

# Chapter 5

# The Indian Health Service

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# The Indian Health Service

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## INTRODUCTION

The primary source of health care services delivered to most American Indians is the Indian Health Service (IHS) of the Public Health Service (PHS), U.S. Department of Health and Human Services (DHHS). The involvement of other Federal, State, and local public health programs and private providers is significantly less, and in fact the extent to which Indians depend on these other sources of care is not precisely known.

Federal responsibility for the provision of health care to American Indians and Alaska Natives under the Snyder Act of 1921 (25 U.S. C. 13) was conveyed from the Bureau of Indian Affairs (BIA) in the Department of the Interior to the Department of Health, Education, and Welfare (now DHHS) by the Transfer Act of August 5, 1954 (42 U.S. C. 2001 *et seq.*). Under that law, IHS came into being on July 1, 1955. The early focus of IHS was on elimination of the infectious diseases that were widespread in the Indian population and on chronic care for the large numbers of Indians suffering from tuberculosis, IHS achieved marked success in both of those areas.

The present mission of IHS, articulated most clearly in the Indian Health Care Improvement Act of 1976 (Public Law 94-437), is to raise the health status of American Indians and Alaska Natives to the highest possible level. IHS defines its service delivery responsibilities to include a comprehensive range of inpatient and ambulatory medical services, dental care, mental health and alcoholism services, preventive health (immunizations and environmental services such as sanitation and water safety), health education, and Indian health manpower development programs. For Indians who live in isolated rural areas on or near reservations, a broad definition of IHS responsibilities is justified, because the infrastructure of roads, utilities, and public services that support health care delivery to non-Indian rural residents often is lacking on Indian reservations. IHS also includes a health facilities construction component that focuses its activities on provid-

ing hospitals, clinics, and facility staff living quarters for reservation-based IHS services. IHS-funded programs for Indians who live in urban areas, on the other hand, do not directly provide hospital care; but they do offer a range of ambulatory medical, dental, mental health, social support, and referral services.

IHS provides comprehensive health and health-related services to approximately 960,000 eligible Indians (1985) who live on or near reservations at no cost to the individual Indian, regardless of other health insurance coverage or ability to pay. Both the comprehensiveness of the services IHS provides and the absence of premiums and user charges for these services set Indians apart from the general population in terms of their health care delivery expectations and problems. Thus, it is difficult to directly compare health services systems for Indians and the U.S. population. Non-Indians do not enjoy the preventive and health-related services available to Indians, and as a rule, they cannot receive such services free of charge. But with private health insurance, non-Indians have easier access to more technologically advanced medical services than are available to Indians dependent solely on IHS.

Although in principle IHS services are comprehensive and readily available at no user cost, in fact they are limited by IHS budget constraints and by the uneven distribution of services among IHS areas that has developed over the years. IHS facilities, for example, are not equally available and accessible to eligible populations in all parts of the country; and facilities construction plans are not necessarily related to local service population size or utilization patterns. The services offered by many of the smaller IHS hospitals may be less specialized than those found in the typical small rural community hospital. When no IHS facility is accessible or when specific services are not available from IHS facilities, Indian patients may require referral to private providers under the IHS contract care program; but contract care

budgets sometimes have been so limited that needed referrals cannot be made. Thus, while they may not be directly affected by ability to pay, Indians may face serious obstacles in obtaining health care services through IHS.

IHS provides inpatient and ambulatory medical, dental, and mental health services either directly through its network of IHS-owned hospitals, health centers, and clinics, or indirectly, by purchasing services that are not available from IHS facilities through contracts with private providers. Another factor in the IHS delivery system since the Indian Self-Determination and Education Assistance Act of 1975 (Public Law **93-638**) has been the operation of health facilities and service programs by Indian tribes. Direct care facilities, contract care programs, facilities construction, and special programs such as community health representatives, mental health and drug abuse, and health education initiatives may be administered by tribes under self-determination or 638 contracts. Most of these services, like IHS's own services, are reservation based; they are au-

thorized and funded under the general authority of the Snyder Act; and they are provided to IHS-eligible Indians at no cost to the individual.

The urban Indian health projects, which are specifically authorized and funded under the Indian Health Care Improvement Act, operate separately from the reservation-based IHS system. Urban projects may receive funds from non-IHS sources, are likely to treat non-Indians, and may request payment from Indians and non-Indians alike based on a sliding fee scale. Although urban projects may not be operated by tribes under the self-determination program, they are similar to tribally operated programs in that they are more active than IHS programs in treating and billing non-Indians and in coordinating their efforts with other non-IHS health delivery programs.

The IHS direct care program, the IHS contract health services or contract care program, urban Indian health projects, and the IHS facilities construction program are described in this chapter.

## THE IHS DIRECT CARE PROGRAM

Although the IHS direct care program also provides preventive health, dental, mental health, and alcoholism services, this discussion of the program focuses on hospital-based and ambulatory medical services, since they are by far the most important components of IHS services delivery. IHS direct care services to Indians living on or near reservations are delivered by Federal staff in IHS-owned and operated facilities, or by employees of tribal self-determination (638) contractors in IHS-owned, tribally operated facilities. As discussed in chapter 6, the 638 contract program implements the 1975 Indian Self-Determination and Education Assistance Act (Public Law 93-638). Hospitals and clinics operated under the self-determination program are considered part of the IHS direct care system, as opposed to the supplemental services that are obtained through the IHS contract care program; but tribes also may operate their own contract care programs under 638 contracts. Utilization data for tribally operated

programs are incomplete because of differences in reporting systems.

### Eligibility for Direct Care Services

Eligibility for direct services in IHS and tribally operated facilities is defined in Federal regulations (42 CFR 36 subpart B). The regulations state that medically indicated services will be provided "to persons of Indian descent belonging to the Indian community served by the local facilities and program." An individual maybe considered eligible for IHS care "if he is regarded as an Indian by the community in which he lives as evidenced by such factors as tribal membership, enrollment, residence on tax-exempt land, ownership of restricted property, active participation in tribal affairs, or other relevant factors in keeping with general Bureau of Indian Affairs practices in the jurisdiction" (42 CFR 36.12). Non-Indian women pregnant with an eligible Indian's child may re-

ceive obstetrical care, and services to prevent the spread of infectious diseases may be provided to Indian and non-Indian members of the community.

These regulations allow broad interpretation of eligibility for IHS direct care, with notable variations among IHS areas. (Eligibility for contract care services is more restrictive because of the required residence “on or near” a reservation, ) The Federal Government limits its responsibility for health services to Indians, however, by stating in regulations that IHS does not provide the same services in all areas and that service availability depends on the capabilities of local IHS and other providers and on the “financial and personnel resources” of IHS. If funds, facilities, or personnel are insufficient to meet demand, IHS may set priorities for care on the basis of relative medical need and access to other services (42 CFR 36.11 (c)).

Differences by IHS area between the numbers of Indians who are eligible for IHS direct care services and those who actually use them are unknown at this time. A patient enrollment system was instituted throughout IHS beginning in January 1984, and when this system is fully implemented, user populations will be defined more accurately. In the meantime, analyses of IHS service utilization rates and trends among the areas and comparisons with general U.S. rates should be viewed with caution, because the comparability of the denominator populations is not known. The uneven availability of IHS direct care facilities also has a significant, though unquantifiable, effect on services utilization.

### Funding for Direct Care Services

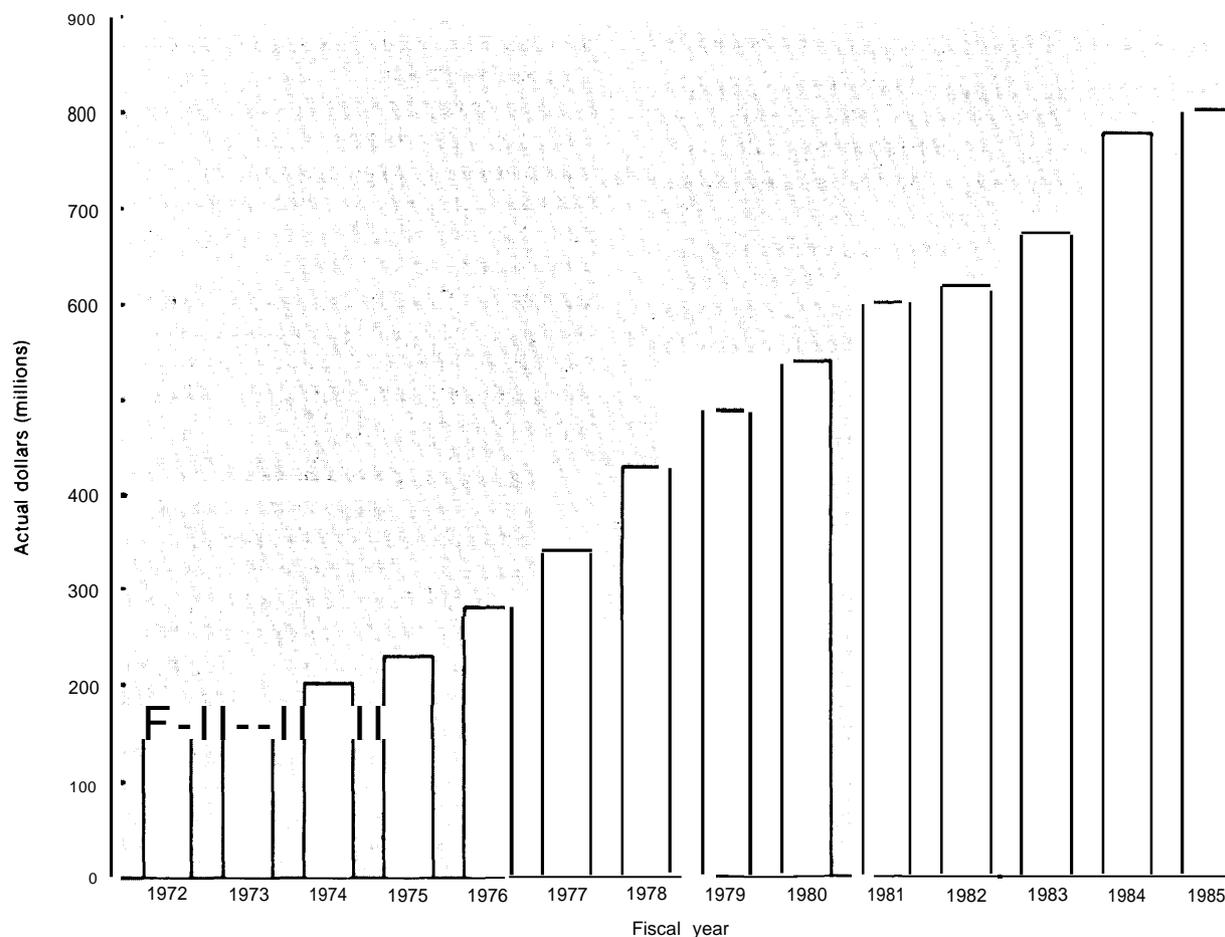
IHS funding for direct care services comes from the basic Snyder Act appropriation. Most of the additional funding appropriated for the Indian Health Care Improvement Act, authorized in fiscal years 1985 and 1986 by continuing resolution, is directed to particular programs such as manpower training, the community health representatives program, and urban Indian projects. That funding amounted to \$129 million in fiscal year 1984, or 15 percent of the total IHS appropria-

tion (135). Growth in overall IHS allocations, including Indian Health Care Improvement Act funding but not including IHS facility construction funds, is illustrated in figure 5-1 (for allocations by budget category and area for fiscal years 1972-85, refer to app. C). In actual dollars, IHS allocations increased from \$157 million in fiscal year 1972 to \$807 million in 1985. During that time, the IHS eligible service population doubled, more as a result of adding new population groups, such as the California Indians, than of natural increase. Consequently, annual allocations per IHS beneficiary have remained essentially the same since 1972 when adjusted for inflation (see ch. 1, figures 1-8 and 1-9).

Direct clinical services delivery has always been the major component of the IHS budget, averaging over 60 percent of total funding in recent years (see figure 5-2). Budgets for contract care services, preventive health programs, and other services (urban projects, manpower training, administration) are much smaller. Figure 5-3 illustrates the relative importance of these major budget components by IHS area and compares area funding levels for fiscal years 1981 and 1985.

Within the IHS direct care budget (excluding contract care), line items for hospital and clinic operations, facility maintenance and repairs, dental care, mental health, and alcoholism programs are specified (the reimbursements category refers not to Medicare and Medicaid collections, but to payments from other Federal agencies for the use of IHS facilities and services). Table 5-1 presents the breakdown of fiscal year 1985 direct health allocations by IHS area into these categories. The operation of IHS hospitals and clinics always has consumed the bulk of the direct services budget, representing 84 percent of the overall IHS direct delivery allocation in 1985. Hospitals and clinics funding ranged from a low of 67 percent of the total in the Portland IHS area to a high of 88 percent in Alaska. Dental care and alcohol programs each accounted for about 5 percent of the direct care budget (although funding for alcohol programs ranged from 2 percent in Alaska to nearly 19 percent in Portland in 1985), with lesser amounts allocated to mental health and facility maintenance and repair.

Figure 5-1.—IHS Annual Allocations, Fiscal Years 1972-85



SOURCE U S Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Office of Administration and Management, 1985

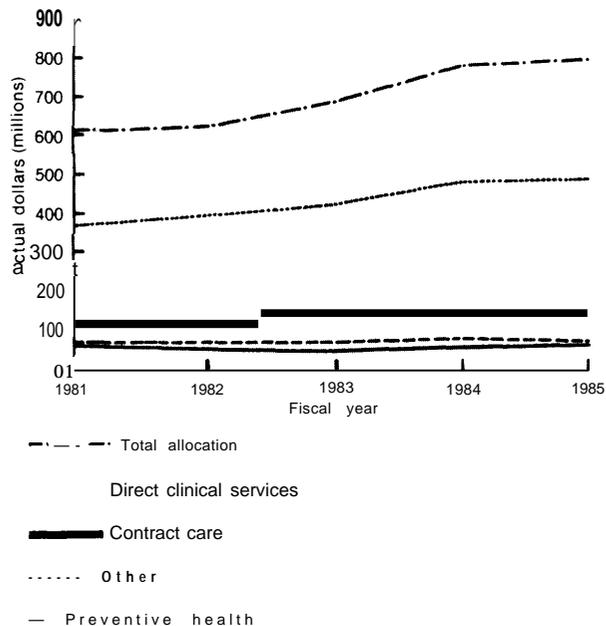
## IHS Staffing

Personnel represents the largest single cost component in the IHS hospitals and clinics operating budget. Fiscal year 1984 IHS staff by area and by type of staff are shown in table 5-2. These figures include staff of IHS-operated direct care facilities and IHS employees assigned to tribally operated 638 contract programs under the terms of the Intergovernmental Personnel Act; but staff hired directly by the tribes are not included. Altogether, there were 10,342 permanent, full-time positions, nearly half of which were classified as administrative and support staff. The two categories of nurses in table 5-2 (including facility-based R.N.s and L. P.N.s, public health nurses, and nursing as-

sistants) made up the largest group of health providers, accounting for nearly 27 percent of all positions. The 645 medical officers (excluding 44 who served primarily as administrators) made up 6.2 percent of total positions. Personnel data maintained at IHS headquarters do not identify medical officers by specialty; however, they do distinguish between medical officers in clinical practice and those engaged primarily in nonclinical work (171).

In 1984, the Navajo, Oklahoma, Phoenix, and Alaska areas had the largest numbers of IHS staff, a combined 62 percent of total IHS positions. The IHS system included 83 physician assistants, who were used most widely in the Navajo area. The largest numbers of medical officers in clinical prac-

Figure 5-2.—IHS Allocations by Category, Fiscal Years 1981-85



SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Office of Administration and Management, 1985

tice were in the Navajo, Phoenix, Alaska, and Oklahoma areas (see table 5-2). This observation suggests that a wider and more advanced range of services is available in those areas. It also reflects the location of IHS's three referral medical centers in Anchorage, Gallup, and Phoenix, and of seven hospitals in the Oklahoma IHS area.

Indian preference in employment applies to initial appointments, reappointment, reinstatement, transfer, reassignment, promotion, or any other personnel action intended to fill a vacancy in IHS (42 CFR 36.42 (a)), BIA, or in tribal programs operated under self-determination (638) contracts. Preference in employment is extended to: 1) members of federally recognized tribes; 2) descendants of such members who were residing within the present boundaries of any Indian reservation on June 1, 1934; 3) persons of Indian descent who are of one-half or more Indian blood of tribes indigenous to the United States; 4) Eskimos and other aboriginal people of Alaska; and 5) certain descendants of the Osage tribe (42 CFR 36.41). Table 5-3 shows the fiscal year 1984 breakdown of Indian and non-Indian IHS employees by pro-

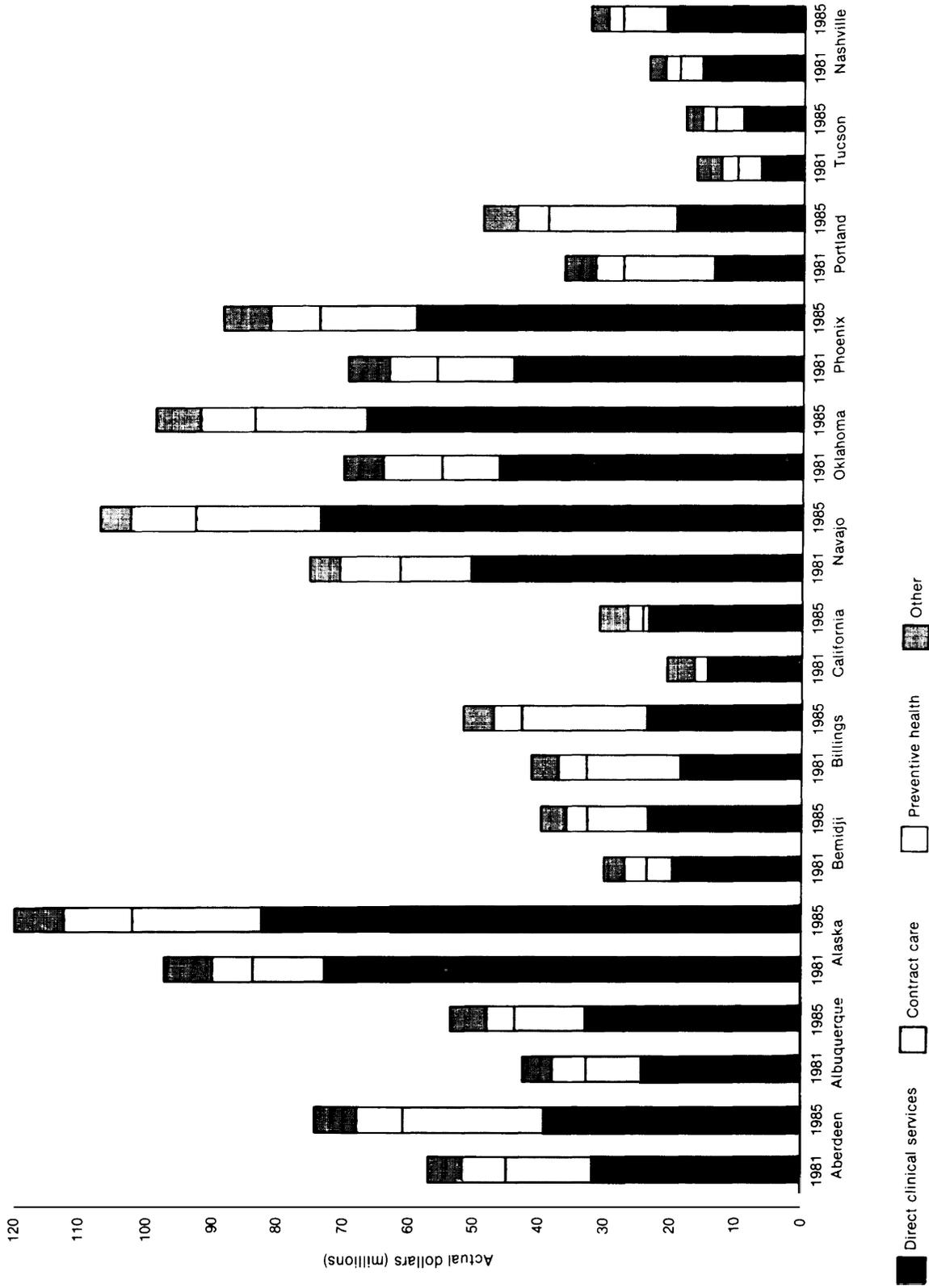
fession for each area. In 1984, 59.3 percent of the IHS work force was Indian, compared with 1970, when Indians comprised 52.2 percent of the total IHS work force (171). There were 23 Indian medical officers and 9 Indian dental officers serving in IHS in 1984; but 6 of the medical officers and 1 dental officer were working in nonclinical capacities. In fiscal year 1983, nearly 60 percent of the staff in urban Indian health projects were Indian.

IHS estimates its unmet need for health professionals relative to workloads in terms of unfilled positions, using an application of the resource requirement methodology (described in ch. 6). In 1985, unfilled staff positions in IHS facilities and tribally operated health programs were estimated to exceed 1,500 health professionals, including 166 surgeons (among other types of physicians) and 697 nurses (137).

Table 5-4 shows numbers of IHS medical and dental officers, by area, and ratios per 1,000 estimated eligible service population in 1984. The physician-to-population ratio for IHS as a whole was 0.7 physicians per 1,000 population. The highest ratios were in the Alaska (1.4 per 1,000) and Phoenix areas (1.3 per 1,000), followed by Albuquerque, Billings, Navajo, and Tucson (ranging from 1.0 to 0.8 physicians per 1,000 service population). The dentist-to-population ratio for IHS as a whole was 0.3 dentists per 1,000 population.

For the U.S. population as a whole, there were 1.65 active, non-Federal, patient care physicians (1980) and 0.46 dentists (1979) per 1,000 persons (202). Within the United States, the supply of physicians and, to a lesser extent, dentists differs from metropolitan to nonmetropolitan areas. In 1980, the United States had 1.91 physicians per 1,000 population in metropolitan areas and 0.84 per 1,000 in nonmetropolitan areas. In 1979, dentists in the United States numbered 0.5 per 1,000 population in metropolitan areas versus 0.31 per 1,000 in nonmetropolitan areas. IHS average ratios of 0.7 physicians and 0.3 dentists per 1,000 eligible service population are closer to U.S. ratios for nonmetropolitan areas, which more nearly approximate IHS delivery locations, than to U.S. ratios for metropolitan areas.

Figure 5-3.—IHS Allocations by Area and Budget Category, Fiscal Years 1981 and 1985



SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Office of Administration and Management, 1985.

