Activating the National Diabetes Prevention Program through Community Health Workers
Hello!

Natalie Blum, MPH
Manager of Prevention

American Association of Diabetes Educators
A little about AADE

- We’re a Chicago-based, multi-disciplinary membership organization
- We have 14,000 members across the country—who are RNs, pharmacists, PTs, RDs, and other healthcare professionals
- Our members have been working alongside individuals making positive, powerful lifestyle changes since 1973
Diabetes and prediabetes

30.3 million American adults with diabetes

84.1 million American adults with prediabetes

32% of Hispanic and Latinos have prediabetes
Prediabetes prevalence

- Prediabetes is associated with kidney disease, heart disease, hearing loss, and vision problems
- Prediabetes is a high-risk state for developing Type 2 diabetes
Who is at Risk for Prediabetes and Type 2 Diabetes?

You may be at higher risk than others for prediabetes, if you are:

- Overweight.
- 45 years of age or older.
- Have a parent or sibling has type 2 diabetes.
- Are physically active fewer than 3 times per week.
- Ever gave birth to a baby that weighed more than 9 pounds.
- Ever had diabetes while pregnant (gestational diabetes).

Race and ethnicity also affect your risk:

Percentage of people in the United States with diagnosed diabetes from 2013 to 2015:

American Indian/Alaska Natives – 15.1%
Non-Hispanic blacks – 12.7%
Hispanics – 12.1%
Asian Americans – 8.0%
Non-Hispanic whites – 7.4%
So what can we do?
Diabetes Prevention Program (DPP)

• DPP Research Study (1996-1999)
• 27 clinical centers across the country
• More than 3000 participants
  • 45% were from priority populations* with an increased risk of developing Type 2 diabetes
  • All participants were overweight
  • All had impaired glucose tolerance (now known as prediabetes)

*priority populations are groups at high risk for developing Type 2 diabetes like African Americans, Alaska Natives, American Indian, Asian Americans, Latinos, and Pacific Islanders
Diabetes Prevention Program (DPP)

Participants were randomly divided into one of three treatment groups:

- Placebo with brief lifestyle counseling
- Intensive one-on-one lifestyle modification program
- Medication (metformin 850 mg/twice daily)
Weight loss matters

Weight loss was the most important factor in Type 2 diabetes reduction, and it had the same positive effect across all populations, regardless of other risk factors.

Participants who reduced their dietary fat calorie intake decreased their risk even further. For diabetes prevention, fat calories matter more than carbohydrates!
Translating research into practice

- DPP in **community settings** were as successful as interventions in clinical settings
- DPP in **small group formats** were as successful as one-on-one coaching
- **Trained lifestyle coaches did not** need to be physicians, nurses, pharmacists, RDs, or CDEs
- Group format + community settings + diversity of lifestyle coaches = **1/3 cost of the DPP Research Study!**
National DPP Overview
CDC: Leading the National DPP

National Diabetes Prevention program – or National DPP – is a partnership of public and private organizations working to prevent or delay type 2 diabetes.
Four Components of the National DPP

Source: Ann Albright, PhD, RD
Director, Division of Diabetes Translation, National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Overview of the National DPP- Lifestyle Change Program

**PROGRAM GOAL:** Help participants make lasting behavior changes such as eating healthier, increasing physical activity, and improving problem-solving skills

Year-long group-based program:

**Phase 1- Months 1-6:** 16 sessions, usually held weekly to bi-weekly (over 26 weeks)

**Phase 2- Months 7-12:** monthly sessions over 6-8 months (minimum 6- at least 1 session per month )
Program Structure

Delivered by trained lifestyle coach

Example modules covered in core phase:
- Eat Well to Prevent T2
- Burn More Calories Than You Take In
- Manage Stress
- Keep Your Heart Healthy

Example modules covered in maintenance phase
- When Weight Loss Stalls
- Stay Active Away from Home
- Get Enough Sleep

