

# Implementing the National Diabetes Prevention Program

Case Studies of Six Organizations' Experiences in the New York Metropolitan and Greater Philadelphia Regions



Report prepared by the Greater Philadelphia Business Coalition on Health for the National Association of Chronic Disease Directors

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# Introduction

The National Diabetes Prevention Program (National DPP) lifestyle change program (LCP) is an evidence-based program that has been demonstrated to delay or prevent the onset of diabetes for persons at-risk for type 2 diabetes.

The Diabetes Prevention Program (DPP) was a major multicenter clinical research study funded by the National Institutes on Health, aimed at discovering whether modest weight loss through dietary changes and increased physical activity or treatment with the oral diabetes drug metformin could prevent or delay the onset of type 2 diabetes in study participants. At the beginning of the DPP, participants were all overweight and had blood glucose levels, also called blood sugar levels, higher than normal but not high enough for a diagnosis of diabetes—a condition called prediabetes.

The DPP found that participants who lost a modest amount of weight through dietary changes and increased physical activity sharply reduced their chances of developing diabetes. Taking metformin also reduced risk, although less dramatically. The DPP resolved its research questions and the researchers published their findings in the February 7, 2002, issue of the New England Journal of Medicine.

The intervention was then translated by the Centers for Disease Control and Prevention (CDC) into a small group setting led by trained lifestyle coaches that meet CDC training guidelines. Today, hundreds of in-person and online National DPP LCP teach participants across the country, to make lasting lifestyle changes, like eating healthier, adding physical activity into their daily routine, and improving coping skills.

Small groups of at-risk individuals meet weekly for 16 weeks and receive education and training as well as friendship and accountability. Afterward, they meet monthly for the remainder of the year to develop sustainable practices outside of the weekly meetings.


Additional information on the National DPP LCP is available at the CDC website:

<https://www.cdc.gov/diabetes/prevention/index.html>.

In 2012, National Association of Chronic Disease Directors (NACDD) became one of only six CDC grantees, tasked to scale and sustain the National Diabetes Prevention Program with employers and health insurers. NACDD focused its efforts on the greater New York City and Philadelphia markets, working to build awareness, train benefits managers and help employers launch National DPP lifestyle change program (National DPP LCP) cohorts.

Specifically, NACDD developed a series of strategic partnerships, working closely with employee benefit experts from MedWorks, USA. Together, NACDD and Medworks established relationships with regional Business Groups On Health in both New York City and Philadelphia.

Those networks allowed widespread exposure to the National DPP LCP while developing a five-year communication pipeline with interested employers and insurers. Second, NACDD tapped the academic medical community to establish a healthcare vertical from which it could train clinical personnel to become National DPP LCP coaches while at the same time soliciting the health system's at-risk employee population and ultimately the patient population that they serve. This highly tactical approach even allowed for realtime feedback loops to referring physicians.



Constant communication, practical marketing tools and support from top leadership within the organization, became essential elements for success. Each of these strategic approaches proved to be highly effective in developing ongoing interest and ultimate deployment of the program.

At the conclusion of its five year grant, NACDD looked to its longtime relationship with the Greater Philadelphia Business Coalition on Health (GPBCH), to conduct case studies of organizations in the New York and Greater Philadelphia region that had implemented the National DPP LCP.

The effort resulted in this report which includes descriptions of six organizations' efforts to implement the National DPP LCP. Barriers to implementation, and the strategies that organizations identified to overcome those barriers, are presented here. Finally, the report spotlights key takeaways for any employer to consider as they seek to reduce the risk of diabetes through implementation of the National DPP LCP.

# Case Studies

## Latham & Watkins

### ORGANIZATIONAL OVERVIEW

Latham & Watkins (Latham) is a global law firm whose attorneys practice across a wide spectrum of transactional, litigation, corporate and regulatory areas, dealing with complex business and legal matters. Latham has approximately 5,000 personnel, including more than 2,400 lawyers in 31 offices located in the world's major financial, business and regulatory centers.

### OVERVIEW OF DPP IMPLEMENTATION

Latham initiated the CDC's National Diabetes Prevention Program lifestyle change program (National DPP LCP) with employees in recognition that while general weight loss programs were effective, the one-size-fits-all approach did not maximize results for any particular population, and that focusing on a particular segment of the population (i.e., pre-diabetics) could have a more significant impact. The firm considered various options for a lifestyle change program, but given the demands and unpredictability of the legal profession, Latham determined that an on-site lifestyle change program would better serve its population.

