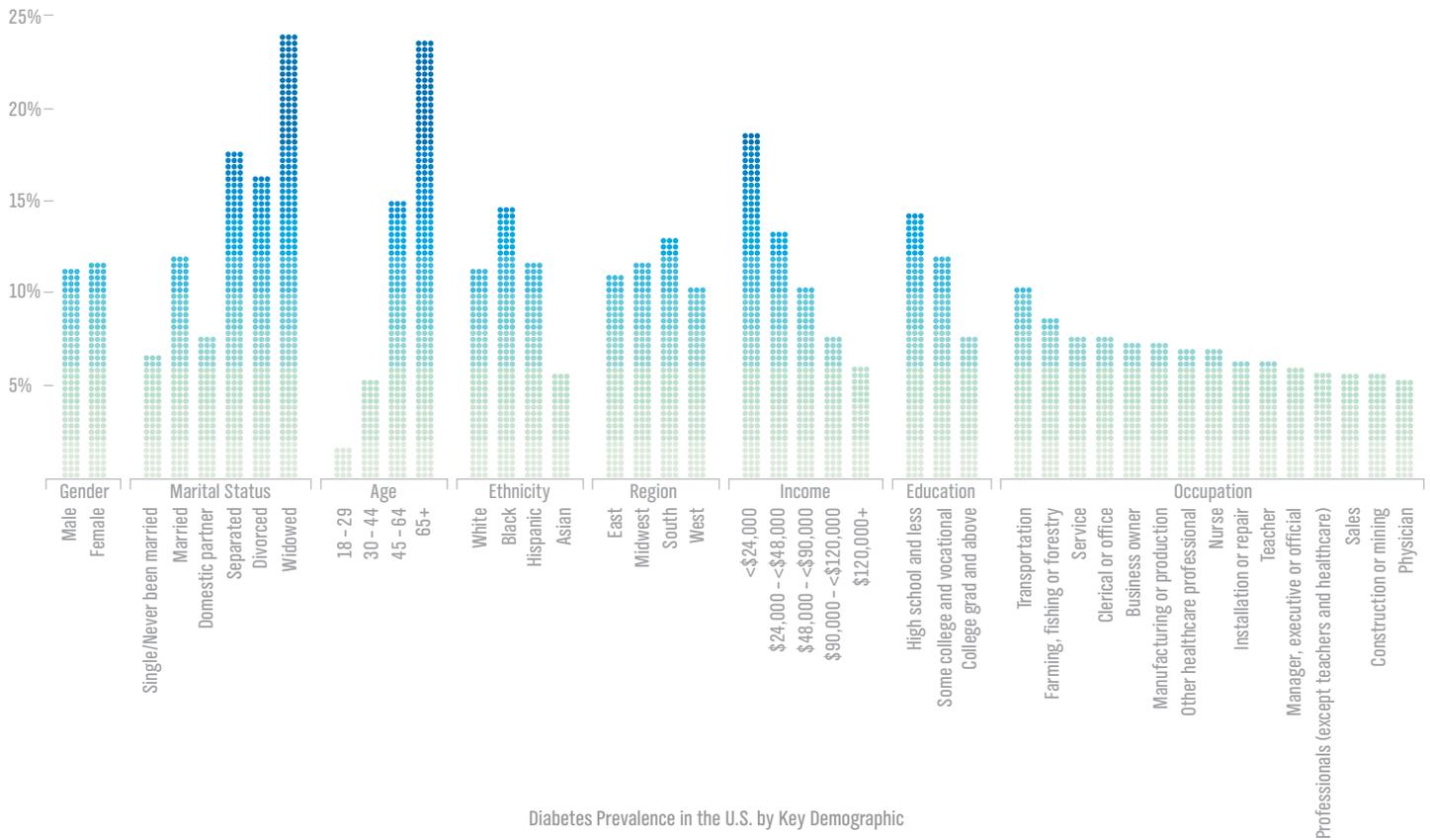


# STATE OF AMERICAN WELL-BEING

## The Face of Diabetes in the United States



Diabetes Prevalence in the U.S. by Key Demographic



Results of Gallup-Sharecare Well-Being Index item:  
 "Has a doctor or nurse ever told you that you have diabetes?" (% yes)

