Diabetes Continuum of Care: Using Health Promotion/Behavior Change to Address Childhood and Adult Obesity and Diabetes

Thursday, April 18, 2019
8am HT/ 11am PT / 1pm CT / 2pm ET

Welcome!
We will begin in a few minutes.
Diabetes Continuum of Care: Using Health Promotion/Behavior Change to Address Childhood and Adult Obesity and Diabetes

MODERATORS & ORGANIZERS

Joe Lee, MSHA
Training & Technical Assistance
Director of AAPCHO

Albert Ayson, Jr., MPH
Senior Program Manager, Training & Technical Assistance of AAPCHO

Kristine Alarcon, MPH
Communications and Engagement Specialist of AAPCHO

Jillian Hopewell, MPA, MA
Director of Education and Communication of MCN

AAPCHO
Association of Asian Pacific Community Health Organizations

MCN
Migrant Clinicians Network
ABOUT THE SERIES

Diabetes affects more than 30 million people in the United States. Multi-tiered efforts to prevent, treat and manage diabetes are critical in reducing the burden of diabetes, particularly for medically underserved racial and ethnic minority populations. In addition to higher prevalence, ethnic and racial minority patients with diabetes have higher mortality and higher rates of diabetic complications.

To combat and continue the national conversation around diabetes, 13 National Cooperative Agreement (NCA) organizations have partnered to create a four-part national learning webinar series to engage health centers, Primary Care Associations (PCAs), and Health Center Controlled Networks (HCCNs) to increase foundation knowledge of effective strategies to prevent, treat, and manage diabetes among special and vulnerable Health Center Program patients.

This year's national learning series is focused on co-morbidities associated with diabetes (e.g., oral health, behavioral health, substance abuse disorders, obesity, and social determinants of health). This series complements with HRSA's working draft of the "Diabetes Clinical Change Package" (to be published this year).

Register for the National Learning Series today at diabetes.aapcho.org.
WEBINAR FACULTY
NATIONAL COOPERATIVE AGREEMENT (NCA) ORGANIZATION PARTNERS

Association of Asian Pacific Community Health Organizations
Corporation for Supportive Housing
Farmworker Justice
Health Outreach Partners
MHP Salud
Migrant Clinicians Network
National Center for Equitable Care for Elders
National Center for Farmworker Health
National Center for Health and Public Housing
National Health Care for the Homeless Council
National LGBT Health Education Center
National Network for Oral Health Access
National Nurse-Led Care Consortium
School-Based Health Alliance

FOR MORE INFO ON OUR NCA PARTNERS, VISIT DIABETES.AAPCHO.ORG.
Diabetes Continuum of Care: Using Health Promotion/Behavior Change to Address Childhood and Adult Obesity and Diabetes

NCA FACULTY

Rebecca Young, MA, Senior Project Director of Community Engagement, Farmworker Justice

Sylvia Partida, MA, Chief Executive Officer, National Center for Farmworker Health (NCFH)

Gladys Carrillo, LCSW, Manager of Health Center Engagement Services, National Center for Farmworker Health (NCFH)

Darlene Jenkins, DrPH, Senior Director of Programs, National Health Care for the Homeless Council (NHCHC)

Andrea Shore, MPH, Director of Programs, School-Based Health Alliance (SBHA)
Key Topics

- Agricultural workers
- Health care policy
- Social determinants of health
- Occupational safety and health
- Coalition building

https://www.farmworkerjustice.org/
Key Topics

- Governance
- Health education
- Workforce development
- Cultural competency
- Agricultural worker population estimation

http://www.ncfh.org/
Key Topics

- Consumer engagement
- Medical respite
- Trauma-informed care
- Integrated care (Integrating health and housing, behavioral health and primary care, substance use disorders screening/treatment)
- Health equity (Adapted clinical guidelines, enabling services, outreach, street medicine and shelter care)

https://www.nhchc.org/
Key Topics

- Primary and behavioral health care for school-aged children
- Social determinants of health
- School-based health care
- Youth development
- Health center partnerships with schools

http://www.sbh4all.org/
HRSA Funded Diabetes Activities 2018-2019

Decrease the percentage of patients with A1c greater than 9

Individual or Small Group
National Cooperative Agreement
Diabetes Learning Collaboratives

