



CHERYL ANN BORNE  
Cheryl has type 2 diabetes

## Study compares ADA and USPSTF guidelines for identifying the undiagnosed

According to the results of new research published online in *Population Health Metrics*, millions more American adults with undiagnosed diabetes and prediabetes could be identified using American Diabetes Association (ADA) guidelines for diabetes screening compared with using current screening guidelines of the United States Preventive Services Task Force (USPSTF).

Researchers calculated that in 2010, 59.1 million adults would have met the USPSTF screening criteria and that among this population there were 24.4 million with undetected prediabetes and 3.7 million with undiagnosed type 2 diabetes. In comparison, the study showed that among the 86.3 million adults who would have met ADA screening criteria, there were 33.9 million with undetected prediabetes and 4.6 million with undiagnosed type 2 diabetes. ADA guidelines, when compared with USPSTF guidelines, detected 39% more cases of prediabetes and 24% more cases of undiagnosed type 2 diabetes.<sup>1</sup>

While the USPSTF recommends diabetes screening only for asymptomatic adults with high blood pressure, ADA's guidelines include multiple risk factors in addition to high blood pressure including overweight and obesity, age, race/ethnicity, and family history, among others.

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- Study compares ADA and USPSTF guidelines for identifying the undiagnosed
- CDC releases 2014 National Diabetes Statistics Report
- Changes in US diabetes complication rates from 1990 to 2010

The study also shows that ADA screening guidelines detect 78% more cases of diabetes among adults aged 54 years and younger, 40% more cases in African Americans, and more than twice as many cases in Hispanic Americans.<sup>1</sup>

Under a provision of the Affordable Care Act, insurers are required to cover, at no cost to the patient, preventive services that have been recommended by the USPSTF.<sup>2</sup> Federal screening guidelines more closely aligned with those of the ADA would mean that millions of previously uninsured adults, who are now insured via the health insurance exchanges or through expansions of Medicaid, could be eligible for no-cost diabetes screenings.

Click [here](#) to access the full study.

**"The study also shows that ADA screening guidelines detect 78% more cases of diabetes among adults aged 54 and younger."<sup>1</sup>**

# new & news in diabetes policy

## CDC releases 2014 National Diabetes Statistics Report

On June 10, 2014, the Centers for Disease Control and Prevention (CDC) released its new [National Diabetes Statistics Report, 2014](#). Compared with 2011, the total number of people with either type 1 or type 2 diabetes (*prevalence*) is 29.1 million, up 13%, and the number of adults aged 20 years and older with prediabetes is 86 million, up 9%. The number of new cases of diabetes per year (*incidence*) is 1.7 million, down 10%.<sup>3</sup>

Other key data from this report include<sup>3</sup>:

- Of the 29.1 million with diabetes, 21.0 million are diagnosed, but 8.1 have diabetes but don't know it. That 8.1 million figure represents a 16% increase in the number of undiagnosed
- Older adults aged 65 years and older are still the age group most affected by diabetes (25.9%) and prediabetes (51%), with nearly 77% of this population having either diabetes or prediabetes
- Non-white populations are also still disproportionately affected by diabetes. Compared with 7.6% of white adults aged 20 years and older, 13.2% of non-Hispanic blacks, 12.8% percent of Hispanics, 9.0% of Asian Americans, and 15.9% of American Indians/Alaskan Natives have diabetes

These statistics underscore the critical need for better policies, programs, research, and treatments to help prevent diabetes and its complications, and accelerate the search for cures.

In addition, these new numbers highlight the need for targeted screening of at-risk individuals to identify those with undiagnosed diabetes and prediabetes for appropriate intervention. Please see the first article in this newsletter for information on a study that shows the need to improve federal diabetes screening guidelines to find the undiagnosed and those at risk for diabetes.

**In a CDC press release, Ann Albright, PhD, RD, the CDC's director of the division of diabetes translation noted, "These new numbers are alarming and underscore the need for an increased focus on reducing the burden of diabetes in our country. It's urgent that we take swift action to effectively treat and prevent this serious disease."<sup>4</sup>**

## Diabetes a factor in blindness and visual impairment worldwide

Globally, the number of people with blindness or visual impairment because of diabetic retinopathy increased 27% and 64%, respectively, between 1990 and 2010 according to a study based on the Global Burden of Disease Study 2010 and a literature search.<sup>5</sup> The research findings were presented at the Association for Research in Vision and Ophthalmology 2014 Annual Meeting.