**Table 5-1.—IHS Direct and Contract Care Budget Allocations in Dollars and Percent of Total, by Budget Category and Area, Fiscal Year 1985<sup>a</sup>**

Area	Budget categories in direct care—dollars and percent of total direct care										Total contract care	Total IHS clinical services (direct and contract care)		
	Total direct care allocation	Hospitals and clinics	Dental	Mental health	Alcoholism	Maintenance and repair	Reimbursements <sup>b</sup>	Total direct care	Total contract care	Total IHS clinical services (direct and contract care)				
Alberquerque	\$ 31,912,200	81.8%	\$ 1,933,000	5.0%	\$ 1,340,000	3.4%	\$ 2,741,800	7.0%	\$ 826,000	2.1%	\$ 264,600	0.7%	\$ 22,008,000	\$ 61,025,600
Alaska	\$ 82,099,500	88.4%	\$ 72,578,700	3.8%	\$ 3,094,000	1.1%	\$ 1,445,900	1.8%	\$ 2,566,000	3.1%	\$ 1,534,900	1.9%	\$ 19,677,000	\$ 101,786,500
Albuquerque	\$ 32,757,900	80.9%	\$ 26,514,400	7.5%	\$ 2,455,000	3.0%	\$ 1,912,700	5.8%	\$ 614,000	1.9%	\$ 273,800	0.8%	\$ 1,246,000	\$ 44,000,900
Bermidji	\$ 22,799,900	85.2%	\$ 19,436,700	4.2%	\$ 949,000	1.8%	\$ 1,794,100	7.9%	\$ 166,000	0.7%	\$ 46,300	0.2%	\$ 9,304,000	\$ 32,039,900
Billings	\$ 23,459,100	77.7%	\$ 18,223,500	7.2%	\$ 1,692,000	4.1%	\$ 1,857,800	7.9%	\$ 483,000	2.1%	\$ 232,600	1.0%	\$ 8,999,000	\$ 42,459,200
Califonia	\$ 24,226,500	85.7%	\$ 20,767,400	1.4%	\$ 335,000	0.8%	\$ 2,918,100	12.0%	\$ 0	0.0%	\$ 4,000	0.0%	\$ 534,000	\$ 24,760,500
Nashville	\$ 20,890,000	88.0%	\$ 18,373,200	2.8%	\$ 586,000	1.9%	\$ 1,286,100	6.2%	\$ 214,000	1.0%	\$ 27,700	0.1%	\$ 6,933,000	\$ 27,823,000
Navajo	\$ 73,150,800	85.7%	\$ 62,674,900	5.6%	\$ 4,132,000	2.2%	\$ 1,593,000	2.6%	\$ 1,537,000	2.1%	\$ 1,290,900	1.8%	\$ 19,242,000	\$ 92,392,800
Oklahoma	\$ 66,241,200	84.6%	\$ 56,058,400	7.7%	\$ 5,116,000	1.9%	\$ 2,155,100	3.3%	\$ 796,000	1.2%	\$ 858,700	1.3%	\$ 7,349,900	\$ 83,591,100
Phoenix	\$ 59,241,000	85.5%	\$ 50,648,200	4.0%	\$ 2,379,000	1.9%	\$ 2,053,200	3.5%	\$ 1,030,000	1.7%	\$ 2,009,600	3.4%	\$ 618,000	\$ 33,853,000
Portland	\$ 19,758,400	66.6%	\$ 13,165,400	8.0%	\$ 1,578,000	5.3%	\$ 3,681,000	18.6%	\$ 146,000	0.7%	\$ 136,000	0.7%	\$ 9,177,000	\$ 39,355,400
Tucson	\$ 9,052,700	86.2%	\$ 7,800,900	3.5%	\$ 318,000	3.2%	\$ 294,000	4.2%	\$ 192,000	2.1%	\$ 66,800	0.7%	\$ 4,507,000	\$ 13,559,700
IHS total	\$ 472,704,600	84.2%	\$ 398,153,900	5.2%	\$ 24,567,000	2.2%	\$ 10,518,000	5.1%	\$ 8,570,000	1.8%	\$ 6,745,900	1.4%	\$ 163,956,000	\$ 636,660,600

<sup>a</sup>Allocations include fiscal year 1985 pay act mandatory increases. Total clinical services funding in this table, \$636.7 million, is less than the \$662.1 million reported in app. C, because this table excludes funds for IHS headquarters in Rockville, MD, and other administrative functions. Special equity funds (\$5 million in fiscal year 1985), which most often are used to deliver clinical services, are not included. Funds administered by tribes under self-determination (638) contract programs are distributed among the direct and contract care categories.

<sup>b</sup>This budget category refers not to Medicare and Medicaid reimbursements, but to payments received from other Federal agencies, primarily for the use of IHS facility space.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Office of Administration and Management, 1985.

Table 5-2.—IHS Staff by Function and Area, Fiscal Year 1984

Area	Clinical						Administrative/ support	Total staff <sup>d</sup>
	Medical <sup>a</sup> officers	Dental <sup>a</sup> officers	Physician assistants	Nurses <sup>b</sup>	Other nursing <sup>c</sup>	Allied health		
Aberdeen . . . . .	25	20	10	161	81	179	439	915
Alaska . . . . .	98	35	8	269	76	114	660	1,260
Albuquerque . . . . .	52	20	12	157	66	181	430	918
Bemidji . . . . .	18	13	0	50	12	53	124	270
Billings . . . . .	40	17	1	77	32	125	324	616
California . . . . .	1	0	0	0	0	4	56	61
Nashville . . . . .	9	3	1	38	18	36	84	189
Navajo . . . . .	145	42	25	393	245	341	842	2,033
Oklahoma . . . . .	94	44	9	319	128	327	684	1,605
Phoenix . . . . .	110	23	11	317	170	164	751	1,546
Portland . . . . .	25	17	3	40	7	92	204	388
Tucson . . . . .	14	3	3	26	17	22	69	154
Headquarters . . . . .	14	3	0	12	15	28	315	387
IHS total . . . . .	645	240	83	1,859	867	1,666	4,982	10,342

<sup>a</sup>During fiscal year 1984, an additional 44 medical officers and 29 dental officers served in nonclinical capacities. They have been excluded from these clinical categories and included in the administrative/support category.

<sup>b</sup>Nurses working in hospitals and clinics.

<sup>c</sup>Nurses working in other settings, e.g., community health and public health nurses.

<sup>d</sup>Total IHS staff in this table includes full-time, permanent IHS employees working in IHS facilities and programs, and IHS employees assigned to tribal 638 contract programs under Intergovernmental Personnel Act provisions. Staff of 638 contract programs hired directly by the tribes (both former Federal and non-Federal) are not included.

SOURCE: Adapted by the Office of Technology Assessment from U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, "Annual Report to Congress on the Indian Civil Service Retirement Act, Public Law 96-135, Fiscal Year 1984," table XII.

Tables 5-2 and 5-4 should be interpreted carefully, because the number of IHS physicians in an area is dependent on the degree to which IHS and tribally operated direct services are available. For example, the numbers and rates of health professionals in California do not accurately reflect the situation there, because California delivers care entirely through tribal 638 contractors. Some employees of these tribal 638 contractors are not included in table 5-4 because they are direct tribal employees rather than IHS assignees through the Intergovernmental Personnel Act. This data limitation probably affects the Bemidji and Nashville areas as well, where there is a substantial amount of self-determination contracting. The Portland IHS area appears to be low in staffing, because nearly half of its clinical services budget is spent for contract care provided by private physicians and dentists. When these areas are excluded, the Aberdeen area stands out with a lower than average physician-to-population ratio.

Another means of comparing IHS staffing among the areas is to attempt to standardize for workload. Variations of this approach have been used in recent years by several IHS area directors (e.g., in the Aberdeen and Navajo areas) to examine and compare direct care workloads. The

workload measure is the number of "clinical units," with each unit representing 1 hospital day. Outpatient visits are converted to clinical units by equating six outpatient visits to 1 hospital day (120). Table 5-5 presents such an analysis for fiscal year 1984. This table distinguishes clinical care staff from administrative staff.

What is evident in table 5-5 is that the distribution of IHS clinical staff among the areas is not necessarily related either to direct care workload, as approximated by the clinical units measure, or to the size of the service population. The number of clinical units delivered per clinical staff position in the Aberdeen area, for example, is about 63 percent higher than the number in the Albuquerque area. This finding, conditional as it is, tends to confirm reports from the field that in areas such as Aberdeen, the problems of attracting medical staff to extremely isolated rural areas are complicated by the demands of unusually heavy workloads.

An important source of medical and health professional staff for IHS is the PHS Commissioned Corps. Eighty-one percent of IHS's medical officers and 99 percent of its dental officers in clinical practice are members of the PHS Com-

**Table 5-3.—IHS Indian and Non-Indian Employees by Profession and Area, Fiscal Year 1984<sup>a</sup>**

Profession	Aberdeen		Alaska		Albuquerque		Bemidji <sup>b</sup>		Billings		California <sup>b</sup>		Nashville <sup>b</sup>	
	Indian	Non-Indian	Indian	Non-Indian	Indian	Non-Indian	Indian	Non-Indian	Indian	Non-Indian	Indian	Non-Indian	Indian	Non-Indian
Medical officers . . . . .	2	26	0	103	1	54	0	18	2	38	0	2	0	11
Dental of fibers . . . . .	2	19	0	36	1	23	0	14	0	18	0	2	0	4
Physician assistants . . . . .	8	2	5	3	10	2	0	0	1	0	0	0	1	0
Nurses . . . . .	51	114	18	252	58	105	11	40	26	52	0	1	8	32
Other nursing . . . . .	78	3	44	32	64	2	9	3	32	0	0	0	18	0
Clinical support . . . . .	85	99	40	77	90	102	15	40	62	64	0	4	15	23
Administrative support . . . . .	356	70	409	241	361	45	83	37	288	33	33	19	60	17
Area total . . . . .	582	333	516	744	585	333	118	152	411	205	33	28	102	87

Profession	Navajo		Oklahoma		Phoenix		Portland		Tucson		Headquarters		IHS total	
	Indian	Non-Indian	Indian	Non-Indian	Indian	Non-Indian	Indian	Non-Indian	Indian	Non-Indian	Indian	Non-Indian	Indian	Non-Indian
Medical of fibers . . . . .	4	145	8	89	1	117	1	27	1	15	3	21	23	666
Dental of fibers . . . . .	1	44	1	45	2	24	2	16	0	3	0	12	9	260
Physician assistants . . . . .	25	0	9	0	9	2	1	2	3	0	0	0	72	11
Nurses . . . . .	116	281	106	217	89	237	16	24	6	20	9	6	514	1,381
Other nursing . . . . .	240	5	125	3	763	7	5	2	17	0	13	2	808	59
Clinical support . . . . .	230	123	181	156	108	66	41	57	10	12	9	24	886	847
Administrative support . . . . .	727	92	600	65	556	165	144	50	58	9	149	139	3,824	982
Area total . . . . .	1,343	690	1,030	575	928	618	210	178	95	59	183	204	6,136	4,206

<sup>a</sup>The 44 medical officers and 29 dental officers serving in administrative capacities are included with clinical officers in this table. As noted in table 5-2, IHS employees of tribal 638 contract programs assigned under the Intergovernmental Personnel Act are included. With other IHS staff in the total 6,136 Indian and 4,206 non-Indian employees. Staff hired directly by tribal 638 programs (former Federal and nonfederal) are not included.

<sup>b</sup>Staffing may be low in Bemidji, California, and Nashville because tribal direct employees of self-determination (638 contract) programs are not included.

SOURCE: Adapted by the Office of Technology Assessment from U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, "Annual Report to Congress on the Indian Civil Service Retirement Act, Public Law 96-135, Fiscal Year 1984 table XII."

**Table 5-4.—IHS Medical and Dental Officers in Relation to Eligible Service Population by Area, Fiscal Year 1984<sup>a</sup>**

Area	IHS eligible service population (1984)	Clinical		Service population ratios	
		Medical officers	Dental officers	Physicians per 1,000	Dentists per 1,000
Aberdeen . . . . .	70,648	25	20	0.4	0.3
Alaska . . . . .	71,329	98	35	1.4	0.5
Albuquerque . . . . .	51,211	52	20	1.0	0.4
Bemidji <sup>b</sup> . . . . .	47,000	18	13	0.4	0.3
Billings . . . . .	40,106	40	17	1.0	0.4
California <sup>b</sup> . . . . .	71,642	1	0	0.0	0.0
Nashville <sup>b</sup> . . . . .	35,822	9	3	0.3	0.1
Navajo . . . . .	162,005	145	42	0.9	0.3
Oklahoma . . . . .	190,451	94	44	0.5	0.2
Phoenix . . . . .	82,309	110	23	1.3	0.3
Portland <sup>c</sup> . . . . .	96,427	25	17	0.3	0.2
Tucson . . . . .	17,852	14	3	0.8	0.2
Headquarters . . . . .	0	14	3	—	—
IHS total . . . . .	936,802	645	240	0.7	0.3

<sup>a</sup>The 44 medical officers and 29 dental officers serving in nonclinical capacities during fiscal year 1984 have been excluded from these calculations. As in tables 5.2 and 5.3, IHS employees of tribal 638 contract programs assigned under the Intergovernmental Personnel Act are included with IHS full-time, permanent staff. Staff hired directly by tribal 638 programs (former Federal and nonfederal) are not included.

<sup>b</sup>Numbers of staff may be low in these areas, because direct tribal employees of self-determination (638 contract) programs are not included. Consequently service population ratios in these areas may be low.

<sup>c</sup>IHS staffing is low in the Portland area because there are no IHS hospitals there, and nearly half of the budget is spent on contract care.

SOURCES: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, "Indian Health Service" service population estimates are from the Population Statistics Staff, medical and dental officers in clinical practice are from the Office of Indian Resources Liaison (unpublished data), 1985.

missioned Corps (216). One of the most persuasive arguments in support of the Transfer Act of 1954 had to do with the recruitment of physicians, because at that time the BIA health program was heavily dependent on PHS for medical staff. The PHS Commissioned Corps offered better career opportunities than were available through BIA, including a commission that satisfied the military service obligation (with the end of the draft, this incentive ceased to exist).

Table 5-6 lists the number of PHS Commissioned Corps personnel serving in IHS in fiscal year 1984, by area, broken down by Indian and non-Indian officers and by clinical and nonclinical function. The **2,063** Commissioned Corps officers represented nearly 20 percent of total IHS staff. Only 7.2 percent of those positions, however, were filled by Indian members of the Corps.

The National Health Service Corps (NHSC) scholarship program, which now is being phased out, has been another important source of physicians for IHS. As of September 30, 1984, NHSC scholarships had been awarded to a total of 13,559 individuals. During fiscal year 1984, 1,303 NHSC recipients (including 1,131 physicians) began to fulfill their service obligations (164). Of these 1,303 NHSC scholarship recipients, 185 accepted

placements in IHS: 155 physicians (in an IHS clinical care physician force of about 650), 22 nurses, and 8 dentists (196). In addition to working directly for IHS, NHSC providers have been employed in tribally operated 638 health programs; and in fiscal year 1983, nine urban Indian health projects received 18 NHSC assignees, representing almost 14 percent of the urban projects' total medical and dental staff (183). Nearly all physicians who enter IHS with NHSC scholarship payback obligations, however, leave after their obligation is fulfilled. Only about 5 percent stay at least 1 additional year (38).

The IHS health manpower scholarship programs, which are authorized by Title I of the Indian Health Care Improvement Act, have several special features designed to recruit and train new health professionals and to provide continuing education for IHS physicians, dentists, and other health providers. Scholarships authorized by section 103 of Title I provide support to Indian students who require additional education to compensate for deficiencies in their prior academic training in order to qualify for enrollment in a health professions school. Section **104** scholarships, which carry a service payback obligation, are awarded to students pursuing degrees in a variety of health professions. Non-Indians are eligi-

**Table 5-5.—IHS Area Comparison of IHS Direct Care Workload by Clinical Units, Fiscal Year 1984<sup>a</sup>**

Area	1984 service population	(i)	(ii)	(iii)		(v)	(vi)	(vii)	(viii)	(ix)
		Clinic outpatient visits	Hospital outpatient visits	Hospital days		Clinical units	Total staff	Clinical staff	Clinical units per staff	Clinical units per clinical staff
				A d u l t s	Newborns					
Aberdeen . . . . .	70,648	116,660	29<,104-	44,612	2,654	115,893	915"	476	127	243
Alaska . . . . .	71,329	64,508	197,872	68,084	4,348	116,162	1,260	600	92	194
Albuquerque. . . . .	51,211	108,754	162,900	27,467	1,485	74,228	918	488	81	152
Bemidji . . . . .	47,000	47,037	62,349	5,380	242	23,853	270	146	88	163
Billings . . . . .	40,106	169,519	100,866	11,819	800	57,683	616	292	94	198
California . . . . .	71,642	86,440 <sup>b</sup>	NA	NA	NA	o	61	5	—	—
Nashville. . . . .	35,822	4,563	56,338	6,329	199	16,678	189	105	88	159
Navajo . . . . .	162,005	111,305	462,894	88,813	9,881	194,394	2,033	1,191	96	163
Oklahoma . . . . .	190,451	254,337	312,036	49,653	7,830	151,879	1,605	921	95	165
Phoenix . . . . .	82,309	94,510	295,289	80,439	3,436	148,842	1,546	795	96	187
Portland . . . . .	96,427	212,547	NA	NA	NA	35,425	388	184	91	193
Tucson . . . . .	17,852	22,388	36,616	7,315	184	17,333	154	85	113	204
Headquarters . . . . .	0	NA	NA	NA	NA	o	387	72	—	—
<b>IHS total . . . . .</b>	<b>936,802</b>	<b>1,206,128</b>	<b>1,982,264</b>	<b>389,911</b>	<b>31,059</b>	<b>952,369</b>	<b>10,342</b>	<b>5,360</b>	<b>92</b>	<b>178</b>

<sup>a</sup>Utilization figures in this table represent IHS direct care workloads. Outpatient visits to tribally operated facilities and urban projects, and utilization data for the contract care program are not included in this table. Columns (i) through (iv) include IHS facilities only; column (v) assumes 6 outpatient visits equal 1 hospital day, and columns (vi) and (vii) include Federal employees assigned to tribal 638 contract programs through the Intergovernmental Personnel Act, but not staff hired directly by the tribal 638 contractors.  
<sup>b</sup>Provisional data from California Program Office Workload Statistical Summary, calendar year 1984.

SOURCES: U.S. Department of Health and Human Services, Public Health Service Health Resources and Services Administration Indian Health Service Service Population estimates from the Population Statistics Staff, outpatient visits and hospital days from the Patient Care Statistics Staff, total staff and clinical staff from the Office of Indian Resources Liaison (unpublished data), 1985.

**Table 5-6.—IHS Indian and Non-Indian Commissioned Corps Officers by Clinical and Nonclinical Function, Fiscal Year 1984<sup>a</sup>**

Area	Indian			Non-Indian			Corps total	Percent by area
	Clinical	Nonclinical	Total	Clinical	Nonclinical	Total		
Aberdeen . . . . .	11	2	13	102	29	131	144	7.0 %
Alaska . . . . .	5	0	5	215	44	259	264	12.8
Albuquerque . . . . .	10	4	14	137	30	167	181	8.8
Bemidji . . . . .	4	0	4	78	16	94	98	4.8
Billings . . . . .	7	1	8	91	11	102	110	5.3
California . . . . .	1	0	1	5	18	23	24	1.2
Nashville . . . . .	0	0	0	39	9	48	48	2.3
Navajo . . . . .	23	1	24	272	58	330	354	17.2
Oklahoma . . . . .	30	3	33	229	37	266	299	14.5
Phoenix . . . . .	27	1	28	257	43	300	328	15.9
Portland . . . . .	10	1	11	84	16	100	111	5.4
Tucson . . . . .	1	1	2	26	3	29	31	1.5
Headquarters . . . . .	1	5	6	37	28	65	71	3.4
IHS total . . . . .	130	19	149	1,572	342	1,914	2,063	100.0 %

<sup>a</sup>Not included in this table are direct employees of tribal self-determination 638 programs. These exclusions affect some areas (e.g., Bemidji, California, and Nashville) more than others.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Indian Resources Liaison, computer printouts dated 01/17/85 and 9/30/85.

ble for scholarships authorized by section 104, although preference is extended to Indian applicants.

To determine the staffing categories for which scholarships will be awarded under its health manpower programs, IHS uses the resource requirement methodology, combined with information on current vacancies, attrition, and turnover. For the academic and fiscal year 1986, for example, section 103 scholarships were awarded in nursing and accounting and, for juniors and seniors, in premedicine and pre dentistry. Section 104 scholarships were awarded to students in medicine, nursing, accounting, master of public health programs, health records, pharmacy, engineering, nutrition/dietetics, sanitary science, and medical technology. From 1979 through the beginning of fiscal year 1986, 2,004 students had received IHS health scholarship program support (24).

IHS scholarship programs have had a dropout rate approaching 40 percent, but are credited with the graduation of 600 health professionals since 1979 (unfortunately, information is not available to specify graduates by profession). Approximately 80 percent of the 600 who have graduated continue to work for IHS (24). Thus, as a training and recruitment mechanism, the Indian health manpower scholarship programs hold promise. At present operating levels, however, it is not likely that the programs can support enough phy-

sicians to meet the expected loss of NHSC physicians. In addition, the scholarship programs are authorized and funded under the Indian Health Care Improvement Act, the reauthorization for which was vetoed in 1984 and had not been reenacted by the end of 1985; but the programs still operate under continuing resolution funding.

Although the retention of health care personnel, including NHSC assignees, traditionally has been viewed as a problem for IHS, the tribes also have a responsibility to take an active role in addressing it. Better retention of NHSC scholars after their obligations are completed could significantly enhance the stability of IHS medical staff in all areas. For the tribes, a more stable medical staff would improve the quality and range of services provided. It would be helpful if PHS Commissioned Corps officers were available for relocation within the system as needed, but there are limits to what can be done in the way of voluntary relocations. Remedying apparent staffing deficiencies in certain IHS areas would require acceptance by IHS and the tribes of a method of allocation that is driven more by relative need or demand than by historical funding patterns. Although a major redistribution of IHS health care delivery staff may not be easy to implement, the ranges in direct care physician- and dentist-to-population ratios and in clinical unit workload rates among IHS areas suggest that further work on this subject is in order.

Policies governing NHSC placements require that scholarship recipients repay their service obligations in designated health manpower shortage areas. These areas are designated by PHS on the basis of detailed sets of criteria involving geography, population characteristics, the availability of facilities, and other factors. Indian and Alaska Native groups are automatically designated as having primary care manpower shortages if they are groups of members of federally recognized tribes as defined in section 4 (d) of the Indian Health Care Improvement Act. If the Indian groups fit section 4 (c) of the act, the definition applicable to Indians who may not be reservation-based members of federally recognized tribes but who meet other criteria of being Indian, they may be designated if they meet other manpower shortage criteria applicable to non-Indian populations (42 CFR Part 5 app. A). In other words, all IHS service units are eligible for NHSC assignments, and IHS receives priority consideration in those assignments (60). Private practice options in medically underserved areas also are acceptable for NHSC paybacks and may provide some services to Indians.

In the absence of the NHSC, IHS will have to rely more heavily on the PHS Commissioned Corps and on its own scholarship programs to ensure a future supply of professionals, especially physicians, who are willing to work on reservations. A recent study of the U.S. medical school class of 1975 found that minority physicians of that class now provide more care to patients of their own racial or ethnic groups and to Medicaid patients than do their nonminority counterparts (59).

Problems of training and retaining health professionals will become critical for IHS over the next 5 years as the NHSC program is phased out. Although IHS has received preferential consideration with respect to the assignment of NHSC scholars in the past, that special relationship is not expected to continue beyond 1986. NHSC has placed 1,083 scholars who will begin repaying their service obligations in July 1986. Of this number, IHS requested 142 physicians and its request was met. Fifty-six of the IHS assignees, almost 40 percent, had elected to work in the IHS system; the remaining 86 were assigned to IHS without

having indicated such a preference. While NHSC is no longer trying to project the distribution of placements beyond the 1986 cycle, its scholarship branch currently estimates that the following numbers of scholars (a few are not physicians) will be available in future years, from which IHS has no guaranteed assignments: 886 scholars in 1987; 413 in 1988; 76 in 1989; and 4 in 1990 (52). These figures may be slightly overestimated, subject to reduction for scholars choosing to buy out their obligation and for deaths.

The need to develop strategies for the replacement of NHSC medical personnel in the IHS system is an imminent problem. NHSC has begun to recruit unobligated physicians and other health professionals for career positions. Its goal is to establish and maintain permanent practices in areas having health manpower shortages. Although the success of such an approach would have been limited in recent years by a lack of individuals willing to practice in rural areas, conditions are changing. Economic factors such as a projected oversupply of physicians, along with a slight decrease in the average annual earnings among physicians and changes in health care delivery systems (e.g., greater enrollment in health maintenance organizations, which require fewer physicians), may mean that more physicians will be available and willing to work in rural areas. The Federal Government could encourage this possibility by strategies such as NHSC as a career or by offering financial incentives to individuals in exchange for agreements to work in underserved areas.

One difficulty with Federal intervention into medical manpower distribution is that commitments from health professionals are generally short term. In addition, the public may not be supportive of education subsidies in a field where supply now exceeds anticipated needs in many parts of the country. Bills have been pending in both Houses of Congress to extend the life of NHSC for 3 years: the Senate bill (S. 1285) would allow 450 new scholarships, and the House bill (H.R. 2234) would authorize 1,176 new scholarships over 3 years. Neither of these bills would make a significant contribution toward replacing IHS's projected loss of physicians, unless a large proportion of the new scholarships was targeted for payback in IHS.

