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ABSTRACT
The third volume in a 10-volume report on the historical development (1966-1973) of the 8 administrative Area Offices of the Indian Health Service (IHS) Mental Health Programs, this report presents information on the Alaska Area Office. Included in this document are: (1) The Context (geography and demography of Alaska, IHS and regional relationships with other agencies); (2) The Initial Stage: Introduction of IHS Mental Health Services (the original mental health unit and the concept of patients as people); (3) Growth: Development of Specialized Services (whether to be a special medical ward, psychological school consultations, alcoholism programs, and training with police and state troopers); (4) Expansions: Development 1968-1973 (budget and personnel changes, dividing responsibility with the State Department of Mental Health, and reciprocity through consultation); (5) Decentralization (Nome 1971-72 IHS mental health activities, Anchorage's Alaska Native Medical Center, other service units, and summary); (6) Patient Characteristics and Flow; (7) An Overview (current and potential problems--urban emphasis, staff morale, paraprofessional utilization, budget, need for epidemiology, administrative clarity, etc.--and achievements--balanced development, personnel retention, relationships with other agencies, patient involvement, developmental tasks, and evaluation); (8) Appendix. (JC)
ALASKA (ANCHORAGE) AREA

Partialutilization of
Contract No. 110-74-382
ALASKA (ANCHORAGE) AREA

MENTAL HEALTH PROGRAMS

OF THE

INDIAN HEALTH SERVICE

1966-1973

1975

IHS Contract No. IHS HSM 110-73-342

A documentary narrative in partial fulfillment of contract entitled:

Service Networks and Patterns of Utilization
Mental Health Programs
Indian Health Service

Prepared by

Carolyn L. Attneave, Ph.D. and Morton Beiser, M.D.

Department of Behavioral Sciences, Harvard School of Public Health
This material has been prepared in connection with an initial evaluation contract to appraise IHS Mental Health Programs seven years after their formal introduction into the system in 1966. (IHS Contract No. HSM 110-73-342.) As originally conceived the report was to be based upon a sampling of about three programs in the eight major Areas: One outstanding, one average, and one new or otherwise struggling. Administratively, Area Chiefs of Mental Health and their staffs found it impossible to participate in such a selection, and instead the staff has been required to inform themselves about over 90 programs and present their findings about each as objectively as possible.

The chapter for each Area follows a standard arrangement of information, varying in detail as the Area development indicates. There is first a description of the geographic and cultural context within which Area programs and Service Units work. Secondly, there is a reporting of the historical roots of mental health activities in the Area as far back in time as it has been possible to find evidence of them. In some instances this is coincidental with the formation of IHS in 1955, but in most it appears a few years before introduction of formal budgeted mental health staff. The latter sections of the report develop in chronological order (usually in two year segments) the personnel and activity of the Mental Health programs for the Area. Unique and special programs are presented in detail. Finally, an overview and summary of achievements and problems yet to be resolved concludes the description of the Area, which was completed as of the spring of 1973.

The concluding chapter of the report and the extensive sections on inpatient programs will be of interest to all Areas. It is also hoped that staff in one Area will find it of value to see what other Areas have done or are facing in the way of similar problems, and differing ones. However, when need arises, or interest is focused on only one Area, it is hoped that that chapter may be used as an independent unit.
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### MENTAL HEALTH SERVICE

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<thead>
<tr>
<th>Name</th>
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<tr>
<td>Joseph Bloom, M.D.</td>
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<td>Psychiatrist</td>
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<td>Dorothy Riffe*</td>
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<tr>
<td>Jeanine Lyerly, PHN</td>
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<tr>
<td>Arlene Paneone</td>
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<td>Elizabeth Mathews*</td>
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Note: Nursing Staff supplied by ANMC

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<td>Robert Kraus, M.D.</td>
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<td>Charles Pedro*</td>
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* indicates Alaska Native
I. THE CONTEXT

A. Geography and Demography of Alaska Indian Health Service

Alaska is a single area for IHS jurisdiction, although it is an area equal to 1/5 the total continental United States. Alaska is the largest state in area and 50th in order of population. The native population (Indian, Eskimo and Aleut) is 17% of the total: 51,528 out of 300,382 according to the 1970 census. This is a higher percentage of the total population than in any other state. Only three states have a higher total Indian population: Oklahoma has 98,469 Indians, or approximately 3.4% of its population; Arizona has 95,812 or approximately 5.5% of its population counted as Indians; and New Mexico has 72,788, or approximately 7% of its total population identified as Indian.

In most of the other states, the total Indian population cannot be considered an IHS responsibility since the Census includes urban Indians for whom programs are not available, and Indian populations who live off reservations are not considered a federal responsibility. Only Alaska and Oklahoma do not have reservations, and also have state and federal laws which permit services to be delivered to any Native American at any point that those services are available. Only Alaska has had the challenge and opportunity to develop the IHS program completely independent of traditions associated with federal reservations and restricted populations.
The population to be served by IHS is not evenly distributed geographically or socially, in spite of the popular yardstick of 1 person per 23 square miles. Geographically Alaska is divided by water and mountains into several natural zones. These barriers to travel and communication are so distinctive, and until the development of air travel, so restricting, that one veteran IHS medical officer suggests that the state is more like a whole country with several regional languages and distinct ways of life, each one of which could be considered a state in itself.

The most separate of these regions is the "Panhandle" which extends south from the mainland of Alaska along the coast of British Columbia. The tops of the coast range of mountains enter the sea near Vancouver and make a chain of islands and waterways from Puget Sound to the Alaskan mainland. There is a slight coastal plain just southeast of the Cook Inlet and then they form the Aleutian Chain. The major portion of the Panhandle has steeply rising coasts, as the tips of the mountains rise from the water. It is characterized by lush forests, sheltered harbors, and a northern climate mitigated by the warm Japanese currents. It is as dramatic in its scenery as the fjords of Norway. Except for the fact that space suitable for developing settlements is cramped and limited to the narrow valley spaces between steep mountains and scanty beaches, it seems a prosperous area. Juneau, the capital city, is located in the northern Panhandle, and the famous shipping and fishing ports of Sitka and Ketchikan are also part of the Panhandle.

The Service Unit hospital is Mt. Edgecombe on an island across from Sitka, and the native population is largely Haida, Tlingit, and
Main Geographic Regions of Alaska

(Information source World Book Encyclopedia)
Temishian Indians famous for their totem poles, potlatch feasts, carved masks, elaborate abstract designs and a highly sophisticated culture said by Claude Levi-Strauss to rival that of ancient Greece in its artistic and literary achievement and social organization. A few other Indians from the interior migrate to these cities and a few Eskimo and Aleut from the north mingle with Panhandle tribes in the BIA boarding schools. However, for the most part, the southeastern Native peoples are a distinctive group, who seem somewhat neglected in Area planning until one realizes that a formal agreement with the State of Alaska Mental Health Department provides that the state Mental Hygiene Clinic in Sitka and the Ketchikan Community Mental Health Center will provide services for this part of Alaska, including its Indians. Until recently, it was only when a patient was sent to Anchorage that he or she came directly into contact with the IHS program. The Panhandle of Alaska, although it contains the state capital, is distinct in geography, industrial base, climate and native culture from the rest of the state, and this is reflected in its service delivery arrangements.

Two regions adjoin the Panhandle on the north. One is the Aleutian Chain, which is an extension of the same mountain range, as though it wandered further to sea and into deeper water. Its furthest westward islands cross the 180th parallel, causing the international date line to jog around them. The tips of the mountains form a chain which curves slightly like a Mammoth tusk, and separate the rest of the Pacific from the Bering Sea. This was the traditional home of the Aleut people, said to have split off from the Eskimos during an earlier wave of migration. They are described from the earliest contacts with American and Russian explorers as docile fishermen and craftsmen, living in fairly permanent villages whose houses were partly earth and partly wooden of a rather sophisticated design.
ALASKA Showing Distribution of Major Native Populations
Water-tight baskets woven of grass are still made by a few women. Islands of the Aleutian Chain have been particularly vulnerable to exploitation for slave labor and raids on their natural resources of game, sea mammals and fish. They also include the only American territory occupied by Japan during World War II, and have strategic military importance. The Aleut peoples are probably the smallest of all native populations left in Alaska, and are considered very similar to the Eskimo, often not distinguished by outsiders from either Eskimos or oriental visitors.

