DIABETES SELF-MANAGEMENT EDUCATION & NATIONAL DIABETES PREVENTION PROGRAMS

What, Why, and How
This presentation is brought to you by the Chronic Disease Prevention Program at the Wyoming Department of Health and funded through the State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health Grant (DP13-1305).

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OBJECTIVES

I. Increase access, referrals, and reimbursement for AADE-accredited, ADA-recognized, or Stanford-licensed DSME programs.

II. Increase referrals to, use of, and/or reimbursement for CDC recognized lifestyle change programs (National Diabetes Prevention Program) for the prevention of Type 2 Diabetes.
THE STAGGERING COSTS OF DIABETES IN AMERICA

Nearly
30 million
Americans have diabetes.

$1 in $3
Medicare dollars is spent caring for
people with diabetes.

3,835
Americans will be
diagnosed with
diabetes. Today,
diabetes will cause
200 Americans
to undergo an
amputation, 136
to enter end-stage
kidney disease
treatment and
1,795 to develop
severe retinopathy
that can lead to
vision loss and
blindness.

$322 billion
per year.

86 million
Americans have prediabetes.

$1 in $5
health care dollars is spent caring for
people with diabetes.

Learn how to fight this costly disease at diabetes.org/congress

ESTIMATED COST OF DIABETES IN WYOMING

Total Inpatient Costs: $232,825,610

People with diabetes incur an average $7,900 in medical cost per year.

PREVALENCE OF DIABETES IN WYOMING

DIABETES SELF MANAGEMENT EDUCATION / SUPPORT

(DSME/S)
Definitions:

- **Diabetes Self-Management Education**: The ongoing process of facilitating the knowledge, skill, and ability necessary for diabetes self-care.

- **Diabetes Self-Management Support**: Activities that assist the person with diabetes in implementing and sustaining the behaviors needed to manage his or her condition on an ongoing basis.

Goal of DSME/S:

- Effective self-management and improved clinical outcomes, health status, and quality of life

Overall Objectives:

• Support informed decision making
• Learn self-care behaviors
• Use problem solving skills, and active collaboration with the health care team
• Facilitate knowledge, skill, and ability necessary for diabetes self-care
• Incorporate needs, goals, and life experiences of the person with diabetes or prediabetes

All guided by evidence-based research.

STANDARDS OF DSME PROGRAMS

I. Internal Structure
II. External Input
III. Access
IV. Program Coordination
V. Instructional Staff
VI. Curriculum
VII. Individualization
VIII. Ongoing Support
IX. Patient Progress
X. Quality Improvement

DSME PROGRAM CURRICULUM

- Describing the diabetes disease process and treatment options
- Incorporating nutritional management into lifestyle
- Incorporating physical activity into lifestyle
- Using medication(s) safely and for maximum therapeutic effectiveness
- Monitoring blood glucose and other parameters and interpreting and using the results for self-management decision making
- Preventing, detecting, and treating acute complications
- Preventing, detecting, and treating chronic complications
- Developing personal strategies to address psychosocial issues and concerns
- Developing personal strategies to promote health and behavior change
BENEFIT OF A DSME/S PROGRAM

Quality of Life
---
Healthy Eating
---
Physical Activity
---
Self-Efficacy
---
Empowerment
---
Healthy Coping
---
Improved HbA1c

Hospital Readmissions
---
Lifetime Healthcare Cost
---
Diabetes Complications
---
Diabetes-Related Distress
---
Depression

Diabetes Self-Management Education and Support for Adults with Type 2 Diabetes:

**Algorithm of Care**

ADA Standards of Medical Care in Diabetes recommends all patients be assessed and referred for:

- **Nutrition**
  - Registered dietitian for medical nutrition therapy

- **Education**
  - Diabetes self-management education and support

- **Emotional Health**
  - Mental health professional if needed

**Four Critical Times to Assess, Provide, and Adjust Diabetes Self-Management Education and Support**

1. **At Diagnosis**
   - Newly diagnosed. All newly diagnosed individuals with type 2 diabetes should receive DSME/S
   - Ensure that both nutrition and emotional health are appropriately addressed in education or make separate referrals