# Diabetes Prevalence in the U.S.

Our objectives for diabetes need to move beyond treating symptoms, and focus on slowing the progression of the disease and lowering its prevalence. With the alarming rise in prediabetes and diabetes nationwide, there is an urgent need for hospitals and health systems to develop efficient, integrated approaches to diabetes care. Comprehensive inpatient glycemic and outpatient diabetes management programs can and do change the trajectory of the disease, and help those with diabetes better manage their condition and live a higher quality of life.

– Sheila Holcomb,  
Vice President,  
Sharecare

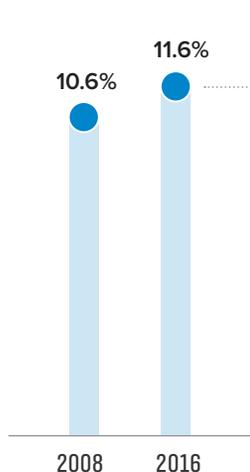
The prevalence of diabetes in the U.S. climbed to a new high of 11.6% in 2016, up from 10.6% in 2008. If the diabetes rate had held steady at its 2008 level rather than increased, 2.5 million fewer U.S. adults would have the disease today. Hospitals, health systems, employers, community leaders and other champions of population health are implementing both inpatient and outpatient solutions to address this rising epidemic.

Gallup and Sharecare’s *The Face of Diabetes in the United States*, analyzes diabetes prevalence across key demographics, occupations, and regions. The Gallup-Sharecare Well-Being Index does not differentiate between type 1 and type 2 diabetes, but instead asks U.S. adults: “Has a doctor or nurse ever told you that you have diabetes?” By shedding light on where diabetes rates are higher or lower than the national average by a statistically significant margin, these data can be used to more effectively target investments and customize programs that address specific populations who are at greatest risk.

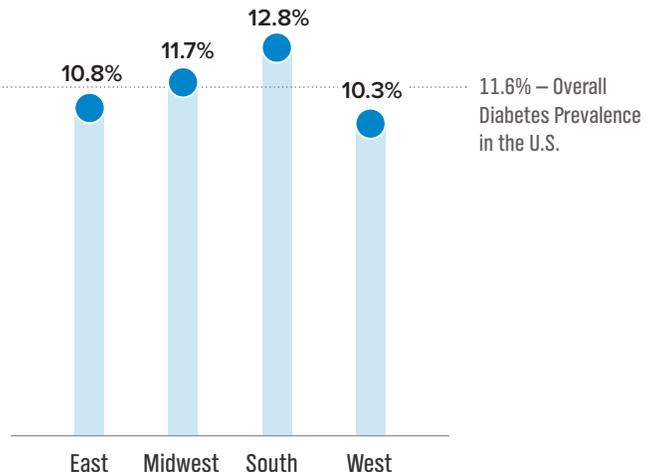
Gallup and Sharecare regional analysis shows that prevalence spikes in the South, with a 12.8% diabetes rate in 2016. [Previous research by Gallup and Sharecare](#) shows that southern-based populations (both for states and communities) have some of the highest prevalence rates in the nation. Seven of the 10 states and communities with the highest diabetes rates are in the South, with Alabama, West Virginia, Mississippi, Tennessee, South Carolina, and Arkansas each having more than 14% of their population reporting having been diagnosed with diabetes.

Other demographic insights include a slightly higher prevalence of diabetes among women versus men, a higher prevalence rate among blacks as compared to other racial and ethnic groups, and a direct correlation between age and higher diabetes prevalence. Seniors age 65 and older have an alarming 23.6% prevalence rate. Income and education levels have an inverse relationship with diabetes – prevalence falls as education and income levels rise. Additionally those who are divorced, separated or widowed have much higher prevalence of diabetes than those who are single, in a domestic partnership, or married. Diabetes rates by marital categories are partially a reflection of the average age of the status itself. (For additional analysis on diabetes prevalence by ethnicity, see page 5.)

