

ACTIVITY/MECHANISMS BUDGET SUMMARY
Department of Health and Human Services
Public Health Service - Indian Health Service
Indian Health Service - 75-0390-0-1-551

DIABETES

Program Authorization:

Program authorized by 111 STAT. 574 (P.L 105-33).

Indian Health Service	FY 1999	FY 2000	FY 2001	Increase or Decrease
<u>Diabetes</u>	<u>Actual</u>	<u>Appropriation</u>	<u>Estimate</u>	
Budget Authority	\$30,000,000	\$30,000,000	\$30,000,000	0

* The Balanced Budget Act of 1997 (P.L. 105-33) provides that \$30 million per year appropriated to the Children's Health Insurance Program be transferred to IHS for diabetes prevention and treatment. Total IHS diabetes funding also includes the National Diabetes Program with 12 Area Diabetes Consultants and 19 model diabetes sites (\$7.7 million per year) and, starting in FY 1998, \$3 million in diabetes grants and \$.3 million for a periodontal disease initiative.

PURPOSE AND METHOD OF OPERATION

Program Mission and Responsibilities

The mission of the IHS National Diabetes Program is to develop, document, and sustain a public health effort to prevent and control diabetes in American Indian and Alaska Native peoples. The agency promotes collaborative strategies for the prevention of diabetes and its complications in the 12 IHS Service Areas through a network of 19 Model Diabetes Programs and 13 Area Diabetes Consultants. The agency also disseminates current information about all aspects of diabetes surveillance, treatment, education, and prevention.

Diabetes was the most frequently identified health problem in the IHS Area I/T/U budget formulation workshops for FY 2001. Type 2 diabetes occurs at dramatically higher rates among AI/AN adults who are almost 3 times more likely to have diabetes than the general U.S. population. A recent alarming trend is the increase in prevalence of type 2 diabetes in young AI/AN. Over a seven-year period, from 1991-1997, the prevalence of diabetes rose 28-36% in AI/AN children and adolescents. Complications of diabetes lead to much higher incidence rates of blindness, vascular insufficiency leading to amputation, and End Stage Renal Disease (ESRD) than in the general U.S. population. Most recent data show that diabetes mortality is 4.3 times higher in the AI/AN population than in the U.S. population. There has been a 24 percent increase in the American Indian age-adjusted death rate from diabetes since 1991-1993. There is clear evidence that for Indian people the health disparity related to diabetes is increasing.

The Balanced Budget Act (BBA) of 1997 provided \$30 million per year for 5 years through the *Special Diabetes Program for Indians* (SDPI) to provide grants for the prevention and treatment of diabetes to Indian Health

Service (IHS), tribal, and urban Indian health programs. The IHS completed a tribal consultation process on the approach to the provision of diabetes services in AI/AN communities that is consistent with the Presidential policy that supports and directs full Federal consultation and partnership with tribal governments on matters of health. The process included national and regional input from tribal and urban program representatives.

A Tribal Leaders Diabetes Workgroup was established to review the tribal input and make recommendations on the administration and distribution of the BBA funds. Based on the Workgroup recommendations, funds were awarded through non-competitive grants for a five-year project term. The Workgroup recommended that IHS distribute the funding by HIS Area according to a formula based primarily on disease burden (53 percent) and user population with an adjustment to increase funding for very small tribes (42 percent). They also recommended that \$1.5 million be set aside for the urban programs who were to be exempt from the distribution formula process. In addition, 5 percent of the overall funds were reserved for improved data collection to enhance the evaluation process. Distribution of the grant funds within each Area to local IHS and tribal programs was determined by an Area-wide consultation process. An evaluation process was created for both the national and Area levels.

There were 286 grants awarded in the first year cycle. Contracts with several tribal organizations were written at the national and regional level to enhance and facilitate evaluation and data collection activities. Ongoing evaluation of the grants, using a mixed methods approach (both qualitative and quantitative methods) has been implemented.

Tribal programs determined how much of their funding was to be used. Sixty six percent of programs chose to focus on both **secondary and tertiary diabetes prevention** efforts (managing diabetes to prevent complications such as kidney failure, amputations, heart disease and blindness). Thirty three percent of programs decided to implement **primary prevention** efforts to reduce the incidence of diabetes (such as offering exercise and nutrition programs). And forty one percent indicated the need for additional **planning** for their diabetes efforts. Chief Medical Officers, Area Diabetes Consultants and other IHS Area Office Staff were available to assist tribes in choosing promising prevention efforts and in selecting appropriate evaluation measures.