Special and Vulnerable Population Diabetes Task Force

Diabetes Quality Improvement (DQI) Peer Learning Team

Clinical Change Package for Diabetes Care
Engaging Patients with and without Diabetes

Strategic Partners’ Technical Assistance Strategies to Prevent and Manage Diabetes

**Improving Health Systems & Infrastructure**
- EHRs with Diabetes Modules
- Diabetes Informatics
- Health Information Exchange (HIE) & Telemedicine
- Patient Centered Medical Home (PCMH)
- Use Patient Portals

**Optimizing Provider & Multidisciplinary Teams**
- Team Based Care
- Promote National Standards
- New Techniques for Early Detection Screening
- Case Management
- Sharing of Diabetes Management Promising Practices
- Eye, Foot, Dental, & Kidney Screening
- Provider Counseling of Patients

**Facilitating Behavior Change in Patients**
- CHW Directed Patient Education
- Lifestyle/Self-Management
- Promote Physical Activity and Healthy Diets
- Address Childhood & Adult Obesity
- Increase Patient Health Literacy

Health Information Exchange (HIE) & Telemedicine

Patient Centered Medical Home (PCMH)

Use Patient Portals

Team Based Care
Promote National Standards
New Techniques for Early Detection Screening
Case Management
Sharing of Diabetes Management Promising Practices
Eye, Foot, Dental, & Kidney Screening
Provider Counseling of Patients

CHW Directed Patient Education
Lifestyle/Self-Management
Promote Physical Activity and Healthy Diets
Address Childhood & Adult Obesity
Increase Patient Health Literacy
LEARNING OBJECTIVES

- To explore evidence-based programs and strategies that incorporate health promotion and behavior change, to address preventing diabetes in adults.
- To explore evidence-based programs and strategies that incorporate health promotion and behavior change, for families with children at-risk for diabetes.
- To discuss promising practices that promote healthy habits.
- To identify challenges in addressing nutrition and physical activity in children and adults of special and vulnerable populations, such as those experiencing homelessness and farmworkers.
Diabetes Continuum of Care: Using Health Promotion/Behavior Change to Address Childhood and Adult Obesity and Diabetes

TODAY'S SPEAKERS

Jessica Wallace, MPH, MSHS, PA-C
Family Medicine Physician Assistant of Denver Health and Hospital Authority

Natalie Blum, MPH
Manager of Prevention of American Association of Diabetes Educators

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American Association of Diabetes Educators
AAPCHO Webinars
Organizer: AAPCHO Meetings | Presenter: AAPCHO Meetings

Viewer Window

Control Panel
NLS Questions & Comments

- Questions can be submitted via the GoToWebinar 'Questions' screen at any time.

- We will address questions and comments at the end of the webinar.

- Webinar slides and video recording will be emailed to all participants after the end of the webinar.

- Interact with us on Twitter @AAPCHOtweets and use #DiabetesNationalLearningSeries.
CME/CNE Accreditation Available

- Please complete the post-webinar survey at the end to indicate whether you would like to receive CME/CNE units or a certificate of attendance.

- Please indicate whether you'd prefer an electronic or hard copy of your certificate.

- For questions, please contact Martha at malvarado@migrantclinician.org.
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Natalie Blum, MPH
Manager of Prevention of American
Association of Diabetes Educators
Using Health Promotion/ Behavior Change to Address Childhood and Adult Obesity and Diabetes:

MEND at Denver Health

Jessica Wallace, MPH, MSHS, PA-C
Diabetes in KIDS???

- 1/3 children are overweight or obese, closely linked to T2DM (previously “adult-onset” DM)
- Overweight = insulin resistance?
- Cardiovascular risks – blood pressure, cholesterol
- Age
- Lack of physical activity
- Family health, habits and disease
- Being African American, Hispanic/Latino, Native American/Alaska Native, Asian American, or Pacific Islander
What is MEND?
MEND 7-13: a family-centered intervention

10 weeks, twice weekly, 2 hours each session

<table>
<thead>
<tr>
<th>Who</th>
<th>First hour</th>
<th>Second hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>Mind and Nutrition</td>
<td>Parenting discussion</td>
</tr>
<tr>
<td>Children</td>
<td></td>
<td>Exercise</td>
</tr>
</tbody>
</table>
High-impact teaching tools
Practical application: grocery store tours
Children's physical activity
Out-of-the-box program
MEND 7-13 RCT: Three month outcomes improved at six months

