



# Indian Health Service 2005 Executive Summary

Improving the Quality of Health Care -  
Measuring Successes and Challenges



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## Introduction

The Indian Health Service (IHS) is an agency within the Department of Health and Human Services that carries out the federal government's trust responsibility to provide health care services to eligible American Indian and Alaska Native (AI/AN) people. IHS provides these health services through a network of hospitals, emergency clinics, health stations, school-based clinics, and Alaskan village clinics. In Fiscal Year (FY) 2005, these facilities provided direct health care services to over 1.4 million AI/AN people.

Since 1975, many Tribes have assumed the administrative and program direction roles that were previously carried out by the Federal government. Through Self-Determination contracts or Self-Governance compacts, Tribes administer over one-half of IHS resources. The IHS administers the remaining resources and manages those facilities where Tribes have elected not to contract or compact their health programs. IHS also contracts with 34 urban Indian organizations to provide services to eligible AI/AN people who reside in large metropolitan areas. Together, these sources of care are known as the IHS/Tribal/Urban (I/T/U) network. When the capability to provide a particular service is not available through this network, the IHS Contract Health Services (CHS) appropriation covers the cost of referring patients to hospitals and specialists. However, most health programs funds are depleted before the end of the year due to continually increasing healthcare costs.

Historically, the Indian Health Service has succeeded in substantially improving the health status of the AI/AN population, primarily by focusing on preventive and primary care services and developing a community-based public health system. Examples can be seen in the dramatic decreases in mortality rates for certain health problems between 1972-1974 and 2000-2002:

- Gastrointestinal disease mortality reduced 91 percent (9.3 to 0.8 per 100,000);
- Tuberculosis mortality reduced 80 percent (10.7 to 2.1 per 100,000);
- Cervical cancer mortality reduced 76 percent (19.0 to 4.5 per 100,000);
- Infant mortality reduced 66 percent (25.0 to 8.5 per 1,000);
- Unintentional injuries mortality reduced 60 percent (223.1 to 90.1 per 100,000); and
- Maternal mortality reduced 64 percent (34.8 to 12.5 per 100,000);

*The average death rate from all causes for the AI/AN population dropped a significant 28 percent between 1972-1974 and 2000-2002.*

However, population growth and economic factors continue to create pressures on AI/AN communities, and the IHS system. From 1990 to 2000, the AI/AN population grew at a rate of 26 percent, while the total U.S. population grew by only 13 percent. Poverty and low educational attainment remain critical external factors affecting the health status of AI/AN people.

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The AI/AN population also suffers disproportionately from a number of health problems. For example, the 2000-2002 death rate from alcohol abuse was more than 4.5 times higher among AI/ANs than the rates for all races in 2001, and the cervical cancer death rate was 3.8 times higher than the all-races rate. Despite these challenges, the IHS seeks to raise the physical, mental, social, and spiritual health of American Indians and Alaska Natives to the highest level.

The Government Performance Results Act (GPRA) requires performance-based budgeting and performance measures to demonstrate the agency's effectiveness in meeting its mission. GPRA results are now part of performance appraisal criteria at all levels of the Indian Health Service. Clinical GPRA measures are tracked and measured through Clinical Reporting System (CRS) software. GPRA results are based on the aggregated performance of all 12 IHS Areas.

In 2005, IHS met or exceeded 29 of 35 GPRA performance measure targets. Of 21 clinical measures, 19 met their targets and 12 measures met and exceeded their targets. Only two clinical measures, BMI Assessment and Diabetes Retinopathy Assessment, did not meet their targets. Of 14 non-clinical GPRA measures, three did not meet their targets. Results for one non-clinical measure, Unintentional Injury Rates, will not be reported until 2009. This report provides a summary of results for all reportable GPRA measures, and includes detailed results for most FY 2005 clinical measures. This report also includes detailed results for the Influenza Immunization measure; however, this measure was placed on hold due to national shortages and was not a GPRA measure for FY 2005.

In accordance with the "One HHS" 10 Department-wide Management Objectives, the Indian Health Service has committed to implementing results-oriented management by achieving a 10 percent *relative* increase in program performance from FY 2004 levels by FY 2007 in four measures: Pneumovax Immunization, Domestic Violence/Intimate Partner Violence Screening, Alcohol Screening (Fetal Alcohol Syndrome Prevention), and LDL Screening in patients with diabetes. The FY 2005 results show a significant increase in rates for two of these measures. Between 2004 and 2005, Domestic Violence/Intimate Partner Violence Screening rates showed a 9 absolute percentile point increase, while Alcohol Screening (FAS prevention) rates showed a 4 absolute percentile point increase, exceeding the FY 2007 targets substantially. However, LDL Screening and Pneumovax Immunization rates were unchanged from 2004 to 2005; IHS will put particular emphasis on these measures to achieve the 10% relative increase by FY 2007.

Additionally, in FY 2005 the agency made significant progress on almost all of its diabetes care measures. The overall prevalence of diabetes among the IHS direct and Tribal population as measured by CRS increased from 10% in 2004 to 11% in 2005. Despite this increase, screening rates for virtually every diabetes measure improved.

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IHS also continued to improve its rate of blood glucose (A1c) screening. In FY 2005, 78% of patients with diabetes received A1c screening, compared to 67% in 2000 and 77% in 2004. This rate substantially exceeds the Healthy People 2010 goal of 50%. Although A1c screening rates are not a GPRA measure, IHS tracks them through CRS to help measure the overall quality of preventative care for patients with diabetes.

IHS assesses the quality of care for patients with diabetes through the following GPRA measures: Poor Glycemic (A1c) Control, Ideal Glycemic Control, Blood Pressure Control, as well as LDL, Nephropathy, and Retinopathy Assessments. On a national level, significant progress was made on both the Poor and Ideal Glycemic Control measures. The number of patients with diabetes in poor control (A1c>9.5) declined by 2% overall, while the number of patients in ideal control (A1c<7) increased by 3% overall. The percentage of patients with diabetes with controlled blood pressure (<130/80) increased by 2%. Diabetic Nephropathy Assessment rates also improved from the 2004 average by 5%. Although there was not an overall increase in LDL Assessment rates, this measure met the 2005 target to maintain the 2004 level. Only one diabetic measure, Retinopathy Assessment, did not meet the 2005 target to maintain screening rates at designated sites. However, CRS collects retinopathy screening data at all sites, and the average screening rate at all sites actually increased from 47% to 50%. These results indicate that diabetes care continues to be a top priority both on the national and area levels.

The progress made on diabetes measures is all the more significant given the continuing epidemic of diabetes within the AI/AN population. Diabetes continues to increase in prevalence among AI/AN communities and across all age groups. American Indians and Alaska Natives have the highest published prevalence of diabetes in the world. The diabetes epidemic is also occurring in an increasingly younger population. AI/ANs ages 25-34 years experienced a 132% increase in diabetes prevalence between 1990 and 2002; AI/ANs ages 20-24 experienced a 69% increase, and AI/ANs ages 15-19 experienced a 106% increase. In 2002, AI/AN people were 2.2 times more likely to have diabetes than non-Hispanic whites, and the death rate from diabetes in the AI/AN community has increased by 55 percent between 1972-1974 and 2000-2002. In the period between 2000-2002, the death rate for AI/AN people with diabetes was 3.3 times that for non-Hispanic whites in 2001. However, studies show that adequate control of glucose levels and blood pressure, preventive measures that are tracked through GPRA, can minimize complications associated with diabetes such as retinopathy, nephropathy, and heart disease.

IHS continues to improve the quality of care for all users of our healthcare system. Significant strides have been made not only to improve the current standards of care but also to increase access to care throughout Indian country. In the long term, our mission is to decrease unnecessary health inequities among American Indians and Alaska Natives both within their own communities and in comparison to other racial and ethnic groups.

## Diabetes: Poor Glycemic Control

### Measure

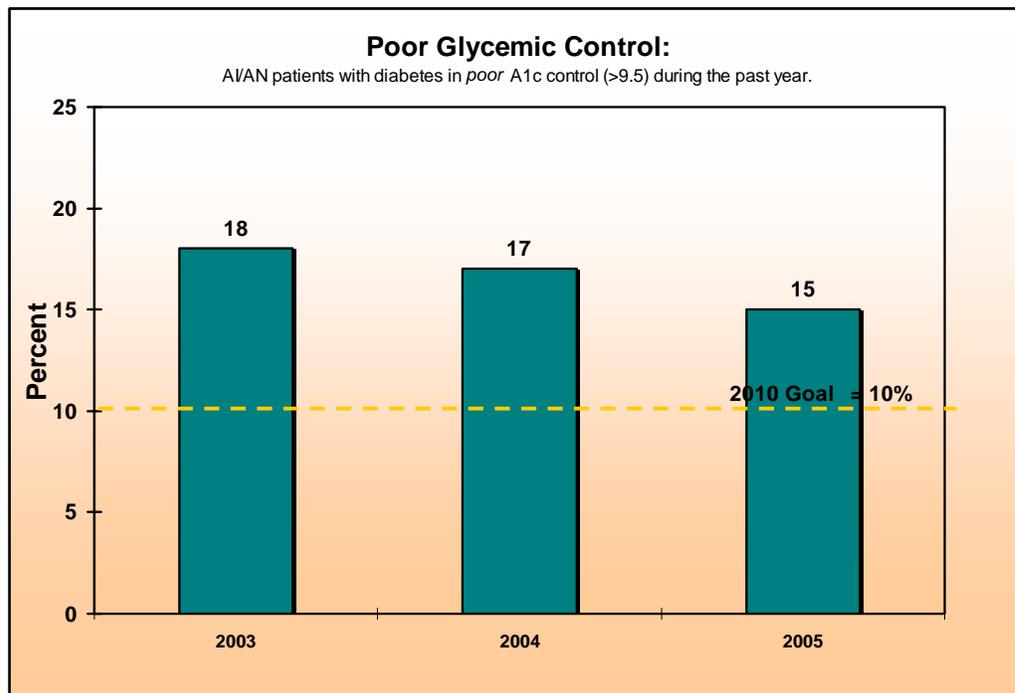
- Proportion of patients with diagnosed diabetes that have poor glycemic control.

### Importance

- *Reducing the number of patients with poor glycemic control will reduce the prevalence of diabetes complications. Some clinical studies have shown that a 1% decrease in the absolute A1C level translates into a: 14% decrease in total mortality, 21% decrease in diabetes-related deaths, 14% decrease in myocardial infarction, 40% decrease in eye disease, 12% decrease in strokes, 43% decrease in amputations, and a 24% decrease in kidney failure. Reducing A1C levels can also save \$800 in annual health care costs.*

### 2005 Target

- Assure that the proportion of patients with diabetes that have poor glycemic control does not increase above the 2004 level of 17%.



### Data Source

- CRS 5.1 electronic examination of 89,757 patient records.

