

The National Diabetes Education Program: Guiding Principles for the Care of People With or at Risk for Diabetes

Sunday, June 7, 2015



A program of the National Institutes of Health and the Centers for Disease Control and Prevention



Introductions

Linda M. Siminerio, RN, PhD, CDE
Chair, NDEP Executive Committee
Professor of Medicine
University of Pittsburgh



- ***Development and Use of “Guiding Principles”***
Judy Fradkin, MD
- ***Using “Guiding Principles”: Preventing Cardiovascular Disease***
John Buse, MD, PhD
- ***Using “Guiding Principles”: Optimizing Self-Management Education and Support***
Marti Funnell, MS, RN, CDE
- ***Using “Guiding Principles”: Moving toward Patient-Centered Diabetes Care***
Linda Siminerio, RN, PhD, CDE
- ***Using “Guiding Principles”: Preventing Type 2 Diabetes – Progress on Implementation of the National Diabetes Prevention Program***
Ann Albright, PhD, RD
- ***Moving Forward: Future Directions for the NDEP***
Joanne Gallivan, MS, RD
Judith McDivitt, PhD

Development and Use of “Guiding Principles”

Judith Fradkin, MD

Member, NDEP Executive Committee

Director, Division of Diabetes, Endocrinology, and Metabolic Diseases

National Institute of Diabetes and Digestive and Kidney Diseases,
National Institutes of Health



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

No Disclosures



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

GUIDING PRINCIPLES

FOR THE CARE OF PEOPLE WITH OR AT RISK FOR DIABETES



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Table of Contents

Introduction

Principle 1: Identify Undiagnosed Diabetes and Prediabetes

Principle 2: Manage Prediabetes

Principle 3: Provide Self-Management Education and Support

Principle 4: Provide Individualized Nutrition Therapy

Principle 5: Encourage Regular Physical Activity

Principle 6: Control Blood Glucose

Principle 7: Reduce Cardiovascular Disease Risk

Principle 8: Detect and Monitor Microvascular Complications

Principle 9: Consider Special Populations

Principle 10: Provide Patient-Centered Care



Should the Target A1C Level Be Less Than 7 Percent?

No: The Case for Modest Glycemic Control in Patients with Type 2 Diabetes

HENRY C. BARRY, MD, MS, *Michigan State University College of Human Medicine, East Lansing, Michigan*

Between firmly held beliefs in tight glycemic control and the available empiric data lies a wide chasm. In a review of 13 randomized controlled trials (RCTs) comparing tight control versus usual care in patients with type 2 diabetes mellitus, overall, tight control did not improve all-cause mortality, cardiovascular mortality, or total myocardial infarctions.¹ There was a decrease in the



This is one in a series of pro/con editorials discussing controversial issues in family medicine.

► See related editorial at <http://www.aafp.org/aafp/2012/1215/od1.html>.

study.³ They found a linear relationship between A1C levels and the rate of aggre-

Yes: This Should Be the Target for Most Patients

KEVIN PETERSON, MD, MPH, FRCS, FAAFP, *University of Minnesota Medical School, Minneapolis, Minnesota*

In 1993, the DCCT (Diabetes Control and Complications Trial) demonstrated that better glycemic control reduces microvascular disease in patients with type 1 diabetes mellitus.¹ Ten years later, the EDIC (Epidemiology of Diabetes Interventions and Complications) trial established that macrovascular disease was also reduced by the DCCT.² In 1998, the UKPDS (United Kingdom Prospective Diabetes Study) demonstrated that intensive glycemic control also reduces microvascular disease in patients with type 2 diabetes, but that macrovascular disease reduction is only a statistical trend.³



This is one in a series of pro/con editorials discussing controversial issues in family medicine.

► See related editorial at <http://www.aafp.org/aafp/2012/1215/od2.html>.

(Veterans Affairs Diabetes Trial), did not show increases in mortality from intensive control, they also did not show a reduction in cardiovascular disease outcomes from low A1C levels.^{7,8} Although we all agree that these trials demonstrate that not everyone should target a normal A1C level, we should also recognize that these clinical trial populations are different from the general population. A closer examination of the evidence shows why family physicians should still recommend an A1C target of less than 7 percent



ACCORD: Primary & Secondary Outcomes

| | Intensive N (%) | Standard N (%) | HR (95% CI) | P |
|-----------------|--------------------|-------------------|------------------|-------|
| Primary | 352 (6.86) | 371 (7.23) | 0.90 (0.78-1.04) | 0.16 |
| Secondary | | | | |
| Mortality | 257 (5.01) | 203 (3.96) | 1.22 (1.01-1.46) | 0.04 |
| Nonfatal MI | 186 (3.63) | 235 (4.59) | 0.76 (0.62-0.92) | 0.004 |
| Nonfatal Stroke | 67 (1.31) | 61 (1.19) | 1.06 (0.75-1.50) | 0.74 |
| CVD Death | 135 (2.63) | 94 (1.83) | 1.35 (1.04-1.76) | 0.02 |
| CHF | 152 (2.96) | 124 (2.42) | 1.18 (0.93-1.49) | 0.17 |



UKPDS: Legacy Effect of Earlier Glucose Control

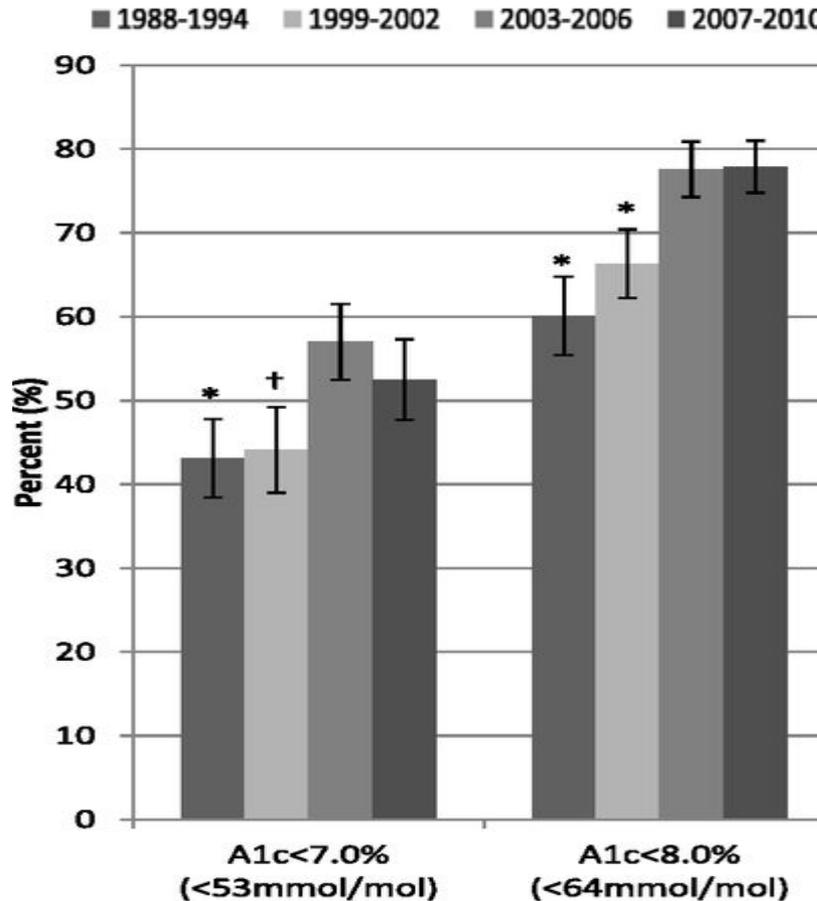
After median 8.5 years post-trial follow-up

| Aggregate Endpoint | | 1997 | 2007 |
|-------------------------------|-------------|---------------|--------------|
| Any diabetes related endpoint | <i>RRR:</i> | 12% | 9% |
| | <i>P:</i> | 0.029 | 0.040 |
| Microvascular disease | <i>RRR:</i> | 25% | 24% |
| | <i>P:</i> | 0.0099 | 0.001 |
| Myocardial infarction | <i>RRR:</i> | 16% | 15% |
| | <i>P:</i> | 0.052 | 0.014 |
| All-cause mortality | <i>RRR:</i> | 6% | 13% |
| | <i>P:</i> | 0.44 | 0.007 |

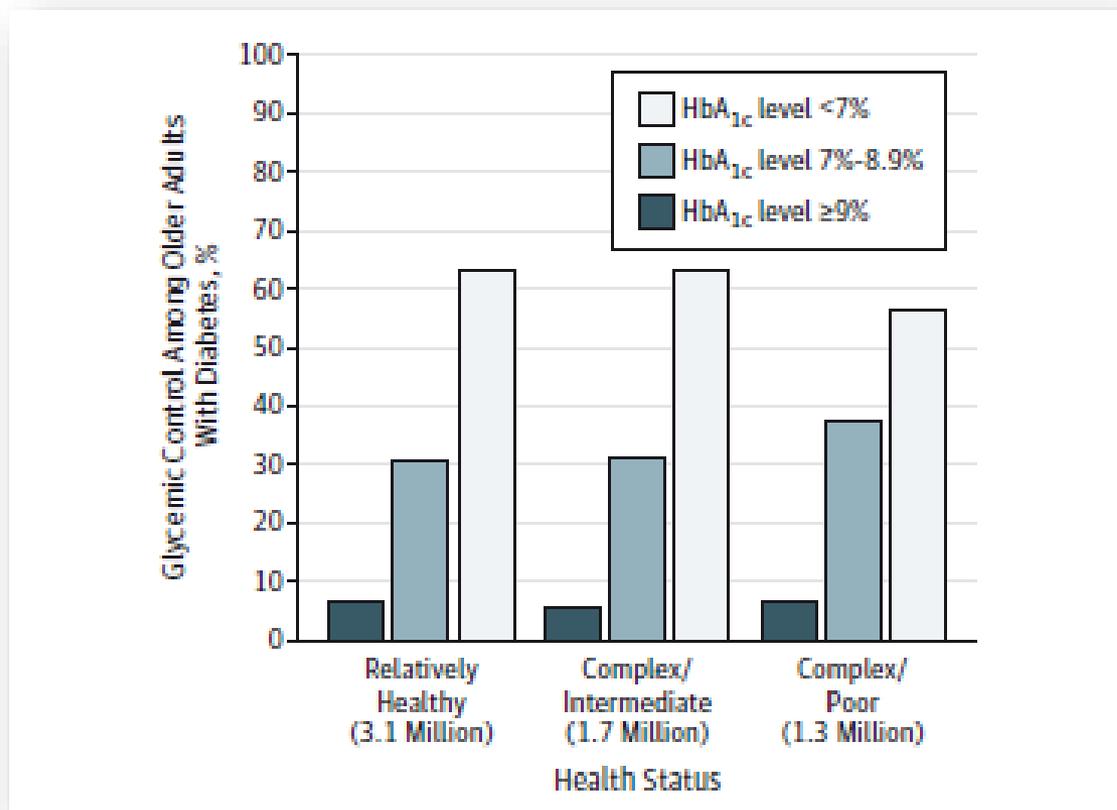
RRR = Relative Risk Reduction, P = Log Rank



Prevalence of meeting A1C goals among adults aged ≥ 20 years with diagnosed diabetes

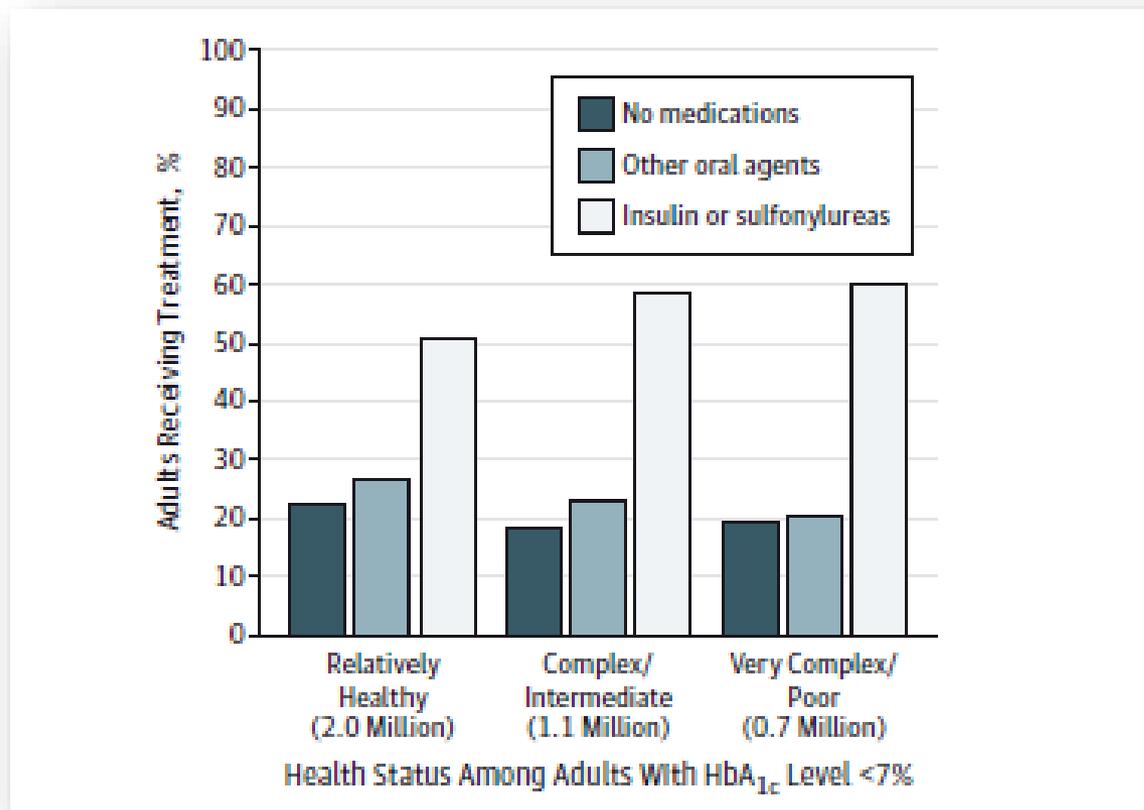


Glycemic Control Among Older US Adults With Diabetes Mellitus Across 3 Health Status Categories



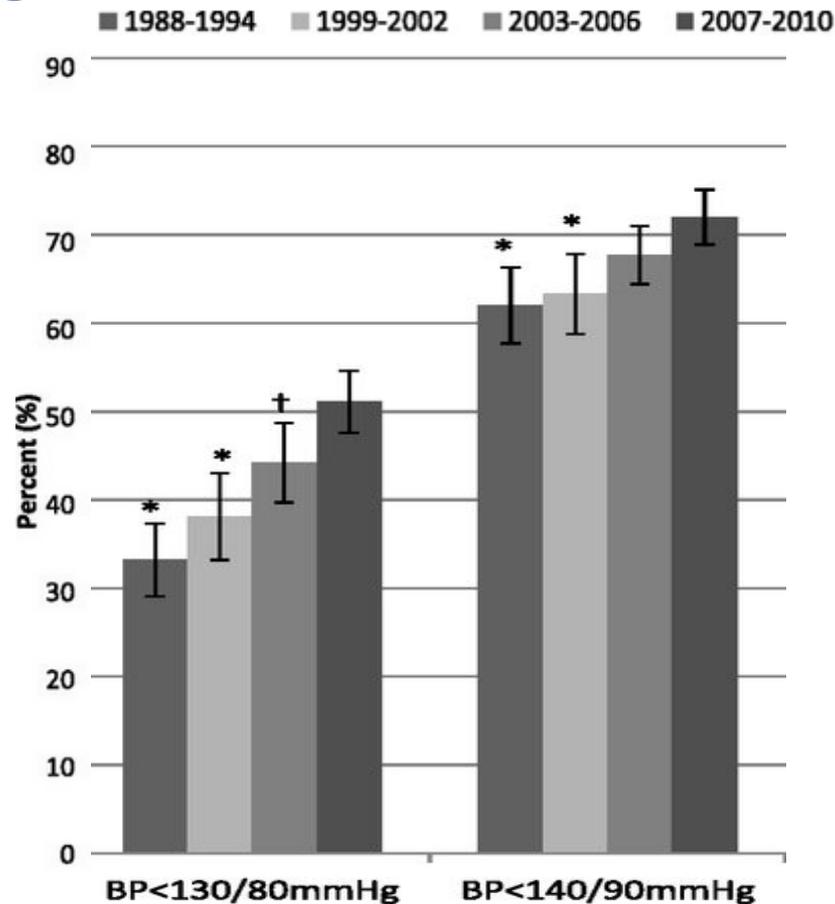


Treatment of Older US Adults With Diabetes Mellitus With an HbA_{1c} <7% Across Health Status Categories



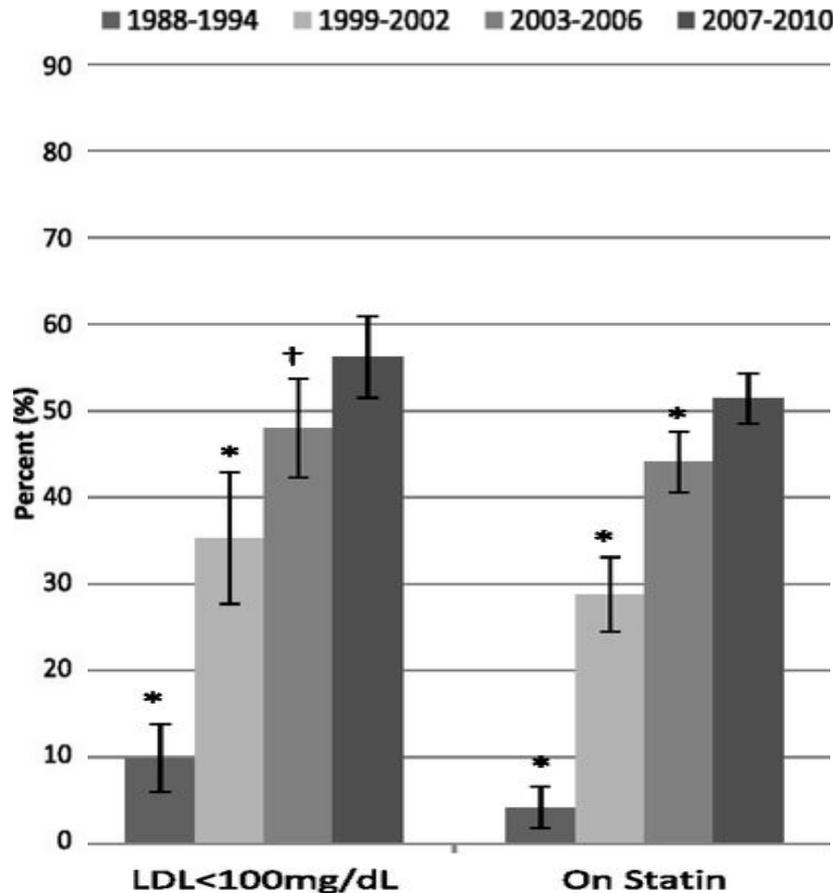


Prevalence of meeting BP goals among adults aged ≥ 20 years with diagnosed diabetes



