COMMUNITY EFFORTS TO PREVENT TYPE 2 DIABETES

15th Population Health Colloquium

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Marti Macchi, MEd., MPH

Senior Consultant

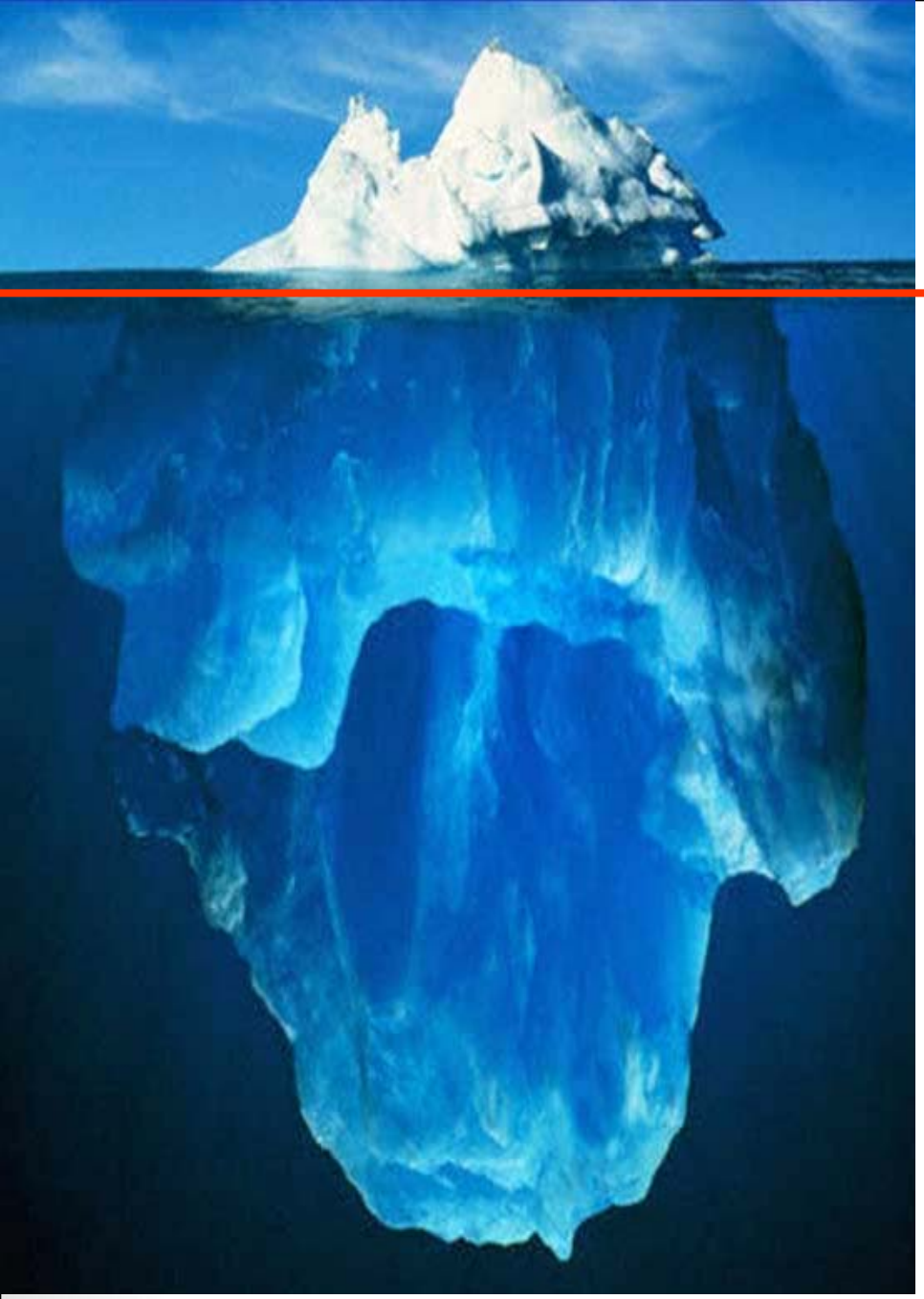
National Association of Chronic Disease Directors

NATIONAL ASSOCIATION OF CHRONIC DISEASE DIRECTORS

Promoting Health. Preventing Disease.