Another option that is more directly within IHS's control would be to increase the number of IHS health manpower training scholarships available to persons for undergraduate degrees in pre-medicine, accompanied by a strengthened commitment to students in medical school through increased scholarship support. This option could be designed to include scholarships for other health professionals and might include non-Indians as well as Indians. Indian medical students also might be assisted through the activities of professional organizations such as the Association of Native American Medical Students and its parent organization, the Association of American Indian Physicians.

The recruitment of physicians to replace NHSC assignees from outside the Federal sector is another possibility. The potential of such an approach has not yet been examined, but large-scale direct hiring of medical personnel would have to be weighed carefully against the feasibility and costs of expanded contracting for needed staff and services.

### Delivery of Direct Care Services

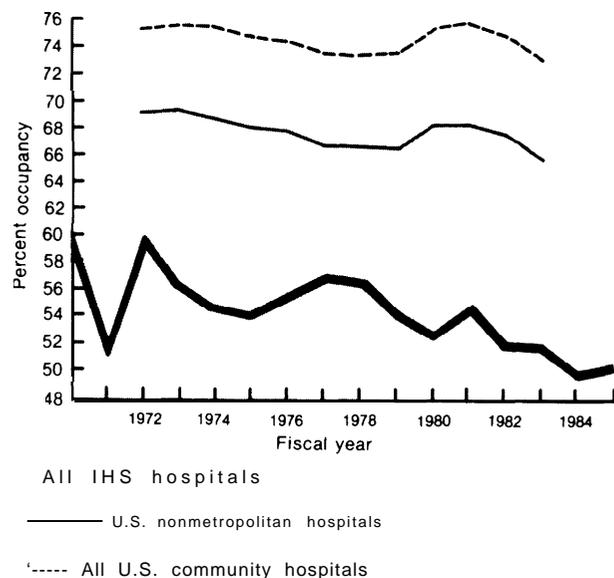
IHS direct care services are delivered through an organizational structure of area and program offices and service units. The eight area offices and four smaller program offices (Tucson, Bemidji, Nashville, and California) serve defined geographic areas of varying sizes and service populations. Area and program office staffs allocate annual budgets among their several service units, which are the basic health care delivery units. As of October 1984, there were 123 service units, of which 44 were operated by the tribes under self-determination (638) contracts (191). **Direct care services are delivered (or monitored, in the case of 638 contract services), and contract care referrals are authorized at the service unit level. Like the areas, the service units are responsible for varying budget allocations, eligible populations, and numbers of facilities.**

The types of facilities in the IHS direct care delivery system include hospitals, health centers, health stations, health locations, and school health centers. The 51 IHS and tribally operated hospitals (discussed in greater detail below) vary greatly in size and service capabilities: for example, only

13 of them offer staffed surgery services. Most of the hospitals have active outpatient departments and often are the location for outpatient dental, mental health, and alcoholism services. Health centers are relatively comprehensive outpatient facilities that are open at least 40 hours per week. Health stations, which include some mobile units, are open fewer than 40 hours per week and offer less complete ambulatory services. Health locations are generally outpatient delivery sites (but not IHS facilities) that are staffed periodically by traveling health personnel.

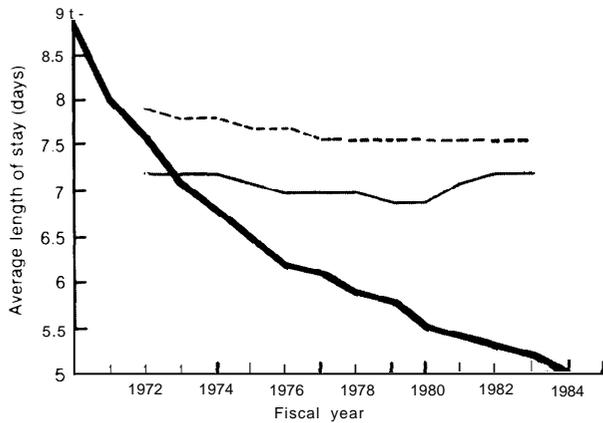
Figures 5-4 and 5-5 illustrate recent trends in hospital occupancy rates and average length of stay for all IHS hospitals, U.S. community hospitals, and U.S. nonmetropolitan community hospitals. IHS hospitals are smaller than the average U.S. community hospital; two-thirds of IHS hospitals (compared with about one-fifth of all U.S. community hospitals) have fewer than 50 beds. IHS hospital occupancy rates, in the range of 50 to 55 percent, have been consistently lower than

Figure 5-4.—Occupancy Rates in All U.S. Community Hospitals, U.S. Nonmetropolitan Hospitals, and IHS Hospitals, Fiscal Years 1970-85



SOURCES: For all U.S. short-stay community hospitals and U.S. nonmetropolitan community hospitals: AHA *Hospital Statistics*, editions for 1971 through 1984. IHS hospitals: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, "Inpatient and Outpatient Summary Data for Indian Health Service Hospitals by Area and Facility," fiscal years 1970-85.

**Figure 5-5.—Average Length of Stay in All U.S. Community Hospitals, U.S. Nonmetropolitan Hospitals, and IHS Hospitals, Fiscal Years 1970-85**



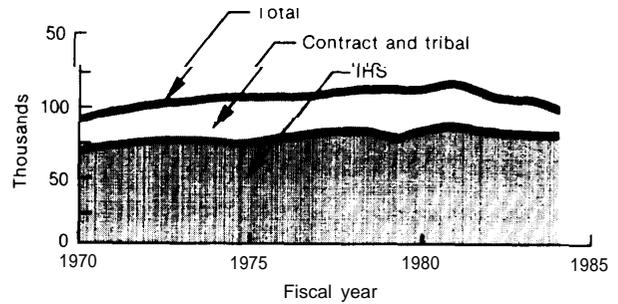
— All IHS hospitals  
 — U.S. nonmetropolitan hospitals  
 - - - - All U.S. community hospitals

SOURCES For all U.S. short-stay community hospitals and U.S. nonmetropolitan community hospitals: AHA *Hospital Statistics*, editions for 1971 through 1984 IHS hospitals: U.S. Department of Health and Human Services Public Health Service Health Resources and Services Administration Indian Health Service 'Inpatient and Outpatient Summary Data for Indian Health Service Hospitals by Area and Facility' fiscal years 1970-85

the average 75 percent occupancy for all U.S. community hospitals. U.S. nonmetropolitan community hospitals, which are closer to IHS hospitals in size and range of services, have experienced occupancy rates of 65 to 70 percent (3).

Average lengths of stay (figure 5-5) in IHS hospitals have fallen from well above to below the average stays in all U.S. community and U.S. nonmetropolitan hospitals. While inpatient stays held relatively stable until 1983 at just below 8 days per stay in all U.S. community hospitals and between 7 and 7.5 days in nonmetropolitan hospitals (3), the average length of stay in IHS hospitals has declined steadily from a high of nearly 9 days per stay in 1970 to 4.9 days in 1984. It is likely that the lower average length of stay in IHS hospitals relates to the comparatively limited range of inpatient services many of these facilities offer (patients requiring specialized care usually are referred to private hospitals under contract care), but how much is explained by this factor is not known.

**Figure 5-6.—Number of Admissions to IHS and Contract and Tribal Hospitals, Fiscal Years 1970-85**



SOURCE U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, *Chart Series Book*, Rockville, MD, April 1985

Total numbers of admissions to IHS hospitals peaked in 1978 at about 112,000 (including IHS and tribally operated hospitals, and contract care inpatient referrals) and have declined since that time to about 103,000 admissions in 1984 (see figure 5-6 and table 5-7). Contract care admissions declined more sharply than admissions to IHS direct care and tribally operated hospitals, which suggests the effects of limited contract care budgets. The combination of declining admissions and average lengths of stay explains the low and declining occupancy rates of IHS hospitals. Given the substantial increase in IHS's estimated eligible service population since 1970, however, other factors such as limited access to facilities, a limited range of services, and differences between IHS's estimated service population and its actual user population may contribute to declining hospital utilization. The overall hospital utilization rate decreased from 206 admissions per 1,000 IHS population in 1970 to 125 per 1,000 in 1984 (table 5-7). This compares with a current hospital utilization rate for the U.S. general population of about 159 discharges per 1,000 in 1982 (202). Figure 5-7 and table 5-8 show that the average number of patients receiving inpatient care (the average daily patient load) in IHS direct, IHS contract, and tribally operated hospitals combined has declined since 1980.

The discussion that follows will focus on health facilities and programs at the IHS area office level, including those operated by tribes under 638 self-determination contracts. (Detailed listings of fa-

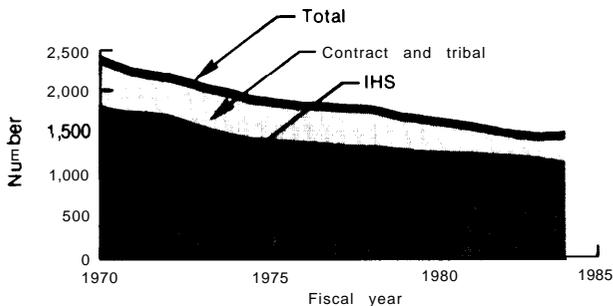
**Table 5-7.—Number of Admissions and Utilization Rate for IHS, Contract, and Tribal Self. Determination Hospitals, Fiscal Years 1955-84**

Fiscal year	Total utilization rate <sup>a</sup>	Total IHS and tribal admissions	Indian Health Service			Tribal
			Total	IHS	Contract <sup>b</sup>	
1984	124.6	102,843	99,849	77,522	22,327	2,994
1983	130.1	104,806	102,961	78,027	24,934	1,845
1982	132.7	104,418	102,343	77,070	25,273	2,075
1981	142.3	109,353	107,087	81,387	25,700	2,266
1980	144.3	108,242	106,992	77,798	29,194	1,250
1979	157.8	107,269	106,329	75,174	31,155	940
1978	179.0	112,203	112,203	77,567	34,636	
1977	181.5	110,025	110,025	78,424	31,601	
1976	197.9	106,461	106,461	76,382	30,079	
1975	212.2	105,735	105,735	74,594	31,141	
1974	218.2	103,853	103,853	73,402	30,451	
1973	213.5	102,350	102,350	75,245	27,105	
1972	218.2	102,472	102,472	76,054	26,418	
1971	206.6	94,945	94,945	70,729	24,216	
1970	205.7	92,710	92,710	67,877	24,833	
1965	226.1	91,744	91,744	67,744	24,000	
1960	201.9	76,754	76,754	56,874	19,880	
1955	150.2	50,143	50,143	42,762	7,381	

<sup>a</sup>Number of admissions per 1,000 IHS estimated eligible service population.  
<sup>b</sup>Number of discharges used as estimate for number of admissions.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, *IHS Chart Series Book*, April 1985 Data published as table 5.5, from the following IHS documents: *IHS Monthly Report of Inpatient Services*; *Annual Report 31* for contract hospitals; and area submissions for tribal hospitals.

**Figure 5.7.—Average Daily Patient Load in IHS, Contract, and Tribal Hospitals, Fiscal Years 1970-85**



SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, *Chart Series Book*, Rockville, MD, April 1985

cilities by type, with utilization data, by service unit and associated tribe, State, and IHS area are available from the Office of Technology Assessment (OTA). )

Table 5-9 summarizes the numbers of health facilities by IHS area and type, with utilization data, in fiscal year 1984. Two areas, Portland and California, have no IHS hospitals and hence no direct inpatient care. The small (18,000 service pop-

ulation) Tucson program office has one 40-bed hospital, the Nashville area has one IHS and one tribally operated hospital, and there are two IHS hospitals in the Bemidji area (both in Minnesota). The Phoenix and Aberdeen areas are served by nine hospitals each, all operated by IHS. There are five IHS and two tribally operated hospitals in Alaska (as of January 1986, a third IHS hospital converted to tribal control). The three IHS hospitals that are considered major medical referral centers, even though they do not offer all tertiary services, are located in Anchorage, Phoenix, and Gallup. Excluding California and Portland, which have no hospitals, inpatient beds per 1,000 IHS estimated eligible service population ranged from less than 1 bed per 1,000 in Bemidji (an area that is heavily dependent on contract care) to a high of 5.4 in Alaska (1984 beds and populations). The IHS average was about 2.4 beds per 1,000 (1984, combining IHS and 638 hospital beds). In 1982, there were 4.4 community short-stay hospital beds per 1,000 U.S. population, ranging from 3.3 per 1,000 in the Pacific region to a high of 5.9 per 1,000 in the West North Central region (including the Dakotas and Minnesota) (202).

**Table 5-8.—Average Daily Patient Load (ADPL) in IHS, Contract, and Tribal Self-Determination Hospitals, Fiscal Years 1955-84**

Fiscal year	Grand total ADPL	Indian Health Service			Tribal
		Total	IHS	Contract	
1984 .....	1,392	1,353	1,072	281	39
1983 .....	1,477	1,449	1,119	330	28
1982 .....	1,488	1,460	1,121	339	28
1981 .....	1,575	1,550	1,194	356	25
1980 .....	1,594	1,576	1,178	398	18
1979 .....	1,586	1,569	1,192	377	17
1978 .....		1,723	1,256	467	
1977 .....		1,710	1,302	408	
1976 .....		1,736	1,299	437	
1975 .....		1,768	1,330	438	
1974 .....		1,840	1,376	464	
1973 .....		2,013	1,499	514	
1972 .....		2,172	1,626	546	
1971 .....		2,177	1,627	550	
1970 .....		2,353	1,729	624	
1965 .....		3,127	2,244	883	
1960 .....		3,142	2,232	910	
1955 .....		3,711	2,531	1,180	

SOURCE<sup>a</sup> US Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, *Indian Health Service, IHS Chart Series Book*, April 1965 Data published as table 56, from the following IHS documents<sup>b</sup>: IHS Monthly Report of Inpatient Services, Annual Report 31 for contract hospitals; and area submissions for tribal hospitals.

IHS hospitals differ from the typical U.S. community hospital in that IHS hospitals are older, smaller in bed size, and more limited in the range of inpatient services they offer. The average IHS hospital is more than 35 years old. Of the 47 hospitals operated by IHS, 18 were built before 1940, 3 were built between 1940 and 1954, and 26 have been built since responsibility for Indian health was transferred to the Department of Health, Education, and Welfare (now DHHS) in 1955 (135).

In 1984, the IHS system consisted of 47 hospitals operated by IHS plus 4 hospitals operated by tribes: the hospitals at Dillingham and Nome, Alaska; the Creek Nation hospital in Oklahoma; and the Choctaw hospital in Mississippi. As of February 1986, two more IHS hospitals had converted to tribal operation, the Mt. Edgecumbe hospital in Southeast Alaska and the Oklahoma Choctaw hospital at Talihina. As of January 1985, 40 of the 47 IHS-operated hospitals were accredited by the Joint Commission on Accreditation of Hospitals (JCAH); the remaining 7 were not accredited (191). All four of the tribally operated hospitals had JCAH accreditation. JCAH accreditation represents a minimum level of adequacy in a hospital's physical facility, equipment, and

staffing. Many IHS hospitals have corrected JCAH deficiencies since 1976, when only 23 of 51 hospitals were accredited. In 1984, 38 of the 47 IHS-operated hospitals met national fire and safety standards, and all hospitals are certified to receive Medicare and Medicaid reimbursements.

Most IHS hospitals are small, and many are more isolated geographically than the average U.S. community hospital even in nonmetropolitan areas. In 1982, the average U.S. hospital had 174 beds. Only 20 percent of all U.S. hospitals had 50 beds or fewer (representing about 4 percent of total beds). Two-thirds of the hospitals operated by IHS are in that size category (3). Twelve of the 47 IHS-operated hospitals have from 50 to 99 beds, and only 4 exceed 100 beds: Anchorage, Phoenix, Tuba City, and Gallup. Five IHS hospitals have only 14 or 15 beds (60).

Differences between IHS and U.S. community hospitals also are apparent in the scope of services they offer. In general, an IHS hospital is likely to provide a relatively wide range of health-related and social support services (e.g., social work, outpatient psychiatric and alcoholism services, family planning) and fewer high-technology services. An especially noticeable difference is in the availabil-

**Table 5-9.—IHS and Tribally Operated Self-Determination (638) Facilities by IHS Area, With Fiscal Year 1984 Utilization**

IHS area	1984 IHS service population	Hospitals				Health centers		Health stations <sup>c</sup>	
		Number	Beds <sup>a</sup>	Admissions	Outpatient visits	Number	Outpatient visits <sup>b</sup>	Number	Outpatient visits <sup>b</sup>
Aberdeen . . . . .	70,648								
IHS . . . . .		9	323	10,725	295,104	4	42,998	20	73,662
638 . . . . .		—	—	—	—	2	28,612	2	—
Alaska . . . . .	71,329								
IHS . . . . .		5	343	9,880	197,872	5	64,497	—	—
638 . . . . .		2	43 <sup>a</sup>	1,483	26,369	3	257,866	172	—
Albuquerque . . . . .	51,211								
IHS . . . . .		5	209	5,629	162,900	8	75,652	12	33,102
638 . . . . .		—	—	—	—	1	13,620	1	—
Bemidji . . . . .	47,000								
IHS . . . . .		2	41	1,597	62,349	2	33,478	7	13,559
638 . . . . .		—	—	—	—	7	110,742	11	—
Billings . . . . .	40,106								
IHS . . . . .		3	86	3,472	100,866	9	157,211	3	18,690
638 . . . . .		—	—	—	—	—	—	—	—
California . . . . .	71,642								
IHS . . . . .		—	—	—	—	—	—	—	—
638 . . . . .		—	—	—	—	17	121,306	10	—
Nashville . . . . .	35,822								
IHS . . . . .		1	35	1,103	51,036	—	—	1	4,563
638 . . . . .		1	35 <sup>a</sup>	693	18,798	10	76,142	4	—
Navajo . . . . .	162,005								
IHS . . . . .		6	400	18,638	462,894	9	105,789	13	59,402
638 . . . . .		—	—	—	—	1	3,144	—	—
Oklahoma . . . . .	190,451								
IHS . . . . .		6	291	11,586	312,036	17	240,870	4	13,467
638 . . . . .		1	39 <sup>a</sup>	818	4,984	6	59,558	—	—
Phoenix . . . . .	82,309								
IHS . . . . .		9	369	13,401	295,289	3	31,186	11	63,324
638 . . . . .		—	—	—	—	2	11,321	—	—
Portland . . . . .	96,427								
IHS . . . . .		—	—	—	—	12	202,555	4	9,992
638 . . . . .		—	—	—	—	4	32,650	9	—
Tucson . . . . .	17,852								
IHS . . . . .		1	40	1,285	36,616	2	21,453	1	935
638 . . . . .		—	—	—	—	—	—	—	—
Totals . . . . .	936,802								
IHS . . . . .		47	2,137	77,316	1,976,962	71	975,689	76 <sup>c</sup>	290,696
638 . . . . .		4	117 <sup>a</sup>	2,994	50,151	53	714,961 <sup>b</sup>	209 <sup>c</sup>	— <sup>b</sup>

<sup>a</sup>For tribally operated self-determination (638) hospitals, numbers of beds are reported from the 1984 AHAGuide (1983 survey data), because that information was not reported by IHS. Numbers of admissions and outpatient visits, however, are from the same 1984 IHS sources as for IHS hospitals, about patient visits to tribally operated health stations and to Alaska's 172 village clinics, not available separately, are included in numbers of visits to 638 health centers.

<sup>b</sup>Numbers of health stations include Indian school health centers and the 172 village clinics in Alaska. Health locations are not included.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Branch, 1985.

ity of surgical services. Of the 51 IHS and tribally operated hospitals, only 13 offer staffed surgery services (5 of these 13 are in Oklahoma), and an additional 4 hospitals deliver modified or limited surgery using part-time contract surgeons, for example, rather than staff surgeons. Difficulties in recruiting and retaining medical staff limit the types of services available at many IHS hospitals, and surgeons are particularly difficult to recruit, in part because there are no NHSC scholarships for surgeons.

The IHS major medical centers at Anchorage, Phoenix, and Gallup do not provide some of the sophisticated services that would be expected at many university teaching hospitals. The following are among the services not provided in any IHS hospital, according to the 1983 American Hospital Association Annual Survey of Hospitals: cardiac intensive care unit, open heart surgery, cardiac catheterization, X-ray radiation therapy and other megavoltage and radio-isotope therapeutic services, organ transplantation, burn care,

and neonatal intensive care. Only nine IHS hospitals have a separate mixed intensive care unit, four operate premature nurseries, and three provide hospital-based renal dialysis (Tuba City, Sells, and Mississippi Choctaw). On the other hand, 32 of 51 IHS and tribally operated hospitals have obstetrical services and 42 offer dental services. Although outpatient psychiatric and alcoholism services are widespread, there is only one inpatient alcoholism service and there are five inpatient psychiatric units (2). In part because IHS direct inpatient services are relatively limited even where hospitals are accessible, the IHS contract care program (see discussion below) has been under increasing budgetary pressures in recent years to fill these service gaps.

In contrast to a declining trend in inpatient utilization, total ambulatory visits provided by IHS hospitals and direct care clinics, contract care referrals, and tribal facilities have more than doubled since 1970 (see figure 5-8 and table 5-10). About half of the total visits were delivered by IHS hospital outpatient departments. The number of ambulatory care visits provided by IHS direct care hospitals and clinics only has increased by nearly 80 percent since 1970, while contract care visits have declined by 24 percent since 1980 and visits to tribally operated facilities increased by 36 percent in that same period.

There were **1,786,920** ambulatory visits in 1970 for a total service population of 460,000, or about 3.9 visits per person. In 1984, 4,231,772 visits were provided (down slightly from totals for 1981 and 1982) for 936,802 eligible beneficiaries, a rate of

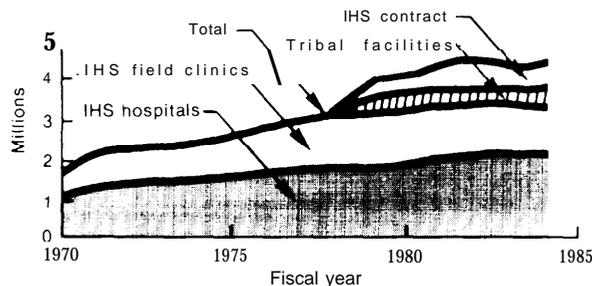
4.5 visits per person. In 1981, when the annual rate of IHS outpatient visits was 5.0 per person, all Americans made an average of 4.6 visits to hospital outpatient departments, clinics, group practices, and physicians' offices (202). Therefore, on the basis of utilization rates alone, it cannot be argued that IHS beneficiaries do not have adequate access to ambulatory services. On the other hand, however, national data indicate that higher rates of outpatient visits are to be expected among populations like those of IHS that are atypically young (under 6 years of age) or old (45 years and older), nonwhite, and in low family income groups.

The distribution of ambulatory care facilities among IHS areas and their approximate utilization in **1984** are shown in table 5-9 (referred to earlier). Utilization is approximate because not all of the tribally operated **638** facilities report to IHS data systems, and **638** clinics provide a substantial amount of health care in some areas. All of the ambulatory care facilities in California, for example, which are the only direct services provided by IHS, are 638 facilities. In the Nashville area, all clinics except one health station are tribally operated. When health stations and locations are excluded because of their small size and variable operating schedules, a comparison of health center availability among IHS areas reveals that the heaviest concentrations of facilities are in Oklahoma, California, and Portland.