### PROGRAM EXPERIENCE AND OUTCOMES TO DATE


Latham partnered with a top-tier medical center in New York City to implement the program. A nurse from the medical center received formal training to serve as a coach for the firm's on-site program. Latham's approach in introducing the program was two-tiered: first, to promote awareness of diabetes and pre-diabetes, the firm offered free on-site hemoglobin A1c testing, and, second, the firm encouraged those who were pre-diabetic to join the program. The initial A1c testing generated 120 participants, and enrollment was rapid. Two nurses conducted finger sticks on site, and participants were then offered the opportunity to meet privately with a lifestyle change coach to understand their test results. If the results were indicative of pre-diabetes, the coach described

the lifestyle change program offered by Latham and enrolled those individuals who opted to participate. In the initial cohort, 25 of approximately 40 eligible individuals enrolled in Latham's Diabetes Prevention Program, consisting of 16 weekly Core sessions and six monthly Post-Core sessions. Participation was tracked throughout the pilot. Twenty-three (92%) of the 25 participants attended more than half of the sessions and 21 (84%) attended more than two-thirds of the sessions. Eighteen (72%) participants moved from the Core to Post-Core portions of the program. Eleven (23%) participants attended at least five of the six Post-Core sessions.

By the end of the program, 9 participants had achieved or maintained 5% weight loss. The A1C levels were retested for fifteen participants midway through the Post-Core sessions, and 10 (67%) changed their health status from pre-diabetic to normal. Two participants had medical issues that likely impacted their results, and three participants had made some improvement.

Subsequently, Latham partnered with a top-tier medical center in Los Angeles to initiate the National DPP LCP in the firm's three LA-area offices. The implementation of the National DPP LCP in Los Angeles followed the same process, although the program development time was cut in half thanks to learning from the NY experience. Latham again began with on-site A1c testing in January 2017, resulting in four National DPP LCP cohorts across all three LA offices. The cohorts kicked off their 16-week Core sessions in February, 2017.

Fifty-five participants began the Latham DPP LCP in Los Angeles, including seven who left during the program. Forty-eight remained as consistent participants, with thirty-seven (77%) attending at least 14 of the 16 Core sessions and receiving a Fitbit Aria scale in recognition of their strong participation. Six other participants attended regularly, although fell slightly short of the 14-session cut-off for the Fitbit scale.



Thirty participants had their A1c re-tested six months into the program, at which time

- 23 reduced A1c by 0.1 % to 0.7% (of whom 15 normalized their A1c to <5.6%)
- 3 maintained the same A1c
- 4 increased their A1c, although some lost weight and achieved >150 min a week of physical activity
- 11 lost between 15-25 lbs.

## **WHAT'S NEXT/FUTURE DIRECTIONS**

Latham has developed many strategies to enhance and expand its National DPP LPC. The firm continues to introduce new programs among its offices, one city at a time. Currently, Latham is collaborating with a top-tier medical center in Chicago to initiate its DPP model in January 2018.

In looking to the future, Latham is considering issues such as scalability and global expansion of the program, as well as the benefits and challenges of in-person, versus virtual programs. The firm is also assessing other vendors and exploring online offerings that could extend the program's reach beyond the United States.

# New York City Mayor's Office of Labor Relations

## ORGANIZATIONAL OVERVIEW

The Mayor's Office of Labor Relations (OLR) administers benefits for 1.2 million City of New York employees, their dependents and retirees. OLR coordinates collective bargaining on wages and benefits for more than 140 bargaining units. WorkWell NYC is the City's health and wellbeing program for employees. WorkWell NYC was initiated under Mayor Bill de Blasio to demonstrate the administration's commitment to workforce health and improving labor relations through wellness offerings.

## OVERVIEW OF DPP IMPLEMENTATION

As part of the planning process conducted by OLR in collaboration with the NYC Department of Health and Mental Hygiene (DOHMH) and union leadership to launch a health and wellbeing initiative, diabetes was identified as a priority area for focus. DOHMH was implementing a community-based National DPP initiative, and offered to assist OLR in implementing the National DPP lifestyle change program (National DPP LCP) for City employees. The New York State Health Foundation funded a pilot National DPP LCP initiative that initially launched in two agencies: the Department of Environmental Protection (DEP) and the Department of Health and Mental Hygiene, each of which has approximately 6,000 employees.

In "Cycle I" of program implementation, two cohorts were implemented for each of the pilot agencies, for a total of four cohorts each with approximately 20 participants each. EmblemHealth, one of the health plans offered by the City, provided the trainers for the project, and the DOHMH used its staff as trainers. This was the first time OLR had offered a free on-site program for employees.

Success of the Cycle I pilot, regarding enrollment, participation, and outcomes, led to expansion of the program to other sites. Recruitment of Cycle II participants was tied to communication and education efforts for National Diabetes Month. With foundation grant support, OLR could hire a full-time facilitator, enrolling an additional 111 program participants. NACDD provided additional support, through a CDC grant, for program expansion to other sites, under

Cycle III, leading to an additional 176 participants.

