



INDIAN HEALTH SERVICE

SPECIAL DIABETES PROGRAM FOR INDIANS 2020 REPORT TO CONGRESS

Changing the Course of Diabetes: Charting Remarkable Progress



Special Diabetes Program for Indians 2020 Report to Congress

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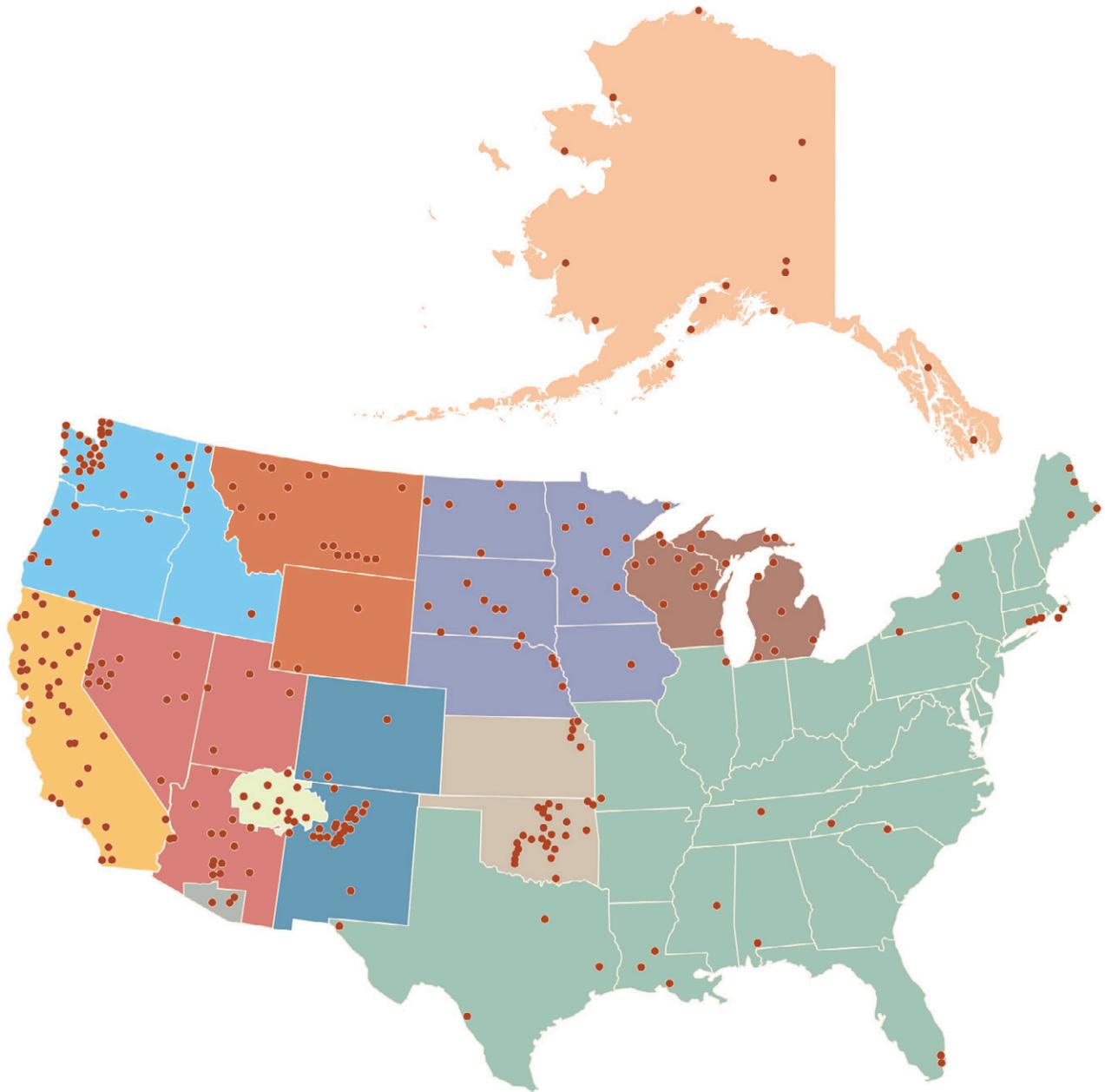


Figure 1. 301 SDPI program sites in 35 states, across all 12 IHS Areas

Diabetes is a nationwide public health problem, and American Indian and Alaska Native (AI/AN) people are disproportionately affected.¹ In 1997, Congress established the [Special Diabetes Program for Indians \(SDPI\)](#) to provide grants for diabetes treatment and prevention services to Indian Health Service (IHS), tribal, and urban Indian (I/T/U) health programs across the United States (Figure 1). Current funding for the SDPI is \$150 million per year.