Today's Agenda

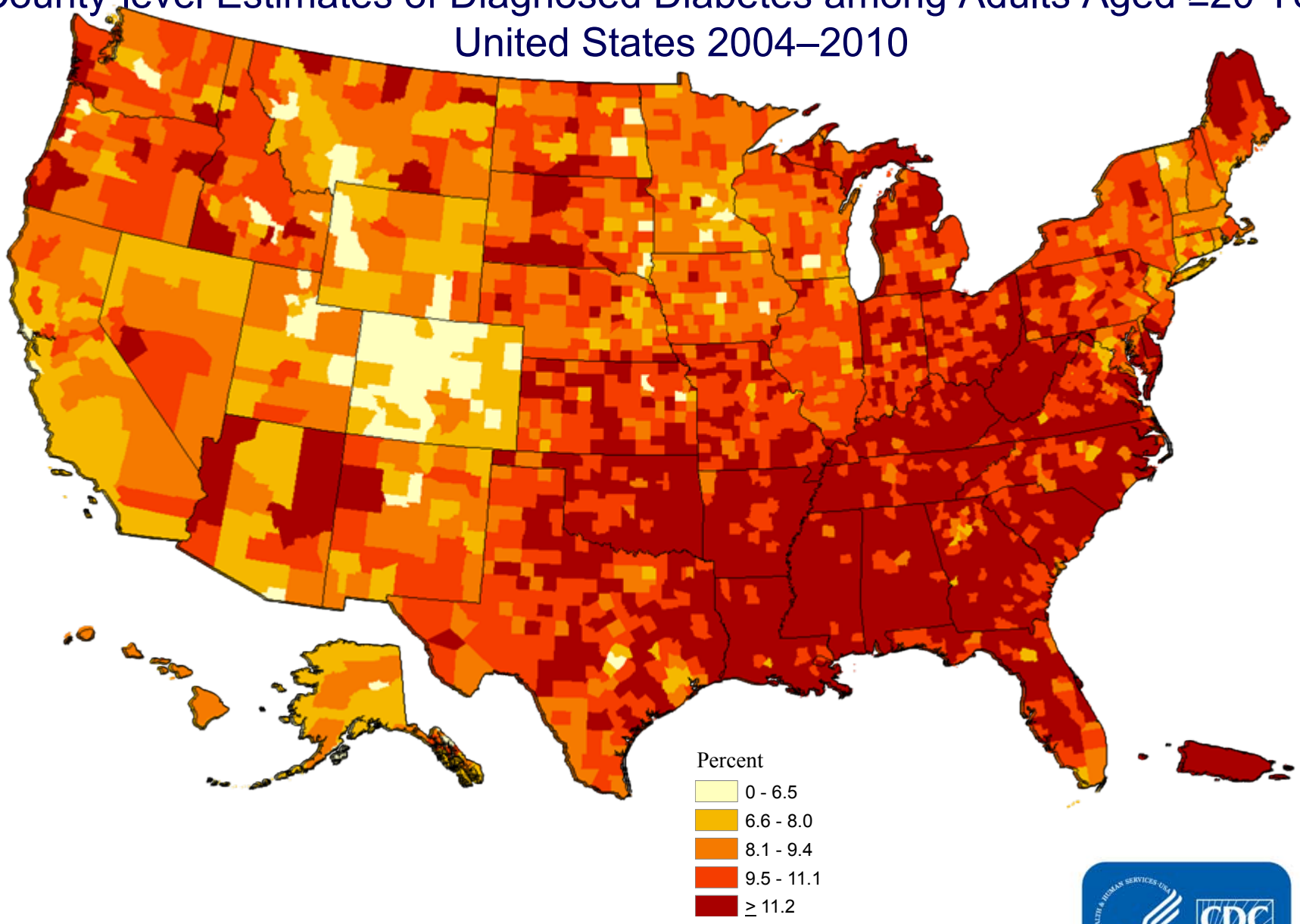
- Overview of the problem
- Brief overview of the solution
- State/Community efforts -- Health care sector
  - New York
  - West Virginia
- Achievements and vital partners