## PROGRAM EXPERIENCE AND OUTCOMES TO DATE


OLR has been very satisfied with its experience implementing the National DPP LCP and expanding its availability over the past two years to additional agencies. Program leadership notes that more than 90% of enrollees complete the 16-week program of classes, with retirement or transfer to a different position being the main reasons for non-completion. Identification of potential participants has also been facilitated by positive word-of-mouth from trainees and identification of program champions.

As of the summer of 2017, twelve agencies within the City had facilitated worksite cohorts, with over 400 employees participating in the National DPP LCP. Of those who have completed the program, 47% lost 5% or more of baseline body weight, and 25% of participants lost 7% or more of baseline weight. For participants in cycles II and III, 65% have lost 3% or more of baseline body weight.

## FUTURE DIRECTIONS

Although external funding was necessary to implement the initial program, based on results to date, OLR is continuing to fund the program. However, OLR recognizes that, given the size of the workforce, and their spread across many departments, divisions, and locations, the in-person program is not fully scalable to the target population. In addition, not all employees are able to take time during the workday to commit to the class schedule (classes are scheduled at lunch hours). OLR therefore is now preparing to pilot a virtual version of the program, offered through Omada Health. Foundation funding will be used to fund 230 program slots. If the program is successful, the City will issue an RFP to identify a vendor to scale up DPP availability for the broader at-risk workforce.

The on-site program also will continue to be offered and spread to other sites and departments. Participants have begun self-reporting their A1c values so change can be measured for evaluation purposes. As



OLR prepares to launch its next round of cohorts, it is incorporating education on maintaining healthy blood pressure, with nurses coming in to conduct blood pressure screenings throughout the year, both to identify pre-hypertension and hypertension diagnoses and to assess program impact on blood pressure levels.

A key concern for OLR is sustaining program outcomes and impact beyond the one year program. OLR seeks to help participants maintain their lifestyle changes by providing ongoing social support for program "graduates". Under the present model, the DPP coaches move on to new cohorts, but remain available to participants through telephonic and in-person "office hours." A survey of National DPP LCP participants showed that 94% expressed interest in on-going "aftercare" programming after the program's completion date. In response, OLR is developing a multi-part set of services to help sustain interest and health outcomes. The aftercare program includes:

- "Coaches Corner": participants can schedule a one-on-one call with a DPP lifestyle coach
- "DPP Talks": monthly conference calls or webinars offered during the lunch hour that focus on relevant topics such as social eating and stress management
- Discounted membership in Weight Watchers program offerings (both at-work, community meetings and virtual services) as a part of the City's larger WorkWell NYC initiative
- Periodic physical activity challenges to stimulate motivation and levels of physical activity



# Healthfirst

## ORGANIZATIONAL OVERVIEW

Healthfirst is a provider-sponsored health insurance company that serves more than 1.2 million members in downstate New York. Based in lower Manhattan, Healthfirst offers Medicaid, Medicare Advantage, Child Health Plus, and Managed Long Term Care plans, participates in the NY State Health Plan Marketplace, and recently began offering plans aimed at small businesses and individuals. The majority of current members (approximately 80%) are in the Medicaid population.

Healthfirst's innovative Healthy Villages Initiative identifies geographic areas where the health plan has a significant membership with significant social, economic, and health-related needs, and seeks to support population health improvement. Healthy Villages uses a social determinants of health framework and involves multiple stakeholders in identifying needs, and creating and implementing innovative solutions. The inaugural Healthy Villages communities were the Claremont neighborhood in the Bronx, and Brownsville in Brooklyn.

## OVERVIEW OF DPP IMPLEMENTATION

Diabetes prevention and management were identified as high priority issues for the Healthy Village Collaboratives. Healthfirst became aware of the National Diabetes Prevention Program lifestyle change program (National DPP LCP) and was put in touch with the NACDD and MedWorks as organizations that could help Healthfirst develop an implementation strategy. Given Healthfirst's contractual relationships with network physicians in the target geographic areas the decision was made to focus on implementing the National DPP LCP in clinical practices. Healthfirst would help to build local National DPP LCP capacity by identifying interested provider practices, and training them to offer the program to their patient populations identified as being at high risk of developing diabetes.

To start the process of identifying interested practices, Healthfirst did outreach to network practices, sharing with them claims-based data on diabetes prevalence in their populations, and use of emergency department and inpatient hospital services. The

National DPP LCP was then explained as an evidence-based solution to help the practices mitigate diabetes risk. Awareness that CMS was scheduled to begin reimbursing providers for delivering the program to Medicare beneficiaries helped to fuel practice interest in developing capacity.


