

April 1993

# INDIAN HEALTH SERVICE

## Basic Services Mostly Available; Substance Abuse Problems Need Attention



**RESTRICTED--Not to be released outside the  
General Accounting Office unless specifically  
approved by the Office of Congressional  
Relations.**

556884

RELEASED

---

---



---

**Human Resources Division**

B-247773

April 9, 1993

The Honorable Daniel K. Inouye, Chairman  
The Honorable John McCain, Vice-Chairman  
Committee on Indian Affairs  
United States Senate

The Honorable Henry A. Waxman, Chairman  
The Honorable Thomas J. Bliley, Jr.  
Ranking Minority Member, Subcommittee on  
Health and the Environment  
Committee on Energy and Commerce  
House of Representatives

The Honorable George Miller, Chairman  
The Honorable Don Young, Ranking Minority Member  
Committee on Natural Resources  
House of Representatives

In response to your request and later discussions with your offices, this report provides information on the availability of health care services to American Indians and Alaska Natives residing in five Indian Health Service (IHS) areas—Aberdeen, Alaska, California, Navajo, and Portland. We reviewed (1) how the five IHS areas differ in the way they deliver health care, (2) the extent to which basic health care services are available in these areas, and (3) whether the areas have major health care needs that warrant additional attention. A recommendation to the Secretary of Health and Human Services is included in the report.

Unless you publicly announce its contents earlier, we plan no further distribution of this report for 30 days. At that time, we will send copies to interested parties. If you have any questions concerning this report, please contact me at (202) 512-7119. Other major contributors are listed in appendix IV.

Mark V. Nadel  
Associate Director, National and  
Public Health Issues

---

# Executive Summary

---

## Purpose

Historically, the distribution of Indian Health Service (IHS) health care facilities and resources has been uneven among the 12 IHS area offices. A longstanding concern within IHS and among the tribes they serve has been that this uneven distribution has resulted in disparities in health services available to Indians.

In light of these concerns, the Senate Committee on Indian Affairs; the House Committee on Natural Resources; and the Subcommittee on Health and the Environment, House Committee on Energy and Commerce asked GAO to examine (1) how five IHS areas differ in the way they are organized to deliver health care, (2) the extent to which basic health care services are available in these areas, and (3) whether the IHS areas have major health care needs that warrant additional attention.

---

## Background

IHS, an agency in the Public Health Service, Department of Health and Human Services, is the primary source of health care for American Indians and Alaska Natives, and is charged with raising Indians' health status to the highest possible level.

In fiscal year 1991, IHS obligated \$1.4 billion to provide health services to an estimated 1.1 million Indians in 32 states. IHS administers its programs through 12 area offices, each of which is subdivided into several service units. Indians are not entitled to any specific package of health care benefits. Rather, health services are provided as resources permit, through direct and contract care. Direct-care services are provided either by IHS facilities and staff or tribal groups. Contract-care services are purchased by IHS and/or the tribes from private providers.

The Committees asked GAO to include five IHS areas—Aberdeen, Alaska, California, Navajo, and Portland—in the study. Each of these areas covers a different part of the country. Collectively, these five areas provided services to about half the total IHS user population and received about half the fiscal year 1991 IHS funds. GAO used a mail questionnaire to survey each of the 70 service units in the five areas. The questionnaire asked whether specific health services were available to those seeking them. GAO grouped the services into five categories: treatment, diagnostic, preventive, dental, and alcohol and substance abuse related services.

---

## Results in Brief

The five IHS areas differed greatly in the way they delivered health care services. Nonetheless, the areas reported generally similar levels in the

availability of basic clinical services. The services most available were treatment services, such as routine prenatal care, and diagnostic services, such as biopsies for cancer diagnoses. Almost all patients seeking such services were able to receive them. However, preventive care, such as diabetes education, and dental care were comparatively less available. Despite the concern among many service unit officials that service availability was lower in areas using more contract care than in those areas using more direct care, GAO's survey results showed there were little overall differences.

Service units officials generally identified alcohol and substance abuse services as their greatest unmet health need. Alcohol and substance abuse, a leading cause of death among Indians, contributes to the demand for hospital and clinical services. Relative to other health service categories, alcohol and substance abuse services were the least available in almost all locations. Despite recent increases in IHS funding for alcohol and substance abuse treatment services, the gap between the demand for and the availability of services persists. While the gap points to the need for more services, IHS lacks data on alcoholism rates among Indians and the effectiveness of current prevention and treatment programs. Without such data, IHS is hard pressed to develop effective strategies that maximize the use of its limited resources.

---

## Principal Findings

---

### Area Health Care Delivery Systems Differ

The five IHS areas varied greatly in how they were structured to deliver health care. The Alaska and Navajo areas had the most comprehensive system of direct-care facilities, including large medical centers enabling them to provide most services through direct care. The California and Portland areas had no IHS hospitals and relied on other public or private providers funded through IHS contract-care programs for services. The Aberdeen area had several IHS hospitals, but these hospitals were generally small and provided only limited services. For example, most of the hospitals cannot perform general surgery. Thus, the Aberdeen area also relied on other public and private providers to deliver many essential services. (See pp. 20-23.)

---

**Basic Health Services  
Generally Available in All  
Areas**

The areas generally reported similar patterns in service availability for the major categories of health services that GAO surveyed. In general, service availability was the highest for treatment services, followed by diagnostic services, preventive services, and dental services. Within each category, the level of service availability reported by survey respondents was similar across all areas, with some exceptions.

In each of the five areas, the majority of service units reported that treatment services for basic medical and surgical care and diagnostic services were available to almost all people seeking care. The main exception was nonemergency surgery. Preventive services were generally less available than treatment and diagnostic services. For example, preventive care for diabetes and some cancer screening services were not generally available in some locations. Dental services were even less available overall. (See pp. 24-29.)

The largest difference among the areas was the relatively low availability of preventive care services in the Alaska area. This was likely a function of the high cost of travel to physician-staffed health centers or hospitals. Almost half of all Alaska natives would have to make such a trip by airplane. The Alaska area, however, is generally able to cover patient travel costs only in case of emergencies. (See pp. 27, 31, and 32.)

---

**Areas Using More Contract  
Care Reported Comparable  
Levels of Health Services,  
but Officials Cite Concerns**

Many IHS officials told GAO that certain aspects of contract care had limited the availability of some nonemergency services to their user population. Major problems cited were: funding limitations of contract care, burdensome administrative procedures, and restrictive contract care eligibility requirements. While these problems may exist, the use of contract care (or direct care) is only one of many factors affecting the availability of services in the areas. Other factors, such as the geographic isolation of the service population or the existence of other health programs serving Indians, also affected the availability of services in many of the areas. In the final analysis, areas using more contract care reported comparable levels of service availability. (See pp. 29-32.)

---

**Alcohol and Substance  
Abuse Services Are  
Greatest Unmet Needs**

Service unit officials in the five areas identified alcohol and substance abuse services as the greatest unmet health care needs for Indians. Alcohol and substance abuse is a leading cause of death among Indian people. The age-adjusted mortality rate for alcoholism is more than six times higher for Indians (aged 15-44) than for the general U.S. population.

Alcohol and substance abuse also place a heavy demand on IHS medical resources. For example, a 1992 IHS study showed that about 35 percent of adult males admitted to IHS/tribal hospitals were admitted for alcohol related problems. (See pp. 33 and 34.)

GAO's survey found that, among the categories of services studied, alcohol and substance abuse services were the least available. While the unmet demand for services was substantial, little data were available about the comparative rate of alcohol and substance abuse among Indians and the nature and effectiveness of existing prevention and treatment strategies. IHS officials said that they lack the resources to conduct the necessary research to fill this information gap. There are other agencies within the Public Health Service—the Substance Abuse and Mental Health Services Administration and the National Institutes of Health—which fund and conduct research on the prevalence of alcohol and substance abuse in the population and evaluate the effectiveness of alcohol and substance abuse treatment and prevention programs. IHS has met with these agencies and discussed its research needs. However, thus far there is no plan to conduct research to evaluate the treatment and prevention program on Indians. While there is a plan to obtain prevalence data, the funding to implement such a plan has not materialized. (See pp. 35-44.)

---

## Recommendation

GAO recommends that the Secretary of HHS ensure that the directors of IHS, National Institutes of Health, and Substance Abuse and Mental Health Services Administration collaboratively develop a plan and identify potential sources of funds to collect and evaluate data on (1) the prevalence of alcohol and substance abuse among Indians and (2) the nature and effectiveness of alcohol and substance abuse prevention and treatment programs.

---

## Agency Comments

GAO obtained comments on a draft of this report from representatives of IHS, National Institutes of Health, Substance Abuse and Mental Health Services Administration, and the Office of the Assistant Secretary for Health, Public Health Service. The officials generally agreed with the report's findings and recommendation. In particular, IHS officials said they are developing a national plan to address alcohol and substance abuse related problems and will include coordination between IHS and other agencies to address needed research and evaluation of the problems. Other comments were incorporated where appropriate.

# Contents

<b>Executive Summary</b>		2
<b>Chapter 1</b>		8
<b>Introduction</b>	Characteristics of the Indian Health Service	8
	Disparities Between Areas' Funding Have Caused Concern	14
	Objectives, Scope, and Methodology	16
<b>Chapter 2</b>		20
<b>Area Health Care Delivery Systems Differ</b>	Alaska and Navajo Areas Are More Direct-Care Oriented	20
	California and Portland Areas Made Extensive Use of Contract Care	21
	Aberdeen Area Used Both Direct and Contract Care Extensively	23
<b>Chapter 3</b>		24
<b>Availability of Health Services Was Similar in All Five Areas</b>	Service Availability Generally Followed Same Pattern in All Areas	24
	Service Availability in Areas Using More Contract Care Compares Favorably, but Officials Cite Concerns	29
<b>Chapter 4</b>		33
<b>Greatest Unmet Need Is for Alcohol and Substance Abuse Services</b>	Alcohol and Substance Abuse Is a Major Health Problem	33
	Services Addressing Alcohol and Substance Abuse Are Limited	35
	Efforts Have Been Made to Address Problems	42
	IHS Has Limited Information About Program Effectiveness	43
	Conclusions	44
	Recommendation to the Secretary of Health and Human Services	45
	Agency and Other Comments	45
<b>Appendixes</b>	Appendix I: A Comparison of Health Care Services Available in Five IHS Areas	46
	Appendix II: GAO's Questionnaire	51
	Appendix III: Statistical Data for Figures Presented in Chapters 3 and 4	73
	Appendix IV: Major Contributors to This Report	74
<b>Tables</b>	Table 1.1: Characteristics of the Five Areas Studied	12
	Table 1.2: IHS Per Capita Fund Allocation by Service Area, Fiscal Year 1991	15

Table 2.1: Summary of Differences in Health Care Delivery for Service Areas in Our Study	20
Table 4.1: Availability of Alcohol and Substance Abuse Treatment Services for Adolescents	37
Table 4.2: Availability of Alcohol and Substance Abuse Treatment Services for Adults	39
Table 4.3: Availability of Mental Health Services	41
Table I.1: Population for Whom Treatment Services for Basic Medical and Surgical Care Were Generally Available, Fiscal Year 1991	46
Table I.2: Population for Whom Diagnostic Services Were Generally Available, Fiscal Year 1991	47
Table I.3: Population for Whom Preventive Services Were Generally Available, Fiscal Year 1991	48
Table I.4: Population for Whom Dental Services Were Generally Available, Fiscal Year 1991	50
Table III.1: Data for Figure 3.1	73
Table III.2: Data for Figure 4.2	73

## Figures

Figure 1.1: Indian Health Service Area Offices	10
Figure 3.1: Comparative Availability of Four Categories of Health Care Services in Five IHS Areas, Fiscal Year 1991	25
Figure 4.1: Age-Adjusted Mortality Rates for Selected Causes of Death, 15 to 44 Years Old	34
Figure 4.2: Availability of Alcohol and Substance Abuse Services Compared to Four Other Classes of Medical Services	36

## Abbreviations

ADAMHA	Alcohol, Drug Abuse, and Mental Health Administration
ANMC	Alaska Native Medical Center
CHA	community health aide
CHSDA	contract health service delivery area
HHS	Department of Health and Human Services
IHS	Indian Health Service
NIAAA	National Institute of Alcohol Abuse and Alcoholism
NIDA	National Institute of Drug Abuse
NIH	National Institutes of Health
SAMHSA	Substance Abuse and Mental Health Services Administration

# Introduction

The Indian Health Service (IHS), an agency in the Public Health Service, Department of Health and Human Services (HHS), administers the principal federal health programs for American Indians and Alaska Natives (hereafter referred to collectively as Indians).<sup>1</sup> IHS's mission is to provide a comprehensive health services delivery system for Indians, and its goal is to raise the health status of Indians to the highest possible level. IHS provides health services to Indians through 12 service delivery areas, each covering a different part of the country. These areas are diverse in climate, geography, density of population, culture, standard of living, natural resources, and other factors that influence health status and health care delivery. Many of the communities in the areas are disadvantaged, with income, employment, and education levels that rank at or near the bottom of population groups in the United States. In fiscal year 1991, IHS obligated about \$1.4 billion to provide free health care services to an estimated 1.1 million eligible Indians.<sup>2</sup> A longstanding concern within IHS and among Indian tribes has been that IHS's distribution of these resources has resulted in significant differences among the areas in the availability of health services.

This report responds to congressional inquiries about how IHS's allocation of its resources affects the availability of services in five IHS areas—Aberdeen, Alaska, California, Navajo, and Portland.

## Characteristics of the Indian Health Service

The federal government's involvement in providing health services to Indians dates from the early 1800s, but the current program dates from passage of the Snyder Act in 1921 (25 U.S.C. 13). The Snyder Act was a response to a number of sociological studies showing the poor health status of Indians served by existing federal health care programs. The act established a permanent and fairly open-ended authorization to "expend such moneys as Congress may from time to time appropriate, for the benefit, care, and assistance of the Indians..." Following the act's passage, the federal government began expanding health services to Indians; nevertheless, Indian health continued to lag behind that of the rest of the U.S. population.

<sup>1</sup>Other federal, state, and local public health programs and private providers are also involved in Indian health care, although the extent of that involvement is not precisely known.

<sup>2</sup>During the 1990 census, about 2 million people identified themselves as Indians, but not all of them are eligible for IHS services. Generally, only Indians who are members of federally recognized tribes are eligible for IHS services.

To raise Indians' health status, the Indian Health Care Improvement Act (P.L. 94-437) was passed in 1976. The act's passage was accompanied by a funding increase of about \$95 million and an IHS staff increase of 477 employees by fiscal year 1978. The act has since been amended many times. IHS funding has grown from \$226 million in fiscal year 1975 to about \$1.4 billion in fiscal year 1991, and its staff has grown in the same period from about 8,100 to about 14,000 employees.