At the mainland end of the Aleutian Chain is the "mouth of the Mammoth," formed by the Kenai Peninsula, and Kodiak Island, which are distinctive, and peopled by a blend of the coastal Panhandle and the Aleut cultures. These are part of the Anchorage Service Unit which is named for the largest city in Alaska, located on Cook Inlet, a long deep sound stretching from the ocean 60 or more miles back inland till it blends with the Matanuska and Susitna Rivers which, with the Copper River, drain the Alaska Basin, between the coastal and inland mountains.

Anchorage is a busy seaport, located just above unstable mud flats at the beginning of a large fertile farming valley. With about 48,000 people, only 6 percent of whom are native, it is the largest city in Alaska. Elmendorf Airbase adjoins it on a high bluff. Unlike the Aleutian Chain, where, except for naval installations, the population is 90% native, Anchorage has only those Native people who have migrated from the towns and villages, mainly coastal Eskimos and Aleuts. This is the location of the Area IHS offices. The 300 bed major IHS hospital, known as the Alaska Native Medical Center (ANMC) which serves as a specialty hospital for all Alaska as well as a general hospital for the valley of the Alaska Basin, Kenai, Kodiak and the Aleutian chain.
Other than the Alcan Highway, the only major road system in Alaska connects Anchorage with the valley, coast and mountains so that it is possible to drive south to Seward, or north and east to the Alcan Highway, or Fairbanks, or to McKinley National Park. Alaska's only railroad also connects Anchorage with Seward to the south, and Fairbanks to the north, and provides a vital passenger and freight link. The railroad operates passenger service once a day in each direction, and consists of smoothly running vista-dome cars which put most continental railroads to shame for comfort and pleasure. It operates rather informally, stopping whenever flagged down to let passengers on and off. When a particularly good view is available it pauses to allow tourists to take pictures at leisure.

The railroad connects the coast with the interior, passing through the rugged range which contains not only Mt. McKinley, the highest peak in the U.S., but also the 10 next highest as well. From the lush farm country of the Alaska Basin it winds through the rugged mountains where gold and silver, as well as coal, are mined, into the prairie-like valleys of the Tanana and Nenana Rivers. The trip takes about 13 hours.

The interior of Alaska looks more like the high plateau country of Montana and Idaho, although it is at a lower altitude on the average. The Native population is about 4-6% Athabaskan Indian. These are a tall woodland and prairie people, related linguistically to the Navajo and Apache. Athabaskan crafts of beadwork and fur and leather more nearly resemble their mainland counterparts than those of the panhandle coastal tribes or the Eskimo-Aleut cultural artifacts.

The main IHS hospital service unit is at Tanana at the junction of the Yukon and Tanana Rivers about 100 miles west of Fairbanks. However, there is a tendency for administrative services to migrate to the larger city of Fairbanks. IHS operates an outpatient Health Center in Fairbanks with a full complement of services. There too, one finds BIA offices, the offices of the
Tanana Chiefs, the University of Alaska, active local and state health and welfare services, and about 15,000 people. It is easy to forget one is far from mainland civilization while eating or shopping in the downtown section with its Woolworth's, multi-story bank buildings and shopping center. However, one has only to be in the local Indian Center when word arrives that a motorist has hit a moose to realize how close one is to the wilderness. While beef and chicken can be bought, one should not minimize the importance of moose as a food source. Within a couple of hours after the animal carcass is hung, there is literally nothing left, all of it having been butchered and, with the hide and antlers, distributed to the local Indian population by agreement with the Game and Highway Departments.

The river valleys are fertile farmland, but markets are far away. The Yukon is navigable during the summer months well past its junction with the Nenana and Tanana Rivers. These routes are the only means of contact to the west except for airplanes. To the south are the railroad and some highways. North and east the Alcan Highway enters Canada following the Yukon River before turning south through British Columbia.

Between Fairbanks and the far north, another mountain range hedges in the valley, sloping on the far side into the arctic plains or tundras that stretch to Barrow on the North Sea. With only 2,663 people in its entire Census division, 231 of whom are Native peoples, the Barrow Service Unit is a small hospital of 13 beds. This area is the source of the oil that is now the subject of great controversy in terms of pipelines and refineries. It will probably become more heavily populated, at least during the development of oil facilities, in spite of its arctic rigor and apparent barrenness. Except for air travel, oil exploration, and one government ship per year sent by the BIA with supplies, Barrow has little contact with the rest of Alaska — or the world in general, for that matter.
A few Eskimo villages dot the coast following along the west and south to the Bering Strait and north banks of Kotzebue Sound. On a small peninsula, just above the Arctic Circle, is the major Eskimo town of Kotzebue which has gained prominence in tourist brochures. With the exception of the 4th of July and Christmas, the Eskimo people put on a daily show of dances and sports in Eskimo traditional dress for tourists before the last plane leaves at 4 p.m. The total population is listed as 1696, of whom 1326 are Eskimo. The couple of hundred others are largely BIA and IHS staffs, state welfare officers, a few merchants and hotel keepers for the tourists or representatives of a few flying services and other businesses. The majority of folk in town depart in summer for fish camps, and to hunt beluga or white whale. Both are dried along with berries for winter food. More than 90% of all the people living in the region are Eskimo, and contact with other villages can be made by boat during the summer and by sled during the winter. Dogs are diminishing in number, but snowmobiles, when they break down, will neither feed a human nor keep him warm, and are beginning to be viewed with some skepticism after a first wave of enthusiasm. IHS maintains a 24 bed hospital. The local Native Association, the State Welfare Office, local service clubs (Kivani and Junior Chamber of Commerce) and a number of church organizations as well as the BIA school complete the social services roster.

On the North Bank of Norton Sound is Nome, a city about equal in size to Kotzebue with gold and silver mining to augment its fishing. Because of the additional industry its population has a higher percentage of non-native people, and it is only 60% Eskimo. Although Nome belongs geographically to Kotzebue Service Unit, there have been efforts to establish some mental health services there by IHS Mental Health Branch in connection with a local non-federal medical hospital. These have not flourished to date for lack of housing. The minimum cost for establishing a trailer home is $25,000 to purchase and another
$25,000 to $40,000 for transporting, leasing or buying land, making a foundation, and installing utilities. There are no local materials with which to build, and everything must be imported. The residents of Nome relate fairly easily to Bethel on the south as well as to Kotzebue since the airlines tend to circle from Fairbanks to Kotzebue to Nome to Bethel to Anchorage in that counterclockwise direction. There are also possibilities to travel by water more efficiently from one village to another.

West of Kotzebue and Nome are the Diomede Islands, three miles apart, one of which belongs to Russia and one to the United States. These lie directly in the Bering Strait and make vividly believable the theories describing a land bridge between Siberia and Alaska, as well as the ready possibility of travel today in appropriate vessels or over ice. Nome, like Barrow and Kotzebue, can expect one federal ship per year during the season while the ice is out. This ship, the BIA North Star, brings in groceries and supplies and takes shopping orders for next year's delivery.

Bethel is a rapidly growing community of about 2500 people, 87% of whom are Eskimo and Aleut. Located on the Kuskokwim River, it is separated from the Norton Sound and the Yukon River delta by a mountain range, and from the Aleutians and Anchorage by another. Some gold is mined nearby. It is not entirely clear why this town persists in growth, when others appear to be more strategically located. It may be that it attracted more enterprising citizens in its early organizational stages. For example, a town-purchased and controlled liquor supply insures lots of civic revenue along with many social problems. The unemployment level is at least 50% and most of the Native population have drifted to Bethel in transition from small village life to urban centers, or back to villages again after trying the cities. Little opportunity for survival in traditional hunting and fishing life styles seems to prevail immediately around Bethel itself. Nome and Bethel may have
a high proportion of Native residents, but the power structure is in white hands. The dominant life styles, except for the climatic rigors are not unlike the early frontier days throughout the west.

