

PART II - PROGRAM PLANNING AND ASSESMENT

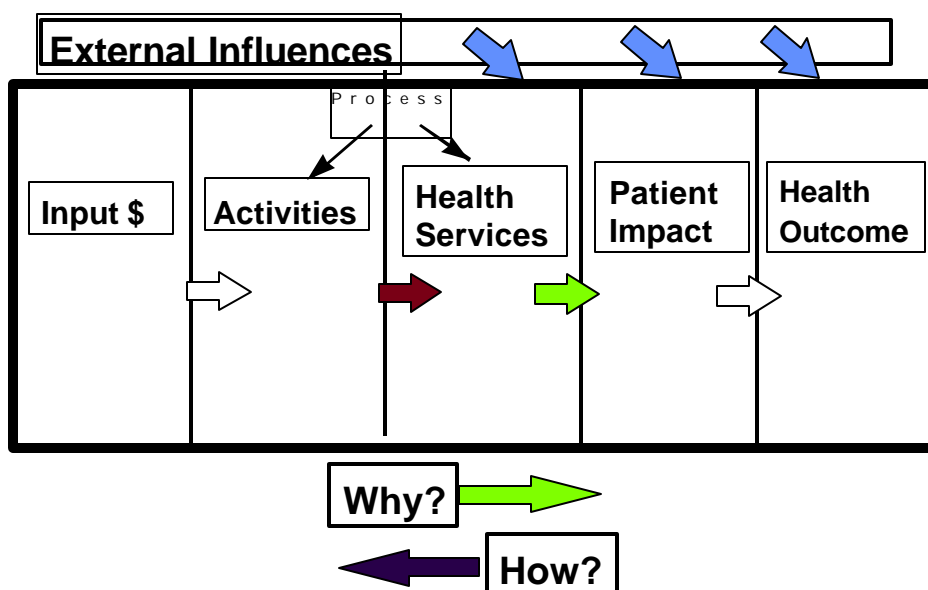
It must be borne in mind that the tragedy of life doesn't lie in not reaching your goal. The tragedy lies in having no goal to reach. It isn't calamity to die with dreams unfulfilled, but it is a calamity not to dream. It is not a disaster to be unable to capture your ideal, but it is a disaster to have no ideal to capture. It is not a disgrace not to reach the stars, but it is a disgrace to have no star to reach for. Not failure, but low aim is sin.

Benjamin Mays

Introduction and Rationale

The diagram that follows has been used the past three years to explain the GPRA process and shows that it is essentially the same as the public health approach the IHS has long followed in health planning and evaluation. The logic of this model links resources to activities or “process” (both support and direct health services) which leads to reductions in risk factors for diseases and conditions (i.e., impact) and over an extended period of time results in improved health outcomes. The model also depicts how external influences such as economic status (see Section 1.4, *The Role of Poverty*) isolation, or social norms can have powerful effects on the success of interventions, particularly in addressing lifestyle related health outcomes.

The Public Health/GPRA Approach



In light of this conceptual model, three broad categories of indicators are of relevance.

Process Indicators:

Indicators that assess the quantity or quality of activities that have the potential to contribute, at least indirectly, to reduced mortality or morbidity in the population over time.

Process indicators include activities such as the construction of clinics, identification of the prevalence of a disease or condition, implementation of consumer satisfaction surveys, and the provision of some health services (i.e., services for which the link to improved health outcomes has not been consistently demonstrated). These are important activities that may be essential to running an effective health care program, but do not in and of themselves result in improved health outcomes. The GPRA represents a process requirement, and committing to comply with these requirements represent a process indicator. (See Activities and Health Services boxes in diagram)

Impact Indicators:

Indicators that assess the quantity or quality of activities that have a scientific evidenced-based link to improved health outcomes usually by a demonstrated reduction in a recognized risk factor of mortality or morbidity in a population. These indicators are referred to as “interim outcomes” in much of the GPRA literature. They include activities such as immunizations, dental sealants, assuring safe drinking water, and cancer screenings. Over time these activities result in improved morbidity and/or mortality. Impact indicators are usually the most appropriate type of indicator for annual performance plans because they provide the most measurable link between funding and results. (see Patient Impact box in diagram)

Outcome Indicators:

Indicators that relate to assessing changes in mortality or morbidity relative to a disease or condition that program(s) address. While these indicators are the ultimate goal of health care, for many health conditions it is often years before outcome benefits are realized. Furthermore, identifying the cost of an observed outcome is often difficult or impossible in the cases of conditions that multiple providers may be addressing simultaneously while addressing other health conditions. Thus, outcome indicators are usually not the most appropriate choice for annual performance plans, but are essential to identify for long-term goals such as in the GPRA Strategic Plan. Examples include reducing the prevalence of obesity, diabetic complications or reducing the unintentional injury mortality rate (see Health Outcome box in diagram).

It is appropriate to note that general workload types of indicators such as total outpatient visits and inpatient days are not included in this performance plan because any meaningful link to health outcomes is indirect or circuitous, at best. As noted earlier, outpatient visits have grown with population growth rather than varied with level of funding. Inpatient days have been declining across the country as well as in the I/T/U care systems to control costs and neither of these measures correlate in an interpretable way with improved health status. However, these data will continue to be monitored and presented to the Department as part of the IHS annual accountability report because they are of significance in the context of expenditures and demands on the I/T/U system.

The IHS performance indicators represent sentinel indicators which are specifically focused on the most significant health problems affecting AI/ANs and/or the essential services that address them and identified by local I/T/Us. These problems include: diabetes, alcohol and substance abuse, cancer, dental diseases, mental health, heart disease, family abuse and violence, injuries, poor living environment, mental health, tobacco use, obesity, environmental hazards, and the unique health problems of elders, women and children. They all represent important links in the

GPRA/public health process directed towards outcomes. Some represent primary prevention that attempts to prevent a disease or condition before it occurs (e.g., immunizations or controlling weight to prevent heart disease or diabetes). Others are “secondary preventive” in nature in that they attempt to reduce the morbidity and mortality associated with a disease or condition after it has occurred (e.g., access to dental care or breast cancer screening). Given that there will always be ten leading causes of death, our focus is to intervene early in the processes that contribute significantly to mortality and morbidity, rather than to target end point problems such as heart attacks and stroke. This is the essence of the cost-effective public health approach that has resulted in the improvements in health status of AI/AN people over the last three decades.

We have also included indicators for improving how our consumers perceive the quality of and access to services, how employees perceive the quality of their work-life, and how our stakeholders perceive our performance in assuring adequate consultation and advocating for their needs. In addition, we have developed indicators addressing our effectiveness in building collaborative relationships with other organizations in regards to cross-cutting issues and meeting our obligations as an Agency in the Department.

These indicators do not represent the complete spectrum of activities and challenges the Agency and the I/T/Us address as part of a comprehensive public health organization. To do so would probably require several hundred indicators and require significant increases in resources just to collect the data. Consistent with the proposed GAO guidance, these indicators are limited to a vital few, represent multiple priorities, are linked to the responsible programs, and in many cases are measures we have used for many years for program evaluation. Several are focused primarily on better defining the magnitude of certain problems and improving our evaluation capability.

A major challenge in selecting indicators for a one-year plan is that many of the processes necessary for intervening in complex chronic diseases require years or decades of focused efforts to realize significant progress, even with significant resource enhancements. Therefore, only a few of these indicators directly address health outcomes, while most are incremental activities that will lead to such outcomes over time. In addition, several indicators directly embrace the principles and intent of the National Partnership for Reinventing Government and link directly with the Secretary’s Initiatives. Finally, all of the health problem related indicators support the HP 2010 goals for AI/AN, the draft HP 2010 goals, while all support the Department’s Strategic Plan.

However, it is important to acknowledge that these indicators were developed in partnership with Area and I/T/U staff and AI/AN tribal leaders with the first priority being the need to reflect the problems and strategic activities of the I/T/Us collectively. We believe this approach is essential to secure the high level of collective support we will need with our diverse and decentralized programs. Because of the diversity across I/T/Us and the freedom of tribal programs to participate in GPRA activities at their discretion, not all indicators will be of priority to all I/T/Us. Furthermore, there are activities that are not included in these indicators that will continue to be priorities, particularly health issues unique to local I/T/Us.

Budget and Program Aggregation

Because of the number and diversity of IHS health programs, these activities can be organized in many different ways. Our goal in presenting our performance measures is to the best of our ability relate performance to our budget. This is a serious challenge to the IHS for several reasons we will articulate. We have selected an aggregation approach largely based on the way our programs are managed and have selected four functional areas for the aggregation of the 24 budget categories identified in the IHS “Detail of Change Table”: 1.) Treatment, 2.) Prevention, 3.) Capital Programming/Infrastructure, and 4.) Consultation, Partnerships, Core Functions, and Advocacy. While this approach may appear to be an overly simplistic "lumping" of categories, it is important to realize that there is no aggregation or disaggregation that allows mutually exclusive activities linked to mutually exclusive health problems.

This conundrum exists because addressing most chronic diseases and problems such as diabetes, injuries, and family violence, require multidisciplinary interventions to successfully address. In such cases, there may be several health programs (and thus funding categories) simultaneously addressing a health problem such as diabetes. Confounding the issue further, these same diverse providers may be addressing other health issues such as tobacco use, blood pressure control, or mental health during the same encounter. Lastly, tribal programs, which now manage over 40% of the total IHS budget, have the legal flexibility to reprogram funding categories to meet their identified health priorities and likewise use an accounting tailored to their needs and preferences. As a result, with the exception of the facilities construction category, tribes tend to use resources based on individual tribal priorities and the link between named categories in the IHS budget and how the funds are actually used in tribal programs may not be highly correlated.

Thus, for tribal programs the aggregation issue is probably moot. For IHS managed programs, aggregation of budget categories that not only splits out activities and funding sources but also allows a valid cost accounting link to health outcomes can not be provided. In such cases, the accounting link can go no farther than services. A manufacturing type of accounting mindset taken to an extreme simply does not fit well in the context of a comprehensive public health program. Therefore, the aggregation approach we have selected seems reasonable given the limitations of any approach and that we do have the option to disaggregate these inputs if desired for a more narrowly focused look at well circumscribed programs such as dental services and public health nursing. There is no priority order to these categories and all are important in accomplishing the mission of the IHS. Table I that follows shows the relationship between the funding categories in IHS Detail of Change Table and the appendix of the “Budget of the United States” and our GPRA aggregation. A brief explanation of the components of each aggregation category precedes each set of performance indicators.

Table I

Budget Category Aggregation

<u>INDIAN HEALTH SERVICE</u>	<u>APPENDIX</u> Budget of the United States items from left column	<u>GPRA AGGREGATION</u> items from left column
Detail of Change Table		
<u>SERVICES:</u>	<u>SERVICES:</u>	
1 Hospitals & Health Clinics		1. Treatment (1,2,3,4,5,10,11,12,14,15)
2 Dental Services		2. Prevention (6,7,8,9,19b)*
3 Mental Health		3. Capital Programming/ Infrastructure (16-20)**
4 Alcohol & Substance Abuse		4. Partnerships, Consultation, Core Functions, and Advocacy (13,19a-c)***
5 Contract Health Services		
Total, Clinical Services	1 Clinical Services (1-5)	
6 Public Health Nursing		
7 Health Education		
8 Comm. Health Reps		
9 Immunization AK		
Total, Prev Hlth	2 Preventive Health (6-9)	*The Prevention category includes 35% of Environmental Health Support (19b) activities.
10 Urban Health	3 Urban Health (10)	
11 Indian Health Professions	4 Indian Health Professions (11)	**The Capital Programming/Infrastructure category includes 80% of Facilities Support (19a), 60% of Environmental Health Support (19b), and 20% of OEHE Support (19c) activities.
12 Tribal Management	5 Tribal Management (12)	
13 Direct Operations	6 Direct Operations (13)	
14 Self Governance	7 Self Governance (14)	
15 Contract Support Costs	8 Contract Support Costs (15)	
Total, Services	Total, Services	***The Partnerships, Consultation, Core Functions, and Advocacy category includes 20% of Facilities Support (19a), 5% of Environmental Health Support (19b), and 80% of OEHE Support (19c) activities.
<u>FACILITIES:</u>	<u>FACILITIES:</u>	
16 Maint. & Improvement	9 Maint. & Improvement (16)	
17 Sanit. Facil. Constr.		
18 Hlth Care Facs. Constr.	10 Hlth Care Facs. Constr. (17-18)	
19 Facil. & Envir. Hlth Sup	11 Facil. & Envir. Hlth Sup (19a- c)	
19a Fac. Support		
19b Env. Health Support		
19c OEHE Support		
20 Equipment	12 Equipment (20)	
Total, Facilities	Total, Facilities	
(20) Total, IHS	(12) Total, IHS	(4) Total, IHS

2.1.1 Treatment and Prevention Categories: Program Description, Context and Summary of Performance

Program Description and Context

Treatment and Prevention indicators have been combined in this section for several reasons including:

- the distinction between treatment and prevention is often blurred
- many health care programs provide both kinds of services
- approximately 90% of IHS resources are directed towards these activities
- monitoring for both is usually accomplished from the same data systems

In essence, prevention and treatment are our business and virtually all other activities are supportive to them. Combined they are the essence of IHS Strategic Objective 2: Provide Health Services and the means to accomplishing our Mission and Goal and IHS Strategic Objective 1: Improve Health Status. The indicators directly address the structure, process, and outcome of treatment and preventive services. While some of these measures such as the dental indicators 12 and 13 and public health nursing indicator 19 can be closely linked to the funding request, most are less directly evident in their linkage to funding because they represent activities performed by staff from multiple disciplines who address multiple health problems. For a more detailed discussion of the limitations in funding linkages with indicators, see *Budget and Program Aggregation* on page 21 and Section A.4 on page 90 in the appendix of this document.

Ultimately, our performance in treatment and prevention activities will determine our level of success in reaching our mission. While we are on track to accomplish many of the treatment and prevention targets for FY 1999, several remain in question because of the growing difficulties in recruitment and retention of critical health care providers. It is important to keep in mind in reviewing performance indicators and performance results that with the AI/AN population increasing over two percent annually, each indicator that sets a target for the percent of the population covered, service capacity must be increased over two percent just to remain at the same level of coverage. For a more detailed discussion of the issues influencing performance accomplishment see the *FY 1999 Performance Summary* section beginning on page 14. In addition, a performance summary table precedes each section of indicators and the description of each individual indicator includes an assessment of estimated performance achievement for FY 1999.

The budget category/programs that make up the Treatment and Prevention categories, along with their page reference in the budget are presented below:

Treatment Aggregation

Hospitals and Clinics - supports inpatient and ambulatory care and support services such as nursing, pharmacy, laboratory, nutrition, medical records, etc (see page IHS-28 in FY 2001 budget document).

Dental Services - supports the provision of dental care through clinical based treatment and prevention services and community oral health promotion and disease prevention activities including water fluoridation and dental sealants (see page IHS-42 in FY 2001 budget document).

Mental Health - supports community oriented clinical and preventive mental health and social services programs (see page IHS-48 in FY 2001 budget document).

Alcohol and Substance Abuse - supports the efforts of tribes in the provision of holistic alcoholism and other drug dependency treatment, rehabilitation, and preventive services for individuals and families (see page IHS-54 in FY 2001 budget document).

Urban Indian Health - supports contracts and grants to 34 urban health programs funded under Title V of the Indian Health Care improvement Act (see page IHS-94 in FY 2001 budget document).

Indian Health Professions - supports self-determination and access to health care through efforts to allow AI/AN to enter health professions, and effective recruitment of health staff by providing scholarships, loan repayment, temporary employment, and health professions recruitment (see page IHS-100 in FY 2001 budget document).

Self-Governance- provides short-fall funding of tribal self-governance compacts to avoid adverse impact to non-compacting tribes as well as supporting the Office of Tribal Self-Governance and Self-Governance Planning grants (see page IHS-116 in FY 2001 budget document).

Contract Support - provides start-up, direct, and indirect costs that occur for tribal managed programs in addition to what would have been provided under the direct provision of the program as authorized under Section 106(a) (2) of P.L. 93-638, the Indian Self-Determination Act, as amended (see page IHS-126 in FY 2001 budget document).

Prevention Aggregation

Public Health Nursing - supports the community-based Public Health Nursing program which provides treatment, counseling, health education, and referral activities carried out in such setting as homes, schools, jails, bars, and community centers in conjunction with a diversity of other health care providers (see page IHS-76 in FY 2001 budget document).

Health Education - supports activities directed towards promoting healthy lifestyles, community capacity building, and the appropriate use of health services through public health education targeted at school health, employee health promotion, community health, and patient education (see page IHS-80 in FY 2001 budget document).

Community Health Representative - supports the tribally administered program of training AI/AN community members in basic disease control and prevention. These activities include serving as outreach workers with the knowledge and cultural sensitivity to effect change in community acceptance and utilization of health care resources and use community-based networks to enhance health promotion/disease prevention activities (see page IHS-84 in FY 2001 budget document).

Alaska Immunization Program - supports the Alaska immunizations program to address hepatitis and haemophilous influenzae through collaboration with the CDC (see page IHS-88 in FY 2001 budget document).

Environmental Health Support - supports the IHS injury prevention program that coordinates and provides grants for primary preventive community-based collaborative programs using epidemiologically defined problem identification and evaluation methods (see page IHF-41 in FY 2001 budget document).

2.1.2 Treatment and Prevention: Performance Indicators

The choice of these indicators was made after considerable deliberation and "trial and error" over the past three years that has resulted in the acceptance of several selection criteria:

- they address major functional areas of our budget structure (i.e., major health programs)
- they represent I/T/U priority areas in terms of addressing health problems
- they are relatively passive to I/T/U providers in that they are extracted from existing data systems and do not add to their workload
- they do not reward under reporting of conditions (i.e., reducing complication of diabetes was dropped for this reason)
- they are evidenced-based and support recognized standards of care

While not all treatment and prevention indicators measure up to all these criteria, most come close. To make clear the ultimate intent or outcome of each process or impact indicator, each begin with a statement of intent followed by the intervention and target that will contribute to this intent. However, it is important to acknowledge that for many indicators a measurable change in the ultimate outcome is not likely to be seen in the one year time span of the performance plan.