### Results and Analysis

- IHS met and exceeded the target for this measure, reducing the percent of patients with poor glycemic control by 2% overall, from 17% (FY 2004) to 15% (FY 2005). The Hemoglobin A1C test measures average blood sugar over the last 1-2 months. Decreasing the rate of patients with poor control is a significant accomplishment, considering that the prevalence of diabetes within the active user population increased from 10% to 11% between 2004 and 2005.

# 2005 Results

## Diabetes: Ideal Glycemic Control

### Measure

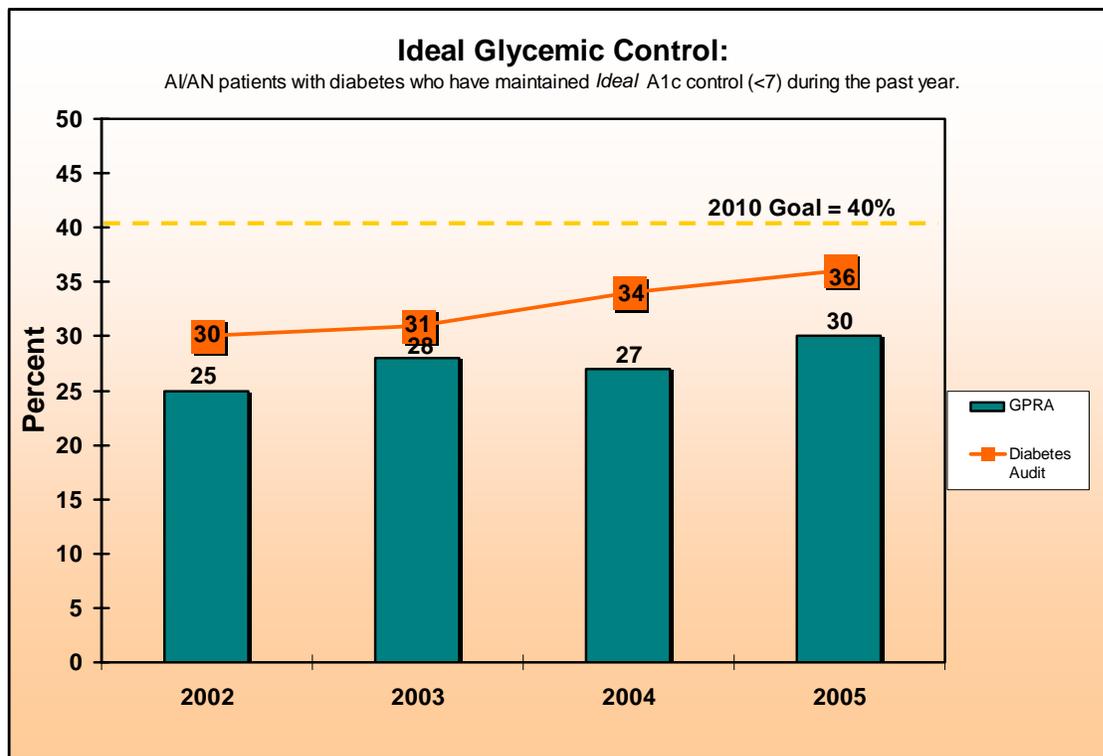
- Proportion of patients with diagnosed diabetes with ideal glycemic control (A1C<7.0).

### Importance

- *Keeping blood sugar levels below 7 can slow or prevent the onset and progression of eye, kidney, and nerve disease caused by diabetes. Good blood sugar control also lowers the risk of heart attack and stroke.*

### 2005 Target

- Maintain the proportion of patients with diabetes that have demonstrated ideal glycemic control at the 2004 level of 27%.



### Data Source

- CRS 5.1 electronic examination of 89,757 patient records.

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the proportion of patients with ideal glycemic control by 3% overall, from 27% (FY 2004) to 30% (FY 2005) as measured by the Hemoglobin A1C test that measures average blood sugar over the last 1-2 months. This improvement came despite a significant increase in the number of patients with diabetes in the same time period. These results reflect meaningful agency accomplishments in dealing with a significant increase in the number of patients with diabetes while reducing complications associated with uncontrolled blood sugar.

## Diabetes: Blood Pressure Control

### Measure

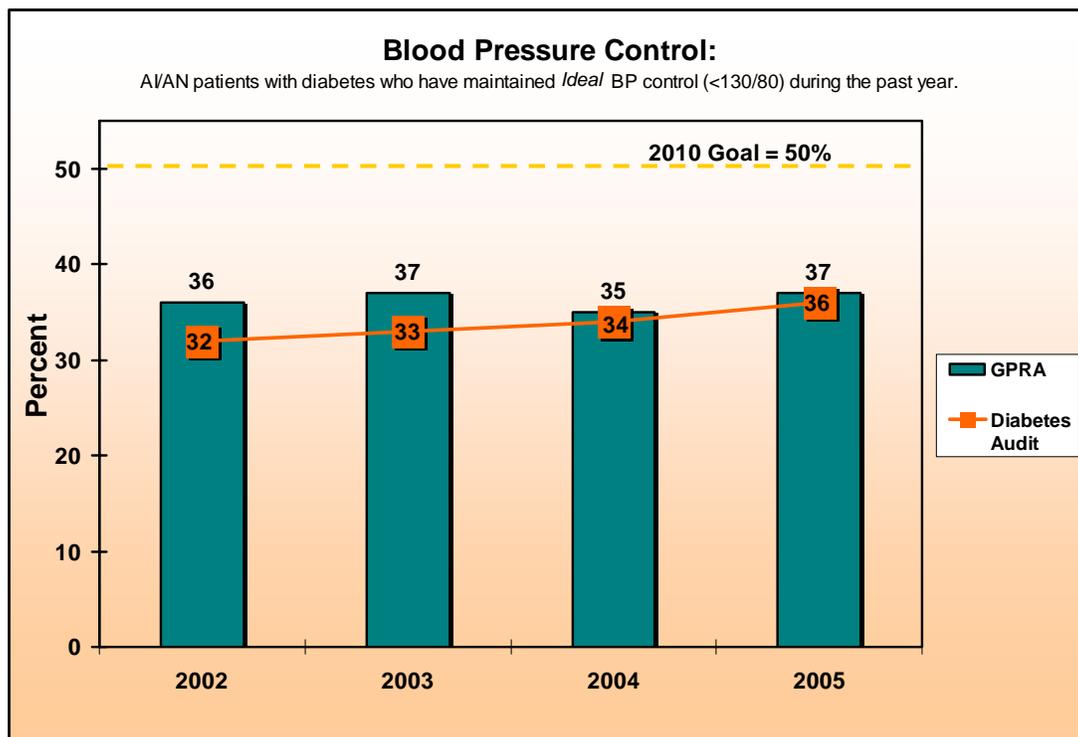
- Proportion of patients with diagnosed diabetes that have achieved blood pressure control (BP < 130/80).

### Importance

- *This measure is directed at reducing complications of diabetes. A National Heart, Lung, and Blood Institute report indicates that the risk of heart disease and stroke doubles for every increase of 20 mm in systolic or 10 mm in diastolic pressure. Lower blood pressure levels in people with diabetes reduce the risk of heart disease and stroke by 33-50%. Blood pressure control also reduces the risk of eye, kidney, and nerve disease by one third.*

### 2005 Target

- Maintain the proportion of patients with diagnosed diabetes that have achieved blood pressure control at the 2004 level of 35%.



### Data Source

- CRS 5.1 electronic examination of 89,757 patient records.

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the percent of patients with ideal blood pressure control by 2% overall, from 35% (FY 2004) to 37% (FY 2005). By meeting and exceeding the target for this measure, the agency helped reduce the potential complications of high blood pressure among diabetics.

## Diabetes: Dyslipidemia (LDL) Assessed

### Measure

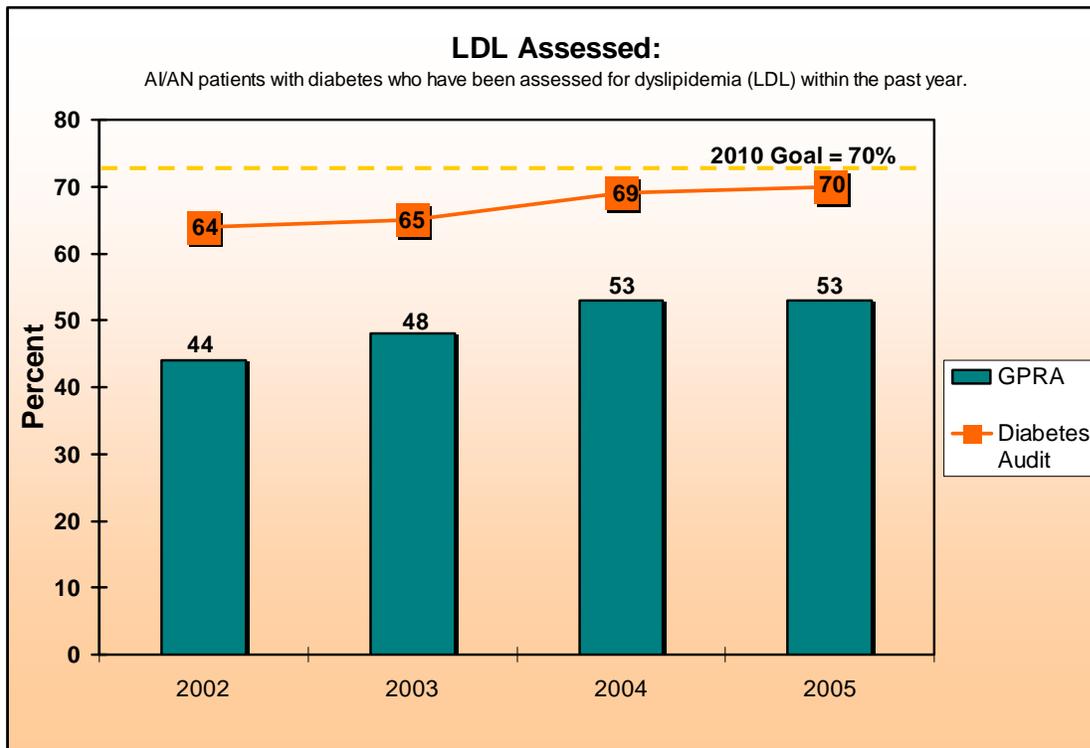
- Proportion of patients with diagnosed diabetes assessed for dyslipidemia.

### Importance

- *Dyslipidemia refers to disorders in the lipoprotein metabolism, including hypercholesterolemia (high LDL cholesterol), and low HDL cholesterol. Low cholesterol levels help to protect diabetic patients from developing heart disease. Improved control of cholesterol levels reduces the risk of cardiovascular complications by 20-50%. National standards recommend that people with diabetes keep their cholesterol levels below 200 mg/dl, and their LDL cholesterol levels below 130 mg/dl and ideally below 100 mg/dl. Diabetic patients are especially prone to develop heart disease and therefore identification and treatment of elevated lipids in diabetic patients is extremely important .*

### 2005 Target

- Maintain the proportion of patients with diagnosed diabetes assessed for dyslipidemia at the 2004 level of 53%.