## Conclusions

IHS defines its responsibility for the health of American Indians to include many services that are beyond the scope of basic inpatient and ambulatory medical care. This broad definition seems appropriate to meet the special health needs and service delivery problems of isolated reservation-based Indian populations. As is discussed later in this chapter, however, IHS does not extend this broad definition to the health care needs of Indians living in urban areas. The IHS's traditional focus, derived from the long history of BIA involvement in Indian health, has been to serve reservation Indians. That role has been challenged in recent years by advocates of urban Indians. How to balance its response to the conflicting demands of these two groups, within current budg-

**Figure 5-8.—Numbers of Outpatient Visits to IHS, Contract, and Tribal Facilities, Fiscal Years 1970-85**



SOURCE U S Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service Chart Series Book, Rockville, MD, April 1985

**Table 5-10.—Numbers of Outpatient Visits to IHS, Contract, and Tribal Facilities, Actual for Fiscal Years 1955.84 and Estimates for 1985.86**

Fiscal year	Grand total	Indian Health Service					
		Total	Hospitals	Health centers (including schools)	Other	Contract	Tribal
1986 (est.) . . . .	4,200,000	3,200,000	2,010,000	<b>950,000</b>	240,000	200,000	800,000
1985 (est.) . . . .	4,210,000	3,200,000	1,990,000	<b>970,000</b>	240,000	210,000	800,000
1984 . . . . .	4,231,772	3,248,660	1,982,264	<b>1,019,764</b>	246,632	218,000 <sup>a</sup>	765,112
1983 . . . . .	4,190,721	3,252,701	1,955,462	<b>1,049,843</b>	247,396	236,690	701,330
1982 . . . . .	4,266,776	3,334,365	1,973,688	<b>1,109,960</b>	250,708	236,706	695,705
1981 . . . . .	4,284,198	3,319,479	1,934,590	<b>1,155,294</b>	229,595	266,577 <sup>b</sup>	698,142
1980 . . . . .	4,058,568	3,194,935	1,795,607	<b>1,120,737</b>	278,592	275,000 <sup>ab</sup>	588,633
1979 . . . . .	3,880,850	3,083,350	1,710,686	<b>1,059,690</b>	312,974	275,000 <sup>ab</sup>	522,500 <sup>a</sup>
1978 . . . . .		3,124,716	1,783,642	<b>1,009,960</b>	331,114		
1977 . . . . .		2,980,850	1,715,114	<b>910,356</b>	335,380		
1976 . . . . .		2,751,546	1,593,130	<b>871,796</b>	286,620		
1975 . . . . .		2,501,050	1,465,816	<b>778,411</b>	256,823		
1974 . . . . .		2,361,654	1,366,564	<b>719,700</b>	<b>275,390</b>		
1973 . . . . .		2,329,160	1,330,660	<b>712,282</b>	<b>286,218</b>		
1972 . . . . .		2,235,881	1,275,726	<b>603,443</b>	<b>356,712</b>		
1971 . . . . .		2,195,236	1,202,027	<b>572,869</b>	<b>420,340</b>		
1970 . . . . .		1,786,920	1,068,820	<b>459,713</b>	<b>258,386</b>		
1965 . . . . .		1,325,400	757,700		567,700		
1960 . . . . .		989,500	585,100		<b>404,400</b>		
1955 . . . . .		455,000	355,000		<b>100,000</b>		

<sup>a</sup>Estimate.<sup>b</sup>Comparable contract care data not available prior to fiscal year 1981.SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, *IHS Chart Series Book*, April 1985. Data published as table 5.11

etary constraints, is a problem that IHS must begin to address. According to the 1980 U.S. census, 54 percent of the 1.4 million individuals who identified themselves as Indian lived in metropolitan areas. Most urban Indians now are excluded from IHS estimated service populations; but a gradual strengthening of urban Indian claims for IHS services may be anticipated if urban Indian populations continue to grow.

Whether in an urban or a reservation setting, however, the delivery of health services to American Indians cannot be accomplished by the same means used to provide health care to the general U.S. population. The socioeconomic, cultural, and geographic isolation of many Indians, and the dominating presence of the Federal Government through IHS and BIA, create circumstances that necessitate special approaches to health care delivery. Independent of problems relating to IHS funding levels, the expressed demand for health services and the availability of IHS facilities vary so much from one IHS area to another that no single benefits package or delivery strategy is likely to be successful in all areas. In some areas,

few health services other than those provided by IHS are readily available and accessible to Indian populations. Even in areas where non-IHS "alternate resources" (other public and private health care providers) are available, some Indians who have private insurance may prefer to use IHS direct services because they feel they are entitled to them, they want to avoid the deductibles and copayments associated with private insurance, or they feel more comfortable with IHS than with private providers.

This section of chapter 5 has presented a description of the IHS direct care program centered on the most important component of that program, the medical services provided by IHS and tribally operated hospitals and clinics. It may be concluded that the volume and scope of IHS hospital and clinic services vary considerably among the areas, apparently without consistent basis. The inventory of services provided directly by IHS and by tribal facilities reveals a system that has evolved in an unplanned manner in response to changing BIA and IHS policies for health care delivery, variable and incompletely

documented local needs and demands, and the limits of available funding as appropriated by Congress. Clearly, IHS does not deliver the same package of health services in each of its areas. This may not necessarily be bad, because it is likely that health problems also differ among the areas. However, it appears that there have been no systematic attempts to match the services that are delivered to area-specific health problems and service needs. Both among and within the 12 areas of the decentralized IHS system, a more rational approach to needs assessment and services planning could result in more cost-effective decision-making about appropriate types and volumes of health services.

IHS staffing, which represents the major cost component of hospital and clinic services, has been described. It may be concluded that in keeping with the uneven availability of IHS facilities and services, IHS staffing distributions by area and service unit also could be more closely adjusted to eligible or user population size and actual utilization trends. This might require new

placement policies and the relocation of PHS Commissioned Corps and NHSC staff to areas of greatest need. Future sources of IHS medical staffing will have to be rethought in general, however, because the NHSC program is being discontinued and the Commissioned Corps is not an actively expanding resource.

Shortages of particular types of clinical staff may limit the range of services provided in a given service unit and, consequently, affect the extent to which the service unit must rely on contract health services. This problem will be aggravated in the future unless medical officers can be recruited from other sources to fill positions vacated by NHSC assignees. The Indian health manpower scholarship program, although small, is one possible solution to this staffing problem. It would be costly to recruit IHS physicians from the private sector by offering competitive salaries, but so would be an increasing dependence on contract services purchased from the private sector to supplement diminishing IHS direct care capabilities.

## THE IHS CONTRACT CARE PROGRAM

The purpose of the IHS contract health services or contract care program is to supplement the services provided by IHS direct care hospitals and clinics. Since 1981, the contract care program has represented about 20 percent of total annual IHS allocations and 25 percent of the IHS clinical services budget. This program provides for the purchase of medical services for IHS beneficiaries from non-IHS providers. The purchase of outside services is essential to the overall IHS health care delivery system because many IHS hospitals and clinics do not have the staff and equipment necessary to offer a full range of services, particularly specialty services, and because not all eligible Indians live within a reasonable travel distance of IHS facilities.

Contract services have long been part of the Indian health system. Authority for BIA to enter into health services contracts for Indians was established by the Johnson O'Malley Act of 1934 and transferred with IHS to the Department of Health, Education, and Welfare (now DHHS) in

1955. The present IHS contract care program purchases hospital medical-surgical services and ambulatory care, including outpatient physician care, laboratory, X-ray, pharmacy, limited dental care, and patient and escort travel. The services are delivered under approximately 1,300 ongoing contracts, mostly with private physicians, and by special purchase orders for other authorized services. Contract care programs in some IHS service units are operated by the tribes under 638 self-determination contracts. The types and amounts of contract services purchased vary from one area and service unit to another depending on medical need and the capabilities of local IHS and tribally operated facilities.

### Eligibility and Funding for Contract Care

Contract care funding is appropriated annually as a separate category within the IHS clinical services budget. The contract care allocation grew

from over \$109 million in fiscal year 1980 to \$158 million for 1984. Approximately \$164 million was allocated to purchase contract health services in fiscal year 1985. Figure 5-1 (in “The IHS Direct Care Program” section, above) illustrates trends in the total IHS budget since 1972; growth in contract care funding since 1981 is shown in figure 5-2 (for detailed budget data over the years, refer to app. C).

Eligibility requirements for contract care are more restrictive than those applied to IHS direct care. It is possible for a patient being treated in an IHS hospital, and requiring services that hospital cannot provide, to be denied referral for the services because of ineligibility for the contract care program (although how frequently this situation occurs cannot be documented). In order to qualify for contract care, an individual must be eligible for direct care. IHS direct care maybe provided “to persons of Indian descent belonging to the Indian community served by the local facilities and program” (42 CFR 36.12 (a)), which may be determined by tribal membership, residence on tax-exempt land, participation in tribal affairs, or other factors consistent with BIA policies. An individual must meet an additional residency requirement to qualify for contract care: that is, he or she must **(168)**:

- reside on a reservation located within a contract health service delivery area (CHSDA) as designated by IHS; or
- reside within a CHSDA, and either “be a member of the tribe or tribes located on that reservation or of the tribe or tribes for which the reservation was established, or maintain close economic and social ties with that tribe or tribes”; or
- be an eligible student, transient, or Indian foster child.

A CHSDA is defined as “a county which includes all or part of a reservation, and any county or counties which have a common boundary with the reservation” (42 CFR 36.22 (a) (6)). This “on or near” a reservation residency requirement was formally applied to the contract care program by 1978 regulations in response to the 1976 lawsuit, *Lewis v. Weinberger*, which required a definition of the term.

Congress has legislated and IHS has developed regulatory exceptions to the general rule that CHSDAs consist of counties containing and/or adjoining a reservation. The entire States of Alaska, Nevada, and Oklahoma are specially designated CHSDAs, as are groups of counties in the States of Michigan, Wisconsin, and Minnesota (42 CFR 36.22 (a)). Arizona was provisionally designated a CHSDA, for 1982 through 1984, but it did not operate as one because the Arizona tribes would not agree to expanded eligibility for contract services without additional funding, and no such appropriation was made (60). The Indian Health Care Amendments of 1985 (H.R. 1426 and S. 277, not enacted by the end of 1985) proposed an extension of the Arizona CHSDA designation with authorization for additional funding.

**In California, all IHS services are tribally administered and all services that cannot be provided by the outpatient clinics themselves (e.g., specialty care, hospitalization, laboratory, radiology, and optometry services) must be provided through contract care. Eligibility requirements for contract care in California have been under dispute since contract health service regulations first were published. According to the executive director of the California Rural Indian Health Board, one of the organizations established in 1970 to return IHS resources and services to California (44):**

. . . (Sixteen) local health projects service units were created throughout rural California as CRIHB (California Rural Indian Health Board) subcontractors. By and large, these service units encompassed more than one county and were constituted without reference to the number or location of Indian tribes in those service units. In practice, with the acknowledgment of the IHS, it was these multi-county service units that have been viewed as “CHSDA’s” for provisions of contract health services to eligible residents of the service units for fifteen years.

According to IHS (60):

After the issuance of CHS (Contract Health Services) regulations, services were continued in California (and in a number of other places) to eligible Indians who did not meet the new CHS regulations. Such services were continued on the basis of direction contained in congressional appropriation action rather than the CHS regulations.

A provision of the vetoed 1984 reauthorization of the Indian Health Care Improvement Act and of the 1985 amendments would have resolved the eligibility issue in California by designating the entire State, excluding nine heavily urbanized counties, as a CHSDA. Pending enactment of the amendments or possible revision of the eligibility regulations, the California projects are continuing to serve their usual populations (32).

The 1976 American Indian Policy Review Commission recommended that all IHS services, including direct and contract, be made available on the basis of tribal membership rather than residence (128). More recently, the 1983 Contract Health Services Task Force supported combined eligibility for IHS direct and contract services, with eligible persons being of Indian blood, being members of federally recognized tribes, living in clearly defined IHS service areas (e. g., CHSDAs), and being formally enrolled for services. The task force considered defining eligibility based on Indian blood quantum, but rejected that approach primarily because of the lack of reliable data to document blood quantum (181).

### Funding and Utilization of Contract Care by IHS Area

The amount of contract care funding, contract care in relation to direct care dollars, and the types and amounts of services purchased under contract care all vary among IHS areas. Although information to document the extent of these variations is not as detailed as might be wished, available data are presented here. Note that incomplete and sometimes inconsistent reporting from contract care programs administered by tribes under self-determination (638) contracts affects these data tables.

Table 5-11 shows provisional budget obligations, or commitments, by general category of contract care expenditure for fiscal years 1983 and 1984, with estimated obligations for 1985 and 1986. Obligations for hospital services represent about half of total contract care expenditures. The contract care medical priority system (described later) tends to authorize acute inpatient services rather than less urgent outpatient care, and there

have been substantial increases in the average cost per hospital day since 1983. Recent reductions in contract care hospital average daily patient load—from about 312 inpatients per day in fiscal year 1983 to an estimated 282 inpatients per day in 1985 and 273 inpatients per day in 1986—are the result of increased per diem costs and slowing growth in contract care program funding. Declining numbers of contract care ambulatory visits, patient and escort trips, and dental services also are projected as unit costs increase more rapidly than overall budget allocations (162,163).

Table 5-12 and figure 5-9 present 10 leading causes of hospitalization for patients in IHS hospitals and in contract general hospitals, fiscal year 1984 (the four hospitals operated by tribes under self-determination contracts are not included). Although the differences are not striking, admissions to contract care hospitals showed higher proportions of injuries, poisonings, and diseases of the digestive and circulatory systems. IHS direct care hospitals provided relatively more care for complications of pregnancy and childbirth (the leading cause of all admissions) and mental disorders.

Table 5-13 shows a breakdown of fiscal year 1984 contract care obligations by IHS area, with contract care as a percent of total clinical services funding, service population estimates, and per capita contract care funding. Although contract care represents about 25 percent of the IHS clinical services budget, there are wide variations in the extent to which the areas rely on contract care, ranging from only 19 percent of the clinical services budget in Alaska to a high of nearly 50 percent in the Portland area.

In the Nashville area, where about one-third of the inpatient days and two-thirds of the ambulatory visits are delivered by tribal 638 programs, 25 percent of the clinical services budget is obligated to contract care. In California, however, where all IHS services (mainly ambulatory care) are provided under self-determination contracts, only 3 percent of the clinical care budget (\$525,000) is obligated specifically to the contract care program. The California figures are *not comparable* to those for other areas because of the way in which contract care funds have been accounted to direct or contract care budget categories. Most

**Table 5.11.—Estimated IHS Contract Care Obligations by Type of Expenditure, With Utilization and Unit Costs, Fiscal Years 1983-86<sup>a</sup>**

Type of expenditure	Fiscal year 1983 (provisional)	Fiscal year 1984 (provisional)	Fiscal year 1985 (estimate)	Fiscal year 1986 (estimate)
Hospitalization				
Cost per day . . . . .	\$ 644	\$ 719	\$ 792	\$ 872
Average daily patient load	312	299	282	273
Dollars . . . . .	\$ 73,544,000	\$ 78,703,000	\$81,708,000	\$86,773,000
Ambulatory care				
Cost per visit . . . . .		\$ 109	\$ 116	\$ 124
Visits . . . . .		273,082	266,000	265,000
Dollars . . . . .	\$29,988,000	\$29,766,000	\$30,902,000	\$32,818,000
Patient and escort travel				
Cost per one-way trip . . . . .		\$ 136	\$ 164	\$ 197
Number of trips . . . . .		38,044	33,000	29,000
Dollars . . . . .	\$ 3,937,000	\$ 5,174,000	\$ 5,372,000	\$ 5,705,000
Dental services				
Cost per patient . . . . .		\$ 186	\$ 207	\$ 220
Number of patients . . . . .		39,420	38,000	37,000
<b>Dollars . . . . .</b>	<b>\$ 6,597,000</b>	<b>\$ 7,338,000</b>	<b>\$ 7,656,000</b>	<b>\$ 8,130,000</b>
Other				
Dollars . . . . .	\$30,840,000	\$36,929,000	\$38,318,000	\$32,440,000
<b>Total IHS contract care obligations . . . . .</b>	<b>\$144,906,000</b> (provisional)	<b>\$157,910,000</b> (provisional)	<b>\$163,956,000</b> (estimate)	<b>\$165,866,000</b> (estimate)

<sup>a</sup>These IHS contract care obligations are presented to show the relative importance and costs of the five major contract care expenditure categories. Contract care programs managed by the tribes as self-determination (638) programs are not included. Because the figures are taken from briefing books prepared by IHS for its annual appropriations hearings, fiscal years 1985 and 1986 are proposed rather than actual appropriations, and figures for fiscal years 1983 and 1984 are provisional.

SOURCE: U S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, "Appropriations Briefing Books," fiscal years 1985 and 1986

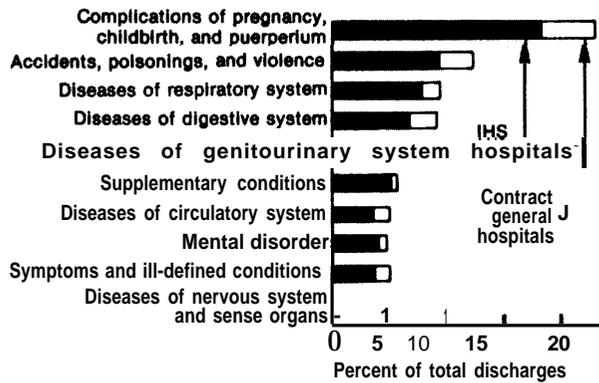
**Table 5-12.—Ten Leading Causes of Hospitalization for General Medical and Surgical Patients, IHS and Contract General Hospitals, Fiscal Year 1984<sup>a</sup>**

Diagnostic category	Number of discharges			Percent distribution		
	Combined	IHS	Contract	Combined	IHS	Contract
All categories . . . . .	99,816	77,561	22,255	100.0	100.0	100.0
Complications of pregnancy, childbirth, and puerperium . . . . .	23,248	18,642	4,606	23.3	24.0	20.7
Injuries and poisonings . . . . .	12,432	9,070	3,362	12.4	11.7	15.1
<b>Respiratory system diseases . . . . .</b>	<b>9,413</b>	<b>7,181</b>	<b>2,232</b>	<b>9.4</b>	<b>9.3</b>	<b>10.0</b>
<b>Digestive system diseases . . . . .</b>	<b>9,243</b>	<b>6,769</b>	<b>2,474</b>	<b>9.3</b>	<b>8.7</b>	<b>11.1</b>
<b>Genitourinary system diseases . . . . .</b>	<b>5,397</b>	<b>4,091</b>	<b>1,306</b>	<b>5.4</b>	<b>5.3</b>	<b>5.9</b>
<b>Supplementary conditions . . . . .</b>	<b>5,253</b>	<b>5,045</b>	<b>208</b>	<b>5.3</b>	<b>6.5</b>	<b>0.9</b>
<b>Circulatory system diseases . . . . .</b>	<b>5,172</b>	<b>3,537</b>	<b>1,635</b>	<b>5.2</b>	<b>4.6</b>	<b>7.3</b>
<b>Mental disorders . . . . .</b>	<b>4,720</b>	<b>3,873</b>	<b>847</b>	<b>4.7</b>	<b>5.0</b>	<b>3.8</b>
<b>Symptoms and ill-defined conditions . . . . .</b>	<b>4,699</b>	<b>3,738</b>	<b>961</b>	<b>4.7</b>	<b>4.8</b>	<b>4.3</b>
Nervous system and sense organs . . . . .	4,108	3,108	1,000	4.1	4.0	4.5
All other . . . . .	16,131	12,507	3,624	16.2	16.1	16.3

<sup>a</sup>Hospitalizations in tribal self-determination (638) hospitals are not included in this table

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, *IHS Chart Series Book*, April 1985. Data published as table 5.7, from IHS Annual Reports 2C and 31.

**Figure 5.9.—Ten Leading Causes of Hospitalization in IHS and Contract General Hospitals, Fiscal Year 1984<sup>a</sup>**



<sup>a</sup>Hospitalizations in tribal 638 hospitals are not included in these figures

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, *Chart Series Book*, Rockville, MD, April 1985.

self-determination funding is accounted in direct care budgets, although it may be used to purchase some services under contract. The **\$525,000** in California represents the contract care programs of only two tribes and does not include contract care that may have been purchased by other 638 projects (43,58).

Other IHS areas besides Portland in which the proportion of contract care funding is high are Billings, Aberdeen, and Tucson (note that all three of these areas have higher per capita contract care obligations than the Portland area, and Billings has a contract care budget equivalent to Portland's to service a population half the size). IHS areas that have relatively comprehensive direct care capabilities, such as Alaska, Phoenix, Navajo, and Oklahoma, have lower proportions of contract care funding in their total clinical services budgets. Per capita contract funding among the areas ranges from **\$86** in Oklahoma to **\$473** in Billings, with an average per capita obligation of **\$182** (excluding California).

Table 5-14 presents fiscal year 1984 utilization data on inpatient care delivered by IHS direct care hospitals, IHS contract care hospitals, tribally operated (638) hospitals, and tribally operated contract care programs. Numbers of admissions, inpatient days, and average lengths of stay may be compared among the areas in these delivery settings. Average lengths of stay by type of hospital varied little around the combined average of about 5 days per stay. The tribally operated hospitals had shorter average stays, but that was in only four hospitals. Combined average lengths

**Table 5-13.—IHS Contract Care Program Obligations by Area, Total and Per Capita, Fiscal Year 1984<sup>a</sup>**

Area	Contract care program obligations fiscal year 1984	Contract care as percent of clinical services	IHS estimated service population 1984	Contract care dollars per capita
Aberdeen . . . . .	\$20,029,000	33.40/0	70,648	\$283.50
Alaska . . . . .	19,296,000	18.5	71,329	270.52
Albuquerque. . . . .	10,694,000	24.7	51,211	208.82
Bemidji . . . . .	8,980,000	28.9	47,000	191.06
Billings . . . . .	18,976,000	44.6	40,106	473.15
California . . . . .	525,000	2.5	71,642	7.33
Nashville . . . . .	6,712,000	25.6	35,822	187.37
Navajo . . . . .	19,074,000	21.1	162,005	117.74
Oklahoma . . . . .	16,478,000	20.5	190,451	86.52
Phoenix . . . . .	14,284,000	20.2	82,309	173.54
Portland . . . . .	18,549,000	48.6	96,427	192.36
Tucson . . . . .	4,330,000	33.9	17,852	242.55
All areas . . . . .	\$157,927,000	24.5%	936,802	\$168.58
All areas excluding California . . . . .	\$157,402,000	24.40/0	865,160	\$181.93

<sup>a</sup>All IHS services in California are delivered via tribal self-determination (638) contracts. Most 638 funding is accounted in direct care budgets, although it may be used to purchase some services under contract. This may explain the small contract care budget in California, which represents specific contract care obligations for only two projects. The Bemidji and Nashville areas also have substantial tribal 638 health delivery programs. Figures for Alaska are somewhat low due to delayed data reporting.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Office of Administration and Management, Resources Management Branch, 1985

**Table 5-14.—Numbers of Admissions, Hospital Days, and Average Lengths of Stay (ALOS) in IHS, Contract General, and Tribal Self-Determination Hospitals, Fiscal Year 1984**

Area	Combined			IHS direct care			IHS contract care <sup>a</sup>			Tribal (638) direct care			Tribal (638) contract care		
	Admissions	Days	ALOS	Admissions	Days	ALOS	Admissions	Days	ALOS	Admissions	Days	ALOS	Admissions	Days	ALOS
Aberdeen . . . . .	15,528	69,038	4.4	10,725	44,612	4.2	4,803	24,426	5.1	—	—	—	—	—	—
Alaska . . . . .	11,972	75,678	6.3	9,880	68,084	6.9	609	2,605	4.3	483	4,989	3.4	—	—	—
Albuquerque . . . . .	7,089	32,956	4.6	5,629	27,467	4.9	1,460	5,489	3.8	—	—	—	—	—	—
Bemidji . . . . .	3,667	14,440	3.9	1,597	5,380	3.4	780	3,257	4.2	—	—	—	1,290	5,803	4.5
Billings . . . . .	7,440	30,447	4.1	3,472	11,472	3.4	3,968	18,628	4.7	—	—	—	—	—	—
California . . . . .	847	4,234	5.0	—	—	—	—	—	—	—	—	—	847	4,234	5.0
Nashville . . . . .	4,017	20,091	5.0	1,309	6,329	4.8	422	1,804	4.3	693	3,227	4.7	1,593	8,731	5.5
Navajo . . . . .	20,640	97,349	4.7	18,638	88,813	4.8	1,424	5,647	4.0	—	—	—	578	2,889	5.0
Oklahoma . . . . .	14,634	66,177	4.5	11,586	49,653	4.3	2,230	11,616	5.2	818	4,908	6.0	—	—	—
Phoenix . . . . .	15,460	89,998	5.8	13,401	80,439	6.0	2,059	9,559	4.6	—	—	—	—	—	—
Portland . . . . .	4,222	18,035	4.3	—	—	—	4,222	18,035	4.3	—	—	—	—	—	—
Tucson . . . . .	1,635	9,094	5.6	1,285	7,315	5.7	350	1,779	5.1	—	—	—	—	—	—
All areas . . . . .	107,151	527,190	4.9	77,522	389,911	5.0	22,327	102,845	4.6	2,994	13,124	4.4	4,308	21,657	5.0

<sup>a</sup>Number of discharges used as estimate for number of admissions.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, unpublished data from the IHS Program Statistics Branch, Monthly Report of IHS Inpatient Services, Annual Report 31 for contract hospitals; and IHS area submissions for tribal hospitals, October 1985.

of stay by area ranged from a low of 3.9 days in Bemidji (on a low volume of admissions) to a high of 6.3 days in Alaska. In the Billings area, more than half of the inpatient admissions were to non-IHS contract general hospitals. In the Nashville area, more patients were admitted to community hospitals under tribally operated contract care programs than to the one tribal hospital, the IHS direct care hospital, or to community hospitals by IHS-operated contract care programs. Well over half of the inpatient admissions in the Aberdeen, Alaska, Albuquerque, Navajo, Oklahoma, Phoenix, and Tucson areas were to IHS direct care hospitals. Because there are no IHS or tribally operated hospitals in the Portland or California areas, in Portland all inpatient care was provided through the contract care program; and in California, the few admissions that were reported were authorized by tribally operated contract care programs.

