

7 BILLION REASONS TO CARE ABOUT DIABETES



What impact does the rise in population have on the future of diabetes?



WHAT'S INSIDE:

From the United Nations High-Level Meeting on non-communicable diseases in September to the release of staggering statistics from three major public health organizations, the need for greater diabetes prevention, education and awareness reached a critical stage in 2011.

Read about some of the most talked about issues this year.

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EXPERT Q&A: MAKING SENSE OF DIABETES DATA

In 2011, the industry saw new data from 3 major public health organizations – the Centers for Disease Control and Prevention (CDC), the National Diabetes Information Clearinghouse (NDIC), and the International Diabetes Federation (IDF). Typically, the CDC releases its National Diabetes Fact Sheet every 2 years as does the NIDC. On November 14, 2011, the IDF published the 5th Diabetes Atlas, which provides country-by-country statistics on diabetes every 2 to 3 years (see sidebar on next page).

Danilo Verge, Vice President, Medical Affairs of Novo Nordisk, discusses this public health data and its impact on diabetes treatment and care today.



What does this data mean and how does the data differ?

All the data point to an explosive increase in the incidence (new number of cases per year) and the prevalence (how many people out of the total population) of diabetes worldwide. Looking at studies in the same country over several years, there is no country which shows a decrease in diabetes. As a matter of fact, the projections that all 3 organizations had made had to be readjusted upwards.

As far as the United States, the data provided by the CDC and NIDC is exactly the same and it estimates the prevalence of diabetes for the adult population (20 years and older) at 11.3% (25.8 million people).¹ The IDF reports an estimated 23.7 people with diabetes in the United States.² Other figures, such as incidence of diabetes,

deaths due to diabetes, also differ, primarily due to this difference in defining the age range for the “adult” population.

How do we make sense of this data?

This is cause for great concern, as diabetes not only exacts a heavy toll in terms of serious health issues for the individual (complications leading to kidney failure, amputations, blindness, heart attack, stroke, etc) but also of serious financial burden for the countries most exposed to the disease. All 3 agencies point to the fact that deaths due to diabetes are almost certainly an underestimation of reality, since more than a third of countries do not have any data on diabetes-related mortality

and also because existing routine health statistics underestimate the number of deaths due to diabetes, including the United States. In fact, the CDC states that “studies have found that only about 35% to 40% of decedents with diabetes had it listed anywhere on the death certificate and about 10% to 15% had it listed as the underlying cause of death.”¹ It is worth noting that overall, the risk for death among people with diabetes is about twice that of people of similar age but without diabetes.

EXPERT Q&A: MAKING SENSE OF DIABETES DATA



What impact will data forecasts like these really have on diabetes treatment and care?

It should have enormous impact, for all the reasons mentioned above. Unfortunately, governments are slow to realize the huge burden diabetes will become in a relatively short time. Actually, it already is a significant burden on the populations of many countries. One of the many downsides of diabetes is its chronic nature, which does not coincide with political 4-year cycles, so it's easy for politicians and other government officials to put it

aside in favor of other, more acute issues that are more plausible to generate more immediate gain.

“In terms of treatment, the best treatment is prevention.”

There are 3 times more people at risk of getting diabetes than there are people with diabetes. The good news is that prediabetes may be reversible, and that it is proven that diet and exercise should suffice to turn blood sugar levels to normal. Once someone

gets the disease, it's a lot cheaper in the long run to ensure that the patient keeps her blood glucose levels as close to normal as possible through the appropriate use of medications, while maintaining the importance of lifestyle modifications like diet and exercise. Emergency room visits can also put a strain on medical costs and in many cases “this more expensive care could be avoided with adequate access to preventative and/or primary care.”³

Sources

1. Centers for Disease Control and Prevention. National Diabetes Fact Sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2011.
2. International Diabetes Federation web site. One adult in ten has diabetes in North America. <http://www.idf.org/sites/default/files/attachments/NAC-Press-Release-WDD.pdf>. Accessed December 7, 2011.
3. Bunker, Katie. Paving the way to a healthier America. *Diabetes Forecast*. <http://forecast.diabetes.org/magazine/your-ada/paving-way-healthier-america>. January 2009.