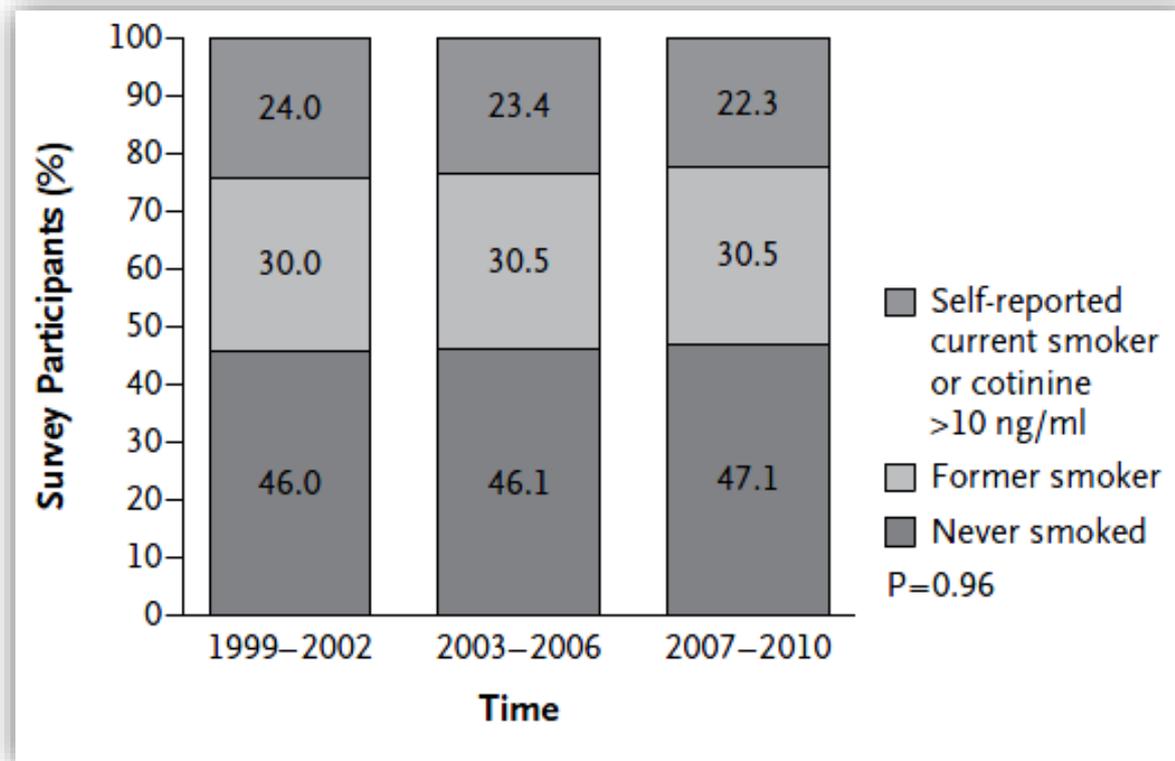


Prevalence of meeting lipid management goals among adults aged ≥ 20 years with diagnosed diabetes





Smoking Status Among US Adults with Diabetes, 1999-2010





“Guiding Principles for the Care of People With or at Risk for Diabetes”

The screenshot shows the NDEP website interface. At the top, there is a navigation bar with links for Home, Publications, Resources, Diabetes Facts, and Press. Below this is a secondary navigation bar with links for I Have Diabetes, Am I at Risk?, Health Care Professionals, Businesses & Schools, and Partners & Community Organizations. The main content area is titled 'Guiding Principles for the Care of People With or at Risk for Diabetes'. On the left, there is a numbered list of 10 principles, with the first one, 'Identify Undiagnosed Diabetes and Prediabetes', highlighted. To the right of the list is a large image of a doctor and a patient talking. Below the image is a text block explaining the purpose of the guiding principles. Further down, there are three boxes: 'Introduction', 'Explore the Principles', and 'Download'. At the bottom, there is a section for 'Supporting Organizations' listing various medical and research organizations.

Home Publications Resources Diabetes Facts Press

I Have Diabetes Am I at Risk? **Health Care Professionals, Businesses & Schools** Partners & Community Organizations

Tengo diabetes ¿Corro riesgo?

You are here: [NDEP Home](#) > [Health Care Professionals, Businesses & Schools](#) > [Health Care Professionals](#) > Guiding Principles

Guiding Principles

Guiding Principles for the Care of People With or at Risk for Diabetes



These Guiding Principles aim to identify and synthesize areas of general agreement among existing guidelines to help guide primary care providers and health care teams to deliver quality care to adults with or at risk for diabetes. No evidence-based guidelines have been developed for this resource.

Introduction
Learn about the goals of this resource, why this resource was developed, and who participated in pulling together these principles >

Explore the Principles
Explore these 10 clinically useful principles >

Download
Click here to view a PDF version for download >

Supporting Organizations

The following organizations support the use of the *Guiding Principles for the Care of People With or at Risk for Diabetes*:

- Academy of Nutrition and Dietetics
- Agency for Healthcare Research and Quality
- American Academy of Ophthalmology
- American Academy of Physician Assistants
- American Association of Clinical Endocrinologists
- American Association of Diabetes Educators
- American Association of Nurse Practitioners
- American College of Obstetricians and Gynecologists
- American Diabetes Association
- American Heart Association
- American Optometric Association
- American Podiatric Medical Association
- Department of Defense
- Endocrine Society
- Health Resources and Services Administration
- Indian Health Service
- National Council of Asian Pacific Islander Physicians and AANPHI Diabetes Coalition
- Office of Minority Health
- The American Geriatrics Society



Collaborative Approach

| Matrix for blood glucose management | | | | | |
|-------------------------------------|---|---|--|--|---|
| Org | Treatment goals | Patient safety | Initiating pharmacologic therapy for type 2* | MNT | Physical activity |
| AAACE | In general ≤6.5% for most FPG <110 2-hr PPG <140 | Individualize- consider age, comorbidities, duration of disease; closer to normal for healthy; less stringent for “less healthy” | The choice of therapeutic agents should be based on their differing metabolic actions and adverse effect profiles as described in the 2009 AAACE/ACE Diabetes Algorithm for Glycemic Control (Grade D; BEL 4).** Consider insulin for patients with T2DM when noninsulin antihyperglycemic therapy fails to achieve target glycemic control (Grade A; BEL 1) | Individualized MNT; insulin dosage adjustments to match CHO intake, sucrose-containing or high glycemic index food limitations, adequate protein intake, & “heart healthy” diet use; weight mgmt. - - calorie reduction to reduce weight by at least 5 to 10%; avoid weight gain | At least 150 minutes/ week of moderate-intensity PA. Incorporate flexibility and strength training exercises. Evaluate patients initially for contraindications and/or limitations to PA, then develop an exercise prescription patient goals & exercise limitations. |
| AAFP | A1C <7% for most people | The goal is to maintain BG levels as close to normal as possible without risking significant hypoglycemia. A1C > 7.0% may be appropriate for patients with a history of severe hypoglycemia, limited life expectancy, advanced microvascular or macrovascular complications, or extensive comorbidities. | Metformin is a first-line consideration. Although insulin is typically introduced when glucose control is no longer possible with oral agents, it can also be used when contraindications to oral medications exist. Newly diagnosed patients also can benefit from acute insulin use. | Weight loss with an initial goal of 7 percent of baseline weight, and a low-fat, reduced-calorie diet | Intensive lifestyle intervention that includes at least 150 minutes per week of physical activity and angiotensin-converting enzyme inhibitors; and normalization of blood glucose levels |
| AHA | Normal FPG (<110 mg/dL) and near normal HbA1c (<7%) | | Second-step therapy is usually oral hypoglycemic drugs: sulfonylureas and/or metformin with ancillary use of acarbose and thiazolidinediones. Third-step therapy is insulin. | First step is diet and exercise | First step is diet and exercise |
| ACP | A1C <7% for many but not all patients As low as feasible without undue risk for adverse events or unacceptable burden on patients | The goal for A1C should be based on individual assessment of risk for complications from diabetes, comorbidity, life expectancy, and patient preferences; & a discussion of the benefits & harms of specific levels of glycemic control with the patient | Add oral agent when lifestyle modifications have failed to adequately improve hyperglycemia (Grade: strong recommendation; high-quality evidence). Prescribe metformin initially for most patients (Grade: strong recommendation; High-quality evidence). Add 2 nd agent to metformin for persistent hyperglycemia when lifestyle & metformin fail to control hyperglycemia (Grade: strong recommendation; high-quality evidence). Begin insulin in patients who do not achieve adequate glycemic control with oral agents, whether alone or in combination. | Lifestyle modifications, including diet and weight loss | Lifestyle modifications, including exercise. Caution patients receiving drug therapy about hypoglycemia during and after exercise. |
| ADA | A1C <7.0% for many people PreRPG 70–130 PostPPG <180 PostPG may be targeted if A1C goals are not met despite reaching prePPG goals | Individualize goals based on ○ duration of diabetes ○ age/life expectancy ○ comorbid conditions ○ known CVD or advanced microvascular complications ○ hypoglycemia unawareness ○ individual patient considerations More- or less-stringent glycemic goals may be appropriate for individual PWD. | 1) At diagnosis, initiate metformin along with lifestyle therapy unless metformin is contraindicated. (A) 2) In newly diagnosed patients with markedly symptomatic and/or elevated BG or A1C, consider insulin therapy, with or without additional agents, from the outset. (E) If noninsulin monotherapy at maximal tolerated dose does not achieve or maintain the A1C target over 3–6 months, add a 2 nd oral agent, a GLP-1 receptor agonist, or insulin. (E) Refer to reference *** for algorithm. | 1) The mix of CHO, protein, & fat may be adjusted to meet the metabolic goals & individual preferences (C) 2) Monitoring CHO whether by CHO, choices, or experience-based estimation, is a key for achieving glycemic control. (B) 2) Saturated fat intake should be <7% of total calories. (B) 3) Reduced intake of trans fat lowers LDLC & increases HDLC. (A) Minimize intake of trans fat.(E) | 1)150 min/week of moderate-intensity aerobic PA (50–70% of maximum heart rate), spread over at least 3 days/week with no more than 2 consecutive days without exercise.(A) 2) In the absence of contraindications, perform resistance training at least twice per week.(A) |



Writing Group

- Stephen J. Spann, MD, MBA, American Academy of Family Physicians
- Farhad Zangeneh, MD, FACP, FACE, American Associations of Clinical Endocrinologists
- Apostolos P. Dallas, MD, FACP, American College of Physicians
- Sue Kirkman, MD, American Diabetes Association
- Rose Marie Robertson, MD, FAHA, FACC, American Heart Association
- Carol Mangione, MD, MSPH, The American Geriatrics Society
- Robert A. Vigersky, MD, The Endocrine Society
- NDEP Executive Committee Members:
 - John Buse, MD, PhD, Immediate Past NDEP Chair
 - Ann Albright, PhD, RD
 - Judith Fradkin, MD
 - Martha Funnell, MS, RN, CDE



Supporting Organizations

- Academy of Nutrition and Dietetics
- Agency for Healthcare Research and Quality
- American Academy of Ophthalmology
- American Academy of Physician Assistants
- American Association of Clinical Endocrinologists
- American Association of Diabetes Educators
- American Association of Nurse Practitioners
- American College of Obstetricians and Gynecologists
- American Diabetes Association
- American Heart Association
- American Optometric Association
- American Podiatric Medical Association
- Department of Defense
- Endocrine Society
- Health Resources and Services Administration
- Indian Health Service
- National Council of Asian Pacific Islander Physicians and AANPHI Diabetes Coalition
- Office of Minority Health
- The American Geriatrics Society



Individualized Approach to A1C Treatment Goals

- Consider A1C targets as close to non-diabetic levels (< 6.5 percent) as possible without significant hypoglycemia in people with short duration of diabetes, little comorbidity, and long life expectancy.
- Consider less stringent A1C targets (e.g., 8 percent) for people with a history of severe hypoglycemia, limited life expectancy, extensive comorbid conditions, advanced complications, major impairments to self-management (e.g., visual, cognitive, social), or long-standing diabetes where the A1C goal is difficult to attain despite optimal efforts.
- Reassess A1C targets and change (lower or higher) as appropriate.

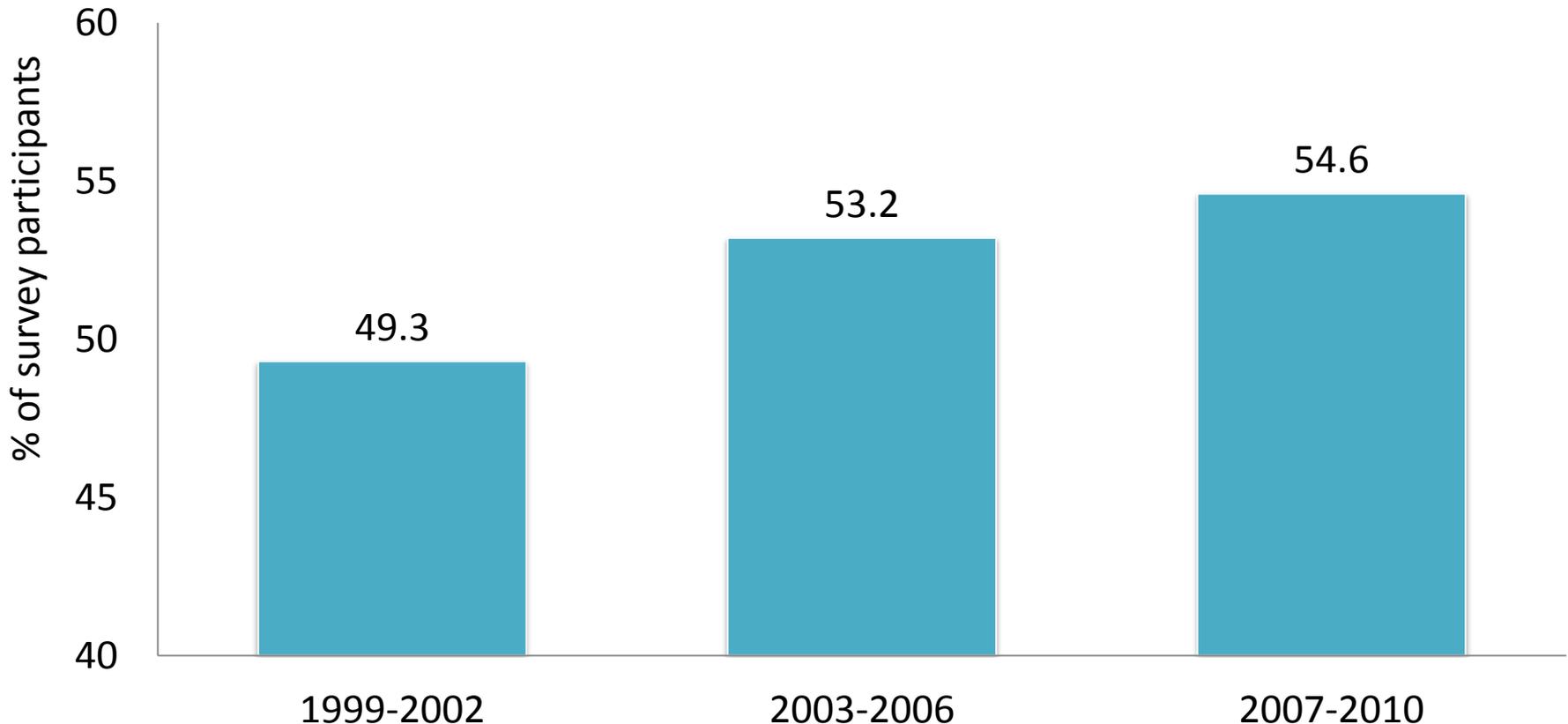


Shared Decision Making in Blood Glucose Management

- Agreed upon goals for glycemic control
- Information about advantages and disadvantages of the available medication classes can help guide joint therapy selection when metformin is contraindicated or insufficient to achieve goals



Diabetes Education Among US Adults with Diabetes, 1999-2010





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

GUIDING PRINCIPLES

FOR THE CARE OF PEOPLE WITH OR AT RISK FOR DIABETES



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Table of Contents

Introduction

Principle 1: Identify Undiagnosed Diabetes and Prediabetes

Principle 2: Manage Prediabetes

Principle 3: Provide Self-Management Education and Support

Principle 4: Provide Individualized Nutrition Therapy

Principle 5: Encourage Regular Physical Activity

Principle 6: Control Blood Glucose

Principle 7: Reduce Cardiovascular Disease Risk

Principle 8: Detect and Monitor Microvascular Complications

Principle 9: Consider Special Populations

Principle 10: Provide Patient-Centered Care



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Using “Guiding Principles”: Preventing Cardiovascular Disease

**John B. Buse, MD, PhD
Verne S. Caviness Distinguished Professor
Director, Diabetes Care Center
Chief, Division of Endocrinology
Executive Associate Dean, Clinical Research
University of North Carolina School of Medicine
Chapel Hill, NC U.S.A.**

jbuse@med.unc.edu

Presenter Disclosure

John Buse

Board Member/Advisory Panel/Consultant (contracted by UNC): **Amylin Pharmaceuticals, Inc., AstraZeneca, Dance Biopharm, Elcelyx Therapeutics Inc., Eli Lilly and Company, GI Dynamics, F. Hoffmann-La Roche Ltd., LipoScience, Merck, Metavention, Novo Nordisk, Orexigen Therapeutics Inc., Quest Diagnostics, Santarus, Scion NeuroStim, Takeda, TransTech Pharma**

Consultant: **PhaseBio Pharmaceuticals Inc,**

Employee: **None**

Research Support: **Amylin Pharmaceuticals, Inc., Andromeda, AstraZeneca, Astellas, Boehringer Ingelheim GmbH, Bristol-Myers Squibb Company, Eli Lilly and Company, GI Dynamics, Halozyme Therapeutics, F. Hoffmann-La Roche Ltd., Intarcia Therapeutics, Johnson & Johnson, Lexicon, MacroGenics, Medtronic, Merck, Novo Nordisk, Orexigen Therapeutics Inc., Osiris Therapeutics Inc., Sanofi, Scion NeuroStim, Takeda, ToleRx**

Speaker's Bureau: **None**

Stock/Shareholder: **PhaseBio Pharmaceuticals, Inc**

Other: **None**



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

GUIDING PRINCIPLES

FOR THE CARE OF PEOPLE WITH OR AT RISK FOR DIABETES



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Table of Contents

Introduction

Principle 1: Identify Undiagnosed Diabetes and Prediabetes

Principle 2: Manage Prediabetes

Principle 3: Provide Self-Management Education and Support

Principle 4: Provide Individualized Nutrition Therapy

Principle 5: Encourage Regular Physical Activity

Principle 6: Control Blood Glucose

Principle 7: Reduce Cardiovascular Disease Risk

Principle 8: Detect and Monitor Microvascular Complications

Principle 9: Consider Special Populations

Principle 10: Provide Patient-Centered Care



Principle 7:

Provide Blood Pressure and Cholesterol Screening and Control, Smoking Cessation, and Other Therapies to Reduce Cardiovascular Disease Risk

