Availability and Use of Medical Services in an Alaskan Eskimo Community

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THE INDIAN HEALTH Service of the Public Health Service has the difficult task of providing health care of high quality to a large population which is diverse in culture and for the most part economically disadvantaged, poorly educated, widely scattered, and living under harsh environmental conditions. Perhaps nowhere in the United States are these conditions more evident than in some of the remoter parts of Alaska, where poverty, climate, and isolation are extreme.

This paper describes the unusual problems encountered in making medical services available to a remote Eskimo community and the pattern of utilization of these services by the people of the community. The findings may be of some assistance to other persons concerned with the health needs of a population living under similar adverse circumstances.

During 1966, the staffs of the Alaska Native Hospital at Bethel and the Alaska Area Native Health Service at Anchorage collaborated in a special intensive study of a large Eskimo community, Hooper Bay, on the coast of the Bering Sea. Except for its size, this village was considered fairly typical of other communities in southwestern Alaska in its economy, cultural patterns, relative isolation, and health status.

The materials used in the preparation of this paper include: (*a*) written and oral trip reports from various health professionals who visited the community during the year, (*b*) inpatient, field clinic, and radio records from the Bethel hospital, which is the only medical facility in the region, (*c*) X-ray survey reports, (*d*) an environmental survey of the village, (*e*) a census enumeration of the residents of the village, (*f*) a health attitude survey, (*g*) several published reports, and (*h*) conversations with a number of village residents.

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The Community and its People

Hooper Bay is an old village site located between the Bering Sea and the western edge of the vast treeless tundra of southwestern Alaska. The winters are long and cold and the summers are cool and wet. The mean annual temperature is 30.7° F. and the precipitation 17 inches.

In 1966, 70 Eskimo family groups, with an average of 7.6 members, lived at Hooper Bay. All but one of the families were Yupik, or south

Alaskan, in origin. The only non-Eskimo residents were a number of teachers and their families, a few VISTA workers, and a Catholic priest, all of whom were excluded from the study. A breakdown by age and sex of the 535 Eskimo residents is shown in table 1.

The population of the community grew from 307 in 1950 to 535 in 1966. Most of the increase was due to a high excess of births over deaths, rather than to migration into the village. In 1966 there were 19 live births, one stillbirth, and one infant death in this population. Predictably, this is a young population, with 53 percent of the total under 15 years old and only 2 percent over age 65. The majority of the people were born in or near the village. In recent years, however, an increasing number of mothers have been using the hospital for delivery.

Few older adults have had more than 4 years of formal schooling, although most children and young adults now complete eight grades and many go on to high school away from the village. Roughly half of the Eskimos over age 30 need the help of an interpreter when talking to a physician or a nurse.

More than 85 percent of the families received less than $3,000 in cash income and nearly half of the total received under $2,000 in 1966. These figures are especially impressive in view of the large average family size and the fact that prices for food and clothing in this part of Alaska are often nearly twice the price of comparable goods in the other States. Sources of cash income include seasonal jobs, trapping of fur-bearing mammals, sale of craftwork, and welfare assistance from the State and Bureau of Indian Affairs. Only a few persons have full-time work—at the school, airline, post office, or store. Balancing, of course, to some extent the low cash income is the fact that many Eskimos of Hooper Bay still depend in large measure on local resources for food and clothing.

Fish—fresh, frozen, or dried—is the dietary staple. Sea mammals, particularly seals, are used for food as well as for waterproof clothing. The tundra around Hooper Bay is one of the best breeding grounds in North America for a variety of waterfowl, particularly geese. During the winter the men trap mink, ermine, otter, fox, hare, and muskrat. Although most pelts are sold for cash, some are used by the women to make clothing for the family.

Table 1. Distribution of Eskimo population of Hooper Bay, 1966, by age groups and sex

Age group (years)	Male	Female	Total	Percent
Under 1	8	10	18	3.2
1–4	39	42	81	15.2
5–14	93	91	184	34.5
15–24	49	55	104	19.5
25–44	47	42	89	16.6
45–64	26	23	49	9.1
65 and over	4	6	10	1.9
All ages	266	269	535	100.0

Of the 70 houses in the village, 64 are of frame construction and the remainder are made of driftwood logs. Nearly all are heated by stoves in which driftwood is used for fuel. About 40 percent of the homes have only one room. The average occupancy rate is 4.1 persons per room.