**Waist circumference (cm)**
- Start (pre): ns
- 3m (post): ns
- 6m (3m post): P=0.018

**BMI (kg/m²)**
- Start: ns
- 3m: ns
- 6m: P=0.046

**Recovery Heart Rate (bpm)**
- Start: ns
- 3m: P<0.001
- 6m: P<0.001

**Self-esteem score (out of 24)**
- Start: ns
- 3m: ns
- 6m: P=0.02

Sacher et al, Obesity, 2010
### US reach and demographics: 2008-2017

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>n</strong></td>
<td>6,713</td>
</tr>
<tr>
<td>Hispanic origin</td>
<td>73%</td>
</tr>
<tr>
<td>African American</td>
<td>17%</td>
</tr>
<tr>
<td>SES: &lt;200% FPL</td>
<td>83%</td>
</tr>
<tr>
<td>SES: single parents</td>
<td>30%</td>
</tr>
<tr>
<td>SES: ≤ HS education</td>
<td>51%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>41%</td>
</tr>
<tr>
<td>Uninsured</td>
<td>17%</td>
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</table>

Underserved populations in community and clinical settings
Participant resources available in English and Spanish
# Change in health-related behaviors

<table>
<thead>
<tr>
<th></th>
<th>Before MEND</th>
<th>After MEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 minutes physical activity/day</td>
<td>52%</td>
<td>81%</td>
</tr>
<tr>
<td>Change in physical activity after MEND 7-13</td>
<td>+4.5 hrs / week</td>
<td></td>
</tr>
<tr>
<td>Sedentary for more than 2 hours/day</td>
<td>20%</td>
<td>8%</td>
</tr>
<tr>
<td>Change in sedentary behavior after MEND 7-13</td>
<td>-2.8 hrs / week</td>
<td></td>
</tr>
<tr>
<td>Sugar-sweetened beverages a few times/day</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Rarely consumed sugar-sweetened beverages</td>
<td>25%</td>
<td>43%</td>
</tr>
<tr>
<td>&gt; 5 servings fruit and vegetables/day</td>
<td>21%</td>
<td>40%</td>
</tr>
<tr>
<td>&lt; 2 servings fruit and vegetables/day</td>
<td>16%</td>
<td>5%</td>
</tr>
</tbody>
</table>

*All results are highly statistically significant (all p < 0.0001)*

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Cardiovascular fitness (recovery heart rate after step test)</td>
<td>-4.5 bpm</td>
</tr>
<tr>
<td>Participants decrease or reduce BMI z-score after MEND 7-13</td>
<td>83%</td>
</tr>
</tbody>
</table>
Weight is a family issue: Parental baseline BMI and change after MEND

90% of parents with overweight or obesity
67% of parents maintained or reduced their BMI
MEND at Denver Health:
Implementation in a clinical setting
Why Colorado?

Prevalence\textsuperscript{†} of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2017

*Sample size <50 or the relative standard error (dividing the standard error by the prevalence) \( \geq \) 30%.
Poverty = poverty = poverty

[Map showing Denver City Council Districts with data on students at an excessive weight, categorized by weight status.]

Students at an Excessive Weight by Denver City Council District of School Attended:
- 21%
- 22% - 27%
- 28% - 33%
- 34% - 36%
- 37% - 39%

Safety-Net Health Care Organization
Network of 9 FQHCs and 17 SBHCs
Childhood Obesity
medical complications

PSYCHOSOCIAL
Poor self esteem
Depression
Quality of life

NEUROLOGICAL
Pseudotumor cerebri
Risk for stroke

PULMONARY
Asthma
Sleep apnea
Exercise intolerance

CARDIOVASCULAR
Dyslipidemia
Hypertension
Left ventricular hypertrophy
Chronic inflammation
Endothelial dysfunction
Risk of coronary disease

GASTROINTESTINAL
Panniculitis
Steatohepatitis
Liver fibrosis
Gallstones
Risk for cirrhosis
Risk for colon cancer

ENDOCRINE
Type 2 diabetes
Precocious puberty
Polycystic ovary syndrome (girls)
Hypogonadism (boys)

RENAL
Glomerulosclerosis
Proteinuria

RENAL
Hernia

MUSCULOSKELETAL
Forearm fracture
Blount's disease
Slipped capital femoral epiphysis
Flat feet
Risk for degenerative joint disease

DVT/PE

Stress incontinence
Risk of GYN malignancy

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The US Preventive Services Task Force (USPSTF) recommends that clinicians screen for obesity in children and adolescents 6 years and older and offer or refer them to comprehensive, intensive behavioral interventions to promote improvements in weight status. 


