Kenney A, Chambers RA, Rosenstock S, et al. The Impact of a Home-Based Diabetes Prevention and Management Program on High-Risk American Indian Youth. The Diabetes Educator. 2016;42(5): 585-595. doi:10.1177/0145721716658357

For more information, contact Rachel Chambers, MPH (rstrom3@jhu.edu).

These materials are a part of the Compendium of Culturally and Linguistically Tailored Resources for Type 2 Diabetes Prevention, assembled by NORC at the University of Chicago under contract with the Centers for Medicare & Medicaid Services Office of Minority Health.

Together on Diabetes

A Diabetes Prevention and Management Program for Native American Youth and Their Families

Implementation Guide

Together on Diabetes (ToD) was developed through a partnership between Johns Hopkins University and four Native communities in the Southwestern US.

Produced by Johns Hopkins University Center for
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Contact for Technical Assistance or to Implement ToD in Your Community

Agencies interested in arranging training or technical assistance to implement TOD can contact the Johns Hopkins Center for American Indian Health: (410) 955-6931 or rstrom3@jhu.edu.

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Preface and Acknowledgments

The Together on Diabetes Program is a diabetes prevention and management program designed and implemented by the Johns Hopkins Center for American Indian Health in partnership with the Navajo (Diné) Nation, and the White Mountain Apache community. Together on Diabetes consists of a curriculum for youth and a curriculum for an adult support person as well as dialogue with health care providers and hosting of community events. The Together on Diabetes Program focuses on improving youth and their families' knowledge, psychosocial health, behaviors and physical health in order to prevent and/or better manage diabetes.

This Implementation Guide provides information about the Together on Diabetes Program background and development, and it includes detailed notes about implementing the program including teaching the curriculum and evaluating program activities. This guide is intended for reference by communities and health programs wishing to implement the Together on Diabetes Program. The guide is organized into the following sections:

Section 1: Background of Together on Diabetes
Section 2. Theoretical Model
Section 3. Getting Started
Section 4. Implementing Together on Diabetes
Section 5. The Together on Diabetes Curriculum
Section 6. Working with the Health Clinic
Section 7. Training
Section 8. Program Evaluation and Fidelity

We would like to express our appreciation to the many people who have contributed to the development of the Together on Diabetes Program. We are deeply grateful to the partnering Native communities and clinics. Their input, guidance, wisdom, and spirit were invaluable to the evolution of the program. We acknowledge our colleagues at Johns Hopkins University and Indian Health Services who were essential to program design and implementation. Finally, and most importantly, we extend heartfelt thanks to the families and community members who have participated in the Together on Diabetes Program.

Section 1
Program Background

Program Overview and History

The Together on Diabetes Program was developed by the Johns Hopkins Center for American Indian Health in partnership with American Indian communities in the Southwest: the Tuba City, Chinle, and Shiprock communities on the Navajo (Diné) Nation; and the White Mountain Apache Tribe. The Johns Hopkins Center for American Indian Health has a long history of partnering with American Indian communities to achieve optimal health and well-being through research, service, and training projects.

To launch the Together on Diabetes Program in 2011, the Johns Hopkins Center for American Indian Health engaged in a variety of community engagement activities across sites to create a culturally and locally grounded program. A Cross-Site Steering Committee with pediatric providers, diabetes prevention specialists, and local community experts was developed and guided much of the program structure and content. The development of the Together on Diabetes Program took place over a year long period.

The Together on Diabetes Program is a multi-level, family-centered program that consists of: 1) home-based lifestyle education and psychosocial support for American Indian (AI) youth and Support Persons, 2) collaboration between Health Coaches and medical teams, and 3) referrals to community resources and engagement of AI youth and families in local wellness and diabetes prevention events.

The Together on Diabetes intervention consists of:

1) My Youth Curriculum: 12 home-based lessons for youth living with or at-risk for type 2 diabetes. These lessons are taught biweekly over a 6 month period in the home of the participant. Family members are encouraged to join these lessons.
2) Support Person Curriculum: 4 home-based lessons for a youth's "Support Person". These lessons are taught over a 6 month period in the home of the participant.
3) Maintenance Curriculum: 6 home-based lessons during a "maintenance period" when guidance and support provided by the Health Coach is replaced by support from the identified Support Person. This period consists of monthly check-ins and coaching for the Support Person and youth. This maintenance period is necessary in order to sustain the program impacts for the youth.
4) Provider Engagement: Health Coaches' aim to have ongoing communication with the youth's provider, including attending at least one visit to the youth's diabetes-related appointments and, when possible, dialogue with the youth's provider through the medical chart system. This is an optional component and implementation may vary by site.
5) Group Lessons/Community Based Events: All youth and families who are in or have graduated from the program are encouraged to attend periodic group lessons and/or community events held by the Health Coaches at a location within the community. Group lesson and community events help to encourage peer support across youth and families. This is an optional component and implementation may vary by site.

The Together on Diabetes curriculum was informed by the Diabetes Prevention Program (DPP) curriculum[1], the Treatment Options for Type 2 Diabetes in Adolescents and Youth (TODAY) study curriculum[2] and other curricula previously developed by the Johns Hopkins Center for American Indian Health. Some of the activities related to nutrition and physical activity may need some small adaptations for the local community[3].

The program was piloted for three years in each partner site to determine the feasibility of implementing the program as well as the efficacy in reducing risk factors among youth. A tracking log and session summary forms were used to track program progress measures and a quality assurance form was used to monitor program fidelity. Self-report and anthropometric data was collected at baseline, 3, 6, and 12 months post-baseline from youth in the program. Additionally, Support Persons completed a short self-report questionnaire and anthropometric data was collected on a sub-set of Support Persons.

Pilot Study Outcomes[4-6]

Among 256 youth enrolled across four communities, outcomes at 12 months post-enrollment included:

1. Increased knowledge about nutrition, fitness, diabetes prevention, and health living;
2. Increased quality of life;
3. Increased diabetes empowerment
4. Decreased depression;
5. Increased physical activity;
6. Decreased Body Mass Index (BMI);
7. Decreased hypertension;
8. Decreased A1C among high-risk youth (HbA1c>7.0% at baseline);
9. Improved understanding of information from medical providers;
10. High program satisfaction; and
11. Decreased BMI among a subset of adult support persons

Program Aims

The overarching goal of the Together on Diabetes Program is to reduce the incidence and prevalence of obesity and diabetes among American Indian youth and their families. The specific aims of the program are to:

1. Improve knowledge about healthy living including nutrition, physical activity and diabetes management among youth with or at risk for type 2 diabetes;
2. Improve the psychosocial health of youth with or at risk for type 2 diabetes;
3. Increase intake of fruits and vegetables and decrease intake of sugar sweetened beverages and junk foods among youth with or at risk for type 2 diabetes;
4. Increase physical activity among youth with or at risk for type 2 diabetes;
5. Decrease A1c, BMI, waist circumference and hypertension among youth with or at risk for type 2 diabetes;
6. Improve diabetes treatment adherence among youth with type 2 diabetes; and
7. Decrease A1c, BMI, waist circumference and hypertension among family members of youth with or at risk for type 2 diabetes.