Diabetes Prevalence in the U.S., 2008 & 2016



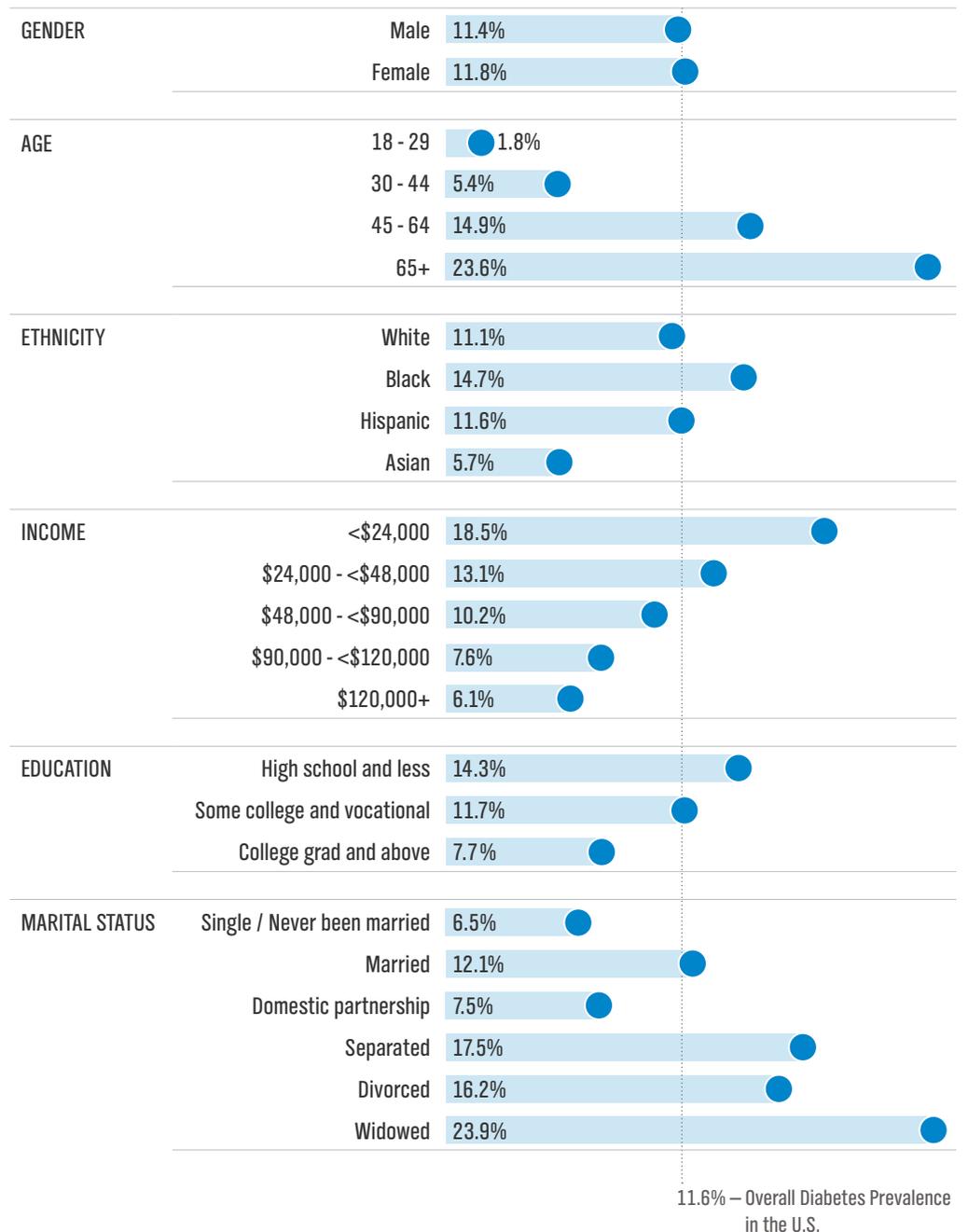
Diabetes Prevalence in the U.S. by Region, 2016



# Diabetes Prevalence in the U.S. by Key Demographic Data

Key groups of Americans are now approaching or exceeding 20% diabetes rates. Seniors, those with low income, and people who are divorced, separated or widowed have the highest diabetes rates in the country. Health systems, hospitals, health plans, employers, and communities are responding by offering diabetes management and prevention programs for their residents, employees and members. These programs should directly address the socio-economic and demographic areas where diabetes has reached epidemic levels. By tailoring these interventions, investments and outcomes can be optimized.