2. **Annual Assessment of Education, Nutrition, and Emotional Needs**
   - Needs review of knowledge, skills, and behaviors
   - Long-standing diabetes with limited prior education
   - Change in medication, activity, or nutritional intake
   - HbA1c, out of target
   - Maintain positive health outcomes
   - Unexplained hypoglycemia or hyperglycemia
   - Planning pregnancy or pregnant
   - For support to attain or sustain behavior change(s)
   - Weight or other nutrition concerns
   - New life situations and competing demands

3. **When New Complicating Factors Influence Self-Management**
   - Health conditions such as renal disease and stroke, need for steroid or complicated medication regimen
   - Physical limitations such as visual impairment, dexterity issues, movement restrictions
   - Emotional factors such as anxiety and clinical depression
   - Basic living needs such as access to food, financial limitations

4. **When Transitions in Care Occur**
   - Living situation such as inpatient or outpatient rehabilitation or now living alone
   - Medical care team
   - Insurance coverage that results in treatment change
   - Age-related changes affecting cognition, self-care, etc.
## Diabetes Self-Management Education and Support for Adults with Type 2 Diabetes: Algorithm Action Steps

### At Diagnosis
- Answer questions and provide emotional support regarding diagnosis
- Provide overview of treatment and treatment goals
- Teach survival skills to address immediate requirements (safe use of medication, hypoglycemia treatment if needed, introduction of eating guidelines)
- Identify and discuss resources for education and ongoing support
- Make referral for DSME/S and medical nutrition therapy (MNT)

### Annual Assessment of Education, Nutrition, and Emotional Needs
- Assess all areas of self-management
- Review problem-solving skills
- Identify strengths and challenges of living with diabetes

### When New Complicating Factors Influence Self-Management
- Identify presence of factors that affect diabetes self-management and attain treatment and behavioral goals
- Discuss impact of complications and successes with treatment and self-management

### When Transitions in Care Occur
- Develop diabetes transition plan
- Communicate transition plan to new health care team members
- Establish DSME/S regular follow-up care

### Primary Care Provider/Endocrinologist/Clinical Care Team: Areas of Focus and Action Steps

#### Diabetes Education: Areas of Focus and Action Steps
- Review and reinforce treatment goals and self-management needs
- Emphasize preventing complications and promoting quality of life
- Discuss how to adapt diabetes treatment and self-management to new life situations and competing demands
- Support efforts to sustain initial behavior changes and cope with the ongoing burden of diabetes
- Provide support for the provision of self-care skills in an effort to delay progression of the disease and prevent new complications
- Provide/refer for emotional support for diabetes-related distress and depression
- Develop and support personal strategies for behavior change and healthy coping
- Develop personal strategies to accommodate sensory or physical limitation(s), adapting to new self-management demands, and promote health and behavior change
- Identify needed adaptations in diabetes self-management
- Provide support for independent self-management skills and self-efficacy
- Identify level of significant other involvement and facilitate education and support
- Assist with facing challenges affecting usual level of activity, ability to function, health benefits and feelings of well-being
- Maximize quality of life and emotional support for the patient (and family members)
- Provide education for others now involved in care
- Establish communication and follow-up plans with the provider, family, and others

©2015 by American Diabetes Association
To be eligible for reimbursement, DSME programs must meet the 10 National Standards of DSME Programs.

AADE- and ADA-accredited programs meet the standards

Stanford-licensed programs do not meet the standards

* Stanford-licensed programs can be embedded into a larger infrastructure that includes the missing standards – this makes them eligible for reimbursement.
DSME REIMBURSEMENT

• Medicare:
  • Must obtain referral from health care professional and receive training from ADA- or AADE-accredited program
  • Up to 10 hours of diabetes-related group training in 12 months
  • Up to 2 hours of training each year after the initial 12 months

• Medicaid:
  • Must obtain referral from health care professional and receive training from CDE or Dietician
  • Up to 1 hour individual training, additional DSME in group setting
DSME REIMBURSEMENT

• Private Payer:
  • Must obtain DSME prescription from health care professional and receive training from health care professional with expertise in diabetes
  • One-time evaluation and training program when medically necessary, within 1 year of diagnosis
  • Additional training, up to 3 hours per year, provided upon significant change in symptoms, condition, or treatment
  • Subject to same annual deductibles or coinsurance for all other covered benefits
DSME PROGRAMS IN WYOMING

ADA-recognized and AADE-accredited DSME Program Site Listing through 6/30/2016

This map reflects the current ADA-recognized and AADE-accredited programs through 6/30/2016. This does not break program sites out by type.