All but eight families regularly get their water from the 125-foot well dug in 1964 by the Indian Health Service under the authority of Public Law 86–121. The remainder, because of distance, use a lake 300 yards south of the village. The well water is chlorinated before distribution and the average daily usage is 1.7 gallons per capita.

All the families use "honey-buckets" for human excreta. The children usually empty these containers once a day into one of four bunkers at the periphery of the village. Trash is often indiscriminately discarded near the home, although residents are urged by the village council to incinerate it or carry it to a nearby lake reserved for this purpose. A census of dogs in February 1966 revealed a total of 370. Most were kept tethered a safe distance from the homes.

Hooper Bay has a Bureau of Indian Affairs school, with an enrollment of 188 in 1966, two churches, a store operated by an Eskimo cooperative, and a community hall. It also has an Indian Health Service Health Station—a clinic building opened for use early in 1966—which contains living quarters for visiting health workers, two examining rooms, a waiting room, and a small laboratory.

The community is located 155 air miles from

Left. **Eskimo woman looks for clams at low tide.** ***Right.*** **Villagers prepare for seal hunting**

Beaching boat on frozen tundra requires many hands

Bethel and nearly 550 air miles from Anchorage. The nearest Eskimo community is 20 miles to the eastward. Hooper Bay is accessible for passengers from distant points only by air—either by the twice weekly twin-engine propjet mail plane (fare $35 one way), or by a single-engine air taxi charter (about $135 round trip) from Bethel. Heavy freight comes in by ship once a year from Seattle. Locally, the villagers use boats, including kayaks and skin-covered oomiaks, during the summer and dogs or motorized sleds in the winter. There are five short-wave radio transmitters in the community, each of which can reach Bethel or more distant points.

During 1966 the villagers who were potential health resources included a health aide and her assistant, whose jobs are described more fully later, a sanitarian aide employed by the Indian Health Service, a teacher who was a registered nurse, and an Eskimo lay pastor who had had considerable experience in performing dental extractions and placing temporary fillings. A local woman assisted with the occasional childbirth in the village, but she had little or no training in this work.

The people of Hooper Bay have regular access to three types of medical service, similar to the situation in most southwestern Alaska communities: (*a*) hospitalization at Bethel, (*b*) physician visits to the village, and (*c*) consultation by radio. Two other minor sources—correspondence between physicians and patients and outpatient services at the Bethel hospital—are not considered further in this report. Each of the three major types is briefly described, with reference to the manner in which it is provided, its availability, and how it is used.

Hospital Care

The first and most conventional type of medical care is the hospital inpatient service provided by the 65-bed, fully accredited Alaska Native Hospital at Bethel. This facility had a staff of five physicians and one dentist in 1966. Patients with complex illnesses requiring specialist consultation are discussed by telephone, teletype, or letter with the staff at the Alaska Native Medical Center in Anchorage, where patients are transferred if necessary.

Table 2. Admissions to Bethel hospital, per 100 population of Hooper Bay, 1966, by age groups and sex

Age group (years)	Male	Female	Total	Percent of total	Admission rate
Under 1	11	3	14	12.5	77.8
1–4	17	11	28	25.0	34.6
5–14	7	8	15	13.4	8.2
15–24	5	5	10	9.0	9.6
25–44	1	27	28	24.9	31.4
45–64	2	8	10	9.0	20.4
65 and over	1	6	7	6.2	70.0
Total	44	68	112	100.0	21.0

The distance between Hooper Bay and Bethel of course limits somewhat the use the villagers can make of the hospital. Generally, the hospital pays the cost of travel for a patient only if the trip has been authorized in advance by radio, telegram, or letter. The uncertainty of the weather often delays or cancels scheduled flights between Hooper Bay and Bethel, especially since Hooper Bay, close as it is to the Bering Sea, has many stormy days, particularly in the fall and spring. Because travel is uncertain and expensive, many persons wait until an illness is far advanced before they try to reach the hospital.

In 1966, 87 persons (32 males and 55 females) or 16.3 percent of the residents of Hooper Bay were admitted to the Bethel hospital. Because some of these persons were admitted more than once, the total number of admissions was 112. Excluding 19 obstetrical patients, the overall male-to-female ratio was 0.9 to 1.0. More than three-fifths of the patients were in the age group 0–14 years (table 2).