## Diabetes Prevalence in the U.S. by Key Demographic Data, 2016



## Diabetes Prevalence in the U.S. by Occupation

Gallup and Sharecare analyzed the prevalence of diabetes within employed populations. Among workers, who are on average younger and in better health than the general population, 6.9% indicate a diagnosis of diabetes in their lifetime, well below the national average of 11.6%. By occupation, transportation workers have a 10.3% prevalence rate in 2016, double the rate of physicians who had the lowest reported prevalence at 5.1%. The occupation category of farming, fishing and forestry reported the second highest prevalence of diabetes at 8.5%.

Transportation workers are also at greatest risk of being diagnosed with diabetes in the future, based on an analysis of several key risk factors. Chief among these is obesity, a known precursor to diabetes that quadruples the risk of diabetes across most age groups, particularly among those between the ages of 25 and 64, prime working years. Other risk factors include heavy alcohol consumption, smoking, a sedentary lifestyle, and poor eating habits. Workers in manufacturing/production, installation/repair, and construction/mining round out the highest four occupation types at risk of new diabetes diagnoses in the future. Other factors, such as age, race/ethnicity, and genetic predisposition can all increase the risk of new onset diabetes but are not included in this analysis.

### Diabetes Prevalence in the U.S. by Occupation, with Key Risk Factors, 2016

	% Diabetes Diagnosis	Risk Level of New Onset Diabetes	Obese	Heavy Alcohol Consumption*	Smoker	Low Exercise**	Low Healthy Eating***
Transportation	10.3%	Highest	40.3%	5.1%	26.7%	48.6%	48.1%
Farming, Fishing or Forestry	8.5%	Average	26.0%	6.1%	17.9%	33.2%	41.0%
Service	7.7%	Average	27.8%	4.0%	23.3%	44.3%	47.2%
Clerical or Office	7.7%	Average	28.4%	2.1%	14.0%	50.4%	43.3%
Business Owner	7.5%	Below Average	22.5%	5.7%	15.4%	41.2%	38.1%
Manufacturing or Production	7.5%	Above Average	31.2%	6.0%	26.2%	44.4%	51.9%
Other Healthcare Professional	6.8%	Average	25.4%	2.7%	11.9%	42.5%	39.3%
Nurse	6.8%	Average	27.2%	1.4%	11.7%	44.3%	34.7%
Installation or Repair	6.2%	Above Average	27.4%	8.7%	27.2%	41.9%	51.1%
Teacher	6.2%	Below Average	25.3%	2.0%	5.2%	44.5%	36.5%
Manager, Executive or Official	6.0%	Average	27.6%	4.9%	14.9%	43.7%	42.3%
Professionals (except teachers and healthcare)	5.7%	Below Average	23.2%	4.4%	10.8%	42.8%	41.9%
Sales	5.5%	Average	25.0%	4.5%	17.6%	44.9%	47.6%
Construction or Mining	5.5%	Above Average	25.4%	10.1%	30.2%	38.2%	49.5%
Physician	5.1%	Lowest	13.8%	2.7%	2.5%	41.5%	36.7%
All U.S. Adult Workers	6.9%						