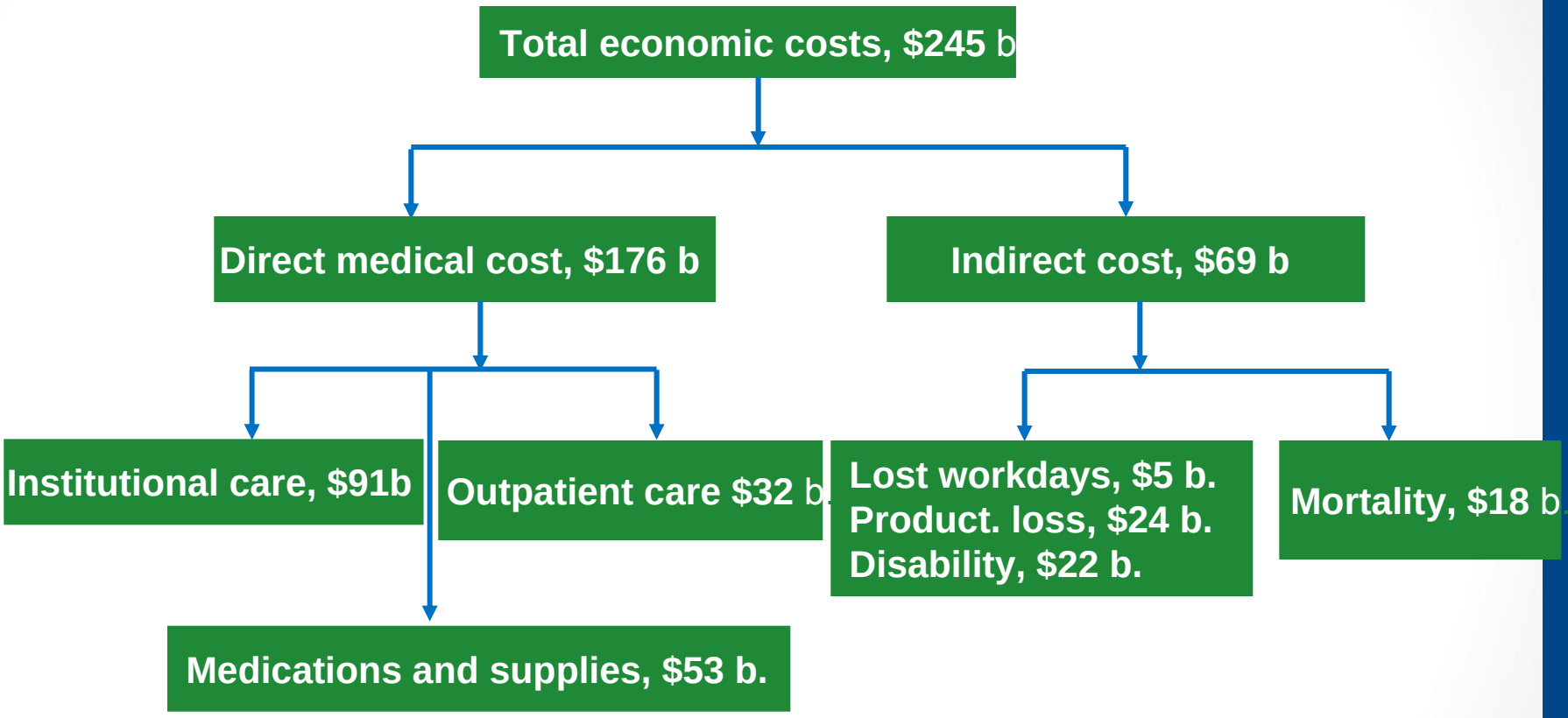
29 million
with Diabetes

86 million
with Prediabetes

County-level Estimates of Diagnosed Diabetes among Adults Aged ≥20 Years
United States 2004–2010