Diabetic retinopathy is the cause of 2.6% of all blindness and 1.9% of all moderate and severe vision impairment worldwide, the study results show. According to the authors, in 2010, one out of every 39 blind people and one out of every 52 people with visual impairment had diabetic retinopathy.<sup>5</sup>

The study abstract is available [here](#).

# new & news in diabetes policy

## Diabetes in US Latino populations

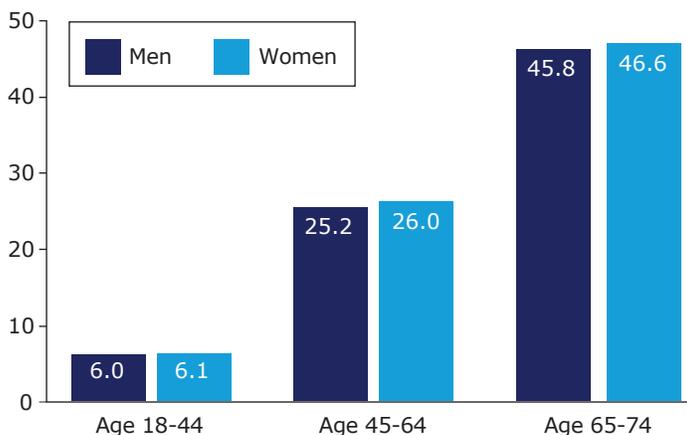
The Hispanic Community Health Study/Study of Latinos, a multiyear epidemiological study sponsored by the National Heart, Lung, and Blood Institute of the National Institutes of Health, is examining the prevalence and development of disease, including diabetes, among more than 16,000 Latino participants in New York City, Chicago, Miami, and San Diego.

Among study participants aged 40 to 49 years, six out of every 10 have either diabetes or prediabetes and one-third of participants with diabetes are not aware they have the disease. The study also showed significant differences in diabetes prevalence across population subgroups: the disease was more common among those of Mexican, Puerto Rican, and Dominican origin and least prevalent among those from South America.<sup>6</sup>

Access the Data Book on the study [here](#).

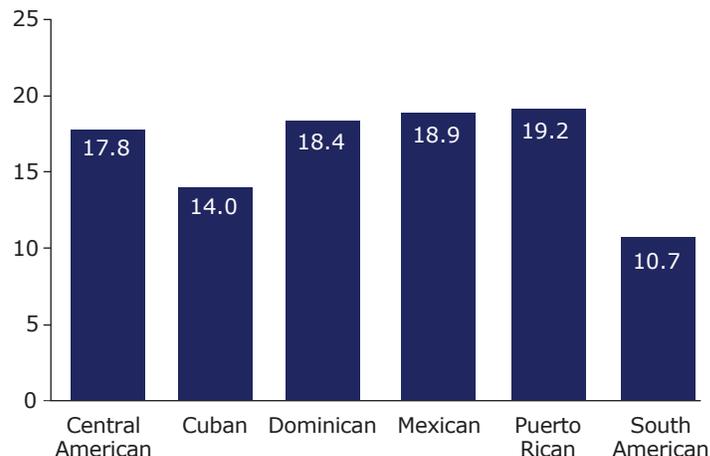
### Percent with diabetes by age and sex<sup>6</sup>

Almost one out of 2 participants in the oldest age group had diabetes and one in 4 in the middle age group had diabetes.



### Percent with diabetes by background<sup>6</sup>

The percentage of participants with diabetes was lowest in those of South American background.



## Cost burden for people with diabetes drops

Research by a team from the US Centers for Disease Control and Prevention (CDC) published in *Diabetes Care* indicates that the number of people with diabetes under age 65 years with a high out-of-pocket burden declined from 28% in 2001 to 2002 to 23% in 2009 to 2010 and 2011.<sup>7</sup> High out-of-pocket burden is defined as total family out-of-pocket spending on health care that exceeds 10% of family income. The largest decline was seen among patients with Medicare or Medicaid coverage, where the number of patients with a high out-of-pocket burden dropped from 43% to 21% during the study period.<sup>7</sup>

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## Update on the SEARCH for Diabetes in Youth study

The SEARCH for Diabetes in Youth study, examined data from more than 3 million children younger than 20 years in five states—California, Colorado, Ohio, South Carolina, and Washington—as well as from selected American Indian reservations in Arizona and New Mexico. The study looked at prevalence of type 1 diabetes in youth aged 0 to 19 years and type 2 diabetes in youth aged 10 to 19 years from 2001 to 2009.