Many practices expressed interest in developing their ability to offer the National DPP LCP. The original plan was to recruit interested practices to have representation at a regional training event organized with NACDD's assistance. A few large provider organizations (typically hospital or health system based) already had capacity, but the community practices expressed a preference for onsite training, due to staffing constraints. In response, NACDD assisted Healthfirst in developing an onsite training plan, organizing community-based training for areas in which the clinical settings could identify at least six trainees. Healthfirst also supported the practices by identifying billing codes that could be used to bill for services.

## PROGRAM EXPERIENCE AND OUTCOMES TO DATE

Three practices received National DPP LCP training from NACDD. At any practice, the mix of personnel being trained included medical assistants, staff nurses, care managers, administrative staff, nutritionists, and outreach and marketing staff and personnel. The approach is still young and in the training stage, but the administrators at each of the three practices understand what they need to do to apply for CDC recognition, and are preparing to collect and submit the necessary information. The participating practices have cleared the schedules of the staff being trained so that they can participate without interruption. Buy-in from practice leadership has been strong, particularly from one practice whose physician-founder has been involved in the planning calls. Training staff have observed that this type of leadership involvement is key to support sustainability and adoption of the National DPP LCP program within the practice.

## WHAT'S NEXT/FUTURE DIRECTIONS

Healthfirst is exploring ways to maintain support for developing National DPP LCP capacity in additional



practices. The plan has had success in developing diabetes self-management training capacity using the Stanford model, with 15 Healthfirst staff members trained and serving as a core resource for engaging network practices in diabetes self-management education. A similar strategy is being explored for training Healthfirst staff to seed the National DPP LCP throughout the physician network.

The health plan also continues to develop strategies to expand the Healthy Villages approach to other communities in need. As the Healthy Villages collaboration model gains recognition, clinical practices across New York City are requesting to have Healthy Villages developed in additional neighborhoods. Healthfirst is now exploring the development of “Healthy Village Spaces” – efforts focused on small geographic areas centered on a specific clinical practice. In this model, a practice identifies itself as being interested in offering a space to host health-supporting community activities that can ultimately improve care and clinical outcomes for the population the practice serves. Healthfirst then collaborates with local stakeholders to bring “health content” to the “Healthy Village Space”. Healthfirst hopes to include support for the National DPP LCP training, and data and technical support to these practices.

# Greater Philadelphia Business Coalition on Health

## ORGANIZATIONAL OVERVIEW

The Greater Philadelphia Business Coalition on Health (GPBCH) brings employers in Southeastern Pennsylvania, Delaware, and Southern New Jersey together to identify and implement best practices for maintaining and improving employee health and productivity, and represents employers in efforts to improve the value of the health benefits spend. GPBCH has 44 employer public and private sector member organizations, representing 750,000 covered lives in the Greater Philadelphia region and more than 1.5 million lives nationally.

## OVERVIEW OF DPP IMPLEMENTATION


In 2012, as part of the regional “Philadelphia Health Initiative” focused on addressing the obesity epidemic, GPBCH convened a “Diabetes Prevention Learning Collaborative (DPLC)” with funding support from Sanofi. Eight employers (out of 16 members at the time) agreed to join the DPLC, and committed to attending monthly meetings where they would receive education on obesity and diabetes prevention practices, share information on their organizations’ experiences, and develop customized action plans to address obesity and other diabetes risk factors.

GPBCH became aware of the National Diabetes Prevention Program lifestyle change program (National DPP LCP) in 2013, and connected with the NACDD and its local subcontractor, MedWorks, to discuss strategy for educating employers on the National DPP LCP. An educational program for employers in the DPLC was offered in 2014 with speakers from NACDD and the American Association of Diabetes Educators (AADE). Although employers expressed interest in offering the National DPP LCP, most expressed concern that they did not have discretionary budgets for “wellness” programs, or would need to budget for it in future years. Therefore, employers expressed a strong preference for being able to reimburse for services through their current medical plans. Exploratory conversations with the plans, however, soon identified institutional barriers to coverage, including questions from the plans about how to credential and contract with non-physician organizations for services, and how to process claims, especially

under a pay-for-performance model.

While working through these issues, GPBCH continued to educate DPLC members and the broader employer membership about the DPP. Several employer members implemented National DPP LCP pilots, some with seed funding from NACDD, and reported back to the group satisfaction with implementation progress and early outcomes. GPBCH and NACDD also developed and maintained a list of local providers offering DPP services, including the local Y’s, a few regional hospitals and health systems, and vendors offering in-person and on-line versions of the program. In 2016, GPBCH also convened a series of four primary care physician training programs in Delaware, Pennsylvania, and New Jersey, to encourage physicians to recognize obesity and diabetes risk as treatable, using the American Medical Association’s Prevent Diabetes STAT framework, which includes high-risk patient referral to a National DPP LCP provider.

