

INCREASING PHYSICIAN SCREENING, TESTING, AND REFERRAL

OF PATIENTS WITH PREDIABETES TO THE
NATIONAL DIABETES PREVENTION PROGRAM
LIFESTYLE CHANGE PROGRAM





American College of Preventive Medicine
physicians dedicated to prevention

In 2010, Congress authorized the Centers for Disease Control and Prevention (CDC) to establish and lead the National Diabetes Prevention Program (National DPP). The National DPP is a results-driven partnership of public and private organizations that provides a framework for national type 2 diabetes prevention efforts, including building an infrastructure for the delivery of an evidence-based lifestyle change program for people with prediabetes or at high risk for type 2 diabetes. The National DPP lifestyle change program is founded on the science of the Diabetes Prevention Program clinical trial, and several translation studies that followed, which showed that making modest behavior changes helped people with prediabetes lose 5% to 7% of their body weight and reduce their risk of developing type 2 diabetes by 58% (71% for people over 60 years old).

The National DPP has four components:

(1) training the workforce; (2) developing and sustaining program delivery sites by increasing the number of employers and insurers offering the program as a covered health benefit; (3) ensuring the quality of the programs offered through the CDC Diabetes Prevention Recognition Program (DPRP); and (4) health marketing to increase referrals and facilitate program uptake. As of October 2017, there were more than 1,500 in-person and virtual organizations in the DPRP registry that had enrolled more than 150,000 participants. Coverage for the National DPP lifestyle change program as a health benefit is expanding. As of October 2017, 12 states were covering the program for more than 3 million public employees and dependents, and more than 60 employers and insurers were covering the program in various markets.

In the fall of 2016, The American College of Preventive Medicine (ACPM) was funded by the CDC Division of Diabetes Translation to increase screening, testing, and referral of people with prediabetes to CDC-recognized organizations offering the National DPP lifestyle change program (CDC-recognized LCPs).

ACPM conducted a survey in November 2016 to understand the status of prediabetes awareness, screening, testing, and referrals to CDC-recognized LCPs among members and non-member physicians across the country. The survey revealed that 35% of physicians currently refer their at-risk patients to CDC-recognized LCPs, 29% provide counseling, and 11% were not aware or did not have CDC-recognized LCPs in their community.

Survey participants cited a variety of reasons for not screening, testing, and referring patients with prediabetes to the CDC-recognized LCPs:

- 50% cited a lack of time/competing priorities for providers to screen and test their patients for prediabetes
- 34% cited a lack of resources for providers (such as support staff, communication tools, EMR/EHR systems, etc.)
- 27% cited lack of reimbursement for providers

In response to the above data, ACPM established a demonstration project to fund clinical practices to develop and implement protocols for screening, testing, and referral of patients with prediabetes to CDC-recognized LCPs.

ACPM funded three healthcare organizations/practices to develop referral models, either through the EMR/EHR or by using another non-electronic approach. ACPM elected to fund organizations that represented a variety of practice settings, as each setting was likely to be unique in the types of strategies and resources needed to establish a scalable referral model.

ACPM selected one grantee from each of the categories listed below:

- Community Health Centers or Federally Qualified Health Centers (FQHC); FQHC Look Alikes; Rural Health Clinics; free and charitable clinics
- Independent Physician Associations (IPA); medical groups
- Integrated Delivery Systems (IDS)

This case study documents the experiences of Altamed Health Services, Wheat Ridge Internal Medicine, and Emory Healthcare System. The case study discusses the approaches, barriers, and the scalability plans of each organization. This information will be helpful to other healthcare organizations / practices interested in developing and implementing prediabetes screening, testing, and referral models.

Federally Qualified Health Center: AltaMed

Pre-Demonstration Project Approach

AltaMed Health Services Corporation, a non-profit regional health network, is the largest Federally Qualified Health Center in California. AltaMed is the medical home to over 180,000 predominantly Latino children, youth, adults, and seniors. Obesity risk in this region exceeds both county and state averages, with adult rates ranging from 24.1% to 37.5%. Diabetes rates are highest among Latinos at 47.4% county-wide in AltaMed's Los Angeles service areas.