Recent findings from the study show that<sup>8</sup>:

- Prevalence of type 1 diabetes increased 21% among children up to age 19 years
- Prevalence of type 2 diabetes among those aged 10 to 19 years rose 31%
- The greatest prevalence increase for both type 1 and type 2 diabetes was among those aged 15 to 19 years

According to the study, although type 1 diabetes has typically been a disease that affects mostly

white youth, the SEARCH findings highlight “the increasing burden of type 1 diabetes experienced by youth of minority racial/ethnic groups as well.”<sup>8</sup>

The authors conclude that the increases in prevalence are important, because “youth with diabetes will enter adulthood with several years of disease duration, difficulty in treatment, an increased risk of early complications, and increased frequency of diabetes during reproductive years, which may further increase diabetes in the next generation.”<sup>8</sup>



ALEJANDRO KULICK  
Alejandro has type 1 diabetes

## Changes in US diabetes complication rates from 1990 to 2010

Using data from several federal databases, a research team from the US Centers for Disease Control and Prevention (CDC) examined changes in diabetes complications rates over the 20-year period from 1990 to 2010. The findings, published in the *New England Journal of Medicine*, showed that rates of lower extremity amputations, end-stage renal disease, acute myocardial infarction, stroke, and death from hyperglycemic crisis all decreased over the time period, with the greatest relative declines in acute myocardial infarction and death from hyperglycemic crisis.<sup>9</sup>

According to the research, declines in complication rates ranged from 68% for acute myocardial infarction and 64% for hyperglycemic crisis

to 53% for stroke, 51% for lower-extremity amputation, and 28% for end-stage renal disease.<sup>9</sup> “These findings probably reflect a combination of advances in acute clinical care, improvements in the performance of the health care system, and health promotion efforts directed at patients with diabetes,” the study concludes.<sup>9</sup>

The good news on diabetes complications trends is juxtaposed with a doubling of the incidence of diabetes in the past 15 years and a tripling of the prevalence as mortality has declined, “suggest(ing) that the total burden, or absolute number of cases of complications, will probably continue to increase in the coming decades.”<sup>9</sup>

# new & news in diabetes policy

## Progress Report: Healthy People 2020 diabetes leading health indicator

A recent progress report released by Healthy People 2020 shows how well the nation is doing on measures that Healthy People calls the “Leading Health Indicators.” These measures are “a select subset of Healthy People objectives chosen to communicate high-priority health issues and actions that can be taken to address them.”<sup>10</sup>

There is one diabetes measure that is a Leading Health Indicator. The objective calls for a reduction in the percentage of patients with diabetes whose A1C level is above 9.0%. The progress report showed the baseline measure in 2005 to 2008 at 17.9% of the population with diabetes with an A1C above 9.0%, increasing to 21% at the first measurement for the progress report in 2009 to 2012—a 17% increase, which Healthy People termed a non-statistically significant increase.<sup>10</sup>

The full progress report is available [here](#).

## A look across diabetes prevention programs

A meta-analysis of 22 translational studies of diabetes prevention programs published in *Diabetes Care* examined their effectiveness.

Key findings from the analysis include<sup>11</sup>:

- Mean weight loss at 12 months was 2.1 kg or 4.62 pounds
- Where there were data, the authors found “significant reductions in other diabetes and cardiovascular risk factors, including blood glucose, blood pressure, and some cholesterol measures”
- Although the mean weight loss was one-half to one-third of that reported in the intervention arms of the US Diabetes Prevention Program (DPP) and the Finnish Diabetes Prevention Study (DPS), the authors contend that “...the level of weight loss found in our analysis is still likely to have a clinically meaningful effect on diabetes incidence”

The study concludes that implementation of translational or what they call “pragmatic” lifestyle interventions may be hampered by: “lack of resources for service provision, the design of efficient risk identification systems, and engagement of politicians and health care organizations in funding national diabetes prevention programs; diabetes prevention strategies require substantial up-front investment to accrue longer-term benefits.”<sup>11</sup>