**PARTICIPANT GOAL:** Lose 5 – 7% of body weight
Participant Eligibility

- Program’s participants must be 18 years of age or older and not pregnant at time of enrollment.
- Program’s participants must have a body mass index (BMI) of $\geq 25 \text{ kg/m}^2$ ($\geq 23 \text{ kg/m}^2$, if Asian American).
- Program’s participants must be considered eligible based on either:
  1. A recent (within the past year) blood test; or
  2. A positive screening for prediabetes based on the CDC Prediabetes Screening Test (these are not options for eligibility for Medicare beneficiaries)
Participant eligibility: Age

- PreventT2 is a program for adults with prediabetes
- All PreventT2 participants must be 18 years of age or older
- Children and adolescents with a positive screening for prediabetes should be referred to their primary care provider
### Blood Glucose Test

#### Table 1. Blood Glucose Tests Used to Identify Prediabetes and Recommended Follow-Up

<table>
<thead>
<tr>
<th>Results</th>
<th>A1C</th>
<th>Fasting plasma glucose</th>
<th>Plasma glucose measured 2 hours after a 75 gm glucose load</th>
<th>Follow-Up Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>&lt;5.7%</td>
<td>&lt;100 mg/dL</td>
<td>&lt;140 mg/dL</td>
<td>Encourage patient to maintain a healthy lifestyle.</td>
</tr>
<tr>
<td>Prediabetes</td>
<td>5.7%–6.4%</td>
<td>100–125 mg/dL*</td>
<td>140–199 mg/dL</td>
<td>Refer patient to a primary care provider and a CDC-recognized lifestyle change program.</td>
</tr>
<tr>
<td>Diabetes</td>
<td>≥6.5%</td>
<td>≥126 mg/dL</td>
<td>≥200 mg/dL</td>
<td>Refer patient to a primary care provider for confirmatory diagnosis, diabetes self-management education and support, and treatment if appropriate.</td>
</tr>
</tbody>
</table>

* The fasting plasma glucose requirement for Medicare Diabetes Prevention Program suppliers is 110–125 mg/dL.
Participant eligibility: Gestational diabetes

For CDC, gestational diabetes does count as a blood-based screening if clinically diagnosed during a previous pregnancy.
COULD YOU HAVE PREDIABETES?
Prediabetes means your blood glucose (sugar) is higher than normal, but not yet diabetes. Diabetes is a serious disease that can cause heart attack, stroke, blindness, kidney failure, or loss of feet or legs. Type 2 diabetes can be delayed or prevented in people with prediabetes through effective lifestyle programs. Take the first step. Find out your risk for prediabetes.

TAKING THE TEST—KNOW YOUR SCORE!
Answer these seven simple questions. For each "Yes" answer, add the number of points listed. All "No" answers are 0 points.

Are you a woman who has had a baby weighing more than 9 pounds at birth?
Do you have a sister or brother with diabetes?
Do you have a parent with diabetes?
Find your height on the chart. Do you weigh as much as or more than the weight listed for your height?
Are you younger than 65 years of age and get little or no exercise in a typical day?
Are you between 45 and 64 years of age?
Are you 65 years of age or older?

Add your score and check the back of this page to see what it means.
Cumulative Enrollment in the National DPP

337,430 individuals have enrolled as of May 27, 2019
CDC-recognized Program Delivery Organizations

![Graph showing the number of CDC-recognized program delivery organizations from June 2013 to May 2019.]  

CDC Diabetes Prevention Recognition Program: May 27, 2019
Who is delivering the program?

Lifestyle Coaches are the heart of the National DPP’s workforce!
Lifestyle Coaches

• Deliver the lifestyle change program exactly as designed
• Guide participants through program content with a variety of teaching strategies
• Encourage a positive, inclusive group dynamic with peer-to-peer learning
• Build on participants’ strengths and celebrate their successes
Lifestyle Coaches

- Present and reinforce content in effective, meaningful, and compelling ways
- Maintain high expectations for the group and individual accountability for participants
- Provide individual support through reminders, reviews of meal logs and activity trackers, and one-on-one problem solving
Role Community Health Workers play in promoting health and prevention
CHW- Frontline Public Health Workers

• A trusted member of and/or has an unusually close understanding of the community served

• Serves as a link between health/social services and the community

• Facilitates access to services and improves the quality and cultural competence of service delivery
Who are Community Health Workers?