The data that support the treatment and prevention indicators comes from several sources but the largest number are extracted from the IHS automated information system which collects data on the services provided by IHS and tribal direct and contract programs. In addition, the diabetes treatment indicators 2-5 are extracted from the IHS Diabetes Audit that is an annual systematic audit of almost 10,000 charts. Beginning in FY 2001, these indicators will be based on three-year running averages from this audit.

The software used by IHS facilities and most tribal facilities is the Resource and Patient Management System (RPMS). Data are collected for each inpatient discharge, ambulatory medical visit, and dental visit (all patient specific) and for community health service programs including health education, community health representatives, environmental health, nutrition, public health nursing, mental health and social services, and substance abuse (all activities reporting systems). The patient-specific data are collected through the Patient Care Component (PCC) of the RPMS. For a discussion of data validation processes relative to this system and the diabetes audit, see Appendix A.1.

Lastly, these indicators directly address the Secretary's Initiative to Eliminate Racial and Ethnic Health Disparities and the President's Initiative to Eliminate Disparities in Health Status Among Americans. Further connections with other initiatives and the HHS Strategic Plan will be identified in the "Linkages" section of each indicator.

**Performance Summary Table 1:
Treatment Indicators**

Performance Indicator	FY Targets	Actual Performance	Reference
<u>Indicator 1:</u> Maintain Area age-specific diabetes prevalence rates (as a surrogate marker for diabetes incidence) for the AI/AN population.	FY 01: Maintain Data-base FY 00: Maintain Data-base FY 99: Establish baseline	FY 01: FY 00: FY 99: baseline established	P: p. 32 B: p. IHS-34 p. IHS-130
<u>Indicator 2:</u> Increase the proportion of I/T/U clients with diagnosed Diabetes that have improved their glycemic control.	FY 01: 3-year average improved FY 00: 3-year average improved* FY 99: 38%	FY 01: FY 00: FY 99: 9/00 FY 98: 35% (baseline)	P: p. 33 B: p. IHS-34 p. IHS-130
<u>Indicator 3:</u> Increase the proportion of I/T/U clients with diagnosed diabetes and hypertension that have achieved diabetic blood pressure control standards.	FY 01: 3-year average improved FY 00: 3-year average improved* FY 99: 30%	FY 01: FY 00: FY 99: 9/00 FY 98: 27% (baseline)	P: p. 34 B: p. IHS-34 p. IHS-130
<u>Indicator 4:</u> Increase the proportion of I/T/U clients with diagnosed diabetes who have been assessed for dyslipidemia.	FY 01: 3-year average improved FY 00: 3-year average improved* FY 99: 81%	FY 01: FY 00: FY 99: 9/00 FY 98: 79% (baseline)	P: p. 35 B: p. IHS-34 p. IHS-130
<u>Indicator 5:</u> Increase the proportion of I/T/U clients with diagnosed diabetes who have been assessed for nephropathy.	FY 01: 3-year average improved FY 00: 3-year average improved* FY 99: 36%	FY 01: FY 00: FY 99: 9/00 FY 98: 33% (baseline)	P: p. 36 B: p. IHS-35 p. IHS-130
<u>Indicator 6:</u> Increase the proportion of women who receive Pap screening.	<u>Pap Screening</u> FY 01: +3% over FY 00 level FY 00: +3% over FY 99 level* <u>Cervical Cancer</u> FY 99: determine incidence of cervical cancer	FY 01: FY 00: FY 99: baseline 4/00 FY 99: 8-10 per 100,000 based on 40% of AI/AN	P: p. 37 B: p. IHS-35 p. IHS-136

Performance Indicator	FY Targets	Actual Performance	Reference
Indicator 7: Increase proportion of the AI/AN female population over 40 years of age who receive screening mammography.	FY 01: +3% over FY 00 level FY 00: +3% over FY 99 baseline* FY 99: establish baseline	FY 01: FY 00: FY 99: 4/00	P: p. 38 B: p. IHS-35 p. IHS-136
Indicator 8: Increase the proportion of AI/AN children receiving a minimum of four Well Child Visits by 27 months of age and expand coverage.	FY 01: +3% over FY 00 FY 00: +3% over FY 99 FY 99: establish baseline	FY 01: FY 00: FY 99: 38.5% provisional	P: p. 40 B: p.-IHS-37
Indicator 9: Maintain the rates and intensity of follow-up for adolescents discharged from IHS supported Regional Treatment Centers (RTC) and assure abstinence.	Abstinence FY 01: +5% over FY 00 FY 00: establish baseline Follow-up Rates FY 01: FY 00 level or higher FY 00: +10% over FY 99 FY 99: establish baseline for 30 days, 6 months, and 12 months follow-up rates	FY 01: FY 00: FY 01: FY 00: FY 99: 64.5% at 30 days 55.2% at 6 months 40.9% at 12 months	P: p. 41 B: p. IHS-54
Indicator 10: Expand the percentage of I/T/U prenatal clinics utilizing screening and case management protocols for pregnant substance abusing women and advocate to expand usage.	FY 01: + 10% over FY 00 FY 00: +5% over FY 99 level FY 99: establish baseline	FY 01: FY 00: FY 99: 3/00	P: p. 43 B: p. IHS-54
Indicator 11: Improve water fluoridation compliance for Areas participating in IHS/CDC Fluoridation Surveillance Demonstration Project.	FY 01: 10% over FY 00 FY 00: 15% over FY 99 FY 99: no indicator	FY 01: FY 00: FY 99: baseline 6/00	P: p. 44 B: p. IHS-42
Indicator 12: Increase annual access to dental services for the AI/AN population.	FY 01: 25% FY 00: 23% FY 99: 21%	FY 01: FY 00: FY 99: 23% preliminary FY 98: 24.5% (baseline)	P: p. 45 B: p. IHS-42
Indicator 13: Increase the percentage of AI/AN children 6-8 and 14-15 years who have received protective dental sealants on permanent molar teeth.	6-8 yrs FY 01: +3% over FY 00 FY 00: +3% over FY 99* FY 99: 50% 14-15 yrs FY 01: +3% over FY 00 FY 00: +3% over FY 99* FY 99: 58%	FY 01: FY 00: FY 99: 38.8% FY 91: 40.1% baseline FY 01: FY 00: FY 99: 66.8% FY 91: 66.5% baseline	P: p. 46 B: p. IHS-42

Performance Indicator	FY Targets	Actual Performance	Reference
Indicator 14: Increase the % of I/T/U medical facilities with Urgent Care or Emergency departments or services that have written policies and procedures for routinely identifying, treating and/or referring victims of family violence, abuse or neglect (i.e., child, spouse, elderly).	FY 01: 80% FY 00: 70% FY 99: 60%	FY 01: FY 00: FY 99: 64% FY 98: 47% (baseline)	P: p. 47 B: p. IHS-48
Indicator 15: Expand the percentage of I/T/U programs that have implemented the use of the Mental Health/Social Services (MH/SS) data reporting system.	FY 01: +10 over FY 00 level FY 00: +10 over FY 99 level FY 99: 50%	FY 01: FY 00: FY 99: 51% FY 98: est. 40-45% baseline	P: p. 48 B: p. IHS-48
Indicator 16: Develop the specifications and implementation plan for an automated mutually compatible information system which captures health status and patient care data for Indian Urban health care programs and implement at field urban sites.	FY 01: implemented in 30% of urban programs FY 00: test in at least one site* FY 99: develop specs and plan	FY 01: FY 00: FY 99: accomplished 8/99	P: p. 49 B: p. IHS- 94
Indicator 17: Maintain 100% accreditation of all IHS hospitals and outpatient clinics.	FY 01: 100% FY 00: 100% FY 99: 100%	FY 01: FY 00: FY 99: 100% FY 98: 100% (baseline)	P: p. 50 B: p. IHS-28
Indicator 18: Improve AI/AN consumer satisfaction with the acceptability and accessibility of health care as measured by IHS consumer satisfaction survey.	FY 01: +5% over FY 00 baseline FY 00: establish baseline* FY 99: develop instrument and protocol	FY 01: FY 00: FY 99: instrument and protocol complete	P: p. 51 B: p. IHS-28
Total Treatment Funding:	FY 01: \$2,113,572,000 FY 00: \$1,931,326,000 FY 99: \$1,811,951,000 FY 98: \$1,711,018,000 * indicates revised FY 2000 measure, see Summary of Changes Table on pages 87-90		P: page # in perform. plan B: page # in budget justif.

A. FY 2001 Treatment Indicators:

Indicator 1: To support planning for the treatment and prevention of diabetes during FY 2001, 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.

Rationale: Diabetes continues to be a growing problem in many AI/AN communities with rates increasing rapidly in several Areas, age at diagnosis occurring at younger ages, and no signs of decline in any Area. The impact of this disease in terms of individual and family suffering is immense, as are the treatment costs to the Indian health delivery systems. Though incidence rates of diabetes (occurrence of new cases within a certain time period) are very difficult and expensive to collect, and are only done reliably in large, population-based studies, trends in age-specific prevalence rates of diabetes can provide evidence of an increase or decrease in diabetes for a certain age group and may suggest a change in true incidence. Analysis of these trends will allow the program and I/T/U's to target prevention efforts to specific age groups in ongoing and future interventions.

Approach: The IHS Office of Public Health is responsible for overall coordination of efforts to achieve this indicator. The IHS Diabetes Program estimates diabetes prevalence of diagnosed diabetes in Native Americans seeking care in I/T/U facilities. Rates are calculated using the IHS automated record system (i.e., PCC/RPMS data), and are reported by geographic Area, gender, and age groups for adults. Three-year rates will be calculated to reduce variability. Three-year running rates (i.e., add the most recent year of data and drop the oldest year of data) will be used in trend analysis. Longitudinal studies of diabetes conducted in Pima Indians since 1965 have provided extensive information on the prevalence and incidence of diabetes in this tribal community. While there are several other tribal-specific diabetes epidemiological studies, none are to the depth of the Pima studies and they cover fewer than 10% of all tribes. Furthermore, there are no published studies on the growing problem of type II diabetes in American Indian youth, though there is extensive recognition by I/T/U providers that the age of diabetes onset is declining to younger adults and children.

Local/tribal facilities can assess diabetes prevalence by using PCC registries and /or diabetes case registries, deriving baseline measures for their tribal communities. The IHS Diabetes Program and the IHS Chronic Disease Epidemiology Program can assist I/T/U facilities to enhance their PCC registries and/or other diabetes registries, as well as establish and organize systematic screening and data entry in order to better ascertain diabetes prevalence. Emphasis will be placed upon the specific age groups identified for this measure.

Diabetes prevalence information will be collected, transformed into similar formats, and transferred to the CDC Division of Diabetes epidemiologist (interagency agreement between CDC and IHS) for analysis and adjusting. Reports will be created and disseminated to I/T/U's, other DHHS agencies, universities, and private foundations for use in identifying prevention strategies and resources.

Data Source: RPMS/PCC reports, Diabetes Registries

Baseline: These indicators commit to establishing and maintaining diabetes prevalence baselines using the IHS PCC and local diabetes registries that are used now in all areas. These

rates will serve as the baseline for tribal-specific prevalence studies in selected tribes and will be determined annually.

Type of Indicator: Process

Linkages: This indicator supports the President's initiative for diabetes, the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population*. It is supported by IHS/CDC agreements, and supports several HP 2010 objectives in Focus Area 5: Diabetes.

Program Performance FY 1999: The FY 1999 performance measure was to establish the initial Area age-specific prevalence rates for diabetes and has been accomplished. Area age-specific diabetes prevalence rates have been prepared for the AI/AN population based on patients diagnosed with and treated for diabetes and having at least one outpatient visit during FY 1997. Rates are available by IHS Area and sex for 4 age groups (0-19, 20-44, 45-64, and 65+). Among the IHS adult population (age 20 and over) 9.6 % have diagnosed diabetes. Alaska Area has the lowest rate (2.9%); Nashville and Tucson Areas have the highest rates (16.1 and 17.9%, respectively).

Indicator 2 : Reduce diabetic complications by demonstrating a continued trend in improved glycemic control in the proportion of I/T/U clients with diagnosed diabetes in FY 2001.

Rationale: Large clinical studies have demonstrated that glycemic control significantly reduces the incidence of complications related to diabetes. In addition, achieving better blood sugar control has been shown to significantly reduce the costs associated with caring for people with diabetes. Using Staged Diabetes Management treatment guidelines for diabetes clinical management has significantly improved glucose control in several Indian communities.

Approach: The IHS Diabetes Program conducts a yearly medical record review of a random sample of nearly 10,000 charts in I/T/U facilities in order to assess compliance with the IHS Standards of Care for Diabetes. These standards are a set of clinical parameters of care and patient management that have a recognized evidence-based correlation with improved diabetic patient outcomes. This record review is known as the Diabetes Audit and uses a strict protocol to assure statistical integrity and comparability of both process and outcome measures over time. Each year, facility-specific values are reported for each indicator, as well as values for each Area and IHS-wide. Trends over time for I/T/U facilities, service units, Areas and IHS-wide are also constructed for selected indicators. Three-year running rates (i.e., add the most recent year of data and drop the oldest year of data) will be used to reduce variability and provide trend analysis.

Glycemic control refers to how well the blood sugars are controlled in a person with diabetes. It is measured with a blood test called the Hemoglobin A1c that measures the average blood sugar for a 2-3 month period. The IHS Diabetes Audit process divides these levels of control into "Acceptable", "Fair" and "Poor" categories based on national diabetes care standards. These categories will be used in the GPRA process to determine improvements in glycemic control.

The benefits of aggressive interventions to lower blood sugar in diabetics have been well described in the literature and numerous practice guidelines and standards exist. Local efforts to improve these parameters through lifestyle intervention and appropriate medication use will be encouraged. Local feedback of pertinent audit data will be provided to each site through the IHS Diabetes Program.

Data Source: Diabetes registries, yearly IHS Diabetes Program Chart Audit

Baseline: The 1998 Diabetes Audit reveals that 35% of all IHS clients were in the "good control" category; 36% of all IHS clients were in the "fair control" category; 17% of all IHS clients were in the "poor control" category; 7% of all IHS clients were in the "very poor control" category; and values were missing for 5% of clients. The proportion of all I/T/U patients with diabetes in "good" glycemic control for FY 1997-99 will serve as the baseline value and will be available by August, 2000.

Type of Indicator: Impact

Linkages: This indicator supports the President's initiative for diabetes, the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. It is supported by IHS/CDC agreements and addresses Year 2010 objective 5-6 (Diabetes: diabetes-related deaths).

Program Performance FY 1999: Data for this indicator will be reported by August 2000 following analyses of the FY 1999 Diabetes Audit.

Indicator 3: Reduce diabetic complications by demonstrating a continued trend in improved blood pressure control in the proportion of I/T/U clients with diagnosed diabetes and hypertension who have achieved blood pressure control standards in FY 2001.

Rationale: Large clinical studies have demonstrated that blood pressure control significantly reduces the incidence of complications related to diabetes. In addition, achieving better blood pressure control has been shown to significantly reduce the costs associated with caring for people with diabetes. Using Staged Diabetes Management treatment guidelines for diabetes clinical management has significantly improved blood pressure control in several Indian communities.

Approach: The IHS Diabetes Program conducts a yearly medical record review of a random sample of nearly 10,000 charts in I/T/U facilities in order to assess compliance with the IHS Standards of Care for Diabetes. These standards are a set of clinical parameters of care and patient management that have a recognized evidence-based correlation with improved diabetic patient outcomes. This record review is known as the Diabetes Audit and uses a strict protocol to assure statistical integrity and comparability of both process and outcome measures over time. Each year, facility-specific values are reported for each indicator, as well as values for each Area and IHS-wide. Trends over time for I/T/U facilities, service units, Areas and IHS-wide are also constructed for selected indicators. Three-year running rates (i.e., add the most recent year of

data and drop the oldest year of data) will be used to reduce variability and provide trend analysis.

Blood pressure control is usually defined in the non-diabetic person as a blood pressure level less than 140/90 mm Hg. However, because a person with diabetes is at greater risk for complications related to blood pressure, national standards recommend that the ideal goal of diabetic blood pressure control should be 130/85 mm Hg. For the GPRA process, "acceptable" control will be defined as 140/90 mm Hg and "ideal" control will be defined as 130/85 mm Hg. and both levels will be reported.

The benefits of aggressive interventions to lower blood pressure in diabetics have been well described in the literature and numerous practice guidelines and standards exist. Local efforts to improve these parameters through lifestyle intervention and appropriate medication use will be encouraged. Local feedback of pertinent audit data will be provided to each site through the IHS Diabetes Program.

Data Source: Diabetes registries, yearly IHS Diabetes Program Chart Audit

Baseline: The 1998 Diabetes Audit reveals that 34% of all IHS clients were in the "normal blood pressure" category; 27% of all IHS clients were in the "controlled blood pressure" category; 27% of all IHS clients were in the "uncontrolled blood pressure" category; 8% of all IHS clients were in the "severely uncontrolled blood pressure" category; and values were missing for 4% of clients. The proportion of all I/T/U patients with diabetes in the "controlled" category for blood pressure control for FY 1997-99 will serve as the baseline value and will be available by August, 2000.

Type of Indicator: Impact

Linkages: This supports the President's initiative for diabetes, the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. It is supported by IHS/CDC agreements and addresses Year 2010 objectives 5-6 (Diabetes: diabetes-related deaths) and 5-7 (Diabetes: cardiovascular deaths).

Program Performance FY 1999: Data for this indicator will be reported by August 2000 following analyses of the FY 1999 Diabetes Audit.

Indicator 4 : Reduce diabetic complications by demonstrating a continued trend of improvement in assessing the proportion of I/T/U clients with diagnosed diabetes for dyslipidemia (i. e., cholesterol and triglyceride) in FY 2001.