THE LATEST DATA¹

At least 1 in 10 adults could have diabetes by 2030, according to the latest statistics from **The International Diabetes Federation (IDF)**. On World Diabetes Day 2011, IDF released its 5th edition of the Diabetes Atlas. According to the report:

- » The number of people living with diabetes is expected to rise from 366 million in 2011 to 552 million by 2030, if no urgent action is taken.
- » It is estimated that as many as 183 million people are unaware that they have diabetes.
- » In some of the poorest regions in the world such as Africa, where infectious diseases have traditionally been the focus of health care systems, diabetes cases are expected to increase by 90% by 2030.
- » 80% of people with diabetes live in low- and middle-income countries.
- » 78,000 children develop type 1 diabetes every year.
- » The greatest number of people with diabetes are between 40-59 years of age.

Source:

1. International Diabetes Federation Web site. One adult in ten will have diabetes by 2030. <http://www.idf.org/media-events/press-releases/2011/diabetes-atlas-5th-edition>. Accessed November 17, 2011.

7 Billion Reasons to Care About Diabetes

“Global disease patterns are changing. As many countries around the world have reduced the great killers such as malaria, we must turn the same effort and resources towards [NCDs (noncommunicable diseases)], as they must be prevented now rather than treated later.

“In addition to the personal consequences for the patient, NCDs burden developing health care systems with such high expenses that can halt their development if we do not intervene.” ²

-Flemming Konradsen, Director of the Copenhagen School of Global Health, *Science Daily*.

On October 31, 2011, the world celebrated the birth of the 7 billionth person.¹ This child is more likely to die from a NCD like diabetes than from an infectious disease, according to a recent report published in *Science Daily* based on research from the Copenhagen School of Global Health at the University of Copenhagen.² Today, NCDs account for nearly two-thirds of the world’s deaths.³

In the report, Flemming Konradsen, Director of the Copenhagen School of Global Health, stresses that we must now deal with the NCDs as seriously as we have infectious diseases:

“Global disease patterns are changing. As many countries around the world have reduced the great killers such as malaria, we must turn the same effort and resources towards [NCDs], as they must be prevented now rather than treated later.

“In addition to the personal consequences for the patient, NCDs

burden developing health care systems with such high expenses that can halt their development if we do not intervene.”²

Combine this population milestone with the staggering statistics released in 2011 by 3 independent public health

“The escalation of NCDs could cost the world \$47 trillion over the next 2 decades”

authorities – the Centers for Disease Control and Prevention, the National Diabetes Information Clearinghouse, and the International Diabetes Federation – and you’ve got a serious public health issue.

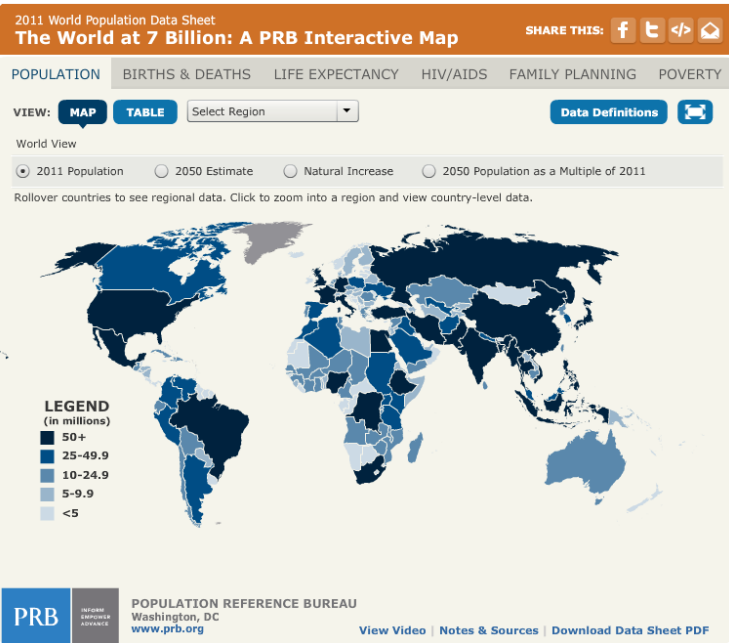
And a costly issue at that. From a global perspective, the escalation of NCDs could cost the world \$47 trillion over the next 2 decades, according to a September 2011 report from the World Economic Forum and the