As an FQHC, AltaMed recognizes its role as a leading health care provider to provide not only clinical interventions, but a comprehensive array of services to support lifestyle change, disease prevention, community health improvement, and overall wellness. AltaMed enhances its work through the provision of culturally- and linguistically-appropriate health education and wellness promotion.

Prior to the demonstration project, AltaMed began work with their Anaheim and Boyle clinics to assess prediabetes screening, testing, and referral models. The clinics referred patients to CDC-recognized LCPs primarily through a point of care approach. Physicians reviewed lab reports during patient visits and referred the patients who met the criteria for program eligibility to a health educator for follow up. Once a referral was received, the health educator contacted each patient to assess his/her interest and readiness to enroll in a CDC-recognized LCP. The patients were presented with three program options:

- The AltaMed Diabetes Prevention Program (*AltaMed Healthy Lifestyle Program*) (a CDC-recognized LCP)
- The YMCA DPP (a CDC-recognized LCP)
- Other clinic-based lifestyle coaching and services

Based on their preference, patients were referred to the desired program and encouraged to follow-up individually for additional assessment and enrollment. This resulted in a less than consistent completion of enrollment in CDC-recognized LCPs and insufficient data collection for follow up. In their application for the demonstration model, AltaMed proposed to continue their work with the Anaheim and Boyle clinics to create a standardized protocol for referrals, and to begin full implementation of this model.

Demonstration Project

AltaMed designed the demonstration model to focus on:

- The development of additional awareness strategies to increase knowledge of the program within the patient population and among providers at AltaMed clinic locations
- Identification of additional patient identification strategies that incorporated retrospective and point of care approaches through three referral strategies:
 - Provider referrals (point of care)
 - Staff referrals
 - Patient self-referrals

Developing Awareness

To increase awareness of prediabetes and the program among patients, AltaMed developed flyers for the *AltaMed Healthy Lifestyle Program* to place in the exam rooms of the clinics where the program was offered. In addition, AltaMed developed a Prediabetes 101 [video](#) for social media distribution to increase awareness of prediabetes and the program within the community.

To raise awareness of the program within the clinics, the wellness staff presented at the clinic's all-staff monthly meetings to give an update on the program and the processes involved in identifying and referring patients at risk. The relationships the wellness team built with the rest of the clinical teams at the Anaheim and Boyle clinics were crucial in developing awareness and obtaining support for referrals.

Provider Referrals

AltaMed developed a process to allow providers to send a referral order through the NextGen EHR system by clicking the *AltaMed Healthy Lifestyle Program* option within the system. After the referral was submitted, a task communication was sent to the Health Education team within the region (Los Angeles or Orange Counties). The health education team followed up with the patient for additional evaluation and enrollment support.

Staff Referrals

To support point of care referrals, health educators were trained to review charts each day to see if patients scheduled for that day had lab values and other risk factors that indicated a risk for type 2 diabetes.

If a patient was identified to be at risk, the health educator would obtain permission from the physician to counsel the patient about prediabetes and give them information about the *AltaMed Healthy Lifestyle Program* during the clinic visit.

AltaMed recognized the need to extend patient referrals beyond the point of care approach and to utilize the significant amount of data housed within the AltaMed EMR. AltaMed performed a query within NextGen to identify patients at risk using the following parameters:

- Patients who had a medical visit within the last 12 months and an
- A1c between 5.7 – 6.4

The above criteria produced a registry of 15,646 patients for proactive outreach, screening, and further evaluation by health educators.

Patient Self Referrals

In addition to the above-named strategies, AltaMed allowed patients to self-refer to the program. If a patient learned about the program through AltaMed's awareness campaigns, they were prompted to contact AltaMed to speak to a health educator for additional evaluation and program enrollment.