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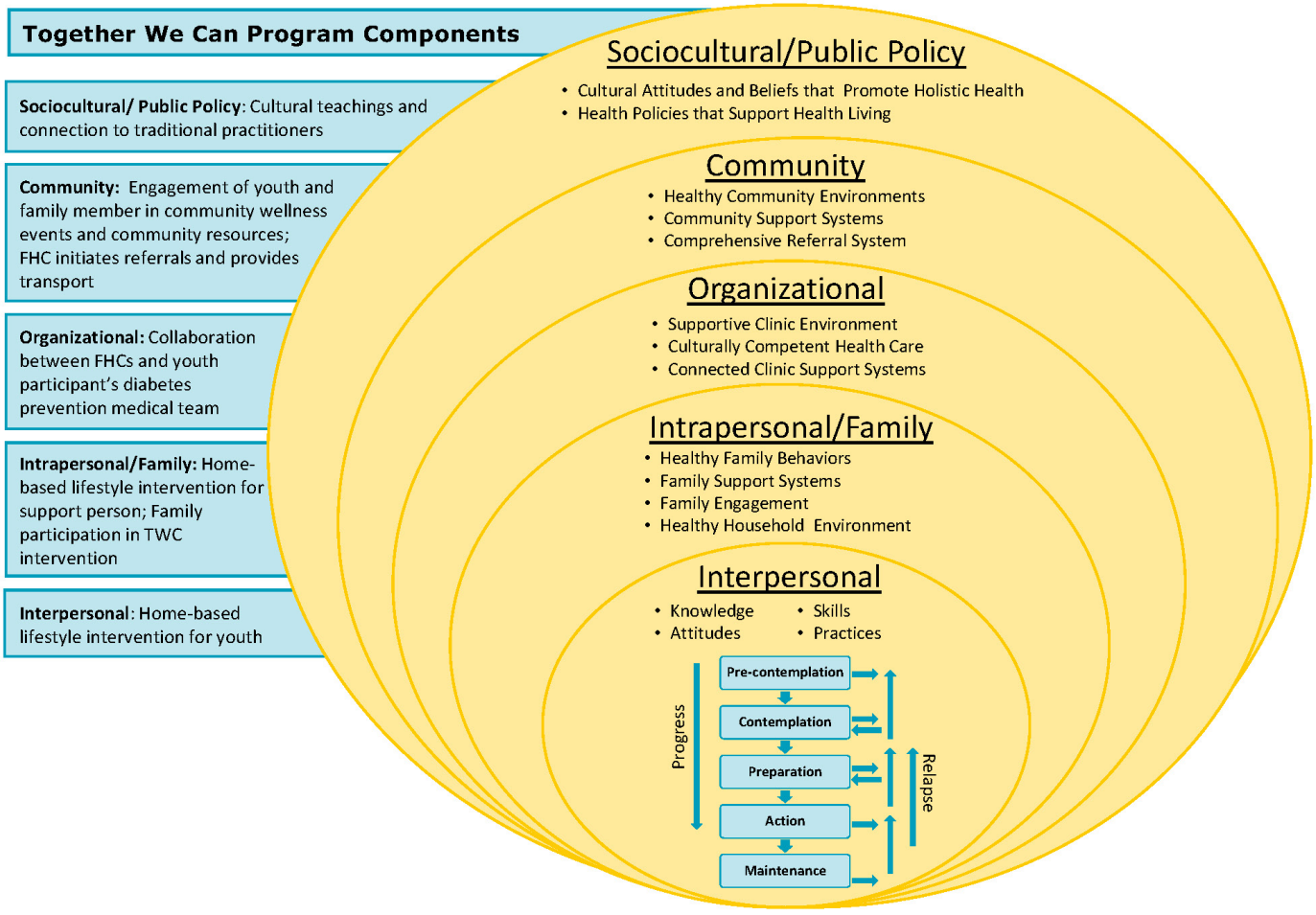
Section 2
Theoretical Model

The Together on Diabetes (TOD) Program is structured to incorporate various constructs of the ecological[1] and transtheoretical[2] model of behavior change. The TOD program was developed as a multilevel intervention based on principles of the ecological and transtheoretical models of behavior change. The design reflected understanding of the reciprocal relationship between individuals and their environment, the importance of family, community and cultural support for behavior change, as well as the direct physiological effects of support on physical health (Figure 1).



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Section 3
Getting Started

Resources

Implementing the Together on Diabetes Program requires a considerable amount of staff time and resources, in addition to clinic and community support. Before initiating the program, dedicated staff and supervisor(s) must be identified to work on the program, and resources must be identified to fund the program.

There are two main responsibilities to fulfill within the Together on Diabetes Program: 1) recruiting youth and their families into the program, typically this is done via referrals from providers who diagnose youth as having or being at risk for type 2 diabetes; 2) implementing the home-based lessons with youth and their Support Person.

Some sites may decide to incorporate additional components including: 1) group-based lessons and/or community wellness events, 2) ongoing communication with providers, and 3) collecting evaluation data and analyzing program impact. For these sites, additional responsibilities of the Health Coaches include: 1) working with community organizations to host community events/group based lessons; 2) liaising with providers and community partners to share program updates, hear feedback on programming, and work to embed the program within the community's health promotion systems and 3) conducting the evaluation with participants. These additional components will also require additional duties for the program Supervisor.

Community Advisory Board

The Together on Diabetes Program is embedded in the clinic, community and home. Therefore, strong partnerships with community organizations and the local clinic are necessary to ensure program success. It is strongly advised to initiate a Community Advisory Board to help guide the development and implementation of the program, and to ensure that the program addresses community needs and does not duplicate other services. A Community Advisory Board consists of various stakeholders including providers, health promotion program leaders, elders, youth, parents, and anyone else who can help inform the Together on Diabetes Program. A Community Advisory Board typically meets more often (e.g., monthly) during the program development phase and less often (e.g., quarterly throughout the year) during the program implementation phase.

