The National Diabetes Prevention Program

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Learning Objectives

After the presentation, participants will be able to:

- Explain the purpose of, benefits of, and evidence supporting the National Diabetes Prevention Program (National DPP)
- Describe national efforts around the National DPP
- Describe how to implement the M.A.P. (Measure, Act, Partner) process in a healthcare setting to prevent type 2 diabetes
History of the National DPP

- Diabetes Prevention Program (Efficacy)
  - Initial study funded by the National Institute of Health
  - Study period from 1996 to 2001

- Findings
  - Placebo group - no risk reduction
  - Metformin group – 31% risk reduction
  - Lifestyle Change Program (DPP) – 58 % risk reduction (>65 had a 71% risk reduction)
Diabetes Prevention Program Outcomes Study

- Follow-up to the DPP Study to monitor long-term effects

- Findings
  - Continued reduction of diabetes-related health problems, such as nerve damage and heart, kidney, and eye disease

- Further research by the National Institute of Diabetes and Digestive and Kidney Diseases has continued to support research assessing delivery methods and cost effectiveness
Translational Study (Effectiveness)

- Provided the DPP in group settings in select states to pilot group method of delivery
- Trained lay professionals as lifestyle coaches

Findings

- Providing the DPP in group settings with lay professionals still successful in reducing the risk of type 2 diabetes
- More cost effective than the initial study (1/3 the cost)

National Diabetes Prevention Program Today (Efficiency)

- National DPPs are provided in group settings by lay professionals across the US
  - (>7,300 trained Lifestyle Coaches)
  - Site examples: Healthcare centers, fitness centers, worksites, public health, Extension sites, and faith-based organizations

- Goals of the program remain:
  - Weight loss of 5 to 7 percent
  - Increase physical activity to 150 minutes per day
Cost Effectiveness

- Evidence shows that diabetes prevention lifestyle change programs are cost effective and can be cost saving.
- Influenced by target population, delivery format and personnel, time horizon.
- Some modeled data from an insurer has shown a three year cumulative ROI of 3:1 when using a pay-for-performance approach.

National Diabetes Prevention Program National Efforts (Availability and Distribution)

- Increasing Awareness
- Increasing Availability/Access
- Building policies/systems for screening, testing, and referring
- Advocating for coverage of the National DPP
Awareness

- **Ad Council**
  - Mission: Identify a select number of significant public issues and stimulate action on those issues through communications programs that make a measurable difference in our society.
  - Prediabetes Awareness has been identified as one of the significant public issues they’ve decided to act on.

- **PSAs:**
  - Bacon: [https://www.youtube.com/watch?v=3YWIaT0G65E](https://www.youtube.com/watch?v=3YWIaT0G65E)
  - Risk: [https://www.youtube.com/watch?v=s020q-FE0H4](https://www.youtube.com/watch?v=s020q-FE0H4)
  - Mom: [https://www.youtube.com/watch?v=dYSzAAM1BX8](https://www.youtube.com/watch?v=dYSzAAM1BX8)
  - [https://doihaveprediabetes.org/index.html](https://doihaveprediabetes.org/index.html)

- Find a program
- Text message tips
Availability/Access

- **AADE**
  - Funding 45 AADE-accredited and/or ADA-recognized DSME sites in 17 states to implement the National DPP

- **DTTAC (Diabetes Training and Technical Assistance Center)**
  - Trains lifestyle coaches and provides technical assistance to existing programs

- **Virtual Programs**
  - To increase access, virtual programs have been tested and proven as successful as in-person programs
Screening, Testing, and Referring

- American Medical Association (AMA) and Centers for Disease Control and Prevention (CDC) have launched a multi-year initiative as part of the National DPP to reach more Americans with prediabetes
  - Prevent Diabetes STAT Toolkit:
Sample patient flow process

**CHECK-IN**
- If age ≥18 and patient does not have diabetes, provide CDC Prediabetes Screening Test or ADA Diabetes Risk Test
- Patient completes test and returns it
- Insert completed test in paper chart or note risk score in EMR

**ROOMING/VITALS**
- Calculate BMI (using table) and review diabetes risk score
- If elevated risk score or history of GDM, flag for possible referral

**ACT**
**EXAM/CONSULT**
- Follow "Point-of-care prediabetes identification algorithm"*
- Determine if patient has prediabetes and BMI ≥24* (< 22 for Asians) or a history of GDM
- Advise re: diet/exercise and determine willingness to participate in a diabetes prevention program
- If patient agrees to participate, proceed with referral

**PARTNER**
**REFERRAL**
- Complete and submit referral form via fax or email

**FOLLOW UP**
- Contact patient and troubleshoot issues with enrollment or participation

* Some diabetes prevention program providers require a BMI of ≥25. Please check with your diabetes prevention program provider for eligibility requirements.
Point-of-care prediabetes identification

**MEASURE**
- If patient is age ≥18 and does not have diabetes, provide self-screening test (CDC Prediabetes Screening Test or ADA Diabetes Risk Test)
- If self-screening test reveals risk, proceed to next step

**RESULTS**

**Diagnostic test**
- **Normal**
  - HbA1C (%): < 5.7
  - Fasting plasma glucose (mg/dL): < 100
  - Oral glucose tolerance test (mg/dL): < 140
- **Prediabetes**
  - HbA1C (%): 5.7-6.4
  - Fasting plasma glucose (mg/dL): 100-125
  - Oral glucose tolerance test (mg/dL): 140-199
- **Diabetes**
  - HbA1C (%): ≥ 6.5
  - Fasting plasma glucose (mg/dL): ≥ 126
  - Oral glucose tolerance test (mg/dL): ≥ 200

**NICE**
- Encourage patient to maintain a healthy lifestyle.
- Continue with exam/consult if negative. Retest within 3 years of first negative test.
- Refer to diabetes prevention program, provide brochure.
- Consider retesting annually to check for diabetes onset.
- Confirm diagnosis; retest if necessary.
- Counsel patient: risk diagnosis. Initiate therapy.