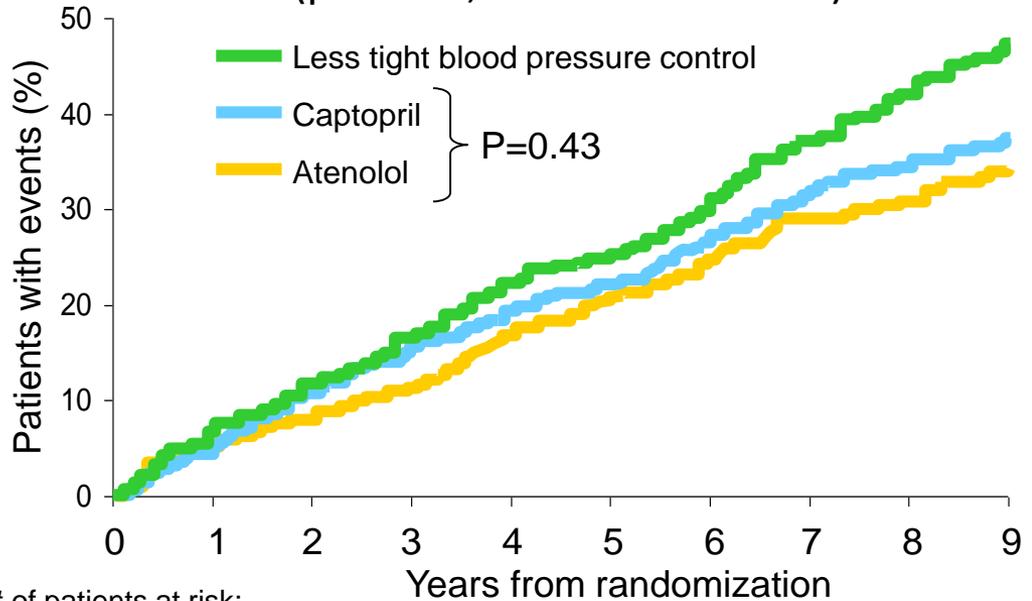
- **Blood pressure**
- Lipids
- Multiple risk factor management
- Antiplatelet therapy
- Cardiovascular risk assessment
- Smoking cessation

UKPDS Blood Pressure Study

Tight (<150/85 mmHg) vs. less tight control group (<180/105 mmHg)

On treatment averages: 144/82 vs. 154/87 mmHg

Any diabetes related endpoint: 24% reduction
($p=0.005$; 95% CI 0.62–0.92)



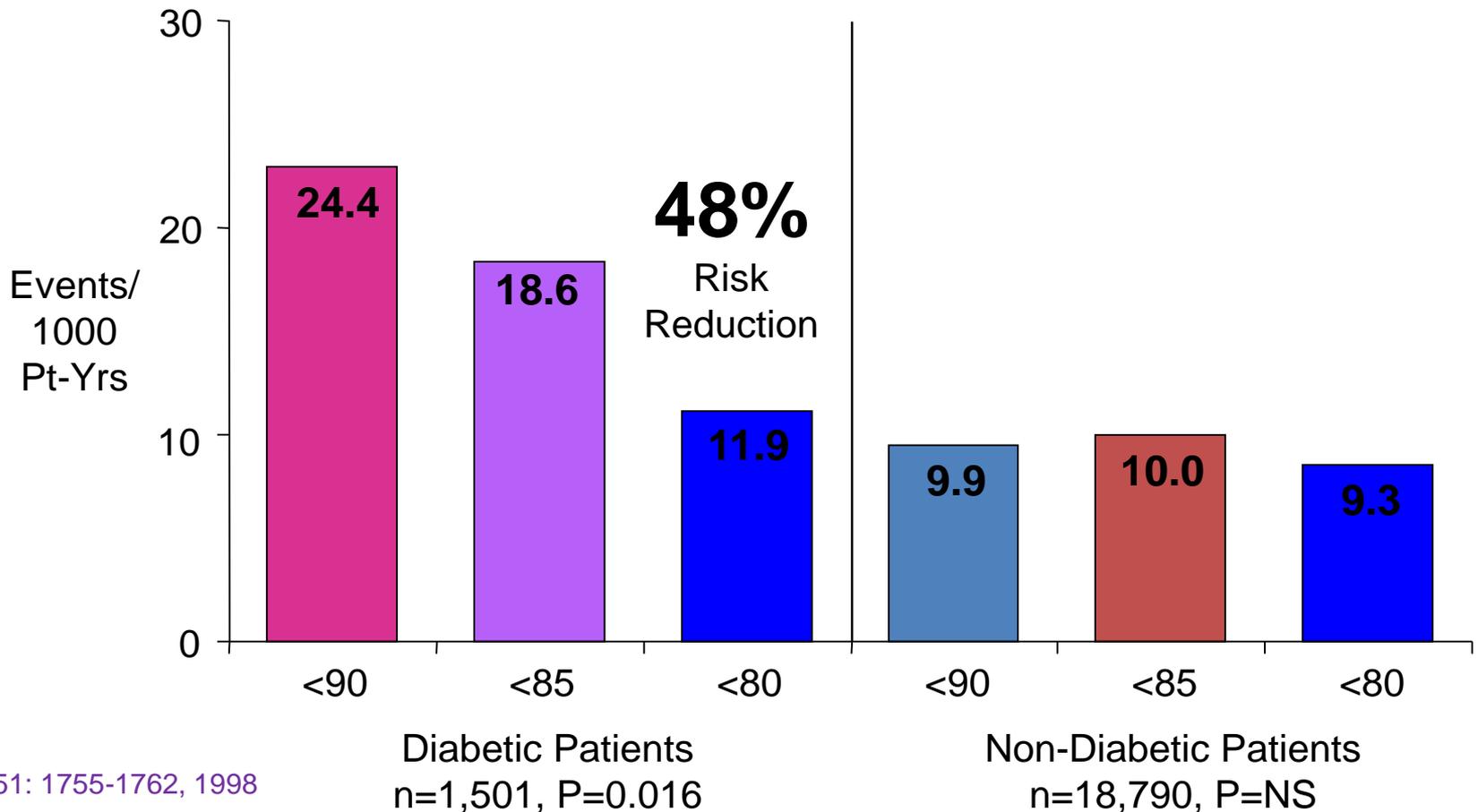
| # of patients at risk: | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Captopril | 400 | 358 | 327 | 296 | 265 | 234 | 203 | 172 | 141 | 110 |
| Atenolol | 358 | 317 | 276 | 235 | 194 | 153 | 112 | 71 | 30 | 112 |

- 32% reduction in diabetes deaths ($p=0.02$)
- 44% reduction in stroke ($p=0.01$)
- 37% reduction in microvascular complications ($p=0.009$)



HOT Trial:

Effect of Diastolic Target on Cardiovascular Events - 4 Years





ACCORD Blood Pressure <120 mmHg vs 130-140 mmHg

N=4773

Mean follow-up 4.7yrs

| | Intensive Events (%/yr) | Standard Events (%/yr) | HR (95% CI) | P |
|--------------------------|----------------------------|---------------------------|------------------|------|
| Primary | 208 (1.87) | 237 (2.09) | 0.88 (0.73-1.06) | 0.20 |
| Total Mortality | 150 (1.28) | 144 (1.19) | 1.07 (0.85-1.35) | 0.55 |
| Cardiovascular Deaths | 60 (0.52) | 58 (0.49) | 1.06 (0.74-1.52) | 0.74 |
| Nonfatal MI | 126 (1.13) | 146 (1.28) | 0.87 (0.68-1.10) | 0.25 |
| Nonfatal Stroke | 34 (0.30) | 55 (0.47) | 0.63 (0.41-0.96) | 0.03 |
| Total Stroke | 36 (0.32) | 62 (0.53) | 0.59 (0.39-0.89) | 0.01 |

N Engl J Med. 358:2545-59, 2008. *N Engl J Med.* 362(17):1575-85, 2010. *N Engl J Med.* 362(17):1563-74, 2010. *N Engl J Med.* 363(3):233-244, 2010. *The Lancet*, 376 (9739):41930, 2010.



Blood pressure: General considerations

- Measure at every routine medical visit.
- Consider home blood pressure monitoring when office/clinic measurements are borderline or elevated.
- Non-pharmacologic therapy can be very effective:
 - Reduce sodium intake
 - Reduce excess body weight
 - Avoid excessive alcohol consumption
 - Follow the DASH Eating Plan
 - Engage in 40 minutes of aerobic physical activity at a moderate to vigorous intensity, at least 3 days a week.
- Referral to a registered dietitian can also be helpful



Blood pressure: Therapy considerations

- Blood pressure of 130-139 mmHg systolic or 80-89 diastolic may initially be treated with lifestyle therapy alone.
- The primary goal of therapy: less than 140/90 mmHg.
- Lower blood pressure targets can be individualized based on shared decision making:
 - level of CVD risk,
 - presence of kidney disease, and
 - burden of therapy.
- Consider initial therapy with a thiazide, calcium channel blocker, ACE inhibitor, or an ARB.
- Two or more agents at maximal doses is usually required to maintain blood pressure targets.
- ACE inhibitors and ARB's are contraindicated in pregnancy



Blood pressure: Controversy

- How low should we really go in people with diabetes? Should there be different targets for the advanced elderly? For those under 40?
- In African Americans with diabetes, should the initial therapy be a thiazide diuretic or calcium channel blocker as opposed to ACEi/ARB?
- What did ACCORD really tell us about blood pressure management?

Targets?

- In the ACCORD BP trial, compared with combined standard treatment, intensive BP (SBP < 120 mmHg) or intensive glycemia treatment (A1C <6%) improved major CVD outcomes, without additional benefit from combining the two.
 - Margolis KL, et al. *Diabetes Care*. 2014; 37:1721-8.
- The comparison was <120 vs 130-140 mmHg.

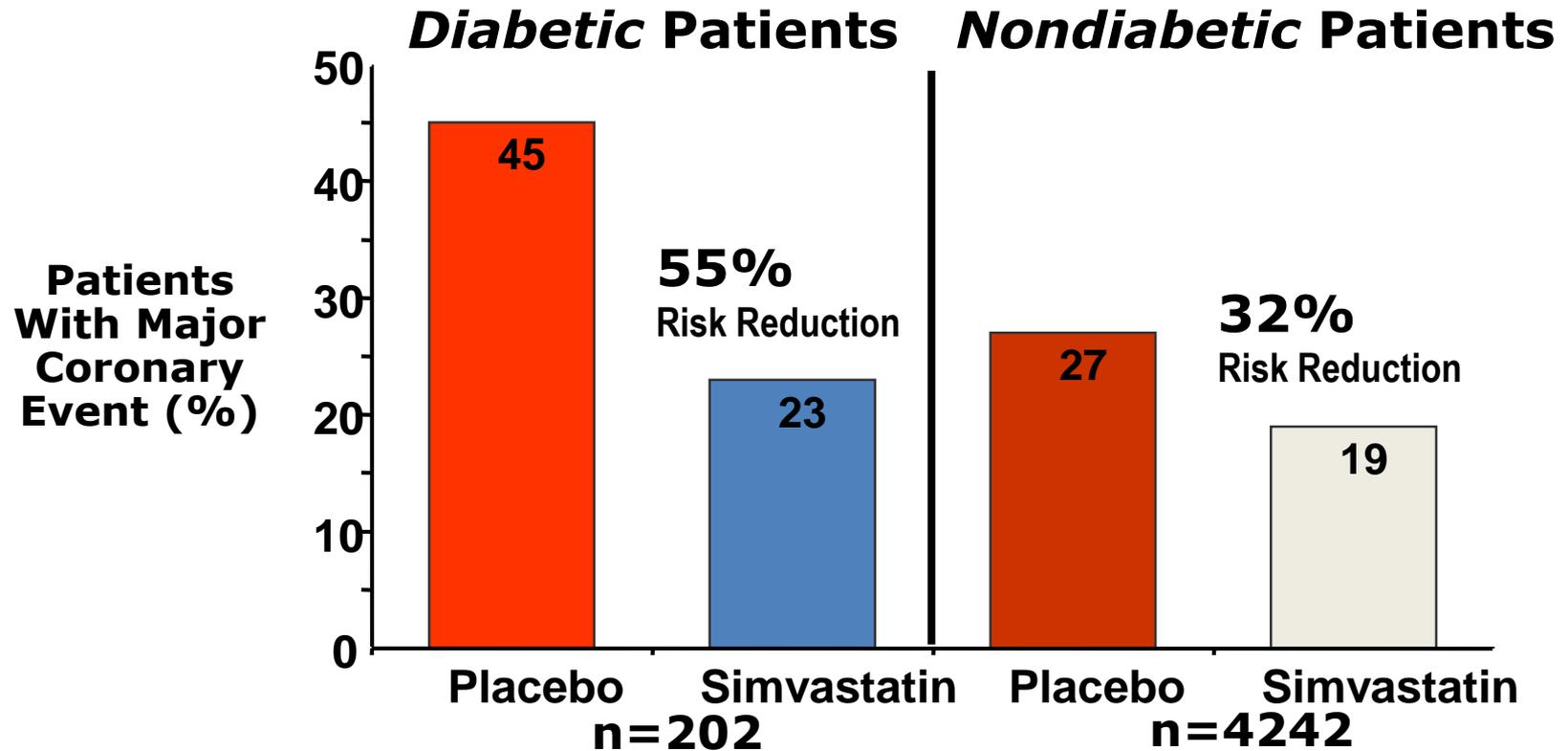


Principle 7:

Provide Blood Pressure and Cholesterol Screening and Control, Smoking Cessation, and Other Therapies to Reduce Cardiovascular Disease Risk

- Blood pressure
- **Lipids**
- Multiple risk factor management
- Antiplatelet therapy
- Cardiovascular risk assessment
- Smoking cessation

4S: Statins reduce coronary events



*CHD death or nonfatal MI

Pyörälä et al. *Diabetes Care*. 1997;20:614



Statins: Targets?

- Studies using the HMG-CoA reductase inhibitors (statins) have clearly shown that moderate to intensive statin therapy can reduce CVD events in people with diabetes.
 - Rather than targeting specific levels of LDL cholesterol, these studies have generally achieved 30 to 40 percent reductions from baseline LDL cholesterol levels.
- In people with diabetes over age 40 and with other CVD risk factors, moderate-to high-intensity statin therapy reduces CVD risk regardless of the baseline LDL cholesterol level.



Cholesterol Management

- Lifestyle modification to optimize lipids is indicated for everyone.
- Statin therapy for everyone with diabetes who have overt CVD.
- Statin therapy should be considered in individuals with diabetes who are without overt CVD but are at substantial risk of developing CVD (e.g., over age 40).
- Risk of CVD is increased more in type 1 diabetes compared with type 2 diabetes, but it is not known if routine use of statins in people with type 1 diabetes under age 40 is useful for primary prevention of CVD.
- The strongest evidence for statin use is in people with diabetes who are 45 to 75 years old.
- Additional lipid-lowering medications have not been shown to reduce CVD risk in people with type 2 diabetes on statin therapy.
- Statins are contraindicated for women who are pregnant or considering pregnancy.



Cholesterol Management: Controversies

- How early should statin therapy start?
- How potent a statin and how high a dose?
- Should there be a target?
- Does LDL (or non-HDL cholesterol) need to be followed?
- Is there a role for advanced lipid testing?
- What to do for the statin intolerant? Lower dose, alternative statin, intermittent therapy, addition of other classes, novel agents.



Principle 7:

Provide Blood Pressure and Cholesterol Screening and Control, Smoking Cessation, and Other Therapies to Reduce Cardiovascular Disease Risk

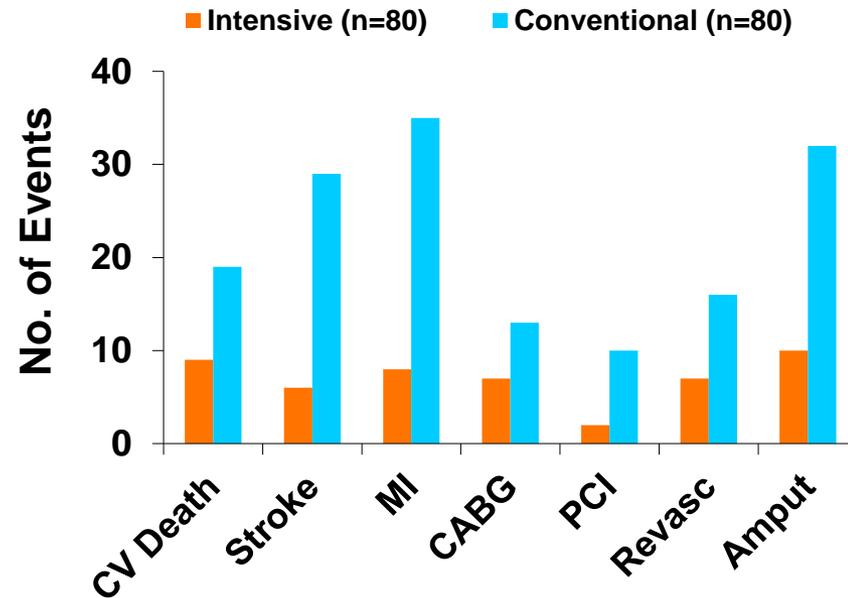
- Blood pressure
- Lipids
- **Multiple risk factor management**
- Antiplatelet therapy
- Cardiovascular risk assessment
- Smoking cessation



Principle 7: Steno-2: Multiple Risk Factor Management

- N=160
- Intensive vs. conventional therapy for glucose, BP, lipids
- 7.8 y treatment, 13.3 y follow-up

| | Baseline | | Post Interv. | |
|----------------|----------|------|--------------|------|
| | INT | CONV | INT | CONV |
| BP—Systolic | 146 | 149 | 131 | 146 |
| Diastolic | 85 | 86 | 73 | 78 |
| A1C, % | 8.4 | 8.8 | 7.9 | 9.0 |
| Lipids (mg/dL) | | | | |
| TC | 210 | 233 | 159 | 216 |
| LDL-C | 133 | 137 | 83 | 126 |
| HDL-C | 40 | 39 | 47 | 45 |
| TGs | 159 | 205 | 115 | 159 |



Deaths in 13.3 y follow-up:

- 24 vs. 40 deaths
- Absolute Risk Reduction=20%, *p*=0.02
- Relative Risk Reduction=46%, *p*=0.02; 95% CI: 0.32-0.89



Principle 7:

Provide Blood Pressure and Cholesterol Screening and Control, Smoking Cessation, and Other Therapies to Reduce Cardiovascular Disease Risk

- Blood pressure
- Lipids
- Multiple risk factor management
- **Antiplatelet therapy**
- Cardiovascular risk assessment
- Smoking cessation



Antiplatelet therapy

- Use low-dose aspirin in adults with diabetes and a history of atherosclerotic CVD.
- In men over 50 and women over 60 with diabetes and other major atherosclerotic CVD risk factors, low-dose aspirin may be considered as a prevention strategy for cardiovascular events.
- For primary prevention of atherosclerotic CVD for people with diabetes, consider aspirin therapy in those who have a 10-year CHD risk of more than 10 percent.