Staffing

Program Supervisor: It is best to have a dedicated Together on Diabetes Supervisor who is located either at or near the clinic to lead all aspects of the program and coordinate communication with the community (e.g. coordinate the Community Advisory Board; help to schedule and host community/group events) and the clinic (e.g. work with the clinic to set up systems for referrals and provider communication). The Supervisor will also monitor and support the Health Coaches and the Supervisor may also serve as a Health Coach.

What are the qualifications for the Supervisors?

It is recommended that Supervisors have a college degree, or equivalent work experience. They should also have experience in home-visiting, case management, community networking, staff supervision, and nutrition promotion/diabetes prevention programming. Additionally, if the program intends to use the electronic medical records system for participant tracking or evaluation, the Supervisor should be knowledgeable about the electronic medical records system. The Together on Diabetes Program recommends up to 6-10 Health Coaches/home visitors per Supervisor. This is a recommendation rather than a requirement as each program is unique in its design and scope.

Program Health Coaches: Multiple Health Coaches trained in the Together on Diabetes Program should be dedicated to the implementation of the program. The Health Coaches will recruit youth and their families, complete lessons with youth and their families, and provide general support and case management to youth and their families. At some sites the Health Coaches will also communicate with providers, host group lessons and/or community events, and collect data from participants.

What are the qualifications for Health Coaches?

Together on Diabetes Health Coaches are generally local community health workers trained in the Together on Diabetes Program. Ideally, Health Coaches are familiar with the tribal culture, traditions, and language. Health Coaches must have at least a high school education, and they must have undergone requisite training to teach the Together on Diabetes Program. Together on Diabetes recommends a caseload of up to 25-30 families for each full-time Health Coach, depending on stage of enrollment for each participant and the commuting distance associated with home visits. The visits are more intensive in the intervention stage and then taper in the maintenance period.

Materials/Supplies

Initial funding is necessary to purchase the curriculum package for each Health Coach who is being trained in the Together on Diabetes Program. Sustained funding is necessary for program supplies, as well as for additional youth workbooks if the site would like to have a workbook for each participant. The first section of each lesson plan indicates the materials needed for that lesson, including props to do the activities within the lesson. Each Health Coach needs a full set of these materials before beginning the program.

Policies and Procedures Manual

Prior to beginning implementation of the Together on Diabetes Program, program sites should develop their own Policies and Procedures manual. This manual will help to guide the Program Supervisor and Health Coaches in the implementation of the program and may require frequent updating by the Supervisor. It is advisable that this is developed by the site leadership prior to Together on Diabetes training.

Suggested topics for the site-specific Policies and Procedures Manual are as follows:

1. Overview of the program, including specific aims
2. Timeline for the program
3. Recruitment/enrollment goal (i.e. number of youth to enroll)
4. Eligibility criteria for participants
5. Recruitment strategies

6. Retention strategies
7. Curriculum implementation plans
8. Provider communication plans
9. Data collection/evaluation plans
10. Plans for group lessons and/or community events
11. Site policies related to home visiting
12. Staff roles, responsibilities, and time commitment
13. File management
14. Instructions for electronic health record access and documentation (if applicable)

Section 4

Implementing Together on Diabetes

Who are the Participants?

Youth Participants

The Together on Diabetes Program was designed for American Indian youth ages 10-19 who are diagnosed with or indicated as "at-risk" for type 2 diabetes.

The pilot trial of Together on Diabetes defined youth with type 2 diabetes as:

- Youth who were diagnosed with diabetes based on a lab result completed at a clinic (A1c>6.5%; FPG >126 mg/dL or OGTT >200mg/dL). *Type 1 diabetes should be ruled out for youth in this category before they are enrolled in the program.*

"At-risk" youth were defined as:

- Youth who were diagnosed with pre-diabetes based on a lab result completed at a clinic (A1c= 5.7%-6.4%; FPG= 100-125 mg/dL or OGTT= 140-199 mg/dL) OR youth had a BMI $\geq 85^{th}$ percentile and had one of the following conditions: LDL $\geq$ 100 mg/dL; Triglycerides$\geq$ 150mg/dL; HDL $\leq$ 40 mg/dL).

Programs can use these guidelines for program eligibility, or can create different guidelines based on local needs and local provider practices and feedback.

Support Person Participants

It is highly recommended that the program enroll one Support Person participant with each youth participant. The Support Person should be chosen by the youth with input from the youth's parent if the youth is a minor. Together on Diabetes recommends that the Support Person is an adult who is close with the youth and has some role in the youth's diabetes management and/or influences the youth's health behaviors. It is recommended that Support Persons live with the youth. The Support Person should be motivated to provide support to the youth participant. Additional family members may also be interested in joining the program. We recommend engaging all family members in the lessons if the youth is comfortable with doing so.

Recruitment

Referrals

Together on Diabetes recommends working closely with the local clinics and providers for recruitment of youth into the program. Engaging providers to refer youth to the program can be done by frequently hosting or attending meetings with the providers to discuss the program and the logistics of the referral process. Flyers could also be posted in clinics to engage patients. These flyers may encourage patients to ask their providers about the program and see if they are eligible. While it is important to engage providers at the beginning of the program, it is also important to continue to engage them throughout program implementation. Together on Diabetes recommends providing newsletters to providers about the program progress and/or presenting on the program progress to

providers. It is also recommended that Health Coaches provide providers with summary progress reports of each patient's progress in the program. This can be done through electronic medical records (when possible), or through written or verbal correspondence.

Engaging the Youth and Family

If the Together on Diabetes Program is utilizing provider referrals as the primary referral strategy, once the program has received a referral, a Health Coach should reach out to the youth and their parent/guardian about participation in the program. If at all possible, this should be done immediately after the referral is made. If possible, the Health Coach should have a space at the clinic and will be on-site to receive referrals as they are made. This will reduce the time and effort necessary to find and re-engage youth. When discussing the program with the youth and their parent/guardian, it is important to provide them with information about all aspects of the program. Additionally, if the youth has just been diagnosed with diabetes or pre-diabetes, it will be important for the Health Coach to be sensitive as they may still be processing the information. The Health Coach should be prepared to answer questions about diabetes but should not, at any time, provide treatment and/or prevention or diagnostic advice.