- 26+ hours
Demand

• 21,000 overweight/obese children (35.8%)
• Large numbers of MCD, minority/Latino, all <200% FPL

Access/barriers

• Despite other child weight management programs in community settings in Denver, few patients were actually participating, and little info on those who did participate.
• How can we best comply with USPSTF guidelines?
Our kids (and families) are sick

- 14% elevated cholesterol
- 12% elevated ALT
- 22% elevated BP
• Parks
• Playgrounds
• Safe sidewalks
• Crime
• Food deserts

• Transportation
• Time off from work
• Leisure time
• After-school programs

• Preferred language
• Health literacy

• Neighborhood and Built Environment

• Health and Health Care
  • Hooray for FQHCs!

• Economic Stability

• Education

• Social and Community Context
  • Deportation
  • Violent crime
  • Social isolation

SDOH
January 2015 – grant funding:
Integrate MEND into FQHCs
Referral from PCP to program in a familiar setting (medical home)
### 2015-2016 outcomes:

<table>
<thead>
<tr>
<th></th>
<th>Before MEND</th>
<th>After MEND</th>
<th>Change</th>
<th>Lower CI</th>
<th>Upper CI</th>
<th>p-value</th>
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<tbody>
<tr>
<td><strong>BMI (kg/m²)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>N</td>
<td>65</td>
<td>26.5</td>
<td>4.6</td>
<td>25.8</td>
<td>4.6</td>
<td>-0.8</td>
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<tr>
<td>Mean</td>
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<td>25.8</td>
<td>4.6</td>
<td>-0.8</td>
<td>-1</td>
<td>-0.5</td>
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<tr>
<td>SD</td>
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<td>4.6</td>
<td>4.6</td>
<td>-0.8</td>
<td>-1</td>
<td>-0.5</td>
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<tr>
<td><strong>BMI z-score</strong></td>
<td></td>
<td>2</td>
<td>0.43</td>
<td>1.88</td>
<td>0.49</td>
<td>-0.12</td>
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<tr>
<td>N</td>
<td>65</td>
<td>2</td>
<td>0.43</td>
<td>1.88</td>
<td>0.49</td>
<td>-0.12</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>2</td>
<td>0.43</td>
<td>-0.12</td>
<td>-0.16</td>
<td>-0.07</td>
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<tr>
<td>SD</td>
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<td>0.43</td>
<td>0.49</td>
<td>-0.12</td>
<td>-0.16</td>
<td>-0.07</td>
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<tr>
<td><strong>Waist circumference (inches)</strong></td>
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<td>67</td>
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<td>4.7</td>
<td>34.5</td>
<td>4.6</td>
<td>-0.4</td>
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<tr>
<td>Mean</td>
<td></td>
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<td>4.6</td>
<td>-0.4</td>
<td>-0.8</td>
<td>0</td>
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<tr>
<td>SD</td>
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<td>4.7</td>
<td>4.6</td>
<td>-0.4</td>
<td>-0.8</td>
<td>0</td>
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<td><strong>Physical activity (hours/week)</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>N</td>
<td>77</td>
<td>6.5</td>
<td>6.6</td>
<td>11.4</td>
<td>6.3</td>
<td>4.8</td>
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<tr>
<td>Mean</td>
<td></td>
<td>6.5</td>
<td>6.6</td>
<td>4.8</td>
<td>3.1</td>
<td>6.6</td>
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<tr>
<td>SD</td>
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<td>6.3</td>
<td>4.8</td>
<td>3.1</td>
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<tr>
<td><strong>Sedentary activities (hours/week)</strong></td>
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<td>6.7</td>
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<td>Mean</td>
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<td>-2.7</td>
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<td>-1.1</td>
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<tr>
<td><strong>Heart rate (beats per minute)</strong></td>
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<tr>
<td>N</td>
<td>80</td>
<td>104.5</td>
<td>13.5</td>
<td>94.5</td>
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<td>-14</td>
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<td><strong>Nutrition score (score 0-28)</strong></td>
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<td>N</td>
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<td>4.7</td>
<td>3.5</td>
<td>5.9</td>
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<td><strong>Total Difficulties (score 0-40)</strong></td>
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<tr>
<td>SD</td>
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<td>6</td>
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<td>-0.3</td>
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<tr>
<td><strong>Body Image (score 0-24)</strong></td>
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<td>2.3</td>
</tr>
<tr>
<td>N</td>
<td>73</td>
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<td></td>
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</tr>
<tr>
<td>Mean</td>
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<td>12.2</td>
<td>5.8</td>
<td>2.3</td>
<td>1.4</td>
<td>3.2</td>
</tr>
<tr>
<td>SD</td>
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<td>5.8</td>
<td>2.3</td>
<td>1.4</td>
<td>3.2</td>
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</tbody>
</table>
Prediabetes (n=16)