SDPI grant program sites are successfully implementing evidence-based and community-driven strategies to prevent* and treat diabetes.

This sixth interim [report to Congress](#) highlights the SDPI's ongoing and outstanding contributions to improvements in diabetes care and health outcomes for AI/AN people.



As Congress envisioned, tremendous improvements are occurring in diabetes outcomes for AI/AN people – and the SDPI plays a key role in making them happen.

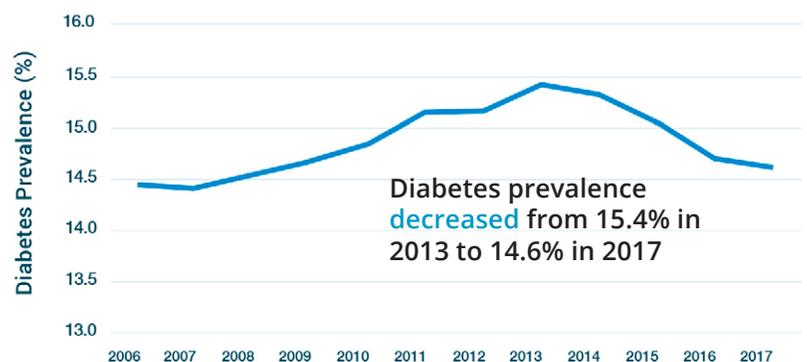
Important Diabetes Outcomes for American Indian and Alaska Native People

SDPI has been essential to achieving the remarkable outcomes described below, which have tremendous implications for health care costs and the quality of life for AI/AN people.

Diabetes Prevalence

For the first time, diabetes prevalence in AI/AN adults has decreased – and has done so consistently for 4 years, dropping from 15.4 percent in 2013 to 14.6 percent in 2017 (Figure 2).² Neither the general United States (U.S.) population, nor any other U.S. racial/ethnic group has shown a decrease in prevalence.³ Given that diabetes-related mortality has also decreased,⁴ this improvement in prevalence appears to be driven by a reduction in new cases of diabetes in AI/AN adults.

Figure 2. Diabetes prevalence in AI/AN adults



Diabetes prevalence decreased from 15.4% in 2013 to 14.6% in 2017

Source: IHS National Data Warehouse
Adapted from: BMJ Open Diabetes Research and Care 2020;8:e001218

*For the purposes of this report, diabetes prevention refers to the prevention of type 2 diabetes.

Diabetes-Related Mortality

Diabetes-related mortality for AI/AN people decreased 37 percent from 54.2 per 100,000 in 1999 to 34.4 per 100,000 in 2017 (Figure 3).⁴ This decrease is likely due to ongoing improvements in diabetes care and reductions in complications, including kidney failure.

Kidney Failure

Diabetes-related kidney failure dropped by 54 percent in AI/AN adults between 1996 (57.3 per 100,000) and 2013 (26.5 per 100,000), a greater decrease than for any other U.S. racial/ethnic group (Figure 4).⁵ Recent research shows that these improvements have been sustained.⁶ This represents a substantial reduction in the number of AI/AN people who have to go on dialysis or receive a kidney transplant —

resulting in an estimated savings to Medicare of up to \$520 million over 10 years.⁷

Hospitalizations for Uncontrolled Diabetes

Hospitalizations for uncontrolled diabetes among AI/AN adults dropped 84 percent from 57.9 per 100,000 in 2000 to 9.4 per 100,000 in 2015 (Figure 5).⁸ Preventing hospitalizations can help lower health care costs.