Fifteen Hooper Bay mothers delivered babies at the Bethel hospital in 1966, and four others delivered in the village, A fifth village delivery ended in stillbirth. All 19 mothers of live-born infants had had three or more previous deliveries: in fact, 12 had been pregnant nine or more times. Fourteen of the women were over 30 years of age and four were over 40. All but one who delivered at the hospital had had at least one prenatal visit, averaging 1.6 visits at the hospital and an additional 1.2 visits in the village. Most women now prefer to deliver at the hospital, and they usually pay their own fare to Bethel several weeks before term to as-

sure that they are not stranded in the village when they go into labor.

The villagers spent a total of 1,368 days, or 3.75 man-years, in the Bethel hospital during the study year—an average of 12.2 days per admission. This figure is slightly above the hospital average of 10.4 days for 1966. The longer-than-average hospital stay for the villagers may be explained by the uncertain travel conditions to and from the village. Delays in arrival, with consequent increased severity of illness, and delays in departure after medical discharge are both factors to be considered.

Thirteen patients from Hooper Bay were referred by the Bethel hospital to the Alaska Native Medical Center during the study year; four for suspected or proved active tuberculosis, four for elective surgery, two for hydatidiform moles, and three for the diagnosis or treatment of difficult clinical conditions. The nine nontuberculosis patients spent a total of 0.9 man-years at Anchorage, with an average hospital stay of 36.8 days.

Field Clinics

The second major type of personal medical service available to the villagers is that provided by physicians and others during periodic visits to the community. Most of the visiting physicians are from the Bethel hospital, although occasionally visits are made by the State tuberculosis control officer, research physicians from the Arctic Health Research Laboratory, or Army physicians on training maneuvers. Public health nurses of the Alaska Department of Health and Welfare also visit regularly, usually about quarterly, and occasionally research nurses come while engaged in special projects. The hospital dentist also visits from time to time. Although the primary purpose of some of these visits may be other than the provision of direct care, it is traditional for all visiting professionals to hold "sick call" to the extent their time and skills allow.

The only medical visits to Hooper Bay in 1966 were made by Indian Health Service physicians, who held clinics in February, April, June, and October. The February clinic was held by a pediatrician from the Alaska Native Medical Center at Anchorage, while the other three clinics were held by general medical officers from Bethel. The February, June, and October visits averaged about 7 days each—sufficient time to accommodate all persons who wished to see the physician—whereas the April visit lasted only 3 days. Except for a few persons with acute conditions, the pediatrician's clinic was restricted to children.

During the four visits, a total of 791 patients attended the clinics, with females predominating by a substantial margin even if obstetrical visits are excluded. About one-fourth of the patients had a physical examination only; many of these were for followup of a previously diagnosed illness. The number of visits to the four field clinics, by age and sex of the patients, is shown in table 3.

In order to provide a baseline more reliable than 1 year, an analysis was made of all 29 field medical clinics at Hooper Bay since 1960. A random sample of 15 families from the 1966 census was used as a population base. An average of 26.5 patients of a mean total of 91.4 persons in the sample were seen at each clinic.

Table 3. Number of visits to physicians at four field clinics, Hooper Bay, 1966, by age groups and sex of patients

Age group (years)	Male	Female	Total	Percent of total	Average visits per person
Under 1	23	23	46	5.8	2.6
1–4	89	109	198	25.0	2.4
5–14	107	128	235	29.7	1.3
15–24	24	40	64	8.1	.6
25–44	31	92	123	15.5	1.4
45–64	32	59	91	11.5	1.9
65 and over	9	16	25	3.2	.9
Unknown	2	7	9	1.1	----
All ages	317	474	791	99.9	1.5

The percentage of patients seen varied from a high of 83.2 to a low of 8.1, with an average of 28.9 percent. The distribution of the reasons for the visits to the clinics is shown in table 4.

Two-fifths of the visits were for complaints of more than 1 week's duration. A substantial number of these were vague abdominal or joint pains, most commonly in adult females. Most of the acute conditions were minor accidents or infectious diseases in children.