Rationale: Large clinical studies have demonstrated that lowering of serum cholesterol significantly reduces the cardiovascular (CVD) morbidity and mortality associated with diabetes. In addition, achieving better control of lipid parameters has been shown to significantly reduce the CVD costs associated with caring for people with diabetes. Using Staged Diabetes Management treatment guidelines for lipid management has significantly improved lipid control in-patients with diabetes.

Approach: The IHS Diabetes Program conducts a yearly medical record review of a random sample of nearly 10,000 charts in I/T/U facilities in order to assess compliance with the IHS Standards of Care for Diabetes. These standards are a set of clinical parameters of care and patient management that have a recognized evidence-based correlation with improved diabetic patient outcomes. This record review is known as the Diabetes Audit and uses a strict protocol to assure statistical integrity and comparability of both process and outcome measures over time. Each year, facility-specific values are reported for each indicator, as well as values for each Area and IHS-wide. Trends over time for I/T/U facilities, service units, Areas and IHS-wide are also constructed for selected indicators. Three-year running rates (i.e., add the most recent year of data and drop the oldest year of data) will be used to reduce variability and provide trend analysis.

The benefits of aggressive interventions to lower cholesterol levels in diabetics have been well described in the literature and numerous practice guidelines and standards exist. Local efforts to improve these parameters through lifestyle intervention and appropriate medication use will be encouraged. Local feedback of pertinent audit data will be provided to each site through the IHS Diabetes Program.

Data Source: Diabetes registries, yearly IHS Diabetes Program Chart Audit

Baseline: The 1998 Diabetes Audit reveals that 79% of all IHS clients had serum cholesterol values in their chart, 74% had serum triglyceride levels, and 29% had LDL cholesterol values recorded. The proportion of all I/T/U patients with diabetes who have had a cholesterol assessment done in FY 1997-99 will serve as the baseline values and will be available by August, 2000.

Type of Indicator: Impact

Linkages: This indicator supports the Secretary's initiative for diabetes, the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. It is supported by IHS/CDC agreements and addresses Year 2010 objectives 5-6 (Diabetes: diabetes-related deaths) and 5-7 (Diabetes: cardiovascular deaths).

Program Performance FY 1999: Data for this indicator will be reported by August 2000 following analyses of the FY 1999 Diabetes Audit.

Indicator 5: Reduce diabetic complications by demonstrating a continued trend of improvement in the proportion of I/T/U clients with diagnosed diabetes who have been assessed for nephropathy in FY 2001.

Rationale: End stage renal disease (ESRD), or diabetic kidney disease, is a significant and growing problem in Indian communities. Large clinical studies have demonstrated that certain measurements can identify those patients at high risk for ESRD and that interventions aimed at reducing risk (blood pressure control, and other "state of the science" medications) may delay the onset of ESRD. Using the Kidney Health Profile of the diabetes audit and the Staged Diabetes

Management treatment guidelines for diabetes clinical management may significantly improve the approach to kidney health in Indian communities.

Approach: The IHS Diabetes Program conducts a yearly medical record review of a random sample of nearly 10,000 charts in I/T/U facilities in order to assess compliance with the IHS Standards of Care for Diabetes. These standards are a set of clinical parameters of care and patient management that have a recognized evidence-based correlation with improved diabetic patient outcomes. This record review is known as the Diabetes Audit and uses a strict protocol to assure statistical integrity and comparability of both process and outcome measures over time. Each year, facility-specific values are reported for each indicator, as well as values for each Area and IHS-wide. A special sub-report of the audit, called the Kidney Health Profile, is generated which assesses screening and treatment for kidney health in a community. Three-year running rates (i.e., add the most recent year of data and drop the oldest year of data) will be used to reduce variability and provide trend analysis.

The benefits of aggressive interventions to lower blood pressure in diabetics have been well described in the literature and numerous practice guidelines and standards exist. Local efforts to improve these parameters through lifestyle intervention and appropriate medication use will be encouraged. Local feedback of pertinent audit data will be provided to each site through the IHS Diabetes Program.

Data Source: Diabetes registries, yearly IHS Diabetes Program Chart Audit

Baseline: The 1998 Diabetes Audit reveals that 89% of all IHS clients had a serum creatinine on the chart and 81% had a urinalysis on the chart. Of these urinalyses, 29% showed positive proteinuria (i.e., protein in urine). Of those with no proteinuria, 33% had a test for microalbuminuria recorded in the chart. Because microalbuminuria is the most sensitive assessment for early diagnosis of diabetes, it will serve as the target measure. The proportion of all I/T/U patients with diagnosed diabetes screened for "kidney health" based on screening for microalbuminuria in FY 1997-99 will serve as the baseline and available by August, 2000.

Type of Indicator: Impact

Linkages: This indicators supports the Secretary's initiative for diabetes, the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. It is supported by IHS/CDC agreements and addresses Year 2010 objective 5-11 (Diabetes: proteinuria).

Program Performance FY 1999: Data for this indicator will be reported by August 2000 following analyses of the FY 1999 Diabetes Audit.

Indicator 6: Reduce cervical cancer mortality and morbidity by increasing the proportion of women in FY 2001 who have had a Pap screen in the previous year by 3% over the FY 2000 level.

Rationale: This indicator is selected because cervical cancer occurs at higher rates among AI/AN women than in the general U. S. population. The death rate for AI/AN women is 4.1 per

100,000 compared with 2.5 per 100,000 for the U.S. All Races rate. Furthermore, this cancer is the cause of significant premature mortality, and is almost entirely preventable by thorough Pap screening and early treatment of pre-cancerous conditions. The long-range goal is to reduce both cervical cancer incidence and death rates to achieve parity with the U. S. all-races rate. This may be attainable within 10 years. This indicator supports a nationally recognized standard of care.

Approach: The IHS Office of Public Health is responsible for overall coordination of efforts to achieve these indicators. All Papanicolaou screening tests (cervical cytology or Pap smear) for cancer of the uterine cervix, performed during the previous year will serve as the numerator for this calculation. The denominator for this assessment will be all AI/AN women over age 18 who reside in counties included in the IHS Service Area, from the U. S. census. In addition, public education, training providers to perform colposcopy, added funding for screening and treatment, and aggressive follow-up of abnormal Paps will all be part of the strategy.

Data Source: The total number of Pap screens performed will be a composite of IHS Laboratory reports and PCC electronic records.

Baseline: Based for FY 1999 to be available by 4-1-00.

Type of Indicator: Impact

Linkages: This indicator supports the President's Initiative on Cancer Screening and Management, the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of*

Primary Health Services, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, 4.1 *Promote the Appropriate Use of Effective Health Care*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. It is supported by IHS/CDC agreements (National Breast and Cervical Cancer Early Detection Program). This indicator also, directly supports the HP 2010 objective 3-4 (Cancer: cervical cancer deaths).

Program Performance FY 1999: The FY 1999 performance measure was to identify the incidence of cancer of the uterine cervix for AI/AN women. This indicator was partially accomplished. After a numerous analyses, the only reliable sources of data for this measure were determined to be: New Mexico Tumor Registry (a SEER site); Arizona Central Cancer Registry; Alaska Native Tumor Registry. These three registries include approximately 40% of the IHS user population and the rates vary between 8 and 10 cases per 100,000 women per year. The U.S. White rate during this same time was 8.5. Other state cancer registries were considered to be inaccurate because of high rates of racial misclassification, and because they often did not include Federal facilities (such as IHS and VA) in their database. Since complete accurate assessment of this measure is not currently available for the entire AI/AN population, the indicator was changed to address Pap screening for FY 2000 and FY 2001.

Indicator 7: Reduce breast cancer mortality and morbidity by increasing the proportion of the AI/AN female population over 40years of age during FY 2001 who have had screening mammography in the previous year by 3% over the FY 2000 levels.

Rationale: Breast cancer has long been considered to be rare among AI/AN women. Incidence and mortality rates have been documented in some AI/AN populations to be 1/3 to 1/2 of the White rates. This picture seems to be changing, however, with breast cancer incidence in the northern plains and Alaska now approaching the rates of the White population. Screening mammography was seldom performed by IHS before 1991, when the CDC National Breast and Cervical Cancer Early Detection Program was initiated. The CDC funded programs have been successful in reaching AI/AN women in many states, and not so successful in others.

Mammography is a nationally recognized standard of care based on its association with both reduced mortality and morbidity because breast cancer is identified at earlier stages. Early identification allows for early clinical intervention and secondary prevention of morbidity and mortality. For this indicator, the numerator will be the number of AI/AN women age 40 and older, registered for care with IHS, who have had a mammogram during the previous year and the denominator is all AI/AN women age 40 and older, who are registered for care with IHS (user population).

Approach: Local I/T/U service sites are responsible for delivering the screening. Regional coordination and assistance is the responsibility of the IHS Area offices. The IHS Office of Public Health performs the overall coordination of this effort. Linkages with NIH, CDC, and the American College of OB/GYN are critical to success.

The strategic approach includes outreach to improve patient access and the availability of specialized staff and equipment to perform the screening. The staff required are public health nurses, Community Health Representatives, and health educators to improve outreach, and specialized clinical providers (nursing, physician, and imaging staff) to provide the actual clinical breast exams and mammograms. The availability of screening must also be associated with the capability to provide diagnostic studies such as ultrasound, biopsy, and fine needle aspiration, as well as treatment such as surgery and chemotherapy.

The successful reduction of premature deaths and morbidity among AI/AN women will depend on full implementation of effective screening and follow-up clinical services. This indicator is linked to success in meeting Strategic Objectives one, two, and four of the Agency's component of the DHHS Strategic Plan.

Data Source: Three data sources will be combined for the total number of mammograms. First, the IHS Medical Imaging Program collects data on mammograms performed by IHS. These data will be supplemented with data from the CDC Breast and Cervical Cancer Early Detection Program, which serves AI/AN women in all states and 15 directly funded Tribes. The last source of data will be mammograms paid for by IHS but performed at non-IHS facilities, are captured by the IHS Fiscal Intermediary. Collectively these sources effectively serve as a reliable estimate of mammogram coverage for AI/AN women.

Baseline: Estimates from FY 1999 ranged from 27%-73% and are of limited usefulness. Using the methodology described above, a baseline for FY 1999 will be established by April 2000. This approach utilized for FY 1999, as described in the *Program Performance FY 1999* section below, has not proven useful.

Type of Indicator: Impact

Linkages: This indicator supports the President's initiative on Cancer Screening and Management, the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, 4.1 *Promote the Appropriate Use of Effective Health Care*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. It is supported by IHS/CDC agreements (National Breast and Cervical Cancer Early Detection Program). This indicator directly supports HP 2010 objective 3-3 (Cancer: breast cancer deaths).

Program Performance FY 1999: The FY 1999 performance measure was to determine the proportion of AI/AN female population 50-69 years of age who had received annual mammography. Despite considerable effort, the data approaches used did not adequately meet this performance measure. Thus an alternative approach as describe above will be used and available by April of 2000.

For the initial approach to this indicator, data were collected from two sources: the CDC Behavioral Risk Factor Surveillance System (BRFSS), and the Indian Health Service annual Assessment of Diabetes Care. Based on the 1997 BRFSS, 73% of AI/AN women over age 50 responded that they had a mammogram within the past two years. The latest IHS Diabetes Audit to collect mammography data (1997) identified that 54% of diabetic women over age 40 had a mammogram documented in the medical record at any time in the past. By IHS Area, this ranged from 36% to 80%. For the same year, 27% of diabetic women over age 40 were in compliance with American Cancer Society recommendations (mammogram in past two years for age 40-49, in past year age 50 and up). By IHS Area, this ranged from 4% to 56%.

The BRFSS only reaches women with telephones, and so misses at least 20% of the AI/AN population. Probably those women without phones have lower socioeconomic status and are less likely to seek preventive services, so the BRFSS figure of 73% is almost undoubtedly a high estimate of mammography coverage. Another problem with BRFS is that relatively few AI/AN women are sampled, so this estimate is based on small numbers and may not be reliable.

The IHS Diabetes Audit is designed to be a scientifically valid sample of people with diabetes in IHS. In one recent study, diabetic women were found to have pap screening rates that were identical to women without diabetes, so we feel that it is reasonable to apply this survey for this purpose. The Diabetes Audit methodology requires documentation on the chart of the mammogram, so will probably not include mammograms that were performed at health fairs and other non-IHS sources that were not paid for by IHS. Therefore this rate of 27% should be considered an underestimate.

Probably the true figure for mammography coverage in IHS lies closer to 27% than 73%. Because the considerable expense necessary to resolve the problems with obtaining adequate data for this measure, the IHS has changed the assessment approach for this indicator for future years as described above. The age range has been also been changed to comply with the latest CDC recommendations.

Indicator 8: Improve child and family health by increasing the proportion of AI/AN children served by IHS receiving a minimum of four well child visits by 27 months of age during FY 2001 by 3% over the FY 2000 level.

Rationale: Well child visits have been associated with improved post-neonatal mortality and opportunities to improve family health and safety in the longer term and is a recognized national standard of care. Of particular importance are the anticipatory educational interventions given to parents concerning diet and nutrition, injury prevention, and prevention of family violence. The current minimum standard for Well Child Visits is six for first born children and five after first born. Accepting four visits as an acceptable minimum is based on the high percentage of children who receive Well Child services in conjunction with urgent care visits and thus are not coded as Well Child Visits.

Approach: The responsible parties are the local I/T/U service sites. The IHS Area offices can provide assistance in development and coordination of media campaigns and analysis of information and they are responsible for regional coordination of this effort. The IHS Office of Public Health is responsible for overall coordination of the effort. Linkages with the USDA-WIC program and the DHHS Head Start program are also critical.

The strategies for success are rooted in effective outreach and management of clinic scheduling for service provision. The outreach activity is dependent upon parent education to assure their awareness of the importance of routine and periodic assessment of well children. Secondly, the effective identification of children in the targeted age groups is important. Public health nursing, Community Health Representatives, Head Start programs, and parent groups have important roles in identifying children and families who are the target of this intervention.

Clinical care is dependent upon the availability of trained nursing and physician staff with the time to address this objective. Scheduling and follow up of these children and their families is critical. The cooperation of medical records staff and others in the clinical environment is essential. Achievement of effective well-child health care is critical to the prevention of childhood obesity, injuries, and family dysfunction. This objective is also consistent with the Secretary's Initiative on Improving the Health of Children.

Data Source: RPMS/PCC

Baseline: Determined by the FY 1999 Indicator and reported below

Type of Indicator: Process

Linkages: This indicator supports the Secretary's Children's Health Initiative, the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, and 3.6 *Improve the Health Status of American Indians and Alaska Natives* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services* and broadly addresses the HP 2010 objectives addressing Focus Area 16: Maternal, Infant, and Child Health.

Program Performance FY 1999: The FY 1999 performance measure was to determine the proportion of the AI/AN children served by the IHS receiving a minimum of four well-child visits by 27 months of age. An automated extraction routine has been developed and run on FY 1999 service data that identified all children 3-3.5 years and then looked back four years to identify specified visits. Based on this initial run, out of 9,873 children, 3,799 or 38.5% of the children met the criteria. These findings should be considered provisional pending approval of the extraction approach by the Areas and final data verification.

Indicator 9: To reduce drug and/or alcohol use relapse of youths discharged from Regional Treatment Centers (RTC) during FY 2001:

- a. follow-up will be equal to or greater than the FY 2000 level**
- b. increase by at least 5% over FY 2000, the youths who have documented 6 months of less alcohol and drug use than before treatment**

Rationale: Studies indicate that the longer individuals are engaged in treatment (including aftercare/continuing care) the better the prognosis (Hoffmann, DeHart, & Gogineni, 1998; Zywiak, Hoffmann, & Floyd, 1999). One RTC evaluation concluded, "aftercare is the biggest problem" with limited coordination among RTC, service units and local aftercare programs retarding the effective and efficient delivery of treatment services at the local level following RTC release. This indicator is focused on assuring adequate follow-up care including an assessment of short-term relapse. A follow-up consists of a structured case management activity whereby continuity of care, treatment modalities and treatment services are assessed. This assessment of integrated aftercare activities is designed so that an individual's changing needs will be met as that individual moves through the recovery process thereby decreasing relapse.

Approach: The Division of Clinical and Preventive Services, Office of Public Health will be responsible for coordinating data collection from the Adolescent Regional Treatment Centers who are the responsible parties. The Alcoholism and Substance Abuse Program has developed an ongoing evaluation instrument in consultation with the RTC. The evaluation process began implementation in FY 1998 and includes follow-up information that will be reported to program staff and compiled for tracking this indicator. In addition, those RTC utilizing the RPMS Chemical Dependency Management Information System (CDMIS) and the RPMS Mental Health/Social Service (MH/SS) packages, routinely collect follow up information which can be exported for national reporting purposes. Aftercare services (for those utilizing CDMIS) occurring at local sites will also provide additional data to support tracking of this indicator.

Findings from the Comprehensive Assessment & Treatment Outcome Research adolescent study indicate that youth engaged in aftercare/follow up activities had better sobriety rates than those who did not, but for optimal benefit, contact frequency of at least twice per week was required (Hoffmann, Mee-Lee, & Arrowood, 1993). Although one-year follow-up information was limited in the IHS RTC Evaluation completed in FY 1997, data did suggest that youth that completed treatment and were involved in continuing care and follow up services maintained higher sobriety rates.

Data Source: CDMIS (IHS Alcoholism and Substance Abuse component of RPMS) and RTC Evaluation System.

Baseline: RTC Evaluation completed in 1997 only 50% of youth admitted between January 1993 and May 1995 received any follow-up care. Actual baseline was determined by FY 1999 Indicator 9 and reported below. A baseline assessment for abstinence rates following discharge will be collected during FY 2000 for comparison in FY 2001.

Type of Indicator: Process/Impact

Linkages: This indicator supports the Secretary's initiative to Prevent Youth Substance Abuse, the DHHS Strategic Plan, Strategic Objectives 1.4 *Curb Alcohol Abuse*, 1.5 *Reduce the*

Illicit Use of Drugs, 3.2 Increase the Availability of Primary Health Services, 3.6 Improve the Health Status of American Indians and Alaska Natives, and 4.2 Reduce Disparities in the Receipt of Quality Health Care Services. This indicator also directly supports HP 2010 objective 26-10 (Substance Abuse: reduce youth use of illicit substances).