Measures of Success

AltaMed is measuring the success of the program by evaluating clinic processes including the amount of provider time involved in referrals and the number of referrals completed. From a patient perspective, success will include the evaluation of program enrollment, engagement, and satisfaction with the program components.

At the conclusion of the demonstration project:

- Most patients who were referred to a health educator were receptive to learning about the program.
- Approximately 50% of referred patients enrolled in the program.
- Systematic approaches were achieved that streamlined the referral process within the clinic.

Challenges & Lessons Learned

Challenges encountered by AltaMed were primarily process in nature and will be addressed through the continued refinement of the referral model.

- The Referral checkbox within the EHR needs to be prominent and easily visible by providers.
- Additional training is needed for providers on type 2 diabetes risk factors and diagnosis of prediabetes.
- Team care is critical.
- Program options need to further address enrollment and engagement barriers (transportation, child care needs, social support).

Scalability / Next Steps

AltaMed recognizes that significant barriers remain to implementing a referral protocol within all clinic locations. As they prepare for the implementation of coverage for California Medicaid beneficiaries in January 2019, AltaMed has engaged Solera Health as a partner to provide the following:

- A network of delivery options for AltaMed patients

- A feedback loop from programs to providers (reporting)
- Opportunity to engage patients on behalf of AltaMed physicians and staff for program matching, enrollment, and follow up

Integrated Delivery System: Emory Family Medicine Clinic

Pre-Demonstration Project Approach

Emory Family Medicine Clinic (EFMC) is an Integrated Delivery System operating within the Emory Healthcare Network (EHN) and serving the community of northern Atlanta since 2002. Approximately 11,000 individual patients receive care at the clinic each year, with 24,000 encounters. Minorities and persons with a lower socioeconomic status are major constituents, and 51% of the patients served are African-American. In addition, 25% of EFMC patients have a BMI greater than 30 and could benefit from lifestyle changes.

In 2013, a Lifestyle Clinic, supervised by family and preventive medicine faculty, was established where patients with chronic diseases and risk factors could be referred for more intensive evaluation, counseling, and intervention. The clinic convenes patient groups once or twice a month using a shared medical appointment. Discussions at the shared medical appointment include nutrition, physical activity, and lifestyle approaches to stress relief.

Prior to the demonstration project, patients identified with diabetes or prediabetes through standard screening were referred to the Diabetes Education program (for patients with diabetes) within the Emory Healthcare Network and the Lifestyle Clinic, as well as to community resources such as the YMCA DPP (for patients with prediabetes) at the time of the patient's visit with their provider. At that time, there was no systematic process in place to encourage patients to connect with community resources for lifestyle support services.

Demonstration Project

In the design of their demonstration model, Emory focused on the development of a formal intensive outreach and enrollment process for patients within the Lifestyle Clinic identified as having prediabetes.

Patient Outreach

To enhance efforts in using its office and community support, EFMC conducted intensive outreach and referral activities with patients who attended Lifestyle Clinic sessions from June 2014 through January 2017 (approximately 109 individuals and 236 visits). This group was

chosen based on their identification as a motivated pool of patients based on prior program engagement within the Lifestyle Clinic. Of the 109 patients, 37 (34%) met the eligibility criteria for the National DPP lifestyle change program based on age, body mass index, A1c, and appropriate exclusion factors.

Patient Outreach

The outreach process began with the mailing of a letter to each eligible patient. The letter provided information about prediabetes, described the National DPP lifestyle change program, and noted that the patient would be contacted by a referral coordinator.

One week after the letter was mailed, the patient was called by the referral coordinator. During the call, the coordinator provided additional information about the National DPP lifestyle change program and evaluated readiness and interest in program enrollment.

The telephonic outreach process included multiple attempts, as the referral coordinator called each of the identified patients up to three times and left a voice mail with her contact information as well as contact information for the Metro Atlanta YMCA DPP coordinator.

As a result of the outreach process, 16 patients (43%) indicated an interest in the program, and their names were forwarded to the Metro Atlanta YMCA DPP coordinator.