### Data Source

- CRS 5.1 electronic examination of 89,757 patient records.

### Results and Analysis

- IHS met the target for this measure, maintaining the percentage of patients assessed for dyslipidemia at 53% in FY 2005. The agency met this target despite a significant increase in the overall population of patients diagnosed with diabetes.

## Diabetes: Nephropathy Assessment

### Measure

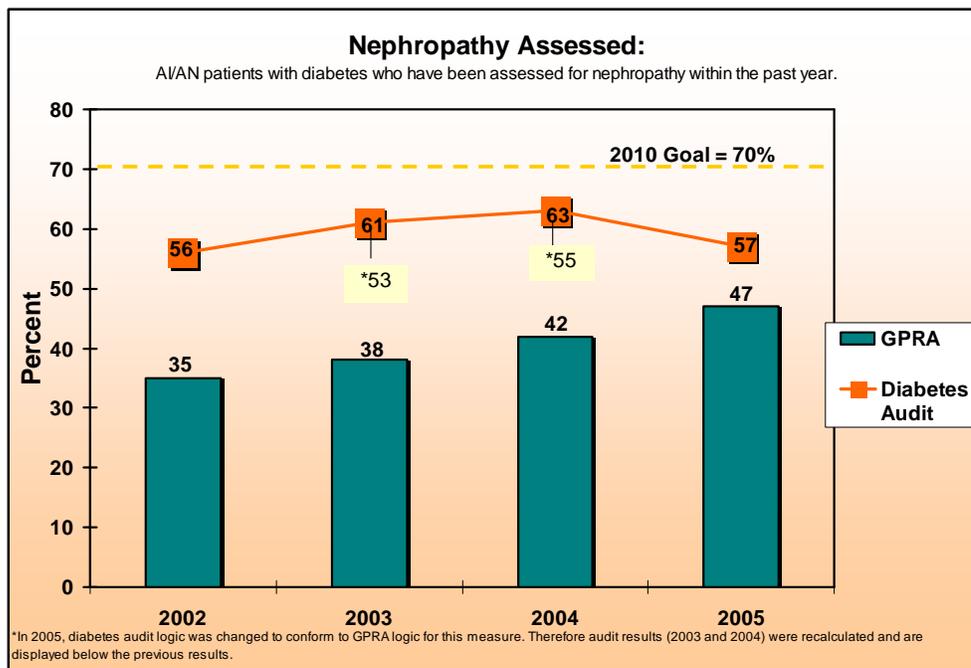
- Proportion of patients with diagnosed diabetes assessed for nephropathy.

### Importance

- *Diabetes can cause kidney disease by damaging the parts of the kidneys that filter out wastes. Diabetic nephropathy, or kidney disease, can eventually lead to kidney failure. Diabetes is the leading cause of end stage renal disease (ESRD), which is a significant and growing problem in American Indian communities. Early identification of at risk patients may help prevent or delay the need for costly care such as dialysis or renal transplant.*
- *Microalbuminuria (or proteinuria) is measured in the urine with a urinalysis test. Microalbumin in the urine is an early sign of diabetic kidney disease. Proteinuria is also an independent predictor of cardiovascular disease, which is the number one killer of American Indian and Alaska Native adults.*

### 2005 Target

- Maintain the proportion of patients with diagnosed diabetes assessed for nephropathy at the FY 2004 level of 42%.



### Data Source

- CRS 5.1 electronic examination of 89,757 patient records.

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the number of diabetic patients assessed for nephropathy by 5% overall, from 42% (FY 2004) to 47% (FY 2005). The agency met and exceeded this target despite a significant increase in the overall population of patients diagnosed with diabetes.

## Diabetes: Retinopathy Assessment

### Measure

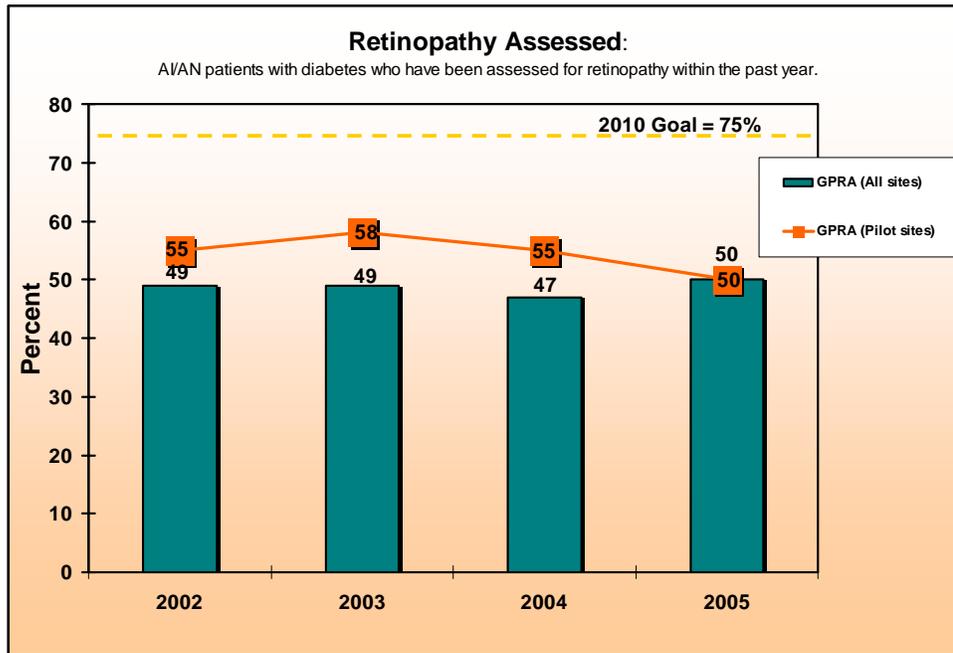
- Proportion of patients with diagnosed diabetes who receive an annual diabetic retinal examination.

### Importance

- Diabetes can affect sight by damaging the blood vessels inside the eye, a condition known as “diabetic retinopathy.” Diabetic eye disease is a leading cause of blindness in the United States. Early detection of diabetic retinopathy (DR) is a fundamental part of the effort to reduce visual disability in diabetic patients. Clinical trials demonstrated that effective laser photocoagulation treatment of DR could reduce vision loss by 90%. These studies also underscore the need for early identification of DR at a time when laser photocoagulation is most effective.*

### 2005 Target

- Maintain the proportion of patients with diagnosed diabetes who receive an annual diabetic retinal examination at designated sites at the 2004 level of 55%.



### Data Source

- CRS 5.1 electronic examination of 89,757 patient records.

### Results and Analysis

- IHS did not meet the target for this measure. The proportion of diabetic patients who received an annual diabetic retinal exam declined from 55% (FY 2004) to 50% (FY 2005) at designated sites. However, at all sites, the exam rate was also 50%, an increase from the 2004 rate of 47%. There are many barriers that exist that have prevented significant improvement in the diabetic eye screening rates over the past few years. Prominent among them is a substantial and sustained increase in the prevalence of diabetes. Because of this growth in the number of individuals with diabetes, the small observed decrease in surveillance rate still represents a real increase in the number of retinopathy examinations. Since controlled studies indicate great advantages from the technology used at pilot sites, its use will be broadened in FY 2006 in the effort to increase the DR examination rate to meet or exceed target goals. In FY 2006, rates for diabetic retinal exams at all sites will be reported.

## Pap Screening

### Measure

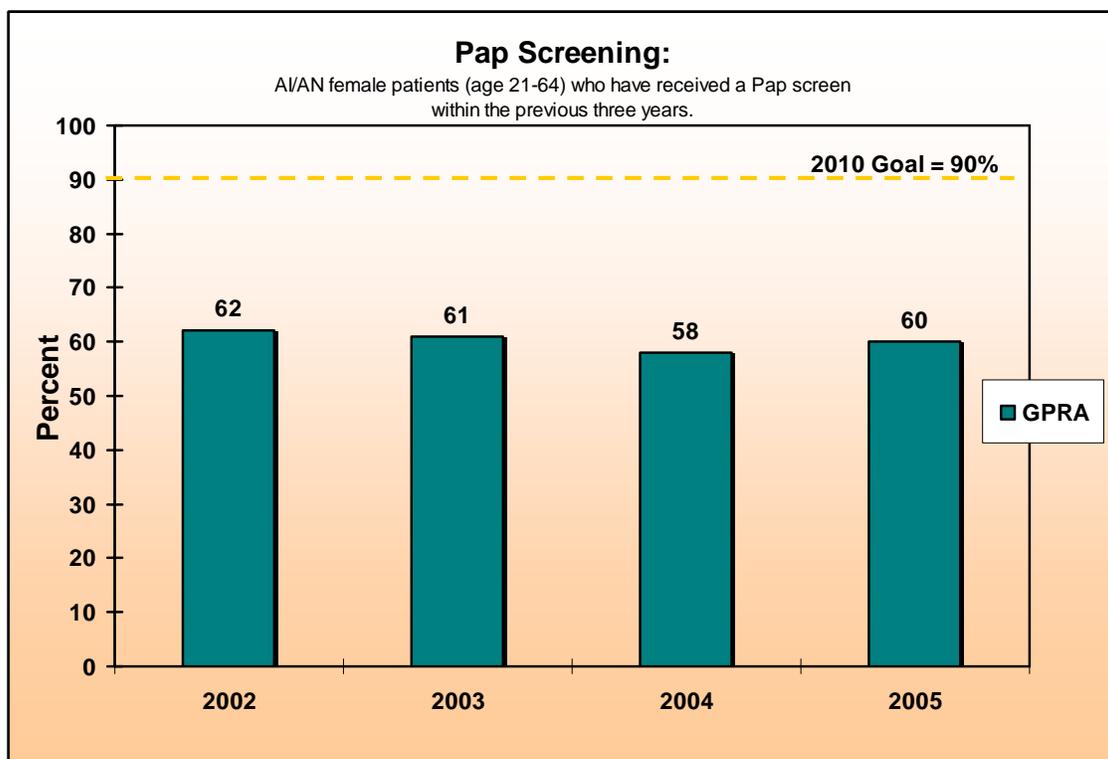
- Proportion of eligible women patients who have had a Pap screen within the previous three years.

### Importance

- *In 2002, American Indian women had a cervical cancer mortality rate of 3.0 that exceeded the rate of 2.5 for U.S. all races. More than any other racial or ethnic group, American Indian women report having never had a Pap screen. Regular screening with a pap smear lowers the risk of developing invasive cervical cancer by detecting pre-cancerous cervical lesions that can be treated. If cervical cancer is detected early, the likelihood of survival is almost 100 percent with appropriate treatment and follow-up. Cervical cancer was once the leading cause of cancer death among women, but it has dropped to thirteenth (among US All Races), thanks to the use of Pap screens.*

### 2005 Target

- Maintain the proportion of female patients aged 21-64 who have had a Pap screen within the previous three years at the 2004 level of 58%.



### Data Source

- CRS 5.1 electronic examination of 263,576 patient records.

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the proportion of women who have had a Pap screen by 2% overall, from 58% (FY 2004) to 60% (FY 2005).

