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Diabetes Resources

Practical Information for New Mexico Health Care Professionals



A quarterly publication for clinicians caring for people with diabetes - Vol. 11 No. 14, 2009

Pre-diabetes Is a Precursor to Diabetes

The Issue:

Pre-diabetes – a condition that has a high risk of progression to diabetes – is estimated to affect about 57 million adults in the United States.¹ The true prevalence, however, is likely to be much higher, as a greater number of individuals are not yet diagnosed. The key practical points about pre-diabetes are described below.²

Risk factors for pre-diabetes mimic those for diabetes and when present, prompt the consideration for screening:

- ❖ Overweight (BMI > 25 kg/m²) particularly with central adiposity
- ❖ Sedentary lifestyle
- ❖ Family history of Type 2 diabetes
- ❖ Certain ethnicities (Native American, African American, Asian, Hispanic)
- ❖ History of gestational diabetes

The criteria to diagnose pre-diabetes:

- ❖ Fasting plasma glucose 100-125 mg/dl; or
- ❖ 2- hour post-prandial oral glucose tolerance test with plasma glucose 140-199 mg/dl; and
- ❖ Confirmation with repeat testing

Consequences of pre-diabetes:

- ❖ Once pre-diabetes is present, the risk of developing diabetes is approximately 7% per year
- ❖ Pre-diabetes increases the risk for development of cardiovascular disease even before overt diabetes develops

Treatment Considerations:

Treating pre-diabetes aggressively can prevent the progression to diabetes and reverse the insulin resistance associated with pre-diabetes.

Lifestyle intervention is the mainstay for treatment. The Diabetes Prevention Study demonstrated a 57% reduction in the development of diabetes in patients with pre-diabetes who were enrolled in the lifestyle arm compared to the placebo arm. Lifestyle interventions include:

- ❖ Weight loss of 7% of body weight
- ❖ A healthy, reduced calorie diet
- ❖ Moderate physical activity 30 minutes at least 5 days/week

The Role of Medications

- ❖ Aggressive management of co-existing cardiovascular risk factors should be considered with goals consistent with those with a diabetes diagnosis; treating BP to goal of < 130/80 and using statins to achieve a goal of LDL < 100, and non-HDL to < 130. Low dose aspirin (in patients without bleeding risk) may also be indicated.
- ❖ While some studies have suggested that there may be a role in the future for metformin and other medications, at this time these medications are not approved by the FDA for pre-diabetes. It is important for practitioners to follow the literature closely in this arena; however, it is premature for a conclusive statement to be made at this point.

1 National Diabetes Information Clearinghouse, National Institute of Diabetes and Digestive Kidney Diseases, National Diabetes Statistics, 2007.

2 www.cdc.gov/diabetes/faq/prediabetes.htm#4.

In each issue of *Diabetes Resources* we have provided specific information about management for diabetes, including important tests and resources to help reduce complications associated with the disease. Information is included about the ABCs of diabetes: **A1C testing 2-4 times per year, Blood pressure screening at every visit, and annual Cholesterol testing. Additional clinical information is also provided. A dilated eye exam, sensory foot exam and screening for kidney disease are each recommended annually. Attention to these risk factors reduces the chance for cardiac, renal, eye and vascular disease secondary to diabetes.**

In support of the *New Mexico Adult Diabetes Practice Guideline 2009*, please see the reverse side of *Diabetes Resources* for recommendations for care including resources and tools that can help in your efforts to provide education and support among your patients with diabetes.

Check www.nmtod.com for organizations that have graciously provided funding for *Diabetes Resources*.

New Mexico Health Care Takes On Diabetes, a New Mexico non-profit corporation, is a broad coalition of New Mexico's diabetes care professionals, New Mexico Health Plans, the New Mexico Department of Health, and the New Mexico Medical Review Association, with technical and administrative support from the American Diabetes Association.

Resources for Clinicians

The following resources are FREE and can be downloaded from the New Mexico Health Care Takes On Diabetes website at www.nmtod.com. For further information contact Charm Lindblad, Executive Director, at 505.796.9121 or toll-free 1.866.796.9121.

NMHCTOD Diabetes Resource Quarterly Publications – Publications and Tools for Providers and Patients: A current list of NMHCTOD Diabetes Resources publications is maintained on www.nmtod.com, including publications and resources to help patients reduce the risk of diabetes. Some publications on the web site are:

- ❖ Diabetes Screening
- ❖ Healthy Diet: Low Carbs, No Carbs: What's Right?
- ❖ Healthy Diet: Back to the Basics
- ❖ Step by Step: Motivating Patients To Be Physically Active and Attain Healthy Weight
- ❖ Helping the Newly Diagnosed
- ❖ Diabetes: Getting to the Heart of It
- ❖ Lower the A1C to Reduce the Risk

Make the Link – All About Pre-Diabetes: This patient education tool created by the American Diabetes Association, Preventive Cardiovascular Nurses Association and the American College of Cardiology clarifies “All About Pre-Diabetes.” Written at a low literacy level, it describes pre-diabetes, suggests ways to reduce risks, and describes tests to determine diabetes. Additionally, a free diabetes and cardiovascular patient toolkit is available to assist with your educational efforts. The kit contains reproducible handouts on 26 topics related to diabetes (including pre-diabetes) and cardiovascular disease. To order, call **1-800-DIABETES** (342-2383) and specify whether you prefer CD or hard copy. Available in Spanish and English.

Small Steps. Big Rewards. Your GAME PLAN to Prevent Type 2 Diabetes - A Patient Tool: Have you been told that you have pre-diabetes or are at risk for developing diabetes? The Small Steps. Big Rewards. GAME PLAN is based on the lifestyle modification strategies used in the Diabetes Prevention Program (DPP), sponsored by the National Institutes of Health. Available at www.ndep.nih.gov/diabetes/pubs/catalog.htm.

** These tools are not intended to serve as complete and full education. The education tools are made available in a written form for the professionals and patients, to assist in lifestyle changes. More complete patient specific education can take place with a registered dietitian and/or a certified diabetes educator.*

Websites—

The editorial committee has identified websites that you may find informative.

- ❖ National Diabetes Information Clearinghouse: diabetes.niddk.nih.gov/dm/pubs/diagnosis/
- ❖ Centers for Disease Control and Prevention: www.cdc.gov/diabetes/faq/prediabetes.htm
- ❖ National Guideline Clearinghouse: www.guideline.gov/summary/summary.aspx?ss=15&doc_id=10591&nbr=5533
- ❖ WebMD Pre-Diabetes: diabetes.webmd.com/guide/pre-diabetes
- ❖ Mayo Clinic Prediabetes: www.mayoclinic.com/health/prediabetes/DS00624/DSECTION=2
- ❖ American Diabetes Association Pre-Diabetes: www.diabetes.org/pre-diabetes.jsp
- ❖ American Heart Association Prediabetes: www.americanheart.org/presenter.jhtml?identifier=3044760
- ❖ PubMed: www.pubmed.gov for pre-diabetes
- ❖ National Diabetes Education Program: www.ndep.nih.gov
- ❖ National Institute of Health: www.niddk.nih.gov/health/diabetes/diabetes.htm
- ❖ New Mexico Department of Health – Diabetes Prevention and Control Program: www.diabetesnm.org

These websites may be accessed directly or through the New Mexico Health Care Takes On Diabetes website www.nmtod.com*

**Please note that these websites do not necessarily represent the views of NMHCTOD. They are listed for your reference and convenience. NMHCTOD does not evaluate websites for content accuracy or application to any clinical situation.*

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