As of April 20, 2017, of the 37 individuals, nine (24%) agreed to enroll in the Metro Atlanta YMCA DPP program. Three patients who declined to enroll cited cost (\$429) as a factor. As of this report, those who had agreed to enroll had not yet done so.

Measures of Success

EFMC is measuring the success of the program by evaluating clinic processes, including monitoring the success of the outreach process and subsequent enrollments. In addition, partnership development that supports scaling of the program across the Emory system is a key outcome.

Through the demonstration model, EFMC:

- Established relationships with community providers – EFMC established a relationship with the YMCA DPP of Metro Atlanta and developed a process to receive data on individual patients from the YMCA. Every week during the duration of the project Emory officials compiled the names and contact information of patients who agreed to be contacted by the YMCA DPP coordinator, and provided this information by fax to the YMCA. Two weeks after this submission, the YMCA and Emory collaborators would review by phone the interest and registration status of each referred patient.

- Developed a relationship with the Emory Diabetes Training and Technical Assistance Center (DTTAC), and planned to collaborate on a university-wide grant to expand activities around type 2 diabetes prevention.

Challenges and Lessons Learned

EFMC encountered a variety of challenges that they plan to address through continued process refinement as options are explored to scale the program across the Emory system.

- A major challenge for the EFMC was the limited amount of time available to complete the demonstration project, which impacted the clinic's ability to keep providers up to date and develop systemic interventions with providers at the clinic and throughout the Emory system.
- The YMCA of Metro Atlanta had challenges in starting classes because of enrollment delays. By the end of the project no patient could be registered for classes because no class in the YMCA network had sufficient patients for the class to begin
- EFMC recognized the need for an EHR referral process and data exchange between the CDC-recognized LCP (YMCA of Metro Atlanta) and EFMC.
- EFMC realized that phone calls were a poor outreach method, as patients' willingness to answer the phone hindered success. Additional modes of outreach (electronic / email) are needed.
- Program cost (patient self-pay) was a significant barrier to program enrollment.

Summary / Next Steps

- Emory will continue to work with the YMCA to follow whether referred patients are enrolled in the program.
- Emory will also broaden the dissemination of promotional materials and brochures provided by the YMCA to the general patient population visiting the EFMC for care.
- This project has stimulated the formation of an Emory Healthcare Network-wide steering committee to develop a standard operating procedure (including evaluation methods) to become a CDC-recognized program provider and implement classes at facilities across the network. The first task of the steering committee was the submission of a grant application to fund dissemination research assessing the details of the challenges and facilitators of implementing classes in Emory facilities.

Independent Practice Association: Wheat Ridge Internal Medicine

Pre-Demonstration Project Approach

Wheat Ridge Internal Medicine (WRIM), an Independent Physician Association in Wheat Ridge, Colorado, serves approximately 13,000 patients. 62% of its patients are on Medicare. 13% of WRIM's patient population is Hispanic/Latino, and 70% Caucasian. Approximately 35% of its patient population has been diagnosed with prediabetes or diabetes.

WRIM has a deep commitment to preventive medicine. It is a very busy primary care practice, in which most of the clinicians are heavily involved in disease management with the predominantly elderly population.

Prior to the demonstration period, Wheat Ridge screened patients at least annually with a metabolic panel that included a fasting glucose and lipid profile. If testing indicated an individual was at risk for diabetes, physicians ordered an A1c test.

Patients were counseled on dietary modifications, physical activity, and weight loss (if relevant) during the examination. Patients were given handouts on healthy food choices and exercise, and encouraged to track their exercise and food intake. They were asked to return in 3 months to recheck their fasting glucose, and if elevated, recheck their A1c.

Prior to the demonstration project, WRIM did not have a systematic approach to referring patients to CDC-recognized LCPs.

Demonstration Project

WRIM designed their demonstration model to focus on prediabetes screening and testing and referral of eligible patients to a community-based CDC-recognized LCP. The strategy incorporated point of care and retrospective patient identification and referral strategies.