Harvard School of Public Health.⁴ Diabetes, cancer, and heart and lung disease -- the 4 conditions the UN is targeting -- account for more than \$30 trillion of the total cost projected by the World Economic Forum and the Harvard School of Public Health.⁵

Undoubtedly, the time has come to increase our screening, advocacy, and research efforts for the prevention and awareness of all NCDs, especially diabetes.



Check out the web version of this article for additional interactive content and videos at: <http://press.novonordisk-us.com/bluesheet/>



Source: Population Reference Bureau. <http://www.prb.org/Publications/Datasheets/2011/world-population-data-sheet.aspx>. Accessed December 2, 2011.



7 Billion Reasons to Care About Diabetes

THE BIG THREE DIABETES ISSUES

SCREENING:

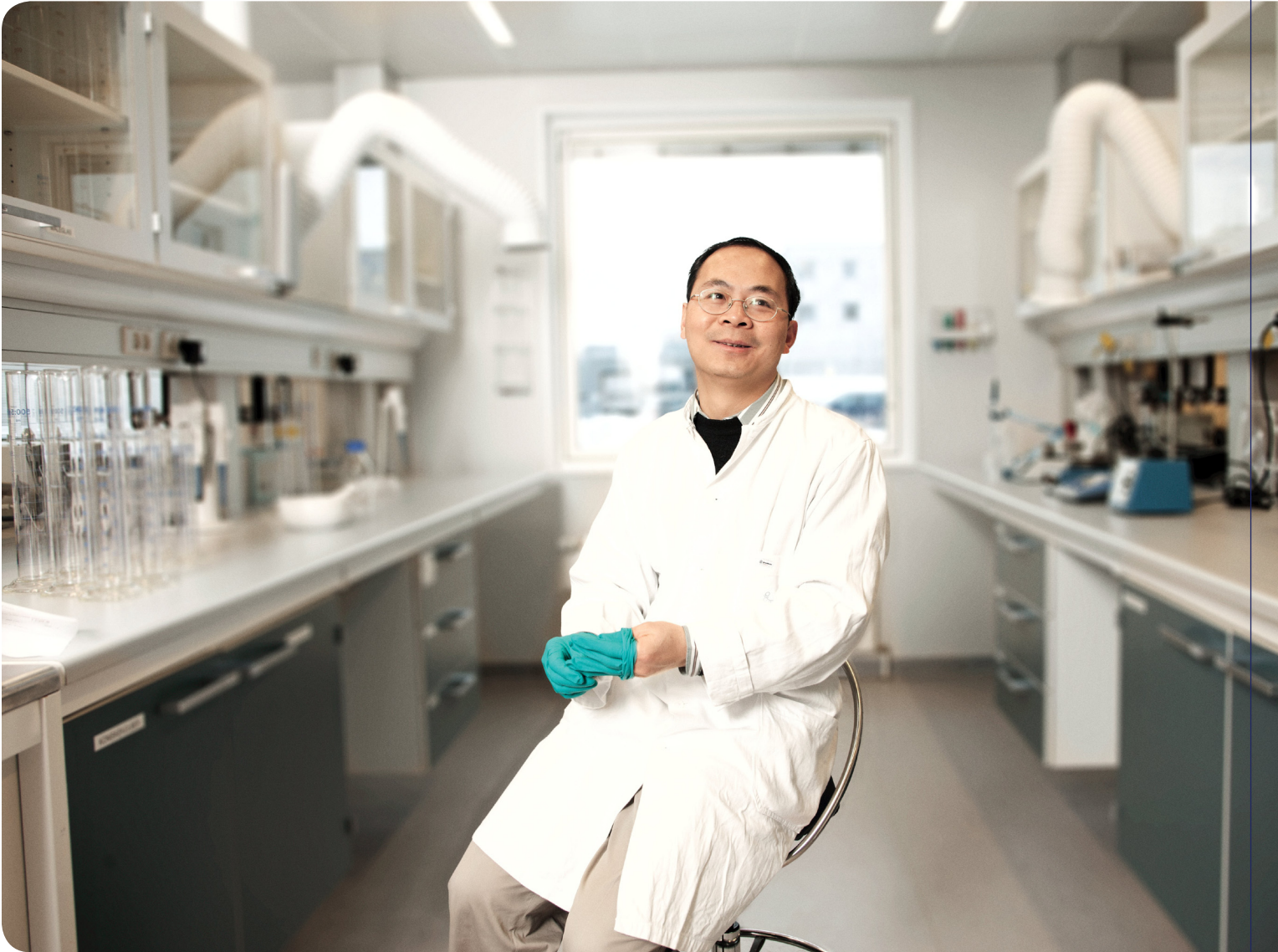
Now more than ever, we need to reign in the growth in diabetes prevalence and costs. As the entry point to prevention, screening can minimize the impact of the global diabetes epidemic. If more people could be screened with risk factor-based screening, more lives could be positively impacted with the lifestyle interventions needed to manage prediabetes and the necessary treatment and care for undiagnosed diabetes.⁶