Program Performance FY 1999: The FY 1999 performance measure was to determine the rates and intensity of follow-up care for adolescent discharged from IHS supported RTCs. This was accomplished and is continuously being updated through the ongoing use of the evaluation instrument that has been implemented. Based on this approach, the overall follow-up rate within the critical first 30 days was 64.5% for the 815 youths discharged from the 12 RTC in FY 1999. This rate drops to 55.2% for those who receive follow-up at 30 days and at least a second follow-up by 6 months, and down to 40.9% for those who receive follow-up contacts at 30 days, at least a second follow-up by 6 months, and at least a third at 12 months after discharge.

Indicator 10: Reduce the incidence of Fetal Alcohol Syndrome by increasing the proportion of I/T/U prenatal clinics utilizing a recognized screening and case management protocol(s) for pregnant substance abusing women by 10% over the FY 2000 level.

Rationale: Surveillance conducted at 2 IHS Areas indicated Fetal Alcohol Syndrome (FAS) rates exceeds general population rates (2.3 and 2.7/1000 live births vs. 0.6/1000 live births approximately). The Institute of Medicine 1996 report on FAS includes case identification and appropriate intervention and treatment of a maternal alcohol abuse as a critical part of FAS prevention. Thus, the purpose of this indicator is to assure that providers consistently screen and make appropriate referrals for women at risk. The written protocol makes this more likely because these efforts become part of the local quality assurance process. However, successful implementation of such a process requires staff training as well as cooperation from tribes and local governing bodies and thus requires resources and time.

Approach: The I/T/Us will be responsible for reporting via survey to be conducted by the Division of Clinical and Prevention Services, Office of Public Health relative to the implementation of protocols. Resources for analysis may be required from other divisions within the Office of Public Health. The Prenatal Health Assessment (PHA) screening instrument was developed in the Aberdeen IHS Area with the Centers for Disease Control and Prevention. A curriculum for utilizing the instrument in prenatal clinics and developing case management systems has been piloted in that Area in FY 1998. In the Aberdeen Area, there are numerous clinics and hospitals that are currently using the protocols. In FY 1999 the protocols will be piloted in two new Areas. This screening instrument is one of several recognized protocols which are being encouraged for use in I/T/U programs to assure the routine prenatal substance abuse screening and case management tailored to the resources of each site. The PHA is currently being reviewed by the Medical Records and will be provided for use nationally by the IHS end of FY 1999. A baseline will be established via the survey in 1999 and repeated in 2000.

Data Source: Survey and possibly RPMS

Baseline: Determined by FY 1999 Performance Indicator and reported by March 2000

Type of Indicator: Process

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 1.4 *Curb Alcohol Abuse*, 1.5 *Reduce the Illicit Use of Drugs*, 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. This indicator also directly supports several HP 2010 objective 16-16 (Maternal, Infant, and Child Health: Fetal Alcohol Syndrome).

Program Performance FY 1999: The FY 1999 performance measure was to determine the percentage of prenatal clinics utilizing screening and case management protocol for pregnant substance abusing women. Area reports will be compiled by March 2000.

Indicator 11: Reduce dental decay rates by improving water fluoridation compliance in FY 2001 by 10 % over FY 2000 levels for Areas participating in IHS/CDC Fluoridation Surveillance Demonstration Project.

Rationale: Fluoridation is one of the most cost effective public health measures for reducing the prevalence of dental decay in all age groups. Costs range from a mean of 31 cents per person per year to \$2.12 per person in communities with less than 10,000 people. For many Indian communities, the cost may be up to \$5 per person per year since most of the water systems in Indian country serve less than 1,000 people. It has been estimated that for every dollar spent on fluoridation, there is a \$50 savings in dental treatment. Fluoridation of community drinking water is a major factor responsible for the decline in dental caries (tooth decay) during the second half of the 20th century. In a 1991 oral health survey conducted by the Indian Health Service, there was a 31% decline in caries rates in adolescent children in those communities with access to fluoridated water. However, despite the known benefits of fluoridation, the number of fluoridated water systems in Indian country has declined by 200% over the last five years. This decline in systems has had an adverse impact in the percent of the population that needs the benefits most and are now receiving the least benefits from this proven public health measure.

Approach: The IHS Dental Program, Office of Environmental Health and Engineering Branch, and the Centers for Disease Control and Prevention's Division of Oral Health will enter into a cooperative agreement to support a demonstration fluoridation project in the southwest region. A fluoridation specialist will provide training and technical assistance to those tribes who want to fluoridate their community water systems. The concept of having an individual available to travel onsite and trouble-shoot problems and solve them with the water operator present has tremendous potential for learning and support of these individuals working in very isolated areas. The circuit rider will also monitor the monthly results and report them to a central data source. This will allow a better process for surveillance. The circuit rider will also train the operators in repair and maintenance of the equipment and help identify resources for needed equipment replacement. The circuit rider concept will also help demonstrate a model for small systems that can be applied to other rural areas as a cost-effective method for assuring the benefits of optimally fluoridated water to less populated communities.

Data Source: IHS Fluoridation Surveillance System and database are maintained at HQW.

Baseline: In FY 1997, 28 percent (96/340) of the tribally managed fluoridated water systems were in compliance. FY 1997, 39 percent (40/103) of the systems in the Phoenix, Albuquerque, Navajo, Albuquerque and Tucson Areas (southwest region) were in compliance.

Type of Indicator: Impact

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, 4.1 *Promote the Appropriate Use of Effective Health Care*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. It also addresses HP 2010 objective 21-9 (Oral Health: community water fluoridation).

Program Performance FY 1999: No FY 1999 indicator.

Indicator 12: Improve oral health status by assuring that at least 25% of the AI/AN population obtain access to dental services during FY 2001.

Rationale: Available evidence supports that people who utilize dental services annually have improved oral health status compared to those who do not. The growing AI/AN population has resulted in higher demands for dental care and this problem has been compounded by increasing difficulties in recruiting dentists. As a result, there has been almost a 10% reduction in the percent of the AI/AN population annually receiving dental services in recent years. Restoring access to both primary and secondary treatment and preventive services can lessen the disease progression. Improving access and thus increasing utilization of dental services can also result in less costly care, improved oral health status, and quality of life. The IHS will be conducting a program-wide oral health survey in FY 1999 and FY 2000 to determine current oral health status of the AI/AN population, in light of reductions in access to care.

Approach: Providing access to care is directly dependent upon the dental care resources in a community which include adequate numbers of dental providers and facilities, and their efficiency in providing services. The requested dental funding enhancements for FY 2001 will be used to increase access to dental services through a combination of strategies that include:

- increase the I/T/U dental workforce by increased effectiveness in the recruitment of staff to fill vacant and newly funded dental positions using advance communications technologies, greater use of alternative pay systems, and expanded loan repayment opportunities.
- increase retention and productivity of dental providers through the expansion/enhancement of support centers to provide training and technical assistance to enhance efficiency and effectiveness of preventive and clinical care, and restoration of short and long-term staff training opportunities.
- update and simplify the automated dental record keep system to enhance clinical efficiency and planning and evaluation capability.
- expand essential dental specialty services through contracts with the private sector.
- target specific populations, (i.e., school-age children, diabetics or other special target groups), utilizing third party payers, and identifying Medicaid-eligible families which would result in increased resources to hire additional staff.

For the numerator of this calculation, the dental program will count the number of patients who access I/T/U and contract systems through the dental exam and first visit procedure codes within the Dental component of the PMS patient data record as a valid proxy measure of annual dental care utilization. The denominator will be the IHS three-year user population.

Data Source: IHS Dental Data System component of the RPMS.

Baseline: FY 1998 = 24.5%

Type of Indicator: Process

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*., This indicator also relates to the HP 2010 objectives 13.12 (Oral Health: referral and follow-up: children) and 21-10 (Oral Health: use of oral health care system).

Program Performance FY 1999: The FY 1999 indicator committed to achieving the target level of 21% of the AI/AN population receiving dental services. This performance measure has been achieved, but the goal was selected when preliminary data analyses for FY 1998 indicated that dental access had fallen to under 20%. Follow-up efforts to identify missing data through the verification of Area data submissions resulted in a revised access rate for FY 1998 of 24.5%. However, because vacancy rates for dental positions had increased dramatically in FY 1999 to the highest levels in history and approaching 20%, the target of 21 % was considered appropriate (see Section 1.4 *Recruitment and Retention of Health Care Providers* on page 15 in this document for a discussion of factors contributing to this problem).

Preliminary analyses of FY 1999 data show that access to dental care was 23%, and the number is likely to grow slightly when final missing data are secured.

Indicator 13: Reduce children's dental decay by assuring that the percentage of AI/AN children 6-8 and 14-15 years who have received protective dental sealants on permanent molar teeth in FY 2001 is increased by 3% over the FY 2000 level.

Rationale: Dental sealants, a recognized standard of dental care, are an effective measure for reducing dental decay rates in children and can be effectively applied by dental auxiliaries at relatively low cost. Sealants and fluorides can prevent almost all tooth decay and play a role similar to vaccinations. Because surveys of AI/AN children's oral health status have consistently identified significantly higher decay rates than the U. S. general population, sealants are essential to reducing the ravages and costs of treating dental decay. The IHS Dental Program was one of the few dental programs in the nation to have achieved the HP 1990 and 2000 dental sealant objectives. However, based on FY 1999 IHS Oral Health Survey, no significant progress has been achieved since the FY 1991 IHS Oral Health Survey and coverage actually declined for the younger age group, probably driven by an increasing difficulties in the recruitment and retention of dentists.

Approach: Local dental clinics are responsible for implementing/maintaining effective and efficient sealant programs that are either school-based or school-linked and targeted for children

ages 6-14 years (to coincide with the eruption of first and second permanent molar teeth). Use of a specialized procedure code, which was created specifically to measure use of sealants in school-age children, will enable local programs to track progress in meeting this objective. The Dental Data Software package in the RPMS environment can capture the number of children examined and the number of children who receive dental sealants on a quarterly and annual basis and thus document trends.

Data Source: IHS Dental Data System component of the RPMS.

Baseline: Based on FY 1999 IHS Oral Health Survey: 38.8% for 6-8 age group and 66.8% for 14-15 age group.

Type of Indicator: Impact

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. The indicator also addresses the HP 2010 objective 21-8 (Oral health: dental sealants).

Program Performance FY 1999: The FY 1999 performance measure was to assure that the percentage of children 6-8 and 14-15 years who have received protective dental sealants on permanent molar teeth was restored to at least 90% of the FY 1991 IHS Oral Health Survey level. This performance measure has been achieved for both age groups, although in terms of the original proposed target levels for the 6-8 age group. not based. The rates from the FY 1991 survey had originally been reported to be 57% for the 6-8 age group and 64% for the 14-15 age group. However, the statistician who analyzed both surveys identified one significant error in the 1991 analysis for the 6-8 age group and a lesser error in the 14-15 age group in the process of running comparison analyses. The data presented for the 6-8 age group from FY 1991 was actually only for the 7 and 8 year olds and had been printed in the monogram in error for 6-8 year olds. The finding for the older age group also changed slightly because the original calculation presented in the monograph had some missing data.

When the analyses for sealant assessment between the FY 1991 survey and the FY 1999 survey were standardized for valid comparisons, the rates for the FY 1991 survey were 40.1% for the 6-8 year olds and 65.5% for the children 14-15 years. Based on the FY 1999 IHS Oral Health Survey, of the 1479 children 6-8 years in the survey, 38.8% had sealants and of the 831 adolescents 14-15 years in the survey, 66.8% had sealants . Thus, both age groups exceeded the goal of 90% of the FY 1991 level with the 6-8 year olds at 97% and the 14-15 year age group at 102 %.

Indicator 14: Reduce the incidence and consequences of family violence, abuse, and neglect by assuring that in FY 2001 at least 80% of I/T/U medical facilities with Urgent Care or Emergency departments or services will have written policies and procedures for routinely identifying, treating and/or referring victims of family violence, abuse or neglect (i.e., child, spouse, and/or elderly).

Rationale: Family violence victims come to the health care system with a variety of physical injuries, illnesses or medical conditions directly related to abuse. The umbrella of family

violence includes child, spouse or elder abuse and/or neglect. Experts in the field of family violence have identified an important link between violence against women and the abuse of their children. Research indicates that children who witness violence in the family are affected in the same way as children who are physically and sexually abused (Goodman and Rosenberg, 1987). The propensity for family violence can extend to older members of the family (parents, grandparents, aunts, uncles) living in the home. The consequences of family violence can be seen in physical, psychological and cognitive results such as intentional and unintentional injuries, detachment, avoidance, depression, and suicidal ideation.

Thus, the purpose of this indicator is to assure that providers consistently screen for indications of violence, abuse or neglect and making appropriate referrals. The written protocol makes this more likely because these efforts become part of the local quality assurance process. However, successful implementation of such a process requires staff training as well as cooperation from tribes and local governing bodies and thus requires resources and time.

Approach: The Mental Health and Social Service program will work with IHS Area Offices to assure that staff are appropriately trained and local policies and procedures are established for these health concerns. Tribal and urban programs will also be encouraged to address these areas and IHS will respond to requests for assistance. Existing funds and staff will be utilized. Achievement of the indicator will assure local identification of family violence and those appropriate services for prevention and treatment of family violence, including the perpetrators, the individual victims, as well as the families and communities which suffer the consequences.

Data Source: Annual survey and/or progress review by IHS Area and Headquarters staff.

Baseline: Determined in FY 1998 to be at 47%. At that time 31 of 66 IHS Service Units had Policies and Procedures in place to address this indicator.

Type of Indicator: Process

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 2.4 *Improve the Safety and Security of Children and Youth*, 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. This indicator also addresses several HP 2010 objectives in Focus Area 15: Injury and Violence Prevention.

Program Performance FY 1999: The FY 1999 performance measure was to assure that at least 50% of I/T/U with urgent care or emergency departments would have written policies and procedures for routinely identifying, treating and/or referring victims of family violence, abuse or neglect. This performance measure was achieved as documented in a survey of 223 clinics and hospitals that showed that 64% had written policies and procedures for domestic violence. In addition, this survey demonstrated that clinics with policies and procedures in place were 2.36 times more likely to regularly screen patients for violence, abuse, and neglect.

Indicator 15: To improve mental health planning and evaluation, increase the number of I/T/U programs utilizing the Mental Health/Social Services (MH/SS) data reporting system during FY 2001 by 10% over the FY 2000 rate.

Rationale: The implementation of the MH/SS data reporting system will provide the vehicle for collection of baseline morbidity, mortality, services and workload data for IHS. Audits of the existing I/T/U data systems have documented both under-reporting and lack of specificity of mental health related conditions reported and services provided. Thus, the continued implementation of this management information system tool will provide a plethora of baseline formation that will enhance and complement national private and public outcomes monitoring efforts and allow consistent reporting, data aggregation for planning, managed care, and more effective billing and collection for services. This objective is also essential for monitoring many of the HP 2010 objectives addressing “Mental Health and Mental Disorders.” The proposed implementation level of an addition 10 percent of I/T/U sites is based on the resources available to provide the incremental hardware and software upgrades, as well as staff training.

Approach: Accomplishment of this indicator is contingent on several factors. The implementation of the RPMS data system should be mandatory and a priority within the IHS service system. Responsibility for the maintenance of the data system will be shared by the MH/SS program and Division of Information Resources, to assure clinical, technical and administrative viability.

Data Source: MH/SS component of RPMS.

Baseline: FY 1998 estimate of IHS program usage of MH/SS system is 40-45 % of the I/T/Us.

Type of Indicator: Process

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 2.4 *Improve the Safety and Security of Children and Youth*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population*. This indicator also supports several HP 2010 objectives in Focus Area 18: Mental health and Mental Disorders.

Program Performance FY 1999: The FY 1999 performance measure was to assure that at least 50 percent of I/T/Us would have implemented the use of the MH/SS data reporting system. This measure has been achieved, with 115 of 227 I/T/U programs or 51% having implemented this system according to Area Information Systems Coordinators (ISCs). The breakdown by type of program is 85% for IHS run programs, 35% for tribal programs, and 60% for Indian urban programs. Expanding the use of this system continues to be a crucial component of the overall Behavioral Health efforts throughout the IHS, including tribal and urban programs.

Indicator 16: To improve planning and better define the needs and health conditions of urban Indian people, at least 30% of the Urban Indian health care programs will have implemented mutually compatible automated information systems which capture health status and patient care data by the end of FY 2001.

Rationale: Adequate health status and health services data are essential for the effective planning and management of any health care delivery system. Currently Urban Indian health programs capture data under the Urban Common Reporting Requirements (UCRR). These data are not currently compatible with other IHS health services data sets and only of limited use for the purpose of health systems management. Thus, the large urban AI/AN population has been

minimally represented in AI/AN data sets. The proposed implementation level of 30 percent is based on a schedule to provide the incremental hardware and software upgrades as well as urban program staff training.

Approach: A workgroup has been formed, comprised of Urban Programs health directors to review and revise the UCRR. The revised UCRR will capture an expanded set of data that are compatible with the IHS RPMS System, as well as provide local urban program managers better information about the health status and health services provided to their clients. Until a comprehensive needs assessment is completed it is difficult to estimate the resource requirements of this project; however, attempts will be made to, where feasible, avail the IHS RPMS system to urban programs so that systems are not duplicated. These indicators were developed to help monitor successful development of then updated urban data reporting system.

Data Source: Self-report of Urban health programs.

Baseline: No Urban Indian Health Programs with compatible information systems in FY 1998.

Type of Indicator: Process

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population* and directly addresses the HP 2010 objective 23-4 (Public Health Infrastructure: data for select populations).

