

Press release

Americans Who Don't Know They Have Diabetes Incur \$18 Billion in Health Expenses Each Year

25 Percent Unaware They Have the Disease; Undiagnosed Diabetes Costs \$2,864 Per Person Annually In Medical Services, Lost Productivity

WASHINGTON, DC (May 20, 2009) – Americans living with undiagnosed diabetes incur an estimated \$18 billion in healthcare expenditures each year, or \$2,864 per person in medical services and lost productivity from diabetes-related complications, according to a new study initiated by the National *Changing Diabetes*® Program and published in the journal, *Population Health Management*.

Undiagnosed diabetes represents 8.3 percent of the \$218 billion cost of diabetes and pre-diabetes estimated for 2007. "For the first time we are beginning to get a sense of the total economic burden of diabetes to our health care system and economy," said Timothy Dall of the Lewin Group, which conducted the study. "The cost is particularly astonishing, given that a significant number of diabetes cases and related complications are largely preventable."

About 25 percent of the 23.6 million Americans living with diabetes are not aware that they have the disease, according to the study, published in the April issue. Data also show the prevalence of undiagnosed diabetes increased with age (until age 70) and was more common in men.

"These data demonstrate the urgent need for policies that encourage the early diagnosis of diabetes so that the disease can be managed aggressively before it leads to costly complications," said Dana Haza, Senior Director of the National *Changing Diabetes*® Program, an initiative created by Novo Nordisk to drive change in diabetes education, treatment and policy at the national and local level.

The cost of diagnosed diabetes was estimated at \$174 billion in 2007. Pre-diabetes was associated with \$25 billion in health care expenditures, and gestational diabetes resulted in \$623 million in costs.

Because people with undiagnosed diabetes cannot be identified using medical claims, the study identified a proxy for the undiagnosed population—people within two years of first diagnosis. The study compared medical claims from 2004 and 2005 for two groups: the undiagnosed proxy population consisting of 29,770 people diagnosed with diabetes in 2006, and 3.2 million people with no history of diabetes during this

three-year period. People in the former group who went on to develop diabetes were shown to have significantly more ambulatory care, emergency visits and hospital stays than those in the group who did not develop diabetes.

Diabetes is a complex disease that affects virtually every system in the body. Diabetes is associated with increased risk of cardiovascular disease, neurological symptoms and renal and endocrine complications. Diabetes is the nation's leading cause of blindness and amputations. Many people newly diagnosed with diabetes already have chronic conditions linked to the disease, such as neuropathy, arterial disease, cardiovascular disease and coronary heart disease.

"We would expect to see a significant impact on cost if diabetes were detected and managed early," Dall said. "The goal is to substantially slow the progression of the disease with aggressive management of diet, exercise and medicine so that costly complications can be avoided."

A separate study published in the journal broke down the costs associated with diagnosed cases of Type 1 and Type 2 diabetes. While about 90-95 percent of people with diabetes have Type 2, or adult-onset diabetes, costs for the 5-10 percent of people with Type 1 diabetes were shown to be far higher on an individual basis. People with Type 1 diabetes have twice as many physician visits for complications compared with people with Type 2 diabetes.

The average Type 1 patient with diabetes under age 44 had annual medical costs of \$4,044 a year. Yet costs increase with age. For Type 1 patients over age 65, the average annual cost was \$35,365 per patient. The increased cost associated with people over 65 is the result of high use of expensive nursing and residential facilities. Sixty-six percent of the 165,000 Type 1 patients over age 65 will spend at least some portion of the year in a nursing home.

"There are about 16 times as many people with Type 2 diabetes as with Type 1, so health care policy focusing on Type 2 diabetes has the greatest potential to lower the overall economic burden of the disease," Dall said. "Yet the very high costs associated with Type 1 diabetes -- particularly among the elderly -- highlight the importance of aggressive disease management to prevent costly complications."

The overall economic burden of diabetes is significant. However, both studies note that the total cost to society is higher than any estimate when the impact of reduced quality of life is taken into account.

###

About The Lewin Group

The Lewin Group is a premier national health care and human services consulting firm with nearly 40 years' experience finding answers and solving problems for leading organizations in the public, nonprofit, and private sectors. With its industry experience and knowledge, The Lewin Group provides its clients with high-quality products and insightful support to help them maximize the delivery of programs and

services that make a difference in the lives of their constituents. For more information on The Lewin Group, visit www.lewin.com.

The Lewin Group is an Ingenix company. Ingenix, a wholly-owned subsidiary of UnitedHealth Group, was founded in 1996 to develop, acquire and integrate the world's best-in-class health care information technology capabilities. For more information, visit www.ingenix.com. The Lewin Group operates with editorial independence and provides its clients with the very best expert and impartial health care and human services policy research and consulting services.

About the National Changing Diabetes® Program

The National *Changing Diabetes*® Program (NCDP) is a multi-faceted initiative that brings together innovators in diabetes education, treatment and policy to improve the lives of people with diabetes. NCDP strives to create change in the U.S. health care system to provide dramatic improvement in the prevention and care of diabetes. Launched in 2005, NCDP is a program of Novo Nordisk. For more information, please visit www.ncdp.com.

About Novo Nordisk

Novo Nordisk is a healthcare company with an 86-year history of innovation and achievement in diabetes care. The company has the broadest diabetes product portfolio in the industry, including the most advanced products within the area of insulin delivery systems. In addition to diabetes care, Novo Nordisk has a leading position within areas such as hemostasis management, growth hormone therapy, and hormone therapy for women. Novo Nordisk's business is driven by the Triple Bottom Line: a commitment to social responsibility to employees and customers, environmental soundness and economic success. With headquarters in Denmark, Novo Nordisk employs more than 27,000 employees in 81 countries, and markets its products in 179 countries. Novo Nordisk's B shares are listed on the stock exchanges in Copenhagen and London. Its ADRs are listed on the New York Stock Exchange under the symbol 'NVO'. For global information, visit novonordisk.com; for United States information, visit novonordisk-us.com.

For further information please contact:

Sean Clements
Novo Nordisk
(609) 514-8400
secl@novonordisk.com

Susan Bro
Media Mind
(615) 440-2799
susan@mediamindsite.com

Tony Plohoros
Media Mind
(908) 940-0135
tony@mediamindsite.com