South of Bethel lies the Kuskwokim Range of mountains, and south of them is another valley and two very large lakes opening to the sea in a wide river whose mouth is Bristol Bay. Its southern shore is formed by two hundred miles of the mainland Aleutian range which eventually separates into the Aleutian Islands. At the inner reaches of Bristol Bay is the town of Dillingham, and a few miles away the village of Kanakanak, where the last of the seven IHS hospital Service Units is located. Dillingham has less than 1,000 people and is the largest settlement in the region. The Native population averages around 79% overall, following the pattern of being lowest in the larger towns and nearly 100% of the smaller communities. It is mostly Eskimo or Aleut, but two inland villages are almost completely Indian in population. Both of these seem to be located on the lakes at the foot of the Aleutian Mountains, and it seems likely that they are Athabascans from the interior, since the deep narrow valleys curve toward Fairbanks, while the high mountains cut them off from other communities.

Also included within the sphere of the Kanakanak Service Unit are the Priboloff Islands, famous for their seals. A health center is maintained at St. Paul, nearly 300 miles from the mainland.

B. Regional Relationships with Other Agencies

1. Bureau of Indian Affairs

With this rather cursory tour around the state, the following map showing the Service Unit boundaries and the location of the IHS hospitals and total Native populations may have a little more meaning than its mere outlines indicate. These IHS Service Units correspond, except for small border
deviations, with the BIA agencies of jurisdiction. The State Department of Mental Health, Public Health and Welfare, divide the state into three regions: the Panhandle in the southeast, the northern interior with the focal center in Fairbanks, and the western coastal regions with major offices in Anchorage. There are satellite offices in each of the major cities mentioned and several others of smaller size.

2. Native Corporations

The Alaska Native peoples are organized into 12 corporations similar in some respects to Tribal Business Committees in the continental United States, but having broader powers and more autonomy. These are needed to settle land claims developing out of statehood. These legal judgments against the United States must be settled before any land can be opened up for homesteading or development. The need for this many Native corporations is evident when one realizes that not only are the Athabascan Indians and the southeastern coastal Indians very different, but that there are at least three major languages among the Eskimo, with dialects that vary from village to village. These cultural and tribal or village identities, together with the geographically isolated territories, require at least this many corporate identities.

The Native corporations are to varying degrees active in fields other than economic ones. They tend to pursue roles in developing services they feel they need, such as alcoholism programs, educational opportunities, and especially in seeking positions of an advisory and planning nature in relation to health and mental health. In the not too distant future they may request a realignment of the "catchment areas" of the IHS Service Units more compatible with their own jurisdictions. These corporations are already influencing state and borough governments significantly, especially through the strategic use of Alcoholism and OEO funds and
educational monies. The Tanana Chiefs, for instance, are taking over the Boarding Home program for high school students from the state and BIA departments, and the Fairbanks Native Association is providing Alcoholism counseling services for the total population, native and white alike.

3. State of Alaska Responsibilities and Departments

In a broad view, it is probably significant that from the earliest U.S. governance of Alaska, the care of the mentally ill who survived the harsh and rigorous life in spite of a survival of the fittest life system was considered a responsibility of the federal government, and were exported. Territorial Governor and later State Senator E. Gruening in the 1957 Britannica article on Alaska dismisses all mental health problems in this one sentence: "The insane of Alaska are cared for at federal expense in a private institution." This institution happened to be a hospital in Portland, Oregon! Up to 1959 and Statehood, both the U.S. and the native population seemed agreed on one basic principle: the proper thing to do with disturbed persons was to ostracize and remove them to a great distance; away from the possibility of disrupting the local community.

In 1959, with the charter for statehood, a reversal of responsibilities was enunciated, and the State of Alaska was to assume and provide care for all mentally ill, whether Eskimo, Aleut, Indian, white or negro; native born or entering migrant. To this end a state hospital was established in Anchorage, the Alaska Psychiatric Institute, and three outpatient clinics at Fairbanks, Juneau and Anchorage. These were all in existence when IHS added its mental health team in 1966. On paper,
at least, one would assume that in-patient care was adequately provided, and that a major function or functions for IHS mental health services would be found in coordination with this unit and in other activities to be discussed under the section devoted to that Area as a whole. In practice, however, it was soon discovered that the IHS team needed to be directly involved both in the ANMC in Anchorage and at Alaska Psychiatric Institute.

It is probably not surprising that Alaska Psychiatric Institute finds itself in difficulties meeting the needs of the Alaskan population. It must recruit its staff from the mainland or "lower 48" states, and they are subject to all the stresses of newcomers to the far north at the same time they are struggling with the familiar bureaucratic and service delivery problems that beset all state hospitals. The extremely cold climate with its cycles of midnight sun and noonday stars, with its paradoxical result of such extreme isolation that travel can only be thought of in short units of flying time; the juxtaposition of these forces of nature and sophisticated technologies -- all these affect the professional imported to provide care and restore sanity. A few pioneers clung long past their ability to be flexibly creative in developing new services, and the more recent arrivals have tended to leave if they could find anywhere to go.

Into this situation the mental health team of IHS put much time and energy through personal consultation, weekly staff conferences of a joint nature, and whatever else seemed appropriate. About 60%
HOSPITAL FACILITIES IN ALASKA

LOCATION
ANCHORAGE
BARROW
BETHEL
CORDOVA
FAIRBANKS
GLENNALEN
JUNEAU
KANAKANAK
KETCHIKAN
KODIAK
KOTZEBUE
MT. EDGECUMBE
NONE
PALMER
PETERSBERG
SEWARD
SITKA
TANANA

HOSPITAL
A.R.I. ANCH COMMUNITY, PROVIDENCE, ELKMOUR V.A. B., U.S. PHS ANNS MEDICAL CENTER
U.S. PHS ANNS
U.S. PHS ANNS
CORDOVA COMMUNITY
FAIRBANKS MEMORIAL
FAITH HOSPITAL
BARTLETT MEMORIAL
U.S. PHS ANNS
KETCHIKAN GENERAL
KODIAK ISLAND HOSPITAL, U.S. NAVAL DISENTERS
U.S. PHS ANNS
U.S. PHS ANNS
MAYNARD MCDONALD MEMORIAL
SEWARD GENERAL
HESLEYAN HOSPITAL
SITKA COMMUNITY
U.S. PHS ANNS

LISTED FROM: "JOURNAL of AMERICAN HOSPITALS"
A.H.A HOSPITALS, GUIDE ISSUE, PART II
AUGUST, 1971 - Drawn by: K.L. 9-11-71

150 MILES

27  28
of the resident patient population at Alaska Psychiatric Institute were Alaska Natives, and the need to stabilize this resource and bring it into the network of services in mental health was a generally accepted task by professionals and administrators alike.

The state law became a fulcrum for evolving ways in which the Native corporations and local Eskimo, Aleut and Indian communities may have voices in deciding their own priorities and programs. Like most such ideals, it is still a long way from implementation. Fortunately, a relatively easy partnership has established itself which allows the BIA and IHS to remain viable, and to work in conjunction with the various state departments, until other options can emerge and be supported.

In most of Alaska, schools are the responsibility of the State, with two major exceptions: an organized Borough (city and county combined unit) must provide support for its own schools, and the BIA still maintains schools in Native villages and boarding schools at secondary levels both within Alaska and outside of it. For health services a Native living in a large city may utilize Borough services, State Public Health services, or IHS hospital and clinic facilities. In a few instances they may be able to afford private medical care. In the mental health field, there are some working agreements that have been developed whereby the state clinic and the community Mental Health Center in the Panhandle region provide care for Native referrals; Kodiak also has a Community Mental Health Center. In Barrow, Nome, Kotzebue and Kanakanak Service Units, IHS has full
jurisdiction, but it is not clear whether they also see non-native clientele. In Fairbanks and Anchorage IHS staff provide consultation to the State Hospital (APT) and its clinics.