ADVOCACY:

Type 2 diabetes is a disease that we largely know how to delay or prevent. But doing this at a national level to truly impact diabetes prevalence and costs requires significant investment and support. In September 2011, the Senate Appropriations Sub-committee on Health, Education, Labor and Pensions (HELP) allocated \$10 million from the Prevention and Public Health Fund to expand the National Diabetes Prevention Program, but no further funding movement has been made yet. The National Diabetes Prevention Program provides a framework and funding for scaling an evidence-based, community-based diabetes prevention program across the United States.

RESEARCH:

Research can reduce the growing burden of NCDs like diabetes on the healthcare system. According to *The Role of Research after the UN High-Level Meeting on NCDs* from the International Diabetes Federation, the focus of research into improved diabetes care models should be on better and cheaper methods for early diagnosis; better and cheaper methods for ongoing monitoring; and more cost-effective treatments – along with prevention models.⁷ The report also calls on governments to make translational research a priority in order to turn findings from clinical trials into improved diabetes prevention and management on the ground in a way that is appropriate for local health systems, cultures, and resources.⁷



Sources

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A MODEL FOR DIABETES PREVENTION

Medicare Diabetes Screening Project (MDSP) is a coalition of more than 20 national partners, co-chaired by the American Diabetes Association, the Healthcare Leadership Council, and Novo Nordisk. The project was developed to promote screening awareness and utilization among patients and to improve the dialogue between physician and patient.

In Atlanta, local churches are “getting a jump on diabetes” through a community-based effort to encourage diabetes screenings among older adults. During November (National Diabetes Awareness Month) former Atlanta Hawks forward and Basketball Hall of Famer Dominique Wilkins and the MDSP teamed up with Atlanta city officials, senior centers, churches, and other community-based organizations on “Get a Jump on Diabetes,” a campaign to promote use of Medicare’s free diabetes screening benefits.

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The goal of the coalition in Atlanta is to enroll 200 adults 65 or older who have prediabetes and who are overweight in the Metro Atlanta YMCA’s Diabetes Prevention Program – a 16-session classroom-based diabetes prevention program. Through this campaign, Novo Nordisk will enable 200 seniors to participate in the program at no cost.

Local church organizations have lent their support to the coalition by reaching out to more than 1,000 seniors in the Atlanta area. Each church involved in the initiative provides a faith community nurse to provide education about diabetes screenings, conduct risk assessments, and connect individuals to the YMCA program. Lori Floyd, a faith community nurse for the Gainesville First United Methodist Church in the Atlanta metropolitan region, said, “By bringing diabetes prevention programs to senior citizens in an environment that is accessible, familiar, and comfortable, we have a much better opportunity to increase awareness for diabetes among our at-risk populations.”



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