Figure 3. Diabetes-related mortality in AI/AN people

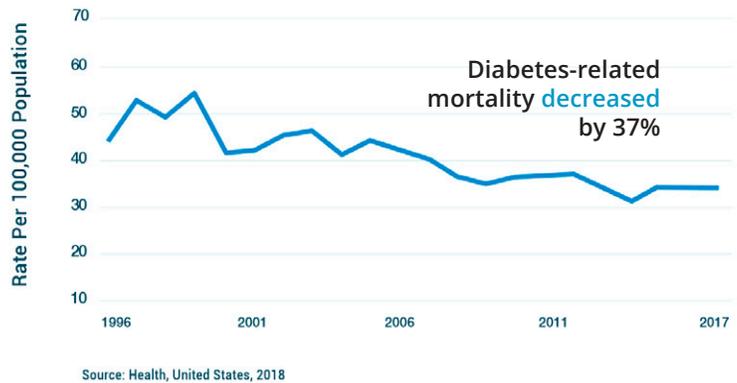


Figure 4. Incidence of diabetes-related kidney failure in U.S. adults

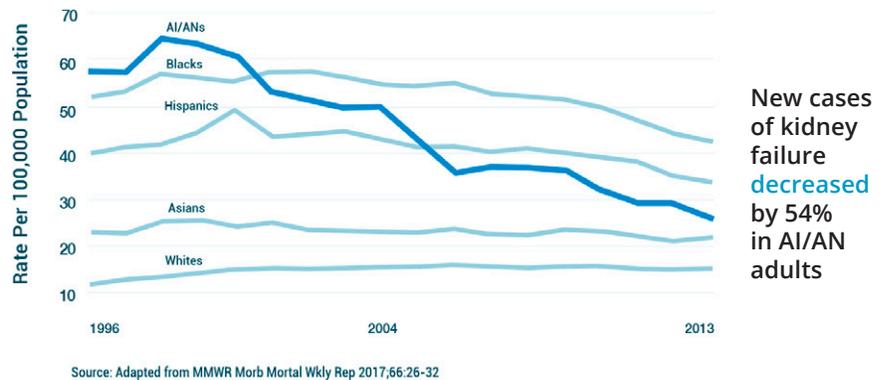
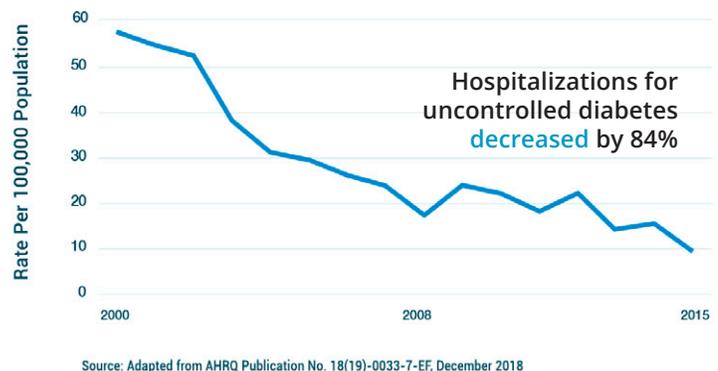


Figure 5. Hospitalizations for uncontrolled diabetes in AI/AN adults



Diabetic Eye Disease

The prevalence of diabetic eye disease (retinopathy) has decreased in AI/AN adults by more than 50 percent compared to reports from the 1980s and 1990s.⁹ This represents a substantial reduction in the risk of vision problems and blindness in AI/AN adults with diabetes.

These outcomes show remarkable progress in the treatment and prevention of diabetes in AI/AN people since the inception of the SDPI.



SDPI: 23 Years of Successful Interventions

SDPI has been essential in helping to make the important outcomes described above happen in AI/AN communities. Utilizing guidance from tribal leaders, the SDPI has engendered a national diabetes network, which includes the program sites, as well as support at the IHS Area and national levels. Each of the following components plays a key role in the important treatment and prevention work that is changing the course of diabetes.



Tribal Leaders Diabetes Committee

Tribal and IHS Collaboration on SDPI

Collaboration between the IHS, tribes, and urban Indian organizations is essential to the success of the SDPI, as is communication about SDPI-related issues.