In addition to grants, \$1 million of the BBA funds were allocated for the development of a National Diabetes Prevention Center (NDPC) in Gallup, NM. IHS collaborated with CDC Division of Diabetes in this effort. The NDPC agreement was awarded to the University of New Mexico who have established a Steering Committee and a Center Advisory Board. The Tribal Leaders Diabetes Committee, established as a result of the BBA funds to advise IHS on diabetes-related issues, will also advise the Steering Committee of the NDPC. A regional diabetes conference with the Navajo Tribe and Zuni Pueblo was sponsored by NDPC in the spring of 1999.

Tribes have begun to exert a growing influence in the management of diabetes programs. The number of tribally managed programs continues to grow steadily. Eighty one percent of the *Special Diabetes Program for Indians* grant recipients are tribal programs. To responsibly manage a health program requires data that supports an assessment of the health needs of the population. To meet this need, tribal programs were well represented in the IHS 1998 *Diabetes Care and Outcomes Audit* of AI/AN with

diagnosed diabetes and will have the opportunity to participate in the 1999 survey. Data gathered by these surveys provides tribes information from which to make rational decisions regarding their diabetes programs.

Best Practices/Industry Benchmarks

The IHS Diabetes Program has a long and distinguished history of serving as a benchmark of diabetes clinical and public health excellence. The IHS developed the *IHS Standards of Diabetes Care* in 1985, prior to those published by the American Diabetes Association in 1987, and are updated every 2 years based on the latest diabetes science. The IHS has been a leader in developing a diabetes care surveillance system, the annual *Diabetes Care and Outcomes Audit*, carried out voluntarily in Indian health facilities, to track performance on more than 87 indicators to study trends over time. The *Diabetes Care and Outcomes Audit* monitors use of standards and outcomes of diabetes care, including blood sugar and blood pressure control, screening for complications, and preventive health services such as immunizations and smoking history. In the 1998 *IHS Diabetes Care and Outcomes Audit*, 11,581 charts were reviewed representing care to 70,751 patients at 190 IHS and tribal health facilities in the 12 IHS Areas.

This diabetes care surveillance system has been instrumental in the improvement of diabetes care practices in many Indian health settings. For example, in a special program in Alaska and in northern Minnesota from 1989-93, lower extremity amputation rates were reduced by 50 percent in people with diabetes who received complete foot screening and protective footwear. This same system enabled IHS to measure improvements in blood pressure control in Montana after an intensive intervention in 1993.

Beginning in the late 1970s, the IHS Diabetes Program was a pioneer in developing a public health approach to diabetes. In the early 1980's the program began to publish some of the first national epidemiologic surveillance data regarding the problem of diabetes in AI/AN. The IHS Diabetes Program staff tailored American Diabetes Association education program criteria to fit the unique needs of Indian communities and disseminated the adapted criteria nationally. Later in the 1980s and early 1990's, the IHS began to publish in peer reviewed journals its experience with using the *Diabetes Care and Outcomes Audit* to measure improvements in diabetes care for Indian communities. A 1994 GAO report outlining diabetes care to elderly Americans was compared to 1995 data from IHS. HIS performed significantly better on all five measures of quality care. In 1998, the IHS Diabetes Program was recognized by the Diabetes Quality Improvement Coordinating Committee as one of only two federal agencies who had collected quality improvement data so that it was available for comparison when the Diabetes Quality Improvement Project (DQIP) guidelines were announced.

The IHS Diabetes Program has been cited internationally as a model of community involvement and program effectiveness, and in 1999 was invited to the World Congress on Diabetes Prevention conference to present a description of the Balanced Budget Act of 1997 diabetes grant program. As part of its ongoing programmatic activities, the IHS Diabetes Program collaborates with the Centers for Disease Control, the National Institutes of Health, the American Diabetes Association, the American Association of Diabetes Educators, the National Diabetes Education Program, many state Department of Health Diabetes Control Programs, and tribal colleges and universities.

Findings Influencing the FY 2001 Request

The Balanced Budget Act of 1997 *Special Diabetes Program for Indians* provided IHS \$30 million per year for 5 years for the prevention and treatment of diabetes. These funds have provided "seed money" to 318 new programs to begin, or in some cases significantly enhance, diabetes prevention programs in Indian communities. Many of these programs, the majority of which are tribally run, are creating innovative, culturally-appropriate strategies to address diabetes. While the SDPI funds have enhanced diabetes care and education in AI/AN communities, programs are reporting the need for additional trained personnel, support, technical assistance and continued funding beyond five years. The next challenge for IHS on a national level will be to disseminate the new ideas learned in these grant site settings to other tribal communities for adaptation and implementation.