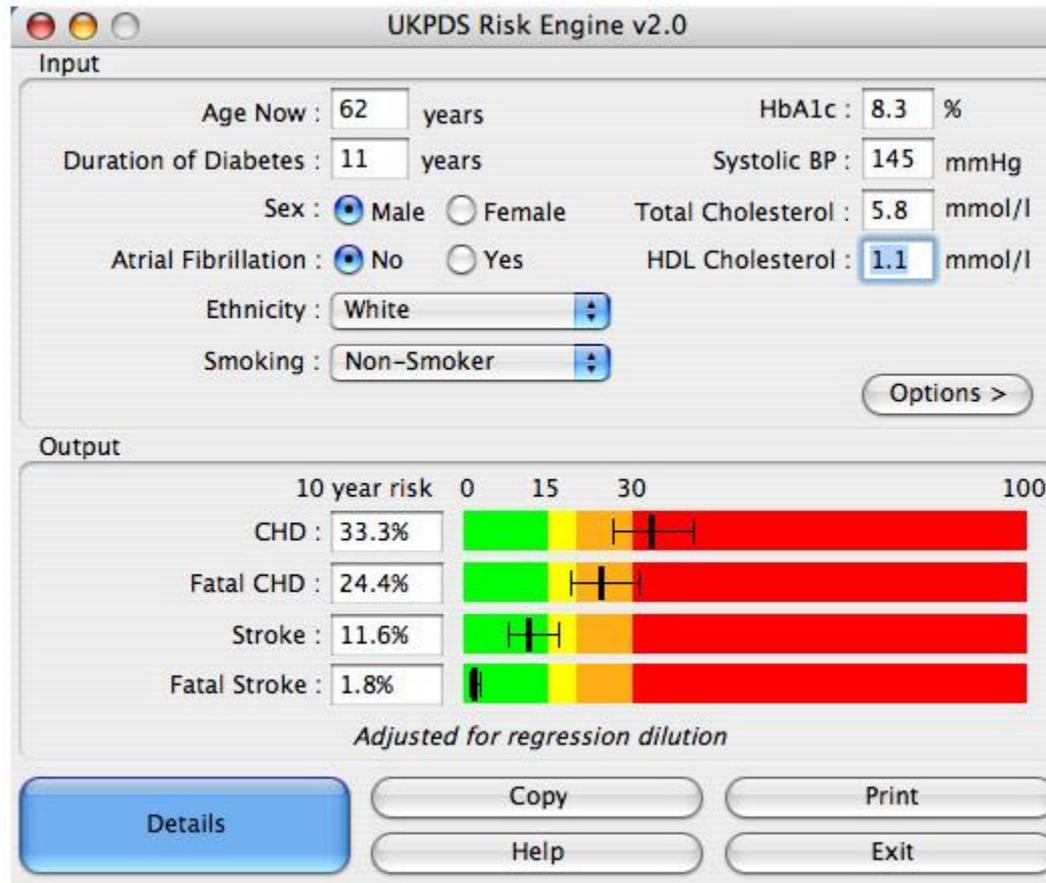
Principle 7:

Provide Blood Pressure and Cholesterol Screening and Control, Smoking Cessation, and Other Therapies to Reduce Cardiovascular Disease Risk

- Blood pressure
- Lipids
- Multiple risk factor management
- Antiplatelet therapy
- **Cardiovascular risk assessment**
- Smoking cessation



Risk Calculators





Risk Calculators

ARIC Coronary Heart Disease Risk Calculator

This risk assessment tool uses information from the ARIC Study. It is designed for adults, 45-65 years old, who do not have heart disease to predict a person's chance of having a heart attack in the next 10 years. To find your risk score, enter your information in the calculator below then click the 'Calculate Risk' button.

| | | |
|---|----------------------------------|--------------------------------|
| Gender | Female <input type="checkbox"/> | Male <input type="checkbox"/> |
| Race | Black <input type="checkbox"/> | White <input type="checkbox"/> |
| Are you a cigarette smoker? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Age | <input type="text" value="45"/> | |
| Total Cholesterol mg/dL | <input type="text" value="150"/> | |
| HDL (Good Cholesterol) mg/dL | <input type="text" value="5"/> | |
| Systolic Blood Pressure mm Hg | <input type="text" value="70"/> | |
| Are you currently taking any medication to treat high blood pressure? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Do you have Diabetes? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

Calculate Risk



Risk Calculators

Heart Risk Calculator

Home

About

Contact

Age (years)

Gender Male
 Female

Race African American
 Other

Total cholesterol (mg/dL)

HDL cholesterol (mg/dL)

Systolic blood pressure (mmHg)

Diastolic blood pressure (mmHg)

Treated for high blood pressure No
 Yes

Diabetes No
 Yes

Smoker No
 Yes

Calculate your 10-year risk of heart disease or stroke using the algorithm published in [2013 ACC/AHA Guideline on the Assessment of Cardiovascular Risk](#).

This calculator assumes that you have not had a prior heart attack or stroke.

UPDATE (5/26/14) -- The calculator now also incorporates [guidelines from JNC-8](#) for blood pressure management.

An [excel spreadsheet](#) is also available for download.



Principle 7:

Provide Blood Pressure and Cholesterol Screening and Control, Smoking Cessation, and Other Therapies to Reduce Cardiovascular Disease Risk

- Blood pressure
- Lipids
- Multiple risk factor management
- Antiplatelet therapy
- Cardiovascular risk assessment
- **Smoking cessation**



Tobacco use cessation

- Smoking more than doubles the risk for CVD in people with diabetes.
- While smokeless tobacco poses a lesser risk for CVD than cigarette smoking, all forms of tobacco should be discouraged.
- People who stop using tobacco greatly reduce their risk of premature death.
- Medications, counseling, telephone help lines, and smoking cessation programs increase a person's chances of success at stopping tobacco use.
- Additional effective therapies include nicotine replacement products (e.g., gum, inhaler, and patch).

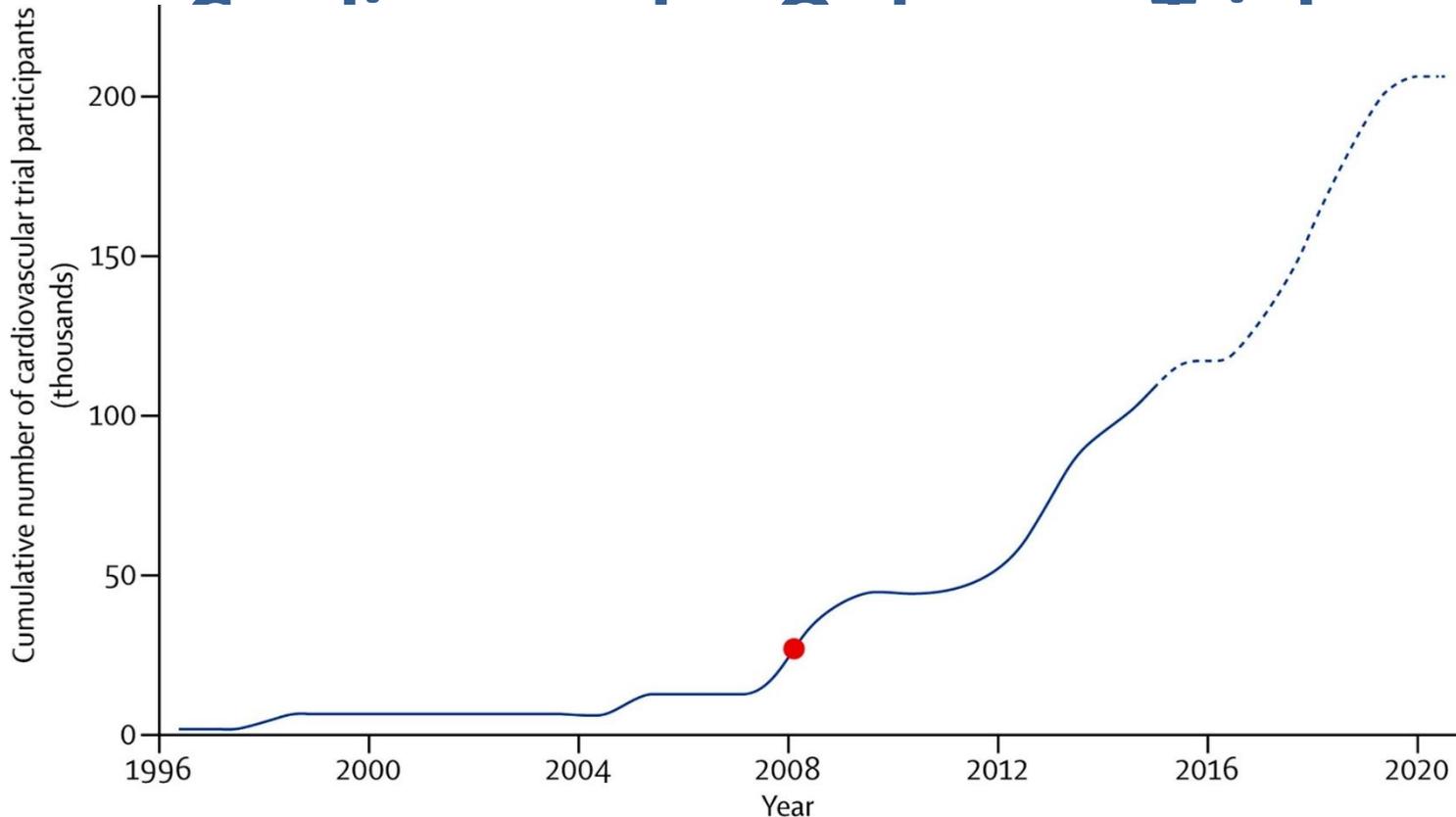


Note

- Failure to take medication regularly as directed should be considered in people who do not meet blood pressure targets or show evidence of cholesterol lowering.
- Using strategies to help people with diabetes take their medicines as directed can improve adherence and affect their clinical outcomes, productivity, and quality of life.



Cumulative Number of Participants in Diabetes



Numbers of trial participants are added at the time of publication for historical trials (solid line) and at the estimated time of reporting for ongoing trials (dotted line). The red circle indicates when the new US Food and Drug Administration guidance for industry was issued.

Guiding Principles: Optimizing Self-management Education and Support

Martha Funnell, MS, RN, CDE

Chair, Diabetes HealthSense Task Group

Associate Research Scientist, Department of Learning Health Sciences, University of Michigan Medical School



Disclosures

- Advisory Boards: Eli Lilly, Bristol-Myers Squibb/AstraZeneca Diabetes, Novo Nordisk, Omada Health, Sanofi US



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

GUIDING PRINCIPLES

FOR THE CARE OF PEOPLE WITH OR AT RISK FOR DIABETES



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Table of Contents

Introduction

Principle 1: Identify Undiagnosed Diabetes and Prediabetes

Principle 2: Manage Prediabetes

Principle 3: Provide Self-Management Education and Support

Principle 4: Provide Individualized Nutrition Therapy

Principle 5: Encourage Regular Physical Activity

Principle 6: Control Blood Glucose

Principle 7: Reduce Cardiovascular Disease Risk

Principle 8: Detect and Monitor Microvascular Complications

Principle 9: Consider Special Populations

Principle 10: Provide Patient-Centered Care



Guiding Principles: Optimizing Self-management Education and Support

- “Effective DSME and on-going DSMS are essential to enable people with or at risk for diabetes to make informed decisions and to assume responsibility for the day-to-day management of their disease or risk factors.”



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Why is Diabetes Self-management Education and Support a Guiding Principle?





Why is DSME/S a Guiding Principle?

- 99% of diabetes management is self-management
- Self-management and patient decision-making greatly impact outcomes
- Self-management is primarily affected by psychosocial issues and diabetes-related distress
- Effective education addresses all of these so that patients can *take charge*



Why is DSME/S a Guiding Principle?

- “Most people with diabetes are not actively engaged by their healthcare professionals to take control of their condition; education and psychosocial care are often unavailable.”
 - 48.8% of participants in the DAWN2 study had received formal diabetes education; 81.1% found it helpful.



Why is DSME/S a Guiding Principle?

- Among newly diagnosed persons with diabetes in the US between 2009-2012, about 6.8% of privately insured, newly diagnosed adults (ages 18-64) participated in DSME during the first year after diagnosis.



Why is DSME/S a Guiding Principle?

- To clarify old, unquestioned assumptions about diabetes self-management education
 - It doesn't work
 - It is not practical
 - There is nothing really new



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Does DSME Work?





Evidence for DSME/S

- Effective for improving clinical and quality of life outcomes, at least in the short-term.¹⁻³
- Cost-effective.⁴
- Repeated contacts over-time result in a dose-responsive effect on outcomes.⁵

1. Heinrich, et al. Eur Diabetes Nursing 2010;7:71-76.
2. Cochran J, et al. TDE 2008;34:815-823.
- 3, Marrero DG et al. Diabetes Care 2013;38:463-470.
4. Duncan et al. TDE 2011; 37:638-658.
5. Duncan et al. TDE 2009; 35:752-760.



Evidence for DSME/S

- There is no single best educational program or approach.¹⁻²
- However, programs that incorporate behavioral and psychosocial strategies have improved outcomes.³⁻⁴
- Group education is at least as effective as individual education.⁵⁻⁶
- Age and culturally appropriate programs improve outcomes.³

1. Norris, et al. *Diabetes Care* 2001; 24:561-587.
2. Norris, et al. *Diabetes Care* 2002; 25:1159-1171.
3. Haas et al. *Diabetes Care* 2012; 35:2393-2401.
4. Heinrich, et al. *European Diabetes Nursing* 2010; 7:71-76.
5. Duke et al. *Cochrane Database Syst Rev*, 2009.
6. Deakin, et al. *Cochrane Database Syst Rev*, 2005.



Evidence for DSME/S

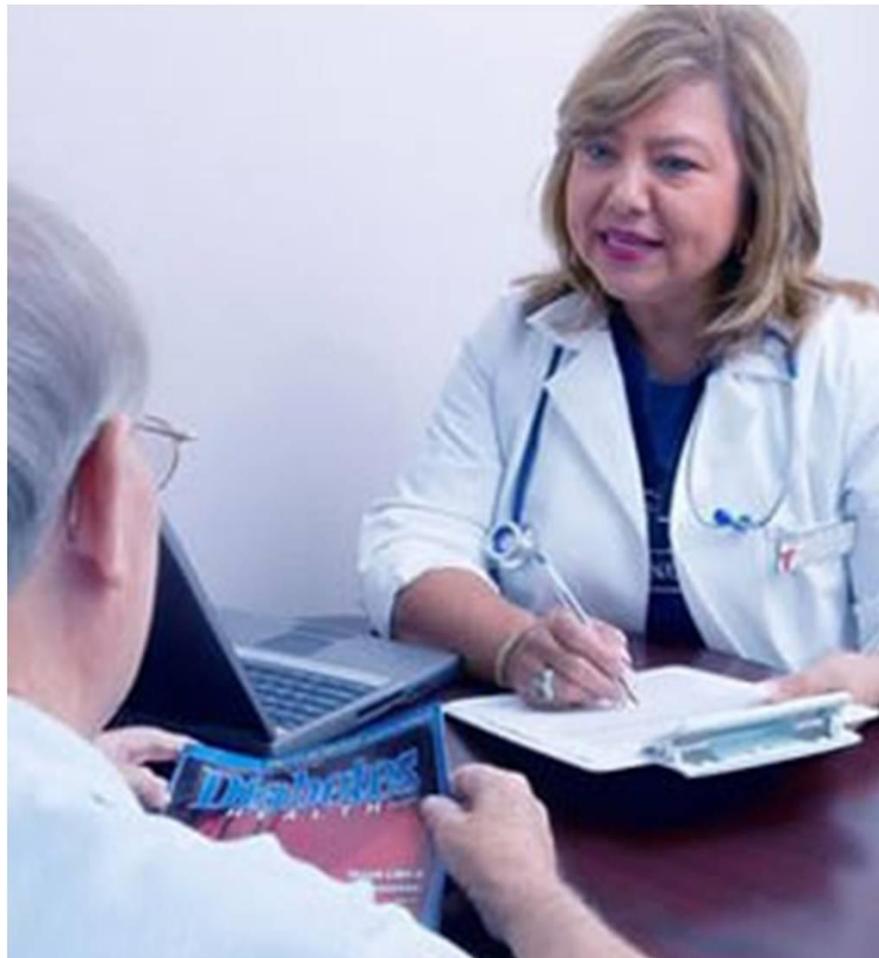
- Traditional knowledge-based diabetes DSME is essential but not sufficient for sustained behavior change.
- On-going diabetes self-management support (DSMS) is critical in order to sustain participants' progress resulting from diabetes self-management education.



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Practical Approaches to DSME/S





Practical Approaches to DSME/S

Interventions are more effective when:

- Tailored to patients' preferences
- Tailored to patients' social/cultural environment
- Actively engage patients in goal-setting
- Incorporate coping skills
- Provide follow-up support



Practical Approaches: Starting the Visit

- What is your biggest worry about diabetes?
- What is hardest for you or your biggest struggle about managing your diabetes?
- How has diabetes affected your daily life and that of your family?
- What questions do you have? What would you like to know when you leave here today?
- Do you have any cultural or religious practices that affect how you care for your diabetes?
- What one thing would you like to be different in terms of your daily life with diabetes?



Practical Approaches: Ending the Visit

Teach-back

- If you were to tell someone what we talked about here today, what would you say?
- What is one key thing you learned today?

Closing the Loop

- What is one thing you will do to better manage your diabetes?



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Culture and Ethnicity





Building Cultural Awareness

- Ask your patients about their health beliefs and practices
- “Do you have any cultural/religious practices that influence how you care for your diabetes?”
- Ask your patients about their medications (including ones other than you prescribed)
- Ask about traditional and natural remedies
- Assess the role of family members and friends in making healthcare decisions
- Offer to include family members in discussions



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

What's New in DSME/S?





What's New?

- Evolved from primarily didactic interventions into more theoretically-based empowerment models.
- Initially focused on knowledge and “compliance /adherence” as the major outcome.
- More recently focused on behavior change and strategies to facilitate behavior change.
- Most recently have recognized need to address knowledge, behavior and psychosocial aspects (i.e., diabetes-related distress), along with providing on-going support.



