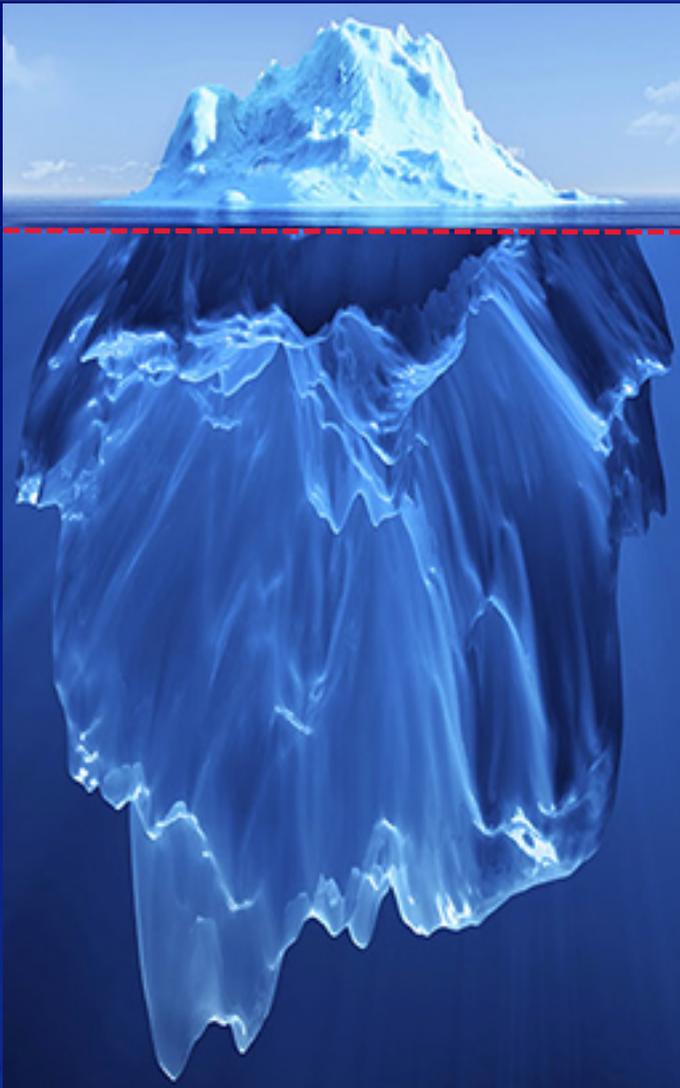


# National Diabetes Prevention Program: Experiences and Outcomes

**Ann Albright PhD, RD**

Director, Division of Diabetes Translation  
Centers for Disease Control and Prevention



