions to improve access to care in patients living with type 1 diabetes can be reliably implemented with clinically significant results. Teams customized implementation of elements reflected in key drivers to meet resources of the clinical care environment in which the team operates. The following tables below outline change concepts, testable ideas, interventions, results, and challenges, assessed at different clinical sites.

PROCESS CATEGORY: TIMELY SCHEDULING OF FOLLOW UP VISITS

CHANGE CONCEPT: Prioritize lost to follow up patients by utilizing clinic resources to reach out to patients and get them scheduled.

TESTABLE IDEA	INTERVENTION	RESULTS/CHALLENGES
Run reports to identify LTFU patients. Identify staff to make phone calls to patients and get them scheduled for the soonest follow-up appointment.	Patient Outreach (in clinic) to LTFU population	High success rate with individual phone calls to LTFU patients. Better identification of the active patient population. Clinics may have limited resources to make additional outreach phone calls. Success in getting patients scheduled can vary and involves the investment of staff time to identify these patients.

PROCESS CATEGORY: TIMELY SCHEDULING OF FOLLOW UP VISITS

CHANGE CONCEPT: Improve strategies during current clinic appointments to schedule patients for their next follow-up appointment while they are already in the clinic.

TESTABLE IDEA	INTERVENTION	RESULTS/CHALLENGES
Alter clinic workflow to schedule patients for their next follow up appointment as they are checking in for their current appointment.	Scheduling next follow up appointment during check-in	Success with established processes for getting patients scheduled at check-in or check-out but must be implemented routinely by check-in staff for best results. Clinics are often busy with many patients and tasks, making it difficult to schedule future appointments at check-in. Physicians and other staff have limited time to schedule during an appointment. Patients often walk out of the clinic before getting the next follow up scheduled.

PROCESS CATEGORY: APPOINTMENT AVAILABILITY

CHANGE CONCEPT: Addition of appointment types that provide more availability for patients to schedule.

TESTABLE IDEA	INTERVENTION	RESULTS/CHALLENGES
<p>Creation of new appointment types based on your clinic and patient’s needs. Example: “Education/Check-In Visit”, for those that just need a quick review with a nurse.</p>	<p>Created new visit types to provide more available slots</p>	<p>The addition of visits allowed patients more options to schedule an appointment that fit their needs.</p> <p>The utilization of these visit types is subject to change based on how busy the clinic is.</p> <p>Requires additional training for clinic staff to schedule and conduct appointments correctly</p>

PROCESS CATEGORY: SCHEDULING SYSTEM

CHANGE CONCEPT: Improvement of clinic scheduling system to reduce patient frustration and encourage scheduling outside of clinic.

TESTABLE IDEA	INTERVENTION	RESULTS/CHALLENGES
<p>Establish internal clinic initiatives that call patients outside of an external scheduling system</p> <p>Promote patient portal scheduling</p>	<p>Change scheduling systems to promote patient scheduling. This includes adjusting the phone tree for easier access to scheduling, education for schedulers on how to best provide availability for patients, and making system changes to scheduling to better prioritize patient needs (ex: patients in DKA need quick appt.)</p>	<p>Streamlining of scheduling systems allows for easier access for patients to schedule.</p> <p>Clinics differ in internal vs. external scheduling systems. External scheduling systems (hospitals) can be more difficult to promote system change. Internal scheduling systems can have limited resources, causing high wait times, and patient frustration. Patient portals may not always be intuitive or easy to use.</p>

PROCESS CATEGORY: TRANSITION PROGRAM

CHANGE CONCEPT: Develop an established transition program for patients 18+ to transition from a pediatric clinic to adult clinic

TESTABLE IDEA	INTERVENTION	RESULTS/CHALLENGES
<p>Clinics develop a transition protocol, materials, and visit types around transition preparation for adolescents</p>	<p>Establish a transition preparation pathway to identify adolescents approaching graduation from pediatric programs.</p> <p>Schedule adult diabetes visit prior to last pediatric care visit.</p> <p>When possible, call to confirm that a visit in adult care context was completed.</p>	<p>Transition program established in two clinics. Prepares patients for adult clinic, reviews T1D concepts and better manages 18+ clinic population with the highest LTFU rates.</p> <p>The development of a program takes staff resources, materials, and finances. Transition programs have been relatively novel in the T1D pediatric population, so resources from other chronic conditions can provide a template²⁰ to aid clinics in design and implementation.</p>

PROCESS CATEGORY: HIGH-RISK PROGRAM

CHANGE CONCEPT: Design systems and reporting that identify high-risk patients and provides additional resources for this patient population.

