Diabetes in North Carolina

Women in Government Diabetes State Briefing
June 20, 2012
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Presentation Overview

- Burden of Diabetes
- North Carolina response
- What’s next
Diabetes in North Carolina

Percentage of North Carolina Adults Who Answered Yes to "Have you ever been told by a doctor that you have diabetes?" by Area Health Education Center (AHEC) Regions, 2009

Legend
Percent
73 - 8.2
8.3 - 9.6
9.7 - 12.0
12.1 - 13.6
AHEC Regions
County Boundaries

Source: 2009 Behavioral Risk Factor Surveillance System (BRFSS)
Estimated Number of Adults with Chronic High Blood Glucose Levels in North Carolina 2009

North Carolina was ranked 13th highest in adult diagnosed diabetes prevalence in the U.S. in 2009.

1.27 million total

- Pre-diabetes: 674,000
- Undiagnosed diabetes: 147,000
- Diagnosed diabetes: 451,000

All numbers rounded to the nearest one thousand.
## Diabetes-Related Hospital Discharges in North Carolina, 2007

The cost of diabetes-related hospitalizations is a **huge** burden on the state.

<table>
<thead>
<tr>
<th>Diagnosis Related to Diabetes</th>
<th>Total Discharges</th>
<th>Total Charges</th>
<th>Average Charge per Hospital Stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any mention of diabetes in diagnosis</td>
<td>194,493</td>
<td>$4,046,926,159</td>
<td>$20,808</td>
</tr>
<tr>
<td>Cardiovascular Disease¹</td>
<td>35,628</td>
<td>$1,008,711,287</td>
<td>$28,312</td>
</tr>
<tr>
<td>Diabetes as principal diagnosis</td>
<td>16,946</td>
<td>$279,359,049</td>
<td>$16,485</td>
</tr>
<tr>
<td>Renal Dialysis/Transplant²</td>
<td>8,959</td>
<td>$238,693,100</td>
<td>$26,643</td>
</tr>
<tr>
<td>Stroke³</td>
<td>8,227</td>
<td>$161,445,995</td>
<td>$19,624</td>
</tr>
<tr>
<td>Lower Limb Amputation⁴</td>
<td>2,608</td>
<td>$94,952,645</td>
<td>$36,408</td>
</tr>
</tbody>
</table>

Source: Provisional 2007 North Carolina Hospital discharges data, State Center for Health Statistics
Deaths from heart disease in women with diabetes have increased 23 percent over the past 30 years, compared to a 27 percent decrease in women without diabetes.

Coronary heart disease is an important cause of illness among middle-aged women with diabetes, and rates are 3-7 times higher among women 45-64 years old with diabetes than women without diabetes.
Gestational Diabetes

- Approximately 2 to 5 percent of all non-diabetic pregnant women develop gestational diabetes.

- Between 3 to 5 percent of pregnancies among women with diabetes result in death of the newborn within 28 days. This compares to a rate of 1.5% for women who do not have diabetes.

- Children born to women with diabetes are more likely to be overweight and to develop Type 2 diabetes later in life.
Number of school children with diabetes 2005-2011

Source: N.C. Annual School Health Services Report: School Years 2005-06 through 2010-11
Confronting the Diabetes Epidemic in North Carolina
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
Before NCDERP began, there were only 82 ADA recognized programs in NC.

Since NCDERP began in 2006, NC has more than 120 ADA recognized program.

Largest ADA recognized program in the U.S.

Over 4000 patients served

Average decrease in blood sugar

20% Return on investment
Kidney Initiative (10/11-10/13)

- N.C. is one of 5 states to receive a national grant to work on diabetic kidney disease
- Partnership with Community Health Centers, Free clinics and the UNC Kidney Center
- Quality Improvement around diagnosing diabetic kidney disease and referral to diabetes self management education and improved clinical care
Chronic Disease Self Management Education

- Served over 3000 people with 76% completer rate—higher than the national
- Partnership with N.C. Division on Aging and Area Agencies on Aging
- Leveraged more than $40,000 to concentrate on training African American males in low income counties how to deliver the program
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
- Blood pressure and BMI data not available at this time
Aisle by Aisle Shopping Videos

- Partnership with the N.C. Division of Public Health and N.C. Cooperative Extension
- Series of 12 videos to demystify healthy grocery shopping
- Printable reminders to take to the store

http://www.myeatsmartmovemore.com/AisleByAisle.html
Gestational Diabetes

- Partnership with N.C. Women’s and Children’s Health Branch
- N.C. is a member of National Gestational Diabetes Collaborative
- In 2008, the gestational diabetes rate in North Carolina was 10.8
- Gestational diabetes is an opportunity for diabetes prevention education
- Educational magnets have been sent to 19 practices throughout the state
Diabetes Primary Prevention

- Partnership with Wake Forest University
- Expansion of successful lifestyle intervention program to 5 health departments/districts began in May 2012 (60 patients so far)
- Albemarle District, Jackson, Martin Tyrell Washington District, Macon, Robeson Counties
- Blue Cross and Blue Shield of North Carolina will reimburse their insured's
- Curriculum submitted for CDC recognition
- Applying for private funding
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