In accordance with the Snyder Act and subsequent statutes, IHS has broad discretion to provide Indians with a range of preventive, curative, rehabilitative, and environmental services. Although services generally must be provided efficiently and equitably, neither the agency nor the law establishes any minimum benefit package or guarantees uniform services in all areas of the country.<sup>3</sup> Services may vary from place to place and from time to time based on such factors as resource availability and/or local health concerns.<sup>4</sup>

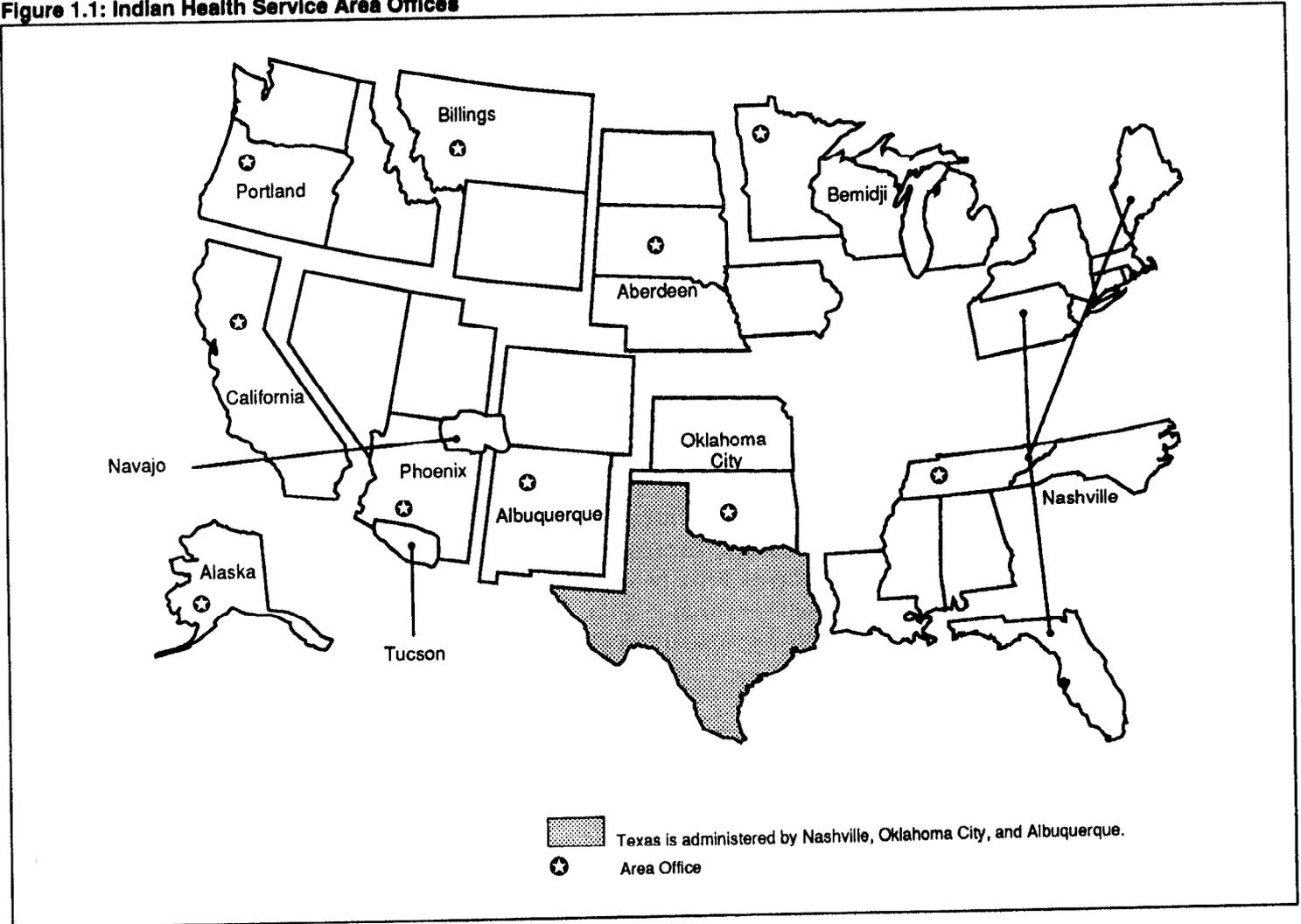
Each of IHS's 12 area offices is responsible for a certain part of the country (see fig. 1.1). Each area is subdivided into service units that manage the delivery of local health services. The number and size of service units varies from area to area. Some service units serve a number of small reservations while others, a portion of one large reservation.

---

<sup>3</sup>In *Morton v. Ruiz*, 415 U.S. 199 (1974), the Supreme Court ruled that the Snyder Act did not provide Indians with statutory entitlement to specific benefits and acknowledged the propriety of IHS establishing reasonable classifications and eligibility requirements in order to allocate limited funds available under the act.

<sup>4</sup>IHS distributes certain funds to areas with specific health resource deficiencies in an effort to reduce disparities among the areas.

Figure 1.1: Indian Health Service Area Offices



---

**Chapter 1**  
**Introduction**

---

The five IHS areas we studied—Aberdeen, Alaska, California, Navajo, and Portland—collectively provided services to about half the total IHS user population and received about half the fiscal year 1991 IHS funds. Table 1.1 presents a brief summary of some of the characteristics of these areas. These characteristics are important to understanding the health needs and problems of each area.

**Table 1.1: Characteristics of the Five Areas Studied**

	<b>Aberdeen</b>	<b>Alaska</b>
User population	101,953	87,307
Service units	14	11
Population range in service units	888-19,078	1,608-24,013
Summary	<p>The Aberdeen area includes members of 10 tribes living in 16 reservations that extend across five states: South Dakota, North Dakota, Nebraska, Iowa, and Minnesota. The majority of the area's Indian population belong to two tribes, the Sioux (65 percent) and the Chippewa (20 percent). Aside from the Rapid City service unit, most Indians in the Aberdeen Area live in rural areas.</p> <p>What distinguishes Aberdeen from the other IHS areas is the comparatively poor health status of its population. Aberdeen's infant mortality rate is the highest of all IHS areas and is almost twice the U.S. all-races rate. The age- adjusted mortality rates for all ages in Aberdeen is more than double the U.S. all-races rate. A large proportion of Aberdeen's service population also lives in poverty. About 43 percent of the population lives below the poverty level (1979).</p>	<p>The Alaska area covers one large state encompassing about one-fifth of the total U.S. land mass. More than half of all Alaska natives are Eskimos, one-fifth are American Indians, and the rest are Athabascan and Aleut. These groups are collectively referred to as Alaska natives but each is culturally distinct. Most Alaska natives live in small, isolated communities or villages ranging in size from less than 100 to almost 3,000.</p> <p>Harsh weather conditions and vast distances without road systems dominate the geography. About 90 percent of the roughly 200 villages in which most Alaska natives live are accessible only by plane, boat, or snowmobile. Air travel frequently is the only means of transportation to a hospital, but such travel is often too expensive for Alaska natives. The vast distances also affect the cost of delivering health care. Budgets can be easily consumed by the costs of chartering flights for both patient and staff travel.</p>

**Chapter 1  
Introduction**

California	Navajo	Portland
53,675	223,943	70,212
22	8	15
250-11,165	13,190-43,992	1,579-10,180

The California area population includes 97 tribal groups most of which are small with fewer than 250 people. These groups are scattered in small groups across the entire state, situated in diverse settings ranging from small rural communities located high in the Sierra Nevada mountains to areas near urban centers, such as Los Angeles.

The area's geography and climate are generally mild and do not significantly impede transportation to access health care services. Most tribal health programs are located within 100 miles of major cities or urban areas where other public and private health care providers offer secondary or tertiary levels of care.

The Navajo tribe is the largest single tribe in the U.S., with a population of about 220,000. The Navajo reservation, which is about the size of West Virginia, extends into Arizona, New Mexico, and Utah and is the largest reservation in the United States. In contrast with other areas, which include many tribes, about 94 percent of the Indians in the Navajo area belong to the Navajo tribe.

Most Navajo Indians do not live in large groups, but are widely dispersed in small towns and rural areas throughout the reservation; the population density of the area is less than seven persons per square mile. Many Navajo Indians live in areas with few paved roads and limited telephone service. Among IHS areas, the Navajo area had the largest average household size (1980) and the lowest median household income (1979). More than 56 percent (1990) of Navajo individuals were living below the poverty level.

The Portland area includes 40 reservations in three states—Idaho, Oregon, and Washington. Many of the tribes are located in relatively rural areas, although some are adjacent to large population centers.

The tribes of the Portland area range from about 80 members to about 8,000 members. Most are relatively small, with about half having fewer than 800 members. The two largest tribes—Yakima (8,077 members) and Colville (7,585 members)—account for about one-fourth of the total population. As in California, the area's geography and climate are generally mild and most service units are located within 100 miles of a major city, enabling convenient access to other public and private health care providers.

**IHS Provides Services Through Direct or Contract Care**

Generally, IHS service units provide health services by means of direct care, contract care, or a combination of the two.<sup>5</sup> Direct care refers to health services provided in IHS-funded facilities, such as hospitals and outpatient clinics, including those operated and administered by tribal groups.<sup>6</sup> Contract care refers to health services that IHS and/or the tribes purchase from private providers when such services are not reasonably accessible or available through an IHS facility. For example, service units

<sup>5</sup>Besides direct-care and/or contract-care services, which primarily serve Indians who live on or near Indian reservations, IHS also partially funds 33 urban Indian health organizations in various cities to serve the medically underserved urban Indian population. The urban projects, not discussed in this report, received about \$16 million in IHS funding in fiscal year 1991.

<sup>6</sup>Under the authority of the Indian Self-Determination and Education Assistance Act (P.L. 93-638), many tribes have contracted with IHS to operate and administer health care programs originally managed by IHS. Passed in 1975, the act provided for maximum tribal participation in programs and services conducted by the federal government for Indians. As of October 1991, tribes operated 8 of 50 IHS-funded hospitals and 331 of 452 IHS-funded outpatient clinics.

often purchase physician specialty services to supplement primary care services available through direct care.

Eligibility requirements are more restrictive for contract care than for direct care. In general, all persons of Indian descent who belong to the Indian community are eligible for direct-care services. To be eligible for contract care, however, an Indian must also (1) reside on a reservation located within a contract health service delivery area (CHSDA) designated as such by IHS; (2) reside within a CHSDA, and either be a member of the tribe or tribes located on that reservation, or maintain close economic and social ties with one such tribe; or (3) be an eligible student, transient, or Indian foster child.<sup>7</sup> In addition, under contract care, services are rationed according to medical priority when funds are insufficient to meet the demand for services.

Individual service units may vary considerably in their means of delivering health care. One service unit, for example, may have an IHS hospital and a number of IHS outpatient clinics and deliver services mostly by direct care. At the same time, another service unit with none or only a few IHS facilities may rely more on contract care. (We discuss the specific differences among five IHS areas in chapter 2.)

---

## Disparities Between Areas' Funding Have Caused Concern

IHS service units receive funding from various sources, but mainly IHS allocations. IHS's allocation of funding to the IHS areas has been uneven over the years, and this has caused considerable controversy. The unevenness among areas can be seen in a comparison of 1991 per capita funding levels (see table 1.2). Per capita funding for the user population<sup>8</sup> ranged from \$727 in the Oklahoma service area to \$2,361 in the Alaska service area.

---

<sup>7</sup>In 1987, IHS issued a regulation attempting to adopt identical eligibility requirements for direct and contract care. Eligibility would have required membership in a tribe and residence within a designated health service area for both direct and contract care. Although included in the Code of Federal Regulations, 42 C.F.R. Part 36, (1992), legislation has to date effectively blocked IHS from implementing the new requirements with the result that the previous requirements, 42 C.F.R. Section 36.23 (1986) are applicable.

<sup>8</sup>IHS generates two sets of population estimates—service population (the number of Indians who are eligible for IHS services and reside in areas served by IHS), and user population (the number of Indians who actually received IHS services during the preceding 3 years). We computed per capita expenditure on the basis of user population, because IHS uses the user population in its needs-based resource allocation formulas.

**Table 1.2: IHS Per Capita Fund Allocation by Service Area, Fiscal Year 1991**

Area	Fund allocation	User population	Per capita funding
Aberdeen	\$ 126,675,140	101,953	\$ 1,242
Alaska	206,153,177	87,307	2,361
Albuquerque	80,320,180	73,338	1,095
Bemidji	67,933,640	56,451	1,203
Billings	79,604,720	58,625	1,358
California	63,231,850	53,675	1,178
Nashville	54,817,270	33,828	1,620
Navajo	173,648,930	223,943	775
Oklahoma	177,276,760	243,715	727
Phoenix	137,325,299	111,994	1,226
Portland	92,240,450	70,212	1,314
Tucson	25,658,730	19,614	1,308
<b>Total and average</b>	<b>1,284,886,146*</b>	<b>1,134,655</b>	<b>1,132</b>

\*Excludes allocations for headquarters and other nonarea related operations.

It is important to note that IHS allocations provide only a partial picture of the total health resources available in each area. IHS service units may be reimbursed by third-party sources, such as Medicaid, Medicare, and private insurers for direct-care services provided to Indians eligible for these sources. These reimbursements are retained by the service units; however, complete data on the amounts collected is not available for tribally operated facilities, according to IHS officials. Also, when services are provided through contract care, these other sources contribute to the health care of eligible Indians by making payments directly to the non-IHS providers. These payments reduce contract-care expenditures, but to what extent is not precisely known.

IHS allocations are based primarily on the level of funding each area received in previous years,<sup>9</sup> with the largest portion of the budget dedicated to clinical services delivered in IHS hospitals and ambulatory clinics. For this reason, IHS's historical resource allocations have closely followed the distribution of direct-care facilities.

IHS's methods of allocating resources among its area offices, service units, and tribes were the target of legal challenges in the late 1970s. A band of

<sup>9</sup>Under this allocation method, each IHS area's base budget is equivalent to the previous year's base budget plus a share of IHS annual funding increases in built-in mandatory cost categories, such as staff cost of living, and other inflationary expenses.

California Indians in the 1980 case of Rincon Band of Mission Indians v. Califano made one such challenge. IHS benefits to Indians in California were eliminated from 1953 through 1969, when the state of California assumed jurisdictional responsibility for California Indians, which was previously held by the federal government.<sup>10</sup> However, in the ensuing years, state health services for Indians did not materialize. By the late 1960s, the California State Department of Public Health recognized that the health of California Indians had deteriorated from 1955 through 1969, and began to appeal for restoration of federal services to all California Indians. In 1970, IHS services were formally restored, but a major funding increase for the California area did not occur until 1978, after the passage of the Indian Health Care Improvement Act. The outcome of Rincon Band of Mission Indians v. Califano was a court order directing IHS to take steps to reduce disparities in area funding. IHS funding for the California area has steadily increased since 1978 from about \$8.3 million in 1978 to \$63 million in 1991.

Since 1980, IHS has attempted to redistribute a portion of its funding by formulas that incorporate measures of service needs, but tribes affected adversely by the proposed changes have voiced strong objections. In 1988, the Congress amended the Indian Health Care Improvement Act to prohibit IHS from reducing funding for any IHS service unit's program, project, or activity by 5 percent or more without prior submission of a report to the Congress (25 U.S.C. 1680g).

Determining what, if any, changes in funding should be made in IHS programs has posed analytical problems for IHS. Equal funding would not necessarily result in equal access to care because the areas differ in many aspects that affect health care costs. For example, Indians in some areas have more alternate resources—that is, other federal, state, or local programs that increase the overall resources available to Indians. Populations in some areas have poorer health status compared with others', thus requiring special attention. Also, populations in some areas may have to cope with special climatic or geographic conditions that dramatically raise health care costs. Unfortunately, data are limited about many of the variables that affect the cost of health care services.

---

## Objectives, Scope, and Methodology

Continued concerns about the effect of IHS's uneven funding distribution on availability of health services prompted the Congressional request for

---

<sup>10</sup>California Indians were severed from the IHS program at the request of the state of California and received no further federal health services funds until 1967 when California and the Public Health Service funded an outreach program for rural Indians.

this report. In May 1991, three Congressional committees—the Senate Committee on Indian Affairs; the House Committee on Natural Resources; and the Subcommittee on Health and the Environment, House Committee on Energy and Commerce—asked us to do a comprehensive study of IHS activities in five IHS Areas—Aberdeen, Alaska, California, Navajo, and Portland.

On the basis of discussions with the Committees, we focused our study on the following three questions:

- How do the areas differ in the way they are structured to deliver health care, particularly in the use of direct and contract care?
- To what extent are basic health care services available, particularly in regard to the availability of services under contract care?
- Are there major health care needs that warrant additional attention?

It is important to note that we did not compare the costs of providing specific health care services through direct or contract care. We also did not study the quality of health care services provided through these systems. These matters were outside the scope of our study.

Because IHS has no data on what health services are available at each location, we developed a questionnaire to gather information on the availability of 58 specific health services ranging from services for obstetrics/gynecology care to alcohol abuse and mental health related services. In developing the list of services, we consulted IHS medical staff to select the health/disease groups and health services important to the Indian population. We solicited input from about 20 IHS experts, including program managers and clinical directors in headquarters and area offices. In addition, we sought views of others outside the IHS systems. We interviewed the immediate past president of the Association of American Indian Physicians and the officials of the Indian Health Boards in each of the five areas. We pretested the questionnaire at five service units and modified it as necessary. A copy of the questionnaire, which shows the 58 services covered, is in appendix II.

The questionnaire, which we sent to all 70 service units in the five areas, asked the service unit director or the clinical staff to report (1) whether each service was available through direct care, contract care, or other public/private providers paid for by such alternate sources as Medicare or Medicaid and (2) what proportion of the service unit's user population seeking the service during fiscal year 1991 was able to receive it. The

questionnaire also included other questions about health care financing, access to health care, and health care needs. We received a 100-percent response rate in all areas except California, where 77 percent of the service units responded.<sup>11</sup>

For analytic purposes, we grouped the 58 health services into five categories—treatment, diagnostic, preventive, dental, and alcohol/substance abuse and mental health services—and developed service availability measures by categories of services. We consulted an IHS medical epidemiologist in developing this set of classifications. Appendix III contains the detailed statistical data that formed the basis for the figures presented in chapters 3 and 4.

Several limitations should be noted in our study approach. First, although our questionnaire included many clinical services essential to the health care of the Indian population, it did not include all services available or needed in each location. The survey results thus do not provide a complete measure of the adequacy of health services in each area. Second, the survey data are based on self-reported numbers. While we did not verify the accuracy of such reporting, we conducted follow-up phone interviews with every respondent to resolve inconsistencies and to gain a better understanding of the conditions in each service location. Third, because our survey covered only five IHS areas, the data from our survey cannot be generalized to the entire IHS service population.

In addition to the mail survey, we also conducted site visits at IHS headquarters, the five area offices, and a selected number of service units in each area. We used the site visits to help us better understand the variations in each area's operation and to obtain available documentation on health care needs. Also, to gain insight on health care concerns from the tribal perspective, we visited the officials and tribal leaders of Indian Health Boards in each of the five areas we studied.