For the 15-family sample, the total number of visits by each person was compared with the theoretically possible number if the person had seen a physician on each of his trips to the village. As expected, wide variation was observed. Two men did not see a physician at all in the 7-year period, whereas two women made 24 and 19 visits out of a possible 29. The average number of visits per person in the sample was 8.4, or 1.2 visits per person per year. In general, males and females were seen about equally often until the age of 25, after which women greatly outnumbered men. In the age-span 26–45, women saw the physician 4.9 times more frequently than men. Only a small part of this difference can be explained by obstetrical visits or by the fact that men were more often away from the village.

Table 4. Reasons for visits of 15-family sample to 29 field clinics, Hooper Bay, 1960–66 [1]

Reason	Average number of patients per clinic	Percent of total
Acute illness (symptoms less than 7 days)	6.3	23.8
Chronic condition (symptoms more than 7 days)	10.6	40.0
Injuries (within 7 days)	.6	2.2
Eye refractions	.8	3.0
Prenatal and postnatal	1.9	7.2
Physical examinations	6.3	23.8
Total	26.5	100.0

[1] Mean total of persons in the sample was 91.4.

Medical Consultation by Radio

Perhaps the most unique feature of medical care in arctic and subarctic regions of Alaska is the so-called radio medical traffic. Nearly every village in the western and northern part of Alaska can contact the nearest Indian Health Service hospital by shortwave radio. At Bethel, the physicians are available at a scheduled time for medical traffic every day of the year and can generally be reached for emergencies also. A patient contacts the physician through an intermediary known as the community health aide, who is usually a young woman appointed by the local village council with the approval of the nearest hospital. She has a period of formal training at the hospital, supplemented by on-the-job training during visits of the various health professionals to the village (*1*).

The aide takes a medical history and reports by radio the patient's symptoms or signs to the physician, who then discusses the case and seeks further information from the aide as necessary. Based on this evaluation, the physician makes his recommendation. If medication is needed, the aide is instructed by radio on the dosage and the method of dispensing from a limited

Table 5. Medical consultation calls by radio for Hooper Bay residents, 1966, by age groups, sex, and rate

Age group (years)	Male	Female	Total	Percent	Average number calls per person
Under 1	67	36	103	16.2	5.7
1–4	89	90	179	28.2	2.2
5–14	37	44	81	12.8	.4
15–24	18	36	54	8.5	.5
25–44	28	89	117	18.6	1.3
45–64	22	41	63	9.9	1.3
65 and over	5	11	16	2.5	1.6
Unknown	7	14	21	3.3	----
All ages	273	361	634	100.0	1.2

Wounded Eskimo is transported to hospital

range of prescription and nonprescription drugs made available to the village by the hospital. Most aides hold "sick call" daily in the village and report only those patients they feel warrant the physician's attention.

At Hooper Bay during the study year, one regular aide and her assistant made 242 scheduled radio contacts with the hospital (an average of 4.7 per week) and five emergency calls. A total of 634 patients, 273 males and 361 females, were reported (table 5). Most of the calls were for infants and preschool children. As with the field clinics, a preponderance of females sought medical advice, particularly in the older age groups. The overall male-to-female ratio, excluding obstetrical consultations, was 0.8 to 1.0.

Eighty-four radio contacts (13.3 percent) were made for followup of previously reported patients, and 35 (5.5 percent) were simply for drug refills. Thus, a total of 515 illness episodes were discussed—an average of 0.96 per person in the village. The illnesses of 34 patients, or 6.6 percent of those reported, were serious enough to warrant their transportation to the hospital at Government expense.

Health Conditions at Hooper Bay

An analysis of admissions, field visits, and radio calls by diagnosis showed health conditions to be poor and characteristic of the region. The devastating effect of tuberculosis in the past is demonstrated by the fact that more than half of the adults in the random sample of 15 families had been hospitalized at some time for tuberculosis. Of 207 persons over age 15 who had a chest X-ray in 1966, 80 percent showed evidence of healed tuberculosis and 5 percent showed signs of previous chest surgery.

Other respiratory diseases, particularly pneumonia, bronchitis, and upper respiratory illnesses, accounted for 21.2 percent of hospital admissions and approximately the same percentage of field clinic visits in 1966; nearly 40 percent of the patients in this group were under 5 years old. Almost 40 percent of the radio calls were for respiratory infections, which peaked in March and early fall.