What's New: Patient-centered

- No lectures
- Respond to questions based on patient concerns
- Integrate clinical, behavioral and psychosocial
- Patient experiences serve as the curriculum
- Effective



What's New: Technology

- Data are mixed in terms of DSME outcomes
- Useful for DSMS, prevention, reinforcement, tracking behaviors, communication
- Use will increase





Goals of New Beginnings

Help African Americans with diabetes:

- Manage the emotional impact of diabetes
- Build positive, supportive family relationships
- Develop behavioral skills:
 - Goal setting
 - Problem solving
 - Improved self-efficacy
 - Health literacy



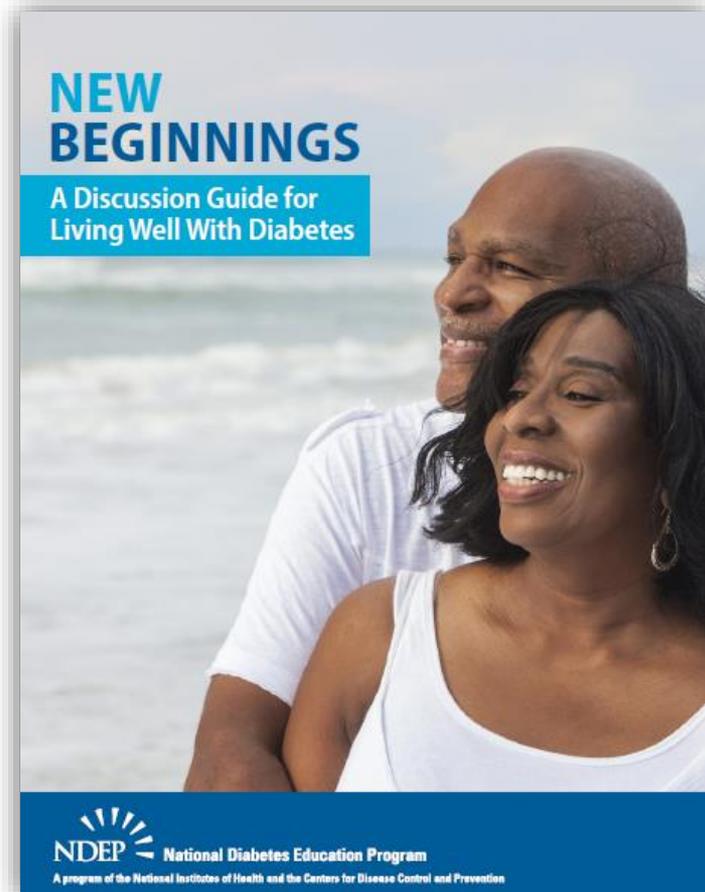


National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

New Beginnings Discussion Guide

- Use in small groups
- People with diabetes
- Family members
- Support coping and behavior change



www.cdc.gov/diabetes/ndep/new-beginnings.htm



In Summary:

- Ensure that the patient receives adequate self-management education and support.
- Set collaborative goals based on the patient's personal goals, culture, values and environment.
- Review lab and other data at each visit.
- Share decision-making and be open-minded to the patient's choices.
- Revisit and revise goals at each visit.
- Encourage participation in community programs.
- Recognize that the behaviors involved in managing and preventing diabetes are dynamic and multidimensional.

Using “Guiding Principles”: Moving toward Patient-Centered Diabetes Care

Linda M. Siminerio, RN, PhD, CDE
Chair NDEP
Professor of Medicine
University of Pittsburgh



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Presenter Disclosure

Research Support: Becton-Dickinson



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

GUIDING PRINCIPLES

FOR THE CARE OF PEOPLE WITH OR AT RISK FOR DIABETES



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Table of Contents

Introduction

Principle 1: Identify Undiagnosed Diabetes and Prediabetes

Principle 2: Manage Prediabetes

Principle 3: Provide Self-Management Education and Support

Principle 4: Provide Individualized Nutrition Therapy

Principle 5: Encourage Regular Physical Activity

Principle 6: Control Blood Glucose

Principle 7: Reduce Cardiovascular Disease Risk

Principle 8: Detect and Monitor Microvascular Complications

Principle 9: Consider Special Populations

Principle 10: Provide Patient-Centered Care



Elements of Patient-Centered Care

1. Respecting values, preferences, and expressed needs
2. Communicating effectively
3. Development of individualized care plans
4. Assessing social, financial, clinical, & emotional needs
5. Proactive approach
6. Care coordination
7. Collaborative multidisciplinary team care
8. Incorporating access to community resources



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Good Communication and Practice Transformation



Are we empathetic?

- Study aimed to describe relationship between patient BMI and physician communication behaviors.
- PCPs demonstrated less emotional rapport with overweight and obese patients than for normal weight patients.
- Findings raise concern that low levels of emotional rapport may weaken relationship, diminish adherence and effectiveness of counseling.

Gudzune, K. et al. Physicians build less rapport with obese patients. *Obesity*. 2013



Empathy and diabetes



Patients of physicians with high empathy scores as compared to those with low empathy were:

- more likely to have good control of A1c (p .001).
- proportion of patients with good LDL control (p .001).
- lower rate of acute complications
- physicians' understanding of their patients' beliefs associated with better self-care among patients (e.g., improved diet, SMBG).



Patient Satisfaction



- 52% in ratings of care satisfaction was accounted for by physicians' levels of warmth and respect.
- Dietitians' empathic engagement predictive of patient satisfaction and successful consultations.
- Empathy was the most important quality for being considered a "good physician".
- Patients who don't have decision support more often blame their practitioner for bad outcomes.

Kenny DT. Determinants of patient satisfaction with the medical consultation. Psychol Health. 1995. Goodchild CE, et al. The value of empathy in dietetic consultation: A pilot study to investigate its effect on satisfaction, autonomy and agreement. J Hum Nutr Diet. 2005.

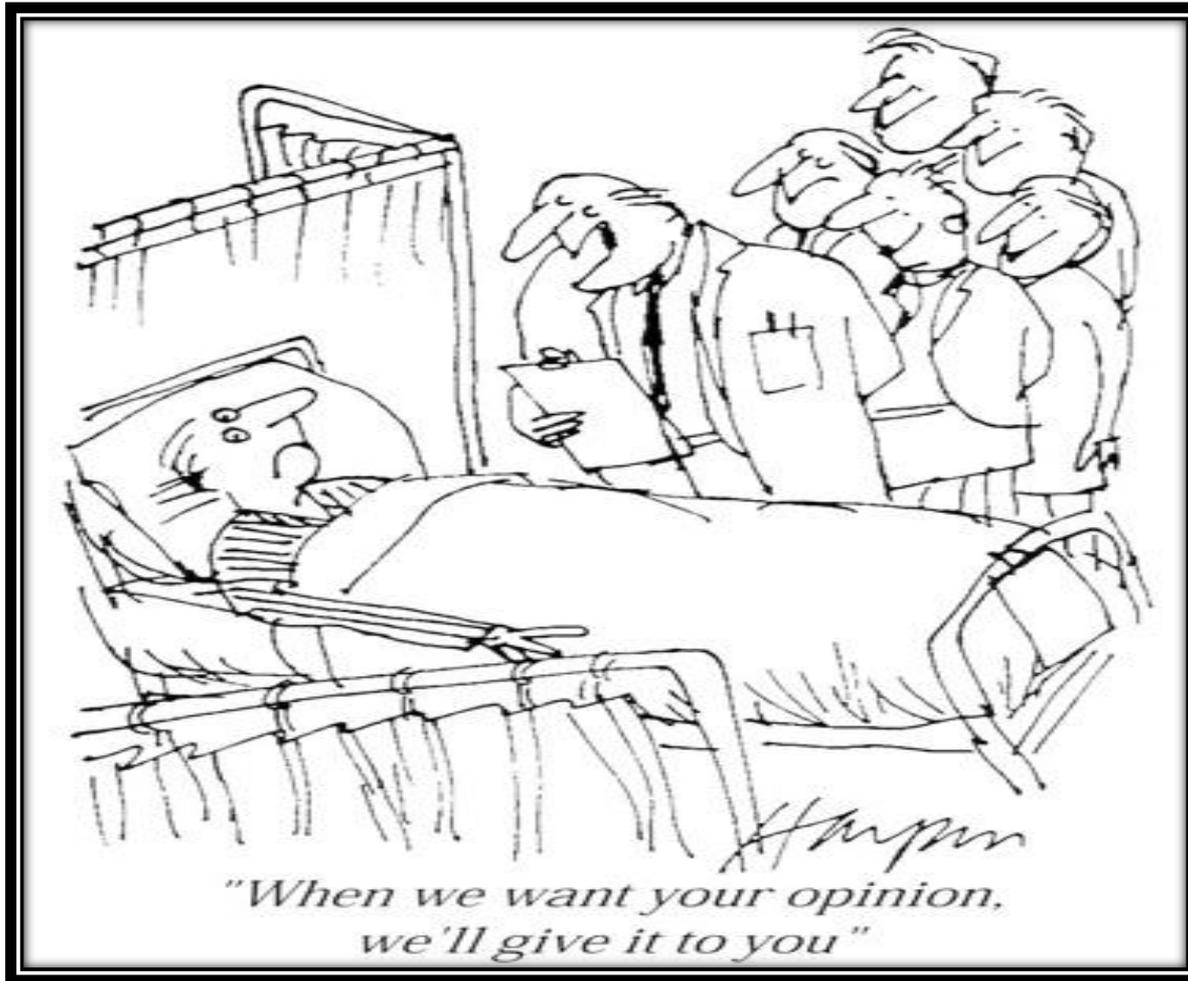


National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Are decisions really shared?

Traditional Decision Model: Paternalism at Its Peak





Consider approaches like: Shared Decision Making

Collaborative process that allows patients and their providers to make health care decisions together, taking into account the best scientific evidence available, as well as the patient's values and preferences.



Consider that:

- Decisions may conflict with evidence-based guidelines.
- Discussion of options requires time & effort.
- Key to patient satisfaction and good outcomes.
- Better experience with providers associated with medication & treatment plan adherence.



Do they understand us?: Health Literacy and Numeracy

- Health literacy includes ability to:
 - Make critical health decisions.
- 1 in 3 Americans has low health literacy.
- Older people, non-whites, immigrants, & those with low incomes are more likely to have trouble reading and understanding health information.
- Limited health literacy is associated with poorer outcomes and higher costs.



Health Literacy

Among diabetes patients, those with low literacy:

- Have greater difficulty understanding their condition
- Are less confident managing their diabetes
- Are less likely to engage in self-management
- Have worse glycemic control
- And have poorer communication with providers



Health Literacy

- Use plain language in written and spoken materials (no jargon)
 - Less than 2 syllables
- Explain medical terms
- Avoid phrases with two interpretations (eg, positive test results; negative test results)
- Open-ended questions ('What questions do you have?' not 'Do you have questions?')
- Highlight key recommendations
- Universal Precautions



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Good Communication and Practice Transformation



Gap between what people want and what they get regarding engagement in health care:

- 8 in 10 people want their health care provider to listen to them, but just 6 in 10 say it actually happens.
- Less than half of people say their provider asks about their goals and concerns for their health.
- 9 in 10 people want their providers to work together as a team, but just 4 in 10 say it actually happens.

Alston, C., L. et al. 2012. *Communicating with patients on health care evidence*. Discussion Paper, Institute of Medicine, Washington, DC. <http://www.iom.edu/evidence>.



Real-Life & Practice Realities

*525,600 minutes/year
versus 45 minutes/ 3-4 visits/year*

- **10-17 minutes with PCP every 3-6 months**

- **Follow-up visit provider addresses**

**approximately 17 topics; writes 2 prescriptions;
and discusses nutrition & medication changes
within 17 minutes**

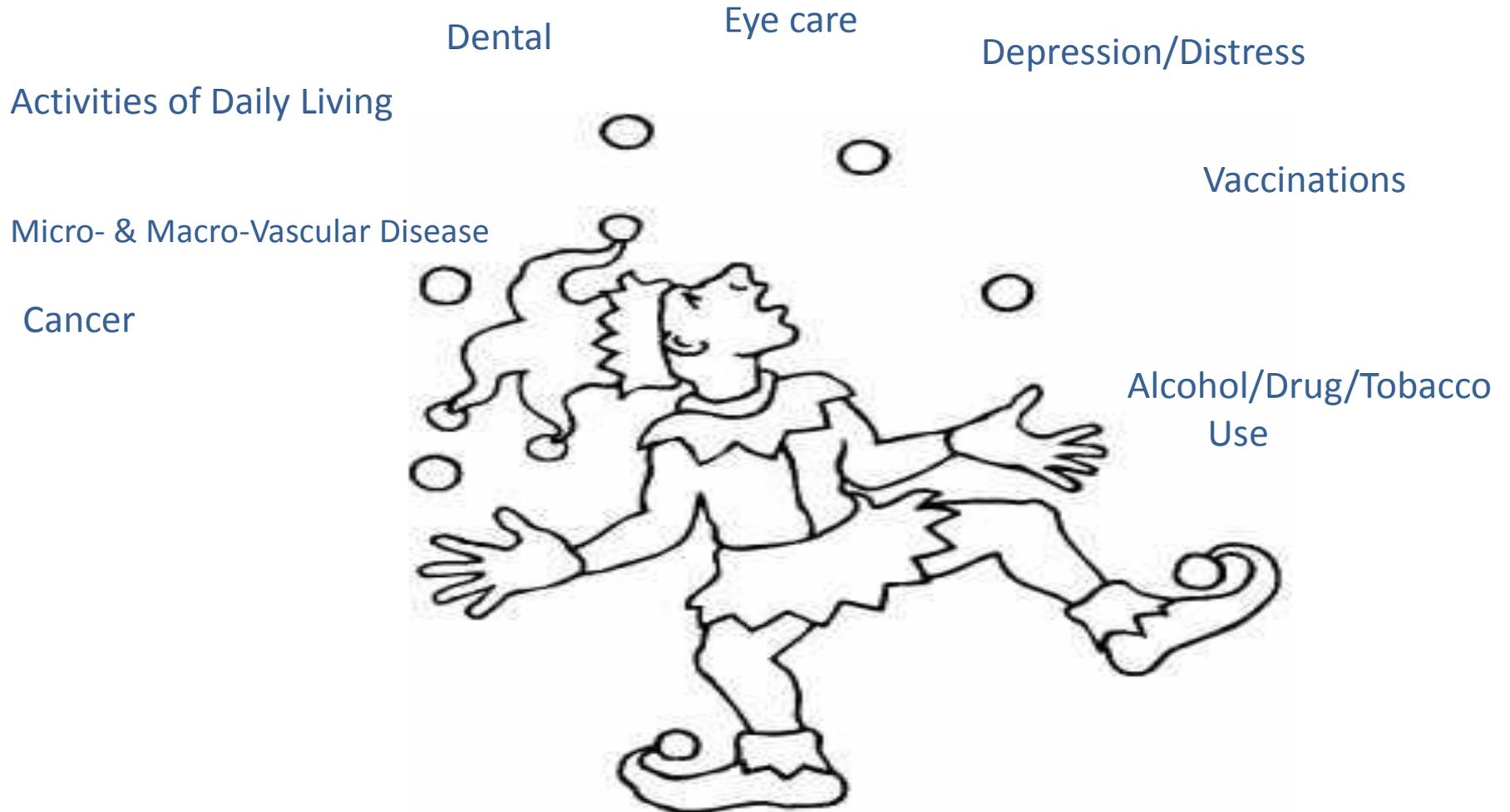
Strange D. et al. Illuminating the “black box”; a description of 4,454 patient visits to 138 family physicians. J Fam Pract, 1998; Parchman ML, et al. Encounters by patients with type 2 diabetes-complex and demanding: an observational study. Ann Fam Med, 2006 .



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Addressing Comorbidities and Screening

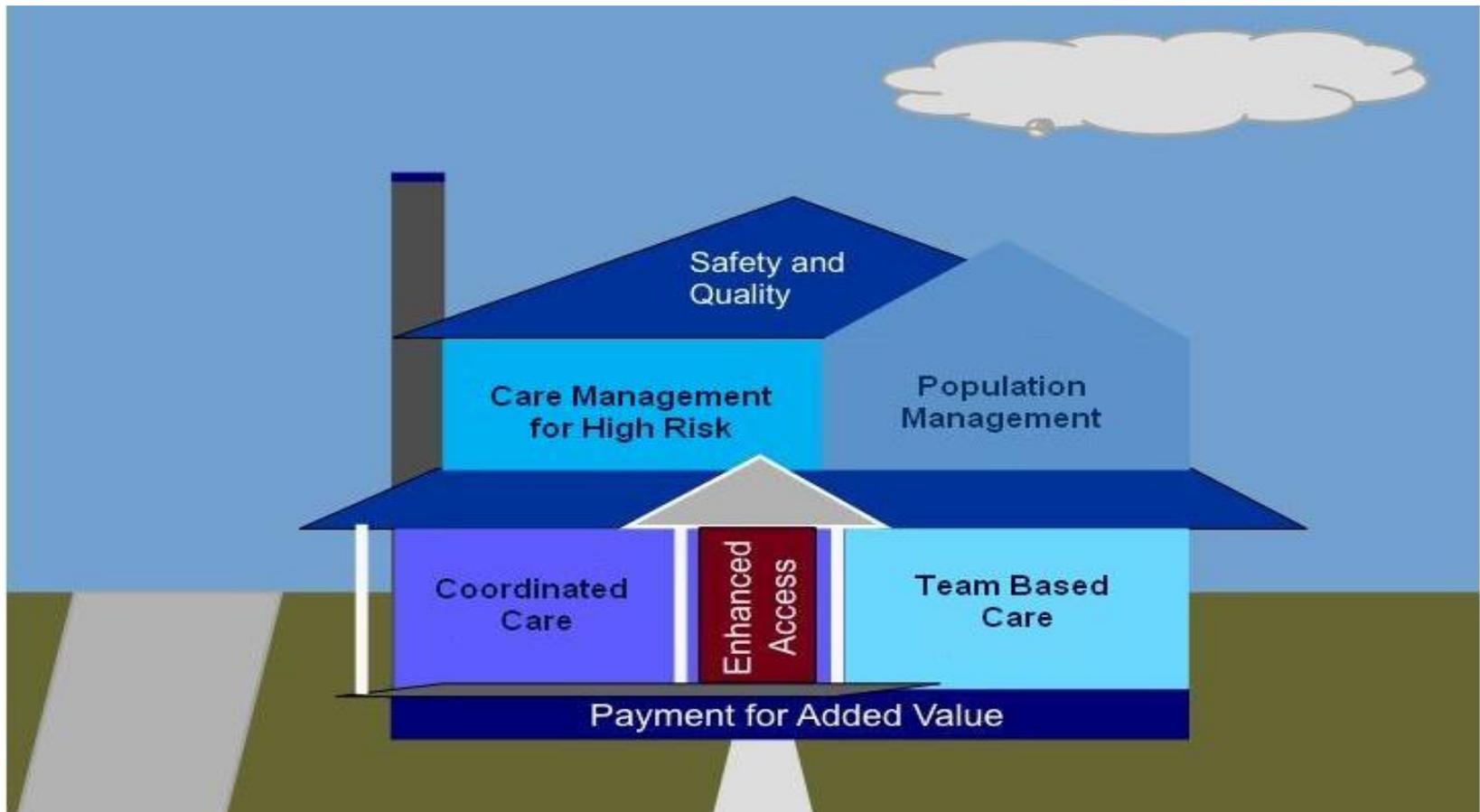




National Diabetes Education Program

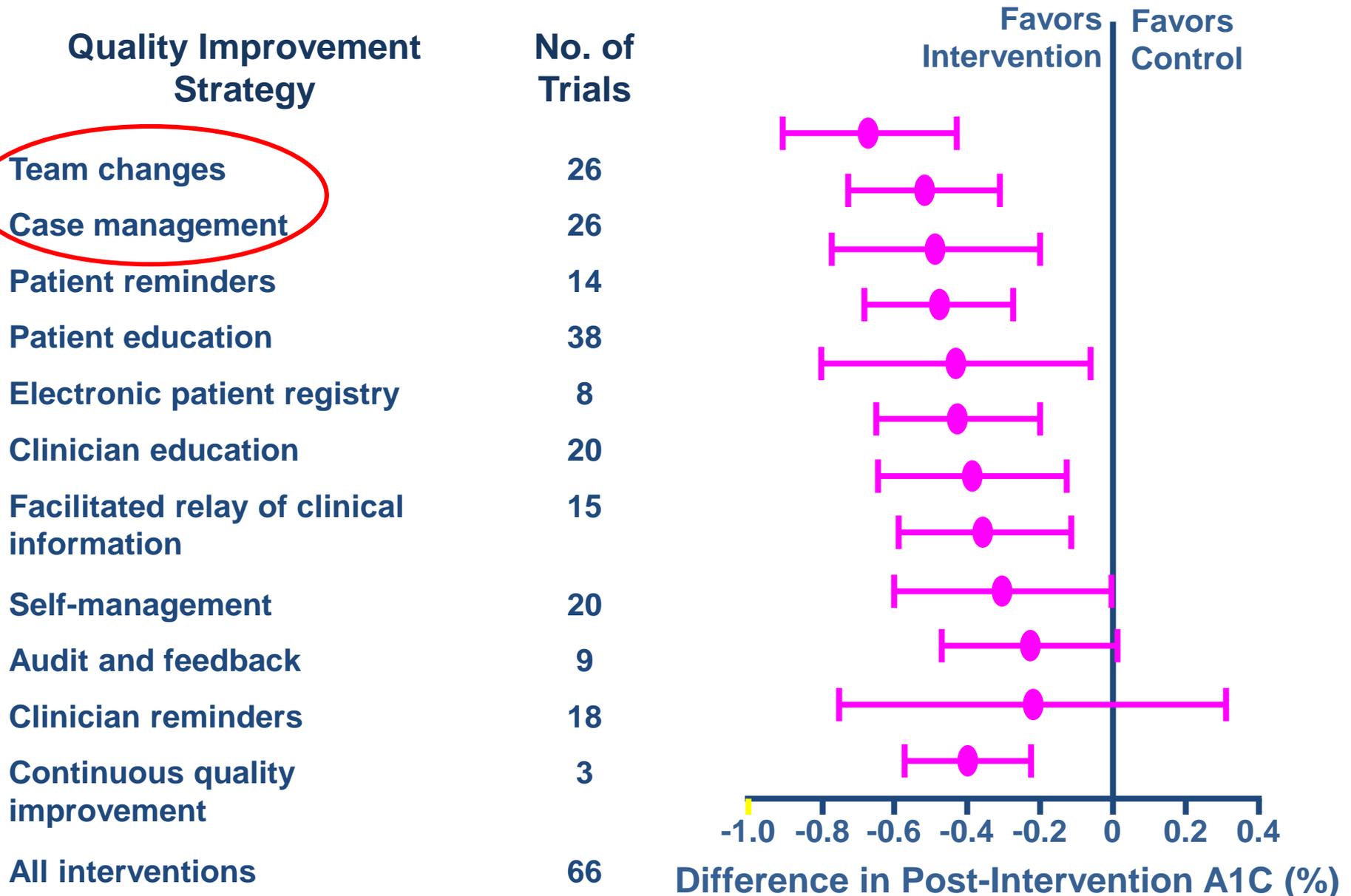
A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Patient Centered Medical Home



Team Care: Differences in A1C

Shojania KG, et al. *JAMA*. 2006;296:427-440.