TRINITY ALFARO  
Trinity has type 1 diabetes

**“Diabetes prevention strategies require substantial up-front investment to accrue longer-term benefits.”<sup>11</sup>**

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## Many Hispanic women are not aware of their diabetes risk

According to research published in the journal *Hispanic Health Care International* by a team from New York University, nearly 5.5 million Hispanic women in the United States had fasting plasma glucose (FPG) levels in the prediabetes and diabetes range, and they are less likely than non-Hispanic white and non-Hispanic black women to have seen a health care provider within the past year.<sup>12</sup>

Researchers examined data on 1,467 women from the 2009 to 2010 National Health and Nutrition Examination Survey (NHANES) and found that 36.7% of Hispanic women in the United States had fasting plasma glucose levels that were in the prediabetes and diabetes range.<sup>12</sup> Of the 5.5 million Hispanic women who had FPG levels in the prediabetes or diabetes range, about 4 million had never been told by a health care provider that they had diabetes, prediabetes, or were borderline for diabetes.<sup>12</sup>

Access the study abstract [here](#).

## Care coordination for patients with chronic disease could save Medicare up to \$1.5 billion annually

A recent RAND Corporation study, published in *JAMA Internal Medicine*, shows that improving the coordination of care for elderly patients with chronic diseases reduces costs, inpatient hospitalization, emergency department visits, and complications. The research team evaluated the care received by nearly 300,000 Medicare recipients who were treated for congestive heart failure, emphysema, or type 2 diabetes, and found that even modest improvements in the continuity of care were associated with sizable reductions in use of hospital emergency departments and hospitalizations, as well as lower rates of complications and lower overall costs for episodes of care.<sup>13</sup>

The study used a standard measure of continuity of care: Care was deemed to be better coordinated if patients saw fewer health care providers or if visits were concentrated among fewer providers.

The findings suggest that improving the coordination of care for patients with these 3 chronic illnesses could save Medicare as much as \$1.5 billion per year.<sup>14</sup>

**Care was deemed to be better coordinated if patients saw fewer health care providers or if visits were concentrated among fewer providers.**

# new & news in diabetes policy

## One-third of patients in California hospitals have diabetes

A study by the UCLA Center for Health Policy Research and the California Center for Public Health Advocacy shows that a significant number of people admitted to California hospitals in 2011 had diabetes. Overall, less than 12% of adults in California aged 35 years and older have diabetes.<sup>15</sup>

Using 2011 hospital patient discharge data and annual financial data from the Office of Statewide Health Planning and Development (OSHPD), the research team found that people with diabetes accounted for 31% of hospital admissions in California in 2011 among patients aged 35 years or older, including 39% of African American and Asian American patients and 43% of Latino patients.<sup>15</sup> They also found that hospital

admissions of people with diabetes cost nearly \$2200 more per hospitalization than those for people without diabetes, regardless of the primary reason for the hospitalization.<sup>15</sup>

“The profound burden of diabetes among the hospitalized population in California suggests that more effort is needed to address the incidence and prevalence of diabetes statewide,” the study concluded.<sup>15</sup>

Access the policy brief [here](#).

### Percentage of hospitalizations for patients with diabetes and statewide prevalence of diabetes by race/ethnicity (aged 35 years or older)<sup>14</sup>

Racial/Ethnic Group	Hospitalizations for Patients With Diabetes <sup>a</sup> (%)	Discharges for Patients With Diabetes <sup>a</sup> (No.)	Prevalence of Diabetes <sup>b</sup> (%)
White	27.5%	288 438	9.2%
Latino	43.2%	140 176	14.7%
Asian-American and Pacific Islander	38.7%	44 262	10.5%
African-American	39.3%	52 484	15.9%
American Indian and Alaskan Native	40.3%	882	17.7%
Other	37.7%	13 779	15.9%

<sup>a</sup> Data Source: Office of Statewide Health and Planning Development, 2011; data for Alpine, Del Norte, Inyo, Mariposa, Modoc, Mono, Plumas, and Sierra counties are not included, either because data were not available or no hospitals in the county met the inclusion criteria.

<sup>b</sup> Data Source: 2011 to 2012 California Health Interview Survey

Note: Patients whose racial/ethnic designations are not known are not shown in the table. The racial/ethnic designation may be considered unknown if it was not noted in the patient’s records or if the racial/ethnic designation was removed from the data set to protect patient anonymity.

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