Special Diabetes Program for Indians: Community-Directed Successful Interventions and Sustained Achievements

Since 1998, Special Diabetes Program for Indians (SDPI) funding has enabled American Indian and Alaska Native (AI/AN) communities to develop, sustain, and dramatically increase access to quality diabetes programs that are associated with remarkable clinical outcomes. SDPI literally has changed the diabetes landscape across the Indian health system.

13 Years of Successful Interventions

Based on local needs and priorities, the SDPI grant programs implement proven interventions to address the diabetes epidemic, often where few resources existed before.

Increased Access to Diabetes Treatment and Prevention Services

	1997*	2010
Diabetes clinics	31%	71%
Diabetes clinical teams	30%	94%
Diabetes patient registries	34%	94%
Nutrition services for adults	39%	89%
Access to registered dietitians	37%	77%
Culturally tailored diabetes education programs	36%	99%
Access to physical activity specialists	8%	74%
Adult weight management programs	19%	76%

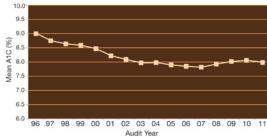
^{*}Before SDPI funding was available

Source: Evaluation of the SDPI Community-Directed Diabetes Programs

13 Years of Sustained Achievements in Diabetes Outcomes

At the same time that access to these diabetes services increased dramatically, key outcome measures for AI/AN people with diabetes show achievement or maintenance at or near national targets. These results have been sustained throughout the SDPI era.

Mean Blood Sugar



Source: IHS Diabetes Care and Outcomes Audit

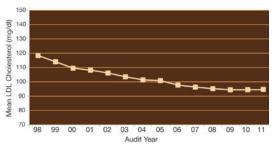
Goal: A1C < 7% for most patients

Outcome: The average blood sugar level decreased from 9.0% in 1996 to

8.0% in 2011 as measured by the A1C test.

Importance: Every percentage point drop in A1C results can reduce risk of eye, kidney, and nerve complications by 40%.

Mean LDL Cholesterol



Source: IHS Diabetes Care and Outcomes Audit

Goal: LDL ("bad") cholesterol < 100 mg/dL

Outcome: Average LDL cholesterol declined from 118 mg/dL in 1998 to

94 mg/dL in 2011.

Importance: Improved control of LDL cholesterol can reduce

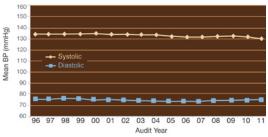
cardiovascular complications by 20%-50%.





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Mean Blood Pressure



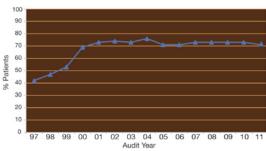
Source: IHS Diabetes Care and Outcomes Audit

Goal: Blood pressure <130/80 mmHg

Outcome: Blood pressure has been well-controlled throughout the SDPI era. The average blood pressure in 2011 was 131/75 mmHg.

Importance: Blood pressure control reduces the risk of cardiovascular disease among people with diabetes by 33%-50% and reduces the risk of eye, kidney, and nerve complications by about 33%. Lowering blood pressure in patients with early diabetic kidney disease can reduce the decline in their kidney function by 30%-70%.

Use of ACE Inhibitors and ARBs for Blood Pressure Control

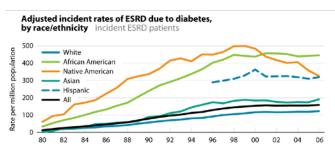


Source: IHS Diabetes Care and Outcomes Audit

Treatment with angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor blockers (ARBs) is more effective in reducing the decline in kidney function than is treatment with other blood pressurelowering medications. Use of these blood pressure-lowering medications increased from 42% in 1997 to 72% in 2011.

The impact of these combined and sustained clinical improvements is most evident in the dramatic drop in the rate of end stage renal disease (ESRD) in AI/AN people with diabetes when compared with other racial and ethnic groups in the U.S.

Adjusted Incident Rates of ESRD Due to Diabetes, By Race and Ethnicity



Source: U.S. Renal Data System, 2011

Between 1995 and 2006, the incident rate of ESRD in AI/AN **people with diabetes fell by 27.7%**—a greater decline than for any other racial or ethnic group. Given that Medicare costs per year for one patient on hemodialysis were \$82,285 in 2009, this reduction in new cases of ESRD means a decrease in the number of patients requiring dialysis—translating into millions of dollars in cost savings for Medicare, IHS, and other third party payers.

SDPI Is Fulfilling Congress' Vision

The SDPI grant programs, now with more than 13 years of experience, implement diabetes interventions that have significantly improved clinical outcomes for AI/AN people. As Congress envisioned, SDPI funding has enabled the Indian health system to make tremendous changes in the diabetes landscape in AI/AN communities.