## Mammography Screening

### Measure

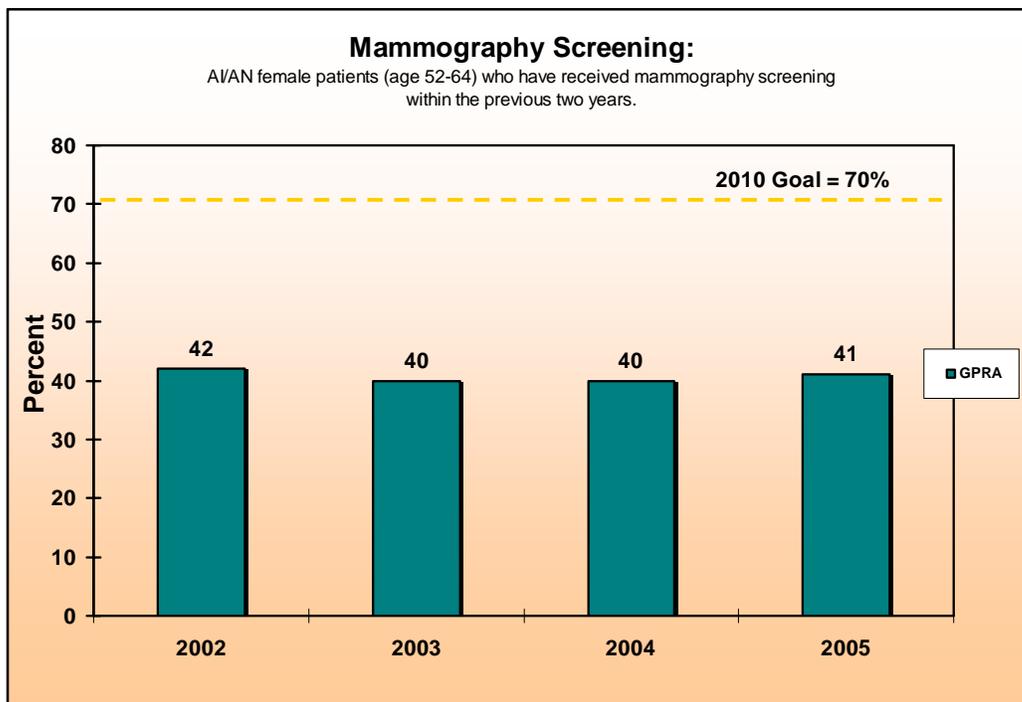
- Proportion of eligible women who have had mammography screening within the previous two years.

### Importance

- *Biennial screening of women between the ages of 50 and 69 has been shown to be a cost effective way to decrease the breast cancer mortality rate. Breast cancer is the second leading cause of cancer death among U.S. women (lung cancer is first). Although there has been overall improvement in breast cancer mortality rates since 1990, AI/AN women have not shared these gains. Between 1992 and 2002, breast cancer mortality rates declined for all racial and ethnic groups except American Indian/Alaska Native women, who experienced no decline in mortality rates. Regular mammography screening can reduce breast cancer mortality by 20-25%. AI/AN women diagnosed with breast cancer have lower 5-year survival rates in comparison to whites, mainly because their cancers are less likely to be found in earlier stages. It is because of this disparity that breast cancer screening remains one of the Agency's highest priorities. .*

### 2005 Target

- Maintain the proportion of female patients aged 50-64 who have had mammography screening within the previous two years at the 2004 level of 40%.



### Data Source

- CRS 5.1 electronic examination of 48,320 patient records .

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the proportion of eligible patients who have had a mammography screening by 1% overall, from 40% (FY 2004) to 41% (FY 2005). Because many tribal and urban facilities lack the equipment to perform mammograms on site, this rate is one of the more difficult measures to increase. Sites that do not have equipment must pay for mammograms with Contract Health Services funds. However, these funds are frequently depleted to pay for acute problems such as heart attacks and cancer treatments.

## Alcohol Screening (Fetal Alcohol Syndrome Prevention)

### Measure

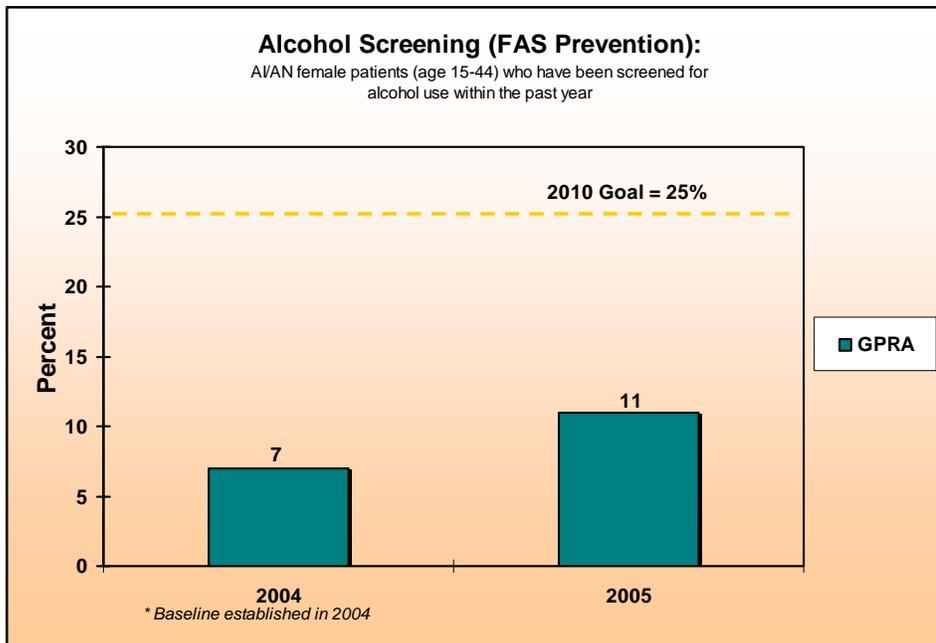
- Alcohol use screening (to prevent Fetal Alcohol Syndrome) in appropriate female patients.

### Importance

- Heavy drinking during pregnancy can cause significant birth defects, including Fetal Alcohol Syndrome (FAS). FAS is the leading known, and preventable, cause of mental retardation. Rates of FAS are higher among American Indians and Alaska Natives than the general population. FAS cases have been reported at a rate of 9.8 per 1000 live births among southwestern Plains Indians living on reservations, 5.6 per 1000 in Alaska, and 2.5 per 1000 in Arizona, well above that of any other race or ethnicity. Studies have found alcohol consumption rates among AI/AN women of childbearing age to be higher than average. The US Preventative Services Task Force recommends screening and behavioral counseling interventions to reduce alcohol misuse by adults, including pregnant women, in primary care settings. Screening with intervention has been shown to be effective in reducing alcohol misuse in pregnancy and to reduce the incidence of FAS..*

### 2005 Target

- Increase the screening rate for alcohol use in female patients ages 15-44 over the 2004 level of 7%..



### Data Source

- CRS 5.1 electronic examination of 246,941 patient records .

### Results and Analysis

- IHS met the target for this measure, increasing the proportion of eligible patients screened for alcohol use by 4% overall, from 7% (FY 2004) to 11% (FY 2005). This measure is included in the “One HHS” 10 Department-wide Management Objectives to achieve a relative increase 10% increase by FY 2007. The agency has already met and exceeded that targeted increase. The targeted increase for FY 2006 has been revised to 13%, and the FY 2007 target has been revised to 14% as a result of the dramatic improvement in screening rates from FY 2004 to FY 2005.

# 2005 Results

## Dental Access

### Measure

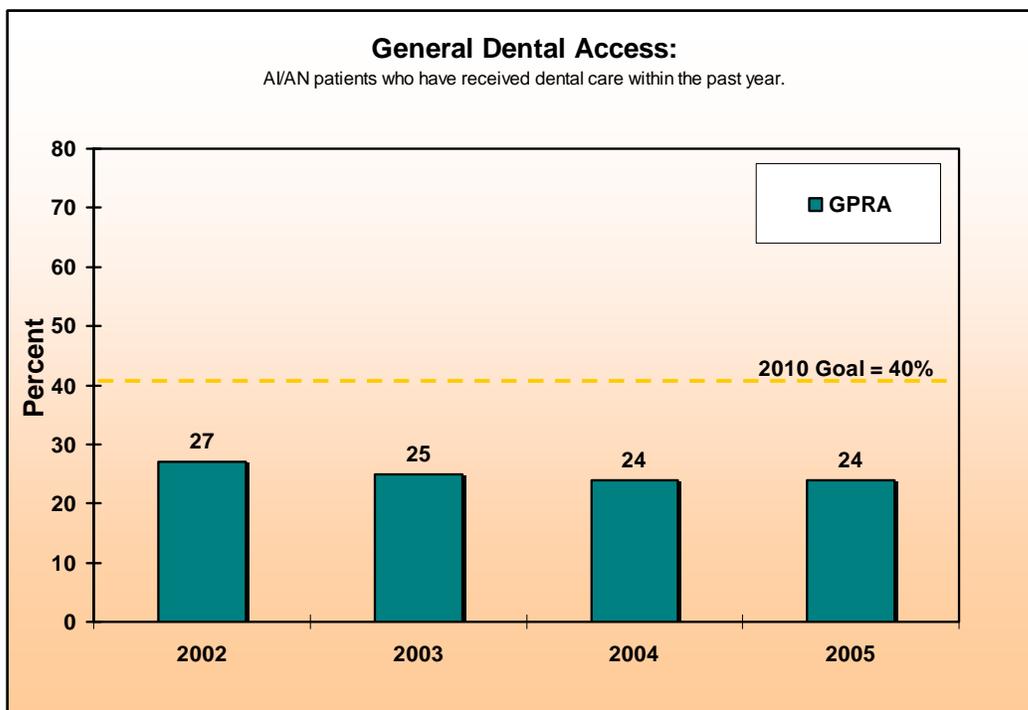
- Proportion of patients who obtain access to dental services.

### Importance

- *This measure is directed at improving the oral health status of the American Indian and Alaska Native population. A recent study showed that American Indians and Alaska Natives reported greater unmet dental health needs compared to Non-Hispanic Whites. However, according to Trends in Indian Health, the number of direct and contract dental service provided by Indian Health Service (IHS), Tribal, and Urban Programs has increased 272 percent since FY 1970 and in FY 2001, over 2.7 million dental services were provided. Untreated tooth decay can cause abscesses and infections, pain, dysfunction and weight loss. Dental problems result in the loss of almost 2.5 million workdays each year. Access to dental care improves oral health as well as the overall health of AI/AN people.*

### 2005 Target

- Maintain the proportion of patients that obtain access to dental services at the 2004 level of 24%.



### Data Source

- CRS 5.1 electronic examination of 1,324,303 patient records.

### Results and Analysis

- IHS met the target for this measure, maintaining the proportion of patients who obtained access to dental services at 24%. The key national factor contributing to maintaining as opposed to exceeding this measure is the continued high vacancy rate in the dental program, which remains around 23%. In recent years, access to care seems closely tied to vacancy rates.