TESTABLE IDEA	INTERVENTION	RESULTS/CHALLENGES
<p>Train scheduling staff to provide outreach and scheduling assistance.</p> <p>Utilization of in-clinic social work and psychology personnel to provide outreach to patients.</p> <p>Hiring of High-Risk Patient Navigator to provide additional scheduling outreach and navigate patient barriers to attending appointments.</p>	<p>Centers with access to SW, psychology defined referral processes and standard approach for evaluation</p>	<p>High-Risk program has been established at 3 sites to better manage and provide resources to high-risk population who struggle to make and attend appointments.</p> <p>SW/Psychiatry staff can be limited in the clinic and cannot meet with or manage all high-risk patients.</p> <p>Not enough funding for some clinics to hire a high-risk patient navigator.</p>

PROCESS CATEGORY: ADVERSE OUTCOME REPORTING

CHANGE CONCEPT: Improve event notification for ER visits and hospitalizations and implement a plan to have staff ensure these patients have appropriate follow-up care scheduled

TESTABLE IDEA	INTERVENTION	RESULTS/CHALLENGES
<p>Review the list of patients reviewed for Diabetic Ketoacidosis (DKA) monthly to identify contributing factors, SW assessment</p> <p>Improve event notification for ER visits and hospitalizations and implement a plan to have staff ensure these patients have appropriate follow up. Test and implement effective methods to engage high-risk patients who have not been seen in more than 90 days</p>	<p>Test out methods for reviewing DKA cases and track contributing factors</p> <p>Test out readmission tools to assess patients' risk for readmissions and test out approaches to reduce readmissions</p>	<p>ER visits reduced progressively across 3 sites.</p> <p>Sites reported the following challenges: staffing constraints, tedious chart reviews, difficulty in capturing weekend admissions</p>

PROCESS CATEGORY: TELEMEDICINE

CHANGE CONCEPT: Video/Audio home telemedicine

TESTABLE IDEA	INTERVENTION	RESULTS/CHALLENGES
<p>Establish initiatives to adopt telemedicine as an option</p> <p>Develop protocol/workflow and train staff on best practices to make telemedicine effective</p> <p>Communicate availability of telemedicine to all patients</p> <p>Promote the use of technology among patients for data downloads before telemedicine appointment</p>	<p>The addition of virtual appointments to allow for easier access to routine clinic appointments</p>	<p>All sites transferred some or all their visits to telemedicine during COVID 19 pandemic.</p> <p>Telemedicine involves multiple staff members to keep the process streamlined and utilize more resources than in-person appointments.</p> <p>Some challenges reported include: many patients not comfortable with technology and had difficulty accessing telehealth platforms, challenges downloading data at home before telehealth visit, and the administrative burden associated with telehealth visit was widely reported across sites</p> <p>Accuracy and relevance of the data from patients as data may not be current at the time of care.</p>

RESULTS

Results below are from seven sites who participated in monthly calls, learning sessions, and completed numerous rapid improvement cycles (Plan-Do-Study-Act cycles). The sites are listed below:

- Cincinnati Children's Hospital Medical Center, University of Cincinnati, OH
- C.S. Mott Children's Hospital Pediatric Diabetes Clinic, University of Michigan, Ann Arbor, MI
- Nationwide Children's Hospital, Ohio State University, Columbus, OH
- Barbara Davis Center for Diabetes, University of Colorado, Aurora, CO
- Texas Children Hospital, Baylor College of Medicine, Houston, TX
- Children's Mercy - Kansas City, University of Missouri - Kansas City, Kansas City, MO
- Lucile Packard Children's Hospital, Stanford University, Palo Alto, CA

COLLABORATIVE LOST TO FOLLOW UP INTERVENTION

The objective of the lost to follow up (LTFU) intervention was to reduce the LTFU rate in pediatric patients (age <18 years). The analysis included 14,790 patients across seven sites from the T1D Exchange Quality Improvement Collaborative who self-enrolled in the LTFU workgroup. Plan-Do-Study-Act (PDSA) cycles were developed during monthly workgroup calls to discuss data and selected site interventions. Patients < 18 years of age living with type 1 diabetes, who had been seen at least one time in the last 365 days were included in this cohort. "Lost to Follow Up" was defined as having their

last clinic visit 180-365 days ago and not having a future appointment scheduled. Successful application of QI methodologies resulted in improvement of LTFU across all ages. With a reduction to <4%, 156 youth were proactively reengaged to diabetes care (Figure 4). A1c data also displayed a correlation between LTFU and A1c. Those with higher A1c's had an increased interval of days between visits (Figure 5). Continued follow-up of this population will focus on identifying and overcoming barriers to LTFU and assess which interventions had the biggest impact.