Otitis media was observed in 79 persons by a physician either at the village or at the hospital, and 37 more cases were reported by radio. Half of all the patients with otitis media were in the 1–4 age group. Ten persons with gastroenteritis were hospitalized, 10 were seen at field clinics, and 44 were reported by radio—nearly all of them were infants and preschool children.

Accidents accounted for seven hospital admissions, 24 field clinic visits, and 27 radio calls. Nearly two-thirds of these accidents were in

the pediatric age group. Laceration was the most common type of injury reported.

As mentioned earlier, there were 19 live births and one stillbirth during the year. Fifteen of the mothers delivered at the Bethel hospital; none of these had serious complications, although breast infection occurred in two. Four women were known to have aborted and two had hydatidiform moles.

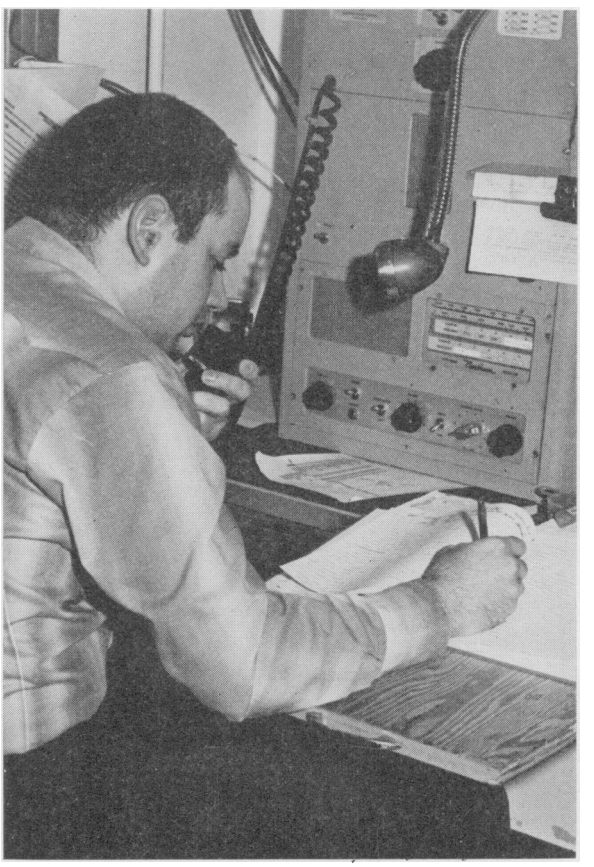
Mental disorders were diagnosed in five patients admitted to the Bethel hospital. Two patients had known schizophrenia temporarily out of control, two had a minor psychoneurosis, and one was a child with mental retardation. The clinical impression of the physicians visiting the village was that minor anxiety and adjustment problems were common, especially among women, but no reliable figures are available.

Discussion

Health conditions in western Alaska are among the worst in the United States (*2*). The infant mortality for the period July 1964 through June 1967 averaged 104 per 1,000 live births for the population served by the Bethel hospital. More than 60 percent of the infant deaths were from infectious diseases; the principal killers were diarrhea and respiratory disease, according to records compiled by the hospital. Tuberculosis, although no longer the epidemic disease of several decades ago, is still a major threat to health and economic security (*3*). Acute respiratory disease (*4*), otitis media (*5*), meningitis (*6*), diarrhea (*7*), and certain parasitic diseases (*8*) are serious and widespread in this area. Cancer, particularly of the esophagus (*9*), is being increasingly recognized as a problem. Accidents, especially drownings, are the most common cause of death among adults (*10*). On the other hand, certain common killers in the general population, notably arteriosclerotic heart disease (*11*) and diabetes mellitus (*12*), are distinctly unusual in the Eskimo population of this region, for reasons which are not clear.

The people of Hooper Bay and nearby villages thus generally have an excessive burden of disease, although conditions are considerably better now than they were a decade ago. In addition, because of their isolation and the uncertainty of travel and communication, these people also have a necessarily limited access to medical services. The system of medical care described has evolved to cope with these difficulties, which to some extent are characteristic of the way of life in northern regions.

Most of the persons who participated in this study felt that the people of Hooper Bay had a positive attitude toward health workers and readily made use of the health services available to them. The only resistance to modern medicine was usually among a few of the elderly, who feared the hospital or some method of treatment which they did not understand completely. Although traditional shamans (medicine men) are still active in some communities on the Bering Coast, I know of none who were practicing at Hooper Bay in 1966.