# 2005 Results

## Dental Sealants

### Measure

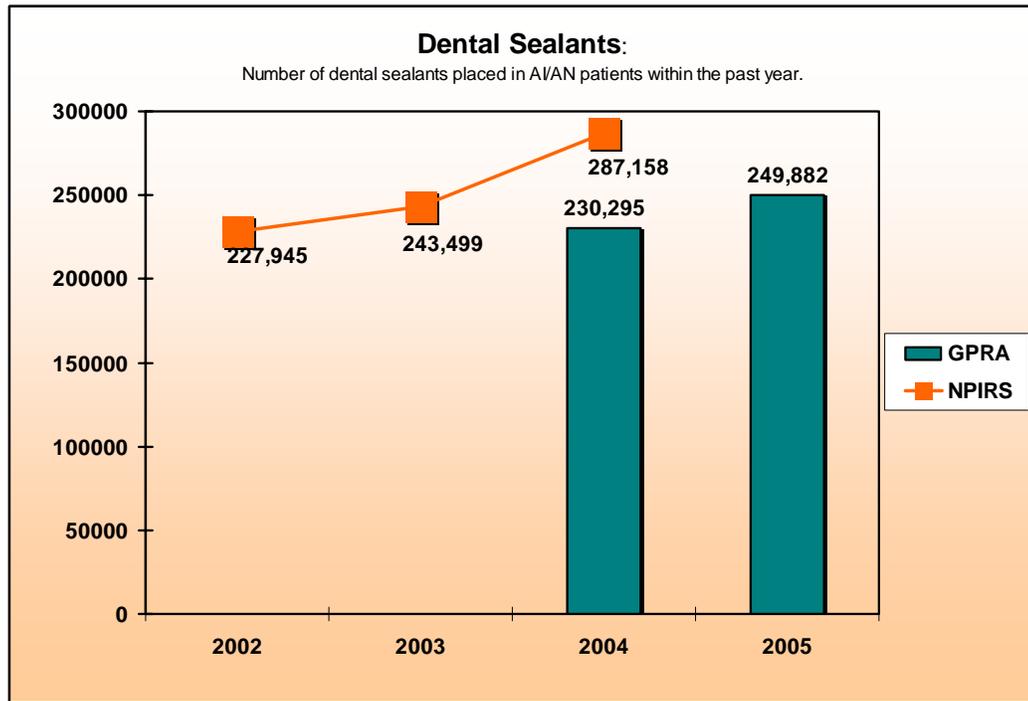
- Number of sealants placed per year in American Indian and Alaska Native patients.

### Importance

- *Surveys of American Indian and Alaska Native children have consistently identified them as having significantly higher dental decay rates than the general U.S. population. Dental sealants, a recognized standard in preventive dental care, are an effective measure for reducing dental decay rates and can be effectively applied by dental auxiliaries at relatively low cost. Sealants reduce both the ravages and costs of treating dental decay.*

### 2005 Target

- Maintain the number of sealants placed in American Indian and Alaska Native patients at the 2004 level of 230,295 sealants.\*



### Data Source

- CRS 5.1 electronic examination of 249,882 patient records.

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the number of sealants placed in AI/AN patients by 8% overall (19,587 more sealants placed in FY 2005 compared to FY 2004.) The intent of this measure is to reduce dental decay by increasing both the number of patients with dental sealants and the number of sealants per patient.

\* The number of sealants in FY 2004 as measured by CRS was 230,295 and this number was used to set the target for this measure. Prior to FY 2005, the number of sealants was collected through NPIRS.

## Dental Access: Patients with Diabetes

### Measure

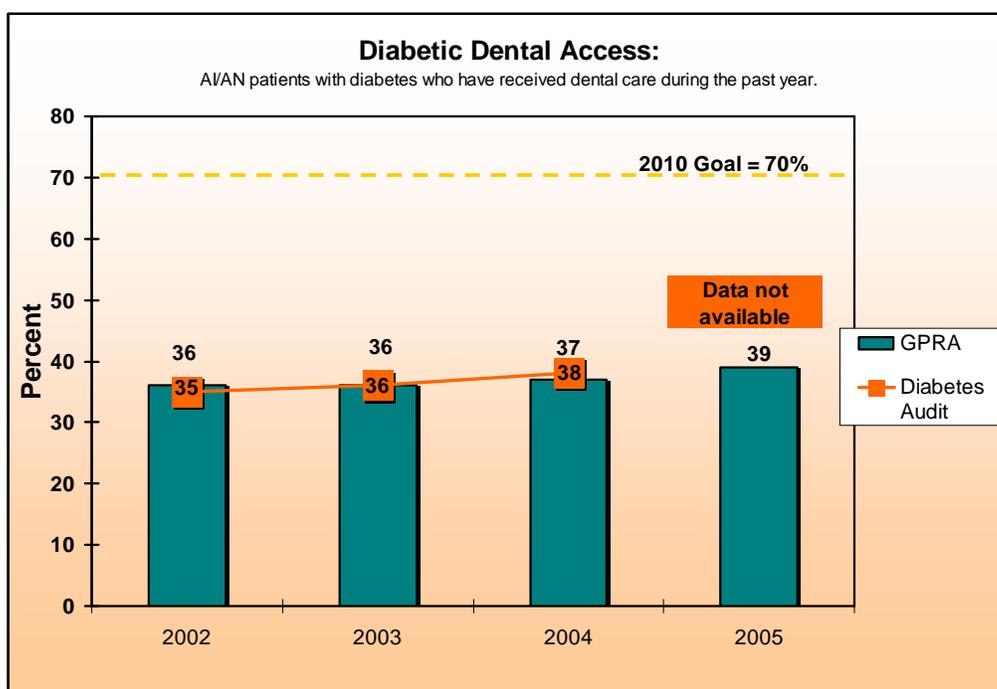
- Proportion of patients diagnosed with diabetes who obtain access to dental services.

### Importance

- *The purpose of this measure is to improve both oral health status and diabetic control for American Indian and Alaska Native diabetics. All diabetic patients should receive a complete dental exam on an annual basis. Diabetics are at increased risk for destructive periodontal disease and subsequent tooth loss. In addition, untreated periodontitis in diabetics may complicate glycemic control. Access to both primary and secondary treatment and preventive services for diabetics can lessen periodontal disease progression and the subsequent effects on diabetes and overall health. Regular visits provide opportunities for prevention, early detection, and treatment.*

### 2005 Target

- Maintain the proportion of patients with diagnosed diabetes who obtain access to dental services at the 2004 level of 37%.



### Data Source

- CRS 5.1 electronic examination of 89,757 patient records .

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the proportion of patients with diagnosed diabetes that obtained access to dental services by 2% overall, from 37% (FY 2004) to 39% (FY 2005). In FY 2006, diabetic dental access will no longer be tracked as a GPRA measure. The National Oral Health Council recommended eliminating this measure, as it determined that the measure **Dental Access**, which includes diabetic patients, is an adequate measure of access. The agency will strive to increase dental access for all of its users, including patients with diabetes.

## Domestic Violence/Intimate Partner Violence Screening

### Measure

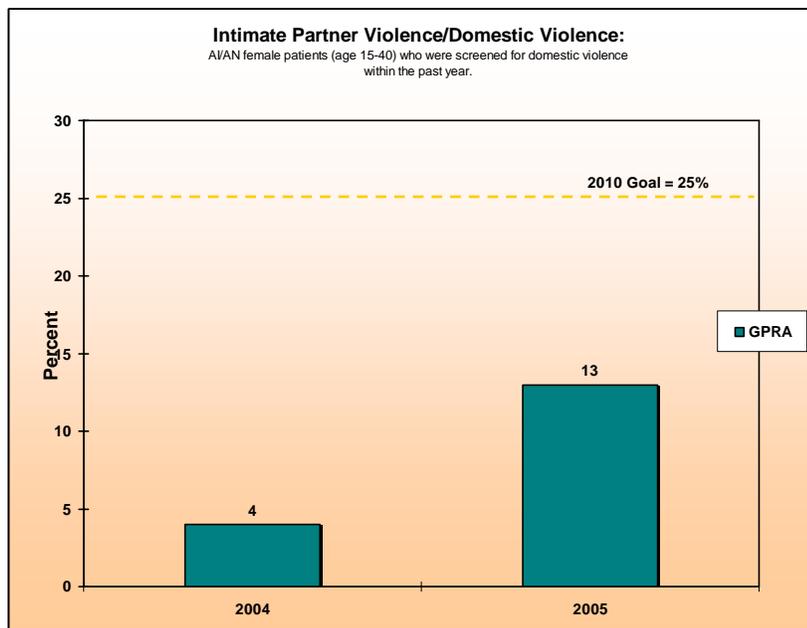
- Proportion of women who are screened for domestic violence at health care facilities.

### Importance

- *This measure is designed to help ascertain, evaluate and reduce the prevalence of family violence, abuse and neglect in American Indian and Alaska Native communities. Thirty percent of women in the United States experience domestic violence at some time in their lives. AI/AN women experience domestic violence at rates similar to or higher than the national average. A survey of Navajo women seeking routine care at an IHS facility revealed that 14% had experienced physical abuse in the past year, and 42% had experienced physical abuse from a male partner at least once in their lives. The health consequences of intimate partner violence are numerous. Women who experience domestic violence are more often victims of nonconsensual sex, have higher levels of smoking, chronic pain syndromes, depression, generalized anxiety, substance abuse, and Post-Traumatic Stress Disorder .*

### 2005 Target

- Maintain the proportion of women aged 15-40 screened for domestic and intimate partner violence at the 2004 level of 4%.



### Data Source

- CRS 5.1 electronic examination of 217,838 patient records.

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the proportion of eligible patients who have had Intimate Partner/Domestic Violence screening by 9% overall, from 4% (FY 2004) to 13% (FY 2005). This measure is included in the "One HHS" 10 Department-wide Management Objectives to attain a 10% relative increase by FY 2007. IHS has already reached and exceeded the target for the DV/IPV measure. The targeted increase for FY 2006 has been revised to 14%, and the FY 2007 target has been revised to 15% as a result of the dramatic improvement in screening rates from FY 2004 to FY 2005.