FIGURE 4 LOST TO FOLLOW UP RUN CHART – GROUP RESULTS

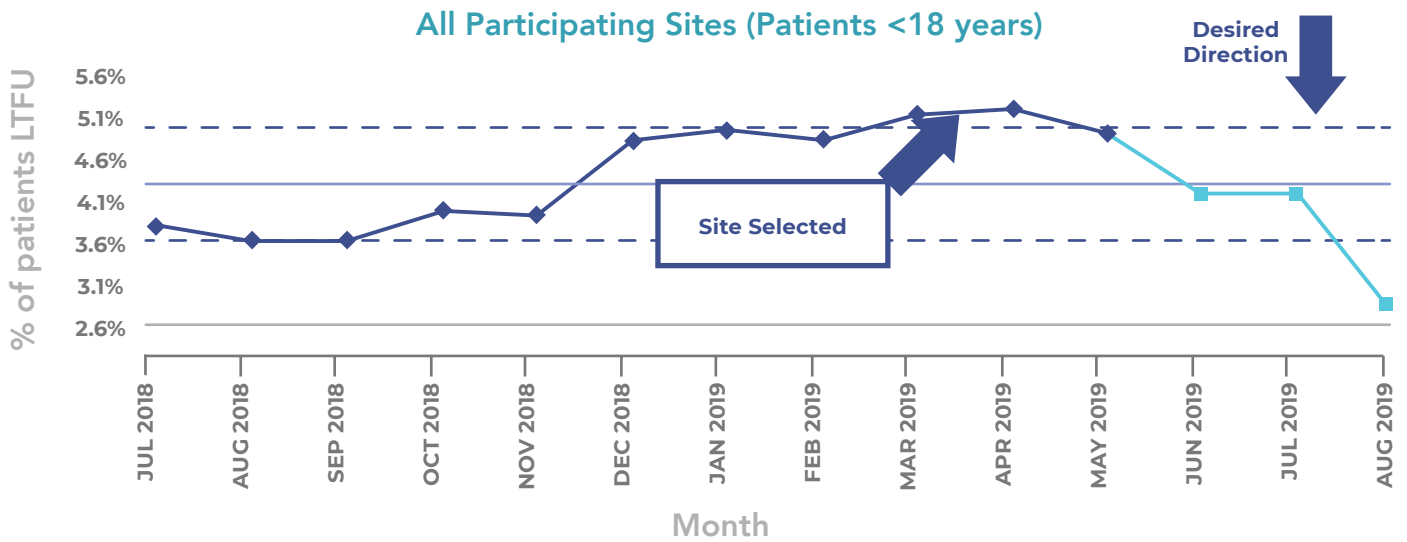
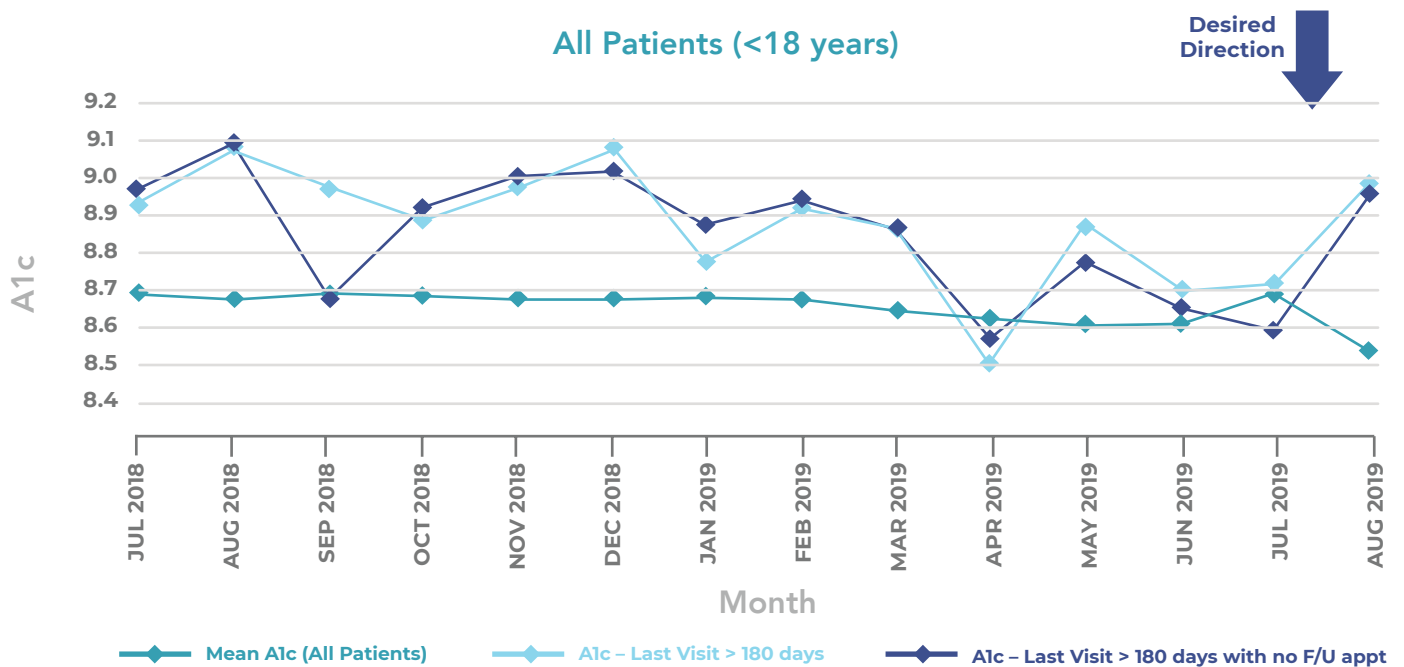