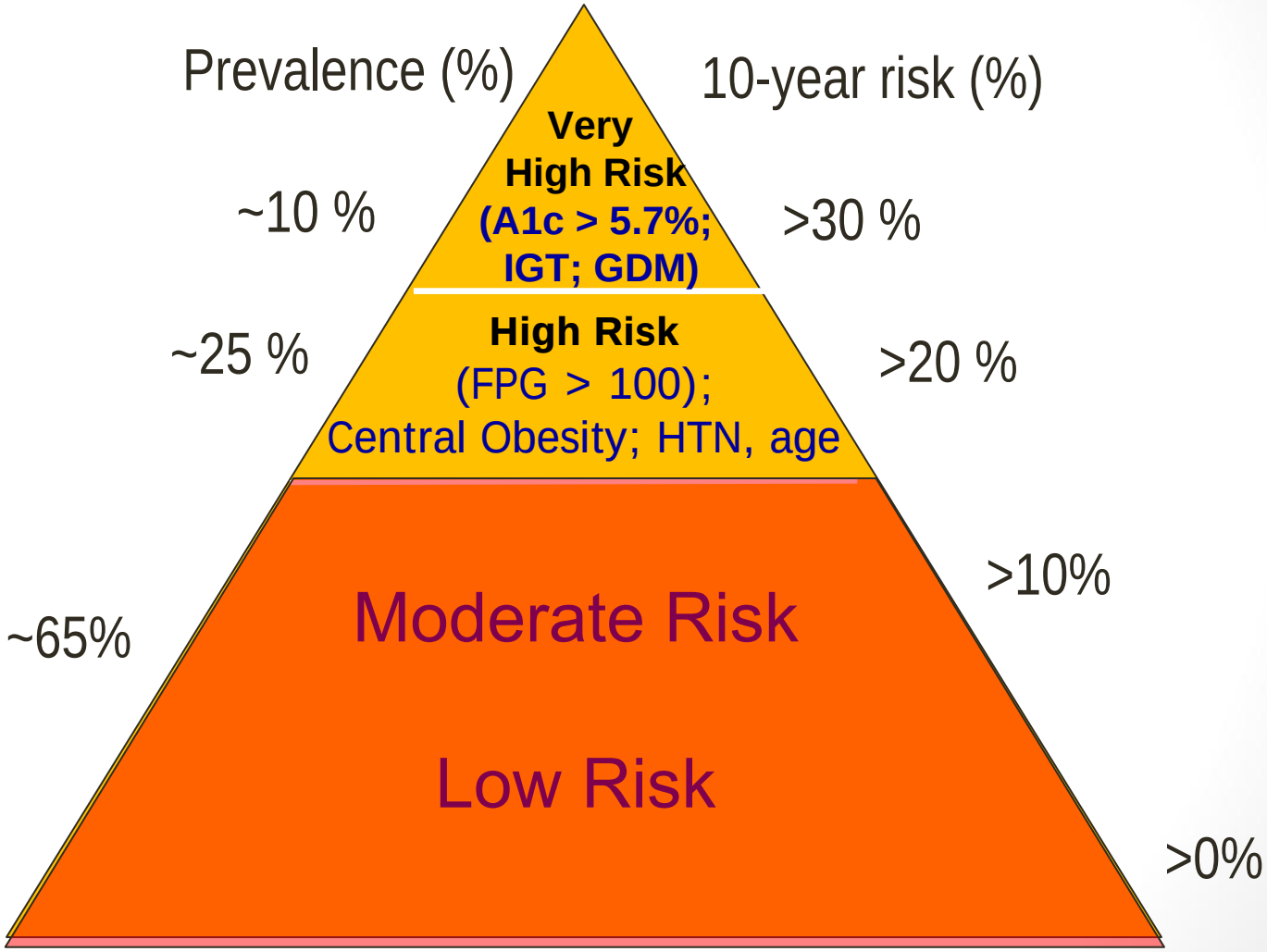


Economic Cost of Diabetes in US, 2012



ADA, Diabetes Care, 2013

Risk Stratification Pyramid for Diabetes Prevention



1 in 3 U.S. Adults will have Diabetes in 2050.....

- If current trends continue
  - Americans are living longer
  - People with diabetes also are living longer
  - Increases in minority groups at high risk for type 2 diabetes
  - New cases of diabetes
- 1 in 10 U.S. adults have diabetes now

Boyle, Thompson, Gregg, Barker, Williamson. Population Health Metrics 2010: 8:29 (22 October 2010)

What is Prediabetes?

- A blood sugar level that is higher than normal but not high enough to be classified as diabetes
- Without lifestyle changes most people with prediabetes will develop type 2 diabetes within 6 years
- Risk is highest in overweight adults over the age of 45, have family history of diabetes or history of gestational diabetes

Prediabetes: Intervening **Can** Make a Difference

DPP Research Study: Can type 2 diabetes be prevented/delayed through a lifestyle intervention or metformin in people with impaired glucose tolerance?