To provide a better understanding of the health care problems and needs, chapter 2 compares the means by which the IHS areas deliver health services. This should serve as a frame of reference for our observations about the availability of health services and the health care needs in each area, which are discussed in chapters 3 and 4, respectively.

---

<sup>11</sup>All service units in California are operated by tribes. Five of the service units (tribal programs) in California did not participate in our survey. They cited unavailability of data, lack of time to complete the questionnaire, and concerns about the purpose of the study as reasons for nonparticipation.

---

**We conducted our field work between September 1991 and July 1992, in accordance with generally accepted auditing standards.**

# Area Health Care Delivery Systems Differ

The five service areas we studied—Aberdeen, Alaska, California, Navajo, and Portland—differed significantly in the way they were structured to deliver health care. Generally, the Alaska and Navajo areas were more direct-care oriented, California and Portland areas were more contract-care oriented, and the Aberdeen area was somewhat in the middle. Table 2.1 summarizes the differences as they relate to the availability of IHS direct-care facilities and staff, while the sections that follow discuss the areas' health care delivery systems in more detail.

**Table 2.1: Summary of Differences in Health Care Delivery for Service Areas in Our Study**

	Service delivery system		
	Direct-care oriented	Contract-care oriented	Combination of direct and contract care
Service area	Alaska and Navajo	California and Portland	Aberdeen
Type and nature of direct-care facilities	Large IHS medical centers plus a network of IHS field hospitals and outpatient clinics.	No IHS hospitals; direct-care facilities are limited to some outpatient clinics.	Small IHS field hospitals plus a number of outpatient clinics.
Type and nature of direct-care staff	IHS facilities employed large numbers of specialist physicians, including general/family practitioners, pediatricians, obstetricians, psychiatrists, surgeons, and others.	IHS facilities employed mainly general/family practitioners; purchased inpatient and specialty care from non-IHS providers.	IHS facilities employed mainly general/family practitioners plus a few specialists; purchased some inpatient and specialty care from non-IHS providers.

## Alaska and Navajo Areas Are More Direct-Care Oriented

The Alaska area delivered most of its health care services by direct care through a three-tiered system. The first level of care—including routine health maintenance, the treatment of common or minor illnesses, and emergency first aid—was most often provided through community health aides in 171 village clinics throughout the state. The community health aide, a type of health care worker unique to the Alaska area, was usually a selected resident of the village who delivered routine health services under the long-distance supervision of a physician.<sup>1</sup> The second level of care—including routine hospital admissions for common illness or injuries

<sup>1</sup>The community health aide (CHA) (usually a female resident), receives about 10 weeks of health training by the Indian Health Service, keeps routine hours at the village clinic, and is on call at other times during the day and night. She gives first aid in emergencies and treats ill patients according to instructions she receives over the telephone from a physician.

and care for minor surgical conditions and normal pregnancy—was generally provided at regional hospitals. The third level of care—treatment for serious or life-threatening illnesses and injuries and high-risk pregnancy<sup>2</sup> generally provided by referral to the Alaska Native Medical Center in Anchorage, Alaska. The medical center, with 138 beds and about 60 physicians in various specialties, had the capacity to provide a wide range of specialty services, including those involving major surgery or complex diagnostic procedures. It is the only IHS facility in Alaska with a critical care unit. Through special arrangements with individual service units, the center sent medical specialists to some regional hospitals and to Anchorage service unit village clinics to provide specialty outpatient care. The center was the clinical focal point for the Alaska area health care delivery system and served as the area's referral, training, and research facility.

The Navajo area's health care delivery system was direct-care oriented but differed from the Alaska area's system in other respects. With a large Indian population, the Navajo area was divided into eight service units with each unit serving a user population of between 13,000 and 43,000 people. Except for two smaller service units, each service unit in the Navajo area had an IHS hospital plus at least one outpatient clinic staffed by physicians to deliver a wide range of inpatient and outpatient care. The largest hospital, Gallup Medical Center, had 107 beds and was authorized to have about 75 physicians in a wide range of medical specialties. Like the ANMC, this medical center also served as the primary referral facility for the Navajo area. The two service units with no IHS hospital used hospitals in neighboring service units for inpatient care. One of these units also contracted for inpatient services with a nearby non-Indian community hospital.

## California and Portland Areas Made Extensive Use of Contract Care

The California and Portland areas usually delivered inpatient and specialty medical services through contract care. Neither area had IHS hospitals, and their direct-care facilities were limited to outpatient clinics. The health services that these areas provided through direct care were limited largely to primary ambulatory services, such as routine health maintenance, the treatment of common or minor illnesses, and primary dental care. Patients needing inpatient care usually received it at nearby community or private hospitals. Many service units in these areas were within 100 miles of a

<sup>2</sup>All women with a high-risk pregnancy are brought to Anchorage from villages throughout the state at 36 weeks of pregnancy to receive care from obstetrical physicians prior to delivery. They are housed in a prematernal home next to the Alaska Native Medical Center (ANMC) until the birth of their baby, according to an ANMC physician.

major city, which enabled the user population to go to private providers for secondary and tertiary levels of medical care.

Almost all physicians employed in the California and Portland areas were general or family practitioners rather than specialists. Generally, patients requiring more specialized treatment were referred to private physicians or facilities.<sup>3</sup> For patients eligible for contract care, service units paid costs of inpatient care and specialty ambulatory services provided by private providers. If the patients were also eligible for other sources of health care coverage, such as Medicare, Medicaid, or private insurance, the service units required private providers to seek payments from those sources first and bill IHS only for the portion that was not otherwise covered. According to IHS officials, many Indians in the Portland and California areas were eligible for other financial resources, such as Medicaid (MediCal in California), for much of their health care needs. However, the extent of their use of these resources was not precisely known.

We found significant differences in the capabilities of the California and Portland outpatient clinics. The Portland area facilities provided more support services than those in the California area. For instance, 13 of the 15 Portland area service units had health centers staffed with full-time physicians, and 11 service units had both on-site pharmacies and laboratories, while only 15 of the California area's 25 health centers had full-time physicians, and most had no pharmacy or laboratory. Generally, however, most California area health centers had at least one full-time primary care provider (physician, physician assistant, or nurse practitioner) and had dentists, public health nurses, community health representatives, and alcohol/substance abuse counselors available to provide a variety of services.<sup>4</sup>

Health services provided to California Indians through direct care are not as extensive as those provided in the other areas we reviewed. Unlike other areas, California's health clinics were established by California Indian tribes. In fact, most tribal populations in California are too small to operate full-fledged health care facilities themselves, so neighboring tribes jointly provide health care services for their people. As stated in chapter 1,

---

<sup>3</sup>We did not determine the number of non-IHS physicians serving each IHS area. Questions about the comparative availability of health services among the areas are addressed in chapter 3.

<sup>4</sup>The two areas also had health stations, which are facilities where ambulatory services are available on a regularly scheduled basis but for fewer than 40 hours per week. The Portland area had 18 health stations, while the California area had 23.

---

the California area health care was significantly affected by the state's actions in the 1950s to terminate the federal government's authority over the California Indian tribes. Because the tribes, not IHS, established the outpatient facilities in California, the facilities were not designed, built, or staffed in accordance with IHS health facility planning criteria.

---

### **Aberdeen Area Used Both Direct and Contract Care Extensively**

The Aberdeen area provided a substantial portion of its health services through direct care but also relied on contract care for many essential services. While all 14 service units in the Aberdeen Area had outpatient facilities, only 9 had hospitals. Most of the hospitals were small (fewer than 50 beds) and could provide only limited services directly. For example, the hospitals generally could provide inpatient acute care for low-risk patients; however, patients with high-risk conditions were usually transferred to a private facility until their condition improved sufficiently for them to return to the IHS hospital for recuperation. Only three hospitals were equipped to conduct surgery, and only one of the hospitals provided intensive care. Labor and delivery services were generally limited to normal deliveries in most hospitals; however, some hospitals could not even provide such services.

Although the Aberdeen area service units employed some physician specialists, the number was limited. Most specialty services, including surgical procedures, were purchased through contract care.

# Availability of Health Services Was Similar in All Five Areas

Although the five areas differed in their means of delivering health care and in many other ways, the areas reported generally similar levels of availability for the categories of health services that we analyzed. In all five areas, with few exceptions, respondents indicated that patients seeking treatment and diagnostic services for basic medical and surgical care were able to receive them. Preventive services and dental care, however, were comparatively less available.

During our study, many service unit officials expressed concerns that certain aspects of contract care had limited the availability of some nonemergency services. While the use of contract care may limit the availability of some services in areas using more contract care, other conditions, such as geographic isolation, may limit the availability of services in areas using more direct care. Overall, areas using more contract care reported comparatively similar levels of available services.

## Service Availability Generally Followed Same Pattern in All Areas

To measure the availability of services, we asked service unit officials to report the proportion of their user population that received the health care services they sought during fiscal year 1991, regardless of who provided or funded the care. If a service unit reported that more than 90 percent of those seeking a service received it, we deemed that service to be “generally available” in that service unit.<sup>1</sup> Figure 3.1 shows the proportion of each area’s population for whom the four basic categories of health care—treatment, diagnostics, preventive, and dental services—were generally available.<sup>2</sup> We found that:

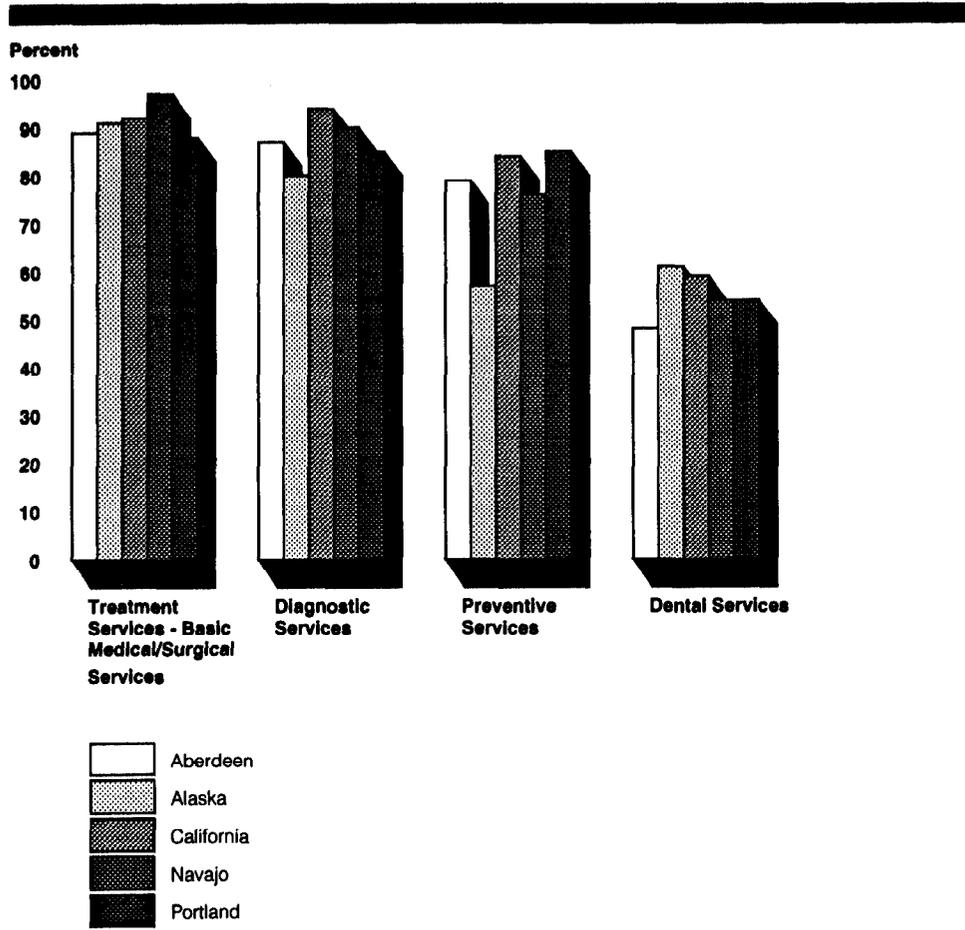
- Service availability was generally highest for treatment services, followed in order by diagnostic services, preventive services, and dental services.
- Within specific service categories, the level of service availability was generally similar across all five areas, with some exceptions.

<sup>1</sup>The more-than-90-percent level of availability was the highest of the response categories in our survey.

<sup>2</sup>Each of the five categories of health care is comprised of several individual services. We measured service availability for each category of care by averaging the availability of all services included in that category. To measure the availability of an individual service we (1) counted the number of service units in each area that reported the service was available at the more-than-90-percent level, and then (2) computed the proportion of each area’s population served by these units. We then averaged the results for each category of care, giving equal weight to all services included in the category.

**Chapter 3**  
**Availability of Health Services Was Similar**  
**in All Five Areas**

**Figure 3.1: Comparative Availability of Four Categories of Health Care Services in Five IHS Areas, Fiscal Year 1991**



The percentage is an average score for multiple services included in our survey. It represents the percentage of Indians in each area for whom services, in the aggregate, are available at the more-than-90-percent level.

Each category of services represented in figure 3.1 is comprised of many specific services. The services in each category are shown below.<sup>3</sup>

<sup>3</sup>According to an IHS epidemiologist we consulted, there is no standard way of classifying health services. He said, for example, some aspects of prenatal care services are treatment related and others are preventive. We decided to classify prenatal care under treatment services because prenatal visits are widely considered to be part of basic medical care.

---

**Treatment Services for  
Basic Medical and Surgical  
Care**

- Routine prenatal care
- Prenatal care for complicated delivery
- Care for uncomplicated delivery
- Care for complicated delivery
- Emergency cesarean
- Other cesarean
- Level I neonatal care
- Inpatient pediatric care
- Therapy for cervical cancer
- Outpatient care acute/chronic
- Intensive care unit
- Inpatient acute care
- Therapeutic radiology
- Nonemergency surgery

---

**Diagnostic Services**

- Diagnostic ultrasound
- Colposcopy
- Biopsy for breast cancer
- Flexible sigmoidoscopy
- Biopsy-colorectal cancer
- Biopsy-prostate cancer
- Diagnostic mammography
- Diagnostic radiology
- Diagnostic laboratory
- Diagnostic pathology

---

**Preventive Services**

- Screening ultrasound
- Family planning
- Tubal ligation
- Well-baby care
- Well-child care
- Ophthalmologic exam
- Podiatric exam
- Nutrition counseling
- Diabetes education
- PAP smear
- Screening mammography
- Preventive primary care for adults

---

**Dental Services**

- Prophylactic-children
- Prophylactic-adults
- Other dental-children
- Other dental-adults

The results shown in figure 3.1 provide general comparisons of broad categories of services, but this generality masks differences in the degree to which specific medical services were available. Appendix I discusses the categories of services in more detail, showing the degree to which each of the services was available in each of the areas. In brief, the results of our survey can be summarized as follows:

- Treatment services. The majority of treatment services we surveyed were generally available for at least 90 percent of the population, in almost all areas. A major exception was nonemergency surgery (such as an elective hysterectomy), which was generally available to less than 60 percent of the population in all areas except Navajo.
- Diagnostic services. Services in this category were generally available to most people in the five areas, but overall, were less available than treatment services. Most diagnostic services were generally available to 80 percent or more of the population, in almost all areas. The exceptions were flexible sigmoidoscopy (a procedure used to detect colon cancer) and diagnostic radiology and pathology services.
- Preventive services. Overall, the preventive services we surveyed were less available than treatment and diagnostic services—a point we discuss in more detail below. While the availability of specific services varied somewhat from area to area, the availability of preventive services was generally lowest in Alaska. The results for Alaska appear in part to reflect the problems of having to travel great distances from isolated villages to a physician-staffed health facility for services.
- Dental services. Dental services were generally the least available of the four categories of services discussed in this chapter. In each of the five service areas, respondents indicated that prophylactic and other dental services for both children and adults were not generally available for large portions of the population. Dental services were generally more available for children than for adults. The Aberdeen area reported a particularly low level of availability in dental services. Aberdeen Area officials said that low staffing levels, high disease rates, and an increased workload have contributed to a backlog of untreated dental cases in their area.

As part of our survey, we also asked service units to compare the comprehensiveness and quality of care for Indians with that for

non-Indians living in the same area. Two-thirds or more of the respondents in each of the five areas reported that health services for Indians were at least as comprehensive as services for non-Indians in the surrounding area. Nearly all respondents in the five areas said that health services for Indians were the same or better in quality.<sup>4</sup>

---

**Preventive Services Less Available and Sometimes Not Utilized**

Although preventive care has been a primary focus of IHS's comprehensive health strategy, our survey results indicated that the availability of preventive services trailed that of treatment and diagnostic services. About 60 percent of the responding service units in the five areas indicated that their adult patients received less routine preventive outpatient care than they needed. For example, although non-insulin dependent diabetes has been recognized as a major health problem for Indian people, diabetes services were lacking in many service units. Four or more service units each in the Aberdeen, Alaska, and Portland areas reported that podiatric exams were not generally available to those seeking care, despite IHS's recommendation that diabetics receive foot exams once every year to monitor vascular problems. Cancer screening services were another problem. While overall cancer rates are lower among Indian populations compared with the general U.S. population, studies have shown that Indians are more often diagnosed with cancer in its later stages. Our survey results were consistent with these studies in showing that screening mammography, for example, was not generally available for large proportions of the population in most of the five areas.