FIGURE 5 LOST TO FOLLOW UP AND A1C RUN CHART – GROUP RESULTS



BARBARA DAVIS PATIENT NAVIGATOR INTERVENTION

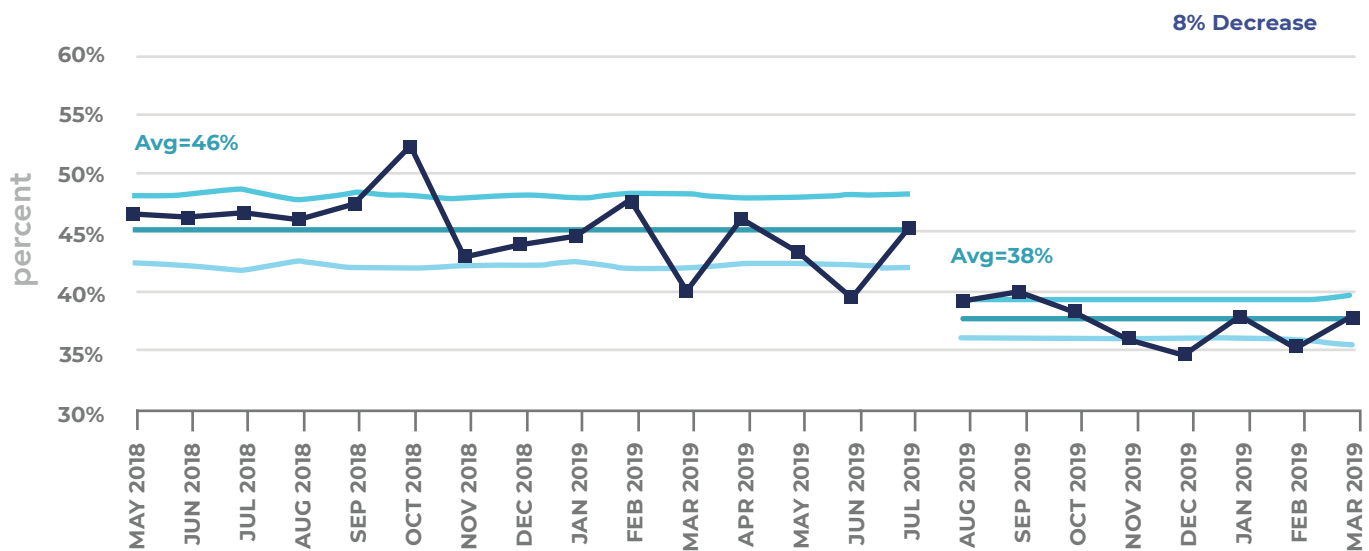
The Barbara Davis Center added a Patient Navigator (PN) to assist in providing extra care to patients at high risk for poor outcomes. This position uses reporting tools to identify patients and reach out to them individually to schedule appointments and improve continuity with their preferred provider. The PN also uses this contact to address barriers to appointment attendance and perform pre-visit planning to maximize the value of clinic attendance for the patient and their family.

The BDC set “high risk” criteria to identify 10-15% (current n=502) of the population thought to be in most need of these interventions. Criteria include A1c $\geq 12\%$; multiple no shows or late cancellations; multiple DKA / severe hypoglycemic hospitalizations; social work

involvement; substance abuse; or insurance coverage issues. An FYI is added to each chart to facilitate reporting.

In 12 months, the PN made over 1,000 scheduling calls to high-risk patients, with 45% leading to a visit being scheduled during the call. About 75% of these patients currently have a future follow up appointment scheduled, a 25% increase from baseline. The PN also collected 333 pre-visit planning questionnaires and identified top areas needing solutions as 1) Education/resources; 2) Diabetes Burnout; and 3) CGM/Supplies. The PN’s success is measured by the patient’s increased perceived value of clinic visits and improved engagement with families. High-risk patients living with T1D population decreased by 8% following the intervention (Figure 6).