ACCOMPLISHMENTS

Results of the 1998 IHS-wide *IHS Diabetes Care and Outcomes Audit* to assess diabetes care and education for over 70,000 diabetes patients completed in 1998 revealed an important finding. Data comparisons with 1994-97 results showed a statistically significant improvement trend in blood sugar control among AI/AN with diagnosed diabetes. This encouraging trend has occurred in spite of the inability of many IHS and tribal facilities to purchase newer diabetes medications and equipment. The IHS National Diabetes Program attributes this trend to the extensive commitment that IHS and local communities have made to improve diabetes control. Blood sugar control has been definitively shown in large clinical trials to reduce the complications of diabetes over time. Despite these advances, AI/ANs continue to have substantially higher rates of diabetes and its complications than the U.S. population at large.

Specific accomplishments include:

- The IHS National Diabetes Program works closely on diabetes-related issues with tribal leaders through the Tribal Leaders Diabetes Committee. This committee was established by Dr Trujillo to advise the agency on an ongoing basis.
- The IHS National Diabetes Program staff play significant roles on numerous national diabetes activities:
 - ✓ The Director serves as a Steering Committee member on the National Diabetes Education Program; as a member of the Translational Advisory Committee of the CDC Division of Diabetes; as an ad hoc member of the Congressionally-mandated Diabetes Research Working Group of the NIDDK/NIH; as a member of the federal Diabetes Interagency Coordinating Committee; on the President's Quality Interagency Coordinating Committee - Diabetes Subcommittee; and as a member of the President's Committee on Health Disparities - Diabetes Committee.
 - ✓ Other staff serve on the Executive Board of the American Diabetes Association and the Task Force to Review the National Diabetes Education Standards for Diabetes Self Management.
- The IHS National Diabetes Program initiated an Indian health task force to revise and develop a framework for integrating Diabetes Education Standards for AI/AN communities. The task force will develop a process

for achieving formal recognition of quality programs in preparation for HCFA reimbursement of diabetes education.

- The IHS National Diabetes Program and the CDC Division of Diabetes collaborate closely. The IHS Diabetes Program prevalence and complications surveillance system have been automated through the assignment of a CDC Epidemiologist to the program. The prevalence data have been disseminated to the Tribal Leaders Diabetes Workgroup, Area Directors, Area Diabetes Consultants, and others. The data are now available by region on our website.
- A Workgroup has been established with CDC, IHS, the American Academy of Pediatrics and the American Diabetes Association to address the growing concern about type 2 diabetes in Native American children. IHS staff are leading the effort with requests for screening protocols, standards of care and treatment recommendations from these expert groups.
- The IHS National Diabetes Program partnered with the National Indian Council on Aging (NICOA) to develop a pilot project to automate diabetes clinical data at the local and national levels. Five sites are fully functional and another 5 sites are coming on board in FY2000.
- The IHS National Diabetes Program collaborated with Macro International, INC, a consultant firm specializing in mixed methods evaluation, to develop an evaluation strategy for the SDPI grants program. The data have been collected and analyzed and reported to the Congress in an interim report.

Following are the funding levels for the Special Diabetes Program for Indians for the last 5 fiscal years:

<u>Year</u>	<u>Funding</u>
1995	\$0
1996	\$0
1997	\$0
1998	\$33,000,000
1999	\$33,000,000

GPRA Performance Measures

Indicator 1: During FY 2000, maintain Area age-specific diabetes prevalence rates and identify trends in the age-specific prevalence of diabetes (as a surrogate marker for diabetes incidence) for the AI/AN population.

Indicator 2: By the end of FY 2000, increase by 3 percent the proportion of I/T/U clients with diagnosed diabetes who have improved their glycemic control over the FY 1999 level.

Indicator 3: By the end of FY 2000, increase by 3 percent the proportion of I/T/U clients with diagnosed diabetes and hypertension who have achieved blood pressure control standards over the FY 1999 level.

Indicator 4: By the end of FY 2000, increase by 3 percent the proportion of I/T/U clients with diagnosed diabetes who have been assessed for dyslipidemia over the FY 1999 level.

Indicator 5: By the end of FY 2000, increase by 3 percent the proportion of I/T/U clients with diagnosed diabetes who have been assessed for nephropathy over the FY 1999 level.