We also found some indications that certain preventive services were underutilized even though they were reported to be generally available. Specifically:

- **PAP smears.** While most service units in all areas reported PAP smears to be generally available, the estimated percentage of women 50 years and older who had a PAP smear in 1991 ranged from 22 percent in Navajo to 54 percent in California.<sup>5</sup> This is an area of concern since a 1990 study showed that the rate of cervical cancer among Indian women was more than twice that for non-Indians.

---

<sup>4</sup>A 1987 study conducted by the Agency for Health Care Policy Research, HHS, found that more than 90 percent of the Indians in the study, compared with 82 percent of the general population, were able to identify a usual source of care. Ability to identify a usual source of care is generally accepted as an important predictor of actual health care use and a factor leading to better continuity of care. The percentage for Indians was considerably higher than the percentage for blacks or Hispanics in the study.

<sup>5</sup>The American Cancer Society recommends that all women who have been sexually active or have reached age 18 have a pap smear each year.

- **Prenatal care.** <sup>6</sup> While most service units reported prenatal care to be generally available, the percentage of women who had at least nine prenatal visits during their pregnancies ranged from a low of 44 percent in the Navajo area to a high of 63 percent in the Alaska area. According to the National Center for Health Statistics, in 1989 about 74 percent of pregnant women nationwide stated they had at least nine prenatal care visits. Low utilization rates may be a reason why prenatal care services were identified by the Aberdeen and Portland areas as one of their top five unmet needs. <sup>7</sup>

Low utilization of prenatal care may reflect the fact that teenage pregnancy rates are relatively high among the Indian population and that pregnant adolescents tend to delay prenatal care. Service unit officials also cited lack of ready transportation to distant clinical facilities and cultural attitudes as reasons for the low rate of preventive care use. In addition, many service units said that they had a great need for more health education programs. Many service unit officials said that their health educational outreach programs were underfunded, and some said that they lacked space and staff to provide such programs. Overall, 40 percent of the service units across the five areas identified health education as one of their top five unmet needs. <sup>8</sup>

## **Service Availability in Areas Using More Contract Care Compares Favorably, but Officials Cite Concerns**

Our survey found no consistent patterns to suggest that the availability of health services was lower in the areas using more contract care. However, many area and service unit officials expressed concerns that problems with contract care lessened the availability of some nonemergency services. In assessing our results, it is important to note that the use of contract care (or direct care) is only one of many factors influencing service availability. At work in each of the areas are other factors, some which can make obtaining services more difficult and some which can enhance the availability of services. The use of contract care, geographic isolation of the user population, and the existence of other health

<sup>6</sup>Although we classified prenatal care under treatment services in developing our overall measure of service availability, we also discuss prenatal care here because many also regard it as preventive care.

<sup>7</sup>We determined the top five unmet needs in each area based on the frequency and order in which service units ranked their top five unmet needs from a list of 25 selected services included as part of the survey. In the Portland area, prenatal care for complicated pregnancies and routine prenatal care were identified as the fourth and fifth greatest unmet needs respectively. In the Aberdeen area, routine prenatal care was identified as the fourth greatest unmet need.

<sup>8</sup>Our survey results showed health education as the fifth greatest unmet need among the five areas. The top four greatest unmet needs were all alcohol abuse or mental health related services, which we will discuss in chapter 4.

programs like Medicaid all affect service availability. While limited data did not allow us to measure the individual impact of these factors, we found that the combined effect of these and all the other factors resulted in similar overall levels of service availability among the five areas we studied.

---

**Officials' Concern About**  
**Contract Care**

Problems with contract care frequently cited by area and service unit officials as limiting access to care were:

- **Limitations in contract-care funding.** Officials from several service units said that limited contract-care funds affect their ability to provide services other than that classified as emergent or acutely urgent. This is because contract-care services are rationed according to medical priorities when funding is insufficient to meet demand.<sup>9</sup> For example, many Indian children suffer from a condition known as otitis media and may need surgery to halt the chronic ear infections that result from the condition. Although such surgery is medically recommended to relieve discomfort, officials in the Aberdeen Area said that because contract-care funds are limited, this ear surgery, which costs about \$400-\$500, is generally not provided unless hearing loss is evident. This is of concern because otitis media occurs most often in younger children (birth to 7 years), and evidence has shown that hearing loss can lead to a delay in speech development and lowered educational achievement. An area official told us that once hearing loss develops, the case is considered an emergency and the procedure to restore hearing is provided. Officials also said that the fixed budget for contract care caused instability in providing services. For example, a service that might be covered at the start of the year when funds are more available might not be covered later, or a serious case might deplete a service unit's contract-care budget and so limit the provision of other services.
- **Procedural burdens in obtaining services.** While the use of alternate payment sources, such as Medicaid, can help service units stretch their contract-care funds, the requirement that these sources be used first can sometimes pose access problems. Because IHS has residual payer status (responsible only for charges not covered by third-party payers), patients must apply for alternate sources of funding, such as Medicaid, when they

---

<sup>9</sup>Each year, IHS provides a fixed amount to service units to provide contract health services. To operate within these budgets, service units generally manage care according to an IHS medical needs priority system. Under this system, needs are ranked as follows: (1) emergent/acutely urgent care services, (2) preventive care services, (3) primary and secondary care services, (4) chronic tertiary and extended care services and (5) excluded services (experimental/not medically necessary care.) Decisions to authorize individual requests for contract care are made on a case-by-case basis based on the priority guidelines and available funding.

seek contract care.<sup>10</sup> Although they maintained no data on the extent of the problem, service unit and tribal officials said that the procedures for enrolling in Medicaid can be burdensome and finding physicians willing to see Medicaid patients can pose access difficulties. A service unit official in California told us that women in one rural county had to drive 45 miles to see an obstetrician who would accept Medicaid patients. Similarly, another California service unit official said that they had difficulties obtaining orthopedic care for their patients since none of the providers in the nearby community would see patients on Medicaid.

- **Restrictive eligibility criteria.** Some service units also reported that a relatively large proportion of their user populations did not meet IHS eligibility criteria for contract care.<sup>11</sup> For example, about two-thirds or more of the responding service units in the California and Portland areas reported that 25 percent or more of their user population was not eligible for contract care. Area office and service unit officials said that people not eligible for contract care try to find other resources (such as Medicaid) to pay for the services but sometimes must pay for it themselves. Officials said that they do not maintain records on the frequency of out-of-pocket payments or cases of patients not receiving care for lack of funds.

---

### **Service Availability Is Also Affected by Other Factors**

Besides contract care, many other factors can affect the availability of services in an area. The effect of these other factors could offset the advantages, if any, an area has from providing more services through direct care. One such factor is the geographic isolation of an area's user population. For example, the Alaska area has a comprehensive direct-care system but is greatly impacted by the barriers of geography and distance. Our survey results showed that almost half of all Alaska natives would have to travel by air to see a physician because of the great distances involved and the lack of roadways. According to area officials, coverage of patient travel costs depends on available funding. Sometimes service units are only able to provide for patient travel one-way from the regional hospital to the Alaska Native Medical Center in Anchorage, so patients must cover their own transportation costs for the trip home following

---

<sup>10</sup>IHS will provide direct-care services to a patient regardless of the patient's eligibility for alternative payment sources and then will seek reimbursement from these sources as appropriate. In contrast, IHS will not authorize contract care until a patient has first applied for all alternative resources for which he might be eligible. If the patient is eligible for alternative payment sources, the non-IHS provider seeks reimbursement from these sources directly.

<sup>11</sup>As discussed in chapter 1, eligibility requirements for contract care are more restrictive than for direct care. To use contract health services, an individual must be eligible for direct care and (1) must reside on a reservation located within a contract health service delivery area as designated by IHS; (2) reside within such an area and be a member of or maintain close social or economic ties with the tribe located on that reservation; or (3) be an eligible student, transient, or Indian foster child.

---

**Chapter 3**  
**Availability of Health Services Was Similar**  
**in All Five Areas**

---

treatment.<sup>12</sup> They said throughout the area, travel costs are generally covered only in cases of medical emergency. All 11 service units in Alaska reported that transportation services for nonemergency care were not sufficient to meet the needs of their user populations; 5 said this was their greatest unmet need.

A second factor affecting service availability is the existence of alternate resources, such as Medicaid. A useful illustration of this point is provided by our findings about the California area, where nearly all inpatient services are provided through contract care yet only about one-fourth of its fiscal year 1991 contract-care budget was spent on inpatient care services. California officials told us that they depend on other federal, state, and local payment sources, such as the state's Medicaid, to pay for much of the area's inpatient care needs. They said that most of their contract-care budget is used for purchasing ancillary services, such as prescription drugs and laboratory and radiology services. While state programs like Medicaid can impact the availability of services in an area, the limitations of data prevented our documenting with precision the extent to which they affected the overall availability of services in each area.<sup>13</sup>

Our survey also included questions on the availability of alcohol/substance abuse and mental health services. This category included services that were generally identified by IHS officials as being the most needed in the IHS areas. Our discussion of the availability of, and need for, these services is presented in chapter 4.

---

<sup>12</sup>According to a recent study conducted by the Alaska Native Health Board, round-trip airfares between regional hospitals and the Alaska Native Medical Center in Anchorage ranged from \$170 to \$800. The study also found that in fiscal year 1989 about 50 percent of surveyed patients paid for part or all of their medical travel and about 40 percent deferred medical care at least once during the year.

<sup>13</sup>While it appears that alternative resources, such as state Medicaid programs, can enhance the availability of services in an area, officials also pointed out that their dependence on these resources makes them more vulnerable to funding reductions in these programs. For example, an Indian health board official in California said that tribal groups are concerned that recent budget cuts in California's Medicaid and other health programs may result in reduced access to services for Indians in that state.

# Greatest Unmet Need Is for Alcohol and Substance Abuse Services

Alcohol and substance abuse is a leading cause of death among Indian people and one of the major contributors to the need for hospital and other clinical services. IHS officials in the five areas we surveyed generally regarded alcohol and substance abuse services (and related mental health services) as the greatest unmet health care need for Indian people.<sup>1</sup> Our survey results confirmed that, relative to treatment, diagnostic, and other types of clinical services, alcohol and substance abuse related services are substantially less available in most locations.

The gap between the demand for and the availability of alcohol and substance abuse related services persists despite considerable efforts to close it. Federal funding for IHS alcohol and substance abuse treatment and prevention services more than tripled during fiscal years 1985-92. Tribal leaders have also tried supplementing treatment services with prevention efforts, such as promoting self-esteem and developing drug-free recreational activities for youth. While the continuing gap points to the need for more extensive services, there is no comprehensive data on the relative rate of alcohol and substance abuse among Indians or the relative success of various prevention and treatment strategies. We believe that IHS needs this data to provide the most effective services and to maximize its limited resources.

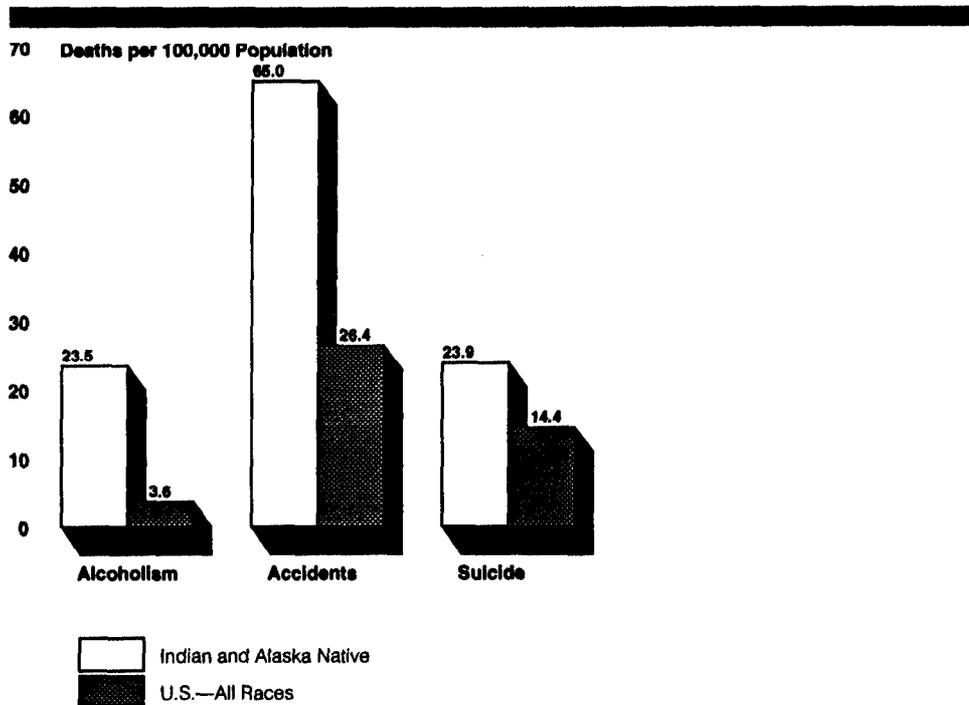
## Alcohol and Substance Abuse Is a Major Health Problem

The devastating effects of alcohol and substance abuse among Indians are well documented. Alcohol and substance abuse, according to IHS data, is the primary cause for shortening the lives of young adult and adult Indians. The alcoholism mortality rate for Indians aged 15 to 44 is about 6.5 times the rate for all races in the United States (see fig. 4.1).<sup>2</sup> For other causes of death often linked with alcohol and substance abuse, such as accidents and suicide, mortality rates for Indians are also higher. IHS estimates that 75 percent of accidents and 80 percent of suicide deaths among young Indians (age 15-24) are related to alcohol abuse.

<sup>1</sup>Our survey included mental health services as part of alcohol and substance abuse related services because IHS studies have shown that most Indian people who suffer from alcohol and substance abuse illness also have needs for mental health services.

<sup>2</sup>Alcoholism mortality includes deaths due to alcohol dependence syndrome, alcoholic psychoses, and chronic liver disease and cirrhosis specified as alcoholic.

Figure 4.1: Age-Adjusted Mortality Rates for Selected Causes of Death, 15 to 44 Years Old



Health problems that result from alcohol and substance abuse place a heavy demand on IHS's medical resources. In May 1992, IHS conducted a 1-day survey of 49 IHS and tribe-operated hospitals to determine what proportion of inpatients' admissions were alcohol related.<sup>3</sup> The survey found that about 21 percent of all adults in the hospitals on that day were admitted for alcohol-related reasons. The figure was almost 35 percent for adult males, 12 percent for adult females (including obstetrical cases), and 3 percent for pediatric cases.

During our survey follow-up interviews, service unit officials also provided specific examples of the extent to which alcohol and substance abuse affects their hospital and clinical services. For example:

- One service unit director in the Alaska area said that if his service population did not have such severe alcohol and substance abuse problems, he could close half his hospital beds.

<sup>3</sup>All IHS areas except California and Portland, which have no IHS hospitals, were represented in this survey. Alcohol-related hospitalizations included people whose reason for admission was related to alcohol use, even if the patient was not the individual using alcohol.

- 
- An Aberdeen area service unit official estimated that at least 60 percent of his service unit's contract health funds were spent for diseases and injuries directly caused by alcohol and substance abuse.

Alcohol and substance abuse also increases demands on IHS medical resources by exacerbating other diseases, such as diabetes and heart disease. For example, the physician in charge of IHS's diabetes program said that alcohol has negative effects on Indians with diabetes. Alcohol abuse makes it more difficult to control diabetes and to prevent disease complications. For example, she said that alcohol aggravates neuropathy (an irreversible disease of the nerves), which can lead to foot and leg ulcers that predispose people with diabetes to amputations. She estimated that in some service units, half the Indians with diabetes also abuse alcohol.