Formal agreements executed concerning these arrangements were begun in 1967 and signed a year or two later. However, IHS is not the only agency plagued by relatively rapid and high turnover. In 1973 there had been no Director of Mental Health at the state level for over a year. No psychiatrist was available for the State facility in the Sitka-Ketchikan region for nearly as long, and the social worker who was the only state staff member, had been alone in the state capitol at Juneau for about 6 months. Either he did not know of these arrangements, chose not to emphasize the constitutional provisions in his planning, or an expected increase in the state staff in June of 1973 may make re-negotiation and re-alignment necessary between IHS and the State Mental Health Department.

One thing seems certain, there is enough room to keep everyone busy without wasteful fights over territoriality. It also seems likely that the Native corporations and their representatives to IHS and state advisory boards will shop judiciously for the programs and personnel that seem to offer the most effective programs geared to local needs. In time they will vigorously oppose wasteful duplication of programs.

II. THE INITIAL STAGE: INTRODUCTION OF IHS MENTAL HEALTH SERVICES

A. The Flying Team: The Original Mental Health Unit

This then is the geographic and social context into which mental health services were introduced in 1966. Headed by Dr. Joseph Bloom, a team was formed immediately, consisting of Dr. Barbara Nachman, Ph.D., as
psychologist and Lucien Pousard, M.S.W., as social worker. These three spent the first year visiting each Service Unit for a week at a time and developing plans and working relationships both within IHS and with local and regional agencies and people. Three outside consultants were invited to spend extended amounts of time during the first two years. Each accompanied the team to Bethel or Kotzebue, and spent time with them in Anchorage. Each of these consultants stressed the seriousness of the problems encountered with individual patients, the need for inter-agency coordination, and commented on the vastness of the territory. Two, Gerald Kaplan and Eugene Brody, emphasized over-all health service delivery and intra-IHS problems. The consultants' reports have an almost déjà-vu quality about them, since most of the features they cover are still prominent, although in six years the details are more visible and the dimensions of the needs are more sharply defined.

In the early days, there seems to have been considerable effort expended to keep the Mental Health Services merely a consulting operation, with relatively little direct clinical service to individuals. This was in part dictated by the infrequency and irregularity of visits, making clinical relationships difficult to sustain, and partly on a philosophical choice to develop community mental health skills within the local populations. At no period was there time to develop a really comprehensive epidemiological study, or to analyze the case loads and kinds of skills needed or to develop master plans for the manner of delivering them. The physicians were continually "mopping the blood off the floor" in chronic crisis encounters with accidents, suicidal gestures, alcoholism and acute illness episodes. They expected the mental health teams to roll up their sleeves and join in stemming the tide.

By the end of the second year, the mental health team was assigning a portion of its time to direct clinical services according to their various
specialized skills. Some of their memos in regard to this sound almost apologetic or defensive, but the need for service delivery was justified on two counts: first, consultation models from metropolitan eastern centers did not fit the frontier conditions where there were not enough other agencies and personnel with clinical skills readily available; and second, until there was a long enough demonstration of the positive benefit of the approaches recommended by the mental health team, it was difficult to involve others in attempting something other than the "airplane cure" for the disturbed people in the towns and villages.

Heavy emphasis on deploying resources out closer to the places where people lived continued. This counteracted the pressures to fly all seriously disturbed or chronic cases to Anchorage for admission to the state hospital. This effectively broke the cycle represented by an old Alaskan saying that there were only three places anyone living in Alaska could expect to go: "Inside, Outside and Morningside" (a psychiatric hospital in Portland Oregon with which IHS and BIA had a contract care arrangement). Although sending acute and chronic cases to the Alaska Native Medical Center continues for many of the medical specialties, 6 years of hard work has created among the population more of an expectation that the family and community can be helped to handle many of their local mental health problems. They do expect to be given sufficient support while attempting this, however.

B. Patients are People: Sam, Nancy, Joseph, Enochik, Annie K.

This last idea seems such a simple statement of the outcome of the long struggles involved that it is anti-climactic. There is the long Eskimo tradition of excluding or ostracizing the deviant person who threatens the small tight village network. There is the sense of the life-or-death urgency of survival in the Arctic climate and the high risks posed
by economic development inherent in opening up the wilderness. Too, there are
the overwhelming problems associated with what is sometimes referred to as the 
"lost generation" among the Native population. This group, comprising now 
amost half of the Native peoples, are the teenagers and young adults whose 
parents were isolated in TB hospitals and who themselves, were either raised 
in boarding schools or in a succession of foster homes and other centers. They 
are a generation for whom many, if not most, of the natural experiences of the 
early life cycle were interrupted, missing, or otherwise distorted from the 
older traditions of their forefathers. They also have problems around the 
newer aspirations that BIA, missionaries, and other contacts with non-
Native life styles might have instilled, but which they could not achieve.

A bit of case material taken from the consultation report written by 
Norman Paul, M.D., during his visit in 1967 illustrates how these factors converge to cause the pediatricians and other physicians to request psychi-
tric services for a disturbed youngster, and how the basic interventions needed were often community-based as much as they were clinical.

SAM I interviewed Sam, a 9-year-old boy who was referred from Nome 
about a month ago because of a pronounced hearing defect and poor school 
performance. On examination here, he was found to have only minimal 
hearing loss. He also was found to have both myopia and slight astig-
matism, for which corrective lenses were indicated. More recent ENT 
evaluation indicated the need for elective ear surgery because of a perforated tympanic membrane. Just before I interviewed Sam, I learned 
that there was some question as to whether his mother had died recently, 
since his sister Helen, age 13, and a resident at a boarding school, had 
recently been here in the hospital twice and allegedly told Sam that his 
mother had just died. Helen was here initially as a patient and later 
came especially to visit Sam. She apparently had been placed in the 
boarding school because of alleged alcoholism and prostitution.

I met Sam. He is a well-developed, somewhat short youngster with glasses and close cropped hair. He readily came with me. I spoke with
him for about fifteen minutes with Drs. Fleshman and Moss present. While looking at me very intently and at times appearing quite involved with me, he would occasionally appear stark and startled when I inquired about his feelings about home and his family, as if this type of inquiry was strange and unexpected. He reluctantly gave factual information and was resistant to exposing his inner feelings about his home situation. He presented the following story: his parents, Susan and Grant, were divorced when he was about two years old. His mother, Susan, then married his stepfather, Aaron, and it was with his mother and stepfather that he had been living. His father, Grant, married his stepmother, Louise. He, Sam, is the tenth of eleven children; Marge is his younger sister. Most of the information he gave me was in response to direct questions; there was meager spontaneous material presented. He seemed intent on trying to please me; I felt him to be sincere in his responses.

I learned that during her first hospital visit Helen had brought him a letter from her father which reported that their mother, Susan, had died. When I pursued Sam on this, he greeted me with the most hostile glance of the interview, as if I were intruding on his inner feelings about the event. I sensed his inner anguish about his life situation and felt that only with considerable energy was he able to avoid crying. To my question as to whether he looked forward to seeing her in heaven, he stated that he did. He presented this information with a note of authenticity. He denied having read the letter from his father; it seems that Helen had read it to him. This tended to corroborate what the nurse observed and reported, that indeed Sam's mother had died, which accounted for his tearful outburst when Helen first visited Sam.

On the basis of the interview and of Sam's clinical record, I suggested that it would be desirable to determine again the veracity of this boy's story about the existence of foster parents and of his mother's death. Dr. Moss stated that they will further review the advisability of proceeding with ear surgery, which is currently viewed as an elective procedure. One fact which seemed clear at the conclusion of the small conference with the pediatricians is that there is a general tendency to under-emphasize in practice the importance of social and familial factors in illness.