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

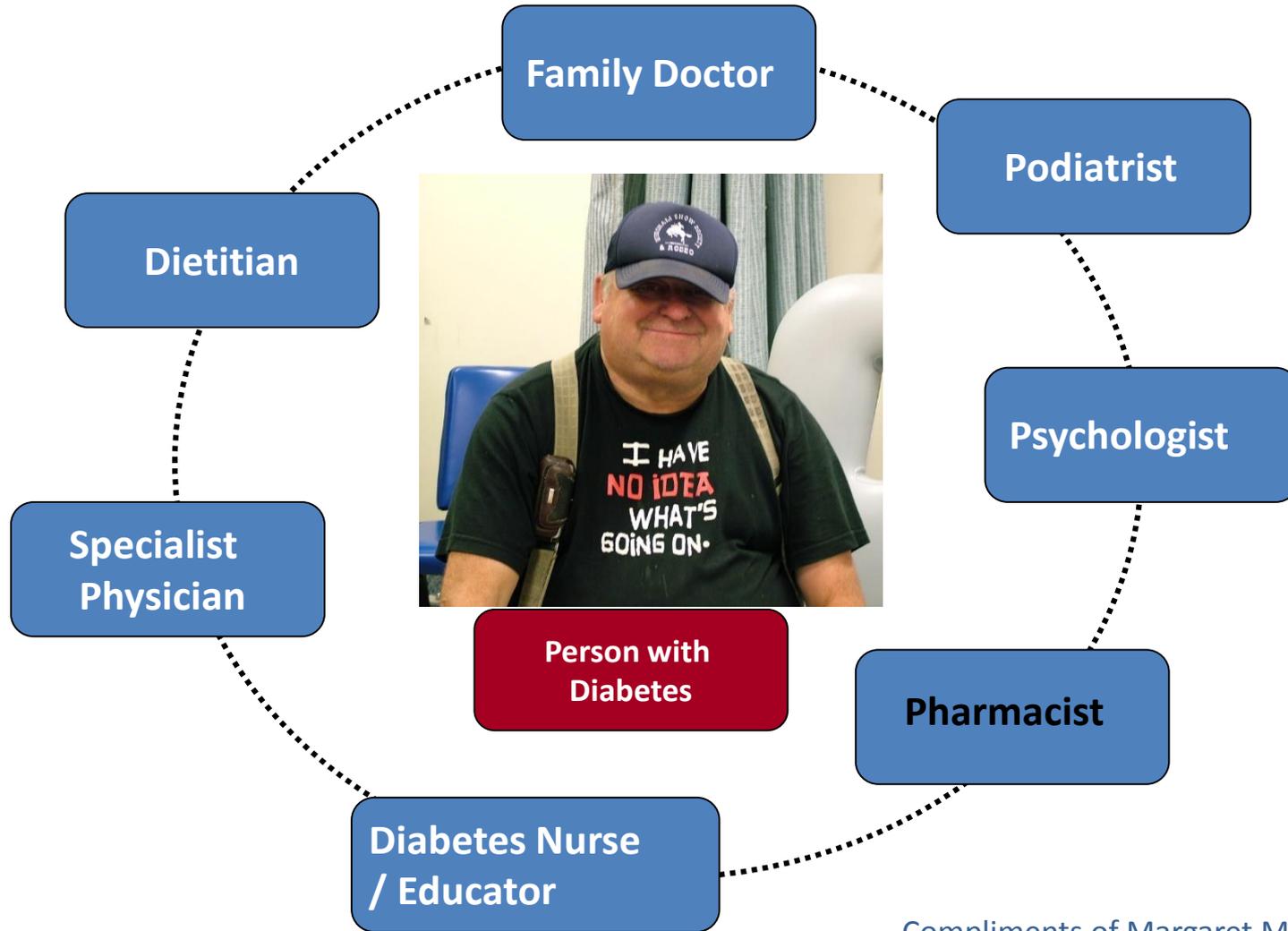
Effective Teams : Shared “Party- line” And Common Goals





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention



Compliments of Margaret McGill,
University of Sydney.



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Patient-Centered Medical Neighborhood: The Community



Our communities





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

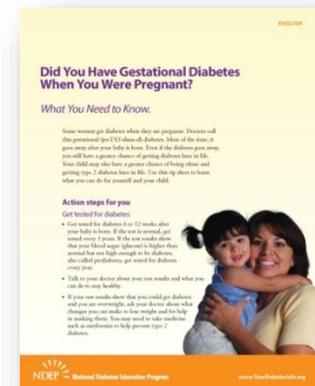
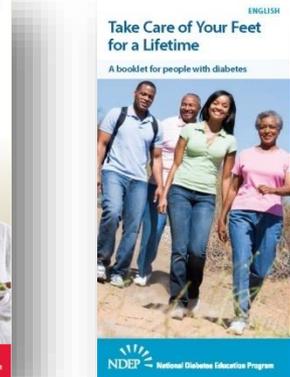
What does NDEP have to offer?



NDEP and Health Literacy

- Review of NDEP's most popular publications for health literacy/plain language principles, including:
 - Content
 - Literacy Demand
 - Health Numeracy
 - Graphics and Visuals/ Layout and Design
 - Learning Stimulation, Interaction and Motivation
 - Cultural Appropriateness

Reviewed for Plain Language Principles

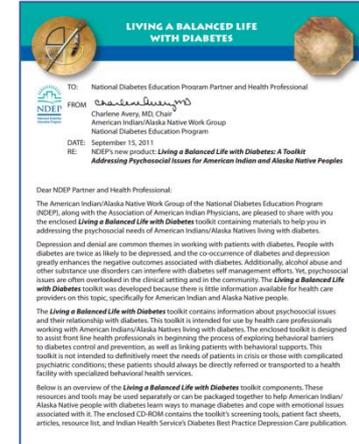
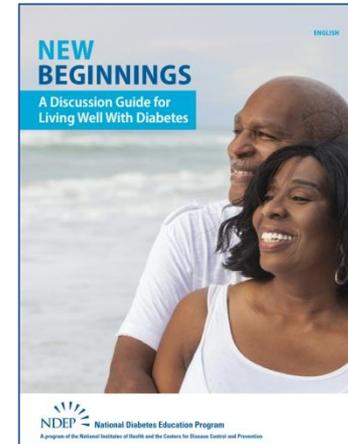
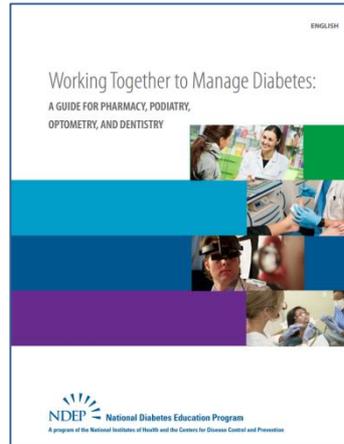
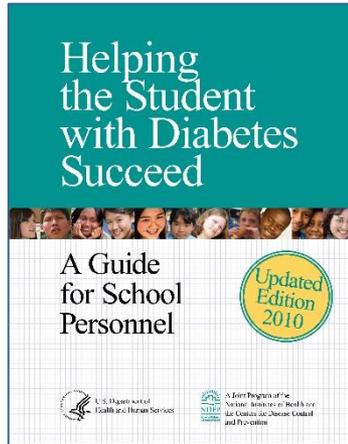
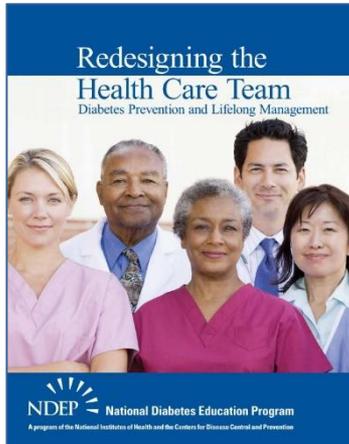




National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

NDEP Tools to Support Health Care Professional/Patient Communication



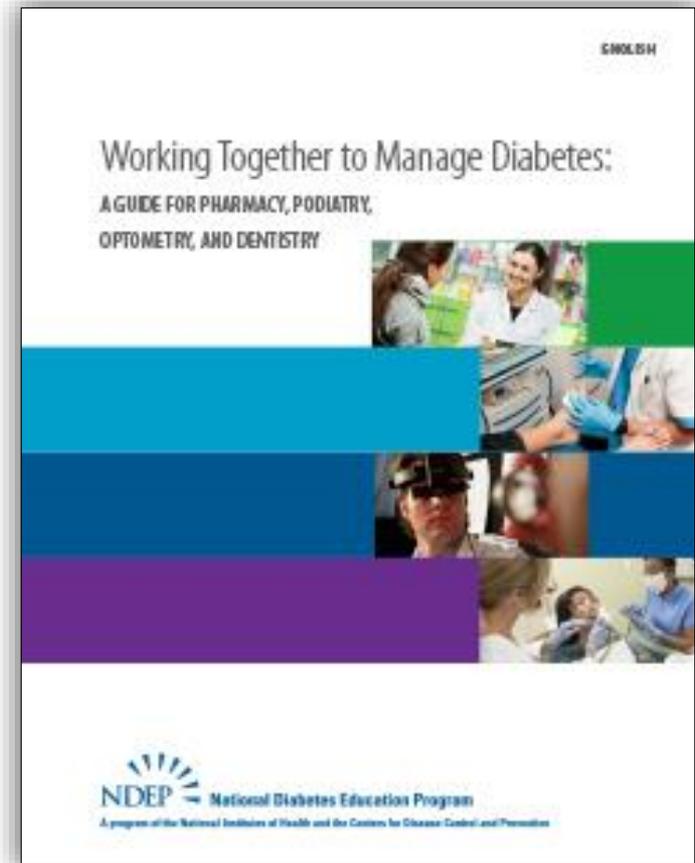


National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Engaging Health Organization Partners

- **Pharmacy, Podiatry, Optometry and Dentistry Partnership Activities (PPOD)**
 - “traditional” health care providers and PPOD professionals
- Range of providers collaborated on Guide
 - Access to expertise
 - Access to audiences
 - Consistent messages
 - Better final product



www.cdc.gov/diabetes/ndep/ppod.htm

Using “Guiding Principles”: Preventing Type 2 Diabetes – Progress since the Diabetes Prevention Program

Ann Albright, PhD, RD

Director, Division of Diabetes Translation

Centers for Disease Control and Prevention



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention



National Institutes
of Health





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Disclosures

- **Nothing to disclose**



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

GUIDING PRINCIPLES

FOR THE CARE OF PEOPLE WITH OR AT RISK FOR DIABETES



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Table of Contents

Introduction

Principle 1: Identify Undiagnosed Diabetes and Prediabetes

Principle 2: Manage Prediabetes

Principle 3: Provide Self-Management Education and Support

Principle 4: Provide Individualized Nutrition Therapy

Principle 5: Encourage Regular Physical Activity

Principle 6: Control Blood Glucose

Principle 7: Reduce Cardiovascular Disease Risk

Principle 8: Detect and Monitor Microvascular Complications

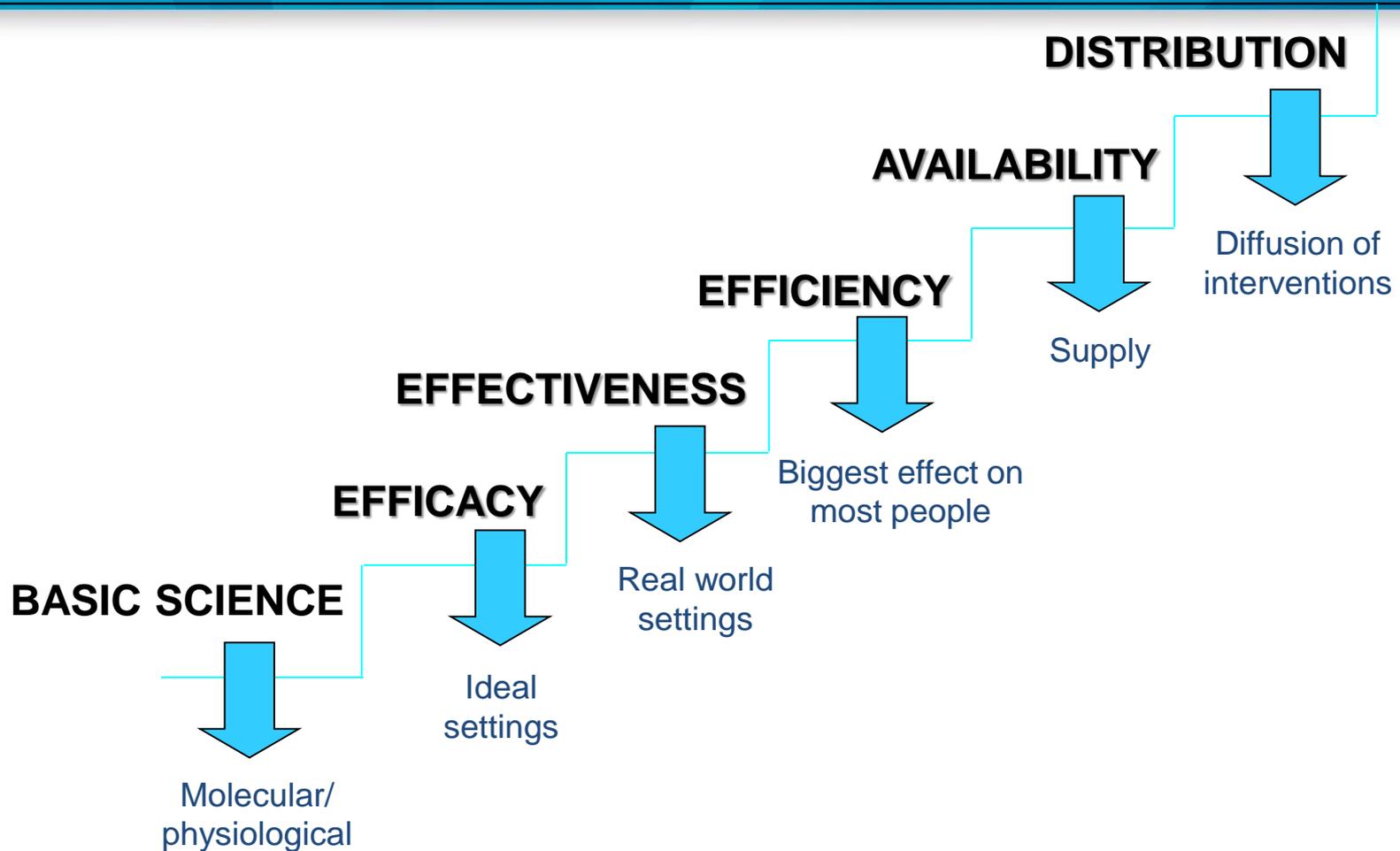
Principle 9: Consider Special Populations

Principle 10: Provide Patient-Centered Care



Evidence for National Diabetes Prevention Program

- **The NIH DPP research study showed that structured lifestyle change program achieved modest weight loss of 5-7 percent and 150 min PA/wk reduced type 2 diabetes by 58% (71% in those over age 60) in those at high risk for type 2 diabetes**
 - True for all participating ethnic groups and for both men and women
 - Blood pressure and lipids improved
 - 10-year f/u shows continued reduction in new cases of type 2 diabetes
- **Translational studies demonstrate trained lay health workers and health professionals are effective in delivering the lifestyle change program**
- **Community Guide shows that longer duration programs are more effective**
- **National DPP is 1/3 of the cost of DPP research study and demonstrates similar lifestyle change results**



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 Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

National Diabetes Prevention Program - largest national effort to bring diabetes prevention lifestyle programs to communities

REDUCING THE IMPACT OF DIABETES



Congress authorized CDC to establish the NATIONAL DIABETES PREVENTION PROGRAM (National DPP) —a public-private initiative to offer evidence-based, cost effective interventions in communities across the United States to prevent type 2 diabetes

It brings together:



Research shows structured lifestyle interventions can cut the risk of type 2 diabetes in

HALF

to achieve a greater combined impact on reducing type 2 diabetes



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.

Albright A, Gregg EW. *Am J Prev Med.* 2013;44(4S4):S346-S351.