---

## **Services Addressing Alcohol and Substance Abuse Are Limited**

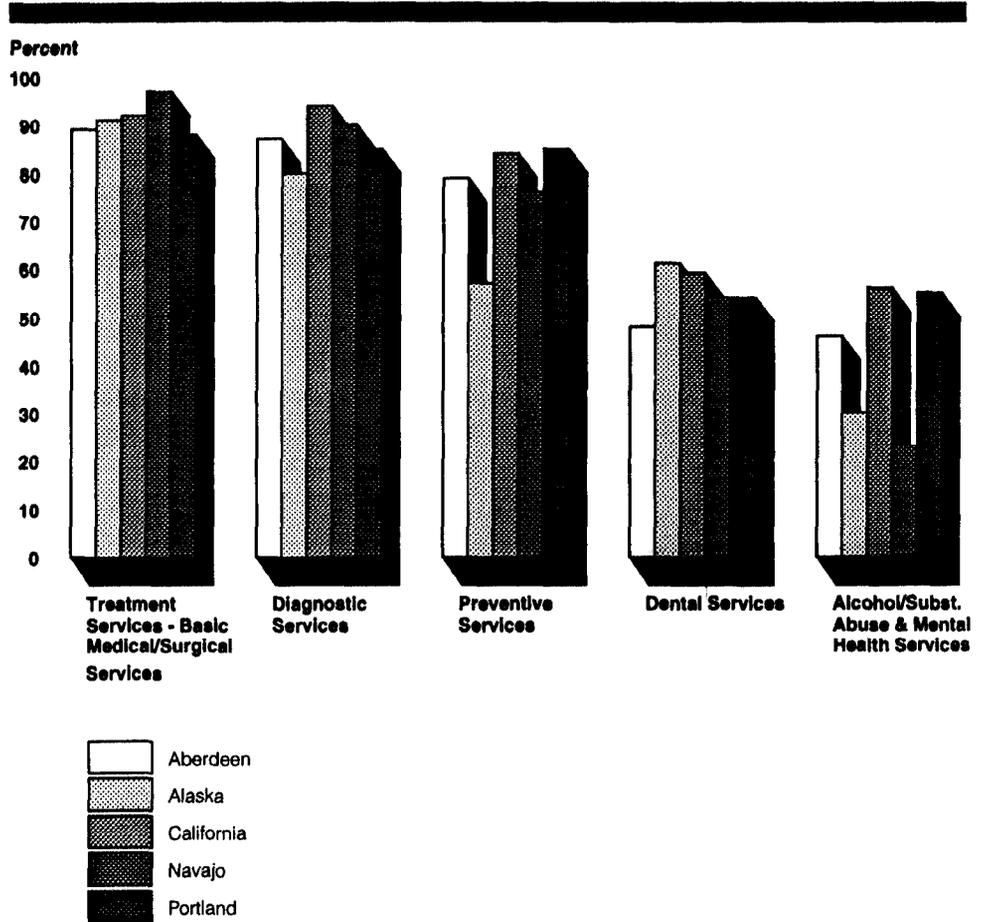
In the five IHS areas we surveyed, most officials cited alcohol and substance abuse treatment services as their greatest unmet need. We asked service unit officials in these areas to identify their top five unmet needs from a list of 25 services ranging from inpatient and emergency services to counseling and health education programs. Among the five areas, the services most frequently cited included adolescent and adult residential alcohol treatment (nonmedical live-in alcohol/substance abuse rehabilitation), outpatient alcohol/substance abuse counseling, inpatient psychiatric care, and outpatient mental health counseling.

In their more specific responses to service-by-service availability, many service unit officials indicated that alcohol and substance abuse related services were below what was needed to meet demand. Relative to the clinical services discussed in chapter 3, they generally rated services for alcohol and substance abuse as the least available category (see fig. 4.2).<sup>4</sup>

---

<sup>4</sup>Our list of services related to alcohol and substance abuse includes four mental health services—inpatient psychiatric care, outpatient suicide prevention counseling, evaluation of and therapy for abused children, and outpatient mental health counseling. These mental health services are also used by patients who do not abuse alcohol or other substances. However, we elected to include them as alcohol and substance related services because IHS officials indicated that many patients who needed them abused alcohol or other substances or were members of families in which alcohol or substance abuse was occurring.

**Figure 4.2: Availability of Alcohol and Substance Abuse Services Compared to Four Other Classes of Medical Services**



The percentage is an average score for multiple services included in our survey. It represents the percentage of Indians in each area for whom services, in the aggregate, are available at the more-than-90-percent level.

As figure 4.2 also shows, the five areas varied considerably in the availability of treatment services for alcohol and substance abuse. Services were reported as least available in the Alaska and Navajo areas. In our view, however, the most important point that emerged from the data was not that areas differed, but that across all five areas, the reported availability of these services was low relative to other types of services.

**Availability of Services for  
 Adolescents**

Recent studies show high rates of alcohol, inhalant, and drug use among Indian youth—rates that exceed those of non-Indian youth. Recognizing the severity of the problems, in recent years, IHS has developed additional treatment services for youth and dramatically increased the prevention services. Despite these efforts, our survey indicated that alcohol and substance abuse treatment services for adolescents were often not available. Table 4.1 summarizes our survey findings for the availability of three types of services—residential, outpatient, and aftercare.<sup>5</sup> As the table shows, only about one-fourth of the user population in the five areas was served by units that could provide services to more than 90 percent of those seeking care.<sup>6</sup> By contrast, a larger percentage of the population was served by units that could provide the services to less than 50 percent of those seeking care.

**Table 4.1: Availability of Alcohol and  
 Substance Abuse Treatment Services  
 for Adolescents**

Type of service	Percentage of population served by service units able to provide care to	
	More than 90 percent of persons seeking care	Less than 50 percent of persons seeking care
Residential treatment	24	38
Outpatient counseling	29	40
Aftercare	29	36

In part, services for adolescents are limited because planned residential treatment centers have not been established. The Congress, through the Indian Alcohol and Substance Abuse Prevention and Treatment Act of 1986 (P.L. 99-570, Title IV, Subtitle C), directed IHS to provide alcohol and substance abuse treatment and prevention services for Indian youth. The act directed IHS to establish youth regional residential treatment centers in each area and to integrate this treatment with community-based rehabilitation and aftercare services for Indian youth returning to their homes and community. As of February 1992, only 6 of the 12 IHS areas had youth regional residential treatment centers operating.<sup>7</sup> IHS officials indicated that a major factor in the limited progress was that the cost of planning and constructing the centers exceeded original projections.

<sup>5</sup>Aftercare services, which include counseling and referral to other support services, are provided to persons who have completed residential or outpatient care and have progressed to the point that community-based services can maintain or increase gains made in treatment.

<sup>6</sup>Because service units vary significantly in the sizes of their user population, in measuring service availability, we first counted the number of service units reporting each service to be available to over 90 percent of their user population, and then summed the user population of these units and computed the percentages of the user population in the five areas represented by these service units.

<sup>7</sup>These areas are Albuquerque, Oklahoma, Nashville, Navajo, Alaska, and Portland.

The two areas we reviewed without residential treatment centers—Aberdeen and California<sup>8</sup>—had to purchase treatment services from other providers. While the Aberdeen area alcohol program coordinator said that such services were available, many adolescents waited up to 28 days to receive care. In California officials from many service units said that they sent most adolescents to out-of-state facilities because these programs were less expensive and more culturally sensitive to Indian people than those available in California. However, even sending adolescents to out-of-state programs was costly. For example, one California service unit official said that the cost for residential treatment for one adolescent ranged from \$6,750 to \$8,000, and that her fiscal year 1992 funding for this service was exhausted in the first 7 months. Some California officials also said that admission to an adolescent facility generally required being placed on a waiting list. They estimated waiting times ranging from 14 to 90 days and said that when adolescents had to wait too long to begin treatment they often lost interest and refused to go when a bed became available.

Even those areas with regional residential treatment centers reported that they could not meet the demand for services. For example, within the Navajo area, which has a regional treatment center, four of the eight service units reported that less than 50 percent of their adolescents seeking residential treatment in fiscal year 1991 were able to receive care. Two Navajo service unit officials reported that adolescents generally had to wait 6 to 8 weeks for admission to the Navajo youth treatment facility. In Alaska, where there are two youth treatment centers, a service unit official said waiting lists were common for adolescents, and that at any one time, there were at least four people waiting for each bed in the youth treatment facilities.

IHS officials indicated that aftercare services for adolescents, while expanded in recent years, also did not meet demand. An IHS headquarters Alcohol and Substance Abuse Programs Branch official stated that at least one aftercare counselor is needed to support a viable aftercare program. However, he said that in 1992, IHS had about 290 aftercare counselors for 360 aftercare programs<sup>9</sup>—less than 1 per program. Program officials told us that aftercare services are extremely important because they provide the community support that someone recovering from alcohol or

---

<sup>8</sup>An IHS official projected that IHS funded youth treatment facilities in California and Aberdeen areas will be operating by the end of fiscal year 1994.

<sup>9</sup>By "program," we mean a contract between IHS and a tribe or tribal group for such services.

substance abuse needs to remain substance-free after inpatient or outpatient treatment has been provided.

**Availability of Services for Adults**

The pattern in service availability for adults was similar to that already described for adolescents (see table 4.2). For the five types of adult services we surveyed,<sup>10</sup> about one-fourth to one-third of the user population was served by units that could provide services to 90 percent or more of those seeking care. By comparison, about one-third to one-half of the user population was served by units that could provide the services to less than 50 percent of those seeking help.

**Table 4.2: Availability of Alcohol and Substance Abuse Treatment Services for Adults**

Type of service	Percentage of population served by service units able to provide care to	
	More than 90 percent of persons seeking care	Less than 50 percent of persons seeking care
Residential treatment	22	47
Outpatient counseling	29	41
Aftercare	29	41
Medical detoxification	36	38
Social-setting detoxification	25	51

In our follow-up interviews, we received more specific examples of the kinds of shortages that exist. For example:

- **Residential treatment.** A service unit official in California said that at the time of our survey, 107 men and 32 women were waiting for treatment at the service unit's eight-bed facility. The alcohol and substance abuse coordinator for the Navajo area said that for every individual admitted to treatment, 10 others were seeking this care but had nowhere to obtain it. Faced with such demands, many service units established waiting lists. The estimated waiting time ranged from 2 weeks to 1 year. Some officials said that many people who have to wait, lose interest in treatment and revert to their patterns of alcohol or substance abuse.
- **Outpatient and aftercare treatment.** Some service unit officials in all five areas reported that they had limited outpatient counseling and aftercare services. In the Aberdeen, Alaska, and Navajo areas, where the reported deficiency was greatest, some service unit officials said that they had

<sup>10</sup>In addition to the three types of services described under adolescent services, the adult services includes two other types—medical detoxification and social setting detoxification. While these services are not exclusive to adult treatment, we are discussing them under adult services even though we did not identify them as adolescent or adult specific in our survey.

waiting lists for these services. Because outpatient counseling is generally more available than residential treatment IHS-wide, patients recommended for residential treatment are often shifted into outpatient services instead.<sup>11</sup> According to IHS data, more than 1,300 Indian people IHS-wide, who were recommended for residential treatment in fiscal year 1989, may have received outpatient counseling because of the lack of services. A headquarters official from the Alcohol and Substance Abuse Program Branch said that someone who needs the structured environment of residential treatment will have a more difficult time succeeding in an outpatient setting, particularly if aftercare services are limited or not available.

- Medical and social-setting detoxification.<sup>12</sup> At some service units, IHS officials told us that medical detoxification and social-setting detoxification services were often not available. Some service unit officials interpreted social-setting detoxification as meaning treatment in a "halfway house."<sup>13</sup> Eight of IHS's 12 areas do not have halfway houses.<sup>14</sup> In fiscal year 1989, IHS was able to provide halfway house services to only about 650 of the approximately 1,400 persons recommended for such service IHS-wide.

---

## Availability of Mental Health Services

Many Indian people suffer from both alcohol/substance abuse and mental health problems. IHS studies have found that 70 percent of Indians with an alcohol/substance abuse problem are in need of mental health services. Many IHS and tribal officials expressed concerns about the high incidence of family violence in Indian homes;<sup>15</sup> alcohol/substance abuse is often associated with such violent behavior. To address such problems, in 1990, IHS developed the National Plan for Native American Mental Health Services, which details the needs as well as the plans for increasing mental health services for Indians. Despite its efforts, however, mental health

---

<sup>11</sup>Nationwide, IHS has about 300 outpatient programs, compared with 40 inpatient treatment programs and 15 halfway houses, according to an official in IHS's Alcohol and Substance Abuse Programs Branch.

<sup>12</sup>Detoxification is care provided while someone is in withdrawal from alcohol or other substances. Medical detoxification is short-term acute care provided under the care of a physician; social-setting detoxification is nonmedical care, according to an IHS Alcohol/Substance Abuse Programs Branch official.

<sup>13</sup>A halfway house is a nonmedical residential facility for detoxified alcoholics that allows them to practice improved living skills while receiving feedback and emotional support from fellow residents and alcohol treatment specialists.

<sup>14</sup>Three of the five areas we studied—Alaska, California, and Navajo—had no halfway houses.

<sup>15</sup>Family violence refers to child abuse, spousal abuse, elder abuse, assault, rape, and homicide, when one family member abuses others in the family.

services, like alcohol and substance abuse services, did not meet demand in the five areas we surveyed (see table 4.3). Our survey included four types of mental health services—inpatient psychiatric services, suicide prevention, the evaluation of and therapy for abused children, and outpatient counseling. Although the survey responses indicated that mental health services were generally more available than alcohol and substance abuse services, about one-fourth of the user population was served by units that indicated that these services were available to less than 50 percent of those seeking care.

**Table 4.3: Availability of Mental Health Services**

Type of service	Percentage of population served by service units able to provide care to	
	More than 90 percent of persons seeking care	Less than 50 percent of persons seeking care
Inpatient psychiatric	39	24
Suicide prevention services	59	28
Therapy for abused children	49	26
Outpatient mental health counseling	56	17

Our follow-up interviews again provided more specific examples of the kinds of shortages and needs that exist. For example:

- **Inpatient psychiatric services.** At the time of our survey, the Aberdeen area, with a nine-bed facility, was the only IHS area, with an operating inpatient facility.<sup>16</sup> The other four areas had to obtain this service through other public or private sources. Service unit officials said that both the sources of service and the funds available to pay for them were very limited.
- **Suicide prevention services.** While these services were generally the most available of the mental health services, officials indicated that they were not sufficient to meet the demand in the Indian community. According to the National Center for Health Statistics (1988), the suicide rate among Indians is about 1.3 times that of the general population. A study released in 1992 by the University of Minnesota reported that almost 17 percent of 11,789 Indian adolescents surveyed said they had attempted suicide, two-thirds of them within the past year.
- **Therapy for abused children.** Child abuse has been reported to be a major problem in the Indian community and one of the leading causes for the need for mental health services. A 1991 report of child abuse conducted in

<sup>16</sup>The Navajo area has a 14-bed inpatient psychiatric unit in the Gallup Medical Center, but as of May 1992, has not used the beds for psychiatric services since May 1991 because the psychiatric physicians left, according to the Gallup Service Unit Director.

the Navajo area estimated that 6.7 percent of Navajo children are abused or neglected each year—significantly higher than the estimated national rate of 2.5 percent of all American children. The University of Minnesota study reported that 18 percent of Indian adolescents surveyed had experienced either physical or sexual abuse.

- **Outpatient mental health counseling.** Most service units reported that they were unable to meet the demand for mental health counseling services. One California service unit official said that funding allowed hiring only 1 mental health counselor when 2.5 were needed. An Alaska service unit official said that counselors within his unit visit each village only six times a year and that people who need more frequent services are unable to receive them.

---

## **Efforts Have Been Made to Address Problems**

In recent years, the federal government has taken steps to increase funding for alcohol and substance abuse treatment and prevention services. In 1986, the Congress enacted the Indian Alcohol and Substance Abuse Prevention and Treatment Act, which significantly expanded IHS authority and increased funding for alcoholism and substance abuse prevention and treatment services. Total IHS funding for alcoholism and substance abuse services increased from about \$25 million for fiscal year 1985 to more than \$77 million for fiscal year 1992. This additional funding substantially increased the availability of services and allowed the number of individuals entering treatment for the first time to increase 127 percent (from 4,539 in fiscal year 1985 to 10,297 in fiscal year 1990). Prevention/education services have also dramatically increased, from 109,144 recorded services annually in fiscal year 1985 to 235,091 services in fiscal year 1990.

In addition, we found in our site visits and interviews that some tribes have taken steps to address alcohol and substance abuse among their people. These steps ranged from increased prevention activities to including aspects of their cultures and traditions in the treatment process. For example:

- As a part of prevention efforts, tribal leaders in one of the Alaskan villages we visited had established laws prohibiting anyone to bring alcohol and drugs into their community. Other villages we visited had not established such community laws but had taken other steps to discourage alcohol and drug use among their people. For example, residents in one village said that they were trying to unify the community through an emphasis on their traditional culture and values by organizing alcohol and drug-free activities

for youth and requiring all community and tribal council members to be alcohol and drug-free to participate in council activities.

- At one Alaska service unit, tribal leaders made the decision to invest additional resources for alcohol and substance abuse treatment, according to the Service Unit Director. Using IHS alcohol funding, state funding, and funds transferred from IHS hospital and clinical services, they established recovery camps in three unoccupied villages. At these camps, people assume a subsistence lifestyle and receive alcohol treatment services that emphasize cultural traditions. While no data exists, the service unit director's opinion was that the camps have been very successful in helping people recover.