## Public Health Nursing

### Measure

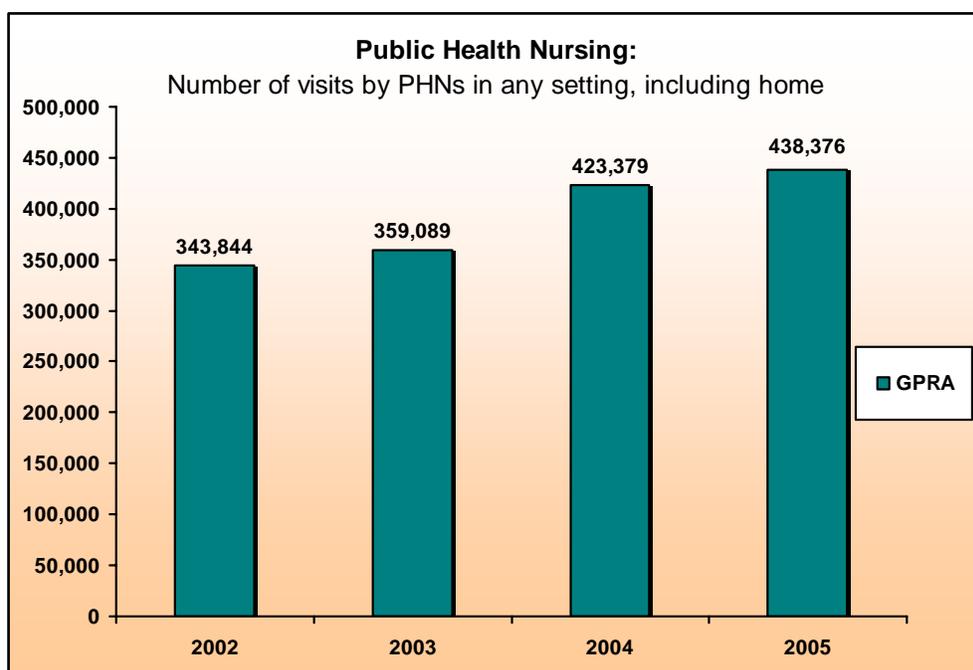
- Number of public health nursing services (primary and secondary treatment and preventive services) provided by public health nursing.

### Importance

- *Public health nursing is a method of delivering services to outside of the I/T/U setting. Public health nurses treat very young children, medically under-served pregnant women, patients with chronic or acute diseases, and the elderly. Public health nurses provide health assessment, health promotion, disease prevention, and infectious disease management. The public health nurse has intimate knowledge of the local community and family structures; this knowledge is essential in improving health status. Direct service helps reduce health care costs through early detection and prevention of health problems.*

### 2005 Target

- Maintain the total number of public health nursing services provided to individuals in all settings, including the home, at the 2004 workload levels.



### Data Source

- CRS 5.1 electronic examination of 438,376 patient records. (2002-2003 data extracted from NPIRS.)

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the number of public health nursing services by 4% overall, from 423,379 (FY 2004) to 438,376 (FY 2005). In FY 2006, this measure will no longer track the number of PHN visits, and will become a non-clinical measure. The goal for FY 2006 will be to implement a data system capable of recording the time spent and nature of public health activities other than one-on-one patient care, with an emphasis on activities that serve groups or the entire community.

# 2005 Results

## Childhood Immunizations

### Measure

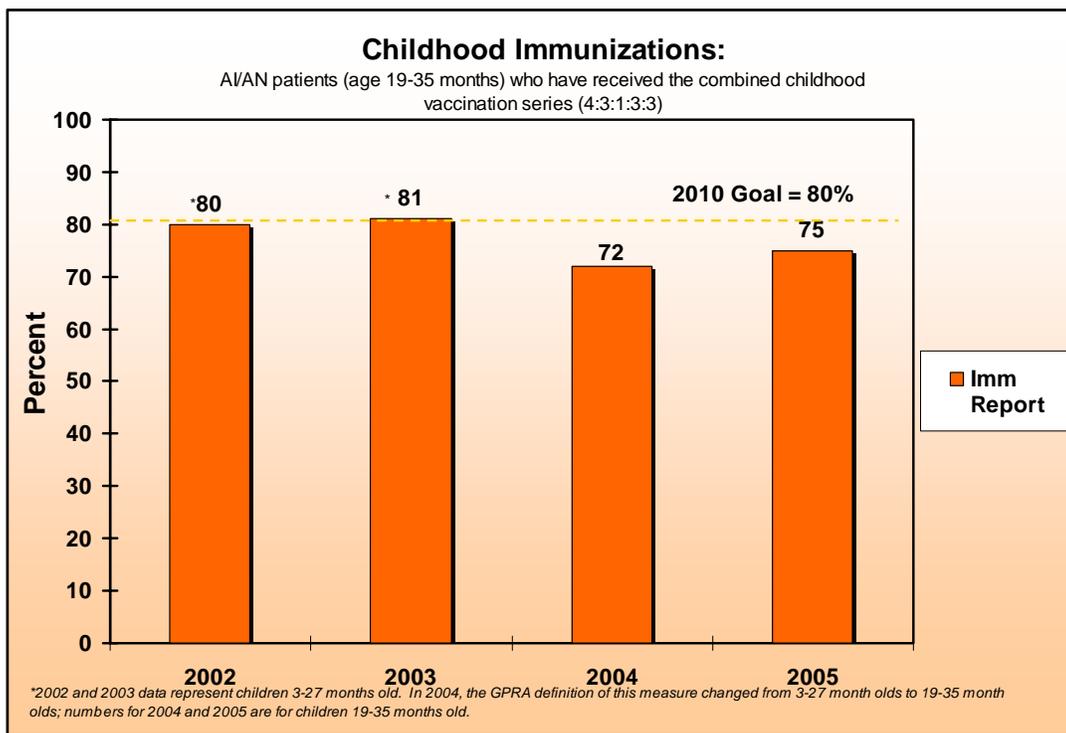
- Immunization rates for AI/AN patients aged 19-35 months.

### Importance

- *Routine immunizations (vaccines) represent a cost-effective public health measure that significantly improves the health of children. The Healthy People 2010 goal is 90% coverage for all routine immunizations for children aged 19-35 months and 80% coverage for the combined (4:3:1:3:3) series of vaccinations. The combined series includes coverage with 4 doses of DTaP, 3 doses of IPV, 1 dose of MMR, 3 doses of Hep B and 3 doses of Hib.*

### 2005 Target

- Maintain rates for the combined series of recommended immunizations for American Indian and Alaska Native children aged 19-35 months at the 2004 level of 72%.



### Data Source

- Annual 2- year old immunization report based on IHS patient care records and public health nursing records of children who receive immunizations at an IHS facility. CRS data will be used in future years

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the percentage of children ages 19-35 months receiving recommended vaccines to 75%, up 3% from the FY 2004 baseline of 72%. Continued success in increasing vaccination rates each year will help IHS to reach the HP 2010 goal of an 80% immunization rate for the combined series of childhood immunizations. .

## Influenza Immunizations\*

### Measure

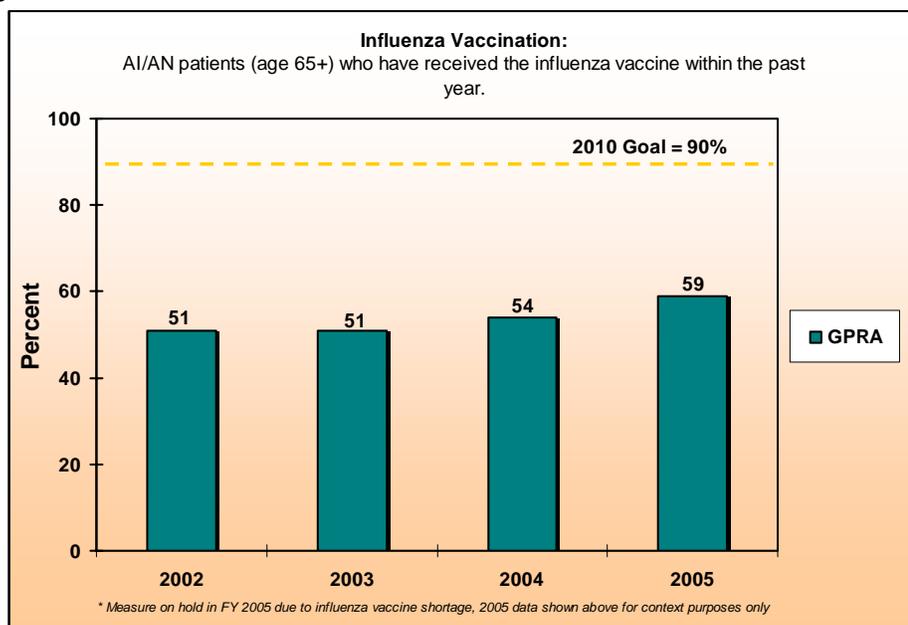
- Influenza vaccination rates among adult patients age 65 years and older.

### Importance

- *Influenza is a highly contagious respiratory disease that can cause potentially life-threatening secondary infections. Elders who get influenza are also at increased risk of hospitalization and death from heart disease and stroke, and vaccination reduces that risk. In one observational study comparing vaccinated to non-vaccinated persons aged 65 and older in a managed care setting over two influenza seasons, researchers found a 19% and 16-23% reduction in hospitalization for cardiovascular and cerebrovascular events, respectively. In addition they found a 29-32% reduction in hospitalization for influenza or pneumonia and a 48-50% reduction in risk of death from all causes.*

### 2005 Target

- Maintain the rate for influenza vaccination at the 2004 level of 54%. \*Placed on hold due to vaccine shortages



### Data Source

- CRS 5.1 electronic examination of 57,359 patient records.

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the proportion of eligible patients receiving an influenza vaccination by 5% overall, from 54% (FY 2004) to 59% (FY 2005). However, due to vaccine shortages, this measure was placed “on hold” for FY 2005. Therefore, the results for this measure are not included in the evaluation of the Agency’s GPRA performance in 2005; these results are presented for informational purposes. The improvement and maintenance of influenza vaccination rates is important because studies have shown that AI/AN people are at high risk for this disease; the 1999-2001 AI/AN death rate from influenza and pneumonia was 42 percent greater than the 2000 U.S. all-races death rate. Continued success in increasing vaccination rates each year will help IHS to reach the HP 2010 goal of a 90% immunization rate.

## Pneumococcal Immunizations

### Measure

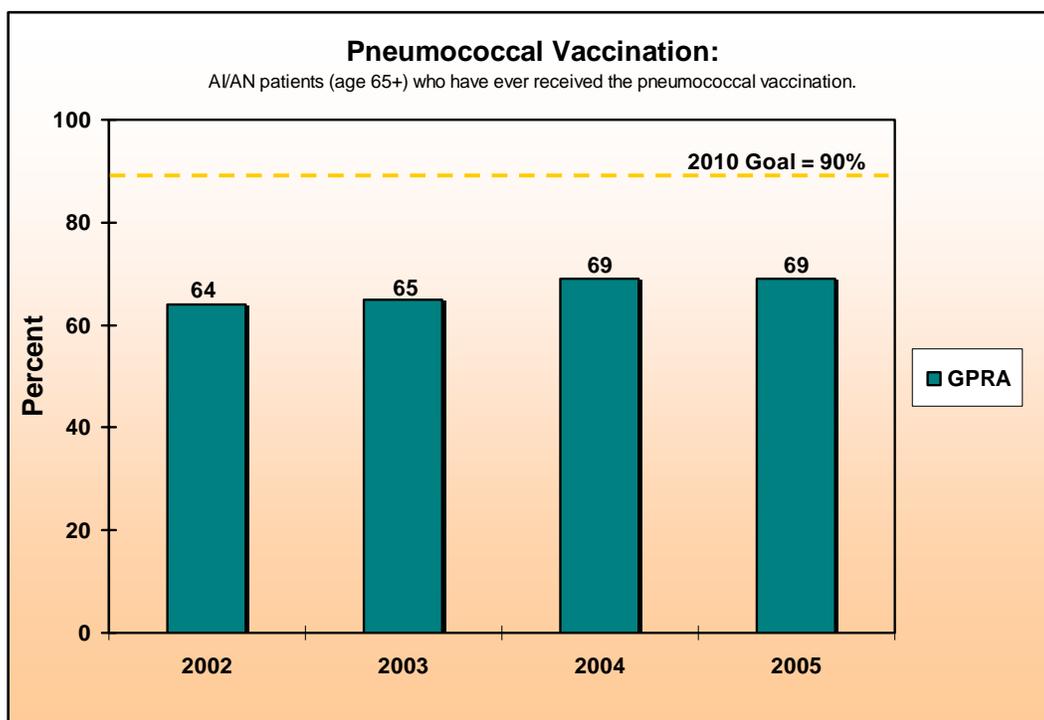
- Pneumococcal vaccination rates among adult patients aged 65 years and older.