<table>
<thead>
<tr>
<th>Series</th>
<th>Baseline</th>
<th>Post-MEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series1</td>
<td>5.84%</td>
<td>5.79%</td>
</tr>
</tbody>
</table>
Fatty liver disease

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Post-MEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series1</td>
<td>78.65</td>
<td>54.57</td>
</tr>
</tbody>
</table>

NAFLD (n=6)
Hyperlipidemia

<table>
<thead>
<tr>
<th>Value mg/dL</th>
<th>Baseline</th>
<th>Post-MEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>total cholesterol (&gt;170)</td>
<td>196.65</td>
<td>180.44</td>
</tr>
<tr>
<td>LDL (&gt;110)</td>
<td>133.64</td>
<td>102.67</td>
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<tr>
<td>triglycerides (&gt;130)</td>
<td>216.43</td>
<td>151.13</td>
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</tbody>
</table>
Adult/parent impact

**Parental fruit+vegetable consumption (n=91)**

Before: 3.2
After: 4.0

P = 0.003

**Parental Mental Health scale (n=90)**

Before: 49.5
After: 53.0

P = 0.01

**Parental BMI (n=27)**

Before: 33.5
After: 33.2

P = 0.4

**Parental BMI (kg/m²)**
## Opportunities for innovation

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Challenge</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and work commitments</td>
<td>How to facilitate family participation</td>
<td>focus groups for ideal days of week and start times</td>
</tr>
<tr>
<td>Language and health literacy</td>
<td>Spanish first language; low literacy</td>
<td>Facilitate class in English and Spanish; simplify surveys</td>
</tr>
<tr>
<td>Inflexible job</td>
<td>What if employer won’t let you have time off</td>
<td>No punishment for missing classes, encourage ongoing participation</td>
</tr>
<tr>
<td>Life stress</td>
<td>Families often faced extreme challenges during 10-week participation</td>
<td>Refer to other FQHC resources (social work, behavioral health)</td>
</tr>
<tr>
<td>Lack of safe spaces for physical activity</td>
<td>Families often unable to add PA</td>
<td>Add one class/week exercise-only (drop-in)</td>
</tr>
<tr>
<td>Food insecurity</td>
<td>Families struggle to buy healthy foods</td>
<td>Partner with local food rescues</td>
</tr>
<tr>
<td>Health risks</td>
<td>What about DM/preDM, other health risks</td>
<td>Add on provider visits for improved medical management</td>
</tr>
</tbody>
</table>
What about diabetes risk?

“In youth with prediabetes-range A1c, BMI stabilization was associated with improvement of glycemia.”

Jessica Wallace, MPH, MSHS, PA-C
jessica.wallace@dhha.org

Information on MEND:
https://healthyweightpartnership.org
Diabetes Continuum of Care: Using Health Promotion/Behavior Change to Address Childhood and Adult Obesity and Diabetes

TODAY'S SPEAKERS

Jessica Wallace, MPH, MSHS, PA-C
Family Medicine Physician Assistant of Denver Health and Hospital Authority

Natalie Blum, MPH
Manager of Prevention of American Association of Diabetes Educators

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American Association of Diabetes Educators
Improving Health Through the National Diabetes Prevention Program

Diabetes Continuum of Care Webinar
April 18, 2019
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
Polling Question

Are you familiar with the National Diabetes Prevention Program (DPP)?