---

## **IHS Has Limited Information About Program Effectiveness**

Although alcohol and substance abuse is known to be a serious problem in the Indian community, IHS has no comprehensive data on (1) the relative rates of alcohol and substance abuse in Indian communities,<sup>17</sup> (2) the nature and extent of tribal initiatives that address alcohol and substance abuse, or (3) the effectiveness of IHS and tribal prevention and treatment programs. IHS and research groups, such as the American Indian Healthcare Association, recognize that this type of data is needed to improve planning of prevention and treatment services for Indians.

According to IHS officials, IHS has been unable to obtain the funding to oversee and direct collection of the needed data. In 1990, IHS officials inquired about Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) funding<sup>18</sup> for an IHS study on the prevalence of alcohol and substance abuse in Indian communities. IHS dropped the inquiry amid concerns about the appropriateness of transferring such research funds to IHS. In addition, IHS officials said that IHS requested specific research funds for alcohol and substance abuse research in their fiscal year 1992 and 1993 internal budget requests but did not receive those funds.

The agencies within the Public Health Service, the Department of Health and Human Services, would appear to be the best source of funding and research expertise for alcohol and substance abuse research. These agencies include the IHS, the National Institutes of Health (NIH), and the

---

<sup>17</sup>Within the Indian community, researchers estimate drinking variations among tribes that range from 30 percent in the Navajo to 80 percent in the Objjwa.

<sup>18</sup>Under P.L. 102-321, ADAMHA was abolished effective October 1, 1992, and the prevention and treatment functions were assigned to the newly established Substance Abuse and Mental Health Services Administration (SAMHSA). In addition, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the National Institute on Drug Abuse (NIDA), research divisions under the ADAMHA, were transferred to the National Institutes of Health (NIH).

Substance Abuse and Mental Health Services Administration (SAMHSA). The missions of SAMHSA and two NIH entities, the National Institute of Alcohol Abuse and Alcoholism (NIAAA) and the National Institute of Drug Abuse (NIDA), include funding efforts to measure the extent of alcohol and substance abuse and to evaluate alcohol and substance abuse programs. In fiscal year 1992, NIAAA and NIDA awarded more than \$430 million to public and private organizations for alcohol and substance abuse studies.

According to IHS, NIH, and SAMHSA officials, joint discussions about IHS alcohol and substance abuse research needs were held in 1992 but no definitive plan was developed. However, SAMHSA, in response to a directive from the Office of Management and Budget, developed a plan to obtain the prevalence data for Indians and approached IHS for \$700,000 to fund a pilot study in fiscal year 1993. The IHS director responded to SAMHSA that they were unable to identify funds in their budget to fund the study.

---

## Conclusions

Alcohol and substance abuse among the Indian people is a serious and complicated public health problem that continues to challenge IHS's effort to improve the health status of Indians. Since 1985, funding for IHS alcohol and substance abuse treatment and prevention services has more than tripled. These increases have provided IHS with the resources to provide more services to more people and as a result, the number of persons undergoing first-time treatment has more than doubled. Nonetheless, IHS officials reported that the demand for all major preventive and treatment services continues to exceed the services available.

The federal government's ability to provide large increases in funding to meet the demand for alcohol and substance abuse treatment and prevention services, like its ability to address many other nonentitlement program needs, is greatly constrained by limited funds. Therefore, within this environment, it is important that IHS allocate its funds to those programs that work most effectively. However, IHS lacks comprehensive information about the prevalence of alcoholism among Indians and the nature and effectiveness of available prevention and treatment programs. Without such data IHS is not in a sound position to develop the most effective approach to maximize the use of its funds. Therefore, we believe that initiatives to collect and evaluate such data should be a logical step in any strategy to address this serious health care problem. The Public Health Service agencies, IHS, NIH, and SAMHSA together have the expertise and potential resources to begin to fill this information gap.

---

## **Recommendation to the Secretary of Health and Human Services**

To ensure that limited federal resources are put to the best possible use in addressing the serious problem of alcohol and substance abuse in IHS service areas, we recommend that the Secretary of Health and Human Services

- ensure that the directors of IHS, NIH, and SAMHSA collaboratively develop a plan and identify potential sources of funds to collect and evaluate data on (1) the prevalence of alcohol and substance abuse among Indians and (2) the nature and effectiveness of alcohol and substance abuse prevention and treatment programs available to Indians in IHS areas.

---

## **Agency and Other Comments**

We obtained comments on a draft of this report from representatives of IHS; NIH; SAMHSA; and the Office of the Assistant Secretary for Health, Public Health Service. The officials generally agreed with the report's findings and recommendation. In particular, IHS officials said that they are developing a national plan to address alcohol and substance abuse related problems and will include coordination between IHS and other agencies to address needed research and evaluation of the problems. We also incorporated other comments into the report where appropriate.

We also asked the Executive Board of the Association of American Indian Physicians to comment on a draft of the report. While they did not directly comment on the report recommendation, they noted that the report confirms the need for IHS to aggressively confront the issues of alcohol and substance abuse problems among Indian communities. They commented that historic and geographic factors continue to greatly influence how IHS delivers health care, yet virtually no Indian family is free of the effects of alcohol and substance abuse.

# A Comparison of Health Care Services Available in Five IHS Areas

Chapter 3 of this report presented a broad picture of service availability for four categories of health services—treatment, diagnostic, preventive, and dental services. This appendix presents a more detailed comparison of the availability of individual services included in each of these categories.

## Treatment Services Reported as Generally Available in All Areas

Table 1.1 compares the availability of the individual treatment services included in our survey. We considered a service to be generally available in a service unit if the unit reported that during fiscal year 1991 over 90 percent of those seeking that service received it.<sup>1</sup> The numbers in the table show for each service the percentage of an area's population represented by service units who reported that the service was available at the more-than-90-percent level.

**Table 1.1: Population for Whom Treatment Services for Basic Medical and Surgical Care Were Generally Available, Fiscal Year 1991**

Treatment services for basic medical and surgical care	Percent of area population for whom services were generally available				
	Aberd.	Alaska	Calif.	Navajo	Port.
Routine prenatal care	93	64	92	100	96
Prenatal care for complicated pregnancy	93	90	92	100	75
Care for uncomplicated delivery	93	100	100	100	100
Care for complicated delivery	100	100	100	100	100
Emergency cesarean	100	100	100	100	96
Other cesarean	100	100	92	100	96
Level I neonatal care	94	90	100	100	100
Inpatient pediatric care	94	90	99	100	100
Therapy for cervical cancer	87	84	99	100	87
Primary outpatient care for acute/ chronic condition	89	100	97	86	73
Intensive care unit	100	100	100	100	100
Inpatient acute care	100	100	80	94	87
Therapeutic radiology	80	100	97	100	73
Nonemergency surgery	29	52	44	81	53

As table I.1 shows, with the exception of nonemergency surgery, treatment services for basic medical and surgical care were generally available to most people in the five areas we studied. Nonemergency surgery, such as an elective hysterectomy or cholecystectomy, was generally available for less than 60 percent of the area population in every area except Navajo.

<sup>1</sup>The more-than-90-percent level of availability was the highest of response categories in our survey.

**Appendix I**  
**A Comparison of Health Care Services**  
**Available in Five IHS Areas**

Some service unit officials in the Aberdeen area said that nonemergency surgery was often deferred because it was not a medical priority for contract care. For example, one service unit official said that cataract surgery was often deferred until a patient's vision was seriously impaired.

**Diagnostic Services**  
**Reported as Generally**  
**Available to Most People**

Diagnostic services were less available than treatment services overall, but most were generally available to 80 percent or more of the user population, in almost all areas. An exception was flexible sigmoidoscopy (a procedure used to detect colon cancer) that was available to less than 75 percent of the user populations in the Aberdeen, Alaska, and Navajo areas. Some service unit officials said that they did not provide this service in-house and only provided it through contract care in severe cases. In the Portland area the lower levels of availability shown for diagnostic radiology, laboratory, and pathology services were reported by the two largest service units in the area.

**Table I.2: Population for Whom**  
**Diagnostic Services Were Generally**  
**Available, Fiscal Year 1991**

Diagnostic service	Percentage of area population for whom services were generally available				
	Aberd.	Alaska	Calif.	Navajo	Port.
Diagnostic ultrasound	93	85	92	100	87
Colposcopy following abnormal pap smear	93	54	98	88	87
Biopsy for breast cancer	87	85	100	86	100
Flexible sigmoidoscopy	56	65	86	74	83
Biopsy for colorectal cancer	87	85	100	86	87
Biopsy for prostate cancer	87	65	100	86	87
Diagnostic mammography	89	90	100	86	100
Diagnostic radiology	100	75	88	100	73
Diagnostic laboratory	97	100	90	94	73
Diagnostic pathology	77	100	90	94	73

**Preventive Services**  
**Reported as Less Available**  
**in All Areas**

Although preventive care has been a primary focus of IHS's comprehensive health strategy, preventive services overall were less available than treatment and diagnostic services. For example, as shown in table 1.3, routine primary preventive care for adults was generally available to less than 80 percent of the user population in every area except California. Diabetes preventive services, such as nutrition counseling, and cancer screening services, such as mammography, were not available at the

**Appendix I  
A Comparison of Health Care Services  
Available in Five IHS Areas**

more-than-90-percent level for relatively large proportions of the population in many areas.

**Table I.3: Population for Whom Preventive Services Were Generally Available, Fiscal Year 1991**

Preventive service	Percentage of area population for whom services were generally available				
	Aberd.	Alaska	Calif.	Navajo	Port.
Screening ultrasound	82	64	77	90	76
Family planning	93	81	80	100	82
Tubal ligation	42	59	74	94	83
Well-baby care	94	47	100	100	100
Well-child care	94	24	92	100	100
Ophthalmologic exam	66	48	90	60	87
Podiatric exam	66	48	90	57	69
Nutrition counseling	86	72	79	43	81
Diabetes education	94	78	93	57	100
PAP smear	87	82	100	88	87
Screening mammography	62	32	43	51	87
Routine preventive primary care for adults	79	49	88	69	65

The relatively low availability of preventive services for diabetes is of concern as diabetes is recognized as a major health problem for Indian people. <sup>2</sup> Nutrition counseling from a dietician or nutritionist was not available at the more-than-90-percent level at five service units each in Alaska and California and at least two service units in each of the other areas. In fact, nine of these service units said that this service was either not provided or was available to less than 50 percent of those seeking care. Podiatric exams were available to 90 percent or less of those seeking an exam at four or more service units each in the Alaska, Aberdeen, and Portland areas, despite IHS's recommendation that diabetics receive foot exams once every year to monitor vascular problems. In the Navajo Area, ophthalmologic exams, podiatric exams, nutrition counseling, and diabetes education were generally available in service units representing no more than 60 percent of the area population.

The availability of routine screening mammography was also low in most areas. With the exception of the Portland area, screening mammogram was generally available for no more than 65 percent of the population in any area. During our follow-up inquiries, some service unit officials

<sup>2</sup>Age-adjusted diabetes death rates in 1990 were more than two times higher for Indians than the general U.S. population.

---

**Appendix I**  
**A Comparison of Health Care Services**  
**Available in Five IHS Areas**

---

acknowledged problems providing screening mammogram, but also said that they had recently acquired or were planning to acquire mammography equipment or contract for these services; thus, they expected the availability of these services to significantly improve.

As also shown in table I.3, several preventive services were reported to be comparatively less available in the Alaska area. In some cases, the low levels of service availability in Alaska reflected problems with transportation for nonemergency care. For example, some equipment, such as ultrasound, and specialists, such as podiatrists were only available in a few locations. Service units generally will pay the travel costs for patients to receive these services in cases of emergency but not necessarily for preventive purposes. The levels of availability for well-child and well-baby care in Alaska were also significantly lower than those for the other four areas. Two service unit officials explained that in their service units these services are available through a community health aide, but parents who seek this care from a physician would have to pay for their own travel costs to the regional hospital, and many cannot afford the cost.

---

**Dental Care Was Not**  
**Widely Available**

As shown in table I.4, prophylactic and other dental services for both children and adults were not generally available for large proportions of the population in each of the five areas. Most areas appeared to place more emphasis on preventive dental care, but officials in some areas said they were not able to treat beyond emergency cases. An official in the Aberdeen area office, for example, told us that preventive dental care is seldom available and that nonemergency cases were generally not treated. He also said that 99 percent of orthodontic work is deferred, including cases of cleft lip and cleft palate. Orthodontic services were deferred in other areas as well. One service unit in the Portland area said that it had 240 youths waiting to receive orthodontic treatment.

Dental services for adults were generally reported to be less available than dental services for children (see table I.4). Service units in which dental services for adults were generally available served no more than 62 percent of the population in any area. Overall, 21 of the 65 responding service units said that less than 75 percent of their adult patients seeking other dental services were able to receive this care. About two-thirds of these service units were from the Aberdeen, Alaska, and Portland areas.

**Appendix I  
A Comparison of Health Care Services  
Available in Five IHS Areas**

**Table I.4: Population for Whom Dental  
Services Were Generally Available,  
Fiscal Year 1991**

<b>Dental service</b>	<b>Percent of area population for whom services were generally available</b>				
	<b>Aberd.</b>	<b>Alaska</b>	<b>Calif.</b>	<b>Navajo</b>	<b>Port.</b>
Prophylactic dental for children	61	70	76	54	62
Prophylactic dental for adults	47	48	43	54	62
Other dental for children	44	82	75	54	48
Other dental for adults	39	46	42	54	41

# GAO's Questionnaire

U.S. GENERAL ACCOUNTING OFFICE  
Survey of Indian Health Care Service Units

\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_|  
case control number

## INTRODUCTION

The U.S. General Accounting Office (GAO), an agency of the Congress, is conducting a study of the health care available to American Indians and Alaska Natives. Three Congressional committees have asked GAO to determine what medical and other health services are available through IHS funding and other means to American Indians/Alaska Natives residing in service units in the Aberdeen, Alaska, California, Navajo, and Portland service areas. The committees would also like to know what additional health services American Indians/Alaska Natives in these areas need. This information will be considered when the Congress deliberates reauthorization of the Indian Health Care Improvement Act (P.L. 100-713) early in 1992. To obtain this information, GAO is conducting a mail survey of all service units in each of these areas. We will also visit several of the service units that receive a questionnaire to collect more detailed information about their operation and the care provided.

Please fill out and return this questionnaire within three weeks of receipt to the:

U.S. General Accounting Office  
Jackson Federal Building, Room 1992  
915 Second Avenue  
Seattle, WA 98174  
Attn: Sophia Ku

A self-addressed, postage-paid return envelope is enclosed for your convenience. Most questions can be answered quickly and easily by checking a box or filling in a number. Because many questions ask about specific types of clinical services, while others ask for financial information, it is very important that your clinical director, financial management staff and other service unit staff knowledgeable about these areas be consulted when answering these questions. If your service unit cannot provide precise data in response to a question, a realistic estimate is acceptable.

If you have any questions about this questionnaire, please call Sophia Ku at (206) 287-4800.

It is very important that you fill out and return this questionnaire promptly. We can only provide the Congress with complete information about health care for American Indians/Alaska Natives in your area if you respond.

Thank you for your cooperation.

## GENERAL INSTRUCTIONS

This questionnaire is intended to provide information about health care available to those American Indians/Alaska Natives residing within your service unit's geographic boundaries. When answering these questions, please include all services provided by IHS and PL 93-638 programs in your service unit. If there is more than one IHS or 638 program in your service unit, and you are not familiar with the services these programs offer, please consult with each before responding so that you can provide complete information about the care available within your service unit's geographic boundaries.

Appendix II  
GAO's Questionnaire

I. DIRECT AND CONTRACT CARE

As used in this questionnaire, the phrase "direct care" refers to any health care provided directly through health care facilities managed by the Indian Health Service (IHS) or managed by a tribe under a 638 contract.

The phrase "contract health services (CHS)" refers to IHS-funded health care that is purchased from outside providers.

1. In total, counting all American Indians/Alaska Natives served by IHS or 638 programs operating anywhere in your service unit, what is the size of your service unit's user population as defined by IHS? (ENTER NUMBER.)

\_\_\_\_\_ American Indians/Alaska Natives

2. About what proportion of your service unit's user population is currently eligible for CHS? (ENTER PERCENT.)

\_\_\_\_\_ %

3. During FY 1991, did any IHS or 638 programs operating in your service unit provide direct care to anyone who is not an American Indian/Alaska Native (AI/AN)?

1.  Yes

2.  No ----> (SKIP TO QUESTION 5.)

4. During FY 1991, in total about how many non-AIs/ANs received care from any of the IHS or 638 programs operating in your service unit? (ENTER NUMBER.)

\_\_\_\_\_ non-American Indians/Alaska Natives

5. About how often do IHS and 638 facilities in your service unit refer AIs/ANs who need some type of health care to another service unit for that care?