Additional information on fiscal year 1984 expenditures for inpatient care and outpatient visits in the 12 IHS area contract care programs is presented in table 5-15. Total combined 1984 inpatient and outpatient expenditures in table 5-15, approximately \$94 million, represent only part of the overall 1984 contract care budget allocation of \$158 million (table 5-13). Excluded from table 5-15 are disbursements for patient and escort

travel (about \$5 million), dental services (\$7 million), and other types of contracts (\$37 million). Incomplete cost data reporting may account for the remainder of the difference. Note also that data in table 5-15 cannot be compared directly with those in table 5-14 because they come from different IHS source reports. The average costs (disbursements) per "full-pay equivalent" inpatient day and outpatient visit in table 5-15 are artificial figures that combine proportions of days and visits paid in full by IHS with those partially paid by IHS and partially paid by other sources. These figures are used by the IHS contract care program for budget planning purposes only. A comparison of actual inpatient days by area in table 5-14 with full-pay equivalent days in table 5-15 suggests that 638 contract care programs may have been included in Alaska but excluded from Bemidji and Nashville data. Most other inpatient day figures are reasonably close, except in the Portland area. Data reporting appears to be incomplete for California.

Actual contract care disbursements per full-pay equivalent inpatient day varied substantially among IHS areas. The lowest cost, \$535 per inpatient day in the Bemidji area, was only 60 percent of the \$902 average cost per day paid in Alaska. Albuquerque, Nashville, and Tucson also had high costs per contract care inpatient day. A

**Table 5-15.—IHS Contract Care Program, Utilization and Costs for Inpatient and Outpatient Care, by Area, Fiscal Year 1984**

Area	Inpatient care			Outpatient care		
	Total disbursements	Cost per full-pay day	Full-pay equivalent days	Total disbursements	Cost per full-pay visit	Full-pay equivalent visits
Aberdeen .. . . .	\$13,325,540	\$598	22,284	\$ 2,935,501	\$124	23,673
Alaska . . . . .	6,295,317	902	6,979	2,552,971	145	17,607
Albuquerque .. . . .	4,943,063	843	5,864	1,833,540	173	10,598
Bemidji . . . . .	1,576,977	535	2,948	1,187,296	103	11,527
Billings . . . . .	13,232,389	698	18,958	3,044,936	91	33,461
California. . . . .	NA	NA	NA	NA	NA	NA
Nashville . . . . .	918,836	813	1,130	202,604	137	1,479
Navajo .. . . .	5,572,359	799	6,974	3,022,670	57	53,029
Oklahoma . . . . .	7,333,354	780	9,402	2,128,747	134	15,886
Phoenix . . . . .	6,948,429	802	8,664	1,985,347	154	12,892
Portland . . . . .	7,876,537	717	10,985	4,844,191	143	33,875
Tucson . . . . .	1,583,336	867	1,826	203,320	142	1,432
IHS total . . . . .	\$69,606,628	\$722	96,014	\$23,953,263	\$111	215,459

<sup>a</sup>Total disbursements are combined full pay by IHS contract care program, partial pay, and unknown pay. "Full-pay equivalent" days and visits are artificial figures developed for comparability with the total disbursement figures. Outpatient visit expenditures include physician, X-ray, laboratory, emergency room, drugs, prostheses, and other expenses, but no patient and escort travel. Data from tribal (638) contract care programs are not included in this table, which accounts for the lack of information from California.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration Indian Health Service Program Statistics Branch, October 1985.

number of factors may contribute to such differences, including the charges prevailing among local private sector providers, a service unit's ability to negotiate reasonable charges, and the relative severity of the cases for which contract care was authorized. Average costs for full-pay equivalent contract care outpatient visits also were variable. They appear to be high in table 5-15 because all expenditures associated with the outpatient visits, such as physician fees, X-ray, laboratory, emergency room, drugs, and prostheses were included.

Service-specific contract care program cost data are available from a so-called "piggyback" data system that has been added onto the Health Resources and Services Administration (HRSA) accounting system. By grouping contract care expenditures by cost center code, the system can generate utilization and cost data by service and IHS area. The piggyback data system is the source of table 5-16, which shows a breakdown of fiscal year 1984 area contract care disbursements, combining full and partial pay, by percent of total area funds devoted to each cost center. The five main cost centers are: patient and escort travel; dental care; inpatient care; outpatient visits; and an "other" category that includes payments for nursing home care, the Pascua-Yaqui prepaid plan in the Tucson area, and use of other medical specialists. The category "contracts to support direct services" includes ongoing contracts for medical professionals and services delivered in IHS facilities (in some areas, a good deal of dental care is provided under such contracts). The final category includes incomplete data on contract care expenditures by tribes under self-determination contracts (58).

The amount of contract care reported to be administered by tribes varies widely among the areas and distorts the proportions of total disbursements that are attributed to each of the major cost centers. This is because available data were not adequate to distribute 638 expenditures among those cost centers. In the Nashville area, 87 percent of total contract care disbursements were administered by the tribes, and in California, the figure was 82 percent; but the average throughout IHS was only 19 percent of contract care funds. The Billings and Phoenix areas indi-

cated that no contract care funds were disbursed by 638 programs. The Navajo area reported that it managed 22 percent of its contract care allocation via 638 contract, but IHS headquarters stated that the Navajo have only one 638 contract for about \$200,000 and it is not for contract care (216). Because of data questions such as these, little can be concluded from table 5-16 except for IHS as a whole, where inpatient services represent more than half of all contract care expenditures. The Aberdeen, Alaska, and Albuquerque areas are roughly comparable to overall IHS proportions in the five main cost centers; Phoenix and Oklahoma are close; but the other areas are difficult to interpret.

### Operation of the Contract Care Program

The contract care program may purchase medical services when no IHS direct care facility is available, when the direct care facility is not capable of delivering the emergency or specialty care required, when the workload of the direct care facility exceeds its capacity, or when IHS funding is necessary to supplement alternate resources (e.g., Medicare) to ensure care for eligible Indians. Contract care may be delivered to individuals who are physically present in an IHS facility but, most frequently, the services are provided in non-IHS public or private facilities (168).

Since 1972, rates of increase in the IHS contract care budget have been less than those experienced in general health care costs (119), while the IHS service population has nearly doubled from 507,804 in 1972 to an estimated 961,582 in 1985. As a result, it has become increasingly difficult to meet the growing demand for contract care within available funding limits: it is not uncommon for a service unit to expend its entire contract care allocation well before the end of the fiscal year.

The IHS contract care program has applied various means in attempting to manage its limited annual resources. In addition to the required residence in a CHSDA, contract care authorizations are governed by a medical needs priority system that in some areas restricts care to emergency and life-threatening conditions (priority one) and denies referral for less urgent services due to lack

**Table 5-16.—IHS Contract Care Program, Major Cost Centers as Percent of Total Disbursements,<sup>a</sup> by Area, Fiscal Year 1984**

Cost centers	IHS total	Aberdeen	Alaska	Alberdeen	Bemidji	Billings	California	Nashville	Navajo	Oklahoma	Phoenix	Portland	Tucson
1. Patient and escort travel . . . . .	3.1 %	3.1 %	3.4 %	1.8 %	0.6%	2.5%	—	—	9.80/0	1.1 %/0	4.80/0	1.50/0	0.7 %
2. Dental care . . . . .	4.1	1.8	4.2	6.0	4.1	2.2	0.3	0.2 %/0	2.4	8.4	2.0	9.3	2.0
3. Inpatient care . . . . .	46.8	66.2	37.2	53.1	20.5	73.4	—	9.8	31.8	51.3	58.7	42.5	37.6
4. Outpatient care . . . . .	16.1	14.3	15.1	19.4	15.5	16.9	2.4	2.2	17.3	14.9	16.6	26.3	4.4
5. Other contract care . . . . .	4.7	4.0	3.9	2.2	0.7	1.0	15.6	—	5.3	0.1	13.4	1.2	52.5
6. Contracts to support direct services . . . . .	5.8	4.9	4.0	14.7	0.6	4.0	—	0.6	11.6	9.9	4.5	3.8	0.2
7. 638 contract care (incomplete) . . . . .	19.4	5.7	32.2	2.8	58.0	—	81.7	87.2	21.8	14.3	—	15.4	2.6
IHS total contract care . . . . .	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%/0	100.0%/0	100.0 %/0	100.0 %/0	100.0 %/0

<sup>a</sup>Based on total contract care program disbursements: full pay, partial pay, and unknown pay. There are substantial variations in how areas may report contract payments by cost center, especially line 6, contracts to support direct services, and line 7, tribal 638 contract care. Note also that data reported for 638 contract care are incomplete.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Program Statistics Branch, September 1985

of funds. By regulation, the IHS contract care program may only pay charges that are not covered by Medicare, Medicaid, or any other third-party payers (42 CFR 36.23 (f)). Because there is no dollar cap on the amount that maybe authorized for an individual contract care referral, and because there are no absolute constraints on the types of services that may be authorized, available funding is the major limiting factor.

The contract care headquarters office is responsible for overall program management. It establishes general administrative policies and standards of performance, develops long-term program plans and objectives, provides staff assistance to area offices, and administers funds to the areas to meet expenditures through the IHS financial management branch. The program's management philosophy is "to delegate to the greatest degree possible, within the limits of available funds, authority for the operation of the Contract Health Services Program to the Area Director and the Service Unit Director" (168).

The area offices are responsible for administering contract care services in accordance with headquarters policies and procedures. The area offices allocate funds among the service units and, in cooperation with them, negotiate annual provider contracts. It is the area offices that "establish medical priorities for the care of eligible Indian people that will most effectively meet their needs within the funds available" (168). Service unit directors and physicians determine on a case-by-case basis whether a specific request for contract care may be authorized within the area's contract health services priority guidelines and the limits of available funding. All requests must be acted upon, with written denials and maintenance of appeals files as appropriate. Service unit staff process patient referrals and payment authorizations, while area office staff provide invoice verification and claims processing services. Day-to-day operations of the contract care program follow the general steps outlined below (168):

1. **Contracting for Services.** Contracts are negotiated annually by the service units and area offices to cover services performed on a routine basis by private hospitals, clinics, laboratories, physicians, and other providers.

When emergency or one-time services are authorized from a provider that is not an established contractor, individual purchase orders are used.

2. **Authorization for Contract Care.** For each contract provider utilized by an eligible Indian, a purchase order must be issued by the service unit director or a member of the medical staff. In emergencies, such authorization must be sought within 72 hours of admission; in nonemergency cases, authorization must be secured in advance. Service unit staff generally set up the approved appointments and prepare a formal authorization sheet, with identification of other sources of payment for which the patient may be eligible.

The authorization form includes an estimated cost for the service. Because contract care is a budget-limited program, authorized estimated costs become obligated and reduce the available contract care funds balance for the service unit. Accurate estimates are critical, and it is important that actual disbursements be compared against the obligated estimates on a timely basis so that excess obligations may be deobligated to permit expenditure of those funds for additional services.

Contract care authorizations for students, transients, and other eligible persons away from their home service delivery areas are the responsibility of the home service unit.

3. **Provider Invoices.** Upon performance of the services, the provider completes the authorization form, indicates the charges, and returns it to the service unit as an invoice. Actual charges are compared with the estimated obligation and adjustments made accordingly, taking into account applicable third-party resources. Documentation of the provider's attempts to obtain other payment should be verified locally. (IHS headquarters maintain no records of the verification of alternate resources. At the service unit level, each contract care authorization form indicates full pay by IHS or partial pay, and the amount paid by IHS, but the other payers usually are not identified.) Approved invoices are forwarded to the area office for

audit review, entry into the area data system, and check processing for payment.

IHS area and service unit staff are responsible for the day-to-day management of the contract care program. Because of differences in the availability of IHS facilities, levels of contract care funding, and the extent to which an area relies on contract care to supplement its direct delivery system, administration of the contract care program is not standard among the areas. Several areas have developed their own explicit program management policies and guidelines.

The particular services that may be authorized under contract health services priority guidelines vary among the areas. Decisions on what services will be purchased are made on a case-by-case basis in each service unit. A service that might be approved early in the quarter, when funds were available, might be denied when funds were running out or exhausted. When a service unit's contract care budget is depleted before the end of the fiscal year, it may apply to the area office for assistance; but it *is not* assured of getting any additional funding. When a patient's life is threatened, emergency contract care must be provided by a nearby private hospital that has no guarantee of being paid in a timely manner. Such bad debts can be a severe financial hardship on small rural hospitals, and can strain relations between IHS and those hospitals.

## Issues Related to the IHS Contract Care Program

### The Adequacy of Contract Care Funding and the Rationing of Care

The scope of services offered by many IHS hospitals is relatively limited compared with U.S. community hospitals in general; and because IHS cannot economically employ specialized medical staff in all service units (assuming such specialists could be recruited and retained), specialty services often must be obtained through the contract care program. The majority of the small IHS hospitals do not provide surgery, and they lack sophisticated diagnostic and therapeutic equipment as well as the specialized staff to operate it. These factors contribute to a demand for contract health services that is likely to increase and to put greater

pressures on area contract care budgets, especially if those budgets experience little or no growth. The volumes of contract services purchased in recent years have shown a level or declining trend because general health care cost inflation has increased service charges more rapidly than the IHS contract care budget has grown. Under these circumstances, how should IHS balance its direct and contract care services to achieve maximum cost-effectiveness? It may be more expensive to purchase services through contract care than for IHS to provide them directly, where IHS is capable of doing so; but direct care delivery requires capital and staffing investments that cannot be justified in many isolated IHS areas.

When the demand for contract services exceeds available funding, IHS contract care programs in the areas and service units must ration services in order to operate within fixed annual budgets. The means by which services are rationed include application of the contract care eligibility requirements, authorization of services according to the medical priority system (which may differ from one IHS area to another), and the required first use of alternate resources.

Medical urgency determinations are made by a physician or by the service unit director within the guidelines of the area's contract health services priority system. That system defines some, but not all, of the medical conditions that are considered emergencies and that should receive first priority for contract care referral. Urgent non-emergency services and elective procedures may be provided if sufficient funds are available, but if not, they may be deferred or not provided at all.

Because this medical priority system tends to refer out the more specialized and expensive inpatient cases, the contract care budget gradually is becoming a high-cost care fund and its original purpose of supplementing the full range of IHS direct care services is being lost. (The effects of especially high-cost cases on the contract care program are discussed in ch. 6.) When no IHS direct care facilities are available, patients may face long waits for elective and urgent care that must be obtained under contract. Serious medical conditions may be aggravated during the wait, and some patients may fail to seek and obtain needed services altogether. Although in recent years some

of the areas have maintained lists of deferred contract care needs, whether or not patients receive the deferred services depends on the state of the area's contract care budget at the end of the fiscal year.

IHS's methods for allocating and administering contract care resources over the years have resulted in inevitable inequities among IHS areas, service units, and individual beneficiaries. Both the 1976 American Indian Policy Review Commission and the Grace Commission cited inequities in the range of health services available to eligible Indians, based on residence. The 1976 commission concluded that the contract care program contributed to the maldistribution of resources because the extent to which the areas depended on contract funding for overall clinical services delivery varied so much (128).

Contract care funds purchase services to supplement those available from the IHS direct care system of hospitals and clinics. In areas with relatively comprehensive direct care resources, this principle may work reasonably well even under current funding constraints because direct service capabilities are there to back up the contract care program and provide some of the services that cannot be purchased because of a lack of contract care funds. A patient with an urgent but not life-threatening condition (such as the need for gall bladder surgery) might not receive the needed care in an area authorizing only priority one (emergency and life-threatening) contract services; but care might be authorized in another area where funding was less restricted. Or, the patient could travel to the nearest IHS hospital and receive services that were denied under contract care, if the hospital did not have an extensive waiting list for the service. In the Portland and California areas, however, this is not an option because there are no IHS hospitals.

Another aspect of the overall funding problem is a perceived vulnerability of the contract care program to budget cuts, relative to the more difficult task, politically, of closing existing IHS facilities and laying off staff to reduce the direct care budget. Areas dependent on contract care believe that they already receive fewer services than direct care areas, and they fear they are at greater risk of absorbing service cutbacks due to reduced

contract care funding. Again, Portland is an example of an IHS area where contract care budget cuts could have serious effects, because nearly half of the clinical services funding in that area is for contract care.

Neither the California nor the Portland IHS area receives compensatory contract care funding to offset the absence of direct care capabilities. It is difficult to dispute the contention of tribes in those areas that they are not receiving their fair share of total IHS resources in comparison with IHS direct care areas like Navajo, Oklahoma, Albuquerque, and others. The idea that some adjustment should be made in contract care relative to direct care funding, or that a clinical services resource allocation formula should be developed to reflect combined direct and contract care needs, has been proposed but not implemented (182). This would be one way to work toward a more comparable services package among IHS areas.

### The Use of Alternate Resources

By regulation, the IHS contract care program is designated as the residual payer, or payer of last resort, for eligible Indians who have access to other sources of reimbursement or health care delivery (42 CFR 36.23 (f)). The identification of these so-called alternate resources and aggressive efforts to collect appropriate reimbursements from them are vital to the contract care program, in which funds are so limited. Chapter 3 of the *IHS Indian Health Manual* defines alternate resources (third-party payers and providers) as "those resources, including IHS facilities, that are available and accessible to an individual. Alternate resources would include but not be limited to, Medicare, Medicaid, vocational rehabilitation, Veterans Administration, crippled children, private insurance, and State programs" (168).

In the contract care program, the use of alternate resources is mandatory: that is, an individual is required to apply for an alternate resource if there is a reasonable chance that he or she may be eligible for coverage, and IHS disbursements are authorized only for charges not covered by other payers. The numbers of IHS beneficiaries eligible for and/or enrolled in Medicare, Medicaid, and other third-party payers, however, are

not known with accuracy. There is no IHS data system that maintains records of eligibility for alternate resources, although the patient registration system that has been implemented since January 1984 may help to fill this gap in the future. Each individual who presents himself for treatment at an IHS facility (or who seeks a contract care referral through the facility) now must register for services and be screened for eligibility for third-party resources.

Some IHS areas have set up their own manual or automated systems for identifying alternate resources. In the Portland area, for example, the contract care program is monitored closely by the area office. Since 1983, alternate resource utilization targets based on actual collections experience have been established for each service unit and reviewed quarterly. The targets, which reflect differences in tribal population characteristics (especially age distributions) and the availability of other resources such as State Medicaid programs, range from an expected **30 to 50** percent of contract care charges that should be collected from non-IHS payers (**46**).

Data from the U.S. Census Bureau's 1980 supplementary survey of American Indians, Eskimos, and Aleuts provide the only national estimates of other sources of payment for health services. However, those data refer only to Indians residing on reservations and in historic areas of Oklahoma (**336,000** out of a **1980** total self-identified Indian population of 1.4 million and an IHS estimated eligible service population of 829,000) and cannot be generalized with confidence to other Indian populations. Data from the census survey suggested that about 85 percent of the reservation-based Indians had received some type of health service during 1979. Eighty percent of those service users reported that their usual place of treatment was an IHS facility; for 11 percent, the delivery site was a private physician's or dentist's office; and for 5 percent, it was a tribal clinic or hospital. Eighty-four percent of service users reported that their recent services had been paid for by IHS (including IHS contract care and tribal 638 health programs), nearly 5 percent of the services were paid by private insurance, 5 percent by the recipient or recipient's family, and 3 percent by Medicare or Medicaid (147).

It is surprising that only 3 percent of the Indian service users reported their care had been paid for by Medicare or Medicaid, especially in view of other census data showing that of Indians 15 years of age and older, **7.3** percent reported receiving benefits from Medicare or Medicaid, an additional 12 percent reported social security benefits, and **6.6** percent received BIA general assistance. It is possible that when an IHS facility is the first point of contact, it is assumed that IHS pays for the care, although this may not be the case if IHS can collect reimbursement from Medicare, Medicaid, and other payers (147).

IHS pursues two approaches in its efforts to make full use of alternate resources. First, services may be provided in IHS facilities to Indians who are eligible both for IHS care and for Medicare, Medicaid, private insurance, or other coverage. In such cases, IHS seeks reimbursements from those other sources before absorbing the costs in its direct care budget. In a second situation that affects the contract care program, an IHS-eligible Indian also having other sources of payment may be referred for care to a non-IHS provider. IHS then must verify that all other applicable sources have paid their shares before the IHS contract care program can pay the remainder of the bills. If the individual has no other source of payment, IHS is responsible for the full charges.

IHS officials report that collections from Medicare for services provided in IHS facilities to Indians who also are Medicare beneficiaries proceed relatively smoothly. IHS has been reimbursed under the Medicare prospective payment diagnosis-related group (DRG) system since October **1983**. Likewise, Medicare payments associated with contract care referrals are not a problem as long as the private provider is aware of the patient's Medicare eligibility and bills Medicare on behalf of that patient. IHS direct and contract care programs have found it more difficult to collect from State Medicaid programs, however, primarily because of problems in ensuring that all Medicaid-eligible Indians are enrolled. IHS must deal with different and changing Medicaid eligibility and coverage requirements in each State, and State Medicaid programs, which are under budgetary pressures of their own, have little incentive to encourage Indian enrollment (70).

Non-IHS private hospitals and physicians that treat IHS contract care patients should bill private third-party insurers, in addition to Medicare and Medicaid, before submitting bills for any remainder to IHS. Service unit contract care staff are responsible for verifying that all other appropriate payments have been made before authorizing contract care disbursements. IHS collections from private payers for services delivered in IHS facilities pose other problems: because individual Indians are not billed and are not legally liable for the costs of their medical care, their private insurers likewise cannot be held liable. Thus IHS usually is not able to collect reimbursements for such care from an Indian's private insurance company. In spite of these difficulties, IHS has been directed to continue to pursue all possible third-party reimbursements (60).

The fiscal year 1985 IHS appropriations briefing book cited unidentified preliminary data indicating that "less than 2 percent of the Indian population have private insurance" (162). Even in view of high unemployment among Indians and other factors, this figure seems quite low. One Federal official familiar with the program estimates that at least 5 to 10 percent of Indians have private insurance, because Indian employees of the Federal Government alone would account for more than 2 percent (83). IHS states that a study is underway to generate better data on this question.