One concern expressed by several employers was that in-person programs (at the worksite or at community-based locations such as a local YMCA) did not meet the needs of their full workforce, e.g. due to shiftwork, limited meeting space, or reluctance to participate in a health program with work colleagues or at the worksite. In response, and in recognition that evidence was emerging of the equivalent effectiveness of web-based offerings, GPBCH convened a “National DPP LCP e-vendor summit” in the spring of 2017. Five prominent vendors of virtual National DPP LCP services were invited and agreed to participate in the summit: Omada Health, Cappa Health, Hope 80/20, Canary Health, and Newtopia. Each vendor had 30 minutes on the agenda to present an overview of their approach to offering the program, including an overview of their platform, discussion of member engagement strategies, and presentation of results. Nearly 40 individuals signed up to attend the presentations. In a post-summit evaluation, all participants said it was useful, and all the employer representatives in attendance indicated that they were either considering a National DPP LCP offering or already engaged in the planning process. NACDD and Med-



works continued to provide technical assistance and, in some cases, provided seed funding support to help employers initiate a pilot program.

## **PROGRAM EXPERIENCE AND OUTCOMES TO DATE**

Of GPBCH's 44 employer members, 12 have either implemented a National DPP LCP strategy or are in the process of planning or implementing a pilot cohort (in person or virtual program). Although GPBCH is not aggregating statistics on participation or outcomes formally, member feedback has been very positive (two GPBCH members, VWR and Christiana Care Health System are included separately in this case study report).

## **WHAT'S NEXT/FUTURE DIRECTIONS**

GPBCH remains committed to providing education and technical assistance to member organizations interested in addressing diabetes risk and obesity through National DPP LCP implementation. The Coalition's Obesity Interest Group will continue to be convened quarterly to provide employers the opportunity to share their experiences and best practices, and GPBCH will disseminate findings and best practices to the members that are not yet offering the National DPP LCP. GPBCH also will continue to advocate for all health plans in the Greater Philadelphia service region to provide coverage for services.



## ORGANIZATIONAL OVERVIEW

VWR, headquartered in the U.S., is a global, independent provider of products, services and solutions to laboratory and production facilities, in the pharmaceutical, biotechnology, industrial, education, government and healthcare industries. Supported by a workforce of over 10,000 employees, VWR distributes over 1,200,000 products to more than 250 customers in North America and Europe, and offers a suite of laboratory services including research support, inventory management and custom chemical manufacturing.

## OVERVIEW OF DPP IMPLEMENTATION

VWR provides insurance coverage for 4,100 employees in the U.S. Health-related data including biometrics are collected from their insured population every year and reviewed along with the medical and pharmaceutical claims. Approximately 6 years ago, the Benefits Director expanded her review to focus on diagnoses with the highest prevalence and associated costs. In 2016, the annual biometric screenings revealed that 7% of VWR's employees had been diagnosed with diabetes and approximately 20% were pre-diabetic. Upon review of their healthcare spend, VWR realized 5% of its medical costs were associated with diabetes, particularly the pharmacy costs which were extremely high, prompting VWR's decision to implement a preventive program for the pre-diabetic population.

VWR was aware of CDC's National Diabetes Prevention Program lifestyle change program (National DPP LCP) and explored different program formats including on-site, community-based, and on-line programs to determine which model would be most feasible for their employees to accommodate the organization's diverse geographic location and job types (e.g., manufacturing, warehouse, transportation, sales/marketing, clerical, management). Based upon costs and accessibility, VWR selected the on-line format and reached out to third-party vendors to discuss strategies for implementation. The Wellness Manager and Benefits Manager consulted with Cappa Health (Cappa) who offered NACDD grant funding to implement a pilot DPP with one cohort of 30 individuals. The eligibility criteria for participation included fasting

blood glucose levels higher than 100 and undiagnosed diabetes. Information about the pilot program was disseminated through mass email communications to all employees who had completed their biometric screening. The program was promoted as "Get Ready to Feel Better" with information about eligibility. Seventy employees immediately responded with interest in participating. Cappa screened the employees for biometric eligibility and conducted a readiness to change assessment. Many of the interested employees did not meet the pilot criteria so an additional email was sent to potential participants to reach the target enrollment.