### Importance

- *The purpose of this measure is to reduce morbidity and mortality due to pneumococcal disease among older adults. Elder health is an increasingly important issue as more and more of the population survives beyond the age of 65. Pneumococcal disease includes pneumonia, bacteremia, and meningitis. Pneumococcal disease has the highest death toll from a vaccine-preventable bacterial disease and patients over the age of 65 account for more than 51% of the deaths. In 1998, over 3400 patients over the age of 65 died from pneumonia. Vaccination of the elderly against pneumococcal disease is one of the few medical interventions found to improve health and save on medical costs.*

### 2005 Target

- Maintain the rate for pneumococcal vaccination at 2004 level of 69%.



### Data Source

- CRS 5.1 electronic examination of 57,359 patient records.

### Results and Analysis

- IHS met the target for this measure, maintaining a 69% pneumococcal vaccination rate for FY 2005. This measure is included in the “One HHS” 10 Department-wide Management Objectives to attain a 10% relative increase by FY 2007. Although the number of patients over age 65 who have received pneumococcal vaccinations kept pace with the overall increase in the number of patients, the agency will refocus its efforts to attain the required percentage increase by 2007.

## Cholesterol Screening - CVD Prevention

### Measure

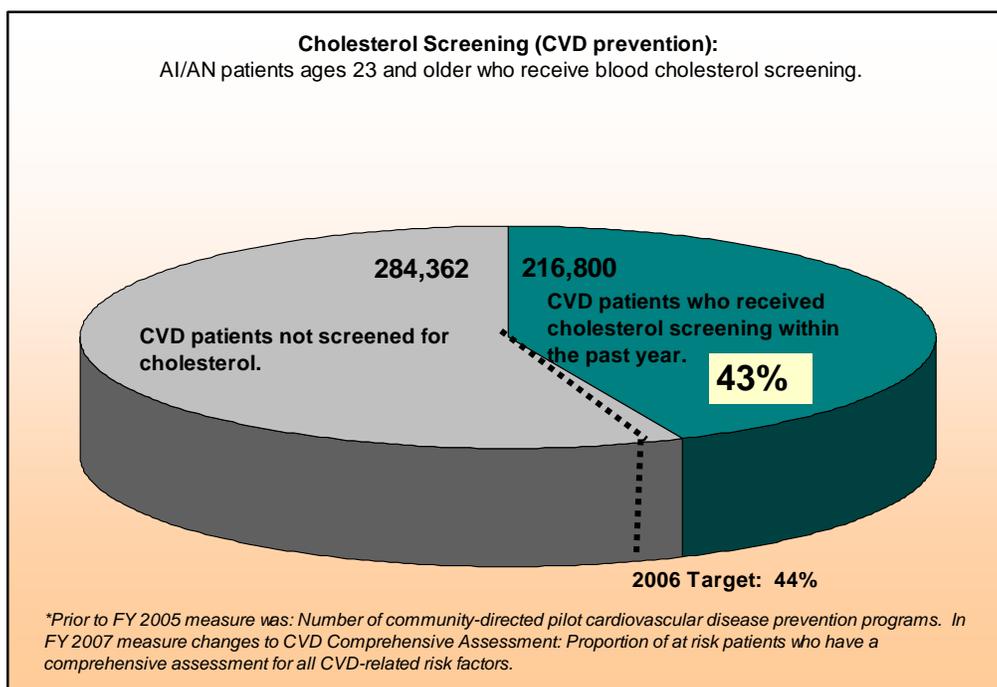
- Proportion of patients ages 23 and older who receive blood cholesterol screening.

### Importance

- *Death rates from cardiovascular disease are higher among AI/AN people than other groups. In the late 1990s, heart disease death rates were 20% higher among AI/AN people than the total US population, and stroke death rates were 14% higher. Cardiovascular disease represents the leading cause of death for American Indian and Alaska Native people above 45 years of age. Unlike other racial and ethnic groups, American Indians appear to have an increasing incidence of cardiovascular disease, likely due to the high prevalence of diabetes. Elevated LDL cholesterol is associated with increased risk of cardiovascular disease, heart attacks, and strokes. However, a 10% decrease in total blood cholesterol levels may reduce the incidence of heart disease by as much as 30%.*

### 2005 Target

- Establish the proportion of patients ages 23 and older that receive blood cholesterol screening.



### Data Source

- CRS 5.1 electronic examination of 501,162 patient records.

### Results and Analysis

- IHS met the target for this measure, establishing a baseline of 43%. In FY 2006 the target is to increase the rate to 44%. Increasing screening rates will allow the agency to identify patients at risk for developing cardiovascular disease. Studies have shown that over a third of AI/AN people have high or borderline-high cholesterol levels. In FY 2007, this measure will focus on comprehensive cardiovascular disease assessment, focusing on the proportion of at-risk patients who have a comprehensive assessment for all cardiovascular disease-related risk factors; cholesterol screening will be part of this comprehensive assessment.

## Obesity Assessment (BMI Measurement)

### Measure

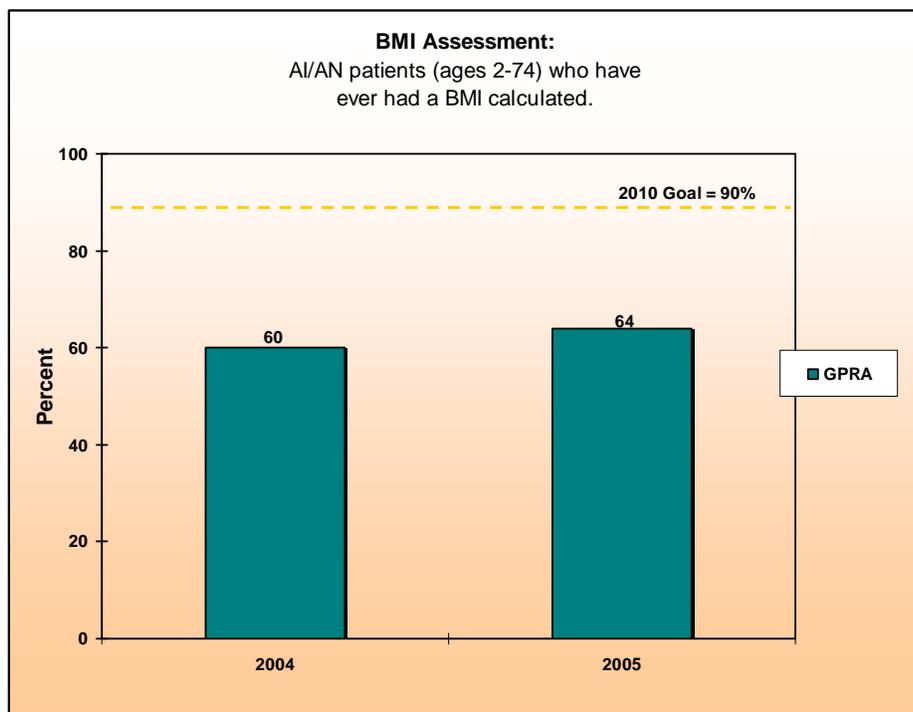
- Proportion of patients for whom BMI data can be measured.

### Importance

- *Body Mass Index (BMI) is a simple measure of weight in relation to height and is used to determine whether patients are overweight or obese. Rates of obesity and overweight among American Indian and Alaska Native populations exceed the national averages. Obesity is a risk factor for high blood pressure, asthma, arthritis, coronary heart disease, stroke, colon cancer, post-menopausal breast cancer, endometrial cancer, gall bladder disease, and sleep apnea. Obesity is also a major risk factor for type 2 diabetes particularly among American Indians. This measure is part of a comprehensive long-term effort to identify effective interventions to prevent and reduce obesity in American Indian and Alaska Native people.*

### 2005 Target

- Increase the proportion of patients for whom BMI can be calculated by 5% over the 2004 baseline level of 60%.



### Data Source

- CRS 5.1 electronic examination of 872,233 patient records.

### Results and Analysis

- IHS did not meet the target for this measure. The target for this measure was an ambitious 5% increase over FY 2005. Although the agency was unable to achieve a 5% overall increase in one year, it did achieve a significant rate increase. BMI measurement increased from the 2004 level by 4% overall. In FY 2006, this measure will focus on obesity and overweight rates in children ages 2-5, in order to address the growing problem of childhood obesity.

# 2005 Results

## Tobacco Use Assessment

### Measure

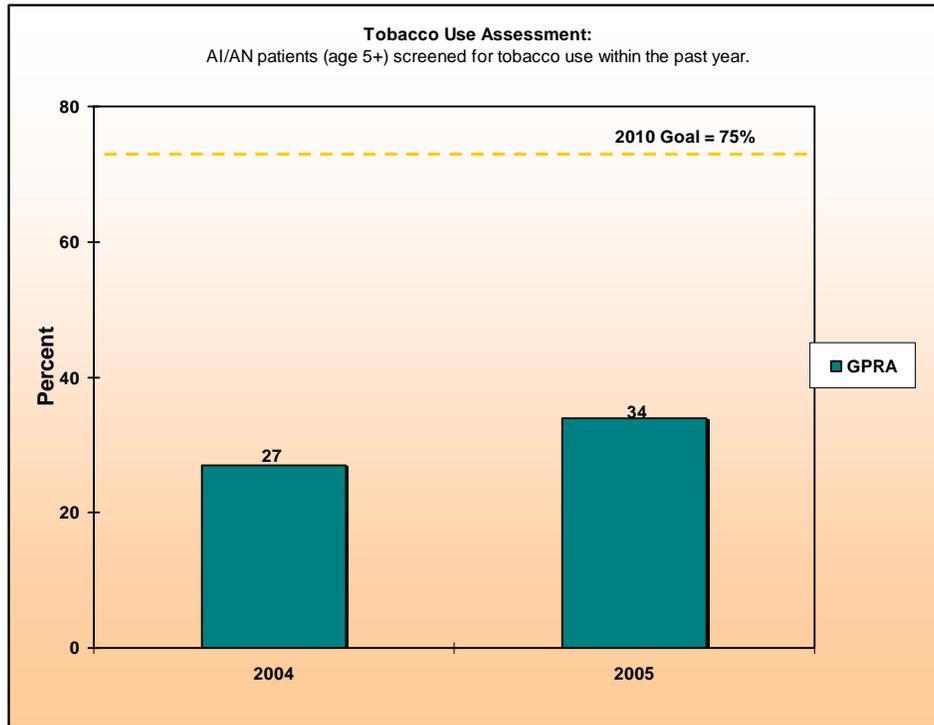
- Proportion of patients ages 5 and above who are screened for tobacco use.