Program Performance FY 1999: The FY 1999 performance measure was to develop the specification and implementation plan for an automated mutually compatible information system which captures health status and patient care data for Indian Urban health care programs. This measure was accomplished by the writing of the Indian Urban Program Data Plan that was developed by an Indian Urban workgroup with the assistance from an information technology consultant. The plan includes full specifications for hardware and software to support a mutually compatible automated information system that captures health status and patient care data.

Indicator 17: To assure high quality health care, maintain 100% accreditation of all IHS hospitals and outpatient clinics during FY 2001.

Rationale: The accreditation of IHS hospitals and clinics represents perhaps the most objective and respected measure of health care quality. In addition, accreditation is essential for maximizing third-party collections, and contributes directly and indirectly to many other indicators presented in this plan.

Approach: The local I/T/U multidisciplinary team approach to accreditation and ongoing quality management has been the mainstay of success in this important activity. Additional support and guidance from Areas and Headquarters staff will continue to support this indicator. This will be one of the most demanding indicators to meet given the proposed funding levels available to support the backlog of health facilities maintenance, improvement, and renovation that is critical to accreditation. The accrediting body most frequently used is the Joint Commission on the Accreditation of Health Care Organizations (JCAHO).

Data Source: IHS compiled database generated from accreditation reports.

Baseline: 100% accreditation of IHS hospitals and outpatient clinics for FY 1997-98.

Type of Indicator: Process

Linkages: This indicator supports the Secretary's initiative to improve health care quality and the DHHS Strategic Plan, Goal 4, *Improve the Quality of Health Care and Human Services*, and Strategic Objective 3.6 *Improve the Health Status of American Indians and Alaska Natives* and broadly supports several HP 2010 objectives in Focus Area 1: Access to Quality Health Services.

Program Performance FY 1999: This indicator has been met as stated for IHS managed programs. A small isolated tribal program in the Phoenix Area, however, did not receive JCAHO accreditation as part of the Area-wide accreditation review in June 1999. The IHS accreditation level would be 98.7% for FY 1999 if tribal programs were included in the calculation. Furthermore, despite this one deficiency, the overall review of the Phoenix Area was very affirming for the IHS. At the closeout session the JCAHO review team leader stated that from his experience and the team's experience, the IHS program of the Phoenix Area was the best rural health care system in the United States that they had ever been involved with.

Indicator 18: By the end of FY 2001, improve IHS-wide consumer satisfaction by 5% over the FY 2000 baseline level.

Rationale: Assessing consumer satisfaction is fundamental to quality management and required for accreditation of hospitals and clinics. Furthermore, it is essential to meeting the President's Executive Order on "Setting Customer Service Standards" and the Secretary's initiative on improving the quality of health services.

Approach: In FY 1999 the IHS submitted a comprehensive culturally sensitive consumer satisfaction survey instrument for OMB clearance. In FY 2000 the instrument will be used to identify baseline scores for IHS hospitals and clinics. The strategy will be to survey patients (clients) in a sampling format to assess their views on various aspects of the services delivered, the manner in which the services are delivered, and provide the opportunity for offering suggestions for change or improvement. The information gathered will be analyzed and various local, Area-wide, or national policies or procedures will be considered for revision based on the findings. In FY 2001 the survey will be repeated to assess whether improvements have been realized.

The responsible parties for implementation are the local I/T/U service sites with assistance from the IHS Area office staff. The local staff will be part of the local quality assurance program and the aggregate staff will be part of the IHS epidemiology centers/program. Continued responsiveness to the patients and the AI/AN communities will be dependent (in part) on the achievement of this target.

Data Source: IHS Consumer Satisfaction Survey

Baseline: To be determined with initial FY 2000 survey

Type of Indicator: Process

Linkages: These indicators support the Secretary's initiative to improve health care quality and the DHHS Strategic Plan, Goal 4, *Improve the Quality of Health Care and Human Services*, and Strategic Objective 3.6 *Improve the Health Status of American Indians and Alaska Natives*.

Program Performance FY 1999: The FY 1999 indicator was to develop and submit a pre-tested culturally sensitive consumer satisfaction instrument to OMB for clearance by the end of FY 1999. The Survey instrument has been developed, revised through the use of focus groups, and additionally pre-tested. The agency administrative staff is currently in the end stages of refining the overall clearance package for final submission to the Office of Management and Budget for authorization for actual implementation the latter part of this FY2000.

In anticipation of a successful clearance and approval of the survey instrument, the agency has initiated program plans to enable the use of the survey instrument in each of the Indian Health Service clinics and facilities over a two year period. A national steering committee has been formed with five (5) members and two (2) staff. Field liaisons from each of the Areas in the Indian Health Services where IHS health facilities are located have been identified. A draft plan is being formulated for use in August 2000. Discussions regarding the cost have been ongoing and will be formalized when the draft plans are approved.

The instruments was developed and pre-tested but difficulties in preparing the OMB clearance package have delayed the submission process. However, the IHS will soon submit the package to OMB and may still be able to meet the FY 2000 measure of collecting a baseline assessment in late FY 2000, after OMB clearance has been obtained.

**FY 1999 Performance Summary Table 2:
Prevention Indicators**

Performance Indicator	FY Targets	Actual Performance	Reference
Indicator 19: Increase the total number of public health nursing services (primary and secondary treatment and preventive services) provided to individuals in all settings and the total number of home visits.	<u>Total Visits</u> FY 01: +7% increase over FY 00 FY 00: +7% over FY 97* FY 99: no indicator <u>Home Visits</u> FY 01: +7% increase over FY 00 FY 00: +7% over FY* FY 99: no indicator	FY 01: FY 00: FY 99: FY 97: total visits 339,283 baseline FY 01: FY 00: FY 99: FY 97: home visits 119,482 baseline	P: p. 55 B: p. IHS-76
Indicator 20: Increase the proportion of AI/AN children who have completed all recommended immunizations by the age two.	FY 01: +2% over FY 00 level FY 00: +2% over FY 99 level* FY 99: 91%	FY 01: FY 00: FY 99: 87% FY 98: 88% (baseline)	P: p. 56 B: p. IHS-76 p. IHS-37
Indicator 21: Increase overall pneumococcal and influenza vaccination levels among diabetics and adults aged 65 years and older.	FY 01: +2% over FY 00 level FY 00: 65% * FY 99: no indicator	FY 01: FY 00: FY 99: 3/00 FY 98: 63% baseline	P: p. 57 B: p. IHS-76 p. IHS-36
Indicator 22: Reduce the number of unintentional injuries for AI/AN people.	<u>Hospitalizations</u> FY 01: 70 per 10,000 FY 00: 71.5 per 10,000* <u>Deaths</u> FY 99: 93/100,000	FY 01: FY 00: FY 98: 72.5 /10,000 hosp. FY 96: 74.7/10,000 hosp. FY 99: 12/02 FY 94-96: 92.6/100,000 deaths	P: p. 58 B: p. IHS-52
Indicator 23: Increase percentage of I/T/Us that have implemented a suicide surveillance system to monitor the incidence and prevalence rates of suicidal acts (ideation, attempts, and completions) which assures those at risk receive services, and that appropriate population-based prevention interventions are implemented.	FY 01: 50% of I/T/Us implem. FY 00: no indicator FY 99: no indicator	FY 01: FY 00: FY 99: FY 98: estimated 25%	P: p. 60 B: p. IHS-48
Indicator 24: Establish model fitness programs at either IHS Area Offices or the I/T/U level.	FY 01: 5 sites established FY 00: no indicator FY 99: no indicator	FY 01: FY 00: FY 99: FY 98: one site established	P: p. 61 B: p. IHS-110

Performance Indicator	FY Targets	Actual Performance	Reference
Indicator 25: Maintain ongoing body mass index (BMI) assessments in AI/AN children 3-5 years old and/or 8-10 years old, for both intervention pilot sites and non-intervention comparison sites, as part of an overall assessment of the ongoing childhood obesity prevention project's effectiveness.	FY 01: implement program and monitor pilots and comparisons sites FY 00: develop five pilot sites* FY 99: develop approach and baselines	FY 01: FY 00: FY 99: approach and baseline accomplished	P: p. 62 B: p. IHS-34 p. IHS-37 p. IHS-130
Indicator 26: Develop at least five regional tobacco control centers to assist AI/AN health facilities and organizations with tobacco prevention and cessation activities.	FY 01: establish five tobacco control centers FY 00: establish baseline rates for tobacco usage FY 99: no indicator	FY 01: FY 00: baseline FY 99:	P: p. 64 B: p. IHS-35 p. IHS-136
Indicator 27: Implement local needs assessment to address HIV/AIDS infection in AI/AN communities.	FY 01: 50% implement needs assessment in 50% of I/T/Us FY 00: establish baseline rates FY 99: no indicator	FY 01: FY 00: baseline FY 99:	P: p. 65 B: p. IHS-68
Indicator 28: Develop environmental health surveillance system. And complete community environmental assessments in 90% AI/AN communities.	FY 01: 90% of communities assessed FY 00: develop surveillance protocol and plan* FY 99: no indicator	FY 01: FY 00: FY 99: no reliable baseline & no surveillance system in place	P: p. 66 B: p. IHS-51
Total Prevention Funding :	FY 01: \$123,243,000 FY 00: \$109,216,000 FY 99: \$102,712,000 FY 98: \$99,647,000 * indicates revised FY 2000 measure, see Summary of Changes Table on pages 87-70		P: page # in perform. plan B: page # in budget justif.

B. FY 2001 Prevention Indicators:

Indicator 19: **Improve the health status of American Indian and Alaska Native people by assuring that during FY 2001, the total number of public health nursing services (primary and secondary treatment and preventive services) provided to individuals in all settings and the total number of home visits are increased by 7% over the FY 2000 workload levels.**

Rationale: Public Health Nursing (PHN) is the integration of nursing practice and public health practice applied to the prevention of disease and the promotion and preservation of the health of Indian population. The nature of this practice is continuous and comprehensive, including all program areas and diagnostic groups. This includes primary and secondary treatment and preventive services, counseling, education, community development and referral follow-up. Many of the successes in Indian health such as decrease in infant mortality, high immunization rates, and increased prenatal care are attributed to the efforts of public health nursing.

The unique quality of PHN service is that care can be provided in any setting where the patient is accessible. This is especially effective for high-risk patients and families (e.g., substance abusing prenatal patients, infectious communicable disease cases, families with dysfunctional life styles, etc.). Settings include homes, schools, jails, bars, and other community locations in addition to the health clinic. The ability to meet the patient in their own environment allows the PHN to fully assess socioeconomic and quality of life variables that affect health status and facilitates rapport with patients who often distrust the formal health care system.

Approach: The population base for public health nursing services is the IHS census population residing within the official boundaries of the Area. The PHN/RRM standard indicates that PHN program addresses the needs of the community and therefore the appropriate target population is census population. However in some service units, the user population is greater than the reported census population, in these cases, the Indian user population is used as an estimate of the service population to reflect PHN service to both stable community and transient populations.

Providing access to PHN services is directly dependent upon the community based resources in a community that includes adequate numbers of PHN providers. Strategies for increasing care and its effectiveness includes targeting high-risk patients based on community epidemiological data and improving access for these targeted populations, (i.e., children, pregnant women, elders, etc.).

The percentage of population served by PHNs in any setting will be calculated by using total individuals served by the PHN in any location for the numerator and the greater of IHS Service Area or IHS user population for the denominator. The percentage of population served by PHNs in the home setting will be calculated by using total individuals served by the PHN in the home location for the numerator and the greater of IHS service area or IHS user population for the denominator.

It is anticipated that with the requested FY 2001 funding at least 25 additional public health nurse positions will be place in the field. This projected increase in staff reflects direct salary and benefit costs in addition to supporting services of secretaries, supplies, transportation, and consultation support centers. The projected increase in workload is at least 32,500 additional

patient services with at least 9,000 being in the home setting. PHN expert opinion and anecdotal historical performance standards reflect 1000 total visits per PHN as a minimally acceptable standard. A significant percent of these totals should be outside the health care facility.

Baseline: FY 1998 and 1999 workload will be reviewed and analyzed to define the baseline for the objective. Total national patient workload for FY 1997 is 339,283 and home visit workload is 119,482. Preliminary data analysis shows 26% of the Indian user population received PHN service in any setting and 9% of the Indian user population received PHN service in the home setting. This, however, was based on total visits rather than individuals served and, thus, would include duplicate patient counts. Because many tribal programs do not report PHN staffing or workload, this data too is considered estimated.

Specific data from one Area specific to individuals served in FY 98 shows 30% of user population receiving PHN service in all setting and 4% of user population receiving PHN service in the home setting. These are unduplicated counts. It also shows an average of 1510 total visits per PHN, 304 home visits per PHN, and 833 total individuals served per PHN.

Data Sources: IHS PCC, IHS service population and user population estimates, IHS Program Statistics Team.

Type of Indicator: Process/Impact

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. It also broadly supports a multitude of HP 2010 objectives.

Program Performance FY 1999: No FY 1999 Indicator.

Indicator 20: Reduce the incidence of preventable diseases by increasing the proportion of AI/AN children who have completed all recommended immunizations for ages 0-27 months (as recommended by Advisory Committee on Immunization Practices) during FY 2001 by 2% over the FY 2000 rate.

Rationale: Immunizations are one of the most cost-effective public health measures available for improving health outcomes in children and are a recognized standard of care and immunization rates are a recognized standard of public health. Thus, vaccination coverage rates are a sensitive measure of the status of public health services and are essential in supporting the Secretary's Children's Initiative.

Approach: Percent of children vaccinated appropriately for age will be calculated for a representative sample of IHS service population children from each Area. Vaccines evaluated include polio (IPV), Diphtheria/Tetanus/Pertussis (DTAP), Measles/Mumps/Rubella (MMR), Haemophilus influenzae type b (HIB), Hepatitis B (HBV), and Hepatitis A (HAV). IHS completes these surveys on a quarterly basis. IHS will be primarily responsible for completing the surveys.

Data Source: IHS patient care records and public health nursing records.

Baseline: 87% based analyses of FY 1999 data.

Type of Indicator: Impact

Linkages: This indicator supports the President's initiative on childhood and adult immunizations and the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. It also directly addresses the HP 2010 objectives in Focus Area 14: Immunizations and Infectious Diseases.

Program Performance FY 1999: The FY 1999 performance measure was to increase the proportion of AI/AN children who have completed all recommended immunizations by the age of two by 3% over the FY 1998 level which was 88%. When calculated as it was in FY 1998, the FY 1999 immunization rate for children is 89% or 2% under the goal. When calculated to include an Area that did not submit for last year's calculation the rate drops to 87%.

The reasons contributing to not meeting this performance measure include:

- high vacancy rates for health care providers, particularly nurses and public health nurses
- continued growth of new recommended vaccines make expanding coverage increasingly difficult
- significant turnover of Area immunization coordinators has resulted in disruption in attention to immunizations.

The turnover of Area immunization coordinators has at least temporarily been resolved and the IHS is working to address the recruitment and retention problems. For a more detailed discussion of this issue, see the section titled *Recruitment and Retention of Health Care Providers* on page 15 of this report.

Indicator 21: Reduce the incidence of preventable diseases, by increasing pneumococcal and influenza vaccination levels among adult diabetics and adults aged 65 years and older by 2% over the FY 2000 rates.

Rationale: Immunizations are one of the most cost-effective public health measures available for improving health outcomes. In addition, adult vaccination coverage rates are a sensitive measure of the status of clinical preventive services and are essential in supporting the Secretary's and IHS Director's elder health initiatives. This indicator also directly supports the HP 2010 "Immunizations and Infectious Disease" objectives.

Approach: Pneumococcal and influenza vaccination coverage rates will be calculated for a sample of IHS service population diabetic adults aged 65 years and older in each Area. These rates are to be collected and calculated by the Service Unit, Area, and Headquarters by diabetes personnel as part of the routine diabetes audit.

Data Source: IHS patient care records and public health nursing records.

Baseline: FY 1998 rate for adults receiving both influenza and pneumococcal vaccines was 63%.

Type of Indicator: Impact

Linkages: This indicator supports the President's initiative on childhood and adult immunizations and the DHHS Strategic Plan, Strategic Objectives 2.5 *Increasing Opportunities for Seniors to Have an Active and Health Aging Experience*, 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. It also directly addresses the HP 2010 objectives in Focus Area 14: Immunizations and Infectious Diseases.

Program Performance FY 1999: No FY 1999 Indicator

Indicator 22: Reduce injury-related hospitalizations for AI/AN people to no more than 70 per 10,000 people for FY 2001.

Rationale: Injuries are a leading cause of hospitalization for AI/AN people relative to morbid events. Annually, forty six percent (46%) of the Years of Potential Life Lost (YPLL) for AI/AN people are the result of injuries. Furthermore, injuries are the number one cause of mortality for AN/AN people for ages 1-44 years and second for overall death rates. The IHS spends more than \$150,000,000 annually for the treatment of non-fatal injuries. The single largest expenditure of contract medical care funds are for the treatment of injuries. However, the systematic implementation of safety protocols through partnerships with tribes and outside agencies has demonstrated significant improvements in injury rates across AI/AN communities and will serve as models for further diffusion of these technologies.

Approach: The IHS has assigned a Principal Injury Prevention Consultant, in the Office of Public Health, at Headquarters who coordinates activities and resources with specially trained Injury Prevention Specialists at the Area, District, Service Unit and tribal levels. This program employs a community empowerment model based upon Dr. John Farquar's work at Stanford University (1985). Primary program emphasis is directed to building the capacity of tribes to recognize severe injury problems and employ evidence-based strategies to prevent or otherwise control injury outcomes. The Complete Injury Prevention Program model developed by IHS is the cornerstone of community-based intervention measures.

The IHS Five-Year Injury Prevention Strategic Plan identified the need for basic capacity building and investments in tribal and Federal infrastructures for the development of effective injury prevention programs. Since 1990, Congress has appropriated over \$3.5 million to injury prevention programs and competitively based intervention projects. In 1997 the Director, IHS, supported a national demonstration grant announcement for basic public health infrastructure projects within tribes. Approximately \$300,000 is awarded for the 13 tribal project sites. In addition to these projects, literally hundreds of Indian communities and Alaska Native villages are implementing proven injury prevention strategies associated with safe home and communities.