YES or NO
Diabetes and prediabetes

30.3 million American adults with diabetes

84.1 million American adults with prediabetes
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!
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 )
Prevent T2 Program vs. {Insert Popular Diet Name Here}?

Prevent T2:
- Program focuses on type 2 diabetes prevention
- Secondary health benefits
- Flexibility and sustainability

Bottom line: participants can make their own choices in how they reach their program goals
What Does the Prevent T2 Program Look Like?

Lifestyle Coach will work with groups of participants to reduce their risk by:

- Losing weight through healthy eating (5-7% of starting weight)
- Physical activity (goal is to get to at least 150 minutes per week)
- Learning to identify and address barriers to healthy eating and physical activity

- Relies on self-monitoring, goal setting, group process
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 $\geq 25$ kg/m$^2$ ($\geq 23$ 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
     - Fasting Plasma glucose of 100 to 125 mg/dl (CMS eligibility requirement for Medicare DPP suppliers is 110 to 125 mg/dl)
     - A1c of 5.7 to 6.4
     - Clinically diagnosed diabetes mellitus (GDM) during a previous pregnancy (not allowed for Medicare); or
  2. A positive screening for prediabetes based on the CDC Prediabetes Screening Test (these are not options for eligibility for Medicare beneficiaries)
Case Study: Am I Eligible?

- Hispanic man, age 39
- Works in California’s Central Valley as an agricultural worker
- BMI of 24
- HbA1c indicates that he has prediabetes (5.8%) and his diabetes risk test is positive
- Parents both passed away from complications of Type 2 diabetes before the age of 65
Participant Readiness

### Readiness to Change Questionnaire

**Where am I right now?**

Thinking about your physical activity and eating over the past three months, please answer the following questions. Please circle one number to indicate how strongly you agree or disagree with the following statements. (Check “Don't know or refused” if you do not know or do not want to answer).

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don't Know or Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>I eat healthily</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>I get enough physical activity</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>I want to eat more healthily</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>I want to be more physically active</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**How confident are you that you can make changes now?**

Please circle one number to indicate how confident you are that you can make the following changes. (Check “Don't know or refused” if you do not know or do not want to answer).

<table>
<thead>
<tr>
<th>Physical Activity</th>
<th>Sure I can</th>
<th>Think I can</th>
<th>Not sure I can</th>
<th>Don't think I can</th>
<th>Don't know or refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get physical activity more often</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Be physically active for longer time</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eating</th>
<th>Sure I can</th>
<th>Think I can</th>
<th>Not sure I can</th>
<th>Don't think I can</th>
<th>Don't know or refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eat more healthful food</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Overeat less often</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Stages of Change

Precontemplation- Unaware, unwilling, and discourage by change.

Contemplation – Aware there is a problem and thinking about taking action.

Preparation- Intends to take action but has not yet done so.
Readiness Ruler

How important? ❤️

How confident are you that—with the right skills and social support—you would be able to accomplish this change? ⬤
Staffing: Your National DPP team

A strong National DPP site has:

- **Lifestyle Coach** to deliver the Diabetes Prevention Program to participants
- **Data Specialist** to keep track of participant data, cohort data, and ensure the program is complying with CDC standards
- **Program Coordinator** to connect with CDC, support the Lifestyle Coach or Coaches, and ensure program success by establishing clinic and community partnerships that drive referrals, enrollment, and reimbursement
Lifestyle Coach- Group Facilitator

Lifestyle Coaches are the heart of the National DPP’s workforce!
Group Facilitation/Motivational Interviewing

PREVENTION 101
Fundamentals of Diabetes and Prediabetes

Motivation = A person’s expressed degree of readiness to change

Readiness to change is = Importance \times Confidence

What are some of the Core Practices of the Group Facilitators?

- Active listening
- Ask questions
- Paraphrase
- Synthesize ideas
- Manage digression
- Offer clear summaries
- Give and receive feedback
- Use appropriate language
Group facilitation techniques

- Open Ended Questions
- Nonverbal Support
- Ping Pong
- Carousel
- Cross Questioning
- Sub Groups
- Active listening
- Silence
Polling Question

Which Facilitation Technique is being used in the following example?