## PROGRAM EXPERIENCE AND OUTCOMES TO DATE

The pilot was launched in October 2016 with an initial enrollment of 30 employees and managed by Cappa. The program included 26 virtual sessions presented by a mobile registered dietician, digital scales and 'touch-points' with the participants at the end of 3 months and 6 months. During this time, VWR had no direct contact with the participants. Of the initial 30 participants, 29 continued to work directly with Cappa. At 6 months, 27 employees were still enrolled in the program. Twenty (74%) of the 27 employees were considered "active," which was defined as watching at least 13 of the 18 modules and uploading at least 3 food logs per week. Among the active participants, the average weight loss was 9.1 pounds (4.5%). Among the full group of 27 employees, there was an average weight loss of 3.9% with an average loss of 7.9 pounds. The range of total weight loss was 18-34 pounds and participants reported having greater energy associated with greater weight loss. Two employees contacted Cappa to share their successful outcomes and express "This is great" and "feeling empowered." In addition to the weight loss, there was a decrease in medication use.

## WHAT'S NEXT/FUTURE DIRECTIONS

There is interest in continuing the National DPP LCP once this pilot ends. The Benefits team will review the 2018 budget to assess if there is funding for additional cohorts, and evaluate the anecdotal feedback, weight loss, decrease in medication use and any other changes.

# Christiana Care Health System

## ORGANIZATIONAL OVERVIEW

Christiana Care Health System, headquartered in Wilmington, Delaware, is a non-profit, non-sectarian health system and the largest private employer in Delaware with more than 11,100 employees. Christiana Care has two teaching hospitals, more than 1,100 patient beds, a home health care service, preventive medicine, rehabilitation services, a network of primary care physicians and an extensive range of outpatient services. The health system ranks 22nd in the country for hospital admissions, has the only Level I trauma center in Delaware, a Level III neonatal intensive care unit and is recognized as a regional center for excellence in cardiology, cancer and women's health services. Christiana Care has over 10,000 employees and provides health insurance for 17,000 employees and their spouses.

## OVERVIEW OF DPP IMPLEMENTATION

Christiana Care's Human Resources Employee Program is responsible for supporting the health of its employees. The Employee Program reviews the annual aggregated data from self-reported health risk assessments (HRAs) and biometric screenings including A1C levels. In 2016, based upon the prevalence of diabetes in their insured population and data reflecting that more than 3200 individuals were identified as pre-diabetic, the health system's Medical Director and Corporate Director of Benefits and Wellness determined that implementing a system-wide early intervention for this population was imperative.

Christiana Care became aware of the CDC's National Diabetes Prevention Program lifestyle change program (National DPP LCP) promoted by the National Association of Chronic Disease Directors (NACDD) through an educational program coordinated by the Greater Philadelphia Business Coalition on Health. Initially, the Christiana Care Corporate Director of Benefits and Wellness, Chris Corbo consulted with the health system's Department of Family & Community Medicine about their initiative to refer their pre-diabetic patients to the YMCA's National DPP LCP. In 2016, after further discussion with MedWorks and NACDD, Christiana Care collaborated on a proposal for funding to develop and implement a National DPP LCP pilot for their covered individuals.


The initial program goal was to train Christiana Care registered dietitians and one bilingual community educator as instructors/coaches and to enroll 200 participants in the first year. Once the proposal was approved in May 2016, the training of the instructors/coaches by NACDD and system-wide communication about the program were initiated. To encourage voluntary participation, Christiana Care provided information about the pilot program at their annual Benefits Fair in May and through correspondence to all employees from the Human Resources and the External Affairs Departments. The letters described prediabetes, the prevalence of diabetes, the impact on health as well as information to enroll in the pilot. As an incentive, the program was offered at no cost for participation.

## PROGRAM EXPERIENCE AND OUTCOMES TO DATE

The National DPP LCP was launched on July 21st. Early on the RDs did everything to get the program prepared and initiated, including making all follow-up calls, going to marketing events and teaching.

When employees were enrolled, the participation expectations were discussed and enrollees were asked to sign an agreement as a non-binding commitment to comply with the program. To support engagement and retention, a community educator was added to the team. The community educator communicated with each participant between class sessions to see how they were doing, provide additional information/coaching and to remind them about the upcoming next session.

Over the course of the year, communication about the program continued through the monthly Wellness Newsletters, intranet messages, and organization newsletter. During this time, the Primary Care & Community Medicine Service Line emerged at Christiana Care, which now included the primary care-based RDs. This provided an opportunity to share details of the National DPP LCP across a large cohort of physician practices through common messaging. It also leveraged the Service Line's clinical pathway on diabetes care.



In Year 1, 85 employees were enrolled in eight cohorts and completed at least 4 sessions. The eight cohorts were convened in July (7 participants), October (50 participants-3 cohorts), February (14 participants – 2 cohorts), April (8 participants), and May (7 participants). The initial group completed the year program in July 2017. Of the seven participants, 6 completed the program and said they were happily engaged. The group lost a total of 29 pounds but did not achieve the 5% weight lost goal. However, the A1C levels decrease from 6.1 to 5.5. Christiana Care leadership were satisfied with the improved A1C levels and explored reasons for not reaching the weight loss goal. Subsequent cohorts seemed to be more engaged in the program although each group had different experiences with the DPP as reflected by their attendance and the cohesiveness among members.