- Lifestyle goal 7% weight loss and 150 min PA/wk
- Lifestyle group reduced risk of type 2 diabetes by 58% (71% in those over age 60) and this was true for all participating ethnic groups and for both men and women
- Metformin reduced diabetes risk by 31%
- 10-year f/u incidence of diabetes was reduced by 34% in lifestyle group and 18% in those taking metformin

Further Benefits of Lifestyle Intervention:

Other CVD risk factors are also improved

- ↑ BP was present in 30% of subjects at entry - then ↑ in placebo and metformin groups, significantly ↓ with lifestyle
- TG levels ↓ in all treatment groups, but ↓ significantly more with lifestyle intervention
- Lifestyle intervention significantly ↑ HDL level and ↓ LDL
- At 3 yr F/U the use of meds in the lifestyle group was 27–28% ↓ for hypertension and 25% ↓ for hyperlipidemia compared with placebo and metformin groups

DPP. Diabetes Care 28:888–894, 2005

The Diabetes Prevention Program (DPP) Lifestyle Change Program

- 16 weekly sessions and 6–8 monthly follow up sessions
- Led by a skilled facilitator (Lifestyle Coach)
- Topics include healthy eating, physical activity, goal setting
- Offered at YMCA and community based organizations
- Can be offered onsite for employees
- $300-$400 per participant; based on

Summary of Benefits of Diabetes Prevention Program

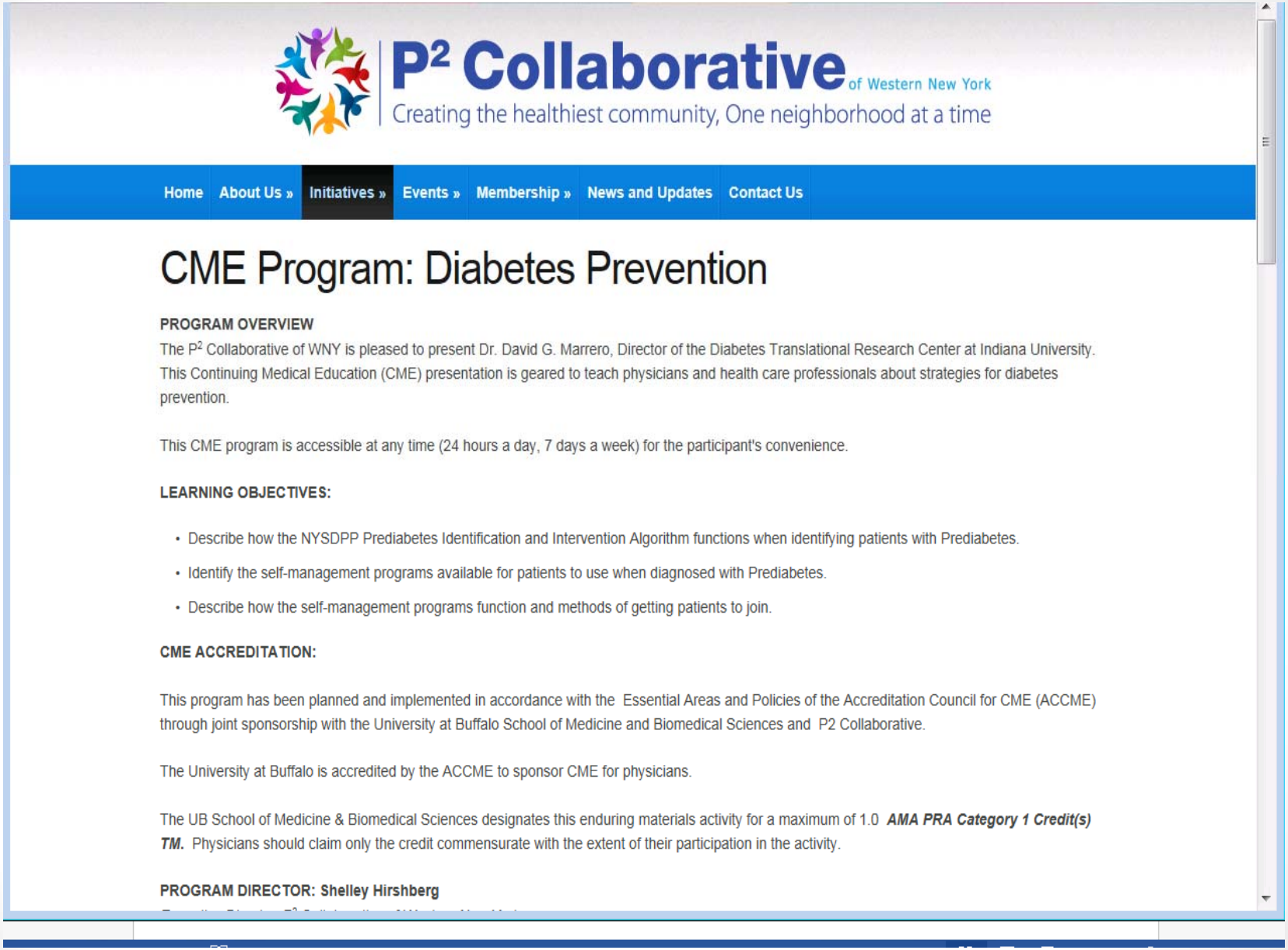
Treating 100 high risk adults (age 50) for 3 years…

