# **Overview of the NC Diabetes Prevention and Management Guide**



### North Carolina Diabetes Advisory Council

Ronny Bell, Ph.D., MS, Chair Jan Nicollerat, MSN, RN, ACNS-BC, CDE, Vice Chair

# A SNAPSHOT DIABETES



#### DIABETES

### 1,030,000 in North Carolina



29.1 million people have diabetes



do not know they have diabetes

#### PREDIABETES





86 million people more than 1 out of 3 adults — have prediabetes

### 2,500,000 in North Carolina



### Age-adjusted Prevalence of Obesity and Diagnosed Diabetes Among U.S. Adults Aged 18 Years or Older









North Carolina : Percentage of Adults (aged 18 years or older) with Diagnosed Diabetes, 1994-2010



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System





### http://www.nature.com/nrendo/journal/v8/n4/full/nrendo.2011.183.html

# Racial and ethnic differences in diagnosed diabetes among people aged 20 years or older, United States, 2010–2012

# Age-adjusted\* percentage of people aged 20 years or older with diagnosed diabetes, by race/ethnicity, United States, 2010–2012



\*Based on the 2000 U.S. standard population.

Source: 2010–2012 National Health Interview Survey and 2012 Indian Health Service's National Patient Information Reporting System.







Total medical costs and lost work and wages for people with diagnosed diabetes

Risk of death for adults with diabetes is



\$\$

Medical costs for people with diabetes are **twice as high** as for people without diabetes

### 7<sup>th</sup> Leading Cause of Death





Search MedlinePlus

GO

Español

About MedlinePlus Site Map FAQs Contact Us

Health Topics Drugs & Supplements Videos & Tools

Home  $\rightarrow$  Latest Health News  $\rightarrow$  Article

#### HealthDay

#### New Diabetes Cases Among Americans Drop for First Time in Decades: CDC

But another report shows U.S. has more cases than 37 other developed nations

By Robert Preidt Tuesday, December 1, 2015



TUESDAY, Dec. 1, 2015 (HealthDay News) -- In a sign that Americans may finally be turning the corner in the fight against diabetes -- and possibly obesity -- federal health statistics released Tuesday show that the number of new cases of diabetes has dropped for the first time in decades.

The decline wasn't sudden or dramatic. But, the number of new

diabetes cases went from 1.7 million in 2009 to 1.4 million in 2014, according to the U.S. Centers for Disease Control and Prevention.

"It seems pretty clear that incidence rates have now actually started to drop. Initially it was a little surprising because I had become so used to seeing increases everywhere we looked," CDC researcher Edward Gregg told *The New York Times*.

The proportion of Americans with diabetes is still twice what it was in the early 1990s. And not every racial group has made strides against the blood sugar disease, which is often triggered by obesity and lack of exercise.

Also, another report released Tuesday at the World Diabetes Congress in Vancouver, Canada, shows that the United States still has the highest diabetes rate among 38 developed nations.

However, the CDC report offers some encouraging indications that Americans may finally be adopting healthier lifestyles.

For example, fewer whites are now being diagnosed with diabetes -- typically type 2 diabetes, by far the most common form of the disease. But, blacks and Hispanics haven't seen significant declines in diagnoses even though a downward trend is starting to emerge, the CDC report showed.

Educated Americans also have seen improvements in diabetes diagnoses, while the less educated



Related MedlinePlus Health Topics

Diabetes

Health Statistics

### Where we have been.....

### • The Diabetes Prevention and Control Branch:

- Initially funded by CDC 1981
- Merged with Project DIRECT in 2000
- Had approximately 8 FTE's

### • The Diabetes Advisory Council:

- Started in Northeastern North Carolina in 1984
- Appointed by the State Health Director
- Included 35 members



# Key DAC Leadership

- Joe Konen MD- Chair
- Betty Lamb
- John Bowdish
- Janet Reaves
- Myrna Miller Wellons Vice Chair
- John Buse MD





### **Previous Partnership Success**

- Insurance coverage of diabetes testing supplies and self management education ) HB 5 - 1997
- One of the first states to pass legislation requiring care for school children with diabetes
- Developed and distributed Patterns of Care Guidelines to hundreds of providers across the state
- Developed diabetes self management curriculum before standard ADA and AADE DSME curriculums existed
- Implemented one of the largest and longest running participatory based research programs in the U.S.