Consultation with Pediatric Service – Thursday, March 16

The pediatric service, including nurses, social workers, a teacher and physicians, discussed the case of Sam. Yesterday, Alan Melowsky, a social worker, in a conversation with a social worker in Nome, learned conclusively that Sam's mother is alive; the Nome social worker learned this from his secretary who lives next door to the family. The nature of the relationship of Sam's parents still remains unclear; however, it appears that Sam has been exposed to both verbal abuse and physical beatings when his parents become drunk. We learned that Sam is very interested in doing things with his father, such as going on the snow-so. The nurse on the ward stated that Sam is inclined to regard the hospital
Mr. Melowsky described the most poignant bit of behavior: when Sam sees him at the other end of the corridor, he will lope down the hall to greet him and then cling to his arm. This behavior is suggestive of a child who is very fearful of being separated from the significant people in his life and who readily attaches himself to surrogate parents if they are kind.

Sam's hospital school teacher indicated that he is often preoccupied in class. She recounted a consultation that she had on the telephone with a teacher from Nome last weekend: the visiting teacher said a telegram was received in Nome by his sister, Helen, reporting that their father's wife had died. It was not clear when Helen received this telegram. And so the whole issue as to whether Sam's mother is alive or dead was subject to greater confusion than had been present before. Focus was now directed on the need for reliable informants, what constitutes a reliable informant, and the importance of knowing what is really going on when such great distances exist between a child and his parents. This led to a discussion of the critical importance of maintaining communication and contact between children and their parents, with suggestions such as having parents send pictures of themselves to their hospitalized children; staff members could reciprocate by taking pictures of the children and sending these to the parents.

NANCY: The case of Nancy was then described. Nancy was away from home for about six years because of a serious medical illness. Between her 9th and 11th years she returned to live at home, where she was viewed as the community pariah, shunned by both her peers and her parents. She is now in the hospital while the staff are attempting to locate a foster home for her. It is interesting to conjecture whether the people in the village, after the absence of a child for such a long period of time, begin to regard such a child as dead, so much so, that when the child returns to his native home, this child could then be viewed as the return of the dead or a ghost, thus terrifying the others in the village.

Reference was then made to the existence of tape recorders in many of these villages that could be used to carry the voices of the parents to a child in the hospital on audio tape and vice versa. It seems that for the maintenance of a child's emotional state, the greatest consideration should be given to preventing prolonged periods of separation between Native children and their parents and, if necessary, maintaining bilateral contact should be part of medical care. Consideration of realistic preparation of children and families prior to admission to the hospital was then reviewed. Very often children are placed on planes from outlying areas for admission here with meager information as to why they are coming here after having been on the waiting list for an operative procedure for many months, if not years. In such instances, if the parents were originally aware of the rationale for the need for hospitalization, they had since forgotten it.
JOSEPH: The case of Joseph was presented. Joseph is an 11-year-old boy who was admitted to the hospital a few days ago for a cystoscopy. Three years ago he was in the hospital because of blood in his urine and was found to have a stricture in his ureter which was subsequently corrected by surgery. Recent recurrence of hematuria dictated re-evaluation. It was interesting to note in the presentation of this case that a very important bit of data which I learned last Monday was not mentioned. It was that this boy's father had murdered his mother in 1960, when he was three years old; currently the father is in a federal prison. I developed the point I believed to be relevant to Joseph, namely that it could generate many concerns, fears, including growing up to be a man. I indicated that I believed that this event would be frightening in anybody's life. When I asked how any of them might feel to be Joseph with his history, much tension was generated. Someone then inquired about Joseph's medical condition and everyone seemed then to be relieved.

Two additional case vignettes were found in Dr. Bloom's records of the Mental Health Team visits to outlying Service Units in 1967. The material below is quoted from his report to the Surgeon General in that year:

EGEGIK: This is a 17-year-old boy of Aleut background. He was admitted to the Alaska Native Medical Center in Anchorage after a very serious suicide attempt in which he shot himself in the left chest. This suicide attempt followed by about two months the suicide of the boy's grandfather who also shot himself in the chest, but didn't survive. The boy said he felt very responsible for his grandfather's death and had been brooding about this feeling of responsibility during the two month interval between his grandfather's suicide and his own attempt.

When questioned about this feeling of responsibility, he told the following story: He said that he and his grandfather would often hunt seals together on the ice floes near his village. One day last winter the grandfather got caught on a moving ice floe and started to drift out to sea. The boy was in a boat while the grandfather was on the ice. He made several attempts to reach his grandfather, then he "panicked" and paddled back to shore while the older man drifted out to sea. Once he reached shore the boy ran three miles to the village and the Coast Guard was alerted. The grandfather was rescued from off the ice about seven hours later. By this time he had suffered from exposure and frost bite. An amputation of several toes was necessary and the grandfather returned to the village. From that point on, people in the village felt that he had changed, was more reclusive and unhappy. About four months later he killed himself, and the boy felt he hadn't done enough to help him when he was stuck on the ice.

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Cultural differences notwithstanding, we have all seen similar types of cases. Very few of us, however, have been to the Aleutians and understand the complex interaction between nature and man as it exists there. The older man's suicide was almost a natural event in this place. I say this because it seems clear that the grandfather had decided never to hunt seals again. Without the old ways of subsistence there are but few choices. One can change one's ways of a lifetime or be faced with psychological breakdown, perhaps family disorganization, perhaps heavy drinking. At this point the older man chose to demonstrate that nature had won and that he couldn't change. [The Mental Health team's task was to help the boy accept this fact, and at the same time his own ability to change if need be.]

ANNIE K. Annie K. is a woman in her late fifties, born in Kobuk, and living in Kotzebue. She was seen with a history of psychotic behavior dating back only three years. Before giving more clinical details, here is a copy of a letter from the Point Hope Village to the Kotzebue Magistrate and the IHS physician, dated about the time of her first symptoms.

June 9, 1964

Dear Sir:

We the members of the Point Hope Village Council are informing you of Annie K., that has visited Point Hope yesterday. And during her staying here at Pt. Hope she has not behaving herself. We the council members of Pt. Hope does not want to treat our visitors in this manner but she has been disturbing people.

During the show she has been throwing cigarettes to some people, and have been using chairs as weapon as to hit people. We personally do not think she is drinking, also she has been visiting people and while visiting them she has been throwing their stuff like clocks and so forth.

As you know we are planning our whaling feast, and we do have lots of visitors from various villages and we feel that no person will put up such an act in front of visitors.

We the council are asking for your help to put a stop to this woman.

The copy of this letter will also be sent to MOTC of Kotzebue.

Sincerely yours,
This letter is not without its humor brought about by the direct style of the authors and the unorthodox behavior of Annie K. What was her story? What precipitated the psychotic behavior? A simple account emerged. Annie's sister had died ten days before she went to Point Hope, and Annie was grieving. She went to Point Hope to visit her brother. He was out hunting on the ice. She begged the Point Hovens to search for him. They refused; told her not to worry. She thought he was dying and that they were killing him. She got extremely angry and threw chairs, cigarettes, clocks, anything at the people "killing" her brother.

How many times have clinicians heard variations of just such a story, minus the whale festival, the ice, and the village council? There is a certain shared core of human experience which allows us to empathize with patients from different cultural settings. However, the cultural twists and turns are equally important to us and must be carefully defined and understood.

Dr. Blooms' report has one additional paragraph which makes the point that no matter how far away, no matter how different culturally -- the patients in Alaska are indeed human beings.

To generalize, at each service unit hospital, we see needs clearly defined: there are disturbed and broken marriages; there are families who have been heavily burdened by the separation of children to school and by the heavy toll taken by the high death rates from tuberculosis. We have problem drinking; there are school problems which have been untouched; we have vocational problems of every description. In each phase of the Native Alaskan's life cycle, there are pitfalls which we in our cultural setting have not been exposed to, and at each stop are many casualties...

III. GROWTH: DEVELOPMENT OF SPECIALIZED SERVICES

A. To Be or Not To Be a Special Medical Ward

Four out of five case vignettes quoted were told about people seen in the ANMC at Anchorage, though the homes of the patients involved were elsewhere.