- Promotor(a) de salud
- Peer leader/navigator
- Outreach educator
- Community health advisor
- Home visitor
- Outreach advocate
- Patient Navigator
- Paraprofessional
- Community coordinator
- Community health representative
CHWs are distinguishable from other health professionals

- Hired for their understanding of the population and community they serve
- Conduct outreach as a significant portion of the time
- Have experience providing services in and across community and clinical settings
CHWs & Chronic Disease: Opportunities

Diabetes Prevention Program
• CHWs can be trained to serve as lifestyle coaches, teaching or assisting with the DPP classes across the state
• CHWs can also serve as referrers to DPP, working with eligible participants to promote the program, reduce barriers to program participation, and demystifying what the program is
• CHWs can also experience DPP as participants, in conjunction with patients or independently, if they qualify per the clinical guidelines
Lifestyle Coach Training
Lifestyle Coach Training for DPP

CDC-recognized lifestyle change programs must have Lifestyle Coaches who are trained to use a CDC-approved curriculum.
Lifestyle Coach Training – Cont.

The minimum length of formal training for new Lifestyle Coaches is at least 12 hours or two days offered in the following modes:

- In-person
- Online

To learn more about these training entities and the types of trainings they offer, visit: https://www.cdc.gov/diabetes/prevention/staffing-training.htm
Advanced Lifestyle Coach Training

Session Zero
- Recognizing readiness to change
- Overcoming barriers and amplifying facilitators
- Utilizing motivational interviewing strategies in one-on-one and group settings

Engage Participants through Core Sessions
- Building social capital within the group
- Addressing weight stigma and bias
- Using skills, styles, and strategies to facilitate behavior change
- Promoting self-management skills

Retain Participants through Core Maintenance Sessions
- Assessing Social Determinants of Health
- Understanding community context and community influencers
- Making sense of incentives

Ongoing Maintenance, Cultural Connectivity, and Other Strategies
- Tools for creating a cultural connected and responsive environment
- Referring to other healthcare professionals
Group Coaching Competency Test- Advanced

National Board of Medical Examiners (NBME) and Centers for Disease Control and Prevention (CDC)

Potential for an “advanced training certificate” but would not replace a lifestyle coach training

More to come…..
Workforce development for CHWs is essential to attract new CHWs and retain and promote current CHWs, but funding for these activities is lacking.
Two Sources of Evidence

- Community Guide/Community Preventative Services Task Force (CPSTF)
- ADA Standards of Care
Community Preventative Services Task Force Finding

• The Community Preventive Services Task Force recommends interventions engaging community health workers for diabetes prevention based on sufficient evidence of effectiveness in improving glycemic control and weight-related outcomes among people at increased risk for type 2 diabetes.

• Some evidence suggests interventions adapted from the Diabetes Prevention Program reduce rates of progression to type 2 diabetes, though more research is needed.
Strategies to engage and retain participants in the National DPP
Why Retention Matters

**Intervention Intensity and Duration**

**Conclusions:**

- “Greater duration and intensity of session attendance resulted in a higher percent of body weight loss overall and for subgroups.”

- “Focusing on retention may reduce disparities and improve overall program results.”
**Intervention Intensity and Weight Loss Achieved**
Participants who attended the most sessions lost more weight (on average) than those who attended fewer sessions.

**Average Weight Loss % Between First and Last Session by Participant Attendance**

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Weight Loss %</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 - 12</td>
<td>1.8%</td>
</tr>
<tr>
<td>13 - 16</td>
<td>4.0%</td>
</tr>
<tr>
<td>17 - 22</td>
<td>5.9%</td>
</tr>
<tr>
<td>23+</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

DPPR Data Set as of January 2018
Retention Strategies

- Shared culture and language between CHWs and participants
- CHWs can help tailor and adapt materials and activities to be user-friendly and culturally appropriate
- Serving as “SDOH expert” on the team.
- Developing and organizing activities to promote healthy diets and physical activity such as a weekly walking club, diabetes awareness and prevention events, cooking demonstrations, and a monthly fruit and vegetable market
Stories from the field - Retention