## **School Policy**

- S.L. 2002-003
  - One of the first State's to pass a law protecting children with diabetes in school
  - Through public-private partnerships over 400 school personnel have been trained in curriculum

### • S.L.2009-563

- Requires annual compliance reporting
- In 2010 all public non-charter schools reported and half of charter schools
- In 2011 100% of charter and non-charter public schools reported





# **Other Policy Activities**

### • Blue Cross and Blue Shield of North Carolina

- Unlimited visits to the RD for some people with diabetes
- Allowed Registered Dieticians to become credentialed providers
- Reimbursement for Diabetes Self Management Education and Medical Nutrition Therapy

### • N.C. Medicaid

- Contract evaluation for diabetes testing supplies
- Consideration of eliminating prior approval for Medical Nutrition Therapy and expanding service

### National

- H.R. 2787 The Diabetes Self-Management Training Act of 2011
- Fix the oversight of the Balanced Budget Act of 1997 which excluded CDEs as Medicare providers of DSMT- still not resolved in 2015



### *The Access to Quality Diabetes Education Act of* 2015 – (S. 1345 /H.R. 1726)

The "Access to Quality Diabetes Education Acts," Amends title XVIII (Medicare) of the Social Security Act to:

- Designate Certified Diabetes Educators (CDE) as Medicare-approved providers of Diabetes Self-Management Training (DSMT) services.
- Permit DSMT to be provided to patients via telehealth by a CDE.

### Cost:

- The bill was scored by both the Congressional Budget Office (CBO) and the Centers for Medicare and Medicaid Service (CMS) as having a little to no impact on the federal budget.
- Another study found that enactment of the bill would actually save the Medicare program \$2 billion over 10 years.
- A 3-year retroactive claims analysis showed an average Medicare cost savings per month/per patient of \$135 for those beneficiaries who complete DSMT. Inpatient hospital cost savings were higher, \$160/ per month/per patient





### Eat Smart- Move More- Weigh Less for Diabetes

- Partnership with Physical Activity and Nutrition Branch
- Pilot Project 8/1/11-12/1/11
- Bladen, Columbus, Hoke, Surry Counties
- Average attendance = 16
- Total pounds lost = 769





# Kidney Initiative (10/11-10/13)

- N.C. was one of 5 states to receive a national grant to work on diabetic kidney disease
- Partnership with N.C. Community Health Center Association and UNC Kidney Center
- Quality Improvement around diagnosing diabetic kidney disease and referral to diabetes self management education and improved clinical care



### NC Medical Journal – 2011



### **Confronting the Diabetes Epidemic**

The policy forum of this issue reviews activities to prevent and control diabetes in North Carolina. Topics considered include the epidemiologic characteristics of the diabetes burden, the role of community health workers in diabetes education and care, and the influence of federal and state policies on programs and services for individuals with or at risk for diabetes. Original articles in the issue complement the policy forum by looking at characteristics associated with glycemic control, diabetes care provided by school nurses, a program to increase retinal screening among diabetic individuals, and diabetes prevention and control

services in North Carolina health departments. Elsewhere in the issue, experts review allied health's contributions to health reform in North Carolina. **TABLE OF CONTENTS** | **FULL ISSUE (pdf)** »