Shortwave radio is an important means of medical consultation in Alaska

Family receives medical supplies from Public Health Service Hospital

The difficulties of delivering quality health care to an isolated community such as Hooper Bay are substantial, especially in view of the serious health problems. The only fully satisfactory care is given in the hospital itself, but admission to the hospital depends on many factors often beyond the control of the patient or the hospital. Too often inclement weather prohibits air transportation, sometimes for as long as a week. Also, the cost of travel may be a limiting factor for either the patient or the hospital. Commonly, the men cannot afford to leave their fishing, hunting, or trapping long enough for a needed trip to the hospital.

Field medical visits are made on a scheduled basis but weather, emergencies elsewhere, and other factors may upset the schedules. As the study findings indicate, most of the patients come to the field clinics for preventive services or for relief of chronic complaints. In addition to their more conventional duties, the physicians also frequently perform eye refractions and some of the more urgent dental extractions. Acute illness and injuries are of course taken care of when they are encountered, but the probability of such a concurrence of physician and patient is rather low.

The radio medical traffic is the nearest equivalent to the usual physician-patient contact in an office or clinic. Here again the weather or solar disturbances can interfere, though less commonly, by upsetting radio signals. At least several times a month the radio reception is so poor that no contact is possible between Bethel and Hooper Bay. At other times it is only by the exquisite patience of both aide and phy-

sician that a meaningful dialog can be carried on.

Even under the best circumstances, however, the physician and patient are both at a disadvantage when using the radio, since the patient must use an intermediary (who is often an interpreter as well) and the physician does not have the benefit of a physical examination or laboratory tests. He also has only a limited number of possible forms of treatment at his disposal.

Another important feature of the radio medical traffic is the fact that anyone can tune in with a home shortwave receiver. Nearly every family has such a receiver and regularly listens to "the doctor's sched." Privacy and confidentiality are of course impossible to maintain under the circumstances, since the physician generally has to identify the patient in order to treat him adequately. Patients, physicians, and aides accept this situation, however, and symptoms and signs, no matter how intimate, are discussed openly over the airwaves. This seeming disadvantage also has its positive aspects. Many people listening in, particularly the aides themselves, learn a great deal about the home management of common medical conditions. Most physicians recognize the potential for health education that this situation offers and may insert comments for the wider audience into their discussions of a person's illness.

Despite the limitations of the radio, however, both patients and physicians recognize how essential it is for adequate medical care in the north. It is by far the most readily available and hence most dependable means by which the villagers can receive medical advice.

To get some idea of the relative utilization rates for medical services by the people of Hooper Bay and the U.S. population generally, a comparison was made of the average number of physician contacts per year from all sources (table 6). Hooper Bay residents, despite their poor health conditions, had an average rate of 2.9 physician contacts per person in 1966, some 36 percent below that of the U.S. population generally in 1964 and 12 percent below that of the U.S. nonwhite population. The largest relative deficiency was in the age groups 15–24 and over 45, whereas in the 0–4 age group the Eskimos actually exceeded the rate of the U.S. population.

Table 7. Hospital discharge rates per 1,000 for Hooper Bay residents, 1966, and U.S. population, fiscal year 1964 [1]

Age group (years)	Discharge rates	
	Hooper Bay	United States
Under 15	201	68
15–24	96	151
25–44	314	156
45–64	204	154
65 and over	700	226
All ages	210	134

[1] U.S. data from reference 14.

Table 6. Physician contacts for Hooper Bay residents, 1966, compared with U.S. population, fiscal year 1964 [1]

Age group (years)	Hooper Bay				U.S. general	U.S. nonwhite
	Hospital admissions	Field clinics	Radio calls	Total		
0–4	0.4	2.5	2.8	5.7	5.5	3.3
5–14	.1	1.3	.4	1.8	2.8	1.4
15–24	.1	.6	.5	1.2	4.3	3.2
25–44	.3	1.4	1.3	3.0	4.5	3.9
45–64	.2	1.9	1.3	3.4	5.0	4.7
65 and over	.7	.9	1.6	3.2	6.7	5.6
All ages	.2	1.5	1.2	2.9	4.5	3.3

[1] U.S. data from reference 13.