FIGURE 6 BDC PEDS HIGH RISK

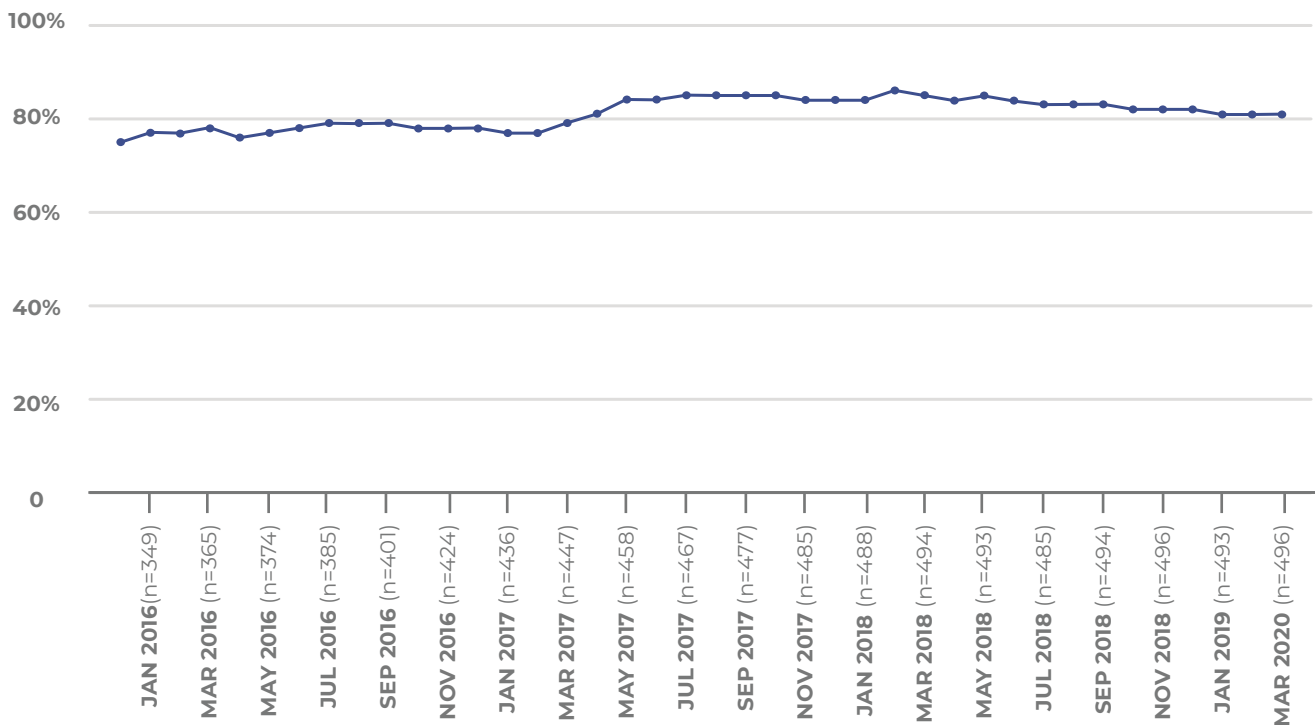


CINCINNATI CHILDREN’S: TRANSITION PROGRAM

CCHMC Diabetes Center developed and implemented a multifaceted Transition preparation Program to support successful transfer from a pediatric to an adult health care provider. Following guidance from national standards^{20–22}, a transition policy sets expectations for developmentally appropriate shared responsibility for care between pediatric patient and adult caregiver, ultimately culminating in health navigation skills required for graduation into adult care. Starting from age 12, youth with diabetes are offered time alone to practice speaking independently to their diabetes health care provider, and offer opportunity to discuss any sensitive topics

relevant to adolescent health. The electronic health record includes prompts for providers to address relevant anticipatory guidance topics (screening and prevention, social supports, driving safety, preparation for pregnancy, substance use, etc.) over time. Starting at age 15, a formal transition readiness assessment, READDY²³ is offered annually. Diabetes educators and social workers use patient responses to build competency and confidence in self-management skills throughout adolescence. The focus of the Transition Program is learning and mastering skills until the time of transfer to adult clinic.

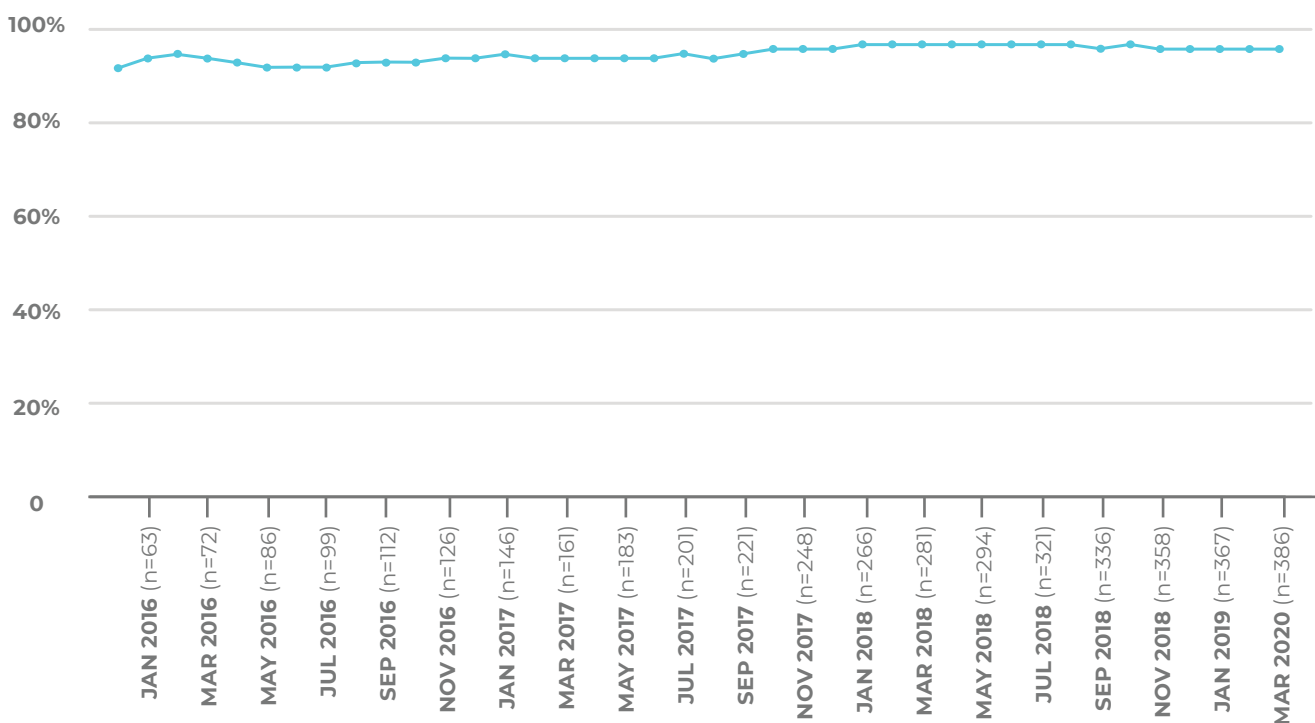
FIGURE 7 PERCENT OF DIABETES PATIENTS WITH A DOCUMENTED TRANSITION PLAN (AGE GROUP 16–18)



By age sixteen, an individualized transition plan will be created and documented in the electronic health record. Details of the plan will be updated and may include information about plans to work or go to college after high school, anticipated change in residence to a new city, and identification of an adult primary care provider. Transfer to an adult diabetes provider is individualized, but usually occurs between ages 18-24 as appropriate. In CCHMC, 80% of patients between the age of 16-18 years have

a documented transition plan (Figure 7) and 97% have a documented plan by the time they are 19 years or older (Figure 8). In preparation for transfer, a transition of care coordinator facilitates identifying an adult practice, securing an initial appointment, sharing summary of pediatric records, and following up to confirm that the adult visit is completed.