### Statewide Plan for Diabetes Prevention and Control



### Diabetes Strategic Plan 2011-2015



#### **Table of Contents**

Chapter 1: The Burden of Diabetes

Overview	4
Diabetes Disparities	5
Children and Diabetes in North Carolina	5
Diabetes Mortality	8
Diabetes Risk Factors	
Diabetes Complications	9
Preventive Care Practices	11
Diabetes Cost	12

#### Chapter 2: Diabetes Prevention and Management Efforts in North Carolina

Leadership and Partnerships	11
Progress on 2005-2010 North Carolina Diabetes Strategic Plan	13

#### Chapter 3: Diabetes Prevention and Management Strategies

Developing the Plan	
Evidence and Best Practices	15
Strategy Framework	
Strategic Priorities	

#### Chapter 4: Evaluation

Logic Model	
Process Evaluation	
Outcome Monitoring	

#### Chapter 5: Planning to Action: Building on Past Success

Logic Model	
Process Evaluation	

#### Attachments

Outcome Monitoring Indicators
Diabetes Strategic Planning Meeting Participants, March 18-19, 2010

NC Diabetes Strategic Plan 2011-2015

- 1 - NC DHHS / N.C. Diabetes Prevention and Control



### **Partnerships Make the Difference**



North Carolina Diabetes Advisory Council

## **Changes over the past 3 years**

- Decrease in all funding for diabetes
- Changes in CDC goals/objectives/initiatives
- Reorganization and Integration of chronic disease branches (Diabetes, Heart, Cancer, Tobacco, Health Promotion, etc into one : Community and Clinical Connections for Promotion of Health Branch ( CCCHP)

- Expansion of DERP program
- Focus on diabetes to include DPP, prediabetes, prevention and management of complications per CDC initiatives
- Collaboration with community stakeholders to bring this to fruition
- Development of NC Diabetes Action Plan and Guidelines



North Carolina Diabetes Advisory Council



# DAC

### North Carolina Diabetes Advisory Council

Ronny Bell, Chair Wake Forest School of Medicine Jan Nicollerat, Vice Chair Adult Clinical Nurse Specialist, Diabetes and CDE

The Diabetes Advisory Council (DAC) is an advocacy group working to reduce the burden of diabetes through coordination among stakeholders in diabetes prevention and management in North Carolina.

#### Core Responsibilities include:

- Emphasize screening and prevention, early detection, treatment and selfmanagement training for diabetes prevention and control as a health priority for all North Carolinians.
- Use clinical advancements, data and technology to provide scientific credibility and public validity for new service priority areas and interventions.
- Foster interagency collaboration and networking for identification, utilization and expansion of resources for diabetes prevention and control services.
- Evaluate, present and propose strategies for the prevention and control of diabetes in North Carolina in terms of assessed need. estimated costs, potential benefits and probability of success of each strategy.



Staff Contact: April Reese, Health Systems Unit Manager April.Reese@dhhs.nc.gov









### **Guide Development**



### North Carolina's Guide to Diabetes Prevention and Management 2015-2020



Manage weight | Live tobacco free | Participate in lifestyle change programs | Participate in diabetes education | Adhere to treatment plan | Get adequate sleep

### **Community & Clinical CONNECTIONS** for Prevention & Health

Branch NORTH CAROLINA DIVISION OF PUBLIC HEALTH



### The Guide is a collaboration of the Division of Public Health and the Diabetes Advisory Council.

### Timeline for Development of the Diabetes Action Plan and Guide

#### NC Diabetes Strategic Plan

- Highlight the social determinants of health and looks for whole person solutions
- •Coordination across disease states and risk factors like obesity and tobacco use
- •Promoting physical activity in planning and particularly walking
  - •Encourage use of community health workers to prevent and manage diabetes
  - Promote quality clinical guidelines like diabetes screening and education recommendations

#### •NC Coordinated Chronic Disease and Injury Prevention State Plan

- Expand access to and increase coordination for screening and clinical preventive services for all North Carolinians
- Provide individuals with the tools and knowledge they need to manage their health condition(s)
  - Maintain or improve quality of life and build community capacity to provide prevention and self-management programs for chronic diseases.