Reimbursements from Medicare, Medicaid, and private payers are used primarily to upgrade hospital and clinic facilities or equipment and to hire temporary staff. The amounts of reimbursements collected vary among IHS areas. Those that are most dependent on contract care may of necessity be more active in third-party collections than IHS areas where pressures on contract care funds are not so great. Some areas express fears that third-party collections will be used to offset their regular budget allocations. Furthermore, aggressive third-party collections are discouraged if the funds are not available to the service unit where they were collected. Title IV of the Indian Health Care Improvement Act provided that third-party collections would be held in a special DHHS level fund for redistribution as needed to upgrade facilities and services, but some areas and service

units complained that they received less than they had collected. The 1985 amendments proposed that each service unit be able to use at least 50 percent of the amount it collected, but that legislation had not been enacted by the end of 1985. At the least, clarification of whether third-party collections will be treated as offset or supplemental funds for budget allocation purposes could encourage greater collection efforts.

In order to utilize alternate resources most effectively, the IHS contract care program must be able to respond to changes in the general health care delivery environment that will affect its beneficiaries. Changes in State Medicaid programs can have significant effects on IHS contract care programs. In the State of Washington, for example, a health program for the medically indigent that served a large number of Indians was discontinued for about 6 months in 1985. The Portland area IHS office estimated that if the program were not reinstated (it was reinstated in October 1985, but its future still was uncertain), additional costs to the IHS contract care program would total at least \$2 million per year (107). Indians in the State of California have relied on the relatively generous MediCal system for a large volume of services, especially hospital services, that California IHS contract care programs often cannot afford. Recent implementation of a Medicaid program in the State of Arizona, the Arizona Health Care Cost Containment System, has brought about a major realignment of IHS, county, and State health programs available to Indians.

IHS contract care programs must keep current of changes in State Medicaid programs in order to encourage all eligible Indians to enroll and maintain eligibility in those programs. In Minnesota, the Medicaid program recently required that all Medicaid beneficiaries be treated in State-qualified health maintenance organizations. How this new requirement will affect services delivery to Medicaid-enrolled Minnesota Indians is not yet known. The Minneapolis urban Indian health project, for example, which serves both Indians and non-Indians who are covered by Medicaid, is not a health maintenance organization, but in order to continue serving its Medicaid-eligible clients, it joined a network of qualified health maintenance organizations.

The question of whether IHS and tribally operated facilities should treat and bill non-Indians raises other issues involving appropriate relations between IHS and the alternate resources, Indian health facilities serve non-Indians in Alaska, where IHS facilities are the only health services available in some areas. Some tribal **638** health programs in California serve non-Indians, as do some urban Indian projects. The practice is not prohibited by IHS, as long as there are assurances that Federal funds destined for Indians are not spent to care for non-Indians. In some IHS facilities, Indian users do not want their facility to treat non-Indians.

### Management Efficiency in the Contract Care Program

The use of contract care and private resources represents a growing portion of IHS clinical services delivery, and, as a number of recent studies have pointed out, there are questions as to whether IHS management techniques have kept pace with program growth. Under current budget constraints, it is of critical concern that IHS's purchase of contract services be as cost-effective as possible. Questions have been raised about program management policies that allow the payment of IHS contract care funds to private providers on terms that are not always advantageous to IHS and that ultimately may reduce the volume of contract services purchased.

Management of the IHS contract care program has been reviewed by the American Indian Policy Review Commission's task force on Indian health, **1976 (128)**; a General Accounting Office (GAO) study of contract care claims processing, 1982 (132a); the Grace Commission's private sector survey on cost control, 1982 (119); the IHS Director's Contract Health Services Task Force, 1983 (181); and a Macro Systems study of fiscal intermediary costs, 1984 (69).

Among potential problems in the IHS contract care program identified by these studies were the following: 1) IHS pays 100 percent of charges billed instead of the 80 percent of customary fees usually covered by private insurers; 2) the contract care program does not reimburse its vendors at Medicare DRG rates, although it receives its

reimbursements from Medicare based on DRGs; 3) in some areas there is a lack of aggressive competitive bidding for IHS contracts and of forceful negotiations for reduced charges; 4) IHS processes its own contract care claims instead of using a fiscal intermediary or billing agency at potentially lower cost; and 5) procurement policies and cost accountability in IHS area offices and service units, where the contract care program is administered, could be improved with more experienced staff and computer capabilities.

There seems to be agreement that IHS should negotiate more aggressively, where it can, to obtain better prices for the services it purchases. Instead of paying 100 percent of billed charges, the contract care program could bargain for reduced fees and encourage competition among contract providers wherever possible. In some geographic areas, IHS does not represent a sufficient share of the health services market to negotiate effectively for reduced rates; elsewhere, the lack of alternate providers may eliminate the effects of competition; but these limitations do not exist everywhere.

The GAO study recommended that IHS contract providers be reimbursed at Medicare rates rather than at 100 percent of the amount billed, as has been IHS practice (132a). This recommendation was supported by the Director's Task Force on Contract Health Services and by the Grace Commission report, both of which called for a uniform, standardized IHS rate structure based on Medicare and the use of Medicare intermediaries for claims processing. Use of a Medicare-based rate structure, such as DRG rates, would generate substantial savings for the IHS contract care program. One way to implement Medicare rates in IHS would be to make acceptance of those rates for IHS patients a condition of Medicare program participation. This approach would require legislation and is not under active consideration. Another approach that IHS was considering at the end of 1985 was the issuance of a "general notice," which is provided for under Federal contracting procedures and would not require formal rule-making. The notice to prospective contractors would state that IHS would refer patients only to private providers with which it had contracts, and that it would enter into such contracts only

if the contractor agreed to accept payment at no more than Medicare-allowable rates. IHS still would be the last or residual payer, but if IHS were the only payer, it would pay 100 percent rather than the usual 80 percent of the Medicare-allowable rate. Emergency services provided by noncontract sources would be paid at full billed charges. IHS officials have stated that the problem of obtaining more favorable contract care rates is not so much one of authority as of inadequate leverage, and it is hoped that the terms specified in the proposed general notice may improve IHS's position in negotiating with contractors (78).

The use of fiscal intermediaries and carriers for IHS contract care claims processing also has been recommended. In addition to reducing the costs of claims processing by taking advantage of existing automated systems, it was suggested that experienced fiscal intermediary staff could perform the essential steps of identifying and verifying third-party resources for each claim. More efficient invoice processing could reduce duplicate payments and other errors. GAO, the Grace Commission, and the contract health services task force all supported this recommendation, and IHS was directed to explore its potential costs and savings. An analysis completed in March 1984 suggested that IHS could process claims more efficiently and at lower cost by retaining the function in-house (69). IHS officials also have pointed out that legislation would be necessary to permit IHS to delegate its responsibility for determining eligibility for services to an outside party such as a fiscal intermediary (78).

The Grace Commission in 1982 noted variations in claims processing policies and procedures among IHS areas and service units. Third-party resources usually were identified, but verification of provider invoices relative to claims filed was inconsistent. Too many people were involved in the largely manual claims processing system, and there was a general lack of uniformity in procedures and of adequate controls throughout the system. One processing problem was the failure to deobligate on a timely basis unused funds set aside in service unit contract care budgets for authorized services. Excessive withholding of obligated reserves reduced the funds available for

new referrals. In addition, more than one study mentioned a variety of deficiencies in contract care program procurement policies (119).

## Conclusions

The contract care program is an essential component of IHS clinical services delivery because it purchases services that IHS facilities and staff cannot provide directly. Contract care now represents about 20 percent of the total IHS budget and 25 percent of the clinical services budget nationally, although those figures vary considerably among IHS areas.

Contract care allocations among the areas are determined by the same program continuity budget methods that are applied to IHS direct services: that is, each area's share of the annual appropriation is approximately the same from year to year. Contract care funding does not reflect need, in terms of what cannot be provided by IHS direct facilities, or demand, as expressed by actual requests for contract service authorizations. Although it has been suggested that contract care funding might be adjusted to compensate areas that have relatively limited direct care facilities and that a combined direct/contract care resource allocation formula might incorporate such a compensation factor, there has been no action on such proposals. Because the types and amounts of IHS direct services vary considerably among the areas and because contract care programs supplement the services that IHS facilities provide directly, the mix of services covered by contract care likewise is different in each IHS area. The private resources that are available as potential contractors in a given area also affect the contract services package.

In recent years, increases in annual contract care appropriations have been less than rates of general health cost inflation. As a result, the pressures of funding constraints are mounting, and the IHS contract care program currently is rationing services in several ways: 1) contract care eligibility criteria are more restrictive than criteria for IHS direct services; 2) services maybe authorized only according to each area's medical needs priority system; and 3) all other payers must be tapped before IHS can pay the remainder of a bill

(the residual payer principle). The primary rationing force behind these policies is the limitation of annual **area and service unit contract care budgets, the effects of which are felt** more severely in some areas than in others.

Funding levels, management policies, and contract care utilization patterns vary substantially among IHS areas, aggravating inequities in resource allocations and in the services available to eligible Indian residents in the **12** areas. Management of the contract care program, including budget management and the necessary rationing of services, *is* implemented at the service unit and IHS area levels within general guidelines from IHS headquarters. The contract care program is particularly difficult to manage at the immediate service unit level, where budgets have the least flexibility, the incidence rates of particular diseases and conditions are most variable, referral decisions must be made on a case-by-case basis, and unexpectedly high-cost contract referrals can severely dislocate budget management plans. The level of service unit staff expertise and the quality of supporting data systems also affect program administration. In addition, the IHS contract care program does not permit the carryover of funds from one fiscal year to the next (although tribal **638** contract care programs do have that option), which further limits the ability to manage the program effectively. Instead, services may be restricted too severely early in the fiscal year in order to conserve funds, and then at the end of the year virtually any service request may be authorized, including previously deferred services, to close out the budget. Provision to carry over a certain percent of the annual allocation, perhaps 5 or 10 percent, could ease this problem.

Some IHS area offices have established formal, centralized contract care program management policies, including systems to monitor performance in all service units. In some areas, such efforts are supported by large, labor-intensive manual data systems, although automated systems clearly are needed (for example, the Portland IHS area manages its contract care program, which represents half of its total clinical services budget or nearly \$19 million, with manual systems). Procedures to ensure that all applicable payments have been made by alternate resources (third-

party payers), a critical part of contract care management, also vary depending on area office leadership, staff capabilities and, perhaps, the importance of contract *services* in the areawide delivery system. The mandatory use of alternate resources may require substantial efforts by service unit staff to encourage all eligible Indians to enroll in Medicaid and other programs, and then to verify and process claims applicable to those programs. Greater assistance from area office staff could relieve the service units of some of the burden of dealing with many outside providers.

It *is* not likely that IHS's annual appropriations will increase substantially in the immediate future. Growth in the contract care appropriation since 1980 has averaged about 10 percent per year (although there have been wide variations in budget growth from year to year, as shown in app. C), which is somewhat below average annual inflation in general health care costs. Over the same period, while numbers of IHS direct care inpatient admissions and outpatient visits remained relatively constant or increased slightly, inpatient admissions and outpatient medical visits authorized by the contract care program each declined by approximately **6** to **7** percent per year (191). The average number of patients being treated daily in IHS direct care hospitals has declined only slightly since **1980**, from 1,178 to 1,072 inpatients per day (a decline of 9 percent); but the average daily census of contract care patients has declined from **398** in 1980 to 281 in **1984**, or by nearly **30** percent (191).

That inpatient utilization has declined substantially while the overall contract care appropriation has continued to grow (even if at rates below general health inflation) raises questions about increases in inpatient per diem charges to the contract care program, by area, compared with such increases in other groups of U.S. community hospitals. In spite of the effects of generally declining average lengths of stay, when these utilization trends are viewed against the background of a 16-percent growth in the IHS eligible service population since **1980**, they suggest that budgetary restraints are limiting the services delivered by IHS and, in particular, by the IHS contract care program. This conclusion is supported by reports from the field that contract care

programs have been forced by budget limitations to authorize services primarily for medical emergencies and life-threatening conditions, while necessary but less urgent services are deferred or denied. Declining utilization of the contract care program appears to reflect funding limitations, rather than any actual decline in the need or demand for contract services (although demand, too, may decline if there is little likelihood of obtaining care).

In spite of recently declining utilization, several factors suggest that in the future, IHS of necessity may become increasingly reliant on the contract care program. The present IHS network of direct care hospitals and clinics is limited in the types of services it can provide, and budgetary limits increasingly restrict new facility construction, the replacement of old and inadequate facilities, and needed maintenance and repair for existing facilities. Diagnostic and therapeutic equipment purchases are limited, further reducing service delivery capabilities. As the older IHS hospitals and clinics deteriorate, it is not likely that they will either be maintained or replaced as has been the practice in the past. This situation is due to the overall budget situation and, in part, to the practical limitations of delivering comprehensive and specialty services to many widely dispersed small population groups. It may in fact be more cost-effective for IHS to discontinue the provision of extensive inpatient services in its own facilities, to contract for more of its inpatient care, and to concentrate IHS direct delivery on outpatient clinic facilities and services.

A critical factor that may orient IHS toward increased contracting in the near future is the growing problem of how to recruit and retain adequate medical staff. IHS depends for physicians, nurses, and other medical and administrative staff on the PHS Commissioned Corps, which is not a growing resource, and on the service payback obligations of NHSC trainees. The NHSC program is being eliminated, and the last few NHSC scholars will be assigned to IHS in 1990. It is not clear how IHS anticipates meeting this loss of professional staff. If IHS direct care staff positions cannot be filled, there would appear to be little alternative but to turn to the services of private providers, where they exist, under the contract care program.

If IHS is going to continue to provide a comprehensive range of health services to American Indians, it seems likely that it will have to rely increasingly on the contract care program. This may be especially true for inpatient services, except in areas so isolated that no private resources are available for contracting. As a result, the contract care program may claim an increasing share of the IHS clinical services budget and may compete more intensely with direct care hospitals and clinics for funding. At current low rates of utilization in most IHS hospitals, averaging only about 50 percent occupancy, their continued existence will be hard to justify except where no alternative facilities exist.

Whether greater reliance on contract care will increase or decrease the overall costs of health care delivery for Indians cannot be determined at this time. Much will depend on IHS's ability to manage contract care efficiently. Current administrative systems, levels of staff expertise, data systems support, and headquarters guidance and technical assistance devoted to contract care might not be adequate to manage a greatly expanded program. Because of the decentralized IHS structure, headquarters has not taken the initiative in helping areas and service units to resolve their contract care management problems.

Management policies that could maximize the purchase of contract care services (some of these techniques would be difficult to implement on the small scale of the service unit) have been noted earlier in this section: payments to private contractors at rates more comparable to those paid by other buyers, i.e., 80 percent of Medicare-allowable or Medicare DRG rates, rather than payments of 100 percent of billed charges; encouragement of competition among providers and more aggressive negotiations for reasonable or discount service charges, where possible; automated systems to track and monitor contract care obligations and claims processing; and IHS area or headquarters support in resolving the legal and operational problems of dealing with many different alternate resources, both public (especially State Medicaid programs) and private. Authorization to carry over funds from one fiscal year to another has been mentioned as a possible means of assisting contract care program managers to use their limited resources more effectively. The

planning and management difficulties inherent in uncertain annual appropriation levels cannot be avoided entirely in the present system, but more serious efforts at assessing health *services* needs and planning services, and particularly in the coordination of services available through the direct and contract programs, could contribute to more cost-effective services delivery.

At the same time, however, given expected rates of increase in general health care costs relative to likely IHS budget increases, even the most efficient management techniques may not be enough to overcome the problems of inadequate funding and a growing service population. Current methods of rationing limited contract care funds create inequities in the services that may be provided to individual beneficiaries living in different IHS areas and service units. Beyond these equity problems, the central policy and management question involves identifying and implementing the most cost-effective balance of IHS direct and contract services, and the appropriate mix of direct and contract services will be different in each IHS area because of differences in available direct and alternate resources.

As IHS contract care budgets are increasingly stressed, IHS will have to become more aggressive and efficient in collecting applicable third-party reimbursements for services provided to

eligible Indians both in IHS facilities and by private providers under contract. Increased collections will tend to shift the costs of health care for Indians to State, county, and local programs, increasing existing conflicts over which level of government is ultimately responsible for Indian health.

The IHS contract care program relates to a wide range of other public and private health providers. Changes in the general health care delivery environment affect IHS contract care, and IHS should monitor such changes to anticipate how its contract care program can best respond to them. Changes in eligibility criteria and in the range of services covered by State Medicaid programs, which have been implemented in a number of States recently to slow the growth in Medicaid expenditures, can have immediate and substantial effects on local IHS contract care programs. The non-Indian health care delivery system in the United States is under increasing financial stress, and future limitations in other public health programs and in private provider obligations for charity care may reduce the extent to which alternate resources are available to relieve pressures within the IHS contract care program. Although IHS cannot prevent such changes, it should be prepared to respond to them.

## URBAN INDIAN HEALTH PROJECTS

According to the 1980 U.S. census, almost two-thirds of all Indians lived off reservations, tribal trust lands, or other Indian lands. Of all identified American Indians, Eskimos, and Aleuts in 1980, 24 percent lived on reservations, 8 percent in historic areas of Oklahoma (excluding urbanized areas), 3 percent lived in Alaska Native villages, 2 percent on tribal trust lands, and 63 percent lived in the remainder of the United States (148). Part of the growth in off-reservation residency can be attributed to past Federal policies such as allotment and termination (see ch. 2) in addition to the changing nature of reservations and the economic developments surrounding them. Incen-

tives for Indians to move and stay away from their homelands exist, for example, if traditional forms of subsistence are diminished because the carrying capacity of reservation lands has approached an upper limit or because of the loss of fishing or hunting resources; if there is little or no chance of earning a living wage or maintaining gainful employment; if the educational system is viewed as inferior; or if the social climate is unacceptable or dangerous. With an unemployment rate of **27.8** percent on all reservations in 1979 (152), it is not surprising that more and *more* Indians are choosing to reside off of reservations, where opportunities to work are greater.

## Funding for Urban Indian Health Initiatives

In the early 1970s, the Federal Government became increasingly interested in programs to assist urban Indians. President Nixon's special message to Congress on Indian Affairs stated: "BIA's responsibility does not extend to Indians who have left the reservation, but this point is not always clearly understood. As a result of this misconception, Indians living in urban areas have often lost out on the opportunity to participate in other programs designed for disadvantaged groups" (94). The Office of Economic Opportunity was directed to lead an effort by four Federal departments and agencies to alleviate the problems faced by urban Indians, for example, by supporting existing Indian centers in major cities as links between urban Indians and various government programs.

In 1972, IHS began to fund urban programs through its community development branch under the general authority of the Snyder Act. Since then, 42 different projects have received financial support from IHS. The Indian Health Care Improvement Act of 1976 explicitly authorized urban Indian organizations to contract with IHS to operate health centers and to increase Indian access to public assistance programs. In 1984, there were 37 urban programs in 20 States funded by

IHS (see table 5-17). Staffing for the urban programs is shown in table 5-18.

Urban health projects are distinguished from IHS's reservation-based clinics by their emphasis on increasing access to existing services funded by other public and private sources rather than providing or paying for services directly. The average number of funding sources for the 37 urban programs was 5.3 in fiscal year 1984. Two urban programs, both well established, had more than 10 sources of support each. At the other end of the spectrum, five programs relied solely on IHS for funding. Fifty-one percent of total urban program funding was provided by IHS. Forty-six percent of the remainder came from other Federal sources including the Community Health Centers program, Maternal and Child Health, the Administration for Native Americans, Women Infants and Children, and Medicare. Although only four programs received funds from the Community Health Centers program, this \$1.6 million comprised 9.1 percent of total funding. State Medicaid programs represented 3 percent of urban program revenues (184).

Out-of-pocket and private insurance collections and private grants have been important sources of income to the urban programs, although in fiscal year 1984, only 5.6 percent of total funds were obtained from patient collections and 4.4 percent

Table 5-17.—IHS-Supported Urban Indian Health Programs, by State, Fiscal Year 1984

State	Location	State	Location
1. Arizona	Phoenix	20.	Great Falls
2.	Tucson	21.	Helena
3. California	Bakersfield	22.	Miles City
4.	Compton	23.	Missoula
5.	Fresno	24. Nebraska	Omaha
6.	Sacramento	25. New Mexico	Albuquerque
7.	San Diego	26. Nevada	Reno
8.	San Francisco/Oakland	27. New York	New York
9.	San Jose	28. Oklahoma	Tulsa
10.	Santa Barbara	29.	Oklahoma City
11. Colorado	Denver	30. Oregon	Portland
12. Illinois	Chicago	31. South Dakota	Pierre
13. Kansas	Wichita	32. Texas	Dallas
14. Massachusetts	Boston	33. Utah	Salt Lake City
15. Michigan	Detroit	34. Washington	Seattle
16. Minnesota	Minneapolis	35.	Spokane
17. Montana	Anaconda	36. Wisconsin	Green Bay
18.	Billings	37.	Milwaukee
19.	Butte		

SOURCE U S Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, "Major Health Facilities for Indians and Alaska Natives," listing urban Indian health programs by State, 1984.

**Table 5-18.—Urban Indian Health Program Staff Profile, Full-Time Equivalents, Fiscal Year 1983**

Program	Medical or dental	Other staff	Total staff	Indian (percent)
All programs . . . . .	112.5	479.2	591.6	59.3 %/0
Albuquerque, NM . . . . .	0.5	8.0	8.5	11.8
Anaconda, MT . . . . .	—	1.0	1.0	100.0
Bakersfield, CA . . . . .	0.5	7.8	8.3	60.2
Billings, MT . . . . .	0.4	3.0	3.4	88.2
Boston, MA . . . . .	0.7	14.1	14.8	81.1
Butte, MT . . . . .	—	1.0	1.0	100.0
Chicago, IL . . . . .	0.2	4.8	5.0	80.0
Compton, CA . . . . .	9.8	29.5	39.3	31.0
Dallas, TX . . . . .	4.9	21.8	26.7	73.0
Denver, CO . . . . .	1.4	7.0	8.4	73.8
Detroit, MI . . . . .	0.6	9.3	9.9	85.9
Fresno, CA . . . . .	3.5	9.8	13.3	51.1
Great Falls, MT . . . . .	3.0	1.5	4.5	77.8
Green Bay, WI . . . . .	—	9.1	9.1	100.0
Helena, MT . . . . .	1.7	0.8	2.5	40.0
Miles City, MT . . . . .	—	2.0	2.0	100.0
Milwaukee, WI . . . . .	11.0	48.0	59.0	38.1
Minneapolis, MN . . . . .	5.3	60.6	65.9	58.6
Missoula, MT . . . . .	—	2.6	2.6	100.0
New York, NY . . . . .	1.0	8.0	9.0	88.9
Oklahoma City, OK . . . . .	5.4	9.8	15.2	65.8
Phoenix, AZ . . . . .	—	7.0	7.0	78.6
Pierre, SD . . . . .	4.5	3.5	8.0	62.5
Portland, OR . . . . .	3.7	12.9	16.6	65.1
Reno, NV . . . . .	1.0	5.3	6.3	31.7
Sacramento, CA . . . . .	5.0	19.0	24.0	66.7
Salt Lake City, UT . . . . .	2.1	7.5	9.6	55.2
San Diego, CA . . . . .	3.5	7.0	10.5	57.1
San Francisco, CA . . . . .	8.6	28.0	36.6	65.6
San Jose, CA . . . . .	2.6	8.2	10.8	27.8
Santa Barbara, CA . . . . .	4.0	8.1	12.1	24.8
Seattle, WA . . . . .	14.2	64.0	78.2	70.1
Spokane, WA . . . . .	4.2	11.6	15.8	55.1
Tucson, AZ . . . . .	2.0	2.2	4.2	52.4
Tulsa, OK . . . . .	5.1	24.6	29.7	68.7
Wichita, KS . . . . .	2.0	10.8	12.8	53.1 %/0

SOURCE: U S Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Division of Health Systems Development, *Urban Indian Health Program Evaluation Project, Fiscal Year 1983* (Tucson, AZ IHS, February 1984), table 5

from private grants. An average 17 percent of Indian clients across all programs had some form of private health insurance, but the extent of coverage and ability to meet deductible and copayment requirements is not known (138). Twenty, or 55 percent, of all urban programs request some form of payment from their clients (184). The programs do not require payment for services, however, and sliding fee scales are used to determine the amount requested of clients. A complete account of funding sources and allocation of costs

for the urban programs is provided in tables 5-19 and 5-20.