Most of the unintentional injury problem is related to motor vehicle crashes. Significant improvements can be made in these statistics with increases in use of occupant protection [safety belts and child safety seats], reducing pedestrian/motor vehicle collisions and reductions in alcohol-related injuries through multiple strategies including corrections in the physical

environments, changes in tribal policies and health promotion/education. These injury measures are identified in the Year 2000 Objectives and are relatively easy to measure.

In FY 2000 IHS will be implementing a \$1 million dollar cooperative agreement program with tribes to establish local injury prevention programs to address injuries. Other new initiatives are targeting childhood fire-related deaths through the *Sleep Safe* program in conjunction with Head Start schools, and continued work with our partners such as the Centers for Disease Control, the National Highway Traffic Safety Administration, and the US Fire Administration.

Data Source: In its original form from the FY 1999 performance plan, this indicator targeted injury mortality as the performance measure. However due to the time lag of 2-3 years in the release of official injury mortality data from the National Center for Health Statistics (NCHS), IHS has determined that injury-related hospitalization rates are a more appropriate measure for the rate of unintentional injuries and will use this measure for the FY 2000 and FY 2001 indicators.

By using this approach the lag time in obtaining data can be shortened to less than one year as compared the NCHS mortality data. In addition, these data include hospital discharges for IHS tribal and contract health care facilities and thus are considered inclusive. Finally, it is likely that the injury hospitalization rate may actually be more sensitive to the actual injury rates than mortality because improvements in emergency medical services could improve injury mortality without reducing the actual injury rate or morbidity.

Baseline: Estimated to be 72.5 per 10,000 in FY 1998 for AI/AN population on or near reservations.

Type of Indicator: Outcome

Linkages: These indicators support the DHHS Strategic Plan, Strategic Objectives 1.2 *Reduce the Number and Impact of Injuries*, and 3.6 *Improve the Health Status of American Indians and Alaska Natives*. It also directly addresses the HP 2010 objectives in Focus Area 15: Injury and Violence Prevention that relate to unintentional injury prevention.

Program Performance FY 1999: The FY 1999 measure for this indicator was to assure that the injury death rate was no greater than 93 per 100,000 deaths in the AI/AN population. While the data that is currently available is incomplete, it is highly likely that this measure has been met and possibly/probably exceeded. When the measure was initially set in FY 1998, the most recent rate available was 95 per 100,000 based on 1992-94 NCHS data. However, the FY 1994-96 data that became available last year showed that the rate had dropped to 92.6 per 100,000. Because of difficulties and delays in getting mortality data that we initially had hoped to overcome, we changed the indicator for FY 2000 and FY 2001, as described above, to focus on hospitalizations and the FY 1999 indicator was not revised.

Regardless of how injuries are measured, the community-based joint partnership approach that has been used has proven successful, as injuries (unintentional and intentional) have dropped from the leading cause of death for Indian people of all ages in the early part of the decade to the 2nd leading cause of death currently (heart disease is now the leading cause for all ages). And while seven IHS Areas still have rates that are above the FY 1999 mortality target, most of these areas are in the rural west, such as the Navajo and Aberdeen Areas, where travel distances are long and residents are at high risk for motor vehicle-related injury. However, these Area rates

have been trending downward over time, due to efforts in reducing impaired driving, tribes passing tougher drunk driving and occupant restraint laws, and stricter enforcement of these laws.

Indicator 23: Reduce suicide rates by assuring that by the end of FY 2001, at least 50% of the I/T/Us will have implemented a suicide surveillance system to monitor the incidence and prevalence rates of suicidal acts (ideation, attempts, and completions) which assures those at risk receive services, and that appropriate population-based prevention interventions are implemented.

Rationale: The suicide death rate for the AI/AN population has actually increased in the 1990s and is currently 72% greater than the national average. This problem has been particularly devastating for a number of AI/AN communities that have experienced dramatic increases in adolescent suicides in recent years and represents one of the greatest tragedies the IHS must address. The implementation of local suicide surveillance and prevention initiatives has been successful in reducing suicide acts in several Indian communities. The obvious goal of diffusing intervention approaches and learning from successful programs to other AI/AN settings is to reduce suicide acts in the AI/AN population as quickly as possible.

Approach: The I/T/Us will be responsible for reporting the implementation of protocols via survey to be conducted by the Division of Clinical and Preventive Services, Office of Public Health. Resources for analysis may be required from other divisions within the Office of Public Health. A suicide surveillance and prevention system was developed in the Albuquerque IHS Area (National Suicide Prevention Project with the Center for Disease Control and Prevention). A suicide surveillance instrument which identifies potential high risk individuals has been developed and is currently being used in clinics and case management systems have been piloted. Numerous clinics, hospitals and behavioral health programs are currently using suicide surveillance protocols and now simply need to be identified and counted. A suicide surveillance and prevention system is being encouraged for use in I/T/Us to assure the routine suicide screening and case management are tailored to the resources of each site. A baseline will be established via survey in 2000 and repeated in 2001.

Data Source: Local annual survey and database linked with RPMS as appropriate.

Baseline: To be determined with developed surveillance system

Type of Indicator: Impact

Linkages: These indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. This indicator also directly supports several HP 2010 objectives in Focus Area 18: Mental Health and mental Disorders which address the incidence of suicide.

Program Performance FY 1999: No FY 1999 Indicator

Indicator 24: Improve physical fitness and model fitness behavior by assuring that by the end of FY 2001, at least five model Take Charge Challenge fitness programs will be organized and functioning at either IHS Area Offices or the I/T/U level.

Rationale: The benefits of exercise and physical fitness in reducing the risk of obesity, diabetes, and cardiovascular disease have become increasingly clear over the past two decades. Within segments of the AI/AN population the prevalence of diabetes is the highest in the world while other segments with historically low diabetes rates are now experiencing dramatic increases. Furthermore, the diabetes death rate for AI/AN increased by almost 13 percent between the period of 1992-94 and 1994-96, and there is no evidence from any subgroup that the problem is lessening anywhere. The approaches currently available to prevent the onset of diabetes, and in some cases reverse its early stages, is the control of diet and exercise.

Thus the intent of this indicator is to develop a sufficient number of organizational sites modeling fitness behavior which can serve as successful models for others to follow along with the communities they serve. There is also evidence that the development of such programs at work-sites can serve to dissipate stress and improve the quality of work life which could ultimately contribute to achieving indicator 37 which addresses the quality of work life. The minimum number of 5 sites is based on an estimated threshold, or seed level, needed to assure some successful models to build organizational acceptance and diffusion to other work sites and communities.

Approach: In 1983 Mr. Bruce Leonard, an IHS health educator working at the Zuni Indian Reservation in New Mexico, developed a community-based exercise program that became well integrated into the Zuni community and continues today. In 1992 Mr. Leonard transferred to the CDC to work with states addressing a variety of issues including fitness and exercise. Working in this context, he revised, updated and expanded the fitness program for use in a variety of settings including work sites and communities. The approach has been piloted in 51 work sites in 21 states since 1995 (including the IHS Tuba City Service Unit) and was successfully implemented within CDC in 1996 as part of its 50th anniversary activities sanctioned by the then CDC Director, Dr. David Satcher. It is underpinned with the most recognized theoretical approaches to behavior change including stages of change, social learning theory, the diffusion of health innovations, and social marketing. The program is now called the "Take Charge Challenge" and is packaged such that it requires minimal resources and has data collection, evaluation, and cultural sensitivity built into its implementation process.

The IHS is working with CDC to formalize an agreement to utilize this successful approach in each IHS Area and then incrementally attempting to stimulate the diffusion of the intervention to a growing number of I/T/U sites.

Data Source: The Take Charge Challenge Data set

Baseline: One known program currently functioning in I/T/U settings.

Type of Indicator: Impact

Linkages: This indicator supports the President's diabetes initiative, the Secretary's chronic disease prevention initiative, the DHHS Strategic Plan, Strategic Objectives 1.3 *Improve the Diet and the Level of Physical Activity of Americans*, 3.6 *Improve the Health Status of American*

Indians and Alaska Natives, and 4.2 Reduce Disparities in the Receipt of Quality Health Care Services. This objective also directly supports several HP 2010 objectives addressing Focus Area 22: Physical Activity and Fitness, and will require significant collaboration between IHS, CDC, and tribes.

Program Performance FY 1999: No FY 1999 Indicator

Indicator 25: Reduce childhood obesity rates by maintaining ongoing body mass index (BMI) assessments in AI/AN children 3-5 years old and/or 8-10 years old, for both intervention pilot sites and non-intervention comparison sites, as part of an overall assessment of the ongoing childhood obesity prevention project's effectiveness.

Rationale: Obesity is prevalent among AI/AN people of all ages and is increasing significantly in a growing number of communities. Obesity is an important risk factor for cardiovascular disease and diabetes, which are perhaps the greatest single health problems for the AI/AN population. Unfortunately, success in reducing the prevalence of obesity and diabetes on a population basis has not been consistently documented. Evidence supports that children who are obese beyond infancy are at risk for elevated circulating serum insulin, which may be a precursor to the development of type II diabetes later in life.

Infant nutrition is emerging as another important factor in childhood obesity. Recently published studies of Pima Indians and also of Bavarian children show that breastfeeding for at least two months provides statistically significant protection from obesity in early childhood. It has also been demonstrated that obese older children are more likely to become obese adults. Fitness promotion and obesity prevention in childhood are expected to be more effective at preventing adult obesity and its complications, including type II diabetes, than weight reduction programs for adults.

It is the intent of this objective to pilot a series of at least five multidisciplinary/multidimensional community projects to address nutrition and fitness in early childhood. Ongoing periodic surveillance of school aged heights and weights will continue to monitor overweight prevalence in older children. Insights gained from the 6-year NIH-sponsored Pathways obesity prevention intervention in third, fourth, and fifth grade students, which began in FY 1997, provides larger-scale interventions for school children. The recently released Surgeon General's Report on Physical Fitness outlines additional intervention strategies for reducing obesity. This objective directly supports the HP 2010 objectives addressing "Nutrition" and "Physical Activity and Fitness."

Approach: The responsible parties are the local I/T/U, Head Start, and WIC service sites. The IHS Area and USDA Regional offices can provide assistance in development and coordination of media campaigns. The IHS Office of Public Health is responsible for overall coordination of the effort. The linkages with the USDA-WIC program, the USDA, the DHHS Head Start Program, CDC Nutrition and Physical Activity Division, and the National Diabetes Prevention Center in Gallup, NM are critical. This objective is linked in part to Indicator 8, assurance of well child visits.

The strategies for success require effective multidisciplinary outreach and management of clinic and community programs, coordination of WIC, well child care, and education programs such as Head Start and Early Head Start. This activity is dependent upon parent education to assure they are aware of the importance of routine and periodic assessment of well children. Secondly, the effective identification of children in the intervention age groups is important. Public health nutrition, public health nursing, Community Health Representatives, WIC, and Head Start programs, and parent groups are important components in identifying children and families who are to benefit from this intervention.

Coordination of maternal and child health clinical care, community activities, and community involvement are also critical to prevent childhood obesity. Interventions will be piloted and evaluated initially at selected, interested demonstration sites, and then successful strategies and ideas will be disseminated to all programs. Data will be collected through the IHS RPMS computerized health record system using the PCC BMI reports developed to measure prevalence of obesity in the clinic population. Coordination between the Pediatric Surveillance System managers at the CDC Nutrition and Physical Activity Division and the IHS Office of Public Health is critical for data access and analysis of the IHS Service Area data subset. This objective is also consistent with the Secretary's Initiative on Improving the Health of Children.

Data Source: CDC Pediatric Nutrition Surveillance System (PDNSS), and IHS RPMS system

Baseline: Determined by FY 1999 indicator and reported below.

Type of Indicator: Impact/Outcome

Linkages: This indicator commits to halting the accelerating rates of childhood obesity and thus supports the President's diabetes initiative, the Secretary's chronic disease prevention initiative, the DHHS Strategic Plan, Strategic Objectives 1.3 *Improve the Diet and the Level of Physical Activity of Americans*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. This objective also directly supports the HP 2010 objectives addressing Focus Area 22: Physical Activity and Fitness and Focus Area 19: Nutrition and Overweight and will require significant collaboration between IHS, CDC, WIC, and Head Start.

Program Performance FY 1999: The FY 1999 performance measure was to establish Area-specific prevalence rates for obesity in children ages 3-5 and 8-10 and develop a multidisciplinary and multidimensional intervention plan to address this problem. This measure has been accomplished. A data extraction process has been developed and successfully run that captures obesity rates from the RPMS patient record system. The use of this extraction routine will be expanded during FY 2000.

Findings from this initial run show expected high rates of childhood obesity in all age ranges determined by the criteria of being in the 95th percentile, or greater, of the Body Mass Index (BMI) based on the National Health and Nutrition Examination Survey II (NHANES II). For children in the 3-5 age group rate of obesity is about 20% and increases to about 25% for the children 8-10 years. While this method of assessing obesity may not provide research quality data, it is more than adequate for its intend of monitoring long-term trends.

The intervention plans for both age groups have come together as collaborative efforts with other HHS agencies. For the 3-5 year age group, the IHS has collaborated with Head Start in developing a Head Start- IHS Obesity Prevention Initiative entitled "Healthy Children, Healthy Families, Healthy Communities" that began in early 1999 with a "Future Search Conference" of stakeholders to begin planning the program with the broadest input. This program seeks to develop partnerships with AI/AN Head Start grantee programs, IHS and tribal health programs, and outside organizations. Interventions for this four-year initiative involve Head Start children, staff, families and AI/AN communities and address both nutrition and physical activity.

For the second age group, the IHS is assisting the Pathways intervention that is a large-scale trial for the primary prevention of obesity in 3rd-5th grade children. This project is funded by the National Institute of Health- National Heart, Lung, and Blood Institute and targets classroom curricula, physical activity, school food service, and family involvement.

Indicator 26: Reduce tobacco use by assuring that at least five regional tobacco control centers are available to assist AI/AN health facilities and organizations with tobacco prevention and cessation activities by the end of FY 2001.

Rationale: The use of tobacco represents a significant cause of preventable deaths in many AI/AN groups. Over 15 percent of all deaths in AI/ANs are related to cigarette smoking or use of other tobacco products and over \$370 million is spent annually for care of smoking-related illnesses. Experience has shown that tobacco control is best pursued at the local level. This is especially true when religious and cultural belief systems are involved, as is the case with tobacco and American Indians. To achieve meaningful progress in tobacco control, we need to empower and support AI/AN tribal organizations to work with their local communities. To this end we propose to establish regional tobacco control centers, located within existing tribal organizations, to encourage and provide technical support for local efforts.

The goal of five regional support centers to assist in tobacco control is based on current resources and program capability coupled with regional needs and anticipated growth and development. While more centers may eventually be needed, significant benefit can be anticipated with five.

Approach: Using funds already identified from CDC, issue a request for applications (RFA) for tribal organizations to develop regional support centers. Program direction will come from IHS Cancer Prevention and Control Program and CDC Office on Smoking and Health. The regional centers will become part of a national network for tobacco control among AI/AN.

Data Source: IHS Program records.

Baseline: Currently four AI/AN organizations are active in Tobacco control: Great Lakes Inter-Tribal Council, (Wisconsin); Northwest Portland Area Indian Health Board (Oregon); Alaska Native Health Board (Alaska); and the California Rural Indian Health Board (California). These centers all have a limited scope of activities and do not have resources to serve their entire region. Through this new RFA, we plan to increase the capacity of these centers and add new ones to serve multi-state and multi-tribe areas.

Type of Indicator: Process

Linkages: This indicator is new for FY 2001 and supports the Secretary's initiative to reduce tobacco use, and the DHHS Strategic Plan, Strategic Objectives 1.1 *Reduce Tobacco Use, Especially among Youth* 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population*. It is supported by an IHS/CDC agreement, and supports several HP 2010 objectives in Focus Area 27: Tobacco Use.

Program Performance FY 1999: No FY 1999 Indicator.

Indicator 27: Reduce high risk HIV/AIDS behaviors by assuring that at least 50% of the I/T/Us will have implemented an HIV/AIDS Needs Assessment to monitor and assess risks by individuals and tribal communities and develop appropriate interventions.

Rationale: The HIV/AIDS rate of infection is 0.3% of the two million American Indian/Alaska Native (AI/AN) population. HIV/AIDS surveillance data collected in FY2000 will provide information on the infection rate on and off the reservation. A clear assessment of the current extent, patterns and trends of HIV infection among AI/ANs is necessary for public health planning, to ensure adequate prevention activities and access to health care. The IHS prevention effort is to target AI/AN youth. With average age at infection falling, and with half of the new infections occurring in individuals under the age of 25, interventions will target HIV prevention efforts at young people.

On a national survey of two groups, young gay men and young women infected through heterosexual sex, the infection rate accounted for roughly 75% of the adolescent epidemic. The epidemic in AI/AN is a microcosm, generally, of what is happening nationally. The incidence of HIV infection is growing in young people who are particularly vulnerable in society. The individual's ability to insist on safe sex or abstinence is likely to be affected by any social condition that damages self-esteem and a sense of control, limits resources, eliminates choices, or reduces access to information and tools of prevention. Young people at risk need far more than information about the biology and transmission routes of HIV. Prevention providers build on the foundations of traditional HIV prevention efforts-providing information and skills training to address the myriad of external forces challenging our AI/AN youth.

Approach: Utilization of the IHS RPMS data on HIV/AIDS within the Indian Health Service. CDC HIV/AIDS Semi-Annual Surveillance Report that gives information on American Indian/Alaska Natives. The standardized survey will be evaluated and monitored during the year. Information from this survey will identify deficiencies in HIV prevention and allow appropriate intervention by each of the I/T/U areas.

Data Source: Local annual survey and database linked with RPMS as appropriate; CDC HIV/AIDS Semi-Annual Surveillance Report.

Baseline: To be determined in FY 2000.

