



# ALLIANCE TO REDUCE DISPARITIES IN DIABETES

**Health care disparities refer to differences or inequities in access to, and outcomes of, health services.**

In the United States, disparities for many chronic health conditions, including diabetes, are a growing national concern. The U.S. Centers for Disease Control and Prevention estimates that nearly 29.1 million people—9.3 percent of the U.S. population—have diabetes. In adults, type 2 diabetes accounts for 90 percent to 95 percent of all diagnosed cases.

Diabetes represents a significant economic burden in the United States. The American Diabetes Association estimates that the total cost of diagnosed diabetes was approximately \$245 billion in 2012.

To address the growing problem of health care disparities related to type 2 diabetes in the United States among low-income and underserved adult populations, in 2009, our company's foundation, a U.S.-based, private foundation, launched the Alliance to Reduce Disparities in Diabetes (Alliance), with a commitment of \$15 million. The Alliance concluded operations in 2014.

**“Patients enrolled across the Alliance sites really responded when care and support were delivered outside the box. Building community partnerships and fostering the spirit of empowerment among patients were just a few of the keys to the Alliance’s success. We were reminded of something fundamental—that most of the work in managing chronic disease occurs outside of the health care system.”**

**Jeffrey Brenner, M.D.**, executive director, Camden Coalition of Healthcare Providers, the Alliance’s Camden, New Jersey, site

## ALLIANCE GOALS

The Alliance worked to minimize disparities in diabetes outcomes and enhance the quality of diabetes care by improving prevention and management services. The Alliance collaborated with national, regional and community partners to develop and implement comprehensive, evidence-based diabetes programs that:

- Applied proven, community-based and collaborative approaches to addressing health care disparities related to type 2 diabetes among low-income and underserved adult populations
- Enhanced patient and health care provider communication, mobilized community partners, and assisted health care organizations in reducing disparities in diabetes care and outcomes
- Disseminated important findings to foster the development of comprehensive prevention and management programs designed to improve the quality of health care for adults who have or are at risk for diabetes

- Increased awareness among federal, state and local policymakers of health system and policy changes that can reduce health care disparities in diabetes
- Promoted collaboration and information exchanges to strengthen the efforts of interested stakeholders around the country that share the vision and goals of the Alliance

**Results from an evaluation of the Alliance to Reduce Disparities in Diabetes were published in a series of 10 articles in the November 2014 supplemental issue of the peer-reviewed journal *Health Promotion Practice*. The Alliance's findings reveal that a new model of chronic disease management for vulnerable populations with diabetes shows significant promise in strengthening coordination of care, reducing diabetes health disparities and improving health outcomes.**

## ALLIANCE PROGRAMS

Through grants to five organizations, our company's foundation supported multifaceted, community-based programs that addressed the key factors that can improve health outcomes for people living with diabetes. The five grantee communities were Camden, New Jersey; Chicago, Illinois; Dallas, Texas; Memphis, Tennessee; and Wind River Reservation, Wyoming. The University of Michigan's Center for Managing Chronic Disease served as the Alliance's National Program Office.

## PROGRAM APPROACH

Alliance programs focused on integrating three areas of intervention:

**Patients:** Patients who are better educated about diabetes and empowered in terms of disease management become more engaged in their health care overall; they become better at managing their conditions themselves by adopting behaviors that help prevent health problems and by communicating more effectively with physicians and other clinicians.

**Clinicians:** Clinicians who are more skilled in communicating with diverse patient groups—and are aware of diverse cultural beliefs—are more effective in providing care and educating their patients.

**Health Systems:** Health care organizations that implement and support clinical systems, policies or practices addressing effective disease management and quality improvement can help to reduce disparities in diabetes care.

## ALLIANCE PROGRAM SITES

### **Camden Coalition of Healthcare Providers (Camden, New Jersey):**

The Camden Citywide Diabetes Collaborative aimed to better coordinate and improve the quality of comprehensive primary care services for city residents with diabetes.

### **University of Chicago (Chicago, Illinois):**

The University of Chicago program focused on redesigning and improving the quality of diabetes management and care provided at community health centers on Chicago's South Side.

### **Baylor Scott & White Quality Alliance (Dallas, Texas):**

The Diabetes Equity Project focused on helping physicians develop strategies that promote effective care and management for low-income, uninsured and underserved people with diabetes in Dallas.

### **Healthy Memphis Common Table (Memphis, Tennessee):**

The Diabetes for Life program promoted community outreach and diabetes self-management through local churches in Memphis.

### **Wind River Reservation (Fort Washakie, Wyoming):**

An effort led by the Eastern Shoshone Tribe and its collaborating partners sought to improve access to diabetes care and management among the Eastern Shoshone and Northern Arapaho tribes of the Wind River Reservation.

## PUBLIC POLICY

Alliance program sites continued to make progress in addressing diabetes disparities in their communities. Yet they also reported facing systemic and structural barriers in the health care system that challenged their ability to deliver and sustain effective diabetes care for those most in need. To help overcome these barriers, program sites initiated organizational and health system changes. Learn more.