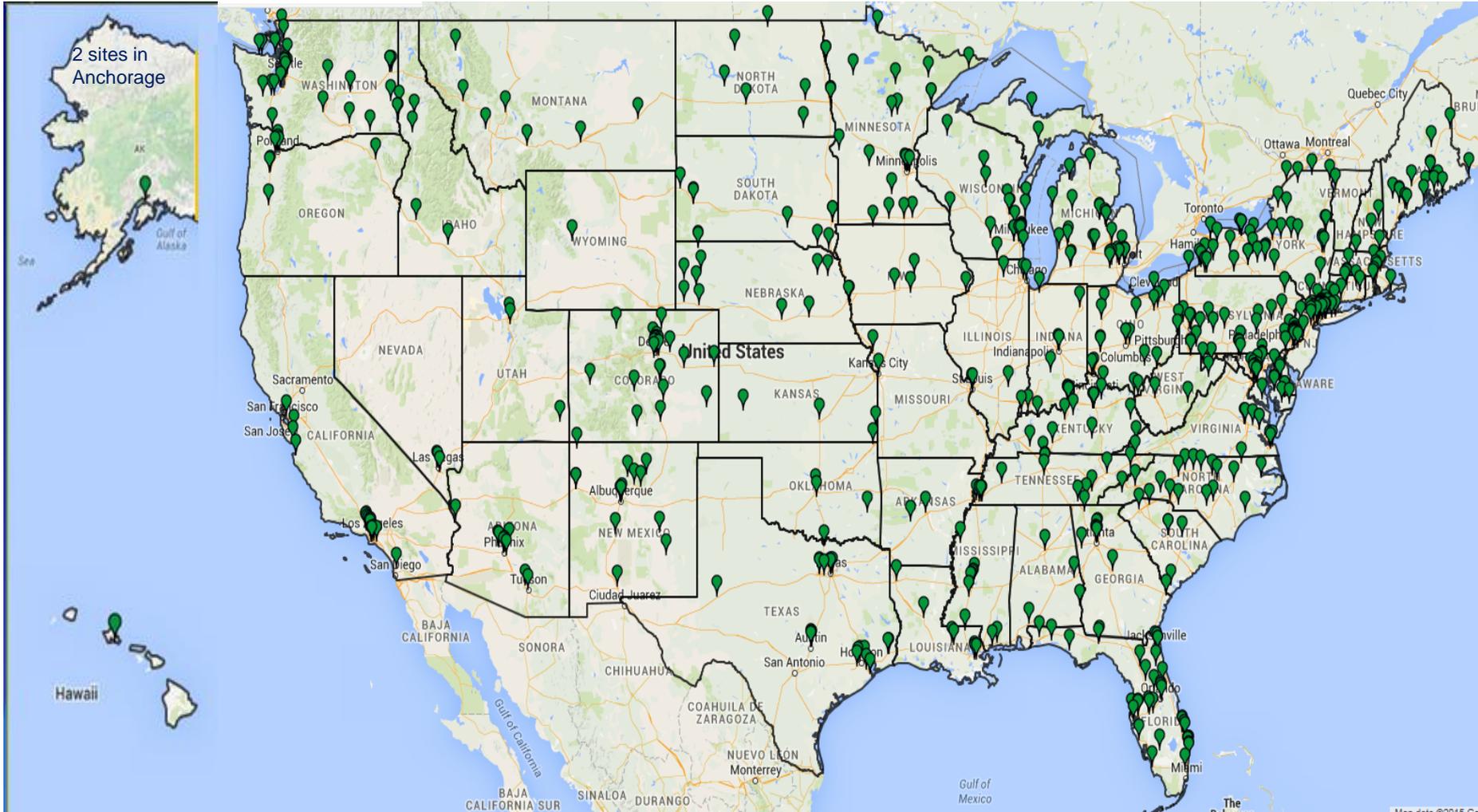
Summary of Status of National DPP

- **624 CDC-recognized organizations delivering the program**
- **Program delivery sites in all 50 states, D.C. and Guam**
- **Programs being delivered in-person and through virtual technology**
 - **Recognition of organizations offering program via technology began with revised program standards in 2/15**
- **All CDC-recognized sites can be found at www.cdc.gov/diabetes/prevention/recognition**



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention



Source: Diabetes Prevention Recognition Program Registry (CDC/National Diabetes Prevention Program 4/14/2015)

copyright © 2005-2015 Zee Source. All rights reserved.



Summary of Status of National DPP

- **About 30,000 participants served by organizations in CDC recognition program (does not yet include virtual program participants)**
- **Average weight loss is 4.6% by participants who have attended at least 4 sessions**
- **More than 20 health plans providing some amount of coverage**
- **6,843 coaches trained**
- **More national partners coming on board**



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

NDEP contributions to National DPP

- Helping to build organizational capacity
- Supplementing National DPP resources



Building Organizational Capacity

- **Demonstration project using the *Road to Health Toolkit***
 - 3 community-based organizations serving Hispanic/Latino populations
 - Training and technical assistance
 - Monitoring behavioral change
 - Measuring capacity before, during, and after





Building Organizational Capacity

Recruit an adequate number of participants

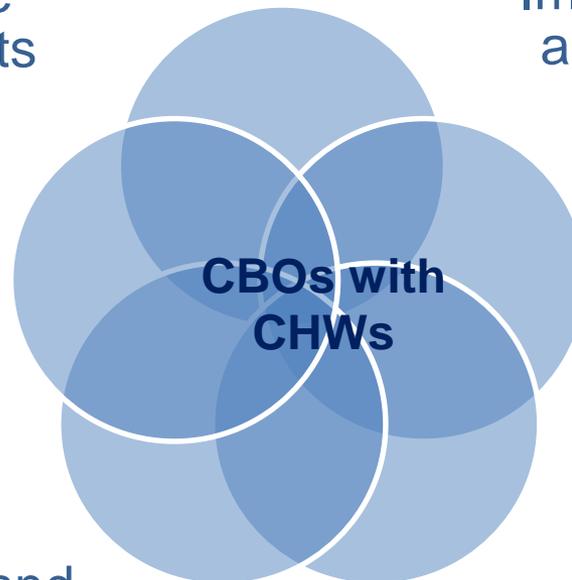
Implement group sessions and 2 follow up sessions

Retain participants during the program and follow-up period

Cover the contents with fidelity

Collect, track, report, and manage data

Participate in project's evaluation activities





Results and Lessons Learned

Recruit an adequate number of participants

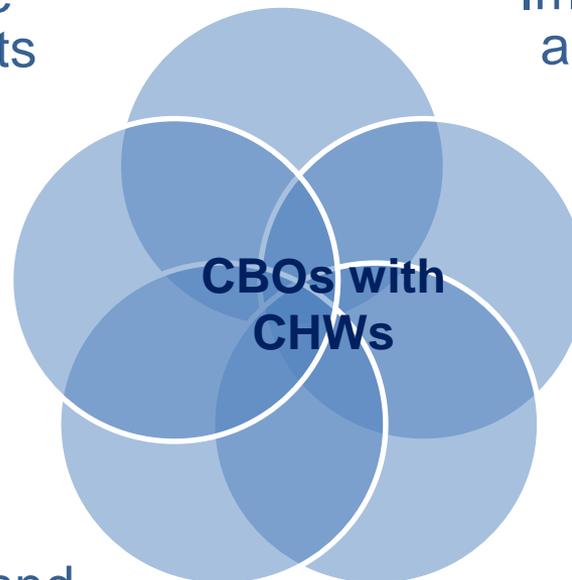
Implement group sessions and 2 follow up sessions

Retain participants during the program and follow-up period

Cover the contents with fidelity

Collect, track, report, and manage data

Participate in project's evaluation activities





Supplementing Program Resources

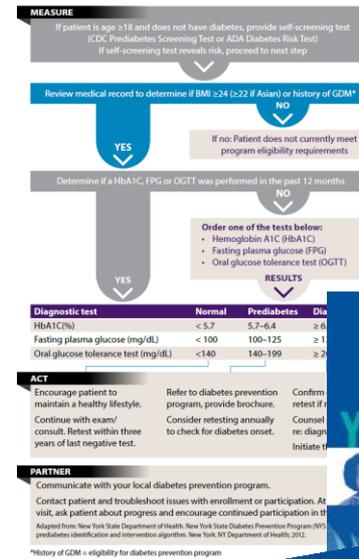
• CDC/AMA toolkit

- Refers people to NDEP’s Small Steps, Big Rewards GAMEPLAN
- Source of additional resources

• Lifestyle change programs

- NDEP resources for ethnic minorities supplement handouts from curriculum

Point-of-care prediabetes identification



Prevent Diabetes STAT | Screen/





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Prevent Diabetes **STAT** **S**creen, **T**est, **A**ct –**T**oday TM

- The AMA and CDC have launched a multi-year initiative as part of the National DPP to reach more Americans with prediabetes, utilizing their collective muscle to offer the tools, resources and training needed to bridge the gap between the clinical setting and communities to achieve a healthier nation
- The AMA and CDC are urging stakeholders to join them in this critical effort to Prevent Diabetes STAT





Goals of Prevent Diabetes **STAT**

- Raise awareness about prediabetes
- Communicate a sense of urgency
- Increase screening, testing and referrals to CDC-recognized diabetes prevention programs
- Rally front-line healthcare providers, community organizations, public health professionals, health systems, employers, insurers, the public and more to ACT today



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Prevent Diabetes **STAT**

- ❑ Dedicated Web site for key stakeholders
- ❑ www.preventdiabetesstat.org

Prevent Diabetes **STAT**



Prevent Diabetes **STAT**

Screen, Test, Act – Today

86 MILLION AMERICAN ADULTS HAVE PREDIABETES

9 OUT OF 10 PEOPLE WITH PREDIABETES DON'T KNOW THEY HAVE IT.

FOR HEALTH CARE PROFESSIONALS

FOR THE GENERAL PUBLIC

Moving Forward: Future Directions for the NDEP

Joanne Gallivan, MS, RD
Director, NIH-NDEP



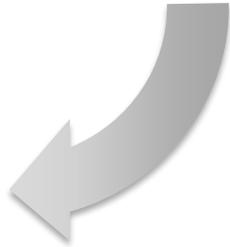
National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Disclosures

- Nothing to disclose

Goal: NDEP's goal is to reduce the burden of diabetes and prediabetes by facilitating the adoption of proven approaches to prevent or delay the onset of diabetes and its complications.



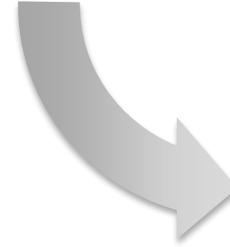
Strategy 1: Behavior Change

Share model programs and resources to develop and sustain a healthy lifestyle with a focus on prevention and/or management.



Strategy 2: Clinical Setting

Share tools, resources and programs that help improve effectiveness in diabetes management and prevention interventions.



Strategy 3: Community Setting

Share tools and resources to improve health outcomes for people with diabetes and people at risk.





Diabetes HealthSense

www.YourDiabetesInfo.org/HealthSense

The screenshot shows the Diabetes HealthSense website. At the top, there is a blue header with the text "Diabetes HealthSense" and "Resources for living well". Below this is a navigation bar with links: "HealthSense Home", "Make a Plan", "Health Care Professionals", "Submit a Resource", and "About HealthSense".

On the left side, there is a "Help Me" section with a "Select one:" dropdown and a list of options: "Eat healthy", "Be active", "Manage my weight", "Cope with stress and emotions", "Set goals", "Stop smoking", "Prevent diabetes-related health problems", "Check my blood glucose", and "Take my medicine". Below this are sections for "I Am A", "Age", "Type of Resource", and "Language".

The main content area features a breadcrumb trail: "You are here: NDEP Home > Resources > Diabetes HealthSense". To the right of the breadcrumb are social sharing buttons for YouTube (Share), Facebook (Share), and Twitter (Tweet), with counts of 231 and 81 respectively. Below these is a search bar with the text "Search HealthSense by title or keyword" and a "Go" button.

The main text reads: "Diabetes HealthSense provides easy access to resources to help you live well and meet your goals—whether you have diabetes or are at risk for the disease." Below this is a quote: "Live well. Eat healthy. Be active. It's not easy, but it's worth it."

On the right side, there is a blue box with a sun icon and text: "The Health Improvement Institute recently named NDEP as the recipient of its 2012 Annual Aesculapius Award, recognizing NDEP's Diabetes HealthSense website for excellence in the communication of reliable information about healthy lifestyles, disease prevention, and health care treatments. Read more."

At the bottom, there is a video player showing a woman walking a white dog on a brick path. The video title is "NDEP Physical Activity Practical Tips and Action Steps". Below the video player is a navigation bar with buttons numbered 1 through 5.

At the very bottom, there is a link: "Watch or download more videos from NDEP".



Medication Adherence

www.YourDiabetesInfo.org/MedicationAdherence

The screenshot shows the NDEP website interface. At the top, there is a navigation bar with links for Home, Publications, Resources, Diabetes Facts, and Press. Below this is a secondary navigation bar with links for 'I Have Diabetes', 'Am I at Risk?', 'Health Care Professionals, Businesses & Schools', and 'Partners & Community Organizations'. A search bar is located in the top right corner. The main content area features a section titled 'Promoting Medication Adherence in Diabetes' with a sub-header 'In this Section' containing links to 'Resources for Patients', 'Resources for Health Care Teams', and 'Scientific Evidence'. A prominent graphic states: 'On average, 50% of medications for chronic diseases are not taken as prescribed.' Below this are three columns of resources: 'Resources for patients' (handouts and websites), 'Resources for health care teams' (videos, presentations, and guides), and 'Scientific evidence' (journal articles). At the bottom, there is a 'Medication facts' link pointing to the National Library of Medicine.



Practice Transformation

www.YourDiabetesInfo.org/PracticeTransformation

The screenshot shows the NDEP website interface. At the top, there is the NDEP logo and navigation links for CDC and NIDDK. A search bar is located on the right. Below the header is a blue navigation bar with links for Home, Publications, Resources, Diabetes Facts, and Press. A secondary navigation bar contains links for 'I Have Diabetes', 'Am I at Risk?', 'Health Care Professionals, Businesses & Schools', and 'Partners & Community Organizations'. The main content area is titled 'Practice Transformation for Physicians and Health Care Teams'. It includes a sidebar with a list of practice transformation topics: Engage Leadership & Assess Practice, Evidence-Based Care, Information Systems, Improve Practice Quality, Clinical Decision Support, Team-Based Care, Patient-Centered Interactions, and Patient Care Coordination. The main text describes the site's purpose in helping healthcare providers implement the Patient-Centered Medical Home (PCMH) model. Below the text are eight small images, each with a caption: 'Engage Leadership and Assess Your Practice', 'Provide Evidence-Based Care', 'Use Information Systems', 'Improve Practice Quality', 'Use Clinical Decision Support', 'Practice Team-Based Care', 'Enhance Patient-Centered Interactions', and 'Improve Patient Care Coordination'.

Resources for Health Care Professionals



NDEP National Diabetes Education Program
NDEP is a partnership of the National Institutes of Health, the Centers for Disease Control and Prevention, and more than 200 public and private organizations.

Home Publications Resources Diabetes Facts Press

I Have Diabetes Am I at Risk? Health Care Professionals, Businesses & Schools Partners & Community Organizations

GAME PLAN for Preventing Type 2 Diabetes

A Toolkit for Health Care Professionals and Teams

You are here: NDEP Home > Health Care Professionals, Businesses & Schools > Health Care Professionals > GAME PLAN for Preventing Type 2 Diabetes

In this Section

- GAME PLAN for Preventing Type 2 Diabetes
 - > [Prediabetes Screening: How and Why](#)
 - > [How to Talk with Patients](#)
 - > [Help Your Patients Make Lifestyle Changes](#)
 - > [Reimbursement and Coding](#)
 - > [Facts and Statistics](#)
 - > [Related Resources](#)

Introduction

Since 2001, the National Institutes of Health (NIH)-sponsored [Diabetes Prevention Program \(DPP\)](#) and subsequent other strong research studies have shown that intensive lifestyle interventions and select medications are cost-effective in preventing or delaying type 2 diabetes in adults with prediabetes.^{1,2}

Given the extraordinary burden of diabetes on patients, their families, the medical community, society, and the economy, the National Diabetes Education Program (NDEP) has prepared this toolkit to provide health care professionals and teams with evidence and resources to identify, counsel, and support patients to prevent or delay the onset of type 2 diabetes.



Prediabetes Screening: How and Why

- Better patient outcomes
- Risk factors
- Recommended tests
- Decision pathway



How to Talk with Patients About Their Prediabetes Diagnosis

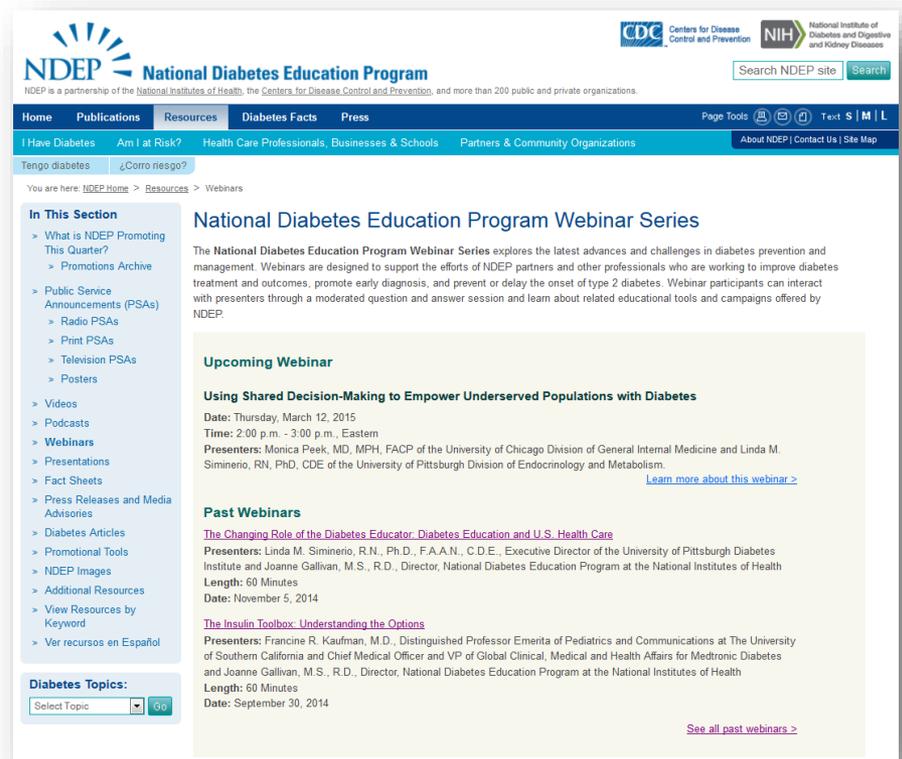
- Do's and Don'ts for the patient encounter
- Teach-back method
- Behavior change strategies



Help Your Patients Make Lifestyle Changes After a Prediabetes Diagnosis

- Team approach
- Evidence-based plans
- Patient resources and referrals

www.YourDiabetesInfo.org/GAMEPLAN



NDEP National Diabetes Education Program
NDEP is a partnership of the National Institutes of Health, the Centers for Disease Control and Prevention, and more than 200 public and private organizations.

Home Publications Resources Diabetes Facts Press

I Have Diabetes Am I at Risk? Health Care Professionals, Businesses & Schools Partners & Community Organizations

Tengo diabetes ¿Corro riesgo?