The Tribal Leaders Diabetes Committee (TLDC) was established in 1998 to provide ongoing input to the IHS Director on the SDPI. The TLDC includes one elected or duly-appointed tribal leader representative from each of the 12 IHS Areas. The committee meets quarterly to discuss current SDPI issues and provide recommendations.

In addition, when major decisions need to be made about the SDPI, the IHS Director requests input through national tribal consultation and urban confer. Tribal and urban Indian organization leaders from across the country provide input via Area consultation/confer meetings, and also by submitting written comments directly to the IHS.

When decisions are made or key issues arise regarding the SDPI, the IHS Director sends out official letters to tribal and urban Indian organization leaders to keep them informed.

SDPI Grant Programs

In fiscal year (FY) 2020, there are 301 SDPI program sites, of which, 254 are operated by tribes, 29 by urban Indian organizations, and 18 by the IHS. These sites are located in 35 states and collectively serve more than 780,000 AI/AN people. The sites vary considerably in organization size and geographic location, as well as in the amount of SDPI funds they receive.

301 SDPI program sites in 35 States serving >780,000 AI/AN people



Each SDPI site selects one IHS Diabetes Best Practice to focus on each year. The 19 Best Practices provide evidence-based approaches to diabetes education and clinical care and are designed to help sites achieve and measure improvement. Within this framework, each site has tremendous latitude to determine the types of diabetes treatment and/or prevention services they will provide, guided by community priorities and

cultural values. Sites also choose what groups they focus on within their communities, such as elementary school children, clinic patients, or elders.

Since its inception in 1997, the SDPI has helped to dramatically increase access to important diabetes treatment and prevention services in AI/AN communities throughout the country (Table 1).

Table 1. Increases in Diabetes Services Reported by SDPI Sites

Intervention	Percent of Sites	
	1997 ^a	2019
Diabetes clinical teams	30%	95%
Diabetes patient registries	34%	96%
Nutrition services for adults	39%	94%
Access to registered dietitians	37%	85%
Access to physical activity specialists	8%	84%
Access to culturally tailored diabetes education materials	36%	96%
Adult weight management services	19%	76%
Nutrition services for children and youth	65%	90%
Community-based physical activity services for children and youth	13%	85%
Physical activity for school-age youth	9%	83%

^aBaseline = before SDPI funding was available
Source: Evaluation of the SDPI, 2019

Support for SDPI Programs

Area

Each IHS Area has an Area Diabetes Consultant (ADC) who provides support to SDPI sites in that Area. The ADCs are health care professionals with expertise in diabetes who assist sites both individually and collectively in many ways, including through training, Area meetings, and site visits. As such, they play a critical role in diabetes program improvement, as well as SDPI grant oversight and accountability.



National

At the national level, the IHS Division of Diabetes works with other IHS programs to provide the supportive framework necessary for the SDPI to be successful. The IHS Division of Grants Management administers the grant process and ensures that federal grant requirements are met. The IHS Office of Information Technology (IT) provides support for national databases and electronic health record systems, and Area IT programs address local technical needs.

The IHS Division of Diabetes provides programmatic leadership for the SDPI overall, as well as extensive training and resources, which are widely used by SDPI sites and clinicians across the country (Table 2).

Table 2. Utilization of IHS Division of Diabetes Training and Resources^a - FY 2019

Resource	Usage	Description
<u>SDPI and IHS Division of Diabetes Websites</u>	782,697 pageviews	Central sources for SDPI and clinical tools, training, and resources
<u>IHS Diabetes in Indian Country Conference</u>	1,228 attendees from 33 states 12,783 CME/CE ^b credits awarded	132 sessions on diabetes care and SDPI grant management August 2019, Oklahoma City, OK
<u>Diabetes Clinical Training</u>	5,622 CME/CE ^b credits awarded	Webinars and online courses
<u>Diabetes Clinical Tools</u>	17,402 Standards of Care pageviews 10,718 algorithm downloads	Guidance for providing quality diabetes clinical care and education
<u>Diabetes Education Materials</u>	9,215 catalog items ordered 9,205 downloads	AI/AN-specific materials for patients and diabetes educators
<u>SDPI Grant Training</u>	6,935 pageviews	Webinars and online courses

^a All provided at no cost to users
^b CME/CE = Continuing Medical Education/Continuing Education

The resources above facilitate the provision of high quality diabetes care and improvement in SDPI program activities. These outcomes are then assessed via an evaluation plan designed and implemented by the IHS Division of Diabetes. Central to this plan are the Diabetes Care and Outcomes Audit and SDPI Outcomes System.

