

FINAL REPORT SUMMARY

National Diabetes Prevention Program

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**NATIONAL
NURSE-LED CARE
CONSORTIUM**
a PHMC affiliate

INTRODUCTION

The National Diabetes Prevention Program

In 2018, **10.5% of the American population of all ages** had Type 1 or Type 2 diabetes. Unlike Type 1 diabetes, Type 2 diabetes is typically diagnosed in adulthood, disproportionately affects racial and ethnic minorities, and, importantly, **can be prevented or delayed through lifestyle changes**. Evidence-based prevention programs provide tools and resources for those with **prediabetes** to pursue healthy lifestyles through weight management, increased physical activity, and peer support. The Centers for Disease Control and Prevention's (CDC) **National Diabetes Prevention Program** (National DPP) is a comprehensive lifestyle change intervention that supports those at risk for developing Type 2 diabetes through prevention efforts. Through the National DPP, CDC aims to promote health and wellness for the more than 88 million Americans with prediabetes, with a secondary goal of reducing the **healthcare costs** associated with Type 2 diabetes treatment and management.

The National DPP can be adapted to meet particular patient and community needs, but three fundamental elements must be included to maintain the intervention's integrity and comply with CDC guidance: (1) participant education sessions delivered by a trained lifestyle coach; (2) utilization of CDC-approved curriculum, and (3) peer support over a minimum of one calendar year. National DPP providers are encouraged to complete the CDC's **readiness assessment** to determine their capacity to scale and sustain lifestyle change programs within their organization.

The **CDC Diabetes Prevention Recognition Program** enables providers to promote their program within an online registry, measure programmatic quality that meet standards which elevate program status in a stepwise process from pending through preliminary to ultimately reach full status, and become eligible to submit insurance claims to Medicare and Medicaid and/or commercial plans. It is worth noting that not all state Medicaid programs reimburse for the National DPP.

Community Health Centers

Community-based healthcare facilities like federally qualified health centers (FQHCs) are on the front lines of primary care for underserved communities, including those at highest risk for developing Type 2 diabetes. With almost 13,000 sites across the United States, community health centers serve millions of the country's most vulnerable patients and communities each year through interdisciplinary primary care. Health centers are well-positioned to lead the healthcare system in screening services for a multitude of chronic conditions, especially prediabetes. They are also specially equipped to support patients with prediabetes by providing culturally-sensitive, person-centered wellness services like the National DPP.

Chronic disease prevention - including diabetes - is a necessity for community health centers. Diabetes is a leading **driver of healthcare costs** across the country, and also disproportionately affects **communities of color and those with low incomes**, key demographics served by health centers. Close to three million health center patients had a diagnosis of diabetes in 2019, and nearly 32% of all health center patients recorded an A1C higher than 9% on their test in the past year. By targeting patients with prediabetes through lifestyle change programs, health centers can shift the model of care from reaction to prevention, which promotes health and wellness for patients and reduces the overall cost of care.

The health centers featured in this case study serve geographically and demographically diverse patient populations and deploy promising practices in National DPP implementation that engage patients, families, staff, and the community at large. In describing the successes and challenges faced by these health centers in supporting National DPP cohorts, this case study aims to provide practical guidance for other service providers interested in beginning or enhancing National DPP programs.

Staff from the National Nurse-Led Care Consortium (NNCC) liaised with experts from the Health Resources and Services Administration (HRSA) and primary care associations (PCAs) across the country to identify health centers to highlight in this case study. These health centers include:

HEALTH CENTER DEMOGRAPHICS CHART*

Health Center	Total Patient Population Size	CDC Recognition?	Number of Sites Offering National DPP	Location	Population	Number of Cohorts in 2019	Percentage of patients with A1C>9
Hamakua Kohala Health	5,604	Yes	4	Hawaii	Rural	3	20%
Open Door Community Health Centers	59,595	Yes	4	New York	Suburban and rural	9	27.8%
Eastern Shore Rural Health System, Inc.	31,654	No	1	Virginia	Rural	1	20.8%
Coal Country Community Health Center	9,657	Yes	1	North Dakota	Rural	1	18.7%

***The information in this chart was obtained via interviews with health center staff, as well as 2019 Uniform Data System (UDS) data**

NNCC partnered with Health Promotion Council (HPC) to develop an interview guide for health center case study participants that highlighted promising practices, challenges in implementation and sustainability, and lessons learned for other health center providers. In sharing these health centers' stories, the authors hope to encourage the widespread adoption of CDC's National Diabetes Prevention Program in health center operations across the country.