Lifestyle Coach/Facilitator: “Iris, can you answer Dave’s question of what we mean by a healthy way of eating?”

Options:
Open Ended Question
Nonverbal Support
Ping Pong
Carousel
Cross Questioning
Sub Groups
Active listening
Silence
Curriculum

- CDC-approved curriculum
- Other Curriculum
  - Provide the completed yearlong curriculum with any supplemental materials with the application.
  - Organizations should allow 4-6 weeks for review and approval of the application and assignment of an organization code.
<table>
<thead>
<tr>
<th>Module names</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to the Program</td>
<td>This module sets the stage for the entire Prevent T2 course.</td>
</tr>
<tr>
<td></td>
<td><em>Presented at the first session.</em></td>
</tr>
<tr>
<td>Get Active to Prevent T2</td>
<td>This module provides the core principles of getting active.</td>
</tr>
<tr>
<td></td>
<td><em>Recommended at the second session.</em></td>
</tr>
<tr>
<td>Track Your Activity</td>
<td>This module provides the core principles of tracking activity.</td>
</tr>
<tr>
<td></td>
<td><em>Recommended at the third session.</em></td>
</tr>
<tr>
<td>Eat Well to Prevent T2</td>
<td>This module provides the core principles of healthy eating.</td>
</tr>
<tr>
<td></td>
<td><em>Recommended at the fourth session.</em></td>
</tr>
<tr>
<td>Track Your Food</td>
<td>This module provides the core principles of tracking food.</td>
</tr>
<tr>
<td></td>
<td><em>Recommended at the fifth session.</em></td>
</tr>
<tr>
<td>Get More Active</td>
<td>This module provides the core principles of increasing activity level.</td>
</tr>
<tr>
<td></td>
<td><em>Recommended at the sixth session.</em></td>
</tr>
<tr>
<td>Module names</td>
<td>Descriptions</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Burn More Calories Than You Take In</td>
<td>This module provides the core principles of caloric balance. <strong>Recommended at the seventh session.</strong></td>
</tr>
<tr>
<td>Shop and Cook to Prevent T2</td>
<td>This module teaches participants how to buy and cook healthy food.</td>
</tr>
<tr>
<td>Manage Stress</td>
<td>This module teaches participants how to reduce and deal with stress.</td>
</tr>
<tr>
<td>Find Time for Fitness</td>
<td>This module teaches participants how to find time to be active.</td>
</tr>
<tr>
<td>Cope with Triggers</td>
<td>This module teaches participants how to cope with triggers of unhealthy behaviors.</td>
</tr>
<tr>
<td>Keep Your Heart Healthy</td>
<td>This module teaches participants how to keep their heart healthy.</td>
</tr>
<tr>
<td>Take Charge of Your Thoughts</td>
<td>This module teaches participants how to replace harmful thoughts with helpful thoughts.</td>
</tr>
<tr>
<td>Get Support</td>
<td>This module teaches participants how to get support for their healthy lifestyle.</td>
</tr>
<tr>
<td>Eat Well Away from Home</td>
<td>This module teaches participants how to stay on track with their eating goals at restaurants and social events.</td>
</tr>
<tr>
<td>Stay Motivated to Prevent T2</td>
<td>This module helps participants reflect on their progress and keep making positive changes over the next six months. <strong>Recommended at the six-month mark.</strong></td>
</tr>
</tbody>
</table>
Calorie Balance: How to reduce dietary fat calorie intake?

Recognize the link between calories and weight

Explain how to burn more calories than they take in

Key Messages for Participants

- Calorie balance determines weight loss
- To lose weight, work both sides of the balance by eating fewer calories and being more active
- Consider keeping track of calories, in addition to fat grams, every day
Calorie Reduction

1 POUND = 3,500 CALORIES \( (3,500 \div 7 = 500) \)

General rule of thumb:

<table>
<thead>
<tr>
<th>Weight Range</th>
<th>Calories Reduction per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 150 lbs</td>
<td>-500 calories per day</td>
</tr>
<tr>
<td>150-200 lbs</td>
<td>-750 calories per day</td>
</tr>
<tr>
<td>Over 200 lbs</td>
<td>-1,000 calories per day</td>
</tr>
</tbody>
</table>
Getting More Active

Getting Active is a great way to lower a participants risk of type 2 diabetes by lowering blood sugar.