- Prevents 15 new cases of type 2 diabetes[1]
- Prevents 162 missed work days[2]
- Avoids the need for BP/Cholesterol meds in 11 people[3]
- Adds the equivalent of 20 perfect years of health[4]
- Avoids **$91,400** in healthcare costs[5]

[1] DPP Research Group. N Engl J Med. 2002 Feb 7;346(6):393-403
[2] DPP Research Group. Diabetes Care. 2003 Sep;26(9):2693-4
[3] Ratner, et al. 2005 Diabetes Care 28 (4), pp. 888-894
[4] Herman, et al. 2005 Ann Intern Med 142 (5), pp. 323-32
[5] Ackermann, et al. 2008 Am J Prev Med 35 (4), pp. 357-363; estimates scaled to 2008 $US

State/Community Efforts: Health Care Sector

- Awareness among health care professional -- New York
  - WNY-specific Continuing Medical Education session (live and taped for subsequent viewing)
  - Focus: increasing diagnosis of prediabetes and referral to local Diabetes Prevention Programs
  - Development and dissemination of (3) tool kits
  - Promotion of 211, NY Connects
- Health System change – screen/test/refer -- West Virginia
  - Using HIT to identify patients at risk for diabetes
  - Developed algorithm based on risk factors
  - Mined EMR data in 4 clinics
  - 2,270 at-risk patients identified
  - Develop referral process
  - Partner with community organizations to funnel patients into appropriate lifestyle interventions to prevent Type 2 diabetes