Pressure by a faction of the Area administrative and medical staff was great to establish traditional psychiatric services within the Anchorage hospital, as a specialty service paralleling other medical and surgical specialties. The mental health team resisted this pressure for several years and continued their attempts to stimulate services in other service units. The mental health team's conviction is reflected by their continued devotion of half their time to community consultation and coordination activities. By the end of 1967-68, the strains of
so much travelling were beginning to affect keenly the lives of the mental health team members, and their families. When Dr. William Richards became available he was assigned chiefly to Anchorage Native Medical Center, where he developed both staff consultations and an active outpatient program (see section V—Decentralization).

B. Psychological School Consultations

By 1968 the Mental Health team began to see opportunities to specialize and focus their energies a little more effectively. The most specialized of the services developed was a consulting arrangement between the psychologist, Barbara Nachman, and the BIA and village schools. The BIA in Alaska is responsible for the development of local schools at the elementary level, and does not make widespread use of boarding schools and boarding homes until the high school levels.

Particularly at Kotzebue and Bethel, regular consultation to these schools has resulted in a number of innovative programs. The Wechsler Intelligence Scales useful in schools for classifying pupils according to expected achievement, was found to have many culture-bound items that were irrelevant to the Eskimo lifestyle. In cooperation with local Eskimo artists a number of the tests were re-drawn and re-standardized. The picture arrangement sequence which in the standard requires a young child to assemble a train, was exchanged for drawings of a dog sled and team requiring the same sequencing concepts. A digging-worms-and-going-fishing story sequence was translated into a typical ice fishing setting. Verbal materials were similarly "translated" and standardized, resulting in a much more useful instrument for Alaskan application.

New developmental scales were also experimented with, including sequence of cognitive stages in which the child's drawing of his home, community and the world reveal his conceptual development. Special evaluation techniques that would circumvent and then delineate language barriers and the hearing losses omnipresent in the school population, have also been initiated and are being constantly refined. Dr. Nachman was able to add to her staff another psychologist, Barbara Dosk, through
contract to evaluate children in the Kuskwokim area. Mrs. Doak was converted to a salaried status with the Mental Health team in 1970. At least one mental health worker has also been added, being trained and supervised in these evaluation techniques and able to contribute from her knowledge of the culture to the evaluations of children in the Anchorage Service Unit.

The psychologists utilized their evaluation skills to gain access to the schools in the Kotzebue and Bethel Service Units and to foster interrelationships through the school to the rest of the community. They hold regular staff conferences during the school year and have had impacts on curriculum revision, and in increasing teachers' understanding of the home backgrounds and learning styles of the pupils in their classes. While there is a relatively high turnover of BIA teachers, (so much so that the task is apparently unending) progress is visible over the five years of this focused effort. Unfortunately, the pressures for service delivery have prevented its being written up for publication and dissemination elsewhere in and out of the IHS system.

Perhaps because of this special focus on schools, the contributions of the psychologists in more traditional clinical services tend to be overlooked. However, they do see a fair number of children on direct referral from other ANMC Service Units, and consult with several child care agencies in terms of general clinical services and case evaluations.

During a July trip to Kotzebue with the psychologist, we learned that high turnover rates in IHS are not an unmixed blessing. While visiting this unit, a conference was held with the Service Unit social worker about a 12 or 13-year-old girl who had been admitted as the aftermath of a suicide gesture. The psychologist's records revealed that she had been in foster placement in a group home in Fairbanks during the school year,
and, due to a highly complex home situation, was generally unable to establish a place for herself during the summer within the home and local community. Her parents were rejecting, and the family had "closed in behind her" following her leaving for school. Since the hospital was not crowded, it seemed wise to allow her to remain as an admitted patient while some supportive work could be done and new plans evolved. In this setting, having secured attention from both her parental group and INS, she was not expected to make a second attempt of suicidal nature.

However, the Head Nurse at the Service Unit felt strongly that this was mollycoddling. She insisted that the girl should probably be sent home to a good spanking. Certainly she did not herself have any rationale that suggested that this girl should have visitors, a pass for the 4th of July celebration, or any relaxation of sickbed hospital routine. This nurse, also active in a fundamentalist church as a missionary, had removed the reports from the Boarding Home and the psychological tests from the hospital charts because she did not feel that the nurses should be trusted with "confidential" materials since some of them lived in the community. (These records were not located during the visit and consultation, but were reconstructed by means of telephone calls and searches of central files).

The social worker, acting not only as Mental Health Coordinator but as Deputy Service Unit Inspector as well, had not been able to soften the starchy rigid armor of this head nurse, during her entire tour of duty. The bright spot of the visit was the farewell party, to which the mental health and social worker willingly contributed, as this nurse departed for another assignment outside Alaska. With her departure, the program of rehabilitation for the 13-year-old began to be instituted, and the rest of the nursing staff became more willing to combine a consideration of the emotional needs of patients with their regular care.
C. Alcoholism Programs

1. Special Problems with Alcoholism Development

Alcoholism is a major problem for the State of Alaska as a whole. The professional staff agrees closely with one of its members who points out that the long winter nights and the even more insidiously long summer months of daylight, provide no cues as to time and normal diurnal rhythms. Therefore, longer and heavier use of alcohol is found here than in ordinary 'lower 48' social circles. Hard drinking has always been associated with frontier developments, to ameliorate the struggle between men and the elements and to ease the sense of loneliness which stems from wrestling with natural resources so far from home. For more than 200 years, alcohol has also been utilized by both Russian and continental American traders, who voyaged to frontiers of the far north intent upon reaping huge profits from the furs, fish, and ivory artifacts produced by Eskimo, Aleut and Indian villages.

Why the native peoples of Alaska, like their 'lower 48' Indian counterparts, should be so vulnerable to alcoholic addiction and the subsequent problems of family and social deterioration, is a mystery as yet unsolved.

The problems, like the extremes of weather and geographic isolation, remain as facts of life in Alaska that IHS staff at all levels must somehow come to terms with. The high percentages of alcohol-related psychiatric diagnoses, alcoholic traumas and alcohol-related illnesses are reflected
in the statistics collected by the Alaska Area, just as they are in every IHS Area and service unit. (See Tables pages 75-78.)

Certainly the Mental Health Team has been involved in clinical services to alcoholics, whether so identified as the primary reason for referral or not. It is interesting to note that the IHS social worker in Juneau had had very little contact with the rest of the Area Mental Health Team, yet he reached some basic conclusions also held by Fred Muhs, M.S.W., and Jeanine Lyerly, P.H.N. working on an outpatient basis in Anchorage. All three observed that socially learned drinking patterns played a large part in the devastating impact of alcoholic consumption. Since earliest childhood, the Native group had little opportunity to observe consumption patterns other than that of excessive drinking to attain inebriation, a pattern prevalent in most Native population homes. This phenomenon has also been noted by Joseph Westermeyer, who analyzed drinking patterns as "the Indian pattern" (referring to the American Indian) and "the white pattern", and his observations are readily concurred with by Indians themselves in the 'lower 48'. Levy and Kuntz in Indian Drinking make similar observations.

To see if this social learning process could be shifted and new patterns learned by young adults, a few selected clients were taught "the white pattern" of nursing drinks and self-monitoring the stages of inebriation. Their education is currently ongoing as an adjunct of the Anchorage outpatient services provided by the Area Mental Health Team. This approach has some support in the work of Klatte and Pattison at the University of
California at Irvine, which is a search for other criteria of success in alcoholism programs besides complete and total abstinence. Such efforts are quite contrary to the principles of Alcoholics Anonymous and to the bent of trainings at the University of Utah and other alcoholism counseling instructional centers. At this point, however, "the white pattern" approach seems to be appropriate when applied to young women adults whose geographical and social mobility patterns are more closely geared to those of the white population than are those of their young male counterparts. (See Bloom, "Psychiatric Problems and Cultural Transitions in Alaska," Arctic, v. 25, no. 3, Sept. 72, and "Population Trends of Alaska Natives and the Need for Planning," American Journal of Psychiatry, 128:8, Feb. 72.) The success rate and possible pitfalls of this untried program will be carefully watched, and for the moment such efforts should be considered bold and innovative rather than either typical or unsound, in the spirit in which they are being initiated.