Consenting/Enrollment

Some Together on Diabetes sites may have all youth, their parent/guardian if the youth is a minor and the Support Person sign a consent or permission form before they begin the study. These forms can be helpful as a guide for the Health Coaches to explaining the components of the study and can help the potential participants gain an understanding of the components of the program. Use of permission forms is encouraged for all minor youth and for all programs that will collect data from participants. Completed forms should be kept and stored by the Program Supervisor. If interested in example consent forms and/or additional technical assistance, contact the Johns Hopkins Center for American Indian Health.

Key Principles to Implementing Together on Diabetes

The Together on Diabetes Program is a user-friendly program. The key to successful administration of the program is thorough knowledge of the curriculum content, rigorous preparation by the Health Coach, and establishment of good rapport with the participant.

Knowledge of Curriculum Content

Health Coaches must know the material thoroughly. It is important for the Health Coach to be highly familiar with lesson content for several reasons. The primary reason is so Health Coaches can better engage with participants by discussing the lesson content instead of reading the script verbatim. Additionally, the Health Coach may encounter a situation where they will need to switch to another lesson based on the participant's current circumstance. Health Coaches need to be very familiar with all the tools available within the curriculum so they can quickly determine other lesson activities or content that will be most helpful to the participant. Through in-depth study of the lesson plans, lesson overview, and relevant reference information for each lesson, the Health Coach will feel prepared to teach the lesson. Oral practice and role play of lessons is also key to mastery of the material.

Preparation

As noted below in Section 5: The Together on Diabetes Curriculum, the Health Coach should review the lesson overview (page 1 of each lesson) in advance of the lesson to make sure they have all of the materials ready and prepared. It is best to prepare at least one day in advance of a scheduled lesson in case they need to get additional materials to supplement the lesson. It is also essential to role play the full lesson during preparation.

Relationship and Rapport with Participant

A key component of successful lesson administration is the ability of the Health Coach to relate to and communicate with the participant. Building relationships takes time, and with experience the Health Coach will learn various strategies for successful communication with all types of participants. We recommend that each home visit starts with at least a couple of minutes of warm-up. This is a time for easy conversation and a period of "catching up." If the Health Coach finds that they are having difficulty establishing rapport and connecting with a participant, they should seek advisement and training from their Supervisor or an appropriate mentor.

Section 5
The Together on Diabetes Curriculum

The Curriculum Package

Prior to program implementation, each Health Coach must have a Together on Diabetes (TOD) curriculum package. The curriculum package includes the following materials:

- ***Implementation Guide*** (the document you are reading now): The Implementation Guide is a comprehensive guide on how to start, maintain and sustain the Together on Diabetes Program. The Implementation Guide is intended for Supervisors and Health Coaches to review carefully before implementing the program. It will be reviewed at all trainings.

- ***Lesson Plans*** The Lesson Plans are the Health Coach's guide to teaching each lesson. There are 22 lesson plans in total. This includes 12 Youth lessons designed to be implemented with youth and their support person, 4 Support Person lessons designed for the support person, and 6 Maintenance lesson plans.

- ***Participant Workbook*** The workbook includes interactive pages that correspond to each lesson. Depending on site resources, each youth can have their own workbook to complete or the Health Coach can photocopy pages from their master copy of the workbook and distribute those to participants. If each youth has their own workbook, the workbook should generally be kept with the Health Coach to avoid them being lost.

In addition to the printed materials listed above, 'Site Resources' to support program implementation can be provided by Johns Hopkins. This includes samples of various templates and forms to be used during recruitment, enrollment and evaluation. Please contact the Johns Hopkins Center for American Indian Health if you are interested in these materials and technical assistance.

TOD: Youth Lessons

Youth lessons are the main teaching materials used to present information to youth. The TOD lessons are designed to be taught one-on-one during home visits. The Support Person is encouraged to join these lessons and other family members are encouraged to join if possible and requested by the youth.

Youth Lessons Visit Structure

Each lesson plan follows the same lesson structure. While the lesson guide is intended to fit within a 60-90 minute period, a full home visit with check-ins and goal setting would be expected to last up to 2 hours.

Warm-up

- Welcome and rapport building
- Review last lesson
- Check-in with participant on their existing goals (both short-term and long-term)
- Check on referrals and provider visits

- Introduce lesson

Lesson

- Cover all lesson content
- Do activities/tasks together with participant (and support person)
- Have participant summarize main points of the lesson
- Discuss and answer questions
- Set new goals
    - At least 1 new short-term goal
    - If needed, rework or create a new long-term goal

Wrap-Up

- Make referrals
- Set next visit time/date
- Complete required paperwork

Preparing to Teach TOD: Youth Lessons

Prior to administration of a Together on Diabetes: Youth home visit, the Health Coach should thoroughly review the lesson plan in their curriculum binder. Each lesson plan outlines key details about how to prepare for the lesson. The lesson overview (found on Page 1 of all Together on Diabetes: Youth lessons) outlines the materials needed, objectives, and reminders for warm-up. An example of a lesson overview with the Materials Needed and Objectives of the lesson outlined in the boxes at the top of the page is shown below. The Health Coach should practice delivering activities to be sure they are familiar with all steps and materials. Finally, the Health Coach should double-check that they have all materials and workbook pages needed before they leave for a home visit. Upon completion of each lesson, the Health Coach should complete the required program paperwork (this will vary by program and site) prior to the end of her work day.

The Health Coach's Supervisor should schedule and conduct quarterly quality assurance checks to ensure lesson delivery is being done to standard. For more information about quality assurance and evaluation procedures, see Section 8 in this Implementation Guide.

TOD: Youth Lessons	
1	Ready, Set, Go! Setting My Goals
2	Making My Healthy Plan
3	Eating to Win! A Balancing Act
4	The SPIRIT Approach to Tackling Problems
5	Think Positive!
6	Building a Winning Team
7	Sweet Revenge! Don't Be Fooled
8	Let's Move: Exercise and Me
9	Finding My Groove
10	Eating to Win! Nutrition Building Blocks
11	Yes I Can Say No!
12	Yes I Can Take Control

TOD Youth Supplies

Below is a list of supplies for the TOD: Youth lessons. It is important that program supervisors work closely with Health Coaches to ensure the Health Coaches have all materials needed to complete lessons.