#### Multiple Events and documents by Partners

- •Increase the number of CDC recognized lifestyle change programs
- •Increase the number of people who are aware that they have pre-diabetes
- •Increase access to diabetes and pre-diabetes education for the underserved population
- Provide third party reimbursement for DPP
- Provide technical assistance for billing DSME
- •Extend pregnancy Medicaid to allow for A1c post-pregnancy diabetes testing

#### •NC Legislatively Required Diabetes Action Plan

- •Third party reimbursement for DPP
- •Gestational diabetes follow-up

2015

#### •NC Guide to Diabetes Prevention and Management

- Six core principles of diabetes prevention: increased physical activity, weight management, smoking cessation, individual and group education, quality healthcare and medication adherence
- •Activities for Communities, Employers, Healthcare Providers
  - •Sorted by Primary Prevention, Diabetes Prevention and Prevention of Diabetes Complications



## North Carolina's Guide to Diabetes Prevention and Management 2015-2020: Goals

To provide specific strategies for community groups, employers and healthcare providers to help people manage their risk for developing diabetes, gain and maintain control of diabetes as well as reducing risks for related complications



### North Carolina's Guide to Diabetes Prevention and Management 2015-2020: Goals

- To provide specific strategies for community groups, employers and healthcare providers to help people manage their risk for developing diabetes
- To gain and maintain control of diabetes
- To reduce risks for diabetes related complications
- To develop, design, implement & advocate for policy changes as needed to reduce the burden of diabetes in North Carolina



### **Socioecological Model of Health**





## Socioecological Model of Health: Evidence-Based Strategies—Community

Diabetes Primary Prevention	Diabetes Prevention for People at High Risk	Diabetes Management and Prevention of Complications
Incent the building of supermarkets in low-income food deserts.	Work with health care providers or state agencies to train your Community Health Workers to screen for diabetes and refer to appropriate care	Offer support groups for people who have diabetes and their caregivers
		-DAC

North Carolina Diabetes Advisory Council

### Socioecological Model of Health: Evidence-Based Strategies—Healthcare

Diabetes Primary Prevention	Diabetes Prevention for People at High Risk	Diabetes Management and Prevention of Complications
Advocate for walkable communities	Point of care testing	Develop standing orders for diabetes screening





### Socioecological Model of Health: Evidence-Based Strategies—Worksites

Prevention	Diabetes Prevention for People at High Risk	Diabetes Management and Prevention of Complications
Establish at least 10 consecutive hours per day of protected time off-duty to allow workers to obtain no fewer than 7-8 hours of sleep.	Offer DPP as a covered benefit	Premium reductions for medication adherence or well-controlled diabetes

### Socioecological Model of Health: Measurement

**Primary Prevention of Diabetes** 

Increase the number of organizations that support diabetes primary prevention by 2020

Increase the number of legislative/regulatory policies that support diabetes primary prevention strategies by 2020



### Socioecological Model of Health: Measurement

**Diabetes Prevention for Those at High Risk** 

Increase the number of people who know that they have prediabetes from 644,000 to 967,000 by 2020. (source: BRFSS and population data estimates for North Carolina from State Center for Health Statistics)

Increase the number of people in North Carolina who enroll in a diabetes prevention program that is recognized by the CDC from 740 (in July 2015) to 5,000 by 2020. (source: CDC DPRP State Level report)


### Socioecological Model of Health: Measurement

**Diabetes Management and Prevention of Complications** 

Increase the number of people in North Carolina with type 2 diabetes who have taken a diabetes class from 484,000 to 533,000. (source: BRFSS and population data estimates for North Carolina from State Center for Health Statistics)

Increase the number of people in North Carolina with type 2 diabetes who enroll in a recognized Diabetes Self Management Program from 36,000 to 50,000 by 2020. (source: CDC report)