## **WHAT'S NEXT/FUTURE DIRECTIONS**

Christiana Care will offer new classes beginning in October 2017 and throughout 2018. The employees' A1C levels and weight loss will continue to be monitored, particularly around weight loss in parallel with changes in A1C levels. Additional measures including “quality of life” will be conducted at the beginning and at the end of the program and a “readiness to change” assessment is being considered. The Wellness Program will focus on increasing program participation, not only with the hospital employees but with the Christiana Care primary care practices and other ambulatory clinic employees as well. Other strategies including exploring the use of a virtual program to enable employees and spouses for whom the daytime on-site program is not convenient.

# Common Themes and Key Takeaways

All six of the organizations participating in this case study project reported positive experiences with the National Diabetes Prevention Program lifestyle change program (National DPP LCP) and plan to continue their activities in implementing and promoting the National DPP for their populations. Five key challenges to program implementation were cited by multiple interviewees: recruitment; retention; resource allocation; program evaluation; and program sustainability. These are discussed below, with interviewees' thoughts and recommendations for addressing these challenges.

1) Recruiting Program Participants: Identifying the “at-risk” population eligible for the National DPP LCP and accruing sufficient interested participants to constitute a class cohort can be challenging. Strategies which were recommended by one or more of the interviewees include:

- Consider messaging that is most likely to resonate with the target population, or altering messaging in recruitment materials. Some candidates may respond to the “reduce your risk of developing diabetes” messaging, but for others, for whom diabetes has a stigma, messaging around “achieve a healthy weight,” or “participate in a new, evidence-based weight loss program,” may draw greater interest.
- Where the target population does not have access (or ready access) to company e-mail, develop multiple communication streams, including mailings, posters, and program advocates within the workforce who can help “spread the word.”
- If the organization has a union presence, engage union leadership in understanding the health and cost benefits of the National DPP LCP, and partner on recruitment strategies
- Assess “readiness to change” as part of the recruitment process. Focusing eligibility on the population that has the program-specified diabetes risk factors, and also is ready to make changes, will lead to higher retention, completion and success rates.
- In marketing materials and recruitment sessions, be clear on how participant confidentiality will be maintained. Consider offering class sessions in a less visible location within or near the office, and avoiding disease-specific signage (e.g. “health strategies session” as opposed to “diabetes prevention meeting”) to support subject confidentiality.
- Consider confirming subject eligibility for the program with baseline blood work (e.g. A1c). Collecting these data at baseline may help to reinforce for the participant why attending sessions is important, plus provides an important metric for evaluating program impact. One interviewee noted that they plan to measure baseline blood pressure also on future cohorts.
- Recognize that National DPP LCP vendors and partnering organizations have significant experience and have already developed communication tools and best practices; draw upon these resources in developing your organization’s communications campaign and in some cases ask them if they will be willing to manage the recruitment communication process.
- “Timing is everything” – connect the launch of the program with other activities when people are more likely to want to change, e.g. at the start of the new year, following distribution of HRA results or at health fairs.

2) Engaging and Retaining Program Participants: Once an eligible population is identified and enrolled, it’s important to keep those participants engaged to maximize program completion (and minimize attrition). Recommended strategies include:

- Consider offering an “orientation” session at the start of the program, to set clear expectations for participants (number of sessions, time commitment, program goals and objectives including metrics that will be used). One interviewee suggested having enrollees sign a non-binding “social contract” delineating these expectations.



- Think about how to make sessions “fun” including offering healthy snacks, drawings for small prizes, or providing an opportunity for participants to share their experiences. “Success stories” will motivate the cohort to remain engaged, plus can be used for recruiting future cohorts.
- Foster more frequent contact in the early weeks of the program until participants are fully engaged, e.g. have the lifestyle coach make interim calls or e-mail with enrollees.
- Facilitate the development of a strong social network within the class cohort.
- Provide participants the flexibility to attend sessions offered during the day, without using vacation or personal time. Make managerial staff aware of the importance of the program.
- Develop a plan that allows participants who miss a session to “make it up,” e.g. through a brief one-on-one catch-up with the lifestyle coach, reviewing some printed materials, or having a “buddy system” among cohort participants.
- Create an “alumni program” to periodically reinforce key messages of the National DPP LCP, and maintain the social network in order to reinforce lifestyle change.