Supplies	Notes
Participant Workbook	New books for new participants or copies made
Plastic cups	
Plastic spoons	
Paper plates	
Bean bags	
Hula hoop	
Blindfold	
Measuring cups and spoons	
Calculator	
Stopwatch or clock with second hand	
Sandpaper	Will need to be replenished as sandpaper is used
Empty calorie frisbees	Recommend adding more frisbees with nutrition labels from popular local foods/traditional foods
Food cards	May need to be reprinted if cards are lost or worn
Brain binders	Will need to be reprinted as pages are used
Calendar of current month	
Grocery store weekly ad	
Hot Cheetos	Not eaten, but may need to be replaced over time
Baby carrots	Not necessarily eaten, but will need to be replaced over time
Peanut M&Ms	Not eaten, but may need to be replaced over time
Coca-cola	Suggest measuring 1 cup and putting into a clear bottle with a label to reuse
Rockstar energy drink	Suggest measuring ¾ cup and putting into a clear bottle with a label to reuse
Bottle of water	Will need to be replenished
4-6 different drink examples including sugar sweetened beverages as well as healthier drinks (no diet sodas)	Empty bottles and cans are fine for the activity and can be reused
Sugar cubes	
Rold Gold pretzels	May need to be replaced over time
Whole grain wild rice	Will need to be replenished as grains are used
Whole wheat bread	Will need to be replenished
White bread	Will need to be replenished
Grapes	Will need to be replenished
Doritos	Will need to be replenished
Salsa	Will need to be replenished
Various food items for portion sizes	Will need to replace any perishable foods used
Packages from popular food and drinks	
Raisins or other dried fruit (optional)	
Healthy food recipes (optional)	

In addition to these recommended materials, Health Coaches will find it useful to think about cultural adaptations that may be relevant to TOD. TOD recognizes that cultural teachings are an important aspect of healthy living, and we encourage programs to incorporate their traditional teachings and practices in to the curriculum. For example, it might be appropriate to modify the nutrition and physical activity lessons to incorporate traditional foods, ceremonies or cultural teachings around these topics. If you have any questions about making cultural adaptations to the curriculum, please contact the Johns Hopkins TOD Team for further suggestions.

Besides specific modifications of the TOD lessons, it is always recommended that Health Coaches incorporate cultural examples and stories from their own community into the lessons whenever possible. This will provide participants with relevant information to use with their own lives.

TOD: Support

The TOD: Support Lessons are the main teaching materials used to present information to support persons and are designed to encourage behavior change among the support person themselves in addition to encouraging changes in the home environment. They are also designed to provide support person with the knowledge and skills needed to support their youth in their behavior change and diabetes prevention and management. The curriculum consists of 4 lessons, which are designed to be taught monthly over a period of 6 months. The TOD: Support lessons are designed to be taught one-on-one during home visits, youth should be encouraged to join these lessons if the support person is comfortable. Lessons should be completed in the order indicated below.

A list of the lesson titles and a chronology of the lessons is provided here:

TOD: Support Lessons	
1	Supporting Your Youth
2	Active Listening
3	Let's Get Moving
4	Planning for Improved Nutrition

TOD: Support Visit Structure

Each TOD: Support lesson follows the same lesson structure, and is intended to fit within a 60 minute home visit. The following is the template for each lesson plan.

Warm-up

- Welcome and rapport building
- Review last lesson
- Check-in with support person on their existing goals (both short-term and long-term) as well as the youth's goals
- Introduce lesson

Lesson

- Cover all lesson content
- Do activities/tasks together with support person (and youth participant)
- Have support person summarize main points of the lesson
- Discuss and answer questions
- Set new goals

Wrap-Up

- Make referrals
- Set next visit time/date
- Complete required paperwork

Preparing To Teach TOD: Support Lessons

Prior to administration of a Together on Diabetes: Support lessons, the Health Coach should thoroughly review the lesson plan in their curriculum binder. Each lesson plan outlines key details about how to prepare for the lesson. The lesson overview (found on Page 1 of all Together on Diabetes: Support lessons) outlines the materials needed, objectives, and reminders for warm-up. An example of a lesson overview with the Materials Needed and Objectives of the lesson outlined in the boxes at the top of the page is shown below. The Health Coach should practice delivering activities to be sure they are familiar with all steps and materials. Finally, the Health Coach should double-check that they have all materials and handouts needed before they leave for a home visit. Upon completion of each lesson, the Health Coach should complete the required program paperwork (this will vary by program and site) prior to the end of her work day. The Health Coach's Supervisor should schedule and conduct quarterly quality assurance checks to ensure lesson delivery is being done to standard. For more information about quality assurance and evaluation procedures, see Section 8 in this Implementation Guide.

TOD: Support Lesson Supplies

The TOD: Support lessons do not require many supplies. Most of the supplies needed are handouts. The only other supplies needed are a calendar of the month and weekly ads from local grocery stores. It is important that program supervisors work closely with Health Coaches to ensure the Health Coaches have all materials needed to complete lessons.

In addition to these recommended materials, Health Coaches will find it useful to think about cultural adaptations that may be relevant to TOD. TOD recognizes that cultural teachings are an important aspect of healthy living, and we encourage programs to incorporate their traditional teachings and practices in to the curriculum. For example, it might be appropriate to modify the nutrition and physical activity lessons to incorporate traditional foods, ceremonies or cultural teachings around these topics. If you have any questions about making cultural adaptations to the curriculum, please contact the Johns Hopkins TOD Team for further suggestions.

Besides specific modifications of the TOD lessons, it is always recommended that Health Coaches incorporate cultural examples and stories from their own community into the lessons whenever possible. This will provide participants with relevant information to use with their own lives.

TOD: Maintenance

The TOD: Maintenance lessons are designed to be taught to the youth and support person after the youth has completed their lessons. The aims of the lessons are to reinforce information and skills provided in the Youth and Support lessons and also to maintenance guidance and support for behavior change from the Health Coach to the support person (and other family members). The curriculum consists of 6 lessons in total, which are designed to be taught monthly for a period of 6

months. They can be taught more than once if the Health Coach feels they will be beneficial to the support person and youth. The TOD: Maintenance lessons are designed to be taught during home visits.

TOD: Maintenance lessons can be delivered in any order. Health Coaches may want to prioritize teaching the lessons corresponding to modules that the youth struggled with first. A suggested chronological order is shown here:

TOD: Maintenance Lessons	
1	Getting to the Core of Healthy Living
2	What We Need to Know about Diabetes
3	Our Nutrition Basics
4	Growing Stronger Through Life Skills
5	Working it All Out Through Exercise
6	Taking Nutrition to the Next Level

TOD: Maintenance Lesson Structure

Each Lesson Plan follows the same lesson structure and is intended to fit within a 30-45 minute period. The following is the template for each lesson plan.