FIGURE 8 PERCENT OF DIABETES PATIENTS WITH A DOCUMENTED TRANSITION PLAN (AGE GROUP 19 AND OLDER)



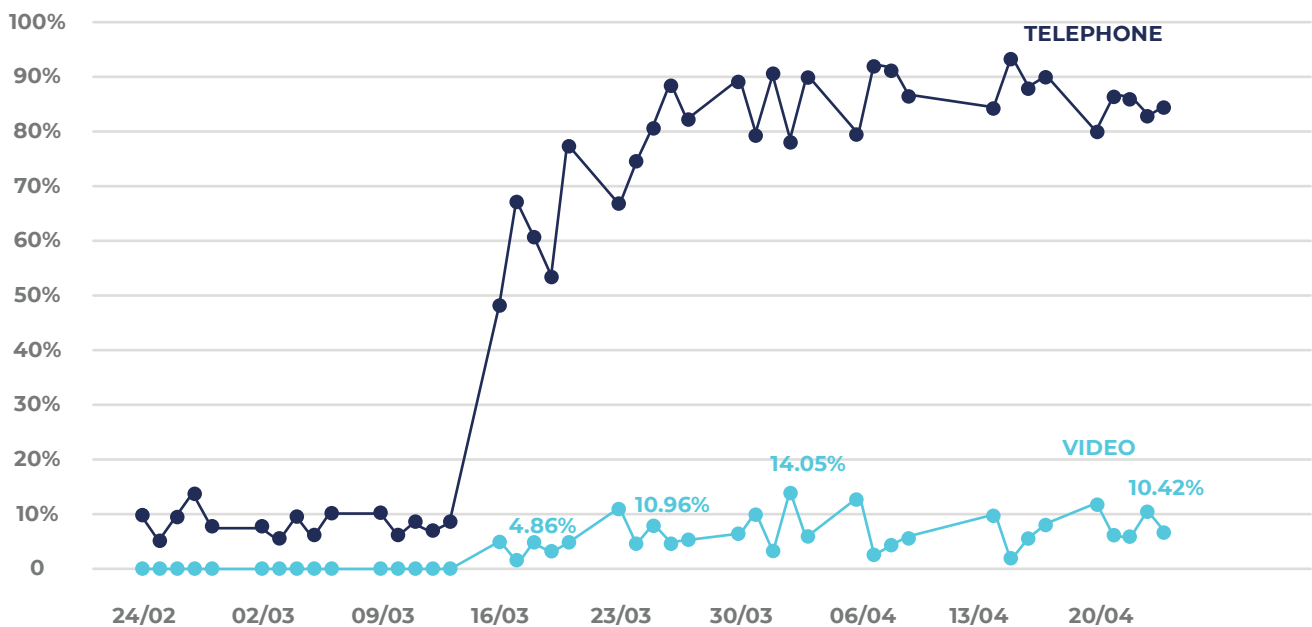
MICHIGAN MEDICINE PEDIATRIC DIABETES CLINIC TELEMEDICINE

Following the pandemic in March, Michigan Medicine Pediatric Diabetes clinic suspended most in-person visits and transitioned to telemedicine to continue providing access for patients. Before the pandemic, this site was working to integrate telemedicine care visits into clinical practice workflow and adjusting quickly to accommodate the change. The team identified the following primary drivers for successful implementation of telehealth;

- Access to technology tools
- Institutional support
- Buy-in from providers, patients, insurance coverage & policy
- Population management

Michigan Medicine developed a comprehensive protocol to guide the workflow, which captures roles of all members of the team; physicians, CDEs, administrative assistants, medical assistants, and billing specialists. Patient/Families are contacted one week before telehealth visits and reminded to download and share data with the clinic. Through this effort, telehealth visits increased from 9% in March to 90% in April (Figure 9) and the number of video visits progressively increased. A major challenge identified is the accuracy and relevance of the data from patient/families as data may not be current enough to be relevant at the time of care.

FIGURE 9 VID CLINICS - A PROPORTION OF TOTAL VIRTUAL OUTPATIENT ACTIVITY



BARBARA DAVIS CENTER TELEMEDICINE

The Barbara Davis Center program incorporates four pediatric endocrinologists that see patients through clinic-to-clinic telemedicine at five established partner sites; two in Wyoming, and three in Colorado. They are currently piloting one more partner site on the northeast Colorado border that will be added in 2021, providing better access to patients in Kansas and Nebraska.