\*15 or more alcoholic drinks per week

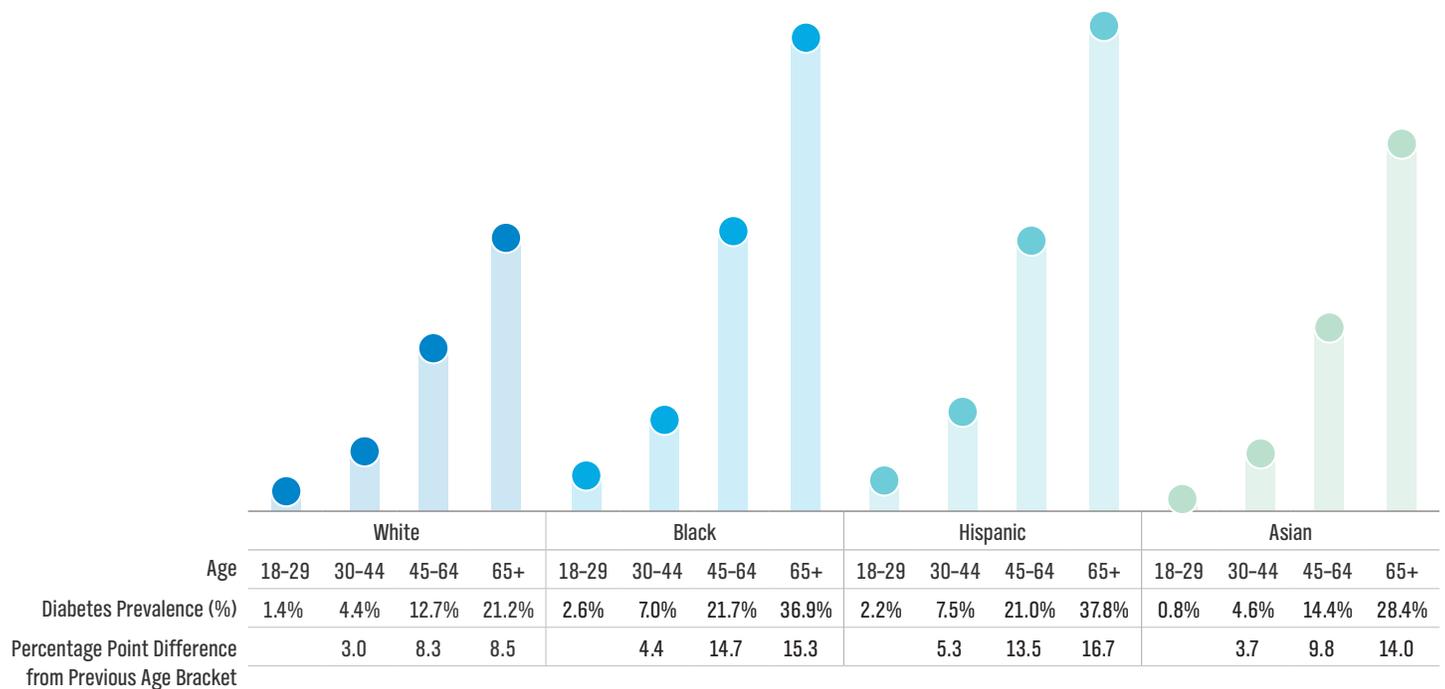
\*\*Did not exercise 30+ minutes 3+ days in the past week

\*\*\*Did not consume 5+ servings of produce 4+ days in the past week

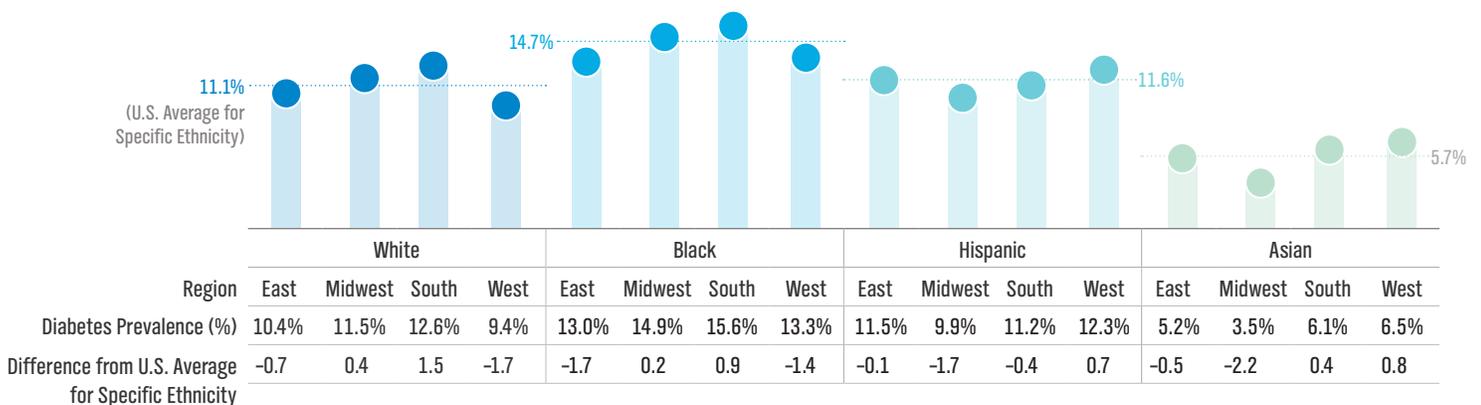
## Diabetes Prevalence in the U.S. by Race / Ethnicity