On the other hand, as shown in table 7, hospitalization rates for the Hooper Bay population were considerably higher than for the U.S. population, except for the 15–24 age group in which a sizable number of persons are away at boarding school most of the year. In part, the generally high rate can be explained by the large number of serious illnesses, especially in infants and preschool children. Also, because of the distance to the hospital and the unpredictability of the weather, a few patients who have relatively minor illnesses have to be admitted to the hospital because they have no other place to stay while receiving outpatient care.

Medical care patterns in western Alaska are not likely to change substantially in the next decade or so. The three main types of medical care will remain much the same except that transportation will perhaps become more readily available, field visits will be more frequent, and communications will be technically improved. Direct medical services can go only so far, however, in elevating the health status of these people. Eventually, significant improvements in health will come about only as a result of better education, housing, employment opportunities, and a safer environment. Whatever the changes brought by the future, the Eskimos of Hooper Bay will have to contend with the isolation, harsh unpredictable weather, and other difficult conditions which have been their lot since long before the first physicians came to their tundra home.

Summary

A study of the availability and use of medical services during 1966 at Hooper Bay, an isolated Alaskan Eskimo community, revealed that the 535 people of this village depend almost entirely on a 65-bed hospital, 155 air miles away, for their medical care. Three types of medical service are available to this population: (*a*) hospitalization, (*b*) periodic field clinics held by visiting physicians and other health workers, and (*c*) medical consultation by shortwave radio between the community health aide and the hospital staff.

Hospitalization rates in 1966 were higher for most age groups, particularly for children, than for the general U.S. population in 1964. The field clinics, held at irregular intervals during the year, were used mostly for preventive examinations and for the care of chronic conditions, chiefly among the women.

Medical consultation by radio was the only available day-to-day means of contact with a physician. Most of the shortwave radio calls were concerned with illnesses or injuries of infants and preschool children. The Hooper Bay residents had an average of 2.9 physician contacts per person in 1966, 36 percent below the national average of 4.5 in 1964.

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Tearsheet Requests

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Grants for Family Planning Services

Family planning service grants, totaling about $12 million for 79 projects, were awarded to 41 States during the 1969 fiscal year; $9,185,426 will be used to provide for family planning services in model cities.

The grants, administered by the Children's Bureau, are authorized under the 1967 Amendments to title V of the Social Security Act. In addition, the Children's Bureau administers grants to the States for maternal and child health services, of which family planning is a part. In 1968, 425,000 women received family planning services under these mostly rural maternal health programs.

According to Secretary Robert H. Finch, "The Department of Health, Education, and Welfare is determined that poor families have the same choice that families in middle or upper income levels have: to plan the size and spacing of their families. These grants are for that purpose. They are also designed to improve maternal health and to reduce infant mortality, especially in those areas where poor people live and where our infant mortality rates are highest. We are receiving increasing evidence that programs which provide good maternity and infant care and family planning services *do* reduce infant mortality. In New York, for example, in 10 target areas served by maternity and infant care projects, there is a greater decline in infant mortality rates than there is in other parts of the city where such services are not concentrated."

In other major cities with maternity and infant care projects, the following decreases have occurred in the infant mortality rate from 1964–67: Baltimore, 31.0 to 26.8; District of Columbia, 34.5 to 32.6; and Houston, 28.4 to 22.1.

Briefly, current Department activities in the extension of family planning services to the poor are these:

- At least 6 percent of Federal appropriations for maternal and child health authorized by title V of the Social Security Act must be spent in family planning activities. For the fiscal year just ended, the Congress earmarked $18.5 million of the appropriation for this purpose. For fiscal 1970, the Children's Bureau is requesting that $31.5 million of the appropriation for the maternal and child health programs be earmarked for family planning.
- States may include family planning services in their federally aided Medicaid program.
- Federally aided public assistance programs of Aid to Families with Dependent Children must offer family planning services to their clients. Federal funds can be used for 75 percent of the cost.
- Demonstration funds are being used to support projects designed to mobilize community leaders in family planning efforts, to plan programs for school-age pregnant girls, to offer genetic counseling, to prevent school dropouts because of pregnancy, and to aid migrant workers.
- Basic research is underway to develop improved contraceptive techniques.
- Plans are underway to support broad studies in demography and population as well as family planning. More knowledge about cultural and social problems is needed if family planning services are to be improved.