Partnership Development

WRIM developed a partnership with the Consortium for Older Adult Wellness (COAW) and the Cherry Creek Wellness Center to provide two classes at the WRIM clinic location. The classes were provided at no charge to WRIM patients as part of a grant-funded model.

Patient Awareness

WRIM designed and placed posters at check-in and other key locations throughout the clinic. The posters educated patients about the risk factors associated with prediabetes and the availability of classes within the WRIM location. The paper-based risk test was also available for patient completion in the waiting area prior to the patient's appointment.

Patient Identification and Referral

Retrospective Approach

Wheat Ridge staff reviewed the health records of 147 patients using an EMR ICD diagnostic code search to identify patients at risk.

Within this population:

- 92 patients were called by the lead provider to discuss their risk status and the opportunity to enroll in the WRIM Diabetes Prevention Program.
- 35 individuals (including family members and friends of the referred patient) attended a one hour readiness assessment with a nutritionist.
- A list of eligible and committed candidates for the program was then compiled and given to COAW.
- Final program eligibility and enrollment was determined by confirming that the patients were willing to commit to a yearlong program.

Point of Care Approach

WRIM physicians were given brief referral forms to complete during a clinical visit (during a routine assessment / lab review). The referral forms were given to the administrative assistant/patient care coordinator for follow up. Each point of care referral included the following process:

- Record review (lab values, other patient eligibility criteria)
- Lead provider calls to patients to discuss the program
- One hour follow up interview / readiness assessment with a nutritionist
- Referral to COAW if patients exhibited readiness for the program

Classes Launched

Through the collaboration with COAW and the Chery Creek Wellness Center, the WRIM hosted two class cohorts. The first program began on March 14, 2017 with 15 participants and has continued to be held on Tuesdays; seven classes had been completed at the time of this report. A Saturday program began on May 6, 2017 with 10 participants, and three classes were completed as of May 20, 2017.

Measures of Success

WRIM is measuring success based on the institutionalization of a referral protocol within their clinic setting. This is important to all stakeholders in preparation for the launch of the Medicare Diabetes Prevention Program (MDPP) expanded model in 2018, as the majority of WRIM patients are Medicare beneficiaries.

Through the demonstration project, WRIM:

- achieved high participant retention rates and patient satisfaction.
- provided a free or low cost lifestyle intervention option for providers to refer to.

Challenges & Lessons Learned

- WRIM providers need easy referral processes, such as one-click EMR referrals.
- The readiness assessment, while worthwhile, is time consuming, and scalable options should be explored.

Appendix 1 Summary Chart

| Grantee | Type of Organization | Barriers Identified | Example Strategies Developed | Scalability Plan |
|-------------------------|----------------------|---|--|--|
| AltaMed Health Services | FQHC | <ul style="list-style-type: none"> • Need referral process to be simplified • Retrospective / proactive approach needed • Program awareness (community and within clinics) • Additional class options that address patient barriers | <ul style="list-style-type: none"> • EHR alert and retrospective query for patient identification • Community and clinic awareness campaigns • Utilization of health education department for patient outreach and enrollment | <ul style="list-style-type: none"> • Additional provider education • Continued development of EHR alert / referral process • Partnership with Solera Health |

| | | | | |
|-------------------------------|-----------------------------|---|---|--|
| Emory Health System | Integrated Delivery System | <ul style="list-style-type: none"> • No systematic approach for referrals • Time constraints for providers | <ul style="list-style-type: none"> • Letter / phone call campaign • Partnership with local YMCA | <ul style="list-style-type: none"> • Recently convened system-wide steering committee to develop scalability plan |
| Wheat Ridge Internal Medicine | Independent Physician Group | <ul style="list-style-type: none"> • Need referral process that utilizes existing data • Time constraints for providers | <ul style="list-style-type: none"> • EHR query process • Point of care process utilizing comprehensive readiness assessment | <ul style="list-style-type: none"> • Establishing readiness for delivery of MDPP within clinic • Continued development of EHR alert / referral process |