Below Gallup and Sharecare present additional analysis of diabetes prevalence by race and ethnicity, both by age and region. The analysis reveals that prevalence rates accelerate at younger ages for both blacks and Hispanics. Both groups have rates exceeding 20% in the 45 to 64 age bracket, while whites and Asians do not cross this threshold until 65. This highlights an opportunity for regional and local hospitals and health systems to collaborate with employers in their communities to provide education and interventions to this younger demographic. Regional analysis shows that diabetes rates are proportionately higher for Hispanics and Asians living in western states; while prevalence rates for whites and blacks are slightly proportionately higher in the southern and midwestern states.

### Diabetes Prevalence in the U.S. by Race / Ethnicity and Age, 2016



### Diabetes Prevalence in the U.S. by Race / Ethnicity and Region, 2016



Within a hospital or health system, diabetes can easily get sidetracked or even lost among competing service lines. One educator may be responsible for many priorities – risk management, patient education, cost avoidance – which means the quality of care for the patient can suffer and the impact on staff increases.

Over the last 24 years, our partnership with Sharecare (formerly Healthways), helped us stay laser-focused on diabetes care and glycemic management. This partnership has been essential for ensuring our patients' diabetes is managed effectively and our cost is minimized.

– Carlton Lancaster, MD,  
Medical Director,  
Hamilton Comprehensive  
Diabetes and Metabolic Center  
Hamilton Health Care System,  
Dalton, GA

Hospitals and health systems around the country currently face an epidemic of those with diabetes and prediabetes in the communities they serve. Hospitals are searching for solutions to help patients better manage their chronic conditions and educate those who are at risk. Best-in-class diabetes management programs deliver professional education, provide outpatient prevention and self-management education and support, focus on achieving glycemic targets and reducing average length of inpatient stays, and engage multidisciplinary teams to promote coordinated care. Below are three profiles of innovative hospitals that are successfully managing their population with diabetes – improving clinical outcomes, patient engagement, and staff satisfaction, while lowering healthcare costs.

## **Munroe Regional Medical Center – Ocala, FL**

In 2008, Munroe Regional Medical Center, in collaboration with Sharecare (formerly Healthways) and Florida Blue, created a program to mitigate the impact of diabetes, a top five expense, within the Marion County School Board's employee population. Through an onsite coordinator, the Munroe Diabetes Center became a "one stop shop" providing educational workshops, various tests and podiatry exams for employees, all covered in full by Florida Blue. Most education classes were held on Saturdays or Tuesday evenings to minimize conflict with school hours. Participants received all testing supplies, generic medication for blood pressure and lipid lowering, as well as diabetes control including insulin, at no cost.

The group participating in the formal diabetes education program had a 9% decrease in total healthcare costs, while the nonparticipant group had a 39% increase in healthcare costs (pre- to post-period). Today, after 10 years, 47% of participants remain active in the program and receive annual screening, program benefits, and two hours of follow-up education at Munroe's Diabetes Center. This program is being used as a model for other employer groups in Florida to help initiate diabetes programs for their employees.