3) Identifying and Committing Appropriate Resources: Obtaining budgetary approval to implement the National DPP LCP, staffing the program, and identifying meeting space (for in-person programs) all were identified by one or more interviewees as challenges. Several employer organizations noted that health plan failure to offer the DPP as a covered benefit is a major challenge, even for self-funded plans. With Medicare coverage of the National DPP LCP scheduled to begin in 2018, employers remain hopeful that their health plans will develop capacity to credential providers and process claims, so that the program does not need to be budgeted as a separate discretionary health program. Interviewees suggested that organizations have discussions with their health plans about ability to offer and/or process claims for the National DPP LCP, as well as how to coordinate program activities with other health and wellness, and disease management, offerings.

The case study participants implemented the National DPP LCP using several different staffing models: partnering with an academic organization to provide the lifestyle-coaching program; training staff in provider offices to serve as lifestyle coaches; hiring and training lifestyle coaches on staff; and contracting National DPP LCP services out to a vendor of on-site or virtual program. It was noted by several of the interviewees that “when it comes to the program, one size does not fit all,” and even within one workforce or population, multiple strategies may be effective for different subgroups.

4) Program Evaluation: All case study participants noted that they are tracking participation rates, and completion rates, and, in accordance with CDC data capturing requirements, are able to measure key outcomes including achievement of weight loss goals. Suggestions for further demonstrating program impact and estimating return-on-investment to justify continued organizational investment in offering the National DPP LCP include:

- Use the CDC Diabetes Prevention Impact Toolkit (<https://nccd.cdc.gov/Toolkit/DiabetesImpact>) to project number of cases of diabetes prevented or delayed, population health impact, and cost savings, based on current workforce demographics
- Consider establishing a relationship with an academic partner or other organization that can provide methodologic guidance and measurement and analytic assistance

5) Program Scalability: All case study interviewees noted that their organizations started with an initial cohort, and based on that experience are now expanding the National DPP LCP to a broader population. Scalability of the program for larger workforces, including screening of the larger participant candidate pool, commitment of staff, budget and space, and logistics all can be challenging. All of the case study participants noted that implementation and scaling up are iterative processes: they continue to learn by doing – trying new approaches, retaining what seems to be working, and discarding strategies that prove to be ineffective.

# Methods

NACDD and Medworks reviewed the list of organizations that they were working with in the New York metropolitan region and Greater Philadelphia on National DPP LCP implementation, and identified those that they determined were most experienced or furthest along in implementing the National DPP. These organizations were invited to participate in the case study project. Six organizations agreed to participate:

- The Mayor's Office of Labor Relations (OLR) for the City of New York
- Latham & Watkins, an American law firm headquartered in Manhattan
- Healthfirst, a health plan based in New York
- The Greater Philadelphia Business Coalition on Health
- VWR International, a global lab supply distributor, based in Radnor, Pennsylvania
- Christiana Care Health System, a large health care provider organization based in Delaware

A seventh organization was identified but did not respond to multiple invitations to participate. GPBCH scheduled on-site interviews with each of the participating organizations (one organization was interviewed telephonically). An interview guide was developed to ensure that all participants responded to a core set of questions, although interviewers had flexibility in probing or adding questions based on the organization's activities and responses.

Questions on the interview guide included:

- Please briefly describe the organization (type of stakeholder, history of organization, brief overview of activities/mission)
- Please briefly describe the workforce (number of employees, demographics, diabetes prevalence and risk factor prevalence if known)
- Please briefly describe employee benefits (if applicable) – (self-funded; insurance carrier; types of plans offered)
- What motivated you to implement the DPP?
- Tell us about what you did to implement the DPP. (What did you do? how did you do it?)
  - Tell us about your experience with the program.
  - Tell us about the program financing.
  - How did you fund the program?
  - What did you pay your vendors and under what structure (e.g. P4P?)
- What were the major barriers encountered and how did you address them?
- Where will you be going from here? (Will the program continue to be offered? Why or why not?)
- What advice do you have for other employers (or organizations) seeking to implement DPP?
- Is there anything we haven't already addressed that you think we should include in the write-up of your story?

Two interviewers conducted each assessment, taking notes. Case study descriptions were written up by one of the two interviewers, reviewed by the other interviewer, and then sent to the case study participant for review to ensure accuracy of the presented information.

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## About the National Association of Chronic Disease Directors

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The National Association of Chronic Disease Directors (NACDD) and its more than 6,500 members seek to strengthen state-based leadership and expertise for chronic disease prevention and control in states and nationally. Established in 1988, in partnership with the U.S. Centers for Disease Control and Prevention, NACDD is the only membership association of its kind to serve and represent every chronic disease division in all states and U.S. territories. For more information, visit [chronicdisease.org](http://chronicdisease.org).

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