Alcoholism, like many mental health problems, is a pervasive difficulty and affects almost every activity of IHS. Often, such problems represent needs which are so omnipresent that many agencies offer at least partial solutions, but no one organization is consistently held responsible for the treatment total. This has been especially true of alcoholism programs developed independently of IHS through local Native corporations using OBO, alcoholism programmatic grants, and other resources. It is of particular interest to note that the Fairbanks Native Association has developed an alcoholism program which serves the whole community, Native and white alike. And yet perhaps not exactly alike. . . The story is told that several white clients who would not likely have been seen in the companionship of Native Indians otherwise, were given special permission to use the back door of the Alcoholism Counseling Center, in a curious reversal of the usual.
discriminatory practices of the 'lower 48'.

The Mental Health Team staff attached to ANMC Hospital began to be more deeply involved in the study and care of alcoholic patients with the addition of a contract psychologist named Jack Shields, who came to them during the fiscal year 1971-72. At the time, Mr. Shields had retired from Army service and was working on a Ph.D. at the University of Alaska, so a close working association with the staff at the ANMC Hospital seemed an admirable way to gather materials for his dissertation. With this in mind, he made his clinical experience available and arranged at first to begin a study of suicidal patients. As part of his doctoral research, Mr. Shields began developing a system of Rorschach indicators for suicidal patients, along the lines of the type of analysis developed by Bellak for schizophrenics. It appeared that the indicators Mr. Shields developed could indeed be utilized and further, they also seemed to discriminate the high risk alcoholic.

The theoretical basis for the development of such indicators suggests similar lacunae in the socio-emotional development of the individual, most probably originating due to early childhood deprivations. Mr. Shields, whose services remained available until late in the summer of 1973, began developing marital and individual counselling techniques also based on these findings. These techniques will hopefully soon be accessible for consultation purposes to various alcoholism programs outside the hospital as well as within the IHS.

Another development of research in this area resulted from the fortuitous mutual interests of William Richards, M.D., who joined the Mental Health Service in 1970, and Barry Mendehlsohn, M.D., a Mental
Health Career Development Fellow assigned to Alaska in 1972. Dr. Mendehlsohn has training in child psychiatry and, in conjunction with Dr. Richards, has become deeply involved in the study of the entire student body of one of the BIA boarding high schools. Their work has indicated that at least 48% of the student body is engaged in behavior related to some stage of alcoholism, and that all of the students could be considered highly at risk. Through the utilization of a variety of projective methods which have been adapted to make social contact possible between professional and student despite broad cultural gaps, the two doctors are beginning to tap the life experiences of this population and come to some understanding of the attendant stresses and strains which so endanger the students.

The projective devices used in this school group do not, however, give diagnostic differentiations of the sort found by Mr. Shields. It would seem that instead, the methods of Drs. Richards and Mendehlsohn are more finely tuned to the mood of the moment and to the situational emphasis of the student at the specific moment of contact. Careful considerations are necessary during such contacts when it is realized that a high risk or deeply alcoholicly-involved student may, on a "good day", present much healthier themes than a less alcoholicly-involved and basically more intact student during a stressful period in his or her life.

The chief usefulness of the study to date has been the subsequent opening of windows into the lives of the boarding school students. The views revealed are quite enlightening, and can be shared with the BIA and other
staff in such a way that the withdrawn or unrecognized nunii can be seen as a fully complex human being in a context. Otherwise staff tend to see student behavior only in the contextual isolation of the school experience, which often dampens their responses well below a threshold observable by ordinary teachers and dormitory staff. Out of this exploration and sharing, it is hoped, will evolve the basis for more effective therapeutic relationships and some guidelines for intervention in the vicious downward cycle of drinking, dropping out of school, unemployment, drifting and more drinking that seems to characterize the older teen and young adult populations.

2. Native Health Board Systems Evaluation Project

The most significant steps being taken toward developing solutions for the problems of alcoholism are being developed by the Alaska Native Health Board. Using a special evaluation contract they have hired staff from the IHS Health Information Programs Systems Center located in Tucson as a special IHS unit. Mr. Edward Helmick, M.P.H., of that staff has spent two years collecting data and developing a descriptive statement of levels of involvement with alcohol. This statement gives objective operational definition to six stages, from no risk to at risk is stage one, proceeding down to death at stage six. Utilizing this descriptive classification, it is planned to analyze the effectiveness of kinds of treatment offered in terms of the progress and regression of patients from one level to another. It is hoped that this will enable programs to determine the probability of effectiveness of each type of treatment for various states of involvement with alcohol, and to discriminate among types of patients for whom specific treatments may have better prognosis.

Although the evaluation project team had hoped to do a pilot study during the present year, the Alaska Native Health Board has requested that
all programs within the state devoted to or involved with alcoholics participate, thus greatly enlarging the data base. This also insures feedback loops to all programs as standards of care are established and the various factors which must be taken into account besides stages of alcohol abuse and addiction are considered. This is a tremendous support from the consumers of services, and suggests that the principle of involving the local populations in the development and understanding of mental health services and problems can lead to important fundamental contributions for improved delivery of services.

Although this project is supported outside IHS Mental Health Services, the pilot studies and planning have involved several Service Units, and it is typical of the way in which IHS Mental Health programs become involved in a total network of service delivery and hopefully develop new patterns in service utilization. The text of the resolution adopted by the Alaska Native Health Board is given in full so that some appreciation of the size of the funding and the number of agencies involved can be appreciated. (See pp. 33, 34.) While still in the developmental stages, this project is doubly exciting because it provides a framework within which to fit the many rather fragmentary efforts being made to find solutions to the tremendous puzzle. So far as is known, this is the first comprehensive effort to apply technical procedures in an empirical fashion to a major mental health problem. (See Appendix, Section VIII for the March, 1975 report of the Alaska Native Health Board, "Risk Analysis: A Concept and Its Application to Alcoholism and Mental Health".
RESOLUTION
OF THE
ALASKA NATIVE HEALTH BOARD

STANDARDS OF CARE FOR THE
ALASKA NATIVE WITH A
DRINKING PROBLEM

WHEREAS, the scope of problem drinking and alcoholism along with their related physical, social and economic effects on individual and community well-being are well-known, and

WHEREAS, the Alaska Native Health Board considers alcoholism and drinking problems a high priority health problem, and

WHEREAS, the Alaska Native Health Board's "Evaluation of Alcoholism Treatment Services" identified a minimum of $6,154,737.00 devoted to the prevention and/or treatment of alcoholism in the State of Alaska, and

WHEREAS, the Alaska Native Health Board's "Evaluation of Alcoholism Treatment Services" identified 194 staff people solely devoted to the prevention and/or treatment of alcoholism, and

WHEREAS, the Alaska Native Health Board's "Evaluation of Alcoholism Treatment Services" identified 51 out of 74 agencies that deal with problem drinking had no formal written plan of action as related to alcohol and alcohol abuse, and

WHEREAS, the Alaska Native Health Board's "Evaluation of Alcoholism Treatment Services" identified 33 out of 74 agencies that deal with problem drinking that do not keep case specific records which provide information regarding the evaluation and treatment of alcoholic clients, and

WHEREAS, the Alaska Native Health Board's "Evaluation of Alcoholism Treatment Services" established that, with the current systems operation there is inadequate patient assessment, treatment plans are not tailored to individual patient needs and treatment plans are not being followed up and reassessed to continue the problem solving cycle, and

WHEREAS, the current response to problem drinking cannot be documented as effective or efficient and should not be considered acceptable by either the clients receiving the care, the agency staff providing the care or the community being taxed to support the care,

49
NOW THEREFORE BE IT RESOLVED, that the Alaska Native Health Board requests that standards to assure quality care be a part of every program and facility that deals with the alcohol problem and

BE IT FURTHER RESOLVED, that these standards insure the continuity of the problem solving process and establish and document minimum standards of information gathering, assessment and follow-up information gathering and reassessment, and

BE IT FURTHER RESOLVED, that the following recommendations also be adopted as standards of treatment:

1. Clients beyond the episodic-excessive drinker stage be referred for medical evaluation for completion of information gathering and for establishing a treatment plan.