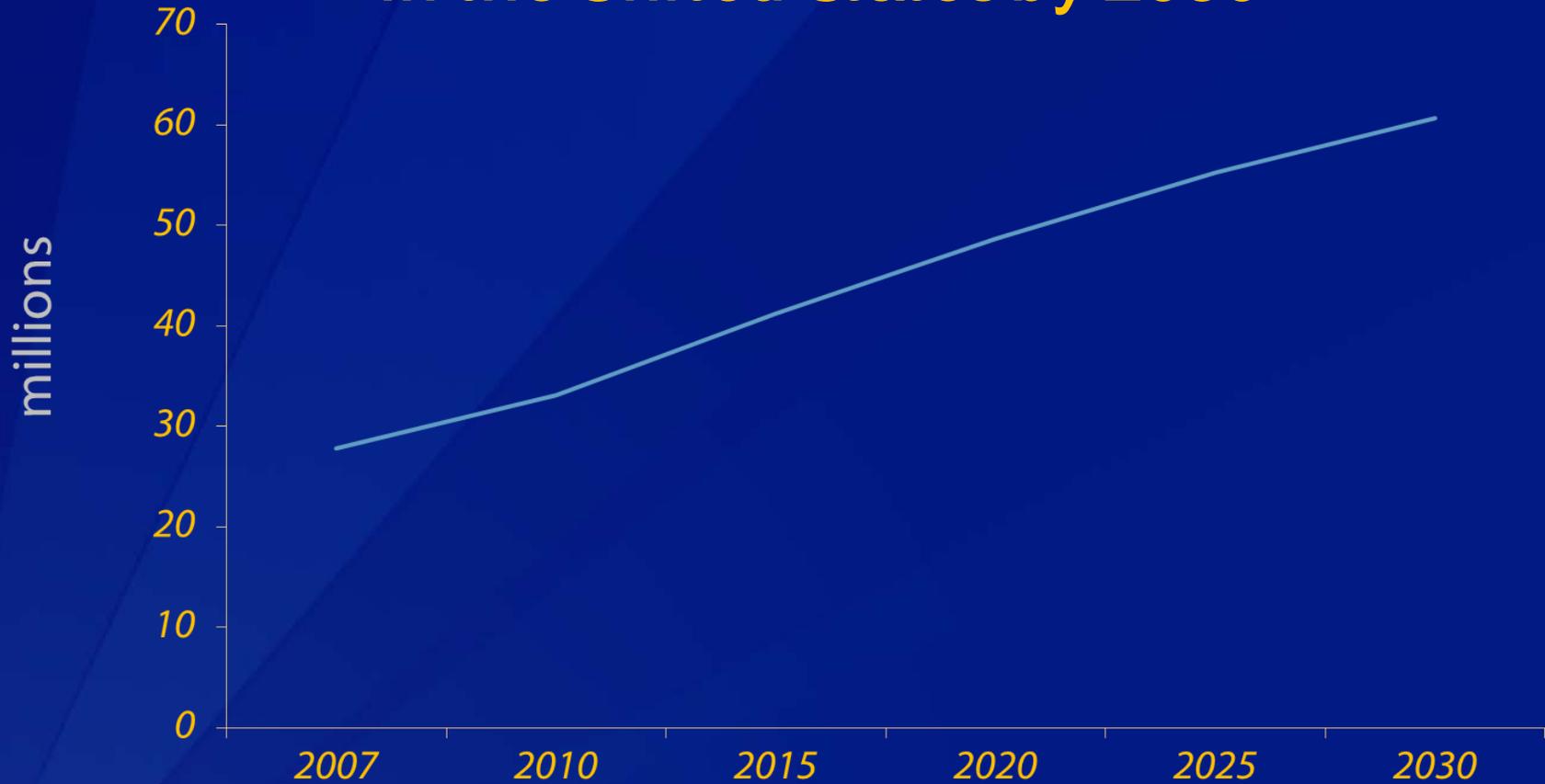
**29 million Americans have diabetes**

**86 million American adults have prediabetes**

**9 out of 10 adults with prediabetes don't know they have it**

Source: Centers for Disease Control and Prevention. *National diabetes statistics report: estimates of diabetes and its burden in the United States, 2014*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2014.

