

Conquering the Diabetes Epidemic

Costs and Opportunities

The numbers are nothing less than staggering: According to a November

2008 Economic Barometer study, in 2007 diabetes and pre-diabetes cost the U.S. an estimated \$218 billion in direct and indirect costs due to higher medical expenses and lost productivity.

By Karen A. Edelman

The Burgeoning Cost of Diabetes

This groundbreaking study—the most comprehensive of its kind—quantified the costs of diabetes and pre-diabetes in the entire U.S. population. In addition to the \$174 billion that was spent on diagnosed diabetes cases in 2007 (type 1 and type 2), this new study also included the 6.3 million people with undiagnosed diabetes (annual cost = \$18 billion); the 57 million adults with pre-diabetes (\$25 billion); and the 180,000 pregnancies where gestational diabetes is diagnosed (\$623 million). The study was conducted by The Lewin Group and commissioned by the National *Changing Diabetes*® Program (NCDP), an initiative created by Novo Nordisk Inc., a healthcare company and a world leader in diabetes care, to help change the status quo in our healthcare system; bring leaders together in the diabetes community; and determine priorities for diabetes spending, policy and treatment. The Economic Barometer is Novo Nordisk's latest commitment to addressing the growing diabetes crisis. This four-part study will be published in *Population Health Management* within the next few months.

The burgeoning cost of diabetes clearly is taking its toll on Americans and U.S. businesses. According to the American Diabetes Association (ADA), diabetes is America's fifth-deadliest disease, with mortality rates on the rise while they are falling for other chronic diseases. If the U.S. continues on this path, according to the Institute for Alternative Futures, by 2025 the number of people living with diabetes is expected to more than double, to approximately 50 million.

Furthermore, today's youngest citizens are at enormous risk: According to the Centers for Disease Control and Prevention (CDC), about one-third of all U.S. children born in the year 2000 are at risk for being diagnosed with diabetes in their lifetimes.

This past November, at *Forbes* magazine's *Innovations in Healthcare Forum* sponsored by Novo Nordisk's National *Changing Diabetes*® Program, top executives and luminaries discussed the critical role business plays

Left to right: Dr. Roger Merrill, chief medical officer of Perdue Farms; Tim Dall, vice president at The Lewin Group; Jeff Frazier, vice president of Human Resources at Novo Nordisk Inc.; former Arkansas Governor Mike Huckabee



national changing diabetes® program



National Diabetes Goal: By 2015, 45% of Americans who are at risk for type 2 diabetes will know their blood glucose level and what actions to take.

Learn more: www.nationaldiabetesgoal.com

in combating the rise in diabetes and its complications. Speakers included former Arkansas Governor Mike Huckabee; Jeff Frazier, vice president of Human Resources at Novo Nordisk Inc.; Tim Dall, vice president at The Lewin Group; and Dr. Roger Merrill, chief medical officer of Perdue Farms.

Changing the Trajectory

The Forum examined The Lewin Group's hypothetical study of an IT company with 10,000 employees, which showed that diabetes would cost \$7 million per year in higher medical costs and lost productivity, or \$700 per person annually in diabetes-related costs—a conservative estimate, since an IT company would have a younger workforce than other sectors.

"The research shows that people with diabetes and the chronic conditions associated with diabetes have higher rates of absenteeism. And when they do show up at work, their productivity is lower—that's called presenteeism," Dall explained.

"Diabetes is a big deal because of the complications. It is the number-one risk factor for kidney failure, blindness and amputation," Merrill said.

The forum revealed that while employers pay a high price for diabetes, employer-sponsored diabetes screening and management programs have demonstrated the potential for a dramatic positive return on investment, since detection and early treatment are quite effective in prevention and better management of the disease. "We can start early to identify people who are at high risk of diabetes and help them in prevention efforts before they become at even higher risk of diabetes," Dall explained.

Two examples of highly successful programs were highlighted at the forum.

The State of Arkansas

When Huckabee was governor of Arkansas, the state embarked on a sweeping program to improve the health of both government employees and its overall population. Some of

the tactical measures that were taken to achieve this goal included:

1. Rewarding healthy state employees with "well days" off
2. Instituting screening programs for better early detection
3. Sponsoring competitions to achieve weight loss and smoking cessation and encourage participation in walking programs

According to Huckabee, the average productivity for government workers increased by a whopping \$3,400 per year. To combat the growth of diabetes in children, the state also instituted Body Mass Index (BMI) tests for all school-age children.

Perdue Farms

Perdue's ambitious company-wide program to reduce diabetes-related healthcare costs has achieved dramatic improvements. "There are things we can do inexpensively that have enormous impact," Merrill explained. "If you're going to do something different, have it be high touch. It doesn't have to be high-tech."

Some steps Perdue's Health Improvement Program has taken include:

1. Detection: Perdue pulls the entire workforce in for on-site medical assessments to determine each person's overall health and potential issues.
2. Prevention and Treatment: Lifestyle changes and education are introduced first.
3. On-Site Medical Clinics: Medical treatment is provided early on and made easily accessible.
4. Personalized Care: Employees meet regularly with healthcare professionals to manage their disease.

The percentage of people with diabetes whose blood levels are under control rises to 68% after they've been in the program for just one year. Perdue's medical inflation has been just .5% per year over the last six years, and medical cost per employee is only 40% of the national average.

A Call to Action

Corporate leaders have the power to help change the course of the diabetes epidemic. Through various initiatives, they can play a large role in changing the trajectory of this disease, and thus improve both the U.S. economy and society as a whole, by:

- Becoming champions of the National Diabetes Goal (see box above)
- Understanding the seriousness of the problem
- Educating employees on risk factors
- Adopting innovative workplace strategies to combat the disease

Novo Nordisk's Frazier pointed out that on a societal level, we must do better now to help future generations. Given the number of children who will be diagnosed with diabetes if we continue on this path, he asked: "If we can't impact that today, what will our children think of us?"

Said Huckabee, "This requires a cultural transformation from the bottom up and from the top down at the same time. It's going to require a change of attitude, a change of atmosphere, and a change of action. But we can get there." ■

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