1.  Never

2.  Rarely

3.  Sometimes

4.  Often

**Appendix II  
GAO's Questionnaire**

6. We would like to know how many direct care facilities there are in your service unit, how many are managed by IHS and how many by a tribe, how many are reviewed periodically by JCAHO, and how many are currently JCAHO-certified.
- In **PART A**, for each category listed below, enter the total number of direct care facilities in your service unit as of December 1, 1991. (ENTER NUMBER FOR EACH. IF NONE, ENTER "0".)
- In **PART B**, enter the number of direct care facilities in each category that were managed by IHS and the number that were managed by a tribe. (ENTER NUMBER FOR EACH. IF NONE, ENTER "0".)
- In **PART C**, enter the number of IHS-funded facilities in each category that are periodically reviewed by JCAHO, and the number that are JCAHO-certified. (ENTER NUMBER FOR EACH. IF NONE, ENTER "0".)

	<u>PART A</u>	<u>PART B</u>		<u>PART C</u>	
	Total number of direct care facilities	Number managed by IHS	Number managed by tribe	Number periodically reviewed by JCAHO	Number currently JCAHO-certified
Acute care hospitals	_____	_____	_____	_____	_____
Hospital outpatient primary care facilities	_____	_____	_____	_____	_____
Non-hospital outpatient primary care facilities staffed by physician(s)	_____	_____	_____	_____	_____
Outpatient primary care facilities staffed by mid-level provider(s)	_____	_____	_____	_____	_____
Outpatient primary care facilities with neither physician nor mid-level staff (village clinics)	_____	_____	_____	_____	_____
Dental care facilities	_____	_____	_____	_____	_____
Intermediate/skilled nursing care facilities	_____	_____	_____	_____	_____
Other types of facilities (PLEASE SPECIFY.)	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
<b>TOTAL NUMBER OF CARE FACILITIES</b>	_____	_____	_____	_____	_____

**Appendix II  
GAO's Questionnaire**

**II. HEALTH CARE FINANCING**

We realize that in order to provide comprehensive health care for its American Indian/Alaska Native (AI/AN) population, a service unit may rely on other sources of funding in addition to IHS. The questions in this section are intended to help us understand the mix of funding sources that pays for health care for AIs/ANs in your service unit.

Once again, your responses should reflect totals across all IHS and 638 programs in your service unit. If there is more than one IHS or 638 program in your service unit, and you are not familiar with what all of these programs offer, please consult with each before responding so that you can provide complete information about health care financing within your service unit's geographic boundaries. If you cannot provide exact amounts or percentages, please give what you believe to be realistic estimates.

7. Including all direct, indirect and administrative costs, for FY 1991, what were the total expenditures of all IHS and 638 programs operating in your service unit? (ENTER DOLLAR AMOUNT.)

\$ \_\_\_\_\_ .00

8. Including all direct, indirect and administrative costs, about how much of this total was spent for direct care and how much for CHS? (ENTER DOLLAR AMOUNT FOR EACH.)

\$ \_\_\_\_\_ .00 for direct care

\$ \_\_\_\_\_ .00 for CHS

9. Consider the total expenditures for CHS across all IHS and 638 programs in your service unit during FY 1991. About what proportion of these CHS funds, was spent for each of the following categories of service specified in IHS medical priorities guidelines? (ENTER PERCENT FOR EACH. IF NONE, ENTER "0".)

Emergent/acutely urgent care	_____ %
Preventive service	_____ %
Acute and chronic primary and secondary care	_____ %
Acute and chronic tertiary care	_____ %
Care that was experimental/ not medically necessary	+ _____ %
<b>TOTAL EXPENDITURES FOR CHS</b>	<b>100%</b>

**Appendix II  
GAO's Questionnaire**

<p>10. About how much of your service unit's total expenditures for FY 1991 (noted in question 7) came from each of the sources listed below? (ENTER DOLLAR AMOUNT FOR EACH. IF NOTHING, ENTER "0".)</p> <p>IHS \$ _____ .00</p> <p>Funding from tribal organizations \$ _____ .00</p> <p>Reimbursement from VA/Military/CHAMPUS \$ _____ .00</p> <p>Reimbursement from Medicare \$ _____ .00</p> <p>Reimbursement from Medicaid(CAL) \$ _____ .00</p> <p>Reimbursement from other state/local government third party payers \$ _____ .00</p> <p>Reimbursement from private health insurance \$ _____ .00</p> <p>Other federal, state and local government funding/contracts/grants \$ _____ .00</p> <p>Funding/grants from private organizations \$ _____ .00</p> <p>Patient out-of-pocket payments from non-AIs/ANs \$ _____ .00</p> <p>Other (PLEASE SPECIFY.) _____ _____ + \$ _____ .00</p> <p><b>TOTAL AMOUNT EXPENDED FOR FY 1991</b> \$ _____ .00</p>	<p>11. Including both direct care and CHS, during FY 1991, in total approximately how much did IHS and 638 programs in your service unit spend for alcohol and substance abuse treatment, rehabilitation and prevention? (ENTER DOLLAR AMOUNT.)</p> <p>\$ _____ .00</p> <p>12. As of December 1, 1991, approximately what proportion of your service unit's AI/AN user population was eligible for, and what proportion was enrolled in each of the following? If some were eligible for or enrolled in more than one program, count them in each category. (ENTER PERCENT FOR EACH. IF NONE, ENTER "0".)</p> <table border="0" style="width: 100%; margin-left: 40px;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center;">% of user population eligible for:</th> <th style="width: 20%; text-align: center;">% of user population enrolled in:</th> </tr> </thead> <tbody> <tr> <td>VA/Military/CHAMPUS health care programs</td> <td style="text-align: center;">_____ %</td> <td style="text-align: center;">_____ %</td> </tr> <tr> <td>Medicare</td> <td style="text-align: center;">_____ %</td> <td style="text-align: center;">_____ %</td> </tr> <tr> <td>Medicaid(CAL)</td> <td style="text-align: center;">_____ %</td> <td style="text-align: center;">_____ %</td> </tr> <tr> <td>Other federal, state or local government program that delivers or pays for health care</td> <td style="text-align: center;">_____ %</td> <td style="text-align: center;">_____ %</td> </tr> <tr> <td>Private health insurance</td> <td></td> <td style="text-align: center;">_____ %</td> </tr> </tbody> </table> <p>13. As of December 1, 1991, approximately what proportion of your service unit's AI/AN user population was eligible for at least one of the programs listed above? (ENTER PERCENT.)</p> <p style="margin-left: 40px;">_____ %</p> <p>14. As of December 1, 1991, approximately what proportion of your service unit's AI/AN user population was enrolled in at least one of the programs listed above? (ENTER PERCENT.)</p> <p style="margin-left: 40px;">_____ %</p>		% of user population eligible for:	% of user population enrolled in:	VA/Military/CHAMPUS health care programs	_____ %	_____ %	Medicare	_____ %	_____ %	Medicaid(CAL)	_____ %	_____ %	Other federal, state or local government program that delivers or pays for health care	_____ %	_____ %	Private health insurance		_____ %
	% of user population eligible for:	% of user population enrolled in:																	
VA/Military/CHAMPUS health care programs	_____ %	_____ %																	
Medicare	_____ %	_____ %																	
Medicaid(CAL)	_____ %	_____ %																	
Other federal, state or local government program that delivers or pays for health care	_____ %	_____ %																	
Private health insurance		_____ %																	

**Appendix II  
GAO's Questionnaire**

**III. ACCESS TO HEALTH CARE**

In this questionnaire the phrase "IHS/tribal health care delivery system" refers to:

- health care provided through direct care facilities managed by either IHS, or by a tribe under a 638 contract (regardless of how the care is paid for), and
- health care purchased from outside providers under IHS-funded contract health services (CHS).

The phrase "other public or private health care delivery system" refers to:

- all other health care providers in the public sector such as the VA, the Military and other federal programs (other than IHS) that deliver care, as well as state or local government programs and systems that deliver care, and
- all other private for-profit and not-for-profit health care providers.

15. We would like to know what types of providers are available to care for the AI/AN user population in your service unit.

In **PART A**, indicate whether each kind of provider is available through any direct care facility in your service unit, or through *referral* to another service unit's IHS/tribal health care delivery system.

In **PART B** indicate whether or not each provider is also available through another public or private health care delivery system, within two hours travel time of at least half of your AI/AN user population.

**PART A**  
Available through direct care facility within  
the IHS/tribal health care delivery system?  
(CHECK ONE FOR EACH.)

**PART B**  
Available through some other public or  
private delivery system within 2 hours  
of at least half your user population?

	Yes, direct care in your service unit	Yes, referral to another service unit	Yes, both	No, neither	PART B	
	(1)	(2)	(3)	(4)	Yes (5)	No (6)
General/family practitioner						
Pediatrician						
MD specializing in ENT						
Orthopedist						
OB/GYN						
General surgeon						
Internist						
Anesthesiologist						
Nurse anesthetist						
Physical therapist						
Respiratory therapist						
Audiologist						

**Appendix II  
GAO's Questionnaire**

16. In addition to any IHS or 638 direct care facilities, which, if any, of the following facilities within the public or private health care delivery system, are located within 2 hours travel time from at least half of the AIs/ANs in your service unit? (CHECK ALL THAT APPLY.)

- 1.  VA medical center
- 2.  Military medical center
- 3.  Acute care hospital
- 4.  Hospital outpatient primary care facility
- 5.  Other outpatient primary care facility staffed by physician(s)
- 6.  Dental care facility
- 7.  Intermediate/skilled nursing facility
- 8.  Other type(s) of health care facility (PLEASE SPECIFY.)  
\_\_\_\_\_  
\_\_\_\_\_

9.  N/A--No other public or private facilities within 2 hours travel time of at least half of the AI/AN population in the service unit

17. How large is the geographic area your service unit covers? (ENTER NUMBER.)

\_\_\_\_\_ square miles

18. In total, including both AIs/ANs and non-AIs/ANs, about how many people live within you service unit's geographic boundaries?

\_\_\_\_\_ people

19. About what proportion of your service unit's AI/AN user population lives within a Metropolitan Statistical Area (MSA) -- that is, a city of 50,000 or more residents, or an urbanized area with at least 50,000 people that is part of a county with at least 100,000 residents? (ENTER PERCENT. IF NONE, ENTER "0".)

\_\_\_\_\_ %

**Appendix II  
GAO's Questionnaire**

20. We would like to know how close health care facilities are to where your service unit's AI/AN population resides.

For each type of care listed, estimate the proportion of your service unit's AI/AN user population who live within each travel time from the nearest location where that care is provided whether through direct care, or the public or private health care delivery system. Count as "travel time" the time a person begins to travel, to the time s/he arrives at the location where care is provided. (ENTER PERCENT FOR EACH. IF NONE, ENTER "0".)

	Less than 30 minutes	From 30 minutes to less than one hour	From one hour to less than two hours	Two hours or more	TOTAL AMERICAN INDIAN/ ALASKA NATIVE USER POPULATION
Level III emergency department/services*	_____ %	+ _____ %	+ _____ %	+ _____ %	= 100%
Inpatient acute care	_____ %	+ _____ %	+ _____ %	+ _____ %	= 100%
Outpatient primary care from a physician	_____ %	+ _____ %	+ _____ %	+ _____ %	= 100%
Outpatient primary care from a mid-level provider	_____ %	+ _____ %	+ _____ %	+ _____ %	= 100%
Outpatient primary care from someone other than a physician or a mid-level provider (village clinic)	_____ %	+ _____ %	+ _____ %	+ _____ %	= 100%

\*As defined by JCAHO, level III refers to emergency care 24 hours a day, with at least one physician available to the emergency care area within approximately 30 minutes through a medical staff call roster. Specialty consultation is available by request of the attending medical staff member or by transfer to a designated hospital where definitive care can be provided.

21. About what proportion, if any, of your AI/AN user population relies primarily on air travel to get:  
(ENTER PERCENT FOR EACH. IF NONE, ENTER "0".)

Level III emergency services	_____ %
Inpatient acute care	_____ %
Outpatient primary care from a physician	_____ %
Outpatient primary care from a mid-level provider	_____ %

**Appendix II  
GAO's Questionnaire**

**IV. OBSTETRICS/GYNECOLOGY**

22. We would like to know what types of health care are available to the AIs/ANs in your service unit, through what health care delivery systems each is available, and what proportion of the AIs/ANs who seek the care, get it from any of these systems.

In **PART A**, indicate whether each type of care is available to AIs/ANs in your user population from 1) a direct care facility, 2) other public or private providers through CHS, and/or 3) other public or private providers paid by Medicaid(CAL) or Medicare, other federal, state or local government programs, or private health insurance, without CHS involvement. (CHECK ALL THAT APPLY.)

In **PART B** consider the AIs/ANs in your user population who sought each type of care during FY 1991. Indicate the proportion of these AIs/ANs who received that care from any of the providers listed in PART A. (CHECK ONE.)

**PART A**  
Available from:  
(CHECK ALL THAT APPLY.)

**PART B**  
Proportion of those who sought  
this care during FY 1991, who  
received it from any of the  
providers listed in PART A

Direct care facility	Other public/ private provider through CHS	Other public/ private provider paid for by Medicaid(CAL), Medicare, other government pro- grams, or private insurance without CHS involvement
(1)	(2)	(3)

(CHECK ONE.)

Less than 50%	50- 74%	75- 90%	More than 90%
(4)	(5)	(6)	(7)

	(1)	(2)	(3)
Routine prenatal care			
Prenatal care for complicated pregnancies			
Screening ultrasound for uncomplicated pregnancies			
Diagnostic ultrasound for suspected intrauterine growth retardation			
Family planning counseling			
Care for uncomplicated labor/delivery			

(4)	(5)	(6)	(7)

**Appendix II  
GAO's Questionnaire**

22. (continued)

**PART A**  
Available from:  
(CHECK ALL THAT APPLY.)

Direct care facility	Other public/ private provider through CHS	Other public/ private provider paid for by Medicaid(CAL), Medicare, other government pro- grams, or private insurance without CHS involvement
----------------------------	---	---

**PART B**  
Proportion of those who sought  
this care during FY 1991, who  
received it from any of the  
providers listed in PART A

(CHECK ONE.)

Less than 50%	50- 74%	75- 90%	More than 90%
---------------------	------------	------------	---------------------

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Care for complicated labor/delivery							
Emergency cesarean section							
Other cesarean section							
Tubal ligation							

23. During FY 1991, about how many births were there among your service unit's AI/AN user population?

\_\_\_\_\_ births

24. In about what proportion of these births during FY 1991: (ENTER PERCENT FOR EACH.)

...did the first prenatal exam occur during the first trimester? \_\_\_\_\_%

...were there at least 9 prenatal visits during the pregnancy? \_\_\_\_\_%

...were there at least 13 prenatal visits during the pregnancy? \_\_\_\_\_%

**V. NEONATAL AND CHILDRENS' HEALTH CARE**

25. In **PART A**, indicate whether each type of care is available to AIs/ANs in your user population from 1) a direct care facility, 2) other public or private providers through CHS, and/or 3) other public or private providers paid by Medicaid(CAL) or Medicare, other federal, state or local government programs, or private health insurance, without CHS involvement. (CHECK ALL THAT APPLY.)

In **PART B** consider the AIs/ANs in your user population who sought each type of care during FY 1991. Indicate the proportion of these AIs/ANs who received that care from any of the providers listed in PART A. (CHECK ONE.)

<p><b>PART A</b> Available from: (CHECK ALL THAT APPLY.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center; vertical-align: top;">Direct care facility</td> <td style="width: 33%; text-align: center; vertical-align: top;">Other public/ private provider through CHS</td> <td style="width: 33%; text-align: center; vertical-align: top;">Other public/ private provider paid for by Medicaid(CAL), Medicare, other government pro- grams, or private insurance without CHS involvement</td> </tr> <tr> <td style="text-align: center;">(1)</td> <td style="text-align: center;">(2)</td> <td style="text-align: center;">(3)</td> </tr> </table>			Direct care facility	Other public/ private provider through CHS	Other public/ private provider paid for by Medicaid(CAL), Medicare, other government pro- grams, or private insurance without CHS involvement	(1)	(2)	(3)	<p><b>PART B</b> Proportion of those who sought this care during FY 1991, who received it from any of the providers listed in PART A  (CHECK ONE.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">Less than 50%</td> <td style="width: 25%; text-align: center;">50- 74%</td> <td style="width: 25%; text-align: center;">75- 90%</td> <td style="width: 25%; text-align: center;">More than 90%</td> </tr> <tr> <td style="text-align: center;">(4)</td> <td style="text-align: center;">(5)</td> <td style="text-align: center;">(6)</td> <td style="text-align: center;">(7)</td> </tr> </table>	Less than 50%	50- 74%	75- 90%	More than 90%	(4)	(5)	(6)	(7)
Direct care facility	Other public/ private provider through CHS	Other public/ private provider paid for by Medicaid(CAL), Medicare, other government pro- grams, or private insurance without CHS involvement															
(1)	(2)	(3)															
Less than 50%	50- 74%	75- 90%	More than 90%														
(4)	(5)	(6)	(7)														
Level I neonatal care*																	
Well-baby care																	
Well-child care																	
Inpatient pediatric care																	

\*As defined by the American Academy of Pediatrics and the American College of Obstetrics and Gynecology, level I care includes the ability to 1) resuscitate neonates, when needed, 2) stabilize small or sick neonates before they are transferred to a higher level of care, and 3) evaluate the condition of healthy neonates and continue their care until discharge. To be classified as level I care, the nursing staff that delivers the care should be supervised by a registered nurse.