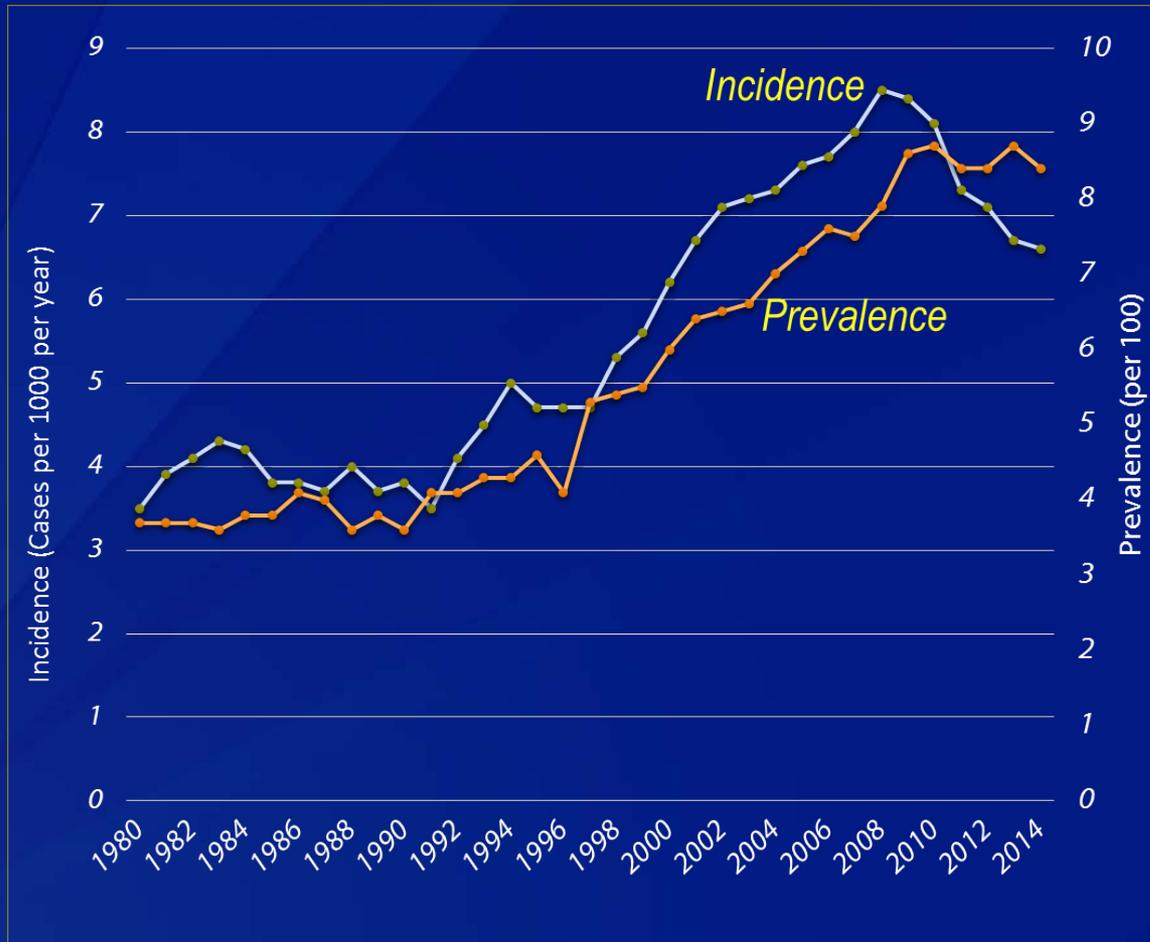
# Current Projections of Cases of Diabetes in the United States by 2030



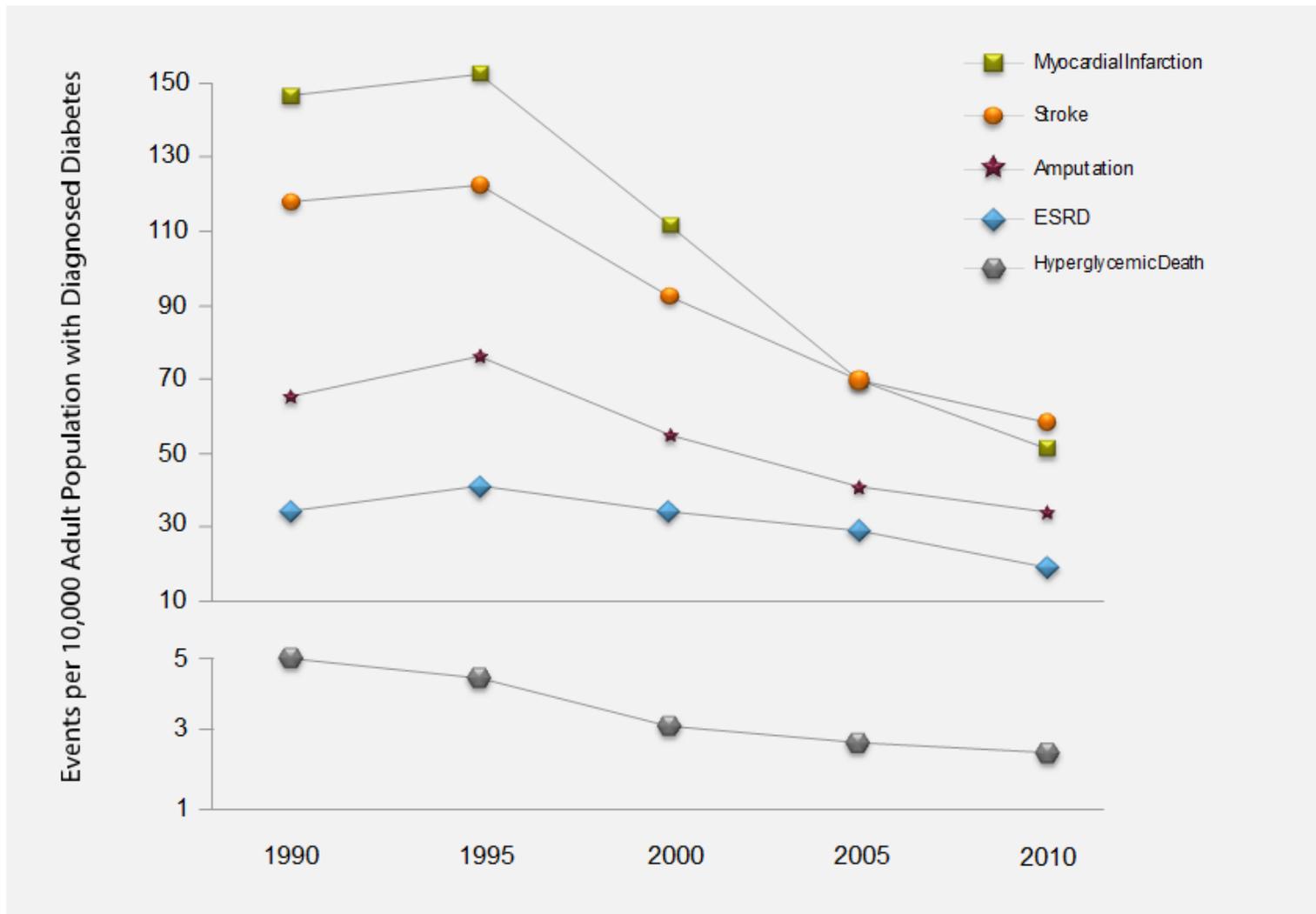
# Trends in Incidence and Prevalence of Diagnosed Diabetes Among Adults Aged 20 to 79, United States, 1980 – 2014