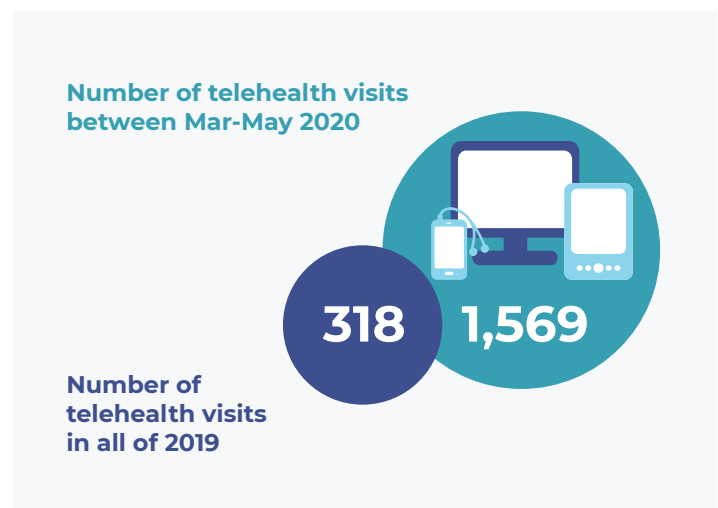
When the COVID-19 pandemic struck the U.S. in March 2020, the Barbara Davis Center rapidly transitioned all follow-up activities to home telemedicine, a newly available tool for diabetes care. While the Barbara Davis Center pediatric clinic has experience with clinic-to-clinic telemedicine for less than 10% of patients, this shift to at-home telemedicine for the majority of the clinic was a dramatic expansion from previous telemedicine efforts in a short period.

This sudden shift represents a watershed moment in U.S. healthcare. By rapidly training team members and developing new processes, the BDC continued delivering high-quality care that simultaneously allowed patients to reduce exposure to COVID-19. Moreover, this patient-centered care model reduces commute time, a frequently cited barrier to the guideline-recommended quarterly visits. As one of the largest pediatric diabetes centers in the world, patient/families travel from all parts of Colorado and outside states to attend in-person clinics. This home telemedicine paradigm is especially efficient at reducing missed school and work and expenses for gas, hotel, and childcare for families from rural communities.

In the first eight weeks following this transition, the Pediatric Clinic completed over 1,500 telemedicine appointments (compared to 318 in all of 2019 using the clinic to clinic telemedicine model) for patients throughout the state of Colorado, a clear marker of success (Figure 10). Even as the clinic begins to reopen for in-person appointments, the team anticipates a sustained demand for home telemedicine, with increases likely during the winter months when mountain roads make travel treacherous and if the country experiences resurgent waves of COVID-19. Read more about the BDC success with telemedicine here:

https://news.cuanschutz.edu/news-stories/why-havent-we-been-doing-this-forever?fbclid=IwAR3105t4LCzuBpLd_2aI7HrQN8HEXldlQcu7U1lx4PrTnX54KrlidPFapO7I

FIGURE 10 BARBARA DAVIS CENTER FOR DIABETES PEDIATRIC CLINIC



SUMMARY

Through a series of monthly calls and in-person learning sessions, seven clinical sites were able to share resources and use QI principles to test and implement changes to increase access to clinical care. Participants expressed value in the opportunity to collaborate with others to improve access to care for their patients.

RESOURCES

[Readmission Case Review and Analysis Tool](#)

[Follow-up survey after diabetes-related hospitalization \(Nationwide\)](#)

[Texas' Social worker assessment for recurrent DKA with solutions](#)

[Mapping and Redesigning Workflow How-to](#)

[Sample action plan for systematic response to ED/urgent care visits \(CCHMC example\)](#)

[CCHMC's QI Project to ensure patients have their next appt scheduled](#)

[AHRQ Patient & Family Engagement toolkit](#)

[Michigan Follow-up Protocol](#)

[Secrets to engage patients in portal use](#)



APPENDIX
OF ADDITIONAL
RESOURCES

APPENDIX A: COLLABORATIVE CLINIC PROFILE

CLINIC	ACTIVE PATIENT POPULATION	COLLABORATIVE TEAM MEMBERS	CONTACT PERSON
CINCINNATI CHILDREN'S HOSPITAL MEDICAL CENTER	2,166	Dr. Sarah Corathers Amy Grant Justin Masterson Dr. Jessica Kichler Carla Allen Francine Bugada Rachael Jones	Sarah Corathers <i>Sarah.corathers@cchcm.org</i>
C.S MOTT CHILDREN'S HOSPITAL PEDIATRIC DIABETES CLINIC, MICHIGAN MEDICINE	1,709	Dr. Joyce Lee Ashley Garrity Amy Ohmer Dr. Ram Menon	Ashley Garrity <i>ashleya@med.umich.edu</i>
NATIONWIDE CHILDREN'S HOSPITAL	1,696	Dr. Manmohan Kamboj Don Buckingham Heather Larson Ming Hong Bethany Glick Dr. Kajal Gandhi Dr. Kathryn Obrynba Natasha Childress Michael Smith	Don Buckingham <i>Don.Buckingham@nationwidechildrens.org</i>
BARBARA DAVIS CENTER, UNIVERSITY OF COLORADO (Adult)	2,564	Sarit Polsky	Sarit Polsky <i>sarit.polsky@ucdenver.edu</i>
BARBARA DAVIS CENTER, UNIVERSITY OF COLORADO (Peds)	3,712	Dr. G. Todd Alonso Sarah Thomas Dr. Shideh Majidi Katelin Thivener Jacqueline Carmer, CPNP	Sarah Thomas <i>Sarah.3.Thomas@cuanschutz.edu</i>