Data-Driven Evaluation and Feedback

Diabetes Care and Outcomes Audit

The IHS Diabetes Care and Outcomes Audit (“Audit”) is a process for assessing care and health outcomes for AI/AN people with diagnosed diabetes. I/T/U health care facilities nationwide participate in this process, submitting data on more than 40 outcome measures each year. The IHS Division of Diabetes analyzes the data and prepares reports at the facility, Area, and IHS national levels. Each participating facility receives reports and graphs summarizing their site-specific data, which they can use to improve diabetes care. In calendar year 2019, 329 I/T/U facilities submitted data on more than 127,000 AI/AN patients with diabetes.

Audit statistics show that while access to diabetes services was increasing markedly (Table 1), key outcome measures for AI/AN people with diabetes showed achievement or maintenance at or near national targets. These results have been sustained throughout the SDPI era (Figures 6-9).

Figure 6. Average blood sugar (A1C)



Figure 7. Average LDL (“bad”) cholesterol

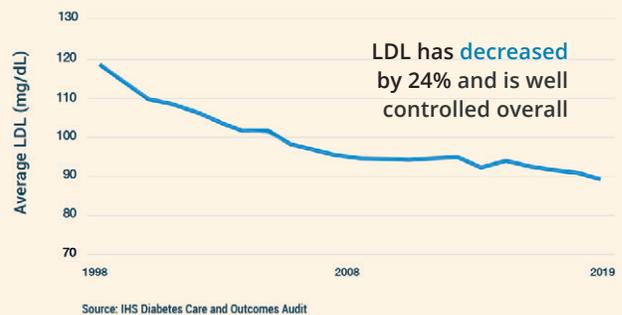


Figure 8. Average blood pressure

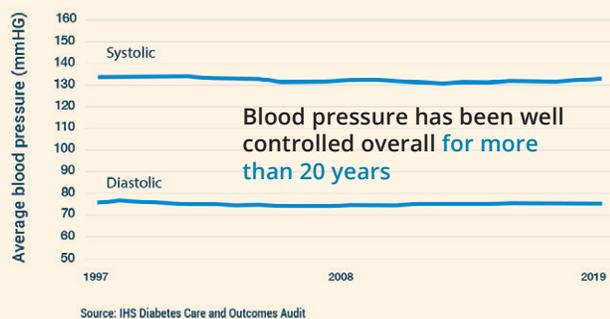


Figure 9. Tobacco use, counseling, and screening



Blood pressure control and improvements in blood sugar, low-density lipoprotein (LDL) cholesterol, and tobacco use are associated with important impacts on reducing risk for diabetes complications, such as heart disease and kidney failure.¹⁰

These measures document improvements in diabetes care for AI/AN people dating back to the beginning of the SDPI – improvements that have been essential to making the remarkable outcomes described in this report possible.

SDPI Outcomes System

As noted above, each SDPI site selects and implements one Diabetes Best Practice. The Diabetes Best Practices focus on improving various aspects of diabetes treatment and prevention – for example, nutrition education or blood sugar control. To assess improvement, each Best Practice includes one Required Key Measure that sites track and report on annually via the SDPI Outcomes System.

SDPI: Charting Remarkable Progress

As this report illustrates, there have been **tremendous improvements** in diabetes outcomes for AI/AN people, including:

- ↓ Diabetes prevalence
- ↓ Mortality
- ↓ Kidney failure
- ↓ Hospitalizations for uncontrolled diabetes
- ↓ Diabetic eye disease



“

These improvements have huge implications for quality of life and health care costs. Sustained efforts in diabetes prevention and treatment are critical to ensuring continued advances in the health of AI/AN people. The SDPI has been, and continues to be, key to this remarkable progress.”