CDC, National Diabetes Surveillance System.

<http://www.cdc.gov/diabetes/home/index.html>, 2016



# Trends in Age-standardized Rate of Diabetes-Related Complications from 1990 to 2010 among U.S. Adults with Diagnosed Diabetes



## Risk Stratification for Type 2 Diabetes Prevention Interventions

Risk Level	Adult Prevalence (%)	10 Years Diabetes Risk (%)	Risk Indicators	Intervention
Very High	~15%	>30	A1c>5.7% FPG>110	Structures lifestyle Intervention in Community Setting
High	20%	20 to 30	FPG>100 NDPP score 9+	
Moderate	30%	10 to 20	2+ risk factors	Risk Counseling
Low	35%	0 to 10	0-1 risk factors	Building Health Communities

Source: Gerstein et al., 2007; Zhang et al., 2010

## Type 2 DIABETES PREVENTION INTERVENTIONS

- Expand access to the National Diabetes Prevention Program (the National DPP), a lifestyle change program for preventing type 2 diabetes in those at high risk
- Promote screening for abnormal blood glucose in those who are overweight or obese as part of a cardiovascular risk assessment

## Type 2 DIABETES PREVENTION EVIDENCE SUMMARY

### Randomized Clinical Control Trials:

- The Diabetes Prevention Program Research Group. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. N Engl J Med. 2002; 346 : 393–403.
- The Diabetes Prevention Program Outcomes Study. Lancet. 2015