Type of Indicator: Process

Linkages: This supports the President's HIV/AIDS initiative and the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population*. It is supported by IHS/CDC agreements, and supports several HP 2010 objectives in Focus Area 13: HIV.

Program Performance FY 1999: No FY 1999 Indicator.

Indicator 28: Reduce environmental threats to health by completing community environmental assessments of 90% of American Indian and Alaska Native communities in FY 2001 by the implementation of the environmental health surveillance system.

Rationale: Community environmental health status has traditionally been determined by completing environmental health surveys of individual facilities listed on the Facility Data System (FDS) inventory. However the overall environmental health status of a community is more than a simple sum of inter-related parts. An accurate determination of a community's environmental health status must be based on a comprehensive analysis of how those parts collectively affect the overall environmental health and quality of life of the residents of the community. Overall community environmental health status will be continuously assessed through the use of the environmental health surveillance system that will be developed during FY 2000. However to effectively measure improvement in the environmental health status of a community, baseline environmental health status must be determined by conducting initial comprehensive community environmental health assessments.

Approach: The Environmental Health Services program will work with the National Center for Environmental Health (NCEH), the National Association of City and County Health Officials (NACCHO), and Tribal partners to establish a surveillance protocol and implementation during FY 2000. This protocol will be employed in conducting the initial community assessment and for ongoing surveillance. At the regional level, this project will be coordinated with the IHS Area Environmental Health Officers in partnership with the tribes and local IHS environmental health services programs.

The collection, organization, and implementation of environmental health and epidemiological data may redesign the services and activities currently provided by and recommended by the Environmental Health Services program. We are not certain that the assumptions used to build the current system are still valid (FDS vs. risk-based decision making). Data analysis is necessary to establish baseline levels of community environmental health, evaluate the effectiveness of existing programs and to plan future programs to insure that resources and activities are best targeted to most effectively reduce environmentally related disease and injury at the local level.

Data Source: IHS Environmental Health Surveillance System developed in FY 2000.

Baseline: To be established by the end of FY 2001.

Type of Indicator: Process

Linkages: This indicator is an extension of FY 2000 Indicator 26. It supports the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population*. It also broadly supports many of the HP 2010 objectives in Focus Area 8: Environmental Health.

Program Performance FY 1999: No FY 1999 Indicator.

2.2.1 Capital Programming/Infrastructure Category: Program Description, Context and Summary of Performance

Program Description and Context

Capital Programming/Infrastructure indicators represent the physical infrastructure that contributes to a healthy environment by assuring safe water and sewage facilities, medical facilities where health services can be adequately provided, and the ability to maintain the medical facilities which are critical to our mission.

Sanitation Facilities Construction – supports the construction of water, sewage, and solid waste systems (see page IHF-14 in FY 2001 budget document).

Health Care Facilities Construction – supports the construction of new or replacement health care facilities (see page IHF-20 in FY 2001 budget document).

Maintenance and Improvement – supports ongoing health care facility maintenance, alteration, and repair (see page IHF-10 in FY 2001 budget document).

2.2.2 Capital Programming /Infrastructure: Performance Indicators

These indicators were selected and based on the following criteria:

- supports components of the Indian Health Facilities Appropriation and funding priorities of I/T/Us identified in the budget formulation process
- are supported by existing data systems that record the need for physical infrastructure or improvements to the existing infrastructure
- follows the formula-based prioritization of each project's relative need
- has demonstrable link to improved access to health services or healthier living environments

The data that support these indicators are recorded at the local level where projects are conceptualized based in strict protocols and formulas. These data are compiled at the Area and Headquarters level and reviewed for accuracy and they compare against similar projects. The validation of this information is essential to the facilities programs since it is used to distribute resources as well as measure performance. The link between funding levels and our ability to accomplish these indicators is relatively direct and supported by well-quantified and validated planning formulas.

These indicators support all of the Presidential, Departmental, and IHS initiatives by providing a foundation where health services can be effectively delivered and objectives reached. Without a healthy living environment, access to adequate medical facilities, and proper maintenance most of the objectives could not be met.

**FY 1999 Performance Summary Table 3:
Capital Programming/Infrastructure**

Performance Indicator	FY Targets	Actual Performance	Reference
Indicator 29: Address the net backlog of essential maintenance, improvement, and renovation (BEMAR) needs for health care facilities.	FY 01: address \$12 million of FY 2000 BEMAR FY 00: address \$12 million of FY 1999 BEMAR* FY 99: maintain backlog at \$243 million	FY 01: FY 00: FY 99: backlog maintained at \$243 based on FY 1998 formula FY 98: \$243 million baseline	P: p. 70 B: p. IHF-10
Indicator 30: Provide sanitation facilities to new or like-new homes and existing Indian homes.	FY 01: 3,800 New/L. New 10,930 Existing FY 00: 3,740 New/L. New 11,035 Existing* FY 99: 5,900 New/L. New <u>9,330</u> Existing Total 15,230	FY 01: FY 00: FY 99: 3,557 New/L. New <u>13,014</u> Existing Total 16,571	P: p. 71 B: p. IHF-14
Indicator 31: Improve access to health care by construction of the approved new health care facilities.	FY 01: complete scheduled phase of construction of appropriated facilities FY 00: complete scheduled phase of construction of appropriated facilities* FY 99: complete scheduled phase of construction of appropriated facilities	FY 01: FY 00: FY 99: projects completed on schedule	P: p. 72 B: p. IHF-20
Total Capital Programming/Infrastructure Funding:	FY 01: \$305,530,000 FY 00: \$277,303,000 FY 99: \$255,953,000 FY 98: \$221,009,000 * indicates revised FY 2000 measure, see Summary of Changes Table on pages 87-90		P: page # in perform. plan B: page # in budget justif.

FY 2001 Indicators

Indicator 29: To improve access to health care services, during FY 2001 the IHS will address \$12 million of the FY 2000 Backlog of Essential Maintenance, Alteration, and Repair (BEMAR) for health care facilities.

Rationale: The provision of quality health services requires effective and efficient space, including reliable supporting building systems. This indicator represents a commitment to this activity that is also fundamental to maintaining hospital and clinic accreditation (see Indicator 17 on page 50).

Approach: This initiative is part of an IHS effort to more accurately determine the resources and processes required to sustain physical surroundings which enhance the delivery of health care services. This includes maintaining both IHS and tribal health facilities in good working order, eliminating environmental and safety hazards, and modifying space as needed to facilitate changing service delivery practices. To achieve this indicator, the IHS will complete an evaluation of the current listing of the BEMAR and initiate major maintenance and improvement projects that will result in the gross reduction to the 2000 BEMAR. It is important to note that the BEMAR continues to grow with additions in space, associated operating costs, aging of facilities, and improved data gathering.

The physical condition of IHS-operated, federally-owned and tribally owned health care facilities is evaluated continuously by local facility personnel and through annual general surveys conducted by local facility personnel and IHS Area Office engineers. In addition, comprehensive “Deep Look” surveys are conducted every five years by a team of specialists, which may include IHS and tribal engineers, architects, and operations experts, and occasionally technical specialists from private sector architectural/engineering firms.

A major facet of this initiative is an improvement of the data system in which identified facilities deficiencies are listed. The revised system will move input and querying of data to a lower level, Area Office and/or field sites, so the information may be used to support and improve decision making at those levels and the capturing of expenditures for capital improvements for buildings, as promulgated by the Federal Accounting Standards Advisory Board will be enhanced.

Data Source: Identified deficiencies recorded in the Facilities Engineering Data System.

Baseline: The 2000 backlog of identified deficiencies totaling \$446 million.

Type of Indicator: Process/Impact

Linkages: These indicators support the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services* and generally, many of the HP 2010 objectives.

Program Performance FY 1999: The FY 1999 performance measure was to maintain the net backlog of maintenance, improvement, and renovation needs for health care facilities at the FY 1997 level. For the two-year period, FY 1997 to FY 1999, approximately one third of the annually appropriated maintenance and improvement funding (\$25 million) were utilized for

projects to reduce the BEMAR. This enabled the IHS to meet the goal of maintaining the net BEMAR deficiency level, as defined in FY 1997, with the available funding.

However, the BEMAR was greater at the end of FY 1999, increasing from \$243 million in FY 1997 to \$446 million in FY 1999. This increase occurred in part because two new data tracking elements were added to the BEMAR during the period. Seismic deficiencies identified in compliance with Executive Order 12941, "Seismic Safety of Existing Federally Owned or Leased Buildings," were added during FY 1998 in the amount of \$149 million. Also, the facilities environmental database was added in FY 1999 in the amount of \$8 million. Several other factors contributed to the remaining increase in the BEMAR: 1) Increase in space - IHS has seen a continued trend in added space being provided for health care services. During the reporting period 522,000 square feet of space were added. The impact of the added space was not factored into the original GPRA goal. 2) Improved reporting - as the IHS improves its facilities data system, accessibility and usability of the system increases improved data gathering and updating; and 3) inflation factors were applied to portions of the cost data.

Indicator 30: Improve home environmental health by providing sanitation facilities projects to serve 3,800 new or like-new homes and 11,455 existing Indian homes.

Rationale: The IHS Sanitation Facilities Construction Program, an integral component of the IHS disease prevention activity, has carried out those authorities since 1960 using funds appropriated for Sanitation Facilities Construction to provide potable water and waste disposal facilities for American Indian and Alaska Native (AI/AN) people. As a result, the rates for infant mortality, gastroenteritis morbidity, and other environmentally related diseases have been dramatically reduced, as much as 80 percent since 1973. Compelling evidence supports that many of these health status improvements are attributable to IHS' provision of water supplies, sewage disposal facilities, development of solid waste sites, and provision of technical assistance to Indian water and sewer utility organizations. Satisfactory environmental conditions (e.g., safe piped water and adequate sewage disposal) place fewer demands on IHS' primary health care delivery system. However, AI/AN homes are still seven times more likely to be without clean water than homes in the broader U.S. The current need for sanitation deficiencies as of the end of FY 1999 was \$1.753 billion. Of this total, \$770 million was considered to be technically and economically feasible projects.

Approach: The Indian Health Care Amendments (Title III, Section 302(g) 1 and 2 of P.L. 100-713) directed the IHS to identify the universe of Indian sanitation facilities deficiencies. From this process, a backlog of needed sanitation facilities was identified and regularly updated. It is feasible to provide sanitation facilities for between 95 and 98 percent of all existing Indian homes. Also included in the backlog are projects intended to upgrade existing water supply and waste disposal facilities and projects to improve sanitation facilities operation and maintenance capabilities in Indian country. Maximum health benefits will be realized by addressing needs identified and providing facilities for new/like-new homes when they are constructed.

Data Source: The Sanitation Facilities Deficiency System.

Baseline: Not Applicable

Type of Indicator: Impact

Linkages: These indicators support the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services* and several of the HP 2010 objectives in Focus Area 8: Environmental Health.

Program Performance FY 1999: The FY 1999 performance measure was to provide sanitation facilities to 5,900 new and like-new homes and 9,330 existing homes by the end of FY 1999. In FY 1999 the IHS provided sanitation facilities to 3,557 new and like-new homes and 13,014 existing homes for a total of 16,571. These exceeded the total goal of providing sanitation facilities for 15,230 homes.

The number of new and like-new homes served was less than the performance goal. The most significant reason was the large decrease in newly constructed HUD funded homes served in FY 1999. Only 461 HUD funded homes were served instead of the projected 1300 HUD homes. This decrease was due to the changes in the HUD Indian Housing programs authorized under the Native American Housing Assistance and Self-Determination Act of 1996 (NAHASDA). The NAHASDA increased the flexibility of tribally managed housing programs to independently meet tribal housing needs with programs beyond the traditional new HUD funded housing construction programs. As a result of NAHASDA, tribally managed housing programs are constructing new HUD funded homes, including associated sanitation facilities infrastructure, without requesting IHS assistance.

Sanitation facilities were provided for 13,014 existing homes in FY 1999, which exceeded the performance goal. This increase was the result of more projects to upgrade existing community sanitation facilities infrastructure. In spite of exceeding the goal for provision of sanitation facilities to existing homes, the backlog continues to grow. The current need for sanitation deficiencies as of the end of FY 1999 was \$1.753 billion. Of this amount, \$770 million was considered to be technically and economically feasible projects.

Indicator 31: Improve critically needed access to health care services by providing the following physical infrastructure:

Ft. Defiance, AZ Hospital	Continue construction of the replacement hospital and start design of part of the staff quarters.
Winnebago, NE Hospital	Continue construction of the replacement hospital.
Parker, AZ Health Center	Continue construction of the replacement health center.
Pawnee, OK Health Center	Start design of the replacement health center.
Small Ambulatory Construction Grants	Provide construction grants to tribes/tribal organizations.
Dental Units	Provide dental units based on priority needs.

The progress on these projects at the end of FY 2001 will be reported.

Rationale: Constructing replacement health care facilities increases access to personal medical services supported by the IHS. These medical services can be compared to medical services available to the general population (appointments to see primary care physicians, nurses, dentists, etc.). Efficient space for health care delivery allows for more appointments and for

patients to see more health care providers in one trip. People are also reluctant to use old run-down facilities but are more likely to seek needed health care when provided in modern facilities.

Likewise, modern facilities help recruit and retain health care providers that can result in improved access and continuity of health care. Once a replacement facility has been completed and fully staffed, IHS has experienced an average increase in patient visits of approximately 60% over the old facility (see page IHF-27 of budget for individual facility specifications). The designing of additional facilities is the first step in improving access for identified locations. Also, alternative methods of providing health care facilities are included (joint venture projects, small ambulatory grants, and non-IHS funds renovation projects).

Approach: The IHS developed the Health Facilities Construction Priority System (HFCPS) methodology in response to congressional directive to identify planning, design, construction, and renovation needs for the 10 top-priority inpatient care facilities and the 10 top-priority outpatient care facilities and to submit those needs through the President to the Congress. Under the three-phase HFCPS process, the IHS Headquarters solicits proposals for health facility construction from the Area Offices and ranks them according to their relative need for construction. Factors used to determine relative need are workload, age, isolation or alternatives to construction, and existing space data. The highest-ranking proposals are added to the Priority Lists.

When new projects are to be added to the Priority Lists, IHS Headquarters asks each IHS Area Office to submit proposals for Phase I consideration. The IHS uses the HFCPS methodology to review these proposals and to determine which will be considered during the more intensive Phase II review. A limited number of proposals that successfully complete Phase I are considered further during Phase II. The IHS examines these proposals in greater detail and applies the methodology to determine those proposals that will be considered during Phase III.

During Phase III, appropriate IHS Area Offices prepare a Program Justification Document (PJD) for each proposed project still being considered. IHS Headquarters reviews each PJD. If the PJD justifies construction, it is approved and the project is placed on the appropriate priority list below those already on the list. Proposed projects that have been approved and placed on a priority list remain on the list until they have been fully funded by congressional appropriations or other funding mechanism.

After projects are placed on the Priority Lists, IHS updates its 5-year planned construction budget. That budget is updated yearly and used as the basis for funding requests. The HFCPS is generally applied using existing IHS resources (staff and equipment); however, some Area Offices have procured assistance in developing the PJD and POR.

Data Source: Health Care Facilities Priority System and Health Care Facilities Planned Construction Budget (5-Year Plan).

Baseline: Not Applicable, the IHS Inpatient and Outpatient Facilities Priority List is used to determine needed construction priorities.

Type of Indicator: Process/Impact

Linkages: These indicators supports the DHHS Strategic Plan, Strategic Objectives 3.6

Improve the Health Status of American Indians and Alaska Natives and 4.2 Reduce Disparities in the Receipt of Quality Health Care Services and generally, many of the HP 2010 objectives in Focus Area 1: Access to Quality Health Services.

Program Performance FY 1999: The FY 1999 performance measure was to reach the completion phase of construction for the Hopi (Polacca), Arizona Health Center, and starting construction of the Ft. Defiance, Arizona Hospital and the Parker, Arizona Health Center by the end of FY 1999. This measure has been accomplished and can be summarized as follows:

New Hopi Health Center, Polacca, Arizona: The FY 1999 appropriation fully funded the project and allowed the tribe, under a P.L. 93-638 contract, to obligate funds for completion of the project. The construction is on schedule to be completed in the third quarter of FY 2000.

Replacement Hospital, Fort Defiance, Arizona: Using the FY 1999 appropriation, the previously completed design for the replacement hospital portion of the project was updated and construction was started in September 1999.

Replacement Health Center, Parker, Arizona: Using the funds appropriated in FY 1999, construction began in June 1999, pursuant to a P.L. 93-638 contract.

2.3.1 Partnerships, Consultation, Core Functions, and Advocacy Category: Program Description, Context and Summary Performance

Program Description and Context

The Partnerships, Consultation, Core Functions, and Advocacy aggregation encompasses the IHS' administrative and management functions, relationships with stakeholders and consumers, and strategies for collaboration in pursuit of the IHS mission. Data for these indicators come from recognized sources including budget reports and audits, a HHS survey, and a survey of the universe of stakeholders using recognized social survey methods. The two components of this aggregation are:

Partnerships, Consultation, Core Functions, and Advocacy Category Aggregation

Direct Operations - supports management and administrative functions for Area and Headquarters staff including policy development, budget formulation, health program support, and accountability requirements (see page IHS-110 in FY 2001 budget document).

Facilities and Environmental Health Support - provides administrative and management support for the construction, maintenance, and operation of health care facilities, staff housing, and sanitation facilities (see page IHF-41 in FY 2001 budget document).

2.3.2 Partnerships, Consultation, Core Functions, and Advocacy Category: Performance Indicators

The choice of indicators for this aggregation category are based on the following criteria:

- supports and encourages tribal sovereignty, the government to government relationship between tribes and the Federal government, and tribal self-determination
- supports and encourages collaboration with stakeholders, agencies, and organizations directed toward improving the health of AI/AN people
- supports and encourages sound management practices

Achieving these performance indicators, as well as the overall coordination of the GPRA and other Federal accountability requirements represent a significant challenge for the IHS and its reduce management and public health infrastructure. The reorganization of Headquarters and many Area offices has resulted in flatter organizational structures, less specialization in function, and greater use of self-directed teams in order to increase efficiency. However, it has become increasingly clear that coupled with improved data management capacity, two functions must adequately supported to assure overall program success and these are:

- assuring that continued and expanded opportunities for tribal consultation and participation in IHS endeavors is supported
- assuring effective recruitment of needed health discipline is achieved and that orientation, training, and support are available to enhance the retention these staff.