You are here: NDEP Home > Resources > Webinars

National Diabetes Education Program Webinar Series

The **National Diabetes Education Program Webinar Series** explores the latest advances and challenges in diabetes prevention and management. Webinars are designed to support the efforts of NDEP partners and other professionals who are working to improve diabetes treatment and outcomes, promote early diagnosis, and prevent or delay the onset of type 2 diabetes. Webinar participants can interact with presenters through a moderated question and answer session and learn about related educational tools and campaigns offered by NDEP.

Upcoming Webinar

Using Shared Decision-Making to Empower Underserved Populations with Diabetes

Date: Thursday, March 12, 2015
 Time: 2:00 p.m. - 3:00 p.m., Eastern
 Presenters: Monica Peek, MD, MPH, FACP of the University of Chicago Division of General Internal Medicine and Linda M. Siminero, RN, PhD, CDE of the University of Pittsburgh Division of Endocrinology and Metabolism.
[Learn more about this webinar >](#)

Past Webinars

[The Changing Role of the Diabetes Educator: Diabetes Education and U.S. Health Care](#)
 Presenters: Linda M. Siminero, R.N., Ph.D., F.A.A.N., C.D.E., Executive Director of the University of Pittsburgh Diabetes Institute and Joanne Gallivan, M.S., R.D., Director, National Diabetes Education Program at the National Institutes of Health
 Date: 60 Minutes
 Date: November 5, 2014

[The Insulin Toolbox: Understanding the Options](#)
 Presenters: Francine R. Kaufman, M.D., Distinguished Professor Emerita of Pediatrics and Communications at The University of Southern California and Chief Medical Officer and VP of Global Clinical, Medical and Health Affairs for Medtronic Diabetes and Joanne Gallivan, M.S., R.D., Director, National Diabetes Education Program at the National Institutes of Health
 Length: 60 Minutes
 Date: September 30, 2014

[See all past webinars >](#)

Diabetes Topics:
 Select Topic

www.YourDiabetesInfo.org/Webinars

NDEP Publications Reviewed for Plain Language Principles

www.YourDiabetesInfo.org/Publications



Reviewed for Plain Language Principles



Working with Partners to Support Systems Change: ACP

- The American College of Physicians incorporated the Practice Transformation website into a training module for their ACP Quality Champions in Diabetes.
- The goal of the training was to advance understanding of key practice transformation and quality improvement strategies.



www.acponline.org



www.YourDiabetesInfo.org/PracticeTransformation



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

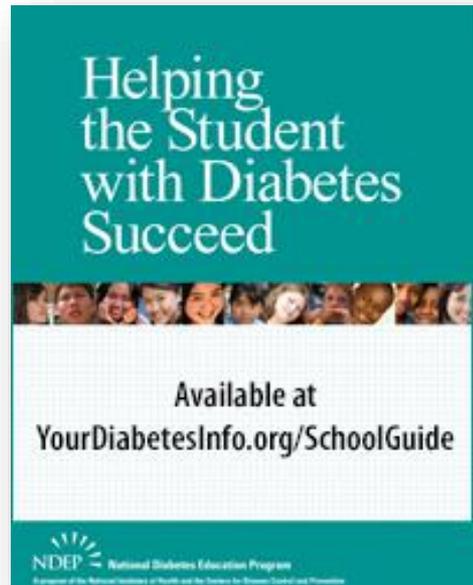
Working with Partners to Provide Better Diabetes Care for Students: ADA

- **ADA Partnership Activities**

- Provides organizational expertise and input in the development of (and updates to) NDEP's *School Guide*
- Incorporates the *School Guide* as part of its "Safe at School" initiative
- Cross-promotion



www.diabetes.org/safeatschool





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Working with Partners to Provide Support and Behavior Change: AADE and Diabetes HealthSense

- Input on evaluation plans and instruments
- Access to AADE's membership
- Recruitment of evaluation sites and participants
- Contributions to final reports and/or evaluation manuscripts



American Association
of Diabetes Educators

www.diabeteseducator.org

2012 Aesculapius Award Winner

Diabetes HealthSense

Change
begins with
just one step.

Find resources
for living well 



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

[www.YourDiabetesInfo.org/
HealthSense](http://www.YourDiabetesInfo.org/HealthSense)



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Support for Clinical Trials

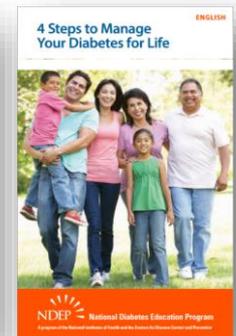
- D2d Vitamin D and Type 2 Diabetes Ancillary Study
- GRADE Study
- RAPID Study
- All use NDEP patient education materials as part of intervention



www.d2dstudy.org



<https://portal.bsc.gwu.edu/web/grade>





NDEP National Diabetes Survey (NNDS)

- Provides specific and timely data about the population's diabetes KAP's
- Conducted in 2006, 2008, 2011, and 2014
- 2011 results showed continued lack of awareness of diabetes and CVD link

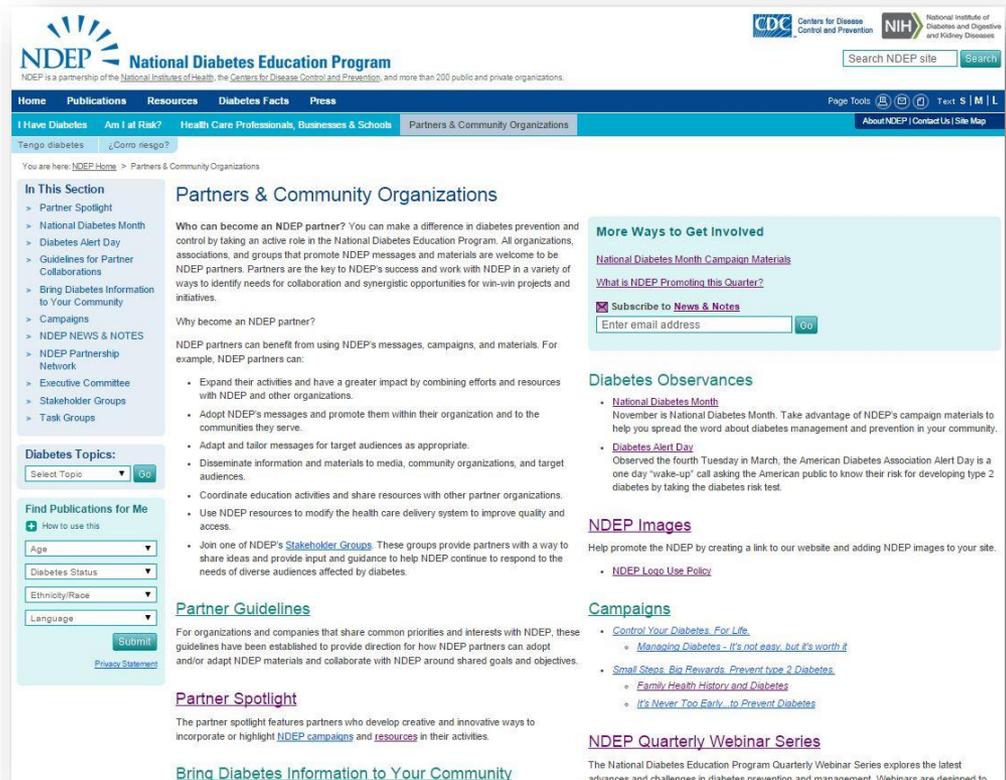
– NDEP Campaign:



- 2014 focus: self-management, self-care, perceived risk

Ways You Can Get Involved

- Stakeholder Groups
- Task Groups
- Pretesting
- Technical Reviewers
- News & Notes
- Webinars
- Social Media



The screenshot shows the NDEP website with the following content:

- Navigation:** Home, Publications, Resources, Diabetes Facts, Press, I Have Diabetes, Am I at Risk?, Health Care Professionals, Businesses & Schools, Partners & Community Organizations.
- Search:** Search NDEP site
- Page Tools:** Page Tools, Text, S, M, L
- Breadcrumb:** You are here: NDEP Home > Partners & Community Organizations
- In This Section:**
 - > Partner Spotlight
 - > National Diabetes Month
 - > Diabetes Alert Day
 - > Guidelines for Partner Collaborations
 - > Bring Diabetes Information to Your Community
 - > Campaigns
 - > NDEP NEWS & NOTES
 - > NDEP Partnership Network
 - > Executive Committee
 - > Stakeholder Groups
 - > Task Groups
- Diabetes Topics:** Select Topic [Go]
- Find Publications for Me:**
 - How to use this
 - Age [Dropdown]
 - Diabetes Status [Dropdown]
 - Ethnicity/Race [Dropdown]
 - Language [Dropdown]
 - Submit
 - Privacy Statement
- Partners & Community Organizations**

Who can become an NDEP partner? You can make a difference in diabetes prevention and control by taking an active role in the National Diabetes Education Program. All organizations, associations, and groups that promote NDEP messages and materials are welcome to be NDEP partners. Partners are the key to NDEP's success and work with NDEP in a variety of ways to identify needs for collaboration and synergistic opportunities for win-win projects and initiatives.

Why become an NDEP partner?

NDEP partners can benefit from using NDEP's messages, campaigns, and materials. For example, NDEP partners can:

 - Expand their activities and have a greater impact by combining efforts and resources with NDEP and other organizations.
 - Adopt NDEP's messages and promote them within their organization and to the communities they serve.
 - Adapt and tailor messages for target audiences as appropriate.
 - Disseminate information and materials to media, community organizations, and target audiences.
 - Coordinate education activities and share resources with other partner organizations.
 - Use NDEP resources to modify the health care delivery system to improve quality and access.
 - Join one of NDEP's **Stakeholder Groups**. These groups provide partners with a way to share ideas and provide input and guidance to help NDEP continue to respond to the needs of diverse audiences affected by diabetes.

Partner Guidelines

For organizations and companies that share common priorities and interests with NDEP, these guidelines have been established to provide direction for how NDEP partners can adopt and/or adapt NDEP materials and collaborate with NDEP around shared goals and objectives.

Partner Spotlight

The partner spotlight features partners who develop creative and innovative ways to incorporate or highlight [NDEP campaigns](#) and [resources](#) in their activities.

[Bring Diabetes Information to Your Community](#)
- More Ways to Get Involved**
 - [National Diabetes Month Campaign Materials](#)
 - [What is NDEP Promoting this Quarter?](#)
 - [Subscribe to News & Notes](#)
 - Enter email address [Input] [Go]
- Diabetes Observances**
 - [National Diabetes Month](#)
November is National Diabetes Month. Take advantage of NDEP's campaign materials to help you spread the word about diabetes management and prevention in your community.
 - [Diabetes Alert Day](#)
Observed the fourth Tuesday in March, the American Diabetes Association Alert Day is a one day "wake-up" call asking the American public to know their risk for developing type 2 diabetes by taking the diabetes risk test.
- NDEP Images**
Help promote the NDEP by creating a link to our website and adding NDEP images to your site.
 - [NDEP Logo Use Policy](#)
- Campaigns**
 - [Control Your Diabetes: For Life](#)
 - [Managing Diabetes - It's not easy, but it's worth it](#)
 - [Small Steps: Big Rewards: Prevent type 2 Diabetes](#)
 - [Family Health History and Diabetes](#)
 - [It's Never Too Early... to Prevent Diabetes](#)
- NDEP Quarterly Webinar Series**
The National Diabetes Education Program Quarterly Webinar Series explores the latest advances and challenges in diabetes prevention and management. Webinars are designed to

<http://ndep.nih.gov/partners-community-organization>

Moving Forward: Future Directions for the NDEP

Judith A. McDivitt, PhD

Director, National Diabetes Education Program
Centers for Disease Control and Prevention



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention



National Institutes
of Health





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Presenter Disclosure

No conflict of interest



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Goal: NDEP's goal is to reduce the burden of diabetes and prediabetes by facilitating the adoption of proven approaches to prevent or delay the onset of diabetes and its complications.

Strategy 1: Behavior Change

Promote model programs to develop and sustain a healthy lifestyle with a focus on prevention and/or management.



Strategy 2: Clinical Setting

Promote models and strategies for team care.



Strategy 3: Community Engagement

Increase adoption of tools and resources to improve health outcomes for people with diabetes and people at risk.





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Working with States and Cities



Build support for healthy lifestyles

- Partner networks
- Tailored communications



Health system interventions

- Team-based care
- Systems to identify & refer people with prediabetes



Community-clinical linkages

- Diabetes Self-management Education access
- Lifestyle change programs



Working in Communities

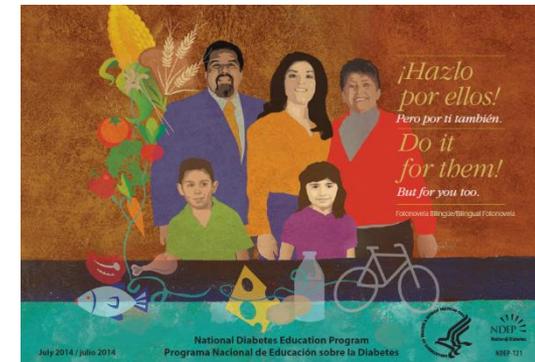
- Community-based organizations
- Community Health Workers
- Business and worksite community



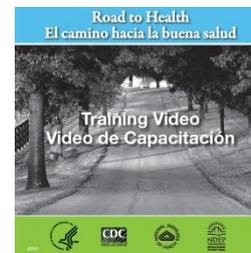


Supporting Community-based Organizations and Individuals

- Build capacity
 - Toolkits
 - Training
 - Technical assistance
- Link partners
- Provide access to culturally-appropriate resources



NDEP National Diabetes Education Program
A program of the National Institutes of Health and the Centers for Disease Control and Prevention





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Supporting Community Health Workers

- Build relationships
- Increase capacity related to diabetes
- Facilitate inclusion of diabetes in certification requirements
- Develop key guidance documents





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Supporting Businesses and Worksites

www.DiabetesAtWork.org

The screenshot shows the homepage of the Diabetes at Work website. The header is dark blue with the NDEP logo and program name on the left, and a 'Login' link on the right. A navigation menu below the header includes 'Home', 'About', 'Diabetes Basics', 'Plan', 'Build', 'Promote', and 'Resources'. The main content area features a large image of a smiling woman in a yellow shirt. To the left of the image is a text box with statistics: 'Diabetes accounts for 15 million work days absent and 120 million work days with reduced performance.' Below this is a sub-header 'What's New' with a snippet about wellness programs for obese workers. To the right of the main image is a 'Spotlight On...' section with a photo of a doctor and a patient, titled 'Diabetes is a Common Disease', and a 'More success stories' button. At the bottom, there are sections for 'Featured Resources' (listing 'GAME PLAN Fat and Calorie...' and 'Diabetes Snapshot') and 'Quick Links' (listing 'Lesson Plans' and 'Depression CE').

Diabetes at Work

A project of the National Diabetes Education Program



[Login](#)

- [Home](#)
- [About](#)
- [Diabetes Basics](#)
- [Plan](#)
- [Build](#)
- [Promote](#)
- [Resources](#)

Diabetes accounts for 15 million work days absent and 120 million work days with reduced performance.

Let's prevent and manage diabetes. It's good for employees and good for business.



Spotlight On...



Diabetes is a Common Disease

Diabetes is a common disease, yet every individual needs unique care. We encourage people with diabetes ...

[More success stories](#)

What's New

Use wellness programs to help obese workers, attorneys say

Featured Resources

- [GAME PLAN Fat and Calorie...](#)
- [Diabetes Snapshot](#)

Quick Links

- [Lesson Plans](#)
- [Depression CE](#)



Empowering Partners

- Provide easy access to science-based relevant resources
 - Website
 - Collections of resources
 - Webinars
 - Training and technical assistance

www.CDC.gov/diabetes/NDEP

The screenshot shows the CDC National Diabetes Education Program website. At the top, it features the CDC logo and the text "Centers for Disease Control and Prevention CDC 24/7: Saving Lives. Protecting People." Below this is a navigation bar with an "A-Z Index" and a search box. The main heading is "National Diabetes Education Program" with the NDEP logo. A featured "New e-Card" highlights a "Road to Health Toolkit e-card" and asks "Do you work with Hispanic/Latino communities?". Below the e-card are four boxes: "About Us", "Partnerships", "Find Educational Resources", and "Training and Technical Assistance". To the right, there is an "ORDER NOW" button and a "More NDEP Information at NIH" section. At the bottom, there are "Collections of Resources for Specific Groups" and "Related Links" including NIH NDEP, CDC Division of Diabetes Translation, CDC National Diabetes Prevention Program, NIDDK Clearinghouse, and a link to "Working Together to Manage Diabetes: A Toolkit for Pharmacv. Podiatrv."



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Collections of Resources

- African American/African Ancestry
- American Indian/Alaska Native
- Asian American/Native Hawaiian/Pacific Islander
- Hispanic/Latino
- Pharmacy, Podiatry, Optometry and Dentistry (PPOD)
- Community Health Workers



Webinars



Exploring Team Care



What Can PPOD Providers Do?

- PPOD providers can:
 - Embrace a team approach to diabetes care.
 - Recognize signs of diabetes and systemic concerns across all PPOD areas.
 - Reinforce the importance of annual screenings and healthy habits.
 - Educate patients about diabetes.
 - Encourage self-management.
 - Provide treatment.



Community Health Workers: Their Role in Preventing and Controlling Chronic Conditions



Alberta Mirambeau, Ph.D., M.P.H., CHES
Division for Heart Disease and Stroke Prevention,
CDC/Lieutenant U.S. Public Health Service



Bina Jayapaul-Phillip, Ph.D.
Division of Diabetes Translation, CDC



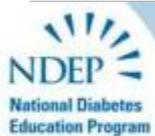
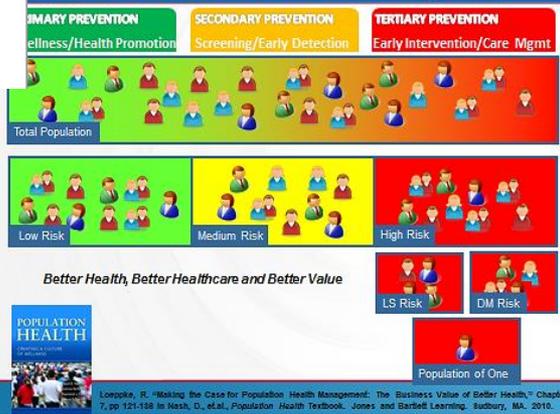
J. Nell Brownstein, Ph.D.
Division for Heart Disease and Stroke Prevention,
CDC (Retired)



Pamela Smart, L.R.N., CHW
Northeastern Vermont Regional Hospital



Whole Population Health Management



Population Health Management ... Improving health where we live, work and play



Living a Balanced Life With Diabetes: An Introductory Webinar

Shondra McCage, M.P.H., CHES
Michelle Owens-Gary, Ph.D.

On behalf of NDEP's American Indian/Alaska Native Stakeholder Group



Partner Activities

- Identify needs
- Collaborate on strategies
- Ensure relevance
- Incorporate, adopt, and adapt
- Extend reach





National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Alone we can do so little; together we can do so much.

Helen Keller



National Diabetes Education Program

A program of the National Institutes of Health and the Centers for Disease Control and Prevention

Join Us!

www.YourDiabetesInfo.org

Joanne.Gallivan@nih.gov

www.cdc.gov/diabetes/ndep

JMcDivitt@cdc.gov