### Subsequent Translation Studies

Various

### Evidence-based Recommendations

- USPSTF Obesity Intensive Behavioral Counseling

**July 2012**

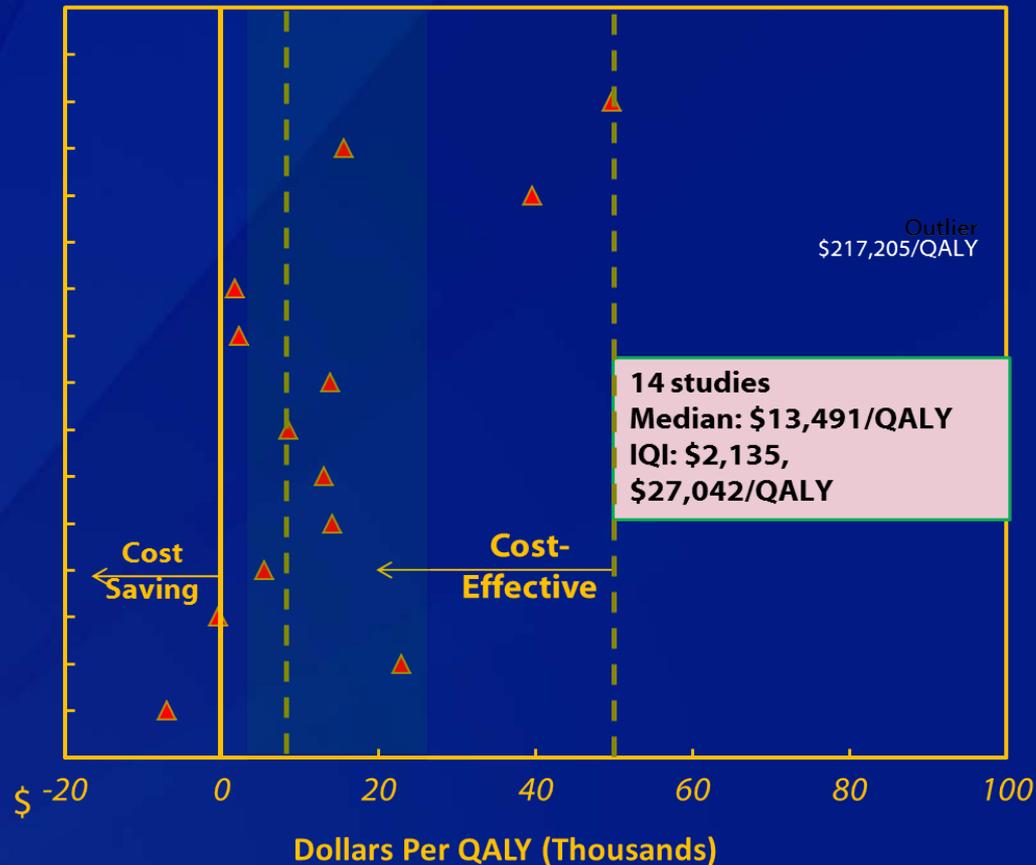
- USPSTF CVD Risk Reduction Intensive Behavioral Counseling

**August 2014**

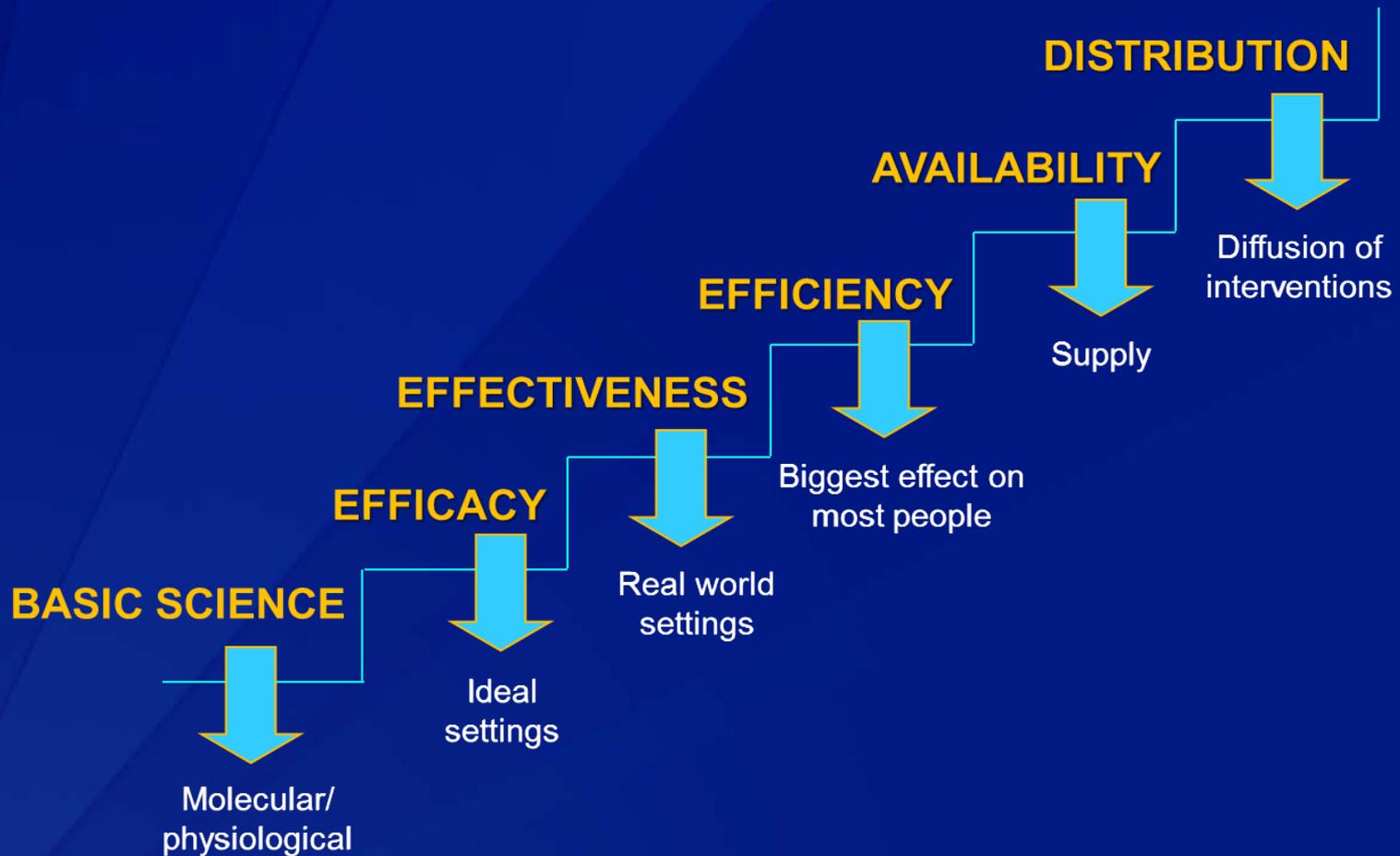
- USPSTF Type 2 Diabetes and Abnormal Glucose Screening