## **Columbia St. Mary's, part of Ascension – Wisconsin**

Columbia St. Mary's diabetes management program, in partnership with Sharecare (formerly Healthways), delivers inpatient glycemic management services and diabetes self-management education within three acute care hospitals, one specialty hospital, one inpatient rehabilitation center and 11 clinics in Wisconsin. The program established standard services to allow patients to move seamlessly through the continuum of care at all locations. The diabetes center's clinicians and educators touch almost 80% of patients ages 18 to 75 across all Columbia St. Mary's physician offices and Madison Medical Affiliates.

This unique program utilizes a multidisciplinary approach to treatment, engaging individuals with diabetes in the context of their own lives and is integrated within three hospitals, 10 primary care offices, and one endocrinology office. Through cohorts tailored for the individual – group exercise and weight loss classes, women's trauma and diabetes groups, diabetes workshops and individual behavior change sessions – Columbia St. Mary's emphasizes bridging gaps in communication between physician and patient. Their programs encourage sustained behaviors that can positively impact those with diabetes including diet, activity, stress management, and medication adherence, to create lifestyle changes needed to successfully manage type 2 diabetes. In addition to a nearly 90% patient satisfaction and recommendation rate, this behavior change approach has led to a 16.3% reduction in A1C values for all patients and a 58.7% reduction in diabetes-related hospital readmissions within the system.

The Sharecare Diabetes Treatment Center (formerly Healthways) provides high-quality education and resources to both inpatients and outpatients at Memorial Regional Medical Center. The staff readily engages our patients both at the hospital bedside instructing a new patient with diabetes on how to use insulin and in the outpatient setting providing education on diabetes self-management tools. I am grateful to have the diabetes treatment center as an integral part of the care I provide to my patients in our community.

– Doug Johnson, MD,  
Endocrinologist,  
Bon Secours Richmond  
Diabetes and Endocrinology  
Affiliated with Bon Secours  
Memorial Regional Medical  
Center and Bon Secours St.  
Francis Medical Center

## Wellmont Health System – Kingsport, TN

According to the Gallup-Sharecare Well-Being Index™, almost 16% of residents in the Kingsport-Bristol area have been diagnosed with diabetes, significantly higher than the national average of 11.6% and Tennessee's rate of 14.2%. Wellmont Health System, one of Northeast Tennessee's largest local healthcare providers, has made combating diabetes a top priority, and partnered with Sharecare (formerly Healthways) for diabetes management solutions. Wellmont is the region's only hospital-based diabetes program recognized by the American Diabetes Association (ADA). In addition to clinical and inpatient care, Wellmont also provides ADA-approved diabetes self-management classes in eight locations in Tennessee and Virginia, helping improve the care of several thousand people each year.

In November 2009, Wellmont partnered with local and state law enforcement to enact the Diabetes Alert Sticker Program. The symptoms of severe hypo- or hyperglycemia including slurred words, dizziness or clumsy movement, can be mistaken for drug and alcohol impairment. This program assists law enforcement to distinguish the cause of traffic incidents due to diabetes-related complications through a physician-prescribed automobile sticker. Available at 27 locations throughout Tennessee, the sticker program is sponsored by local area health systems and their diabetes centers. This program enhances community safety, increases knowledge for law enforcement, and ensures quicker reaction from first responders and emergency personnel. To learn more, go to <http://mydiabetesalert.com>.

### The Voice of the Patient

*"I woke up with blurry vision and went to my eye doctor. He couldn't find anything wrong with my eyes but decided to test my blood sugar levels which came back at over 500. My physician diagnosed me with type 2 diabetes, and referred me to the Hamilton Diabetes Center. After attending the education classes, I learned more about diabetes than I imagined was possible.*

*It was time to get serious. I drastically changed my life by cutting out sugar, reading nutrition labels, watching my portions and walking daily. After one year, my A1C (blood glucose levels) was reduced from 10.2 to 4.8, I lost over 100 lbs., and I no longer have to take medication. The support and encouragement the diabetes center provided was invaluable. They made an impossible situation possible, and their impact has improved my life and health forever."*

– Jason H., Sharecare Diabetes Solution – Education Program Graduate  
Hamilton Comprehensive Diabetes & Metabolic Center, Hamilton Medical Center, Dalton, GA