- Train bilingual CHWs lifestyle coaches to serve vulnerable and underserved populations
  - Use a CHW lifestyle coach who is culturally fluent with vulnerable populations to deliver program education and materials to improve reach and retention of those groups
  - Develop language and cultural adaptations to the course curriculum
- CHWs’ non-judgmental nature is powerful!
- Use popular education strategies
- Community workshops- develop weights using many common household items (milk jugs, canned goods)- save money and active
- CHWs can create connections within the group to provide additional support (Facebook, walking groups, car pooling)
Shopping at the Corner Store or La Tiendita

As you walk into the local corner store or Tiendita, you see and smell foods you and your family enjoy eating like tortillas, pan dulce, sodas, tacos, and candy. There may be a restaurant where you can buy menudos, caídos, picadillo, chile rellenos, etc. These foods are delicious and tempting, but usually contain high amounts of fat, sugar, and sodium that can lead to health problems like high cholesterol, hypertension, heart disease, and type 2 diabetes. You can lower your risk or prevent these health conditions by paying attention to what you eat.

The good news is eating healthy does not have to be expensive. These five tips can help you shop for healthy foods and save you money:

1. **Plan ahead!** Make a list of the foods you plan to eat for each day of the week. First, choose a main meat or protein, and then add vegetables and fruits to complete your meal.

2. **Substitute where you can!** Think of foods you could change or replace that cost less, like buying corn tortillas or lettuce instead of flour tortillas.

3. **Stick to your plan!** Only buy the items on your list. Stay in the aisles where you find fresh foods at the store to help you focus on healthy choices.

4. **Eat before you shop!** You have less temptation and cravings for junk food or prepared meals when you are not hungry.

5. **Cook at home!** Home cooking is less expensive than eating out and you have leftovers for the next day.
CHW reimbursement and sustainability in the National DPP
Cost Effectiveness of the National DPP

Cost of preventing diabetes is typically much lower than the cost of managing the complications of type 2 diabetes.

CDC states that the program costs approximately $500 per person.

CDC reports that some modeled data from insurer has shown a **ROI of 3:1** when using a value-based payment approach. Meaning every 1 dollar spent on DPP gives the payer 3 dollars back within 3 years!
Cost Analysis of DPP

Research studies (2) conducted cost Analyses for DPPs:

Total estimated cost for the CHW delivered lifestyle intervention was $165 per participant

Costs were almost half those of a health professional delivered DPP which cost $300 per participant
Centers for Medicare and Medicare Services: Preventative Services Payment Rule

The Centers for Medicare and Medicaid Services (CMS) created a new rule which allows state Medicaid agencies to reimburse for preventive services provided by professionals that may fall outside of a state’s clinical licensure system.

The services must be initially recommended by a physician or other licensed practitioner.

The new rule for the first time offers state Medicaid agencies the option to reimburse for more community-based preventive services, including those of CHWs.

The rule went into effect on January 1, 2014.
Medicare Diabetes Prevention Program (MDPP) is a structured behavior change intervention that aims to prevent the onset of type 2 diabetes among Medicare beneficiaries with an indication of prediabetes.

### Better Outcomes, Higher Incentives

The healthier beneficiaries become, the more suppliers earn.

<table>
<thead>
<tr>
<th>Year 1 Payment Scenarios*</th>
<th>Attendance</th>
<th>Weight Loss (WL)</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Core Session</td>
<td>N/A</td>
<td></td>
<td>$25</td>
</tr>
<tr>
<td>4 Core Sessions</td>
<td>Without 5% WL</td>
<td></td>
<td>$75</td>
</tr>
<tr>
<td>4 Core Sessions</td>
<td>With 5% WL</td>
<td></td>
<td>$235</td>
</tr>
<tr>
<td>Full (9 Core, 4 Core Maintenance)</td>
<td>5% WL in mos. 10 – 12</td>
<td></td>
<td>$400</td>
</tr>
<tr>
<td>Full (9 Core, 4 Core Maintenance)</td>
<td>5% WL (mos. 0 – 6) &amp; maintains WL in mos. 7-12</td>
<td></td>
<td>$445</td>
</tr>
</tbody>
</table>

*Note: in Year 2, suppliers can also receive up to 4 payments of $50 (total potential of $200) per beneficiary, assuming ongoing maintenance session attendance and maintenance of 5% weight loss; the maximum payment per beneficiary is $670 over 2 years
MDPP: Coach Eligibility

CHWs can provide/bill services!