**October 2015**

# Cost-Effectiveness of Lifestyle Intervention: Systematic Review



Source: Li et al, Annals of Internal Medicine 2015



Adapted from information in Sinclair JC, et al. *N Engl J Med.* 1981;305:489–494. and Detsky AS, et al. *Ann Intern Med.* 1990;113:147-154.

# National Diabetes Prevention Program

- Recognized programs join largest national effort to mobilize and bring effective lifestyle change programs to communities across the country.



# National Diabetes Prevention Program (cont.)

## National Diabetes Prevention Program

### COMPONENTS



#### **Training: Increase Workforce**

Train the workforce that can implement the program cost effectively.



#### **Recognition Program: Assure Quality**

Implement a recognition program that will:

- Assure quality.
- Lead to reimbursement.
- Allow CDC to develop a program registry.



#### **Intervention Sites: Deliver Program**

Develop intervention sites that will build infrastructure and provide the program.



#### **Health Marketing: Support Program Uptake**

Increase referrals to and use of the prevention program.

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

# Diabetes Prevention Recognition Program Objectives



- 1. Assure program quality, fidelity to scientific evidence, and broad use of effective type 2 diabetes prevention lifestyle change programs throughout the U.S.**
- 2. Develop and maintain a registry of recognized organizations**
- 3. Provide technical assistance to programs to assist staff in delivery and problem-solving to achieve and maintain recognition**

<http://www.cdc.gov/diabetes/prevention/lifestyle-program/index.html>



# Application Process

- **READ – Standards Document on CDC website**
  - <http://www.cdc.gov/diabetes/prevention/recognition>
- **Complete – Capacity Assessment posted on the CDC Website**
  - Does my organization have the capacity to **implement and sustain** the program long-term **without government grant funds**?
  - Does my organization have a **data collection system**?
  - Does my organization have the capacity to **develop or implement data collection system**?
  - Does my organization have the resources to **train Lifestyle Coaches**?

# DPRP Standards and Operating Procedures

- I. Overview
- II. Standards and Requirements for Recognition
- III. Applying for Recognition
- IV. Submitting Evaluation Data to DPRP
- V. National Registry of Recognized Diabetes Prevention Programs

## Appendices include:

- Capacity Assessment
- CDC Prediabetes Screening Test
- Staff Eligibility, Skills and Roles, and Sample Job Descriptions
- Sample Timeline
- Example of Using Data for Evaluation

Find the *DPRP Standards* at: <http://www.cdc.gov/diabetes/prevention/recognition/standards.htm>  
<http://www.cdc.gov/diabetes>

# CDC Recognition Process

**Apply**

- **Submit curriculum, or statement re: use of CDC-preferred curriculum**
- **Submitted curriculum reviewed for consistency with the criteria described in the standards**