APPENDIX A: COLLABORATIVE CLINIC PROFILE continued

CLINIC	ACTIVE PATIENT POPULATION	COLLABORATIVE TEAM MEMBERS	CONTACT PERSON
SUNY UPSTATE, JOSLIN CENTER (Peds)	1,234	Dr. Roberto Izquierdo Margaret Greenfield	Margaret Greenfield <i>GreenfMa@upstate.edu</i>
SUNY UPSTATE, JOSLIN CENTER (Adult)	2,725	Dr. Ruth Weinstock Dr. Marisa Desimone	Margaret Greenfield <i>GreenfMa@upstate.edu</i>
CHILDREN'S MERCY – KANSAS CITY Kansas City, MO	2,159	Dr. Mark Clements Dr. Ryan McDonough Emily Dewit Melissa Newmaster Julie Kincheloe Heather Fiengold Jerin Wurtz Stephanie Wurtz Christen Williams	Ryan McDonough <i>rjmcdonough@cmh.edu</i>
UNIVERSITY OF PENNSYLVANIA	1,099	Mar Schutta Dr. Ilona Lorincz J Dr. Shivani Agarwal Jack Eiel Kathryn Gallagher	Ilona Lorincz <i>Ilona.Lorincz@pennmedicine.upenn.edu</i>
STANFORD UNIVERSITY (Peds)	945	Dr. Priya Prahalad Jeannine Leverenz Melissa Anderson	Jeannine Leverenz <i>jleverenz@stanfordchildrens.org</i>
STANFORD UNIVERSITY (Adult)	1,700	Phoebe Zhang Marina Basina	Marina Basina <i>mbasina@stanford.edu</i>
TEXAS CHILDREN'S HOSPITAL	1,893	Dr. Rona Sonabend Dr. Daniel DeSalvo Dr. Sarah Lyons Curtis Yee Rick Fernandez Selorm Dei-Tutu	Curtis Yee <i>cxyee@texaschildrens.org</i>

APPENDIX A: COLLABORATIVE CLINIC PROFILE continued

CLINIC	ACTIVE PATIENT POPULATION	COLLABORATIVE TEAM MEMBERS	CONTACT PERSON
WAYNE STATE UNIVERSITY Detroit, MI		Elizabeth Morrison Berhane Seyoum Ltanya Glass	Berhane Seyoum <i>bseyoum@med.wayne.edu</i>
UNIV. OF MIAMI, MILLER SCHOOL OF MEDICINE ADULT CLINIC Miami, FL (Adult)	1,709	Vendrame Francesco Lisania Cardenas	Vendrame Francesco <i>FVendrame@med.miami.edu</i>
UNIV. OF MIAMI, MILLER SCHOOL OF MEDICINE ADULT CLINIC Miami, FL (Peds)	450	Janine Sanchez Patricia Gomez Judy Ruth Waks	Janine Sanchez <i>jsanchez@med.miami.edu</i>
LE BONHEUR CHILDREN'S HOSPITAL, UNIVERSITY OF TENNESSEE Memphis, TN	600	Ahlee Kim Grace Bazan Blake Adams Amit Lahoti	Ahlee Kim <i>akim20@uthsc.edu</i> Grace Bazan <i>gracebazan@gmail.com</i>
CHILDREN'S HOSPITAL OF LOS ANGELES Los Angeles, CA	955	Brain Miyazaki Daniel Brimberry	Brain Miyazaki <i>bmiyazaki@chla.usc.edu</i>
COOK CHILDREN'S MEDICAL CENTER Fort Worth, TX	1,900	Paul Thornton Susan Hsieh Stephanie Ogburn Candice Williams	Susan Hsieh <i>Susan.Hsieh@cookchildrens.org</i>
UNIV. OF FLORIDA DIABETES INSTITUTE Gainesville, FL	800	Anastasia Albanese-O'Neill Janey Adams Jocelyn Dola	Anastasia Albanese-O'Neill <i>aalbanese@ufl.edu</i>

APPENDIX A: COLLABORATIVE CLINIC PROFILE continued

CLINIC	ACTIVE PATIENT POPULATION	COLLABORATIVE TEAM MEMBERS	CONTACT PERSON
SPECTRUM HEALTH, HELEN DEVOS CHILDREN'S HOSPITAL Grand Rapids, MI	1271	Jose Jimenez Vega Olivia G Docter Amy L Martinez	Jose M. Jimenez Vega <i>Jose.JimenezVega@helendevoschildrens.org</i>
RADY CHILDREN'S HOSPITAL San Diego, CA	1,504	Carla Demeterco Christine Byer-Mendoza Kim McNamara	Carla Demeterco <i>cdemeterco@rchsd.org</i>
SEATTLE CHILDREN'S HOSPITAL Seattle, WA	1,650	Malik Faisal Alissa Roberts Catherine Pihoker Kevin Blake Kathryn Ness	Malik Faisal <i>Faisal.Malik@seattlechildrens.org</i> Alissa Roberts <i>Alissa.Roberts@seattlechildrens.org</i>
NYU LANGONE HEALTH, PEDIATRICS New York, NY	450	Mary Pat Gallagher Jeniece Ilkottz Samantha Freeman Ebel, JD, MPH Yelena Chernyak, Irene Kagan	Mary Pat Gallagher <i>Marypat.Gallagher@nyulangone.org</i>
NORTHWELL HEALTH, COHEN CHILDREN'S MEDICAL CENTER Queens, NY	547	Jennifer Sarhis Allison Mekhoubad Aditya Bissoonauth Rashida Talib	Jennifer Sarhis <i>JSarhis13@northwell.edu</i>
UNIV. OF ALABAMA AT BIRMINGHAM Birmingham, AL	1,304	Mary Lauren Schmidt Jessica Lashaun Pryor	Mary Lauren Scott <i>mlscott@peds.uab.edu</i>

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