Must obtain and maintain a valid National Provider Identifier (NPI) number in order for organizations to receive payment for MDPP services.

Train Coaches

- Coaches are trained consistent with the requirements of the CDC’s Diabetes Prevention Recognition Program (DPRP) training and staffing requirements.
- CMS does not require coaches to receive training beyond the CDC’s requirements.
CHW Financing Webinar

COMMUNITY HEALTH WORKER (CHW) FINANCING WEBINAR

JULY 17, 2018

View the webinar at https://www.youtube.com/watch?v=pUKTsh0XuM0
AADE Expanding the National DPP
CDC’s Funding for 1705:

Over 1200 CDC-recognized organizations in 50 states offer the lifestyle change program, but there are still many areas with few or no programs.

Through this cooperative agreement, CDC funds multi-state networks to start new programs in underserved areas.

Priority populations include: Medicare beneficiaries, men, African-Americans, Asian-Americans, Hispanics, American Indians, Alaska Natives, Pacific Islanders, and people with visual impairments or physical disabilities.
AADE has been awarded funding for the next 5 years to bring the National DPP to underserved populations with little or no access to diabetes prevention services.

AADE will establish new sites to deliver the evidenced-based Lifestyle Change Program in year one.

AADE has worked with several different partners, including UnidosUS, NCFH, Omada Health, and the Healthy Truckers Association of America (HTAA) to raise awareness, conduct screenings, expand coverage areas, and promote enrollment activities.
1 in 3 Americans have Prediabetes
(higher-than-normal blood glucose levels)

The American Association of Diabetes Educators (AADE) has worked to activate the Centers for Disease Control and Prevention (CDC) National Diabetes Prevention Program (National DPP) within underserved communities through in-person and online delivery modes. Through a 5-year cooperative agreement (DP17-1705), AADE has been able to increase access and availability to the National DPP lifestyle change program to specific priority populations at high-risk for developing type 2 diabetes.

Enrolling Participants Across the U.S. in CDC-Recognized Lifestyle Change Programs

Priority Populations of Focus*

Medicare beneficiaries, Men, African-Americans, Hispanics, American Indians

Through an evidence-based intervention, these hard to reach populations have engaged with treated members of the community; discussed culturally informed healthy eating, learned stress management strategies, and developed realistic positive health behaviors that can be maintained long-term.

Reaching individuals in 9 states and 34 counties through in-person delivery

Reaching individuals in 36 states through online delivery

TOTAL PARTICIPANTS
1172

PRIORITY POPULATION *
78%

HIGH RETENTION
82%

WEIGHT LOSS
2.88%

PHYSICAL ACTIVITY
232 Minutes

Attend at least one session

Attended at least three sessions

Average weight loss

Of physical activity, on average, per week

To learn more about this cooperative agreement or how organizations can get involved, email: dpp@aadenet.org

*This resource was supported by Cooperative Agreement, Number 17nu001215061-01-00 from the Centers for Disease Control and Prevention. Users should acknowledge the responsibility of the sponsors.
Enroll as a DPP Supplier- TODAY!

- Proven, Science-Based Program
- Complement to Your Current Work
- Increased Visibility and Credibility
- Part of the National Prevention Effort
- Cost Effective

AADE can help you take the steps become a successful DPP!
CDC developed a job aid to support CHW engagement sustain their work in diabetes management and type 2 diabetes prevention

THANK YOU!

Natalie Blum, MPH

Manager of Prevention

nblum@aadenet.org OR DPP@aadenet.org

(312) 601-4857