**Appendix II  
GAO's Questionnaire**

**VI. CARE FOR NON-INSULIN-DEPENDENT DIABETES MELLITUS (NIDDM)**

26. In **PART A**, indicate whether each type of care is available to AIs/ANs in your user population from 1) a direct care facility, 2) other public or private providers through CHS, and/or 3) other public or private providers paid by Medicaid(CAL) or Medicare, other federal, state or local government programs, or private health insurance, without CHS involvement. (CHECK ALL THAT APPLY.)

In **PART B** consider the AIs/ANs in your user population who sought each type of care during FY 1991. Indicate the proportion of these AIs/ANs who received that care from any of the providers listed in PART A. (CHECK ONE.)

**PART A**  
Available from:  
(CHECK ALL THAT APPLY.)

Direct care facility	Other public/private provider through CHS	Other public/private provider paid for by Medicaid(CAL), Medicare, other government programs, or private insurance without CHS involvement
(1)	(2)	(3)

**PART B**  
Proportion of those who sought this care during FY 1991, who received it from any of the providers listed in PART A

(CHECK ONE.)

Less than 50%	50-74%	75-90%	More than 90%
(4)	(5)	(6)	(7)

Ophthalmologic exam			
Outpatient dialysis			
Podiatric exam			
Nutrition counseling by a nutritionist or a dietitian			
General diabetes mellitus education for those with NIDDM			


27. About what proportion of those in your service unit's AI/AN user population who are diagnosed with NIDDM receive each of the following, annually? (ENTER PERCENT FOR EACH. IF NONE, ENTER "0".)

Dilated funduscopic exam or fundus photograph, annually \_\_\_\_\_ %

Complete foot exam, annually \_\_\_\_\_ %

**Appendix II  
GAO's Questionnaire**

**VII. CANCER SCREENING AND DIAGNOSIS**

28. In **PART A**, indicate whether each type of care is available to AIs/ANs in your user population from 1) a direct care facility, 2) other public or private providers through CHS, and/or 3) other public or private providers paid by Medicaid(CAL) or Medicare, other federal, state or local government programs, or private health insurance, without CHS involvement. (CHECK ALL THAT APPLY.)

In **PART B** consider the AIs/ANs in your user population who sought each type of care during FY 1991. Indicate the proportion of these AIs/ANs who received that care from any of the providers listed in PART A. (CHECK ONE.)

**PART A**  
Available from:  
(CHECK ALL THAT APPLY.)

Direct care facility	Other public/ private provider through CHS	Other public/ private provider paid for by Medicaid(CAL), Medicare, other government pro- grams, or private insurance without CHS involvement
(1)	(2)	(3)

**PART B**  
Proportion of those who sought  
this care during FY 1991, who  
received it from any of the  
providers listed in PART A

(CHECK ONE.)

Less than 50%	50- 74%	75- 90%	More than 90%
(4)	(5)	(6)	(7)

PAP smear			
Colposcopy following abnormal PAP smear			
Definitive therapy for cervical carcinoma in situ			
Mammography for those with no signs/symptoms of tumor			
Mammography for those with signs/symptoms of tumor			
Biopsy to diagnose breast cancer			
Flexible sigmoidoscopy			
Biopsy to diagnose colorectal cancer			
Biopsy to diagnose prostate cancer			


Appendix II  
GAO's Questionnaire

29. In your AI/AN user population, about how many men and women are currently 50 years of age or older? (ENTER NUMBER FOR EACH.)

\_\_\_\_\_ men

\_\_\_\_\_ women

30. Of the AI/AN women in your unit's user population who are currently 50 years of age or older, about what proportion have had: (ENTER PERCENT FOR EACH. IF NONE, ENTER "0".)

... a physical examination of the breast within the last year? \_\_\_\_\_%

... a mammogram within the last year? \_\_\_\_\_%

... a PAP smear within the last year? \_\_\_\_\_%

31. Of the AI/AN men and women in your service unit's user population currently 50 years of age or older, about what proportion have had a stool blood slide test within the past year? (ENTER PERCENT. IF NONE, ENTER "0".)

\_\_\_\_\_ % of the men

\_\_\_\_\_ % of the women

32. About what proportion of the AI/AN men and women in your service unit's user population who are currently 50 years of age or older have had a digital rectal exam within the past year? (ENTER PERCENT FOR EACH.)

\_\_\_\_\_ % of the men

\_\_\_\_\_ % of the women

**Appendix II  
GAO's Questionnaire**

**VIII. ALCOHOL/SUBSTANCE ABUSE AND OTHER MENTAL HEALTH TREATMENT AND SERVICES**

33. In **PART A**, indicate whether each type of care is available to AIs/ANs in your user population from 1) a direct care facility, 2) other public or private providers through CHS, and/or 3) other public or private providers paid by Medicaid(CAL) or Medicare, other federal, state or local government programs, or private health insurance, without CHS involvement. (CHECK ALL THAT APPLY.)

In **PART B** consider the AIs/ANs in your user population who sought each type of care during FY 1991. Indicate the proportion of these AIs/ANs who received that care from any of the providers listed in PART A. (CHECK ONE.)

**PART A**  
Available from:  
(CHECK ALL THAT APPLY.)

**PART B**  
Proportion of those who sought  
this care during FY 1991, who  
received it from any of the  
providers listed in PART A

(CHECK ONE.)

Direct care facility	Other public/ private provider through CHS	Other public/ private provider paid for by Medicaid(CAL), Medicare, other government pro- grams, or private insurance without CHS involvement
(1)	(2)	(3)

Less than 50%	50- 74%	75- 90%	More than 90%
(4)	(5)	(6)	(7)

	(1)	(2)	(3)
Inpatient alcohol/sub. abuse medical detoxification			
Live-in, social setting detoxification			
Live-in alcohol/sub. abuse rehabilitation for adults			
Live-in alcohol/sub. abuse rehabilitation for adolescents			
Alcohol/sub. abuse aftercare for adults			
Alcohol/sub. abuse after care for adolescents			
Outpatient alcohol/sub. abuse counseling for adults			
Outpatient alcohol/sub. abuse counseling for adolescents			

(4)	(5)	(6)	(7)

**Appendix II  
GAO's Questionnaire**

33. (continued)

**PART A**  
Available from:  
(CHECK ALL THAT APPLY.)

Direct care facility	Other public/ private provider through CHS	Other public/ private provider paid for by Medicaid(CAL), Medicare, other government pro- grams, or private insurance without CHS involvement
(1)	(2)	(3)

**PART B**  
Proportion of those who sought  
this care during FY 1991, who  
received it from any of the  
providers listed in PART A

(CHECK ONE.)

Less than 50%	50- 74%	75- 90%	More than 90%
(4)	(5)	(6)	(7)

Inpatient care by a psychiatrist for other mental health conditions			
Outpatient suicide prevention counseling			
Evaluation/therapy for abused children			
General outpatient mental health counseling			


34. Consider your service unit's American Indians/Alaska Natives in each age category below. About what proportion of those in each category who presented themselves for inpatient or live-in alcohol/substance abuse rehabilitation during FY 1991, received it? (ENTER PERCENT FOR EACH.)

Under age 12                    \_\_\_\_\_ %

12-17                            \_\_\_\_\_ %

18-24                            \_\_\_\_\_ %

25 or older                     \_\_\_\_\_ %

**Appendix II  
GAO's Questionnaire**

**IX. AVAILABILITY OF OTHER HEALTH CARE/SERVICES**

35. In **PART A**, indicate whether each type of care is available to AIs/ANs in your user population from 1) a direct care facility, 2) other public or private providers through CHS, and/or 3) other public or private providers paid by Medicaid(CAL) or Medicare, other federal, state or local government programs, or private health insurance, without CHS involvement. (CHECK ALL THAT APPLY.)

In **PART B** consider the AIs/ANs in your user population who sought each type of care during FY 1991. Indicate the proportion of these AIs/ANs who received that care from any of the providers listed in PART A. (CHECK ONE.)

**PART A**  
Available from:  
(CHECK ALL THAT APPLY.)

Direct care facility	Other public/ private provider through CHS	Other public/ private provider paid for by Medicaid(CAL), Medicare, other government pro- grams, or private insurance without CHS involvement
(1)	(2)	(3)

**PART B**  
Proportion of those who sought  
this care during FY 1991, who  
received it from any of the  
providers listed in PART A

(CHECK ONE.)

Less than 50%	50- 74%	75- 90%	More than 90%
(4)	(5)	(6)	(7)

Routine preventive primary care for adults			
Primary outpatient care for acute/chronic conditions			
Intensive care unit			
Intermediate/skilled nursing facility			
Inpatient acute care			
Diagnostic radiology			
Therapeutic radiology			
Diagnostic laboratory services			
Diagnostic pathology services			


**Appendix II  
GAO's Questionnaire**

35. (continued)

**PART A**  
Available from:  
(CHECK ALL THAT APPLY.)

Direct care facility	Other public/ private provider through CHS	Other public/ private provider paid for by Medicaid(CAL), Medicare, other government pro- grams, or private insurance without CHS involvement
(1)	(2)	(3)

**PART B**  
Proportion of those who sought  
this care during FY 1991, who  
received it from any of the  
providers listed in PART A

(CHECK ONE.)

Less than 50%	50- 74%	75- 90%	More than 90%
(4)	(5)	(6)	(7)

Non-emergent general surgical procedures (cholecystectomy, hysterectomy, etc.)							
Kidney transplant surgery							
Prophylactic dental care for children							
Prophylactic dental care for adults							
Other dental care for children							
Other dental care for adults							
Air transportation for emergency care							
Ground transportation for emergency care							
Pharmacy services							

**Appendix II  
GAO's Questionnaire**

**X. HEALTH CARE NEEDS**

36. With respect to each of the following, in your opinion do American Indians/Alaska Natives in your service unit's total user population receive more, about as much as, or less care than they need? (CHECK ONE FOR EACH.)

	Much more (1)	Somewhat more (2)	About as much as (3)	Somewhat less (4)	Much less (5)
1. Emergency department/services					
2. Intensive care unit					
3. Inpatient acute care					
4. Intermediate/skilled nursing care					
5. Routine prenatal care					
6. Prenatal care for complicated pregnancies					
7. Care for uncomplicated labor/delivery					
8. Care for complicated labor/delivery					
9. Inpatient neonatal/pediatric care					
10. Well baby/child care					
11. Routine preventive outpatient care for adults					
12. Primary outpatient care for acute/chronic conditions					
13. General non-emergent surgical care					
14. Inpatient care by a psychiatrist					
15. Inpatient (live-in) alcohol/sub. abuse rehabilitation services for adults					
16. Inpatient (live-in) alcohol/sub. abuse rehabilitation services for adolescents					

**Appendix II  
GAO's Questionnaire**

36. (continued)

	Much more  (1)	Somewhat more  (2)	About as much as  (3)	Somewhat less  (4)	Much less  (5)
17. Outpatient alcohol/sub. abuse counseling					
18. Other outpatient mental health counseling					
19. Dental care for adults					
20. Dental care for children					
21. Health education/promotion activities					
22. Access to specialists for consultation					
23. Air transportation for emergency care					
24. Ground transportation for emergency care					
25. Transportation for non-emergency care					
26. Other (PLEASE SPECIFY.)					
27. Other (PLEASE SPECIFY.)					

37. Of those types of care/service listed in question 36, which represent the five greatest unmet needs among American Indians/Alaska Natives in your service unit? (ENTER NUMBER OF CARE/SERVICE FROM QUESTION 40.)

Greatest unmet need is number: \_\_\_\_\_

Second greatest unmet need is number: \_\_\_\_\_

Third greatest unmet need is number: \_\_\_\_\_

Fourth greatest unmet need is number: \_\_\_\_\_

Fifth greatest unmet need is number: \_\_\_\_\_

**Appendix II  
GAO's Questionnaire**

38. To what extent, if any, does each of the following factors contribute to the demand for health care among AIs/ANs in your service unit's user population? (CHECK ONE FOR EACH.)

	To little or no extent (1)	To some extent (2)	To a moderate extent (3)	To a great extent (4)	To a very great extent (5)
Poor water quality					
Poor sanitation/waste disposal					
Poor housing/living conditions					
Alcohol/substance abuse					
Child/spouse abuse					
Teenage pregnancy					
Lack of health education or prevention services					
Lack of adequate or timely health care					
Other (PLEASE SPECIFY.)					

PLEASE GO ON TO THE LAST PAGE----->

Appendix II  
GAO's Questionnaire

39. In your opinion, how comprehensive is the health care that AIs/ANs in your service unit receive, compared to the care non-AIs/ANs in and around your service area receive? (CHECK ONE.)

- 1.  AIs/ANs receive much more comprehensive care than others
- 2.  AIs/ANs receive somewhat more comprehensive care than others
- 3.  AIs/ANs receive about as comprehensive care as others
- 4.  AIs/ANs receive somewhat less comprehensive care than others
- 5.  AIs/ANs receive much less comprehensive care than others

40. In your opinion, how does the quality of health care that AIs/ANs in your service unit receive compare to the quality of care non-AIs/ANs in and around your service area receive? (CHECK ONE.)

- 1.  AIs/ANs receive much better care than others
- 2.  AIs/ANs receive somewhat better care than others
- 3.  AIs/ANs receive about the same quality care as others
- 4.  AIs/ANs receive somewhat worse care than others
- 5.  AIs/ANs receive much worse care than others

41. Please enter the name, service unit, position title, and telephone number of the person we should call if we need additional information related to any of these questions.

Name: \_\_\_\_\_

Service unit: \_\_\_\_\_

Position: \_\_\_\_\_

Phone #: \_\_\_\_\_

42. If you have comments related to any of these questions, or about health care in your service unit, or your service unit's health care needs, please write them in the space below. You may attach a separate sheet if you need more space.

# Statistical Data for Figures Presented in Chapters 3 and 4

Table III.1: Data for Figure 3.1

Category	Percentage of area population for whom services were generally available <sup>a,b</sup>				
	Aberd.	Alaska	Calif.	Navajo	Port.
Treatment services for basic medical and surgical care	89	91	92	97	88
Diagnostic services	87	80	94	90	85
Preventive services	79	57	84	76	85
Dental services	48	61	59	54	54

<sup>a</sup>Percentages shown represent an average for all the services included in each health service category.

<sup>b</sup>A service was considered to be generally available if the respondent indicated that more than 90 percent of those seeking the service received it.

Table III.2: Data for Figure 4.2

Category	Percentage of area population for whom services were generally available <sup>a,b</sup>				
	Aberd.	Alaska	Calif.	Navajo	Port.
Treatment services for basic medical and surgical care	89	91	92	97	88
Diagnostic services	87	80	94	90	85
Preventive services	79	57	84	76	85
Dental services	48	61	59	54	54
Alcohol/substance abuse and mental health services	46	30	56	23	55

<sup>a</sup>Percentages shown represent an average for all the services included in each health service category.

<sup>b</sup>A service was considered to be generally available if the respondent indicated that more than 90 percent of those seeking the service received it.

---

# Major Contributors to This Report

---

**Human Resources  
Division,  
Washington, D.C.**

**Janet L. Shikles, Director, Health Financing and Policy Issues,  
(202) 512-7119  
Fred Yohey, Assistant Director  
Clarita A. Mrena, Assistant Director**

---

**Seattle Regional  
Office**

**Frank Pasquier, Assistant Director  
Sophia Ku, Evaluator-in-Charge  
Nancy Purvine, Evaluator  
Linda Akiyama McIver, Evaluator  
Drummond Kahn, Evaluator  
Stan Stenerson, Evaluator  
Desiree Whipple, Reports Analyst  
Evan Stoll, Computer Specialist**

---

### **Ordering Information**

**The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.**

**Orders by mail:**

**U.S. General Accounting Office  
P.O. Box 6015  
Gaithersburg, MD 20884-6015**

**or visit:**

**Room 1000  
700 4th St. NW (corner of 4th and G Sts. NW)  
U.S. General Accounting Office  
Washington, DC**

**Orders may also be placed by calling (202) 512-6000  
or by using fax number (301) 258-4066.**

---

**United States  
General Accounting Office  
Washington, D.C. 20548**

**Official Business  
Penalty for Private Use \$300**

**First-Class Mail  
Postage & Fees Paid  
GAO  
Permit No. G100**

---