Hamakua Kohala Health



Open Door Community Health Centers



Eastern Shore Rural Health System, Inc.



Coal Country Community Health Center



SETTING UP FOR NATIONAL DPP SUCCESS

Not all health centers have the capacity to offer lifestyle change programs like the National DPP on-site. Others are equipped to host classes, cooking demonstrations, and group visits with multiple cohorts. There is no right or wrong way to engage patients with lifestyle change resources. When considering National DPP participation, health centers have several options:

1. Refer patients to [National DPP providers](#)
2. Partner with community organizations to co-lead National DPP
3. Fully integrate the National DPP into existing health center programming

Health centers that offer the National DPP on-site can limit participation to health center patients and families, or make the program accessible to all community members. The remainder of this case study illustrates effective strategies across the full continuum of implementation.

The Key Elements of Successful National DPP Implementation in a Health Center Setting

Through interviews with health center staff, dialogue with CDC, and an analysis of existing health center data on National DPP implementation, NNCC and HPC identified five key elements of successful national DPP implementation in a health center setting. Each of the five elements - workforce and infrastructure, recruitment and retention, external partnerships, reimbursement, and delivery modalities - are described in the following sections, with examples from the four aforementioned health centers highlighted throughout each section.

Workflow and Infrastructure

In order to either refer to or integrate National DPP programs for patients, health center staff must design a thoughtful workflow that accounts for available physical, technological, and staff resources. Health centers must identify, educate, and refer or recruit eligible patients in a systematic process, ideally one that complements existing care coordination efforts and is streamlined through the electronic health record (EHR) system. Yet even before patients are recruited into the program, providers and staff - including IT, leadership, and administration - must understand their role in the health center's National DPP efforts and how their responsibilities might change as the program evolves. If a health center is offering the National DPP at one or more sites, existing space needs to be assessed and utilized appropriately, or sites should acquire alternate space for short or long-term use.

Promising Practice: Educate Providers

"I would send them PowerPoints - really quick ones - about who would qualify for the program, or periodically send emails out to remind providers about National DPP."

EHR optimization was a key early step at Open Door Community Health Centers. Gina Devito, the health center's Director of Wellness Initiatives, described the process of updating the EHR to facilitate National DPP implementation. "The EHR really isn't built for this. We had to make templates and figure out a system for scheduling. I spent a lot of my time working with our IT department." Gina and her team created "dummy codes" that could be entered during provider visits to identify, refer, and track patients enrolled in program cohorts. In this way, Open Door was prepared to [capitalize on reimbursement opportunities](#) offered by Medicare, private payers, and some state-based Medicaid providers. The process of modifying the EHR took approximately six to eight months of collective effort, but resulted in a streamlined referral process for providers, seamless data capture and tracking capabilities, and a relatively easy transition to updated reimbursement codes.

At Hamakua-Kohala Health, provider and staff education came first. Jennifer Valera is a certified lifestyle coach for the health center's National DPP and emphasized the importance of connecting the program with her colleagues across the health center team. "I would send them PowerPoints - really quick ones - about who would qualify for the program, or periodically send emails out to remind providers about National DPP." Jennifer also had the support of Cathy Marquette, the health center's medical director. As a clinical and administrative leader at Hamakua, Cathy made space for Jennifer and her team to discuss the National DPP at provider meetings and find other ways to regularly communicate with clinicians. "The more you talk about it, the more referrals you get," Jennifer said.

Recruitment and Retention

Participants in a National DPP cohort can be recruited from the health center patient population, the community at large, or as an employee benefit for health center staff. Regardless of how participants enroll, DPP providers need strategies to retain them for the duration of a **year-long program** - a sizable time commitment for both participants and staff. While the program length is a staple of its effectiveness, many National DPP practitioners cite challenges in maintaining participant engagement from session to session.