P² Collaborative of Western New York
Creating the healthiest community, One neighborhood at a time
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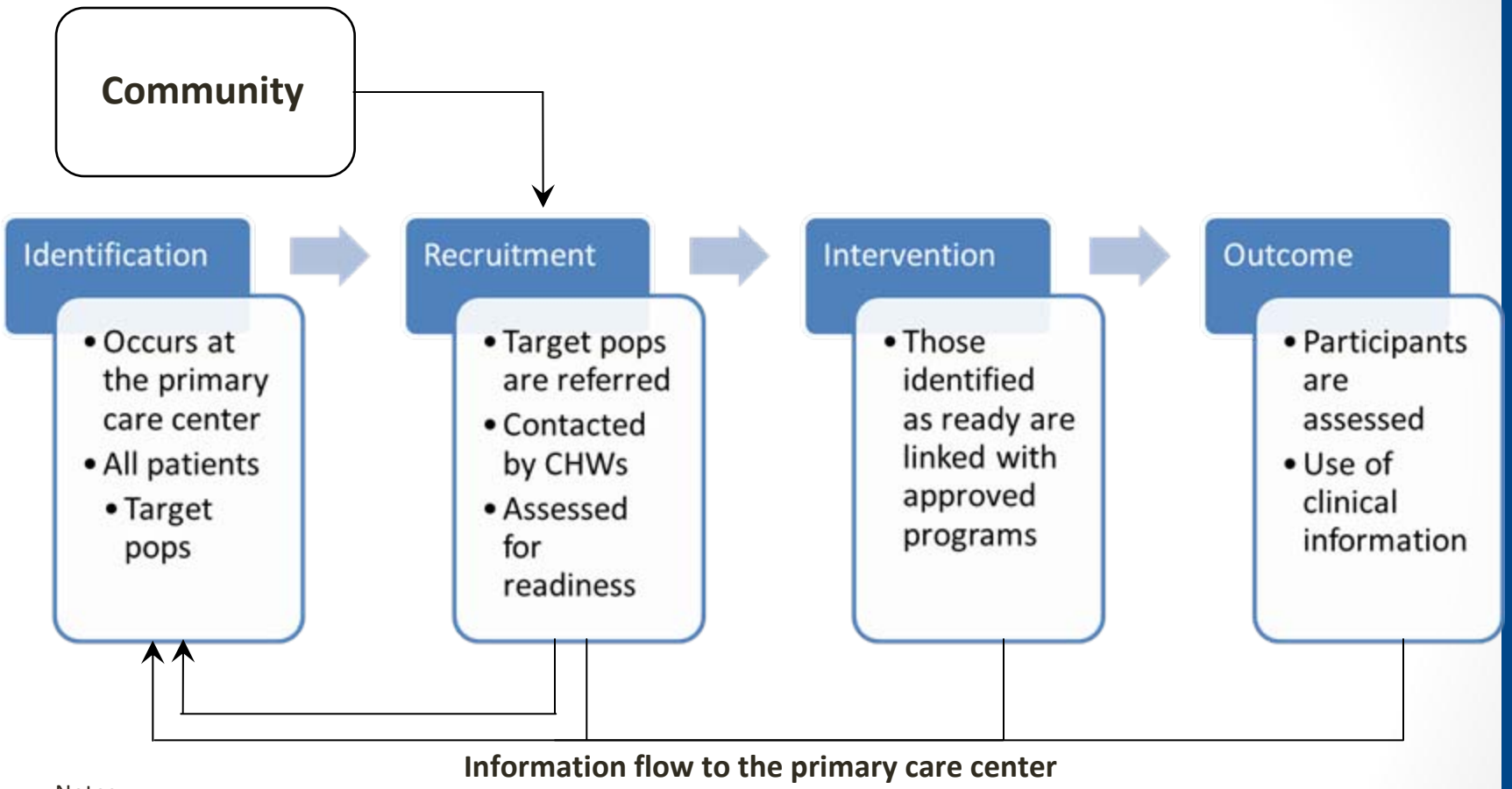
CME Program: Diabetes Prevention
PROGRAM OVERVIEW
The P² Collaborative of WNY is pleased to present Dr. David G. Marrero, Director of the Diabetes Translational Research Center at Indiana University. This Continuing Medical Education (CME) presentation is geared to teach physicians and health care professionals about strategies for diabetes prevention.
This CME program is accessible at any time (24 hours a day, 7 days a week) for the participant's convenience.
LEARNING OBJECTIVES:
• Describe how the NYSDPP Prediabetes Identification and Intervention Algorithm functions when identifying patients with Prediabetes.
• Identify the self-management programs available for patients to use when diagnosed with Prediabetes.
• Describe how the self-management programs function and methods of getting patients to join.
CME ACCREDITATION:
This program has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for CME (ACCME) through joint sponsorship with the University at Buffalo School of Medicine and Biomedical Sciences and P2 Collaborative.
The University at Buffalo is accredited by the ACCME to sponsor CME for physicians.
The UB School of Medicine & Biomedical Sciences designates this enduring materials activity for a maximum of 1.0 AMA PRA Category 1 Credit(s) TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
PROGRAM DIRECTOR: Shelley Hirshberg

Toolkits


LIVING HEALTHY WITH CHRONIC CONDITIONS
COMMUNITY GUIDE
HEALTHY LIVING WITH CHRONIC CONDITIONS
MY HEALTHY GUIDE
HEALTHY LIVING WITH CHRONIC CONDITIONS
PHYSICIAN TOOLKIT