In order to receive IHS support for an urban Indian health project, an organization must submit an application. Criteria that IHS applies to make funding determinations on the urban programs include attention to cultural barriers, conditions discriminating against Indians, inability to pay for health care, lack of facilities providing free care to indigent persons, lack of State or local health programs, technical barriers created by State and local health agencies, availability of transportation to health care services, and distance between Indian residences and the nearest health care facility (42 CFR 36.351). Funding for specific programs has taken into consideration the extent of unmet health needs in the urban community, as determined by the incidence and prevalence of disease, life expectancy, infant mortality, dental needs, housing conditions, family income, and employment status. There have been no new urban Indian health projects established in the past few years. Projects that have been in existence longer and have had time to strengthen their organizations tend to receive a greater proportion of IHS's allocation for urban Indian health projects.

Two other important factors in determining funding priorities are the Indian population in urban centers and whether the city has an existing urban Indian health program. With respect to population, there are five levels of priority, with greatest preference given to cities with more than 9,000 Indians and lowest preference given to localities with fewer than 1,000 Indians (42 CFR 36.351). The 1980 census identified 114 out of 318 Standard Metropolitan Statistical Areas (SMSAs) as having more than 1,000 American Indians, Eskimos, and Aleuts (see table 5-21). Two of the four largest urban Indian health programs supported by IHS are located in SMSAs that ranked eighth and ninth on the list of SMSAs with the largest numbers of Indians; however, 7 of the 37 projects funded in fiscal year 1984 served Indians in communities that had fewer than 1,000 Indian inhabitants in the 1980 census, and 3 programs were located in cities with an IHS hospital or clinic in close proximity.

**Table 5-19.—IHS. Funded Urban Indian Health Programs, Fiscal Year 1984:  
Distribution of Reported Revenues in Dollars, by Source and by Program**

Program	Total	CHC Sec 330	MCH	Title X	WIC	Other Federal	IHS Title V	IHS other	Medicare	Medicare	Other 3d party	Patient collections	State	County	City	Other
All programs	\$17517,838	\$1595143	\$294,233	\$108,502	\$645979	\$1234015	\$7,928,531	\$929,533	\$97,154	\$590478	\$546,390	\$980,502	\$139,454	\$508,967	\$144,671	\$774,286
Percent by source	100.0%	9.11%	1.68%	0.62%	3.69%	7.04%	45.26%	5.31%	0.55%	3.37%	3.12%	5.60%	6.50%	2.91%	0.83%	4.42%
Albuquerque NM	111,519	—	—	—	13,020	—	98,499	—	—	—	—	—	—	—	—	—
Anaconda, MT	30,429	—	—	—	—	—	30,429	—	—	—	—	—	—	—	—	—
Bakersfield, CA	140690	—	—	—	—	3738	118,216	—	—	—	18,736	—	—	—	—	—
Billings, MT	77,012	—	—	—	—	—	77,012	—	—	—	—	—	—	—	—	—
Boston, MA	349014	—	—	—	—	10,603	96,574	217700	—	—	—	—	22257	—	1880	—
Butte MT	37,543	—	—	—	—	—	37,543	—	—	—	—	—	—	—	—	—
Chicago, IL	179,771	—	—	—	—	—	137,992	—	—	2,274	13319	6,197	—	—	—	19539
Compton, CA	1,539410	—	—	106,002	56,699	—	548,676	287078	—	—	192000	—	183194	165761	—	—
Dallas, TX	1 121,760	—	—	—	92844	642675	357,226	—	—	—	—	24,390	—	—	—	4,625
Denver, CO	222,027	—	—	—	—	—	183,147	—	—	—	—	—	—	—	13,000	25,880
Detroit, MI	231856	—	11,906	—	—	—	193,000	—	300	1,500	50	100	—	25000	—	—
Fresno, CA	494,556	—	50,000	—	88,020	—	175,436	—	—	21 553	—	44481	99565	—	—	15501
Great Falls, MT	101 494	—	—	—	—	—	101 494	—	—	—	—	—	—	—	—	—
Green Bay, WI	183364	—	—	—	—	—	129,000	—	—	—	—	—	2063	30,500	—	21 801
Helena, MT	92,229	—	—	—	—	—	64,620	—	—	2589	1,869	3604	19547	—	—	—
Miles City, MT	109909	—	—	—	—	68,780	41,129	—	—	—	—	—	—	—	—	—
Milwaukee, WI	2,138713	864,414	43459	—	72146	246737	389232	31688	15,100	251400	72962	91000	—	—	—	60,575
Minneapolis, MN	1,432,838	328451	—	—	—	—	588899	—	—	—	—	292190	10875	57654	27524	127245
Missoula, MT	129,798	—	—	—	—	20,000	59,790	—	—	—	—	—	—	13,000	—	37008
New York, NY	316,000	—	—	—	—	17000	119000	30000	—	—	—	—	90000	—	60,000	—
Oklahoma City, OK	517,600	—	—	—	—	—	463,000	—	643	390	370	26890	15,057	—	—	11,250
Phoenix, AZ	165297	—	—	—	14,301	—	133,226	2,689	15,081	—	—	—	—	—	—	—
Pierre, SD	197,528	12,586	—	—	—	—	165,500	—	—	5339	—	2625	11 478	—	—	—
Portland OR	394,222	—	—	—	39,660	—	276,200	18000	36584	—	—	15,991	7787	—	—	—
Reno, NV	158,436	—	—	—	—	—	150168	—	—	—	—	—	—	—	—	8,268
Sacramento, CA	514,889	—	—	—	—	—	122419	—	4449	72149	11 544	34,299	208775	35319	—	25,935
Salt Lake City, UT	201,620	—	—	—	18711	17	146727	—	—	706	1,399	16,563	—	—	—	17497
San Diego, CA	407,801	—	—	—	—	—	231,061	—	3805	12,889	28085	17,828	108579	—	—	5,554
San Francisco, CA	1 087,898	—	188868	—	91 476	—	352,680	—	—	—	—	260000	116,874	68500	—	9,500
San Jose, CA	469,338	—	—	2500	53,286	—	187662	—	—	—	97,889	—	128,001	—	—	—
Santa Barbara, CA	326190	—	—	—	—	—	176785	—	—	10,633	11 230	44,877	72,665	—	—	10,000
Seattle, WA	2,263,198	—	—	—	21,431	126,665	1,093,254	341 700	12964	153365	43,292	44,669	9,534	135031	17267	264,026
Spokane, WA	317,262	—	—	—	47,481	—	173716	—	4,255	35640	15541	11,169	—	—	—	29,460
Tucson, AZ	156,099	—	—	—	—	—	134,369	678	2,201	—	933	12,935	1 012	3202	—	769
Tulsa, OK	924,942	389,692	—	—	36,904	97800	332,894	—	—	—	5,987	27,061	—	—	—	34,604
Wichita, KS	375586	—	—	—	—	—	241,956	—	1 772	19,601	15,193	11,837	39,978	—	—	45,249

Revenue Sources CHC = Federal Community Health Center MCH = Federal Maternal and Child Health Title X = Federal Family Planning WIC = Federal Women Infants and Children Title V = IHS Urban Indian Funding

SOURCE U S Department of Health and Human Services Public Health Service Health Resources and Services Administration Indian Health Service Division of Health Systems Development Urban Indian Health Project Evaluation Report Fiscal Year 1984 (Tucson AZ IHS June 1985) table 1

**Table 5-20.—IHS-Funded Urban Indian Health Programs, Fiscal Year 1984: Distribution of Costs in Dollars by Program Component**

Program	Total	Medical	Lab and X-ray	Pharmacy (medical)	Dental	Health education	Nutrition	Mental health	Optometry	Substance abuse	Other	Community service	Administration	Facility related
All programs	\$16567293	\$3724830	\$451940	\$342139	\$2167395	\$796.372	\$602145	5591009	\$216675	\$1.181.623	\$628232	\$1.293.840	\$3.548.400	\$1022693
Percent of costs	100.00%	22.48%	2.73%	2.07%	13.08%	4.81%	3.63%	3.57%	1.31%	7.13%	3.79%	7.81%	21.42%	6.17%
Albuquerque NM	110058	30830				5.827	10.020	1768		200	1.500		58906	1.007
Anaconda MT	26971	—		—						—	1.658	1.450	21.253	2610
Bakersfield CA	129976	21.976								—	2318	40.335	51.071%	14276
Billings MT	77012	16800	1184	7057							—	15633	29498	b 840
Boston MA	364902	12030			—	7020		32720	—		135.505	29481	148.146	—
Butte MT	38323	2401	4.123	217	1.370	348		—			796	229	24288	2895
Chicago IL	153834	21.524	734		25.168	4.109			1.656			22670	73408	6221
Compton CA	1.539410	380421	4.971	1.500	239401	85443	76331	75270		433.183		66564	151.045	25281
Dallas TX	778495	87836	11.142	18965	104847	84,572	1.160					195,081	182847	92045
Denver CO	211.794	14703	910	310	9078				10406		13689	64.332	71.807	26559
Detroit MI	179349	20.932		—	3867		840			37466		38238	53.052	24954
Fresno CA	494556	120702		—	70832	30372	66268	—			24652	61.309	105765	14656
Great Falls MT	101.494	42852	6.175	3641	—	3500	2604				2273	9681	26876	3892
Green Bay WI	167364	—								33078		60036	59923	14327
Helena MT	118937	45328	6084		709	5273	6996	3955	1.823		4462	9025	20282	15,000
Miles City MT	41.129	—										31.416	7553	2160
Milwaukee WI	2042724	343334	80518	119215	175792	94287	186039	28473			338248	48023	448030	180765
Minneapolis MN	1.345261	262902	68503	1.214	258789	130976		180003				115625	222866	104383
Missoula MT	67737	11.807	1.312	1.995	2583	1.678	654	—	806	875	—	749	41.271	4007
New York NY	418000	24.300		2200	—	—				150000	1.7000	103900	18600	102000
Oklahoma City OK	454541	122,417	22,929	23103	90096	2522	—					18023	118,069	57382
Phoenix AZ	165,297	111.637		—			14301						39,359	
Pierre SD	238527	104806	23574	5000					12294	11.478		8749	50,419	22,207
Portland OR	378,600	139,275	23,825	21,000			23500	47,000				16000	63,000	45000
Reno NV	150168	42094	5149	3300		4931					19422	28129	42349	4.794
Sacramento CA	347576	85,034	3,324	12953	69503		—		—			24,437	124236	28089
Salt Lake City UT	136029	27568		—	12.196				5214		4800	—	66326	3600
San Diego CA	355,355	124374		—	124554		16325					35782	70645	
San Francisco CA	1,081,898	497,742	36000	18,000	202980	9000	91.476	10000				70700	137,000	9000
San Jose CA	187,742	61,637	2700		8035	3008			8004		3,536	15,619	58905	26298
Santa Barbara CA	302250	—		—	199188				450			42252	60360	
Seattle WA	2.488050	476844	88410	45303	317779	100216	48431	198202	176022	515343	17267	57998	446235	
Spokane, WA	466101	119508	27342	35885	87351		23250	5000		—	25705		97857	44203
Tucson, AZ	231413	129765	2866	—			—	—	—	—	14501	12901	50298	21.082
Tulsa OK	801.166	156,522	24.155	8818	89935	223290						30752	169988	97.706
Wichita KS	375254	64929	6010	12463	73342		33.950	8618			900	18721	136867	19454

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Division of Health Systems Development, Urban Indian Health Program Evaluation Report, Fiscal Year 1984 (Tucson, AZ: IHS, June 1985), table 2.

## Services Provided by Urban Indian Health Projects

In the summer of 1985, OTA conducted a short mail survey of the existing urban Indian health projects to supplement information available from two evaluations performed by IHS. These evaluations, covering fiscal years 1983 and 1984, were designed to assess the progress of urban Indian health projects from their inception in 1972 to their current status as a program authorized by the Indian Health Care Improvement Act,

The OTA Survey found that most of the urban projects or "human service organizations" funded by IHS offer a wide range of social services that are organized to alleviate individual or family problems or to fulfill basic human needs (48). Thirty-two percent of the patient encounters reported by the urban programs in fiscal year 1984 were medical; 10 percent were dental; 27 percent were health-related (health education, nutrition, mental health, optometry, and substance abuse programs); and 31 percent represented other community service contacts (184).

Table 5-22 outlines 10 broad categories of non-medical, nondental services provided by the urban programs. The health education category includes activities such as health fairs, diabetic control sessions, prenatal classes for mothers, a healthy babies perinatal project, instruction in first aid, management of chronic medical problems, and literature on disease and trauma prevention. The jobs and training category includes employment and training services, economic assistance to Indian businesses, classes for the illiterate, a Job Training Partnership Act program, an Indian

leadership program, and training programs for employees. The nutrition category, which is funded mostly from non-IHS sources, encompasses the Women, Infants and Children program (one of the major services provided to non-Indian clients), Federal food commodity distribution, and several emergency food banks. Outreach includes home health care similar to the community health representatives program, referral, transportation, and liaison with governmental agencies and the public.

The social services category, which includes a broad range of services, is similar to what some tribal health departments provide to complement the medical care delivered directly by IHS. Examples of the social services provided by some urban programs include: paralegal counseling and advocacy; housing counseling, including food and lodging for the homeless; limited financial assistance, ranging from prescriptions and partial payment of emergency health care to fuel bill assistance; offender/ex-offender rehabilitation; a patient representative program; a senior center; a recreation center; and clothing. In some cases, these social services are part of mental health activities staffed with professional counselors offering help to all age groups.

The urban Indian health programs serve Indians and non-Indians. IHS regulations do not prohibit the programs from serving non-Indians, and other sources of Federal funds often require urban Indian centers to serve certain populations that include non-Indians. Hence, the only requirement that IHS imposes is that the number of Indians served by each program be proportional to the amount of money provided by IHS.

In fiscal year 1984, close to 60 percent of the users of the urban programs were Indian. In half of the programs, Indians represented 90 percent or more of the clientele; and four of these programs served Indians only (184). Verification of eligibility for IHS-funded urban Indian activities consists primarily of presentation of a certificate of degree of Indian blood issued by a tribe or BIA, a tribal membership card, or certifying affidavits signed by three eligible Indians (138).

Most of the urban Indian programs could not survive on IHS funding alone and would be inefficient if they served only Indians. Because they

**Table 5.21.—Distribution of the American Indian, Eskimo, and Aleut Population Among SMSAs, 1980**

Numbers of American Indians, Eskimos, and Aleuts in SMSAs	Numbers of SMSAs	Percent of total
> 9,000	20	6.30%
4,500 to 8,999	15	4.7
3,000 to 4,499	16	5.0
1,000 to 2,999	63	19.8
< 1,000	204	64.2
Total population	318	100.0%

SOURCE: U.S. Department of Commerce, Bureau of the Census, *1980 Census of Population: Characteristics of the Population, General Population Characteristics, U.S. Summary* (Washington, DC: U.S. Department of Commerce, December 1983), PC80-1-B1, table 69.

**Table 5-22.— Nonmedical, Nondental Services Offered by IHS-Supported Urban Indian Health Programs: Fiscal Year 1984**

Type of service	Small programs (N= 10)		Medium programs (N= 10)		Large programs (N =7)		Total (N =27)
	Number	Percent <sup>a</sup>	Number	Percent <sup>a</sup>	Number	Percent <sup>a</sup>	Number
Health education . . . . .	9	360/o	14	560/o	2	8%	25
Family planning . . . . .	1	25	1	25	2	50	4
Jobs and training . . . . .	3	50	0	0	3	50	6
Nutrition . . . . .	5	21	8	33	11	46	24
Formal outreach . . . . .	12	55	8	36	2	9	22
Social services. . . . .	22	48	14	30	10	22	46
Alcohol and drug . . . . .	1	17	2	33	3	50	6
Counseling . . . . .	3	38	2	25	3	37	8
Children and youth . . . . .	2	33	3	50	1	17	6
Family support. . . . .	3	25	4	33	5	42	12

<sup>a</sup>Percentages shown are percent of row totals. The number of services may exceed the sample size since some programs offered more than one unique service within a given category.

SOURCE: U S Congress, Office of Technology Assessment, "Survey of Urban Indian Health Programs," 1985

were established to provide medical and social services to a group of clients who are largely eligible for public health care, a few of the programs have competed successfully for a place within their local health delivery and social services network. For example, the Urban Indian Health Board, Inc., in the San Francisco Bay Area contracts with Alameda County to provide care to medically indigent non-Indian adults in its Oakland clinic. In June 1985, the State of Minnesota decided to serve its Medicaid population through health maintenance organizations. The Indian Health Board of Minneapolis, an urban Indian clinic that served 945 Medicaid-eligible clients in 1984, became qualified as part of the health maintenance organization delivery network (113).

## Conclusions

Urban Indian health programs are important because of the demographic changes that have taken place in the Indian population. In the 1980 U.S. census, 50 percent of the 1.4 million persons who identified themselves as Indians lived in metropolitan areas. Approximately 829,000, or 59 percent, of the 1.4 million Indians were included in IHS's estimated service population living on or near a federally recognized reservation. Thus, about 10 percent of Indians identified in the 1980 census were living on or near reservations that were in or contiguous to metropolitan areas. However, IHS-supported programs for urban Indians have always been viewed and treated as separate from IHS's reservation-based service system.

Health care services are provided to Indians based on political relationships between the United States and tribal governments. When services are extended to Indians on the basis of race, as might be the view of urban program services since tribal governments are not involved in them, one of the basic premises of the trust relationship is undermined. An essential feature of IHS services for Indians is that individual recipients of care are affiliated with political entities, Indian tribes, that have established claims to such care. When Indians leave their reservations and the jurisdiction of their tribes, they lose whatever degree of tribal affiliation is associated with residence on an Indian reservation. One group, the National Tribal Chairmen's Association, once viewed as the major opponent of programs for urban Indians, has held that urban Indians relinquish their right to health care from IHS by leaving tribal jurisdiction. In congressional hearings of March 1985 (93), the executive director of the National Tribal Chairmen's Association retracted the organization's opposition to IHS funding for urban Indian health projects. Members of the National Tribal Chairmen's Association still feel, however, that non-tribal organizations, such as the non-profit corporations that operate urban Indian programs, should coordinate the services they provide for Indians with tribal governments and elected Indian officials. But coordination of services between urban Indian health projects and area tribes is a formidable task. In some urban centers, there are as many as 40 tribal governments nearby, and representation by tribes on governing boards might include over 80 different tribes (4).

Urban Indian health programs, lacking tribal government legitimacy, may always be subject to opposition from tribal groups. The disagreement between some tribal leaders and proponents of the urban programs is as much over having to share funding as over points of law. Leaders of several urban Indian organizations feel strongly that the Federal Government is responsible for providing health care and social services to Indians regardless of their chosen residence (4,57). The fact that urban Indian health projects have been funded since 1976 by appropriations under the Indian Health Care Improvement Act, and have been

operating under continuing resolution appropriations in fiscal years 1985 and 1986 in the absence of reauthorization of that act, indicates that their future is uncertain. The Administration's IHS budget proposals in recent years and for fiscal year 1987 have eliminated funding for urban Indian health projects. The negative effects of the Federal budget deficit on overall IHS funding suggest that priority is likely to be given to maintaining reservation-based direct and contract care delivery programs, rather than to maintaining or expanding urban Indian programs.

## THE IHS HEALTH FACILITIES CONSTRUCTION PROGRAM

The IHS health facilities program provides funds for the construction of hospitals, health centers, health stations, sanitation facilities, and personnel quarters for eligible staff at these facilities. Since 1970, the program has built 14 hospitals, 20 health centers, and about 700 units of personnel quarters. The program also provides funds for the major modernization and repair of existing facilities. In 1960, a program to provide sanitation facilities and systems for Indian homes and communities began. This responsibility is shared by IHS with the Department of Housing and Urban Development (HUD) and BIA through its housing improvement program.

Funding for the IHS facilities construction program is appropriated by Congress separately from the IHS health services delivery budget. In fiscal year 1985, \$61.6 million was appropriated for facilities construction, compared with \$807 million for services delivery and program management (see app. C). Appropriations for facilities construction by type, 1956 through 1985, are summarized in table 5-23.

As of October 1984, within IHS's direct and tribally operated system, there were 51 Indian hospitals; 124 health centers; 285 smaller health stations, Alaska village clinics, and school health centers; 489 treatment locations (not fixed facilities); and 1 extended care facility (191). With the completion of sanitation facilities provided by the 1984 appropriations, over 144,000 American Indian and Alaska Native homes will have received

water supply and/or sewage disposal systems (177). It is estimated, however, that about 22,000 existing homes have not yet received first service and that the unmet need for sanitation facilities is approximately \$520 million (60). The IHS facilities construction program, its operation, and planning methodologies are described below.

### Priority System for the Construction of Health Facilities

IHS has developed a priority system for the construction of clinical facilities (167). A committee that may include members from PHS, HRSA, IHS headquarters, and IHS area offices applies this priority system. The first priority list under this system was compiled in 1980; application of the system is described below and illustrated in figure 5-10.

Application of the priority system results in three groups: Group A consists of those projects previously proposed to Congress for which funds were not appropriated (these projects are placed at the top of the priority list); Group B includes the top 10 new inpatient and ambulatory care projects respectively (5 each); and all other projects comprise Group C.