https://www.diabeteseducator.org/patient-resources/find-a-diabetes-educator
DSME PROGRAMS VIA WEB

Better Choices, Better Health – Diabetes

• Online DSME program
• Stanford University workshop
• Led by two trained facilitators
• 6 weeks long with weekly lessons
• Participants are in a group of ~24 people

BECOMING A RECOGNIZED DSME PROGRAM

American Diabetes Association
• Education Recognition Program (ERP)
• http://professional.diabetes.org/content/recognition-requirements

American Association of Diabetes Educators
• Diabetes Education Accreditation Program (DEAP)
• https://www.diabeteseducator.org/practice/diabetes-education-accreditation-program-(deap)

Stanford Medicine
• Diabetes Self-Management Program (DSMP)
• http://patienteducation.stanford.edu/licensing/

Support from Chronic Disease Prevention Program at the Wyoming Department of Health and Independent Contractors
In order to enhance patient and family engagement in DSME/S, provider communication about the necessity of self-management to achieve treatment and quality-of-life goals and the essential nature of both DSME and ongoing support throughout a lifetime of diabetes is essential.

NATIONAL DIABETES PREVENTION PROGRAM (NDPP)
WHAT IS PREDIABETES?

A **reversible** cardiometabolic risk factor

- Plasma glucose levels are above normal, but not high enough for diagnosis of type 2 diabetes
- A1c between 5.7 - 6.4
- No prior diabetes diagnosis

**Risks factors for Prediabetes** include:

- Overweight/Obesity
- Lack of physical activity
- Age (risk increases with age)
- Race/Ethnicity
- Low birth weight

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# How Can Prediabetes Be Diagnosed?

<table>
<thead>
<tr>
<th></th>
<th>A1C (percent)</th>
<th>Fasting plasma glucose (mg/dL)</th>
<th>Oral glucose tolerance test (mg/dL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diabetes</strong></td>
<td>6.5 or above</td>
<td>126 or above</td>
<td>200 or above</td>
</tr>
<tr>
<td><strong>Prediabetes</strong></td>
<td>5.7 to 6.4</td>
<td>100 to 125</td>
<td>140 to 199</td>
</tr>
<tr>
<td><strong>Normal</strong></td>
<td>About 5</td>
<td>99 or below</td>
<td>139 or below</td>
</tr>
</tbody>
</table>

Definitions: mg = milligram, dL = deciliter

For all three tests, within the prediabetes range, the higher the test result the greater the risk of diabetes.

Source: NIDDK
NDPP OVERVIEW

- A **lifestyle change program** following an evidence-based, CDC-approved curriculum
- Designed for people who **have prediabetes** or are at risk for **type 2 diabetes**
- Consists of 16 weeks of **intervention** followed by 6 months of **maintenance and follow-up**
- Focuses on **healthy habits**

# STANDARD NDPP CURRICULUM

<table>
<thead>
<tr>
<th>First 6 Months - Modules</th>
<th>Last 6 Months - Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Overview/Introduction</td>
<td>When Weight Loss Stalls</td>
</tr>
<tr>
<td>Get Active to Prevent T2</td>
<td>Take a Fitness Break</td>
</tr>
<tr>
<td>Track Your Activity</td>
<td>Stay Active to Prevent T2</td>
</tr>
<tr>
<td>Eat Well to Prevent T2</td>
<td>Stay Active Away from Home</td>
</tr>
<tr>
<td>Track Your Food</td>
<td>More About T2</td>
</tr>
<tr>
<td>Get More Active</td>
<td>More About Carbs</td>
</tr>
<tr>
<td>Burn More Calories Than You Take In</td>
<td>Have Healthy Food You Enjoy</td>
</tr>
<tr>
<td>Shop and Cook to Prevent T2</td>
<td>Get Enough Sleep</td>
</tr>
<tr>
<td>Manage Stress</td>
<td>Get Back on Track</td>
</tr>
<tr>
<td>Find Time for Fitness</td>
<td>Prevent T2 – For Life!</td>
</tr>
<tr>
<td>Cope with Triggers</td>
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<tr>
<td>Keep Your Heart Healthy</td>
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<tr>
<td>Take Charge of Your Thoughts</td>
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<tr>
<td>Get Support</td>
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<tr>
<td>Eat Well Away from Home</td>
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<tr>
<td>Stay Motivated to Prevent T2</td>
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</table>

NDPP OUTCOMES

NDPP is a result of a major clinical research study designed to test whether lifestyle changes (diet and physical activity) could prevent or delay onset of type 2 diabetes.