Additionally, the Alliance programs emphasized the need to connect their “on the ground” experience with the national policy dialogue about improving the quality of health care and reducing diabetes disparities in the United States. To advance the national conversation about ways to overcome systemic barriers to providing effective diabetes care, the Alliance published a set of policy considerations titled “Policy Considerations That Make the Link: Connecting Community Experience and National Policy to Reduce Disparities in Diabetes.”

# PERFORMANCE

## CROSS-SITE ALLIANCE PROGRAM EVALUATION

Our company’s foundation, a U.S.-based, private foundation, engaged RTI International to conduct a five-year (2009–2013), independent cross-site evaluation of the Alliance and its programs. The final results of the evaluation were published in the November 2014 special supplement of *Health Promotion Practice*. Final results from the evaluation are provided below.

Overall, 48 clinics or practices participated in at least two of the three areas of intervention (i.e., patients, providers and systems). Cumulatively, from 2009 to 2013, 141 individual physicians were actively engaged in program implementation (e.g., recruiting patients with type 2 diabetes, and identifying and implementing systems changes in the practice setting). In

addition, Alliance sites served a diverse patient population through their programs. From 2009 to 2013, across the sites, 40 percent of patients were Hispanic or Latino, 40 percent were African-American, 8 percent were Native American, 7 percent were white, 1 percent were Asian, and 4 percent were of another racial or ethnic background or of unknown ethnicity.

The Alliance program sites enrolled participants on a rolling basis since the program was first implemented in 2009. Enrollment was ongoing through December 2013. Data collection has been completed, and the values reported are the final baseline and follow-up measures. The data presented below were aggregated across the five sites in an independent evaluation.

### PATIENT & PROVIDER PARTICIPATION (CUMULATIVE OVER TIME)

	2010	2011	2012	2013
<b>Number of adults with type 2 diabetes enrolled in DSME<sup>1</sup></b>	804	1,570	2,151	<b>2,361</b>
<b>Number of providers who received cultural awareness training<sup>2</sup></b>	39	72	138	<b>172</b>

<sup>1</sup> DSME: Diabetes self-management education. DSME commonly addresses enhancing self-care behaviors (such as nutrition, exercise and blood-glucose monitoring) and informed decision-making in order to improve clinical outcomes and quality of life.

<sup>2</sup> Cultural awareness training is part of a process by which better patient care is delivered. It helps clinicians become better communicators and makes them more aware of cultural differences.

PATIENT SELF-REPORTED OUTCOMES	BASELINE	FOLLOW-UP AS OF 12/2013
Diabetes competence <sup>1</sup>	4.9	<b>6.2</b>
<b>DIABETES SELF-CARE BEHAVIORS<sup>2</sup></b>		
General diet	3.7	<b>4.7</b>
Diabetes-specific diet	4.0	<b>4.6</b>
Exercise	2.6	<b>2.9</b>
Blood-glucose testing	4.1	<b>5.0</b>
Foot care	4.1	<b>5.5</b>
<b>QUALITY-OF-LIFE MEASURES</b>		
Physical functioning <sup>3</sup>	42.1	<b>42.9</b>
Mental functioning <sup>4</sup>	43.3	<b>47.8</b>
<b>OBJECTIVELY MEASURED PATIENT CLINICAL OUTCOMES</b>		
Hemoglobin A1c <sup>5</sup>	8.4	<b>7.7</b>
Low density lipid (LDL) cholesterol <sup>6</sup>	101	<b>99</b>
Blood pressure <sup>7</sup>	129/79	<b>128/78</b>

<sup>1</sup> Weighted averages for the cohort of participants with baseline and follow-up measures for four competence questions rated on a scale from 1 to 7, where higher ratings reflect better feelings of competence about engaging in diabetes self-management. The baseline score here demonstrates slightly above-average competence and shows improvement at follow-up.

<sup>2</sup> Weighted averages for each behavior for the cohort of participants with baseline and follow-up measures. Self-care behaviors are scored on a scale from 0 to 7, indicating how many of the prior seven days a behavior was performed. Higher numbers reflect more days on which the behavior was performed. The scores here demonstrate that participants, on average, engaged in these behaviors between three to four days a week at baseline and that there was improvement at follow-up.

<sup>3</sup> Weighted averages shown for baseline and follow-up measures for the cohort of participants for self-reported physical functioning (e.g., physical ability or limitations, bodily pain); higher scores reflect better physical functioning. Population norm: 50. Scores are below population norm at baseline and follow-up.

<sup>4</sup> Weighted averages shown for baseline and follow-up measures for the cohort of participants for self-reported mental functioning (e.g., feelings of depression, anxiety, calm); higher scores reflect better mental functioning. Population norm: 50. Scores are below population norm, but mental functioning shows improvement over time.

<sup>5</sup> Weighted averages for the cohort of participants with baseline and follow-up measures for the hemoglobin A1c blood test. Lower numbers indicate better values. Changes in hemoglobin A1c show improvement over time.

<sup>6</sup> Weighted averages for the cohort of participants with baseline and follow-up blood LDL cholesterol tests. Lower numbers indicate better values. Changes in LDL cholesterol show slight improvement over time.

<sup>7</sup> Weighted averages for the cohort of participants with baseline and follow-up measures for blood pressure measurements. Lower numbers indicate better values. Changes in blood pressure show no improvement over time.