Phase I of the priority ranking system divides Groups B and C by assigning numerical values to workloads at the facility, demand for health care in the area, ability of the current facility to

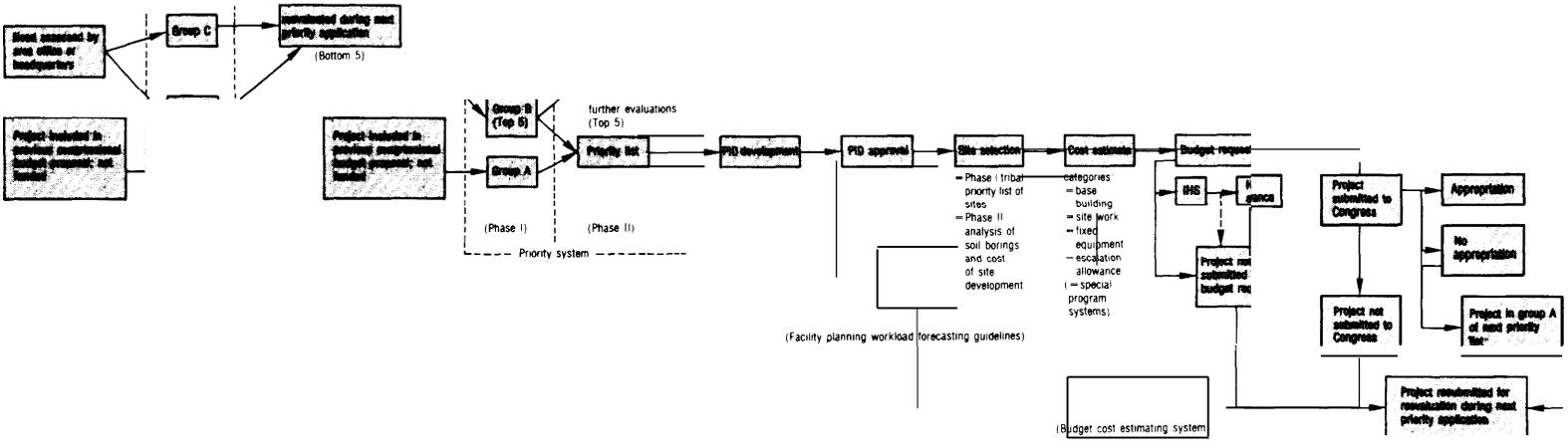
Table 5-23.—Indian Health Facilities, History of Appropriations by Activity, Fiscal Years 1956-85

Fiscal year	Hospitals				Outpatient care facilities	Grants to community facilities	Sanitation facilities	Personnel quarters	Total
	New and replacement	Modernization and repair	Total hospitals						
1985	\$ 19,843,000	\$ 2,086,000	\$ 21,929,000	\$ 9,712,000	\$ 0	\$ 24,500,000	\$ 5,483,000	\$ 61,340,000	
1984	28,965,000	200,000	29,165,000	960,000	0	21,000,000	2,400,000	53,905,000	
1983	6,700,000	3,944,000	10,644,000	-0-	0	49,056,000	14,000,000	73,000,000	
1982	28,965,000	200,000	9,723,000	9,613,000	0	38,680,000	36,000	58,520,000	
1981	25,693,000	3,300,000	28,993,000	670,000	-0-	52,740,000	160,000	83,530,000 <sup>a</sup>	
1980	8,000,000	1,600,000	9,600,000	7,595,000	-0-	50,240,000	6,870,000	74,020,000	
1979	20,181,000	3,139,000	23,320,000	-0-	0	50,640,000	3,000,000	76,600,000	
1978	41,610,000	2,150,000	43,760,000	4,770,000	0	21,840,000	187,000	71,570,000	
1977	33,400,000	50,000	33,450,000	2,520,000	625,000	125,848,000	720,000	163,630,000	
1976-T.Q. <sup>b</sup>	-0-	-0-	-0-	-0-	0	11,084,000	70,000	11,840,000	
1976	12,940,000	-0-	12,940,000	1,000,000	1,250,000	38,544,000	1872,000	55,716,000	
1975	10,035,000	-0-	10,035,000	1,375,000	-0-	40,521,000	55,000	57,310,000	
1974	12,488,000	630,000	13,118,000	100,000	53,000	36,179,000	-0-	49,290,000	
1973	7,305,000	1,355,000	8,660,000	44,000	10,000	35,745,000	-0-	44,490,000	
1972	873,000	220,000	1,093,000	119,000	28,000	28,950,000	-0-	30,472,000	
1971	220,000	45,000	265,000	-0-	-0-	18,450,000	-0-	18,715,000	
1970	-0-	157,000	157,000	1,763,000	1,950,000	16,905,000	117,000	20,552,000	
1969	-0-	549,000	549,000	46,000	86,000	16,657,000	44,000	18,560,000	
1968	1,763,000	697,000	2,460,000	1,752,000	25,000	10,464,000	1,920,000	16,880,000	
1967	1,115,800	2,411,000	3,527,500	1,425,500	0	5,736,000	3,800,000	14,490,000	
1966	6,387,200	147,200	6,534,000	696,000	0	6,258,000	160,600	14,060,000	
1965	1,799,700	979,000	2,779,600	362,400	0	4,550,000	1,140,000	8,800,000	
1964	-0-	726,700	726,700	216,300	0,0	4,687,000	47,000	6,100,000	
1963	2,913,000	1,275,600	4,189,000	620,700	10,000	4,000,000	42,000	9,300,000	
1962	420,000	1,270,000	1,690,000	770,000	32,000	3,000,000	2,500,000	8,250,000	
1961	1,238,500	1,025,300	2,263,800	400,200	50,000	2,550,000	4,000,000	9,740,000	
1960	1,808,000	279,000	2,087,000	-0-	-0-	200,000	2,500,000	4,700,000	
1959	1,886,000	1,545,400	3,431,400	114,600	175,000	-0-	711,000	6,000,000	
1958	-0-	3,130,000	3,130,000	-0-	0	-0-	-0-	3,130,000	
1957	6,762,000	1,000,000	7,762,000	-0-	0	-0-	1,000,000	8,762,000	
1956	1,950,000	780,000	2,730,000	740,000	0	-0-	2,055,000	5,500,000	
<b>Total</b>	<b>\$265,827,900</b>	<b>\$34,884,000</b>	<b>\$300,712,700</b>	<b>\$47,384,700</b>	<b>\$8,526,000</b>	<b>\$719,034,000</b>	<b>\$63,156,600</b>	<b>\$1,138,814,000</b>	

<sup>a</sup>Includes a restriction on \$3,910,000.  
<sup>b</sup>Third-quarter adjustment for change in Federal fiscal year.  
 Includes \$535,500 unobligated balance transferred from BIA.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration. Health Service, Office of Planning, Evaluation, and Legislation, 1985.

Figure 5-10.—IHS Facilities Construction Process From Assessment of Need to Congressional Appropriation



SOURCE: Adapted by the Office of Technology Assessment from information provided by U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, Program Planning Branch, 1985.

meet demand, accessibility of alternative sources of care, and facilities evaluations conducted within the past 3 years by DHHS regional offices. Phase II verifies Group B scores and further ranks the projects on each list. The final priority construction list, then, is headed by Group A projects and followed by the top five Group B projects for each type of facility (inpatient and ambulatory care).

After a project has been approved by the priority system committee for inclusion on the priority list, the proposed facility then undergoes a more complete evaluation and a program information document (PID) is developed. The PID, which defines the scope of the project, is prepared by IHS headquarters or the area office in conjunction with the affected tribes. It contains information about existing health care delivery patterns and conditions, availability and accessibility of alternate resources, existing and projected workloads, populations to be served, existing program deficiencies, staffing conditions and requirements, alternative construction sites and the condition of those sites, and the amount and type of contract health care. The PID is used to define the size and location of the proposed facility and its equipment (78). Staffing requirements for a proposed facility are determined by IHS's resource requirement methodology, based on the projected size of the service population and projected workloads (60).

In 1984, PID development became more standardized with introduction of the "Facility Planning Forecasting Guidelines" (190). This document is essentially a procedures manual that contains the relevant information outlined above and instructions for calculating the workload rates and projections.

The methods used in projecting workloads assume that future utilization patterns will reflect current utilization, adjusted to the size of the estimated future service population. For example, a 3-year base period actual utilization rate is used to correct for aberrations in any single year, and adjustments are made to compensate for unmet need in the base utilization rate. Such adjustments are made only if documentation, such as lists of deferred cases, can be provided.

There are differences of opinion concerning both current population figures and assumed rates of growth. IHS derives its population figures from U.S. Census Bureau data, but there are concerns about the accuracy of these numbers in many Indian areas. IHS projections are adjusted to the local level for Indian births and deaths but do not take into account migration, i.e., Indians moving out of or into the service area. Until recently, IHS used the population figure for the middle year of the 3-year base period (a statistically acceptable method) to calculate a facility's utilization rate. At the request of PHS, however, the last year of the 3-year period now is used. This yields a lower utilization rate than would result if the mid-year population were used, assuming growth in population and utilization.

Workloads are projected 8 years into the future, which represents the estimated length of time from PID development to completion of a newly constructed facility. Workload projections are based on an analysis of the following current workloads: 1) the direct workload of the subject IHS facility generated by people residing within and outside the subject service area; 2) direct workload at nearby IHS facilities generated by people residing within the subject service area; and 3) a portion of contract care cases generated by people residing within the service area that could be handled in the new facility based on planned services (190). If data on contract health cases are inadequate and a detailed analysis cannot be performed, it is assumed that no more than 25 percent of the contract care workload will be provided in the new facility. This is a recent revision in IHS planning standards. Prior to publication of the forecasting guidelines, a default value of 50 percent of contract care was used.

The completed PID is submitted to PHS through HRSA. Unanimous approval of the PID by IHS, HRSA, PHS, and DHHS is the next essential step toward actual construction. As of late 1985, the guidelines for facilities planning described above had been adopted only by IHS, not by HRSA, PHS, or DHHS. Most PIDs developed since IHS adopted the guidelines in 1984 have not yet been thoroughly reviewed by HRSA, PHS, or DHHS because of a backlog of projects, and therefore

these agencies have not had an opportunity to assess how well the process works. HRSA, PHS, and DHHS are not required to apply a particular methodology in making their facilities construction decisions.

## Methods for Assessing Need for New and Replacement Facilities

### Bed Size and Surgical Services

Prior to the mid-1970s, IHS based its decisions regarding the size of new or replacement hospitals on one of four hospital bed planning methodologies. In 1977, however, in response to a report by GAO, Congress imposed a moratorium on IHS's hospital construction until its acute care bed need methodology was revised (131).

IHS began using its revised system, the "Methodology for Determining Future IHS Acute Care Hospital Bed Needs," in 1980. Inpatient services are divided into general acute care and obstetrics. The average daily patient load over the 3 most recent years forms the base period workload rate. This figure is adjusted for eligible individuals who received care elsewhere because of limitations in the services available from their existing IHS facilities, and for documented cases where care was provided at the patient's own expense. This adjustment reflects the assumption that an adequately staffed replacement hospital would be expected to provide directly some of the care being referred out to other hospitals. The expected utilization rates are applied to a population estimate projected 8 years into the future from the base year. Projected average daily patient loads are adjusted to cover daily census fluctuations by estimating the number of beds that would be needed if the number of general acute care patients exceeded bed capacity no more than 10 percent of the time, and if obstetrical patients exceeded bed capacity no more than 5 percent of the time.

The results of these calculations are compared with those of two other standards: 1) general health planning guidelines recommending 3.7 beds per 1,000 population; and 2) an average facility occupancy rate of 80 percent, which represents reasonably efficient operation in short-stay hospitals (although nationally, hospital occupancy

has averaged around 75 percent in recent years). If both of these methods generate a need for fewer beds than the forecasting guidelines calculation, the larger of these two alternatives is selected as the final estimate of needed hospital beds. Otherwise, the calculated value is used as the final estimate.

In estimating future needs for surgical services, the most recent 3-year surgical caseload is averaged and projected 8 years into the future, adjusted for simple population growth. Under IHS criteria for establishing an inpatient surgical service, a workload of 1,200 to 1,300 surgical cases per year is accepted as firm evidence of need for a surgical service. The minimum workload necessary for consideration of a surgical service is 600 to 900 cases per year. These rates were derived from IHS's resource requirement methodology, which requires need for a minimum of three surgeons to establish a surgical service. The 1,200 case level reflects 400 cases per surgeon per year, and the 600 to 900 figure reflects 200 to 300 cases per surgeon. (OTA applied these planning criteria to a particular facility construction case at the request of the U.S. Congress, Senate and House Appropriations Committees. The results of that analysis may be found in the OTA Staff Memo, "Replacing the Rosebud Sioux Hospital," August 1985 (140). )

### Staff Quarters

In addition to establishing the size of the facility and its scope of services, the PID development and approval process provides the basis for determining the number of personnel quarters needed to house facility staff. Although IHS attempts to coordinate funding requests for staff quarters with the facility construction schedule, such requests frequently have been disallowed or omitted from final budget plans at higher levels in DHHS. As a result, construction of personnel quarters may not begin until after completion of the facility, leaving new facility staff without adequate or acceptable housing. When staff cannot be housed, expected levels of services cannot be provided (78).

Staff quarters are provided for new facilities and for facilities where there is a housing short-

age or where the units are substandard. The number of units for newly constructed facilities is estimated from PID information on optimal staffing requirements for the proposed facility. In addition, the *Public Health Service Quarters Management Handbook* aids in determining need for staff quarters by setting down the rules governing which staff qualify for quarters. The housing need determination is further adjusted by local housing availability, whether this local housing meets HUD standards, and the experiences of other IHS facilities regarding the numbers of eligible employees who live on or off the reservation. The determination of the need for personnel quarters for existing IHS facilities is similar to that described above, except that it is based on current authorized staffing instead of projected staffing.

The House Committee on Appropriations requested that a priority system for the funding and construction of personnel quarters be in place by September 1985. At the end of 1985, IHS was developing such a priority system (62,78).

#### Medical Equipment

The PID summarizes relevant information concerning the equipment needs of the new facility. Funds for equipment generally are provided in the facility construction appropriation, but the equipment list is subject to additional approval. Each area office submits a list to IHS headquarters for verification and approval. Replacement equipment for an existing facility is considered in the maintenance and repair budget and undergoes a separate approval process, described later.

#### Site Selection

Selection and approval of the construction site takes place while the PID is under development. Site selection occurs in two phases. In phase 1, the tribe, by tribal resolution, provides several sites for the proposed new construction. Each of the sites is evaluated by IHS as to size, terrain, availability of utilities and access, and ease of construction. After the surveys of proposed construction sites have been completed, the sites are ranked in order of preference. If the planned facility is approved, an in-depth analysis of the first choice construction site is done, including soil borings and the estimates of costs of site development (78).

When site selection is approved, the project cost is estimated. This was the responsibility of DHHS'S Office of Facilities Engineering until 1982, when a new cost estimating system was adopted and IHS began to prepare estimates on a case-by-case basis; but either IHS or the Office of Facilities Engineering may prepare cost estimates for proposed projects. This budgeting system relies on: 1) modifying hospital or health center gross square foot values for changes in costs over time and location; 2) addition of special program costs to the base budget; and 3) monitoring costs through the design and construction phases to keep them within the established budget. Hospital and health center costs are categorized into five major components (78):

1. *Inflation allowance*: the estimated building cost is inflated to the expected mid-point in the construction schedule.
2. *Base building*: a gross square foot value that includes structural, architectural, electrical, and mechanical systems costs (solar and materials handling systems are excluded).
3. *Site work*: the site work value is obtained by using the gross square foot value or, when site information is available, by pricing major site work items based on anticipated quantities.
4. *Fixed equipment*: gross square foot values for fixed equipment are used.
5. *Special program systems*: solar systems, materials handling, and lawn sprinkler systems must be estimated and added if they are part of the proposed facility.

Project cost estimates are reviewed by IHS, HRSA, and PHS to arrive at the estimate that will be included in the budget request to Congress. There have been and continue to be differences in the cost estimates supported by the three levels of DHHS, in particular relative to the use of phased funding and to PHS's allowances for certain types of equipment, which IHS views as insufficient. IHS must, however, comply with PHS policies in these matters (78).

Finally, IHS prepares a budget proposal that must be approved by HRSA, PHS, DHHS, and the Office of Management and Budget (OMB). If a project is not included in the IHS facility program's budget request or if it is not submitted to Congress, the project can be submitted for reeval-

uation during the next application of the priority system. However, if a project is proposed for congressional appropriation and is not funded, it is placed automatically in Group B of the facility construction priority list. If funds are appropriated for a project by Congress, DHHS apportions the funds to IHS and steps toward actual construction begin.

Facility construction projects on the priority list are funded in phases by direct congressional line appropriations. Congress usually appropriates funds for design and planning in 1 fiscal year, phase I construction the following year, and then phase II construction including equipment costs to complete the facility. Funds for each subsequent phase generally are not appropriated until the preceding phase has been completed or is nearing completion. Consequently, in any particular set of annual appropriations, it may appear that the priority list system is not being followed, when in fact it is.

### **Facility Maintenance, Modernization, and Repairs**

Funds for the maintenance and repair of IHS facilities, modernization projects (including the backlog of essential maintenance and repair projects, known as BEMAR), and energy conservation retrofit projects are specified in separate lines of the IHS health facilities appropriation.

#### **Maintenance and Repair**

Although these services are not within the purview of the facilities program proper, a brief description is provided. Each area office is allocated a specific amount for maintenance and repair based on an IHS-modified version of what is called the "University of Oklahoma methodology." Approximately 60 percent of these funds are spent for day-to-day maintenance items, e.g., in-house maintenance and repair projects and contractual services (boilers, elevators, generators, etc.). The remaining 40 percent are used for special maintenance and repair and BEMAR projects, the priority of which is the responsibility of each area office. Those special projects not funded within the maintenance and repair projects budget can be requested by the area office as a special

maintenance and repair project under BEMAR (funding for which is discussed below). The funds also may be used to replace or upgrade equipment, e.g., boilers, heating and air-conditioning equipment, and air handlers in IHS facilities. The 1985 allocation for maintenance and repair projects was \$8.6 million and the 1986 budget was expected to increase to around \$8.7 million.

Additional funding for certain maintenance and repair projects can be provided from Medicare and Medicaid collections, which are generated by billing those programs for services provided to their Indian beneficiaries in IHS facilities. Such collections must be used to correct deficiencies cited by JCAH and to meet Medicare conditions of participation, e.g., staffing levels (by hiring temporary personnel) and life-safety code deficiencies. Each facility prepares an annual plan for correction of deficiencies and submits it to IHS headquarters. The plans are approved and/or modified and returned to the area office. As a matter of policy, which would have been mandated by the vetoed 1984 amendments to the Indian Health Care Improvement Act, the Medicare and Medicaid reimbursements collected in an IHS area should be available for use in that area. The area office has discretion in further distributing funds to the facilities in its jurisdiction, based on an approved annual plan. In fiscal year 1984, nearly \$27 million was collected from all IHS areas. At one point, there was an estimated unobligated balance of \$10 million in Medicare and Medicaid collections from 1984. According to IHS headquarters, such balances result from the fact that collection cycles may require up to 2 years to complete, from billing the intermediary, to receiving the funds at IHS and making final decisions regarding their distribution (122).

#### **Modernization and Repair**

The health facilities program is responsible for the modernization and repair of the facilities it builds. This includes providing construction funds for current projects and those on the BEMAR list, as well as funds needed for energy conservation retrofit projects.

As of June 1984, there was an estimated backlog of \$98 million in IHS modernization and repair projects (174). This included \$65 million for

BEMAR projects. The other projects resulted from deficiencies in such areas as fire, life, and safety codes; environmental quality; requirements to provide access for handicapped individuals; and energy management and installed equipment (e.g., boilers). Backlog project information derives from area office totals of the annual facilities deficiency survey. The survey supports an automated data system, updated annually, which maintains an inventory and condition evaluation of IHS property, estimated facility repair costs, and life expectancies of all real and installed equipment. Every fifth year, data are collected for the “deep look” facility deficiency survey. Approval of BEMAR projects is based on this information.

Area offices are responsible for ranking their BEMAR projects in order of priority, and a priority list combining all 12 area lists is assembled at IHS headquarters. This list is based on a scoring system that assigns points for deficiencies involving life-support systems, life-safety regulations, facility accreditation, and emergency repairs. IHS may or may not further revise its priority list depending on the total BEMAR budget. For example, IHS's initial BEMAR budget request for 1985 amounted to \$20 million; PHS reduced this request to \$8 million, a cut that required IHS to develop a new priority list. The budget was cut again to \$2.1 million to accommodate the OMB allowance, leaving funds for only six new projects. The projects that ultimately were funded were chosen from IHS priority lists in keeping with a policy decision to favor inpatient facilities. Similarly, the five projects to be funded in fiscal year 1986 from a budget of \$2.45 million were selected because of a subjective, though informed, decision to favor emergency repairs (27).

In order to better ensure the equitable allocation of funds and to reduce the number of projects on the current BEMAR list, IHS has formed a repair and improvement project prioritization committee comprised of representatives from each area office. The objective of this committee is to eliminate the estimated \$98 million backlog (BEMAR) in 5 years beginning in 1987.

According to congressional mandate in the Energy Policy and Conservation Act of 1975 (Public Law 94-163), as modified by Presidential

order\*, by 1985 all existing Federal facilities must reduce their energy usage by 20 percent from the base period, October 1974 to September 1975. All new Federal facilities must use 45 percent less energy than existing facilities did during the base period. In 1982, IHS was appropriated \$192,000 to conduct energy conservation retrofit studies. As a result of these studies, IHS compiled a list of 27 projects complete with project descriptions and estimated costs. IHS's preliminary budget request for fiscal year 1986 included these projects estimated to cost \$4.6 million. To date, however, none of the projects has been included in the OMB allowance.

### Sanitation Facilities

The Indian Sanitation Facilities Act of 1959 (Public Law 86-121) provided for the supply of water and waste disposal facilities to American Indian homes, lands, and communities. Environmental health funds for IHS are split between the IHS sanitation budget (in the preventive health services allocation) and the IHS facilities construction appropriation.

Funding in the preventive health services allocation is primarily service-oriented, providing personnel, such as sanitarians, environmental health technicians, injury control specialists, sanitary engineers, and engineering technicians who provide the technical services necessary to construct and maintain sanitation facilities. The IHS environmental health program funded 428 staff positions in fiscal year 1985, when the allocation was \$20.2 million.

The IHS facilities construction program, on the other hand, funds the construction of sanitation facilities. For the first 15 years of the sanitation facilities program, the main thrust was to serve existing homes; but congressional appropriations changed the bias toward providing facilities for new homes, usually sponsored by either HUD, BIA's housing improvement program, or by individual tribes. The relationship between the three Federal agencies—IHS, HUD, and BIA—was established in a 1976 agreement. In 1982, this

\*Executive Order 12003, Energy Policy and Conservation, FR Doc 77-21414, July 20, 1977.

agreement was modified at the suggestion of OMB so that HUD-sponsored Indian housing projects would receive HUD funds for sanitation facilities. In 1986, for example, IHS anticipates that approximately \$24 million in funding authority will be required from HUD to provide sanitation facilities for the 2,500 HUD-sponsored housing units expected to be allocated.

In general, BIA's housing improvement projects receive first IHS funding priority. In fiscal year 1986, IHS's preliminary budget request provided for \$8 million for the construction of facilities for 1,000 BIA project homes. The remaining funds would be allocated to other new Indian housing projects on the basis of greatest need and "first come, first serve." IHS, in its fiscal year 1986 preliminary budget request, anticipated the need for an additional \$15 million to fund sanitation facility construction for 1,900 tribally sponsored housing projects.

The need for sanitation facility construction for existing homes has been estimated at **\$520** million for over **22,000** existing homes that have never received first service sanitation facilities (60). This information is based on the sanitation facilities' unmet needs data system, which collects data annually. For fiscal year 1986, IHS requested \$29 million to provide services for 3,800 existing homes. The DHHS allowance for 1986 provided construction funds for 300 BIA project homes (at \$2.3 million) and **350** tribally sponsored homes (at **\$2.7** million). Funds for existing homes were not provided.

## Conclusions

The IHS facilities construction program has been active since **1970** in building **14** hospitals, **20** health centers, and **700** units of staff quarters. It also has completed facility modernizations and repairs, as well as sanitation projects in cooperation with HUD and BIA. Since 1980, a relatively detailed system for setting priorities among facility construction proposals has been applied to develop the annual priority lists that are submitted to Congress for appropriations.

IHS facility planning guidelines specify criteria and standards to determine facility size and range of services. It should be noted, however, that

planning for individual facilities does not represent health system planning based on an assessment of health problems, service needs, and utilization patterns throughout IHS area or overall service populations. The service delivery and facilities construction components of IHS, funded through two separate appropriations, have never been closely integrated. For this reason, questions have been raised as to whether IHS facilities have been located where they can serve the largest numbers of eligible Indians in the most cost-effective way. Tribes have been very active in promoting their own facility construction projects, because they have found that new facilities bring with them increased staffing and other resources (staffing that is considerably more generous than levels assigned to existing facilities), and thus are an effective means of securing funding increases beyond what would be expected under the IHS program continuity budget approach.

The Administration has called for elimination of the IHS facilities construction program, including the sanitation facilities component, in its budget proposals for fiscal years 1985, 1986, and 1987. In spite of this clear Administration direction, Congress has continued to fund some projects such as the replacement hospitals at Rosebud, South Dakota, and Kakanak, Alaska. But whether Congress will continue to fund IHS facility construction requests compelling, in view of the severely constrained budget climate, cannot be predicted.

If IHS's mission is to raise Indian health to the highest possible level, given present budget constraints, any funds that Congress may appropriate for facilities construction and maintenance would be better spent if facilities planning were coordinated with planning to meet present and projected health service needs. The loss of NHSC physicians and the potential for serious medical staffing shortages in the 1990s also indicate a need to reevaluate IHS facility construction plans.

Needs-based services planning might result in a rethinking of the IHS facilities construction program. For example, resources might be directed toward construction and renovation of ambulatory care facilities, rather than hospitals, in areas where inpatient care could be purchased at reasonable prices from private providers. Or, rather

than commit large amounts of money to new facility construction, lesser amounts might fund substantial improvements in existing facilities by completing needed renovations and repairs, providing staff quarters where required, and purchasing essential medical equipment. With limited prospects of budget growth for the immediate future and a likely shortage of physicians, IHS might choose to support and maintain its existing network of

facilities rather than undertake new construction. Finally, because there is general agreement among public health professionals that safe water and adequate sanitation are essential to maintaining health, IHS could request funds to continue its sanitation projects, which will not be undertaken by any other Federal, State, or local agency, instead of constructing new hospitals and clinics.