<table>
<thead>
<tr>
<th>National Institute of Health (NIH)-funded 3-arm Randomized Control Trial</th>
<th>Outcome – 3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>Intervention Group 2</td>
</tr>
<tr>
<td>Placebo</td>
<td>Metformin</td>
</tr>
<tr>
<td>Intervention Group 1</td>
<td>Intensive Lifestyle Coaching*</td>
</tr>
</tbody>
</table>

*Individual counseling and motivational support on effective diet, exercise, and behavior modification

- **Outcome – 3 years**
  - Intervention Group 2
  - A **5-7% body weight loss** reduced the risk of developing type 2 diabetes by **58%** in those with prediabetes (**71%** in those 60+ years).

- **Outcome – 10 years**
  - Intervention Group 2
  - **34% decrease** in prevalence of type 2 diabetes.

http://www.cdc.gov/diabetes/prevention/
NDPP OUTCOMES

Reduction in Risk of Developing Type 2 Diabetes

WHAT IS THE IMPORTANCE OF A NDPP?

1 in 5 adults could have type 2 diabetes by 2025

In 2013, diabetes as a primary or secondary diagnosis cost the state of Wyoming $232,825,610 in inpatient costs alone

Participation in a NDPP resulted in Medicare cost savings of $2,650 per patient compared to control beneficiaries

State of Wyoming Hospital Discharge Data, 2013.
YMCA & CDC, 2016.
WHAT CAN YOU DO?
PREVENT DIABETES STAT

SCREEN
patients for prediabetes using the CDC Prediabetes Screening Test (or the American Diabetes Association Diabetes Risk Test)

TEST
patients for prediabetes using one of three blood tests

ACT TODAY
to help prevent diabetes by referring patients with prediabetes to a diabetes prevention program

Go to https://preventdiabetesstat.org/
for the diabetes prevention toolkit.
NDPP VIA WEB

Same curriculum as in-person NDPP, but online format.

- Lifestyle – Virtual Lifestyle Management
- Noom
- Omada Health
- Care Matters
- Good Measures
- HealthSlate

And **many more** virtual NDPP options.

Find online and in-person NDPP programs at:
https://nccd.cdc.gov/DDT_DPRP/Programs.aspx
NDPP VIA TELEHEALTH

**What?** High-quality lifestyle interventions with frequent provider interaction delivered to patients in remote locations

**Why?** Reduce cost burden to health systems and disease burden to Wyoming

**How?**
- **Provide:**
  - Facilities
  - Facilitator
  - Referrals and recruitment
  - Video conferencing technology

- **Receive:**
  - CDC-recognized NDPP
  - Trained Lifestyle Coach
  - Cost savings
  - Innovative program
NDPP VIA TELEHEALTH

Can a Telehealth NDPP be successful? Yes!

In Montana, a Telehealth NDPP resulted in:

- Reduction in diabetes incidence of ~19.3%
- ~7% weight loss among 45% of telehealth participants
- Cost savings of ~$1.1 million for 2010
- Cost of $470/participant (*Medicaid reimbursed up to $500/person/year)

In a meta-analysis of 28 NDPPs nationally, virtual programs had equivalent rates of participant retention and weight loss to in-person interventions.

BECOMING A RECOGNIZED DPP

Centers for Disease Control and Prevention (CDC)

- Diabetes Prevention Recognition Program (DPRP)
  - [https://www.cdc.gov/diabetes/prevention/lifestyle-program/requirements.html](https://www.cdc.gov/diabetes/prevention/lifestyle-program/requirements.html)
- Standards for CDC recognition include:
  - CDC-approved curriculum
  - Ability to begin offering program <6 months from CDC approval
  - Capacity and commitment to deliver program for >1 year
  - Ability to record and submit data on participant progress
  - Trained lifestyle coaches
  - Designated DPP Coordinator(s)

Support from Chronic Disease Prevention Program at the Wyoming Department of Health and Independent Contractors
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https://health.wyo.gov/publichealth/prevention/chronicdisease
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QUESTIONS?

Thank you for participating!