**PARTNER**
- Communicate with your local diabetes prevention program.
- Contact patient and troubleshoot issues with enrollment or participation. At the next visit, ask patient about progress and encourage continued participation in the program.

*Some diabetes prevention program providers require a BMI of ≥25. Please check with your diabetes prevention program provider for eligibility requirements.

**History of GDM = eligibility for diabetes prevention program.
Retrospective prediabetes identification

**MEASURE**

Query EMR or patient database every 6–12 months using the following criteria:

A. Inclusion criteria:
   - Age ≥18 years
   - Most recent BMI ≥24* (≥22 if Asian)
   - A positive lab test result within previous 12 months:
     - HbA1C ≥5.7–6.4% (LOINC code 4548-4) or
     - FPG 100–125 mg/dL (LOINC code 1558-6) or
     - OGTT 140–199 mg/dL (LOINC code 62856-0) or
     - History of gestational diabetes (ICD-9: V12.21)

B. Exclusion criteria:
   - Current diagnosis of diabetes (ICD-9: 250.xx) or
   - Current insulin use

**Generate a list of patient names with relevant information**

**ACT**

Use the patient list to:

A. Contact patients to inform of risk status, explain prediabetes, and share info on diabetes prevention programs, and/or

B. Send patient info to diabetes prevention program provider
   - Program coordinator will contact patient directly, and

C. Flag medical record for patient's next office visit

**PARTNER**

Discuss program participation at next visit

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* Some diabetes prevention program providers require a BMI of ≥25. Please check with your diabetes prevention program provider for eligibility requirements.
Steps Forward Module

https://www.stepsforward.org/modules/prevent-type-2-diabetes

AMA online module: Preventing Type 2 Diabetes in At-Risk Populations

1.0 CME (AMA PRA Category 1 Credit) available for physicians

Coverage

- State Employee Coverage
  - Colorado
  - Kentucky
  - Louisiana
  - Maine
  - Minnesota
  - New Hampshire
  - Ohio
  - Washington

- Medicaid Coverage
  - Montana
Medicare Coverage:

“On Wednesday, March 23, US Department of Health and Human Services Secretary Sylvia Burwell made a landmark announcement: Medicare will cover certain lifestyle change programs that use trained coaches to guide participants in healthier eating and increased physical activity to help prevent type 2 diabetes. “ ~Dr. Ann Albright
“We have confused illness with the process of aging, which can be thoroughly healthy. Illness is not a necessary part of aging!” ~ Dr. Charles Eugster, 94-year-old World Masters Rowing Champion
29 million with Diabetes

86 million with Prediabetes
Prediabetes, could it be you?

9 out of 10 people with prediabetes do not know they have it.
Current Projections of Cases of Diabetes in the United States by 2030
Determine your risk!

A score 9 or higher means your current risk of having prediabetes is high!

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Add up your score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>Are you a woman who has had a baby weighing more than 9 pounds at birth?</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>Do you have a sister or brother with diabetes?</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>Do you have a parent with diabetes?</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>Do you weigh as much as or more than the weight listed for your height? (BMI &gt;24)</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>Are you younger than 65 years old and get little or no exercise?</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>Are you between 45 and 64 years of age?</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>Are you 65 years of age or older?</td>
</tr>
</tbody>
</table>

Centers for Disease Control & Prevention’s Prediabetes Screening Test:
Type 2 diabetes can be prevented, but not cured!

15 to 30% of people with prediabetes will develop type 2 diabetes within 5 years...

without weight loss and moderate physical activity
Details of the National DPP

- Eligibility
  - >18
  - Not pregnant
  - Overweight
  - At risk for prediabetes

- What’s included with the program
  - Trained lifestyle coach to provide information, support, and motivation
  - CDC-approved curriculum
  - 16 weekly sessions
  - 6 monthly sessions
  - Support and learning/sharing from peers
Session Examples

- Be a Fat & Calorie Detective
- Ways to Eat Less Fat & Fewer Calories
- Four Keys to Healthy Eating Out
- Talk Back to Negative Thoughts
- Ways to Stay Motivated
- Take Charge of What’s Around You
The NDPP: Registry of Recognized Programs

- Sites participating in NDPP must meet certain standards to be a part of the CDC’s list of recognized programs as part of ongoing quality assurance.
- A program submits for pending recognition status and has two years to attain full recognition.
- Programs are offered in a physical location and as online programs.
- Provide technical assistance to programs to assist staff in delivery and problem-solving to achieve and maintain recognition.
- A full list of all NDPP programs can be found here: https://nccd.cdc.gov/DDT_DPRP/Registry.aspx

Current Diabetes Prevention Programs in ND

Bismarck/Mandan:
**Sanford**
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Support Program Implementation

- 89% of people with prediabetes have no diagnosis or symptoms which indicates a need for increased awareness and testing efforts

- Multiple channels needed for engagement include employers, insurers, providers and consumers among others
Additional Resources

- ND specific infographics
- Prescription pads for the National DPP
- CDC or ADA risk test
- North Dakota Department of Health Diabetes Program Website:
  - www.diabetesnd.org
Summary

- Strong evidence for type 2 diabetes prevention through lifestyle change
- Lifestyle change programs can be cost effective
- Coordination among many partners is critical to scale the National DPP
- The DPRP assures program quality and evaluation are part of the National DPP
- Get involved and become part of something big, the National Diabetes Prevention Program
The greatest wealth is Health.
Questions?

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