**FY 1999 Performance Summary Table 4:
Consultation, Partnerships, Core Functions, and Advocacy Indicators**

Performance Indicator	FY Targets	Actual Performance	Reference
Indicator 32: Improve the level of I/T/U satisfaction with the processes for consultation and participation provided by the IHS, as measured by a survey of I/T/Us.	FY 01: secure OMB clearance for instrument FY 00: revise policy and instrument * FY 99: establish policy and collect baseline	FY 01: FY 00: FY 99: policy established but baseline delayed	P: p. 77 B: p. IHS-110
Indicator 33: Improve the level of Contract Health Service (CHS) procurement of inpatient and outpatient hospital services for routinely used providers under contracts or rate quote agreements at the IHS-wide reporting level.	FY 01: 88% FY 00: no indicator FY 99: no indicator	FY 01: FY 00: FY 99: NA FY 97: 85.4% baseline	P: p. 78 B: P. IHS-62
Indicator 34: Maintain administrative infrastructure (Area and Headquarters) no higher than FY 1999 target level while maintaining full compliance with major Federal requirements (i.e., GPRA, GMRA, ITMRA, etc.).	FY 01: 1876 FTE or less FY 00: 1876 FTE or less* FY 99: at least 10% under FY 97 level or 1876 FTE	FY 01: FY 00: FY 99: -22% (1,619 FTE) FY 97: 2085 FTE baseline	P: p. 79 B: p. IHS-110
Indicator 35: Increase the number of interagency agreements and cooperative agreements with agencies and organizations that are directly linked to performance plan indicators.	FY 01: increase over FY 00 FY 00: increase over FY 99* FY 99: increase by 10% over FY97 or 73 agreements	FY 01: FY 00: FY 99: 86 total agreements FY 97: 66 agreements baseline	P: p. 80 B: P. IHS-110
Indicator 36: Continue implementation of Managerial Cost Accounting systems across IHS setting.	FY 01: secure IT capability FY 00: develop pilot sites* FY 99: begin implementation	FY 01: FY 00: FY 99: "cost centers" implemented in FY 1999	P: p. 81 B: P. IHS-110
Indicator 37: The IHS will improve its overall Human Resource Management (HRM) Index score as measured by the DHHS annual HRM survey.	FY 01: at least 95 points FY 00: at least 94 points* FY 99: no indicator	FY 01: FY 00: FY 99: 93 points FY 98: 93 points baseline	P: p. 82 B: P. IHS-110
Total Consultation, Partnerships, Core Functions, and Advocacy Funding:	FY 01: \$78,084,000 FY 00: \$72,884,000 FY 99: \$69,729,000 FY 98: \$67,038,000 * indicates revised FY 2000 measure, see Summary of Changes Table on pages 87-90		P: page # in perform. plan B: page # in budget justif.

FY 2001 Partnerships, Consultation, Core Functions, and Advocacy Indicators

Indicator 32: To improve the IHS consultation process with its I/T/U stakeholders, during FY 2001 the IHS will implement the revised consultation policy and secure OMB clearance for the instrument to assess I/T/U stakeholder satisfaction with the consultation process.

Rationale: It is fundamental to the intent of the NPR and the realization of the IHS Mission and Goal that I/T/Us increasingly become participating partners in the important processes which will guide the Agency into the next century. Given the number and diversity of I/T/Us, formal policies are essential to assure broad input, a rational and equitable approach to making timely decisions, and the highest possible buy-in across I/T/Us. Equally important is securing the data to assess how well the processes are actually working, and then improving them. In addition, this indicator serves as a proxy measure of the effectiveness of the IHS Tribal Management program. Finally, during the initial reorganization of the IHS in 1995-96, the IHS was encouraged by its stakeholders to assure opportunities for local I/T/Us to evaluate the agency's progress in enhancing the consultation process and supporting recommended changes.

Approach: It is critical that the IHS form a strong and effective partnership with its I/T/U constituents in addressing the health disparities. This partnership is essential to ensure that resources are effectively and efficiently utilized to maximize the positive impact health programs have on the target I/T/U populations. Partnerships already exist with such tribal entities as the National Indian Health Board (NIHB), Regional Indian Health Boards, the Tribal Self-Governance Advisory Committee (TSGAC) and the National Congress of American Indians (NCAI).

The starting point for this initiative was with the development and implementation of the IHS consultation policy and was to be followed by the development of a survey instrument to assess I/T/U satisfaction with the consultation process. This policy was actually developed ahead of schedule and was in effect at the start of FY 1999. In addition, a survey instrument was developed and tested in the spring of FY 1999. This survey instrument was to be used in FY 1999 to establish a baseline and was to be accomplished by several tribal and AI/AN organizations. However, concerns about the how the consultation process was being implemented refocused the attention of the I/T/U stakeholders on revising the policy to address specific consultation processes. As a result the collection of data was delayed pending the revision of the policy by a team that includes the I/T/U stakeholders.

The IHS has elected to honor our stakeholders' preferences and will support the revision of the consultation policy/process for FY 2000 and concurrently revise the survey instrument to reflect changes in the policy. For FY 2001 the IHS will implement the revised policy and submit the revised instrument to OMB for clearance.

Data Source: I/T/U survey instrument and protocol

Baseline: From baseline survey completed in FY 1999.

Type of Indicator: Process

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives* and 4.3 *Increase Consumer's Understanding of their Health Care Options*. It also underpins the IHS' commitment supporting the Self-Determination process and AI/AN community empowerment.

Program Performance FY 1999: The FY 1999 indicator committed to establishing the consultation policy, developing a satisfaction survey, and securing the baseline level of satisfaction. This performance measure has been partially completed. The policy was developed and implemented well ahead of schedule and the survey instrument was developed and tested in the spring of FY 1999. However, as described in the "Approach " section, data collection with a survey instrument has been delayed to coincide with the revised policy and the need for OMB clearance. The IHS has elected to prioritize stakeholder participation and preferences over a predetermined schedule.

Indicator 33: During the FY 2001 reporting period, the IHS will have improved the level of Contract Health Service (CHS) procurement of inpatient and outpatient hospital services for routinely used providers under contracts or rate quote agreements to at least 88% at the IHS-wide reporting level.

Rationale: It is important that IHS optimize its use of CHS resources. CHS regulations require the use of medical priorities to assure that persons with the most urgent need receive services and that alternate resources pay prior to IHS expending funds. Beyond these built-in requirements, IHS is making efforts to assure that we receive the best price available from our routine providers of care. To that end, we are seeking to ensure that contracts or rate quote agreements are in place that provide reduced rates to IHS and its patients with routinely used hospitals. While not every routinely used hospital will agree to some reduced rate schedule with IHS, many will, and it is to our advantage to continue to aggressively pursue cost-effective arrangements.

Approach: It is not feasible to pursue contracts or agreements with every hospital that provides services to IHS patients. Some hospitals are utilized on a one-time emergency basis when it is impossible for the patient to be moved to a contract facility, or when there is no contract facility in the vicinity. In other cases, the utilization of the facility is so infrequent that it is impractical to contract with that facility for a small number of patient visits per year. Therefore, IHS is only interested in obtaining contracts or rate quote agreements with frequently used providers.

Frequently used hospitals are defined as those facilities to which IHS paid more than \$50,000 for inpatient services per year and/or more than \$10,000 in outpatient services per year. Not all hospitals meet both criteria, and inpatient and outpatient service contracts and rate quotes will be tracked separately.

To calculate the percentage rate we divide the amount paid to frequently used hospital providers with contracts or rate quote agreements, by the amount paid to all frequently used hospital providers. The IHS fiscal intermediary (FI) , who makes IHS' CHS payments, will provide these amounts. The FI also maintains information on contract and rate quote agreements and applies the contract or agreement rate to the payment. Records are maintained by individual provider and composite data can be provided by the FI.

Data Source: The IHS Fiscal Intermediary – Blue Cross and Blue Shield of New Mexico. The IHS will use FY 1997 claims paid data as the baseline. For this year the calculated rate is 84.4 percent. The reason why the baseline of FY 1997 is chosen is that the data are 99 percent complete.

Type of Indicator: Process

Linkages: These indicators support the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives* the accountability requirements of a DHHS OPDIV, and support H P 2010 objectives in Focus Area 1: Access to Quality Health Services.

Program Performance FY 1999: No FY 1999 Indicator.

Indicator 34: During FY 2001, the IHS Headquarters and Areas will maintain full compliance with major Federal requirements (i.e., GPRA, GMRA, ITMRA, etc.), without expanding the administrative staff above the FY 1999 FTE target level.

Rationale: A major recommendation in the IHS reorganization plan was to downsize and streamline the IHS Headquarters and Area Offices and move from controlling and directing to providing consultation and support to I/T/Us. This recommendation supports the continued transition to local control, and the intent of the NPR, but represents a significant challenge because of the loss of economies of scale in the decentralization process. In the FY 1999 performance plan the IHS committed to reducing the number of FTE s in IHS Headquarters and Areas by 10 percent over the FY 1997 level.

For FY 2001 the IHS is committing to maintaining the reduced Area and Headquarters administrative FTE level at the target FY 1999 level (i.e., 10% below the FY 1997 level) and to focus resources at providing access to services. Further reductions in administrative positions will be considered with caution given the increasing accountability requirements for which the Agency must be responsive and the importance of field support.

Approach: To accomplish this indicator the IHS continues the process of reorganizing Headquarters to a flatter and simpler structure and integrating the use of multi-disciplinary teams to address important functions, including the GPRA. Many Areas are also reorganizing to more efficient structures. Likewise, the IHS is well along in its Y2K conversion plan addressing five mission-critical information systems and will meet the necessary requirements associated with this activity.

As described in Performance Indicator 35, we are attempting to expand the development of partnerships with outside organizations to bolster our capacity to serve the needs of AI/AN people. Doing more of what is important without expanding administrative overhead will require considerable training and improved technologies, as well as ceasing to expend resources on low value work.

The evaluation of our success in this attempt at achieving more will come from the surveys of I/T/Us described in Performance Indicator 32. Feedback will come from the Department, OMB,

and Congress relative to our level of compliance with the growing number of Federal requirements, particularly the GPRA, GMRA, ITMRA, and audits of the resources expended. In the long run, our success in this efforts will be reflected to a considerable degree in the level of realization of our component of the DHHS Strategic Plan and the IHS Mission and Goal.

Data Source: Audits of Area and Headquarters, I/T/U Survey, and feedback from HHS, OMB, and Congress.

Baseline: FY 1997 Area and Headquarters FTEs = 2085

Type of Indicator: Process

Linkages: These indicators support the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives* and the accountability requirements of a DHHS OPDIV.

Program Performance FY 1999: FY 1999 Indicator 25 committed to reducing Area and Headquarters staff by 10% below the FY 1997 level of 2085 FTEs (i.e., 1876 FTEs) and maintaining compliance with Federal requirements. This indicator has been achieved with FY 1999 total Area and Headquarters FTEs level of 1,619 or a 22 % decrease while meeting compliance standards. However, the large reduction in FTEs that has occurred with reorganization is greater than anticipated and has left "function holes" in the IHS infrastructure that are essential to replace to assure that the IHS can meet its accountability requirements. Thus, the IHS is committing to maintaining the target level (i.e., 1876FTEs) rather than the actual FY 1999 levels for this performance measure for FY 2000 and FY 2001 (see summary of changes to FY 2000 plan on pages 87-90 of appendix).

Indicator 35: To increase collaborative support for improved health status of AI/AN people, the IHS will have increased the number of interagency agreements and cooperative agreements with agencies and organizations that are directly linked to performance plan indicators over the FY 2000 level.

Rationale: Given the demands in health care that the IHS continues to face, it has become increasingly important to the IHS's advocacy role to seek collaborative partnerships with other organizations which can assist in efforts to achieve the IHS Mission and Goal. While the number of agreements was initially identified as the most appropriate indicator, it has become clear that number is less significant than the area of focus and level of commitment spelled out in the agreement. Thus, this indicator was revised to address increasing the number of agreements specifically directed at performance indicators.

Approach: For many years the IHS has worked collaboratively with other organizations, particularly other HHS agencies (e.g., NIH, CDC, AHCPH), in efforts to improve the quantity and quality of services we provide. The IHS is currently in the process of proactively seeking additional and broader partnerships with organizations directed at setting in place long-term strategic approaches to addressing the interactive effects of health and social services, community empowerment, and economic development directed towards improved quality of life for AI/AN people.

Clearly opportunities exist for expanding agreements with existing organizations as well as developing new ones with other Federal, State and local agencies, as well as private sector organizations. In this light, our Director is currently spearheading a Domestic Policy Council multi-departmental initiative for AI/AN children and youth around two themes:

1. Ensuring a safe and healthy home and community
2. Ensuring personal development within the context of developing communities

Response thus far has been encouraging with active participation from HUD, DOI, DOA, DOT, and several HHS OPDIVs. The ultimate goal for the initiative is to improve the status of AI/AN children and youth relative to indicators reflecting the two themes. The approach is to collaborate with agencies that serve AI/AN people to improve coordination of services and increase access to services for AI/AN communities (including urban areas). In addition, the initial workgroup of this initiative embraced the importance of agencies documenting their commitment to the initiative through identifying appropriate specific GPRA performance indicators.

Many additional opportunities exist to address major health problems through collaboration. These will be pursued with intent to include joint performance indicators as part of the collaborative process (e.g., see Indicator 11 on page 44).

Data Source: Audit of existing agreements.

Baseline: The FY 1999 total number of agreements was 86. The baseline for those FY 1999 agreements linked to performance measures will be determined by February 2000.

Type of Indicator: Process

Linkages: This indicator broadly supports the DHHS Strategic Plan, Strategic Objective 3.6 *Improve the Health Status of American Indians and Alaska Natives*.

Program Performance FY 1999: The FY 1999 indicator committed to increasing the total number of agreements with other agencies and organizations by 10% over the FY 1997 level that was originally reported at 71. Review of the documentation of FY 1997 revealed that only 66 were actually in effect. This indicator has been accomplished with 86 agreements for FY 1999 for a total of \$12.9 million compared to the 66 agreements in FY 1997 for a total of \$11.6 million. This represents a 30% increase in the number of agreements.

Indicator 36: During FY 2001, the IHS will expand Managerial Cost Accounting (MCA) capacity through the investment in necessary information technology in accord with DHHS and OMB guidance.

Rationale: The Federal Financial Management Improvement Act of 1996 (The Brown Bill) requires IHS to achieve the linkage of resources to results through MCA. This legislation requires each agency to maintain financial management systems that comply with Federal financial management systems requirements, applicable Federal accounting standards, and the U. S. Standard General Ledger at the transaction level. As mentioned in the *Program Aggregation* section on page 24, caution must be exercised in applying manufacturing

accounting approaches to a comprehensive public health program. Attempting to cost account for outcomes for complex chronic disease processes (i.e., diabetes) addressed by many health disciplines in diverse settings, with long time lags in effect, is plagued with threats to validity, and would probably represent an exercise in futility.

Approach: The IHS has contracted with the Mitretek Systems to analyze technical alternatives for IHS cost reporting/cost accounting. This will be a detailed analysis of technical alternatives and include a cost benefit and trade off analysis of alternatives. The results will be provided to a steering committee to support strategic decision making regarding the implementation of cost reporting and cost accounting at IHS. This system is necessary to assist IHS leadership to maximize the effective use of available resources and ensure that patient care can be provided to its customers. Perhaps the most significant benefit or goal for establishing MCA is to increase collections from private insurance, Medicare, and Medicaid.

Type of Indicator: Process

Linkages: This indicator supports the management and accountability requirements of GPRA, GMRA, Clinger-Cohen and a DHHS OPDIV.

Program Performance FY 1999: The FY 1999 indicator committed to begin implementation of cost accounting during FY 1999. This measure was accomplished with the implementation of "cost center" accounting practices which began operating at IHS health facilities, Area Offices, and Headquarters and have contributed to improved management particularly at hospitals and clinics.

Indicator 37: To improve job satisfaction and the quality of work life for IHS employees, the IHS will improve its overall Human Resource Management (HRM) Index score to at least 95 as measured by the DHHS annual HRM survey.

Rationale: The DHHS Quality of Work Life Initiative is based on social-psychological principles which are associated with both organizational effectiveness and improved quality of life for members. As part of this initiative, the Department has developed and refined a HRM Index employee survey as a valid measure of management practices that are important to organizational performance. These practices include Morale, Climate for Innovation, Planning and Organization, Communication, and Operational Efficiency. Since the DHHS started conducting the HRM Index surveys in 1991, the IHS sample scores have consistently averaged below the overall average DHHS score. Given that the elements assessed in this survey are fundamental to achieving the IHS Mission and Goal, the Agency is committed to improving this trend.

Approach: The IHS is now in the process of actively tailoring the implementation of the Department's Quality of Work Life Initiative to its unique and diverse setting. Furthermore, some of the additional resources in the requested FY 2001 IHS Budget will be used to improve supporting functions such as training, equipment and supplies, and improved communications networks. The Agency believes these enhancements, coupled with the Quality of Work Life Initiative, will improve morale, communications, job satisfaction, and other factors sufficiently to be reflected in an improved HRM Index score for the IHS in FY 2001.

Data Source: FY 2000 DHHS HRM Survey

Baseline: FY 1998 and FY 1999 DHHS HRM Survey Scores were 93 for the IHS

Type of Indicator: Process/Impact

Linkages: This is a new indicator for FY 2000 which directly supports the Secretary's Quality of Work Life Initiative and generally supports the DHHS Strategic Plan, Strategic Objective 3.6 *Improve the Health Status of American Indians and Alaska Natives.*

Program Performance FY 1999: No FY 1999 indicator