#### FIGURE 2:

#### Lifetime Risk Management for Developing and Controlling Type 2 Diabetes

The risk of developing diabetes increases with age.





eet\_Diabetes\_ FINAL\_Aug2014.pdf

lerat, Janet A - O... 🔒 Bookmarks Menu

Automatic Zoom 🗘

\_

+

#### Community & Clinical CONNECTIONS for Prevention & Health

Branch NORTH CAROLINA DIVISION OF PUBLIC HEALTH

# TYPE 2 DIABETES IN NORTH CAROLINA Fact Sheet

#### What is diabetes?

- Diabetes is a group of diseases marked by high levels of blood glucose (sugar) resulting from defects in the production or action of insulin, a hormone that regulates blood glucose levels.
- Diabetes can lead to serious complications and premature death, but people with diabetes, working together with their support network and their health care providers, can take steps to control the disease and lower the risk of complications.
- Type 2 diabetes accounts for about 90% to 95% of all diagnosed cases of diabetes in adults.

#### How many people have diabetes?

- Diabetes is the seventh leading cause of death in both the United States and North Carolina.<sup>1,2</sup> In 2012, diabetes was the primary cause for 2,401 deaths (almost 3% of all deaths) and a contributing cause to many more deaths in North Carolina.<sup>2</sup>
- An estimated 25.8 million adults in the United States have diabetes, and of these, over a quarter (7 million individuals) do not know that they have the disease.<sup>3</sup> In North Carolina, almost 750,000 adults report having been diagnosed with diabetes by a health professional.<sup>4</sup> Assuming that national rates also apply to North Carolina, then up to an additional 280,000 North Carolinians may have diabetes but are unaware of their condition.



Figure 1. Prevalence of modifiable risk factors for diabetes, North Carolina, 2011-2012

 In North Carolina, less than three out of every five adults (58.6%) without a known diagnosis of diabetes have had a blood sugar test within the past three years.<sup>7</sup>

#### What are the treatment options for diabetes?

Data Source: North Carolina State Center for Health Statistics. www.schs.state.nc.us/data/briss/survey.htm. Accessed 05/2014.



#### DPP Programs in NC 2012 Diabetes Prevention Programs in North Carolina







lerat, Janet A - O... 🔚 Bookmarks Menu

#### th Carolina ance for Health

### DAC is a Race to Quit Partner



**Acharlotte**chamber



Ut takes place in 95 cities nationwide. With more

than 100,000 walkers who are walking for so many, there are so many stories, and so many who have been touched by diabetes.

Raleigh, NC....November 7, 2015 Dorothea Dix Campus





# **YMCA Partners: DPP programs**

#### **86 MILLION HAVE PREDIABETES**

#### ONLY 9 MILLION ARE ABOUT 9 AWARE OF IT

Source: Centers for Disease Control and Prevention (2014)

ymca.net/diabetes



The National Connection for Local Public Health











## Press Release and Rollout Coming: November 30, 2015!



# Tips for talking with the press about diabetes



### How to Promote the Guide

- Share copies and information about the Guide with partners who may not be aware of the Guide and how their work aligns with the Guide
- Link to the Guide on your organization's website
- Send out a press release about the Guide
- Include information about the Guide in newsletters
- Use social media to share the Guide



#### **Tracking Successes—Online**



This site is a tool for North Carolina citizens and providers to reduce the impact of diabetes through leadership, education, communication and community involvement. Its vision is to achieve a healthier and more productive state by reducing the number of North Carolinians who develop diabetes by targeting the risk factors for diabetes through community, clinical and institutional cooperation.



Diabetes NC Website



Contact: April Reese • 1915 MSC • Raleigh, NC 27599 • info@DiabetesNC.com

#### Tracking Successes—Where to share?

- Newsletters
- Print materials
- Social Media
- Presentations





### Thank you!