*"When I was first diagnosed with diabetes, I felt overwhelmed especially about what I could eat. I feared I could never enjoy my favorite foods again. A friend of mine recommended I attend the diabetes education classes offered at Parkview. After my classes, I learned how to eat a balanced and healthy diet without giving up the foods I enjoyed. I want to extend special thanks to the Parkview team for their continued support. I know if I have a problem or question, they are only a phone call away. Along with hard work, I credit my improvement to the classes and education team at Parkview."*

– Debbie J., Sharecare Diabetes Solution – Education Program Graduate  
Parkview Diabetes Treatment Center at Parkview Regional Medical Center, Parkview Health, Fort Wayne, IN

*"I have diabetes and congestive heart failure with a pacemaker. One night it triggered multiple times, and I thought I would die. Later I found out it was because my glucose levels rose to emergency levels.*

*After joining the Columbia St. Mary's diabetes support group, I learned that diabetes affects individuals in many ways and that others have challenging moments too. This group has improved my quality of life tremendously. I have more positive things to add, but in short, if you ask other members they all will agree, this diabetes group has and is still saving lives."*

– Grozayar H., Sharecare Diabetes Solution – Education Program Graduate  
Columbia St. Mary's Diabetes Treatment Center, Columbia St. Mary's, part of Ascension, Milwaukee, WI

# STATE OF AMERICAN WELL-BEING

## The Face of Diabetes in the United States

### Methodology

These data are based on a subset of 177,192 telephone interviews with U.S. adults across all 50 states and the District of Columbia, conducted from January 2, 2016 to December 30, 2016. For the occupation category analysis results are based on 91,424 U.S. workers age 18 and older, conducted in the same time period, as part of the Gallup-Sharecare Well-Being Index. Gallup conducts 500 telephone interviews daily, resulting in a sample that projects to an estimated 95 percent of all U.S. adults. Gallup conducts interviews in both English and Spanish. Each sample of national adults includes a minimum quota of 60% cellphone respondents and 40% landline respondents. Additional minimum quotas by time zone and within region are included in the sampling approach.

In the measurement of diabetes prevalence, the Well-Being Index does not discern between type 1 and type 2 diabetes, but rather asks: "Has a doctor or nurse ever told you that you have diabetes?"

Read more about diabetes trends at: <http://www.gallup.com/poll/214097/diabetes-rate-greatest-among-transportation-workers.aspx>

### About the Sharecare Diabetes Solution™

The Sharecare Diabetes Solution™ was founded on the principles of the Diabetes Treatment Centers of America, originally established more than 30 years ago, by Healthways, a Sharecare company – to be the trusted partner in diabetes and glycemic management for physicians and health systems nationwide. Today, our expanded products and services build upon that foundation by educating and providing comprehensive coordinated care for those with diabetes and prediabetes. As the only diabetes program delivering end-to-end care, the Sharecare Diabetes Solution enhances revenue, increases cost savings, and boosts both clinical and quality outcomes, while also improving patient, provider and nurse satisfaction throughout your health system. For more information, please visit <http://sharecarediabetes.com>.

### About the Gallup-Sharecare Well-Being Index™

The Gallup-Sharecare Well-Being Index is the world's largest data set on well-being, with over 2.5 million surveys fielded to date. The Well-Being Index provides unmatched, in-depth insight into the well-being of populations, is frequently cited by national media, and has been leveraged by Nobel laureates and academicians for peer-review and scholarly articles. Gallup interviews 500 people every day; the result is a sample that projects to an estimated 95% of U.S. adults.

The partnership between Gallup and Sharecare merges decades of clinical research, health care leadership and behavioral economics expertise to track and understand the key factors that drive greater well-being for individuals and populations. Previously known as the Gallup-Healthways Well-Being Index, the Gallup-Sharecare Well-Being Index™ was recently rebranded following Sharecare's 2016 acquisition of Healthways. This rebrand signifies a new and exciting union of the powerful insights generated by Gallup and meaningful health engagement fostered by Sharecare, to create a healthier world through knowledge, information and action.

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