Small changes over time can get a participant to their 150 minutes of physical activity goal each week
Eat Well to PreventT2

Eating well can help prevent or delay type 2 diabetes. PreventT2 has several modules that introduce the concepts of healthy
DPP: Cultural adaptations

- Translation
- Delivery
- Literacy Sensitivity
- Visuals
- Added Activities
- Class Format
- Language
- Implementation staff
- Metaphors
- Content
- Concepts
Taking action!

If you are not already working with a CDC-recognized organization...

• Find out if your organization wants to offer diabetes prevention

• Assess your organization’s capacity and readiness with CDC’s organizational capacity assessment

• Apply when you’re ready!
Joining the National DPP is like climbing a pyramid! By taking the Lifestyle Coach Training, you’re taking the first step to prevent or delay Type 2 diabetes for those at risk and helping to address the prediabetes epidemic!
THANK YOU!

Natalie Blum, MPH
Manager of Prevention
American Association of Diabetes Educators

nblum@aadenet.org OR DPP@aadenet.org
(312) 601-4857
Diabetes Continuum of Care: Using Health Promotion/Behavior Change to Address Childhood and Adult Obesity and Diabetes

What are your questions and comments?

Jessica Wallace, MPH, MSHS, PA-C
Family Medicine Physician Assistant of Denver Health and Hospital Authority

Natalie Blum, MPH
Manager of Prevention of American Association of Diabetes Educators

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American Association of Diabetes Educators
# Diabetes in Special & Vulnerable Populations: A National Learning Series

## Webinar Topics

<table>
<thead>
<tr>
<th>Webinar #1</th>
<th>Thursday, March 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Continuum of Care: Using Referrals, Outreach, and Care Coordination to Address Oral Health and Diabetes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Webinar #2</th>
<th>Tuesday, April 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Continuum of Care: Using Behavioral Health and Substance Use Disorder Integration to Address Older Adults with Cognitive Impairments and Diabetes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Webinar #3</th>
<th>Thursday, April 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Continuum of Care: Using Health Promotion/Behavior Change to Address Childhood and Adult Obesity and Diabetes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Webinar #4</th>
<th>Tuesday, April 23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Continuum of Care: Using the CHW and Enabling Services Workforce to Address Social Determinants of Health and Diabetes</td>
<td></td>
</tr>
</tbody>
</table>

Register today at [diabetes.aapcho.org](http://diabetes.aapcho.org)
SAVE THE DATE FOR WEBINAR #4

Diabetes Continuum of Care: Using the CHW and Enabling Services Workforce to Address Social Determinants of Health and Diabetes

NCA Faculty:

AAPCHO
Migrant Clinicians Network
MHP Salud
National LGBT Health Education Center
A Program of the Fenway Institute

TUESDAY, APRIL 23, 2019
8am HT / 11am PT / 1pm CT / 2pm ET

REGISTER TODAY AT DIABETES.AAPCHO.ORG
WEBINAR SLIDES & RECORDINGS AVAILABLE

Webinar #1: March 14th
Diabetes Continuum of Care: Using Referrals, Outreach, and Care Coordination to Address Oral Health and Diabetes

Webinar #2: April 9th
Diabetes Continuum of Care: Using Behavioral Health and Substance Use Disorder Integration to Address Older Adults with Cognitive Impairments and Diabetes

Download slides and watch the recordings at
DIABETES.AAPCHO.ORG
THANK YOU!

For more information about the Diabetes National Learning Series, visit diabetes.aapcho.org today.

Feel free to contact our NCA collaborating partners and speakers from today's webinar:

Jessica Wallace, MPH, MSHS, PA-C - jessica.wallace@dhha.org
Natalie Blum, MPH - nblum@aadenenet.org
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Gladys Carrillo, LCSW - carrillo@ncfh.org
Darlene Jenkins, DrPH - djenkins@nhchc.org
Andrea Shore, MPH - ashore@sbh4all.org

At the end of this webinar, please complete the evaluation form. Your feedback is greatly appreciated.