### Importance

- *The use of tobacco represents the second largest cause of preventable deaths for American Indian and Alaska Native people. Smoking rates in many communities are almost twice the national average. Tobacco use contributes to the leading causes of mortality among American Indians and Alaska Natives. Lung cancer is the leading cause of cancer death among AI/AN people. Cardiovascular disease is the leading cause of death among AI/ANs, and tobacco use is an important risk factor for this disease.*

### 2005 Target

- Maintain the proportion of patients screened for tobacco use at the 2004 level of 27%.



### Data Source

- CRS 5.1 electronic examination of 829,166 patient records .

### Results and Analysis

- IHS met and exceeded the target for this measure, increasing the proportion of eligible patients who have had tobacco screening by 7% overall, from 27% (FY 2004) to 34% (FY 2005). Screening for tobacco use is essential to identifying patients at risk for complications of tobacco abuse. In FY 2006, this measure changes to measuring rates of tobacco cessation intervention, aimed at reducing tobacco usage in AI/AN communities. Because tobacco has a unique status among many American Indian and Alaska Native tribes as a sacred plant, any plan for control activities must have significant input from American Indian and Alaska Native community leaders.

## Prenatal HIV Screening

### Measure

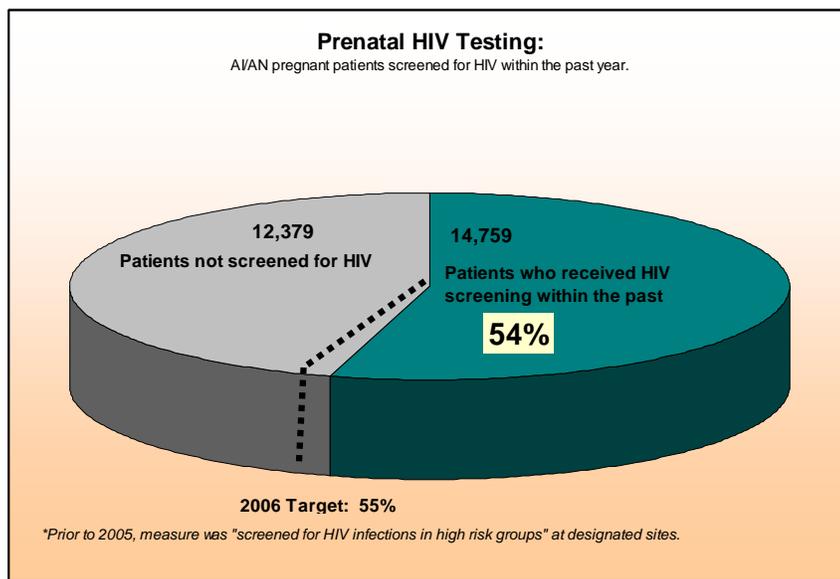
- Support screening for HIV infections in appropriate population groups.

### Importance

- *The HIV/AIDS epidemic represents a growing threat to American women of childbearing age. From 1999 through 2003, the estimated number of AIDS cases increased 15% among women and 1% among men. In 1992, women made up 14% of adults and adolescents living with AIDS; by the end of 2003, they made up 22%. In 2001, HIV infection was the 6th leading cause of death among women aged 25-34 years, and the 4th leading cause of death among women aged 35-44.*
- *HIV infections in newborn children are one potential consequence of higher HIV infection rates among women of childbearing age. In 2003, the CDC reported that 92% of HIV and AIDS cases in children and virtually all new HIV infections in children in the United States were the result of perinatal transmission of HIV. The CDC estimates that over 8,700 children have contracted HIV through perinatal transmission cumulatively through the year 2003. Studies have shown transmission rates of less than 2% among HIV infected mothers who started antiretroviral treatment during pregnancy; those who did not begin treatment until labor or after birth had transmission rates of 12-13%, and those who received no treatment had rates of 25%. Routine prenatal HIV testing of all pregnant women is the best way to avoid transmission of HIV from mother to infant.*

### 2005 Target

- Establish the baseline number of women screened for HIV in pregnancy.



### Data Source

- CRS 5.1 electronic examination of 27,138 patient records.

### Results and Analysis

- IHS met the target for this measure by establishing a baseline screening rate of 54%. The goal of this measure is to eliminate HIV infections in newborn children. The Indian Health Service has issued guidance recommending universal prenatal HIV testing using the "opt-out" approach. In "opt-out" testing, HIV tests are included in the standard battery of prenatal tests and women are informed that an HIV test is being conducted and that they have a right to refuse it. Information regarding HIV is included as part of a patient's prenatal education. As more practitioners adopt opt-out testing, prenatal HIV screening rates should increase.

# Appendix A

# Summary of Key Findings

**Summary Table of GPRA Measures: Clinical**

Measure	2005 Target	2005 Rate	2004 Rate	Measure Status
Diabetes: Poor Glycemic Control	17%	15%	17%	Met
Diabetes: Ideal Glycemic Control	27%	30%	27%	Met
Diabetes: Blood Pressure Control	35%	37%	35%	Met
Diabetes: Dyslipidemia Assessed	53%	53%	53%	Met
Diabetes: Nephropathy Assessment	42%	47%	42%	Met
Diabetes: Retinopathy Assessment	55%	50%	55%	Not Met
Pap Screening	58%	60%	58%	Met
Mammography Screening	40%	41%	40%	Met
Alcohol Screening (FAS Prevention)	>7%	11%	7%	Met
Dental Access	24%	24%	24%	Met
Topical Fluorides Patients Applications	Baseline	113,224 85,318	No data	Met
Dental Sealants*	230,295	249,882	230,295	Met
Dental Access-Patients with Diabetes	37%	39%	37%	Met
Domestic Violence Screening	4%	13%	4%	Met
Public Health Nursing	423,379	438,376	423,379	Met
Childhood Immunizations (From Immunization Report)	72%	75%	72%	Met
Adult Immunizations: Influenza**	54%	59%	54%	Met
Adults Immunizations: Pneumococcal	69%	69%	69%	Met
Cholesterol Screening (CVD Prevention)	Baseline	43%	No data	Met
Obesity Assessment	65%	64%	60%	Not Met
Tobacco Use Assessment	27%	34%	27%	Met
Prenatal HIV Screening	Baseline	54%	No data	Met

\*Reporting System changed from NPIRS in FY05

\*\*On hold for 2005 National Vaccine Shortage

# Summary of Key Findings

## Summary Table of GPRA Measures: Non-Clinical

Measure	2005 Target	2005 Rate	2004 Rate	Measure Status
<b>RTC Accreditation</b> •Youths who completed Substance Abuse Treatment •Youths who developed after care plan •Youth who have communicated after care plan •Youth programs that have a family week <i>* Measure changed in FY05 to indicate # of YRTC's accredited.</i>	100% N/A N/A N/A N/A	100% No data No data No data No data	N/A 70% 100% 100% 100%	<b>Met</b>
<b>Data Quality Improvement</b> <i>*Implemented training in all 12 areas, +2 new measures.</i>	+2 new measures	+4 new measures	*	<b>Met</b>
<b>Behavioral Health (BH)</b> <i>*Percent increase from previous year</i>	Increase	+4%*	+7%*	<b>Met</b>
<b>Urban IS Improvement</b>	Implement C&G language	C&G language not implemented	Minimum data set language developed	<b>Not Met</b>
<b>Accreditation</b>	100%	100%	100%	<b>Met</b>
<b>Medication Error Improvement</b>	NCCMERP use by all direct care facilities	All areas using NCCMERP	Baseline (+6 areas)	<b>Met</b>
<b>Injury Intervention</b>	37 projects	37 projects	37 projects	<b>Met</b>
<b>Unintentional Injury Rates</b>	<GY04 rate	Results available 12/2009	Results available 12/2008	<b>Pending</b>
<b>Suicide Surveillance</b>	Integrate BHS reporting tool	BHS integrated	National plan implemented	<b>Met</b>
<b>Environmental Surveillance</b> <i>*Represents percent increase from previous year.</i>	12 programs (WebEHRS)	12 programs	15%*	<b>Met</b>
<b>Sanitation Improvement (# homes)</b>	20,000	24,072	24,928	<b>Met</b>
<b>Facility Construction</b> <i>*See specific FC report of status</i>	21 sites	Partial*	12 sites	<b>Not Met</b>
<b>Public Health Infrastructure</b> <i>*additional areas assessed from previous year.</i>	+3 offices	No added areas	4(1*)	<b>Not Met</b>
<b>Provider Retention/Scholarships</b>	22%	30%	20%	<b>Met</b>

# Indian Health Service Mortality Disparities Table

## American Indian and Alaska Natives (AI/AN) in the IHS Service Area 2000-2002, US All Races 2001

	Rate AI/AN 2000-2002	Rate U.S. All Races 2001	Ratio: AI/AN: U.S. All Races
<b>ALL CAUSES</b>	<b>1039.9</b>	<b>854.5</b>	<b>1.2</b>
ALCOHOL INDUCED	42.1	6.9	6.1
BREAST CANCER	16.5	26.0	0.6
CEREBROVASCULAR DISEASE	59.9	57.9	1.0
CERVICAL CANCER	4.5	1.4	3.2
DIABETES	73.2	25.3	2.9
DISEASES OF THE HEART	236.2	247.8	1.0
HIV INFECTION	2.9	5.0	0.6
HOMICIDE (assault)	11.4	7.1	1.6
INFANT DEATHS (per 1,000 live births)	8.5	6.8	1.3
MALIGNANT NEOPLASMS (ALL)	183.5	196.0	0.9
MATERNAL DEATHS <sup>1/</sup>	12.5	9.9	1.3
MOTOR VEHICLE CRASHES	50.4	15.3	3.3
PNEUMONIA & INFLUENZA	31.1	22.0	1.4
SUICIDE (Intentional self-harm)	17.3	10.7	1.6
TUBERCULOSIS	2.1	0.3	7.0
UNINTENTIONAL INJURIES	90.1	35.7	2.5

<sup>1/</sup>Rate per 100,000 live births. Rate does not meet the standards of reliability due to small numbers. The break in comparability for maternal mortality has not been quantified by NCHS.

Source: Unpublished data: OPHS/Division of Program Statistics (2000-2002 AI/AN rates based on 2000 census with bridged-race categories: Date: January 2006

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