— Ann Bullock, MD
Ojibwe
Director
IHS Division of Diabetes

References

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- ³Bullock A, Sheff K, Hora I, et al. Prevalence of diagnosed diabetes in American Indian and Alaska Native adults, 2006–2017. *BMJ Open Diab Res Care* 2020;8:e001218. doi: <http://dx.doi.org/10.1136/bmjdr-2020-001218>
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- ⁷Office of the Assistant Secretary for Planning and Evaluation (ASPE). The Special Diabetes Program for Indians: estimates of Medicare savings. ASPE Issue Brief. Department of Health and Human Services, May 10, 2019. <https://aspe.hhs.gov/pdf-report/special-diabetes-program-indians-estimates-medicare-savings>
- ⁸Agency for Healthcare Research and Quality (AHRQ). Data Spotlight: Hospital admissions for uncontrolled diabetes improving among American Indians and Alaska Natives. AHRQ Publication No. 18(19)-0033-7-EF. December 2018. <https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrd/dr/dataspotlight-ai-an-diabetes.pdf>
- ⁹Bursell SE, Fonda SJ, Lewis DG, Horton MB. Prevalence of diabetic retinopathy and diabetic macular edema in a primary care-based teleophthalmology program for American Indians and Alaskan Natives. *PLoS One* 2018;13(6):e0198551. doi: <https://doi.org/10.1371/journal.pone.0198551>
- ¹⁰American Diabetes Association. Standards of Medical Care in Diabetes, 2020. *Diabetes Care* 2020;43(Suppl. 1). doi: <https://doi.org/10.2337/dc20-SPPC>

Hyperlink URLs

- **Special Diabetes Program for Indians (SDPI) Program Sites:** https://www.ihs.gov/sites/sdpi/themes/responsive2017/display_objects/documents/factsheets/FactSheet_SDPI2020byState_508c.pdf
- **SDPI:** <https://www.ihs.gov/sdpi/>
- **Indian Health Service (IHS) Areas:** <https://www.ihs.gov/locations/>
- **SDPI Reports to Congress:** <https://www.ihs.gov/sdpi/report-to-congress/>
- **Tribal Leaders Diabetes Committee:** <https://www.ihs.gov/sdpi/tldc/>
- **IHS Tribal Consultation:** <https://www.ihs.gov/tribalconsultation/>
- **IHS Urban Confer:** <https://www.ihs.gov/ihm/pc/part-5/p5c26/>
- **IHS Tribal Leader Letters:** <https://www.ihs.gov/newsroom/triballeaderletters/>
- **IHS Urban Leader Letters:** <https://www.ihs.gov/newsroom/urbanleaderletters/>
- **SDPI Diabetes Best Practices:** <https://www.ihs.gov/sdpi/sdpi-community-directed/diabetes-best-practices/>
- **Area Diabetes Consultants:** <https://www.ihs.gov/diabetes/about-us/area-diabetes-consultants-adc/>
- **IHS Division of Grants Management:** <https://www.ihs.gov/dgm/>
- **IHS Office of Information Technology:** <https://www.ihs.gov/oit/>
- **IHS Division of Diabetes:** <https://www.ihs.gov/diabetes/>
- **IHS Diabetes in Indian Country Conference:** <https://www.ihs.gov/diabetes/training/conferences-and-workshops/>
- **IHS Diabetes Clinical Training:** <https://www.ihs.gov/diabetes/training/cmece-online-edu/>
- **IHS Diabetes Clinical Tools:** <https://www.ihs.gov/diabetes/clinician-resources/>
- **IHS Diabetes Education Materials:** <https://www.ihs.gov/diabetes/education-materials-and-resources/>
- **SDPI Grant Training:** <https://www.ihs.gov/sdpi/sdpi-community-directed/sdpi-grant-training/>
- **IHS Diabetes Care and Outcomes Audit:** <https://www.ihs.gov/diabetes/audit/>
- **SDPI Outcomes System:** <https://www.ihs.gov/sdpi/sdpi-outcomes-system-sos/>



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is a publication of the



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