Referral Process for Domain 4 – Community-Clinical Linkages

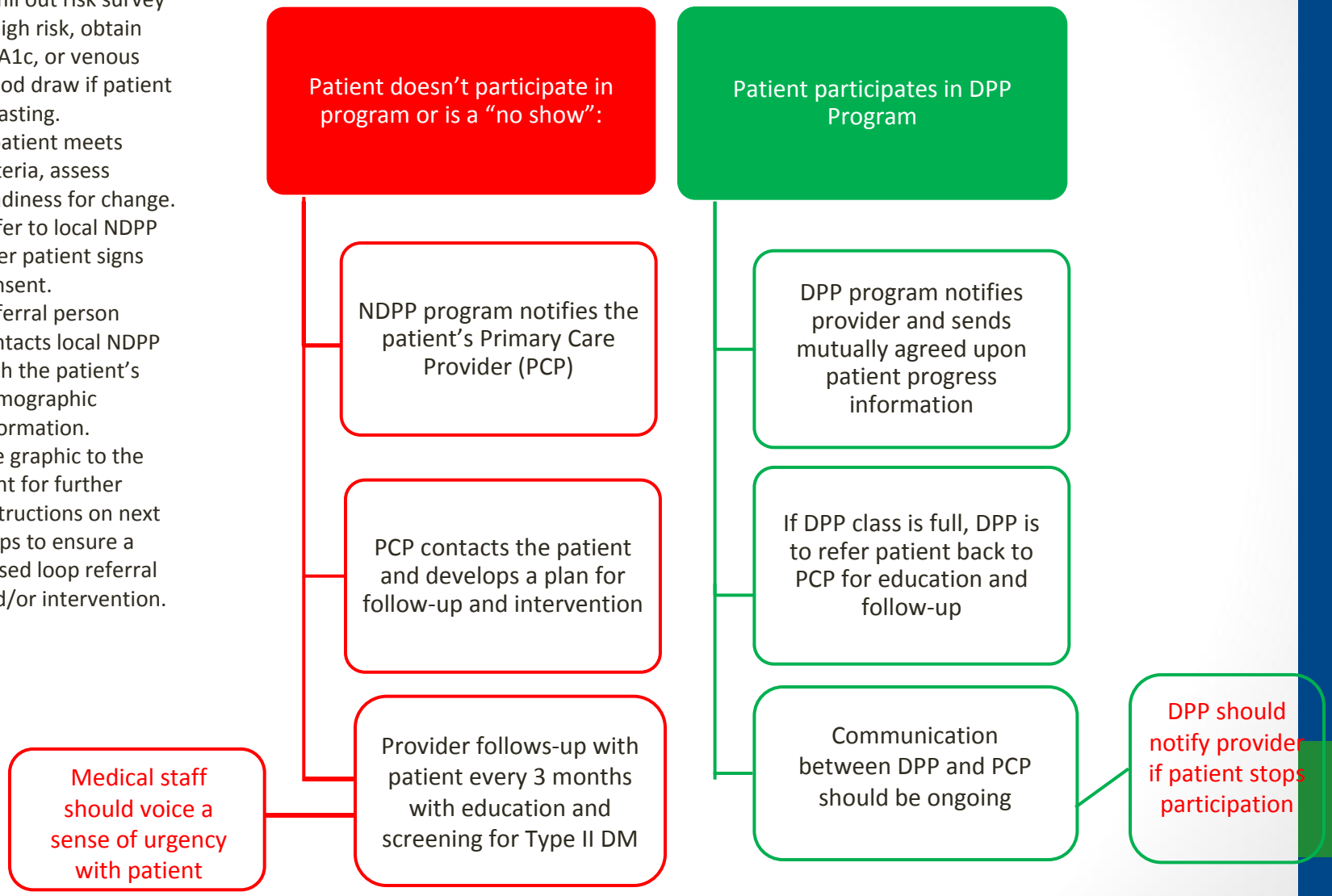


Notes:

1.This is a referral process that identifies target populations from either the community or the primary care center.
2.The referral process supports the Patient-Centered Medical Home model and Meaningful Use of electronic health record data.
3.This model helps address the needs of the entire population, and target subsets of patients by health conditions for preventive services.
4.This model helps to provide motivation for the primary care center to participate in community initiatives and activities.

1. Risk survey in the waiting area or standing order for nurse to ask patient to fill out risk survey
2. If high risk, obtain HbA1c, or venous blood draw if patient is fasting.
3. If patient meets criteria, assess readiness for change.
4. Refer to local NDPP after patient signs consent.
5. Referral person contacts local NDPP with the patient's demographic information.
6. See graphic to the right for further instructions on next steps to ensure a closed loop referral and/or intervention.

DPP Referral and Intervention Algorithm



Achievements and Partners: New York

Achievements

- 1 Marketing campaign
- 423,162 Adults with prediabetes living in the geographic area covered by the campaign
- 3 Diabetes prevention toolkits

Partners

- P2 Collaborative of Western New York
- Health plans, healthcare providers, churches, and other community organizations

Achievements and Partners: West Virginia

Achievements

- 3 Healthcare system partners
- 8 Healthcare delivery sites 32 Primary care health
- providers
- 11,332 Adult patients served by these providers
- 2,270 Adult patients identified as at-risk for prediabetes
- 261 Adult patients referred to evidence-based lifestyle change program

Partners

- West Virginia University Office of Health Services Research
- Community Health Centers and Free Clinics

Thank You

Marti Macchi, MEd., MPH

mmacchi@chronicdisease.org