Jennifer Valera employed several strategies to both recruit and retain participants at Hamakua-Kohala Health. The health center's cohorts are open to patients, but also welcome eligible members of the community. Jennifer and her team regularly attend community health fairs, parent nights, and parades and bring physical copies of **CDC's prediabetes risk test** to screen potential participants. Jennifer noted that they also ask community members and patients to "test friends and family" and spread the word about Hamakua's lifestyle change programs. Word of mouth is a powerful tool for recruitment, and Hamakua staff encourages current and former participants to share their experience in the DPP program to bolster interest. Hamakua cohort members also receive incentives for sticking with the program for the full year. Jennifer provides participants with materials like food scales, fitness trackers, and reusable water bottles that relate the content and themes from each of the sessions.

Success Story: Lifestyle Change

"I really enjoy this group. They're making much better choices, they're more conscious of exercise, and their bloodwork is showing the progress that they're making."

Eastern Shore Rural Health System, Inc. is just beginning their National DPP implementation; 2019 marked the first time that the health center conducted a DPP cohort. "Getting them to stick with it is the hardest part," said Health Education Coordinator Heather Diem. "We started with twelve in this cohort, but are down to three." Heather mentioned that some of her retention issues stem from limited transportation for patients, the length of the program, and the difficulty with planning sessions that work with everyone's schedules. Despite these challenges, the three patients that Heather continues to coach in her cohort are making huge strides. "I really enjoy this group. They're making much better choices, they're more conscious of exercise, and their bloodwork

is showing the progress that they're making." Heather also noted that the remaining cohort members have built a sense of community among one another, one centered around support, mutual trust, and camaraderie. Eastern Shore can point to this group's successes and positive experiences to build recruitment and retention efforts in the future. Weekly attrition rates were typically <1-2% for the National DPP.

External Partnerships

As community-based providers, health centers regularly interface with external partners in housing, social services, and education. Community partners can be integral members of a health center's National DPP team, providing incentives for participants, transportation assistance, cooking demonstrations, or any number of complementary services. Many YMCAs, for example, offer **diabetes prevention programs**, and can facilitate health center efforts by offering discounted or low-cost memberships to patients. By identifying like-minded organizations with similar community wellness goals, health centers can fill gaps in resources and promote sustainability for their National DPP programs.

Promising Practice: Partner Goal Alignment

“We tried to figure out how we can combine our forces and resources together to improve the health of the population that we serve,”

The National DPP team at Coal Country Community Health Center regularly partners with peer organizations in the community to enhance their work. One of Coal Country’s most successful partnerships is with **North Dakota State University’s** cooperative extension program. **Cooperative Extension** is part of a network of educational providers who serve farming and rural communities by promoting agriculture research, supporting farmers and their families, and offering nutrition-based health and wellness programs. Coal Country and the NDSU extension share information and resources - including workforce - to supplement one another’s health programming.

The local extension agent is a member of Coal Country’s Population Health Committee, which meets on a monthly basis to discuss community health initiatives like the National DPP. “We tried to figure out how we can combine our forces and resources together to improve the health of the population that we serve,” explained Chastity Dolbec.

Successful National DPP programs are supported by a skilled workforce - including project managers and lifestyle coaches - who work with providers and patients to build and sustain health center cohorts. Open Door took an innovative approach to staffing their wellness programs, including National DPP. The health center regularly hosts **AmeriCorps members**, who provide direct services to patients across the organization’s six sites. Gina shared that two previous AmeriCorps members now work full-time as part of Open Door’s wellness staff. In one instance, an AmeriCorps member “did three AmeriCorps terms with us, and it changed her career path.” Instead of pursuing her initial goal of social work, the member at Open Door became certified as a group exercise instructor and now works with patients in several lifestyle change programs, including National DPP. Partnerships with organizations like AmeriCorps provide added value not only to the existing health center team, but can recruit future health center staff members and advocates.

Reimbursement

Many **private insurers** reimburse providers for offering the National DPP program to their members. For health centers, this benefit has limited value; well over half of all health center patients are covered by Medicaid (48.42%) or Medicare (9.66%), which are funded through the Centers for Medicare & Medicaid Services (CMS). CMS began reimbursing National DPP providers through its **Medicare program** in 2018, and has since encouraged state Medicaid providers to reimburse as well. However, **not all states** have adopted this policy. Of the four health centers featured in this case study, only New York’s Open Door Community Health Center is able to bill both CMS and its statewide Medicaid provider for National DPP costs. Still, many of the health centers we interviewed have experience billing for their Medicare and privately insured patients, and others are beginning to prepare for potential Medicaid reimbursement expansion.