Warm-up

- Welcome and rapport building
- Review last lesson
- Check-in with participant on their existing goals (both short-term and long-term)
- Introduce lesson

Lesson Activities- Lead by Health Coach

- Cover all lesson content
- Do activities/tasks together with youth participant
- Have youth summarize main points of the lesson
- Discuss and answer questions

Lesson Activities- Lead by Support Person

- Cover all lesson content with support from Health Coach
- Do activities/tasks together with youth participant
- Have youth summarize main points of the lesson
- Discuss and answer questions

Wrap-Up

- Make referrals
- Set next visit time/date
- Complete required paperwork

TOD: Maintenance Supplies

The TOD: Maintenance lessons do not require many supplies. Other than revisiting and updating pages from the youth workbook, the only supplies needed are nutrition labels. Ideally these would be

packages collected over time, but the Health Coach can also use labels from Youth materials. The TOD: Maintenance lessons are a review of the Youth lessons, so if the Health Coach finds that the youth and support person are confused about a topic, they may decide they would benefit from a repeated activity from a Youth lesson. Supplies from that activity would therefore be needed. It is important that program supervisors work closely with Health Coaches to ensure the Health Coaches have all materials needed to complete lessons.

Preparing To Teach TOD: Maintenance Lessons

Prior to administration of a Together on Diabetes: Maintenance lessons, the Health Coach should thoroughly review the lesson plan in their curriculum binder. Each lesson plan outlines key details about how to prepare for the lesson. The lesson overview (found on Page 1 of all Together on Diabetes: Maintenance lessons) outlines the materials needed, objectives, and reminders for warm-up. An example of a lesson overview with the Materials Needed and Objectives of the lesson outlined in the boxes at the top of the page is shown below. The Health Coach should practice delivering activities to be sure they are familiar with all steps and materials. Finally, the Health Coach should double-check that they have all materials and handouts needed before they leave for a home visit. Upon completion of each lesson, the Health Coach should complete the required program paperwork (this will vary by program and site) prior to the end of her work day. The Health Coach's Supervisor should schedule and conduct quarterly quality assurance checks to ensure lesson delivery is being done to standard. For more information about quality assurance and evaluation procedures, see Section 8 in this Implementation Guide.

Group Lessons and Community Events

The Johns Hopkins TOD team suggests community events be implemented as supplemental activities used to present information to youth and their families, and connect participants with each other for peer support. Group lessons are optional and consist of utilizing current Youth lessons in group setting or during community events that are organized by the TOD site. We suggest hosting group lessons/community events monthly, but they can be taught as often as biweekly or as infrequent as quarterly. The group lessons/community events are designed to establish peer support among the youth and their families in the TOD program.

Certain lessons may also be useful in clinic and group settings. Clinic-based or group-based administration has not been evaluated in the TOD research trials.

Preparing to Teach Group Lessons

Before teaching the group lessons, Health Coaches should be familiar with the lesson and the changes that need to be made in order for it to be appropriate for group settings. Changes could include collecting additional materials so multiple youth can have the hands-on experience, creating poster-size visuals to assist with teaching, making adjustments to activities so they are more like competitions between small teams, etc. When teaching group lessons, Health Coaches will need to engage participants and have "classroom" management so the better they know the lesson plan, the better. They should meet with their supervisor to discuss the appropriateness of utilizing the lesson as a group lesson and discuss the changes that would be needed. The Health Coach should ensure they have the supplies for the number of participants they expect at the group lesson prior to

beginning the lesson. If it is expected that more than 10 people will attend the group lesson, it is suggested that more than one Health Coach teaches the lesson (we recommend ~1 Health Coach for up to 10 people).

The space identified for the lesson is also important to consider. Many of these lessons include activities where participants will need to move around the room. It is important that you have the space necessary to carry out these activities. Additionally, it is important to choose a neutral location that everyone will be comfortable attending a class at. We suggest a community gathering center either indoors or outdoors.

Community Events

Hosting events in the community are a wonderful way to engage families in fun healthy living activities. These events do not follow a structured curriculum. It is important to host events that promote health and wellness and when possible, increase community members/participants' skills and can be translated into their day to day lives (e.g. a cooking class with ingredients that are accessible at the local store and/or instruction on physical activities that are not resource intensive). These events might be hosted by the TOD program, or they might be hosted by a community partner and supported by TOD. Events can either be taught to program participants and their family only or be open to the community. This is up to your program. Below are some examples of community events that work well with youth and their family members who are in the TOD Program:

- Fun run or walk
- Cooking demonstration
- Zumba class
- Bike ride
- Swimming or aqua fitness class at the local pool
- Hike on a local trail
- Family game night
- Gardening in a local community garden
- Cultural crafts or teachings (e.g. basket weaving)

Section 6
Working with the Health Clinic

Provider Visits

The Together on Diabetes Program encourages all Health Coaches to attend at least one provider visit with the youth participant. The first visit should be conducted soon after enrollment into the program. The purpose of this visit is for the Health Coach to better understand the circumstances around the youth's diagnosis, as well as provide support to the youth to ensure the youth and their family members understand the provider's messages and feel empowered to ask questions. Additionally, this provides an opportunity for the Health Coach to meet the youth's provider and initiate ongoing communication with the provider. This visit is not meant to indicate the Health Coach is able to provide care or advise the youth on their diabetes related care.

Prior to the Visit

Prior to the visit, the Health Coach should speak with the youth and family about their comfort with them attending a visit with them. The Health Coach should explain that they would like to attend so they can help to advocate for them and ensure their questions are answered fully. The Health Coach should also let the family know that it will be helpful for them to know what their doctor prescribes and/or advises as it will help them to support the youth when creating goals. If the youth and/or family members do not want the Health Coach to attend a visit with them, the Health Coach should not push the family to do so.

Additionally, the Health Coach should ensure the clinic and provider are comfortable with them attending the lesson. The Program Supervisor should establish the clinic's preferences and policies before beginning the program. Additionally, if a presentation or meetings with providers occur before or during program implementation, the topic of Health Coaches attending visits should be discussed with providers. Providers may have varying preferences related to the Health Coach's attendance at the youth's visit. It is the intention of the program that the Health Coach creates a trusting relationship with the provider and therefore, they should respect the providers' preferences about Health Coaches attending visits. It should be explained to providers that the Health Coach is not at the visit to provide advice, but only to advocate for the youth and ensure that the goals the youth sets within the Together on Diabetes Program align with the provider's advice/ management plan.