**15-30  
days**

- **Granted “pending recognition” by CDC**

**6 mos.**

- **DPRP standards state that organizations are to begin lifestyle change program w/in 6 mos. of pending recognition**

# CDC Recognition Process

**12 mos.**

- 1<sup>st</sup> set of evaluation data submitted to CDC

**24 mos.**

- 2nd set of evaluation data submitted to CDC & recognition status assessed  
(granted full recognition or remain pending)

**Beyond**

- Recognition maintained as long as continue to submit data every 12 mos. and meet standards

# What participant data will be reported to CDC?



- **Participant's Prediabetes Determination:** (Glucose/A1C, GDM or CDC Prediabetes Screening Test)
  - Note: these will be Y/N fields – specific values not reported
- **Demographics:** Age, Ethnicity, Race, Sex, State
- **Physical characteristics:** Height, Weight (height and weight used to determine BMI)
- **Session data:** Weight, Documentation of Minutes of Physical Activity

# Recognition Benefits

- Quality Assurance associated with recognition can be influential to help:
  - enroll participants
  - obtain health care provider referrals
- Recognition may facilitate reimbursement from a growing number of insurers paying for the program
- Program contact info included on CDC website
- CDC provides technical assistance, including feedback on data submitted
- There is no charge to become recognized by CDC

## Status: Scaling and Sustaining National DPP

- 1045 CDC-recognized programs; in-person programs across 48 states and DC
  - 156 organizations report serving AI/AN
- Serving over 88,000 eligible participants
  - 683 participants who identify as AI/AN reported
- Average weight loss for participants who attend at least 4 sessions over the yearlong program is 4.6%
- Over 60 commercial health plans providing some coverage; state employees covered in 11 states covering > 3 million people
- Expansion of the National DPP to Medicare coverage
- Medicaid demo

# CDC's New *Prevent T2* English and Spanish Curriculum Sample Handouts

**PREVENGA EL T2**  
El programa para prevenir el tipo 2 de diabetes

## What will I do?



## How can I change?




## Can I make it fun?




## What should I eat?




My Action Plan Journal



**PREVENGA EL T2**  
El programa para prevenir el tipo 2 de diabetes



## Consejos para alcanzar y mantener un peso saludable

**Consejo 1: Establezca una meta de peso:**  
 Hable con su médico o con su proveedor de atención médica y establezcan juntos una meta de peso. Escriba cuánto le gustaría pesar. Escriba sus razones para llegar a un peso saludable y permanecer en él:

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**Consejo 2: Consuma alimentos que tengan menos calorías. ¡Usted decide cómo!**

Algunas personas dejan los postres para bajar de peso. Otras piensan que llevar un registro de lo que comen y cuidar el tamaño de las porciones es la clave. Algunas veces, con solo pequeños cambios se logra una gran diferencia en la pérdida de peso.

### Consejos para comer alimentos con menos calorías

- ▶ **Limite los refrigerios (snacks) altos en calorías.** Cámbielos por otros que aun siendo sabrosos, tienen pocas calorías. Pruebe, por ejemplo, unas rebanadas de plátano y medio huevo duro (cocido).
- ▶ **Evite los postres altos en azúcar.** En vez de eso coma una fruta fresca o un poco de gelatina sin azúcar. O añada fruta picada al yogur natural. Y si después de pensarlo decide comer un postre alto en azúcar, intente quedarse con la porción más pequeña que pueda. Es posible que el comer solo un poco sea suficiente para usted.
- ▶ **Baje el consumo de bebidas con muchas calorías.** Si usted bebe alcohol, limite la cantidad que bebe. Tome agua en vez de sodas. Si usted bebe jugo, beba solo ½ taza de jugo 100 % de fruta. Añádale agua si desea una porción más grande.






# Prevent Diabetes **STAT**

- <http://www.PreventDiabetesSTAT.org>
- The AMA and CDC have launched a multi-year initiative as part of the National DPP to reach more Americans with prediabetes
- **Healthcare Provider Toolkit**
  - Guide for healthcare providers on the best methods to screen and refer high-risk patients to CDC-recognized community based or virtual diabetes prevention programs in their communities
  - Includes a screening tool for patients (also available online) to help them determine their risk for type 2 diabetes