Success Story: Implementing Billing Infrastructure

“Because we’re able to bill for National DPP, we can apply the same sliding scale fee schedule that we have for all of our services,”

For Open Door, reimbursement and sustainability were incorporated early during program implementation. Open Door staff also used dummy codes for eligible patients before reimbursement was available, but have since transitioned to regularly billing for Medicaid patients. “Because we’re able to bill for National DPP, we can apply the same sliding scale fee schedule that we have for all of our services,” said Gina. In this way, eligible National DPP visits and sessions have become part of Open Door’s existing billable portfolio. The majority of Open Door’s National DPP cohort participants are insured through Medicaid, not Medicare, so Gina and her team are still deciding whether pursuing Medicare reimbursement is worthwhile.

Hamakua-Kohala Health worked closely with their [state primary care association](#) to plan for reimbursement when they enrolled their first National DPP cohort in 2015-2016. The health center also built referral and tracking templates into their EHR, where providers could enter dummy codes for patients eligible for and enrolled in National DPP. Those dummy codes were replaced with Medicare codes beginning in 2018, and life coaches at Hamakua applied for and received their own National Provider Identifier (NPI) number to bill for qualifying services. The system Hamakua-Kohala Health developed will enable a smooth transition to Medicaid billing if and when it becomes available in Hawaii.

Modalities

National DPP sessions can be offered either in-person or remotely (via internet or phone), though all of the health centers featured in this case study offer exclusively in-person sessions. This was due to a variety of factors, including internet connectivity issues, retention challenges for online sessions, and lifestyle coach comfort with utilizing telehealth technology. Providers also have the option to offer a blended cohort model, where some sessions are offered in-person and others virtually. Before deciding on the modality that works best for their patients, health centers should take inventory of existing telehealth infrastructure, reimbursement considerations, and the needs and preferences of enrolled participants.

“In rural North Dakota, we still have a large number of people who don’t email or text message, or even have a computer,” according to Janet at Coal Country. The team expressed interest in exploring virtual options in the future, but recognized that offering sessions online or via phone would necessitate a shift in the way both patients and staff are educated and supported. Chastity added that “If we could move some of our sessions to remote access, we might have a better outcome for the National DPP program because of the transportation issues we face, the six months of winter we have, and just the uniqueness of our rural population,” said Chastity. “That’s definitely something on our radar.”

Eastern Shore is also only offering in-person sessions, but Heather utilizes a variety of modalities to build and maintain trust between herself and the groups she coaches. Heather regularly checks in with her cohort members via phone, and her group text one another to offer support. “The biggest compliment I’ve received from them is that every time they’re going to eat something ‘bad,’ they see my face!” Heather’s participants feel comfortable connecting with her about their progress, their challenges, and to ask for real-time advice. Still, Heather imagines what unlimited resources could mean for the program. “I would love to take field trips to grocery stores or cooking demonstrations, and offer incentives for every session instead of just occasionally.” As her first cohort reaches completion in 2020, Heather hopes to devote more time to exploring new ways to engage patients in Eastern Shore’s National DPP.

CONCLUSION

Diabetes prevention must be a clinical priority for primary care providers, especially those serving patients most at risk for developing Type 2 diabetes. By either offering the National DPP to patients or referring to outside DPP providers, health center staff can address patient prediabetes through evidence-based lifestyle change program services that not only benefit enrolled patients, but their families and communities as well. The barriers, promising practices, and lessons learned to raise referral and enrollment to DPP programs outlined in this case study provide context and concrete solution strategies for health centers to consider and trial for effectively embedding the National DPP implementation into their primary care setting.

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National Nurse-Led Care Consortium

The National Nurse-Led Care Consortium (NNCC) is a nonprofit member-supported organization working to strengthen community health through quality, compassionate, and collaborative nurse-led care. NNCC's mission is to advance nurse-led healthcare through policy, consultation, and programs to reduce health disparities and meet people's primary care and wellness needs.



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