At the Visit

The Health Coach should take notes at the visit. Notes should be kept by the Program Supervisor in a secure place that has been established by the program. The Health Coach should observe most of the visit and only interject when the youth or family members asks them to or they feel as though some of what the provider is saying needs clarification.

Electronic Health Records

Although not possible for all programs, it is highly suggested that programs embedded in the clinic environment utilize electronic health records to track referrals (both those from providers to the TOD Program, and referrals that Health Coaches make for the participant to other resources) and document participant progress for providers. The Program Supervisor should determine if this is a

feasible aspect of the program and work with the clinic administration and medical records personnel to establish this system. As all medical records systems may vary and/or clinics have varying structures, it is up to the individual site to determine if this is a feature they include in their program and to work with the clinic to set it up to meet the needs of their program. The following may be included in charting in the medical records:

- ***Referrals to the program:*** All referrals to the program by providers can be done through medical records. The supervisor will need to work with the clinic medical records team to set up a system for this and will need to work with the clinic to train providers on making referrals.
- ***Referrals to additional resources:*** Health Coaches can make referrals to providers or programs through the medical records system. For example, if they identify the youth as depressed through either an evaluation or by standards developed by the program supervisor, they can create a referral to a psychologist or mental health specialist at the hospital. The ability to use this feature should be discussed with the Program Supervisor and the clinic as there are considerations when making referrals.
- ***Notes to the provider:*** Some programs may wish to communicate with the youth's provider via open-ended notes. Open-ended notes can often be sent to the provider through electronic health records. The utility of these notes and the providers' preferences on receiving these notes should be considered.
- ***Notes and data to track participants:*** Some programs may wish to use the electronic health records to keep a detailed log of when participants are seen and what happens during the visit. This may be helpful for reporting purposes and can help in program management. This most likely will require the creation or edits to the electronic health record interface and could therefore involve substantial set up. Included in an electronic medical record could be a place to indicate which lesson was completed, who attended the lesson, what was covered during the lesson, goals the youth set during the lesson, what goals had been accomplished since the last lesson and any concerns the Health Coach has. Additionally, data collected at the lesson can be recorded in this section of the medical chart. Program Supervisors may want to set up a feature in which the Health Coach asks (electronically) the Supervisor to review the entries before they are submitted.

Section 7
Together on Diabetes Training

Training Overview

The Together on Diabetes Program requires Health Coaches to attend a mandatory 3-day training before they can use the TOD Program with families. Following the training, Health Coaches will be certified by the Johns Hopkins TOD team. To receive certification, the Health Coach must: 1) attend and participate fully in all 3 days of the training; 2) take a knowledge assessment and score 80% or higher; and 3) demonstrate ability to teach the lessons by receiving an average score of 3 or higher on the Quality Assurance rating during the role play sections of the training. If any of these criteria are not met, the TOD trainers will make a plan with the Program Supervisor to have the Health Coach complete the pending items and the Supervisor will provide the certificate at a later date.

The training is conducted on-site and covers a wide range of topics including:

- ***Introduction to the TOD Program and Training:*** A session dedicated to teaching participants the history and background of the TOD Program, and the current core components of TOD.
- ***TOD Curriculum:*** Curriculum training focuses on mastering the curriculum content and practicing teaching lessons within the visit structure.
- ***TOD Implementation:*** Strategies for implementation will be discussed, including recruitment, retention, home visiting skills and strategies, case management, and networking with providers and community partners.
- ***Program Evaluation and Fidelity:*** Training will be tailored to include evaluation needs of the specific site. During pre-training activities, Supervisors will select which evaluation tools are necessary to achieve their fidelity and evaluation goals. A series of evaluation tools are available for each training site to select from and tailor to local program needs (see Section 8 of this Implementation Guide).

Consultation and Technical Assistance

Trainers from the Johns Hopkins Center for American Indian Health will have a series of pre-training meetings with local Supervisors before the scheduled training date to understand the program structure and needs, as well as help prepare the site for the training and implementation. The training will be tailored to reflect identified program needs. Trainers will also meet with Supervisors and Health Coaches after the training to provide technical assistance on program implementation and evaluation (if applicable). Technical assistance will vary by program location, needs, and available resources. The main contact for questions regarding TOD is rstrom3@jhu.edu.

Section 8
Evaluation and Fidelity

Program Evaluation

TOD Program sites have varying levels of resources and goals for program evaluation. If a site chooses to conduct program evaluation, a series of evaluation tools are available to monitor program fidelity, ensure quality implementation of the program, assess and screen participants, and measure the impact of the Together We Program. Many of these tools were tested and used in the TOD research trial. These tools can be used as-is, or sites can adapt some or all of the tools for their own program needs. Evaluation measures that will be used by the site are determined during the pre-training process with each program site.

The tables below provide an overview of all TOD evaluation measures and the recommended protocol for administration. Items outlined in the tables include instrument name, instrument description, the person responsible for completing the form, and the recommended time point for measurement. TOD can provide in-depth instruction on administering forms if programs request this type of training.

Process Measures

It is important to document all TOD Program processes to track daily/weekly/monthly progress over time and ensure accountability to all program commitments. The table below lists the process measures

List of Process Measures

Name	Description	Person Completing Form	Time point for measurement
Tracking Log	This log includes one sheet to track all lesson dates as well as other program activities that participants participate in. There are two sheets within this tracking log, one for youth participants and one for support person participants.	Health Coach	After each meeting with the youth
Session Summary Form	Includes information about the visit date, time, participants involved, lesson covered or other activity completed during the visit, activities completed, health goal set and progress on previous health goal/plan and necessary referrals.	Health Coach	After each meeting with the youth and/or Support Person
Quality Assurance (QA) form	Assesses quality of administration and adherence to the curriculum and visit structure.	Program Supervisor	Completed at least quarterly with each Health Coach
Progress Note for Provider	This form can be filled out by Health Coaches and provided to the youth's provider or entered as notes into the youth's medical chart.	Health Coach	After each meeting with the youth, or as often as determined useful by program team and providers

Outcome Measures

To assess program impact on all participants, an outcome evaluation of the program may be conducted. The table below lists the outcome measures that are available for sites to use.

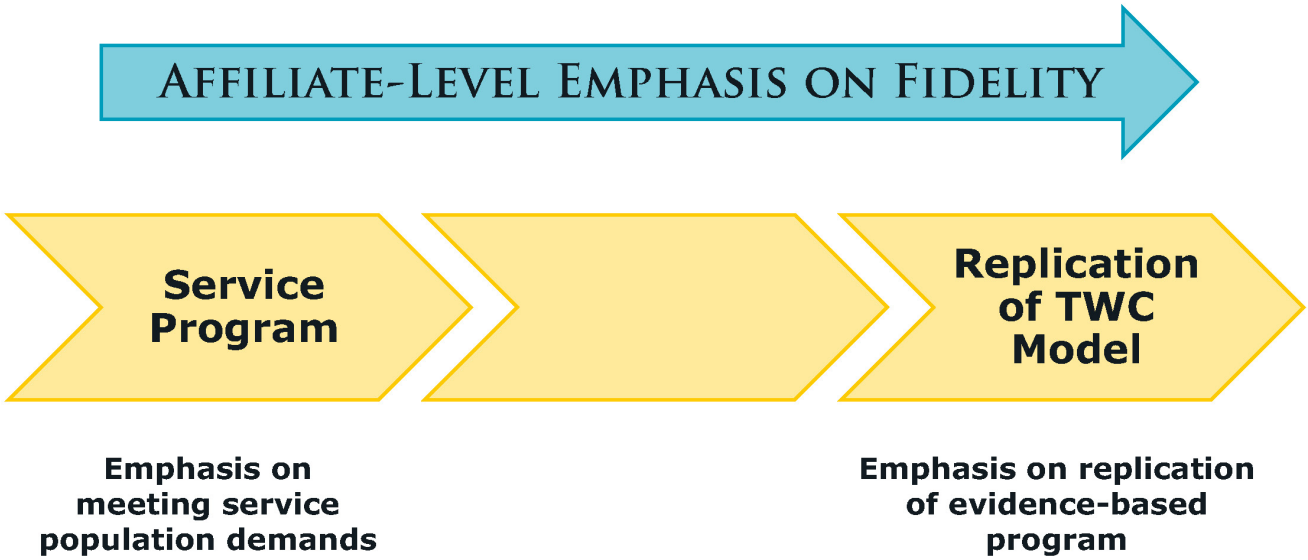
List of Outcome Measures

Name	Description	Person Completing Form	Recommended time points for measurement
Youth Demographic Form	Measure obtains a broad range of demographic information including age, educational status, living situation, past and current health and behavior history, information about the home environment including food access/food security.	Youth Participant	Baseline, 6, 12 months post baseline
Support Person Demographic Form	Measure obtains a broad range of demographic information including age, educational status, living situation, past and current health and behavior history, information about the home environment including food access/food security.	Support Person Participant	Baseline, 6, 12 months
Patient Health Questionnaire-9	The Patient Health Questionnaire (PHQ-9) is a nine item depression scale that asks youth to answer how often they experience the cluster of symptoms that define depression. The PHQ-9 has proven to be a valid tool in assessing depression in adolescents.	Youth Participant	Baseline, 3, 6, 12 months post baseline
Pediatric Quality of Life Inventory	Pediatric Quality of Life Inventory (PedQL) is used to evaluate the health related quality of life. The PedQL 4.0 Generic Core Scales is a 23-item self-report assessment that encompasses physical functioning (eight items), emotional functioning (five items), social functioning (five items) and school functioning (five items).	Youth Participant	Baseline, 3, 6, 12 months post baseline
Youth self-efficacy	The Rosenberg general self-efficacy scale assesses global self-efficacy.	Youth Participant	Baseline, 3, 6, 12 months post baseline
Adapted Nutrition/Physical Activity Assessment	This short assessment asks youth and support person about past eating behaviors and physical activity. Nutrition related questions assess intake of sugar sweetened beverages, junk food, fruits, vegetables, etc. It also asks about past week of physical activity.	Youth & Support Person	Baseline, 3, 6, 12 months post baseline
Knowledge Test	This is utilized to assess youth and support person knowledge about the curriculum topics.	Youth & Support Person	Baseline, 3, 6, 12 months post baseline
Community Mastery-Family Scale (CMFS)	CMFS is a 5 item measure adapted from the 10 item Communal Mastery Scale. Each item has three response categories: not at all, somewhat and a lot.	Youth Participant	Baseline, 3, 6, 12 months post baseline
Diabetes Screening Questions	This is a questionnaire used to learn which family members have been screened for diabetes.	Youth & Support Person	Baseline, 3, 6, 12 months post baseline

Program Satisfaction-Youth	This measure is used to assess the youth's satisfaction with the program. The measure includes questions about which parts of the program were most helpful and useful to them.	Youth Participant	Baseline, 3, 6, 12 months post baseline
Program Satisfaction-Support Person	This measure is used to assess the support person's satisfaction with the program. The measure includes questions about which parts of the program were most helpful and useful to them and their youth.	Support Person Participant	Baseline, 3, 6, 12 months post baseline
Anthropometric Data Collection Form	This form is where the Health Coach will write down the youth and support person anthropometric measurements. The measurements collected will depend on the specific TOD program.	Health Coach	Baseline, 3, 6, 12 months post baseline

Implementing with Fidelity

Fidelity is the degree to which a site "stays true" to the Together on Diabetes model, as implemented during the pilot trial of TOD, in an effort to replicate the same outcomes that were seen in the trial (described in Section 1). The degree to which a site prioritizes fidelity is decided at a site level and may be influenced by funding source(s) and community needs.



Those sites that are on the left of this spectrum have chosen to offer the TOD Program as a service program and, as such, their primary focus is meeting service population demands that may not allow for full model fidelity. For example, these sites might not offer the full program in a home-visiting setting but rather host a few groups as a means of providing the program to the maximum number of participants possible or they may decide not to include one of the optional components (e.g., working with providers, community events, group lessons). These sites may or may not teach the curriculum in the recommended sequence. For this type of site, their fidelity to the TOD model is low and the Johns Hopkins team highly recommends that they conduct a systematic evaluation of program implementation and outcomes of the program to identify the impact of the adaptations they have made.

On the right side of the spectrum are sites that aim to use the TOD model as a means of replicating the outcomes found in the pilot trial. This is often driven by the funding source and requirements, or internal program goals and resources. These sites will adhere closely to the TOD core components.

The Johns Hopkins TOD team encourages sites to follow our model to ensure fidelity whenever possible. We recognize that not all programs have the resources to follow this model, and, in these cases, we welcome use of the curriculum in other formats and/or not implementing all of the components of the interventions. We will contact each site at least four times each year to understand how the curriculum and model are being used, and to learn about new outcomes or impact that other sites are seeing in their program implementation. We will also ask about general program progress and updates, as well as any technical assistance needs so that we can support program implementation.