2. Related problems when present require a direct response by the provider or a referral.

3. Withdrawal symptoms require an immediate referral to a facility with medical supervision.

4. Follow-up and reassessment attempts occur at least every three months.

BE IT FURTHER RESOLVED, that this resolution be distributed to, but not limited to, all organizations that provide or maintain facilities that treat the Native individual with a primary or secondary drinking problem.

CERTIFICATION

It is hereby certified that at the November 2-3, 1973 meeting of the Alaska Native Health Board, the foregoing resolution was presented and approved by the majority of those members present.
### DATA BASE FOR ALCOHOL RELATED PROBLEMS

<table>
<thead>
<tr>
<th>FACTORS WHICH MAY INDICATE SEVERITY OF DRINKING PROBLEM</th>
<th>SYMPTOMS - DISABILITY INDEX</th>
<th>INSTRUCTIONS: STAGES REFER TO FACTORS PRESENT IN LAST THREE MONTHS ONLY. CHECK APPROPRIATE BOXES. WRITE ADDITIONAL INFORMATION ON REVERSE SIDE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPARENT INTOXICATION &amp; ADDICTION</td>
<td>STAGE 0</td>
<td>Alcohol abuse averages less than once per month</td>
</tr>
<tr>
<td>INJURIES DUE TO INTOXICATION</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>PATHELOGIC CHANGES (This section may be completed by a physician)</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>PHYSICAL</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>FAMILIY RELATIONSHIPS</td>
<td>No problems related to alcohol abuse</td>
<td>Some quarrels related to alcohol abuse with spouse, parents, etc.</td>
</tr>
<tr>
<td>SOCIAL</td>
<td>Yes</td>
<td>No problems related to alcohol abuse with school, job, employer, or normal activities.</td>
</tr>
<tr>
<td>ECONOMIC</td>
<td>Yes</td>
<td>No problems related to alcohol abuse with school, job, employer, or normal activities.</td>
</tr>
</tbody>
</table>

### TREATMENT PLAN FOR ALCOHOL ABUSE

<table>
<thead>
<tr>
<th>STAGE 1</th>
<th>STAGE 2</th>
<th>STAGE 3</th>
<th>STAGE 4</th>
<th>STAGE 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTITUTIONAL ADMISSION</td>
<td>FY1</td>
<td>FY2</td>
<td>FY3</td>
<td>FY1</td>
</tr>
<tr>
<td>1. Self-referral</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Halfway House</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Jail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Medical Hospitalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Psychiatric Hospitalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Nursing Home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Rehabilitation Facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PROBLEMS WHICH MAY CONTRIBUTE TO ALCOHOL ABUSE

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Past 3 Months</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. Physical disabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Psychiatric problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Voluntary Entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Housing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Legal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Other</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### PHYSICAL/Psychiatric Assessment

<table>
<thead>
<tr>
<th>Personal Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Individual's Agency No.</td>
</tr>
<tr>
<td>Social Security No.</td>
</tr>
<tr>
<td>Birth Date</td>
</tr>
<tr>
<td>Sex</td>
</tr>
</tbody>
</table>

### FUTURE CARE

- Follow up at this Agency
- Referred to other agencies: Name of Agency, Address, Contact Person

### CASE CLOSED ON THIS VISIT

| 1. Planned | | |
| 2. Unplanned | | |
| 3. Closed | | |
| 4. Closed due to: | | |
| 5. Individual | | |
| 6. Therapist | | |
| 7. Other | | |

### INSTITUTIONAL ADMISSION

<table>
<thead>
<tr>
<th>Plan for:</th>
<th>Past 3 Months</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Treatment of Alcohol Abuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Inpatient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Inpatient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Inpatient Admission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Individual's family refuses care for themselves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Individual referred until next visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### INFORMATION ABOUT THIS VISIT

- Antecedents Care on Institutional Admission
- First Visit | First |
- Readmission | | |
- Referral | | |
- Telephone: | | |
- Contact: | | |
- Walk-in | | |

### Who's seen

- Interpreted with drinking problems: | |
- Family members: | |
- Names and relationships of family members seen: | |

### Notes

- Medical record: Description of physical and lab description
- Physical description: | |
D. Training with Police and State Troopers

It is often the series of chance encounters that leads to the building of viable networks of service relationships. Fred Muhs, MSW, was particularly drawn in to discussions with individual troopers and village police around suicide attempts, violent events, and alcoholism. His ability to assist a few individuals in handling difficult situations well, especially in the Nome Area, and his participation in search and rescue missions with his own small aircraft made him a figure of trustworthiness and respect. In discussions it became apparent that an addition could profitably be made to the training given State Troopers, and he was invited to do this. His topic officially is "Handling the Emotionally Disturbed Person", which is a definitely needed piece of the curriculum in all police training, especially at state police academies.

However, in addition to this he also takes a period of time, perhaps half a day, to discuss with the men their own reactions to the violence they encounter, the risks that they must take, and other emotion-arousing factors relating to their roles as troopers. This enables the men to begin to understand how they contribute to exacerbation of the disturbances they face and to develop alternatives. It also may help them survive as more complete human beings in a vocational role that is a high risk for divorce, suicide, and other hazards when emotions cannot be faced and worked out, or are not understood by either the policeman or his family.

The present State Troopers include a number of men who started in the Alaskan villages, and through this consultation among other factors, found ways to work their way up the career ladder to become state troopers. Even though Mr. Muhs has been transferred out of the Alaska Area, his teaching services are still requested, and he plans to return to the police academy periodically at least until local staff or other TFS personnel can take over this responsibility. Meanwhile the network of appropriate referrals and relationships
between the Troopers, police and Mental Health and Social Service staffs continues to grow appropriately.

IV. EXPANSION: DEVELOPMENT 1968-1973

A. Changes in Personnel and Budget

For its first four years the team continued to develop its pattern of services, with only two substitutions. On completing his two years of service Dr. Bloom returned to New England for post-doctoral study and was replaced by another psychiatrist, newly out of residency, John Ackerman, M.D. In the spring of 1969 the Chief Social Worker position within the IHS Area became vacant, and the possibility of combining the Mental Health Team and the Social Service Branch was explored. However, this did not prove feasible, and Dr. Lucien Poussard, the original social worker with the Mental Health Team, became head of the Social Services Branch, being replaced on the Mental Health Team by Fred Muhs, M.S.W.

In 1970 Dr. Charles Hudson replaced Dr. Ackerman and a second young psychiatrist, William Richards, was added to the staff to provide full-time coverage and consultation in the ANMC. Jeanine Lyerly, RN, brought to the staff familiarity with Alaska and its varied population from earlier experience in the Alaska State Department of Health. Her first IHS tour with the Navajo was also good preparation for joining the team.

In 1971, Mental Health Workers began to be recruited. Some of them were deployed to outlying service units, and some within the Area Office Team at Anchorage. Those who have remained with the IHS Mental Health Services tend to be those who have received close supervision and training in specific skills from one of the central Area teams, or from local supervision in the Social Work Associates Program at the Service Unit level.
During the six year period from its beginnings, the THS Mental Health Services in Alaska have expanded from a traditional team of three professionals and two clerks to 13 full-time professionals, two part-time psychiatrists as consultants, 5 native paraprofessionals and a clerical support staff of three. The budget for specific projects such as alcoholism has increased from $100,000 to $325,000 as a base figure, with non-recurring funds from other contracts supplementing this from time to time.

B. Dividing Responsibility with the State Department of Mental Health

By this time formal arrangements with the State Department of Mental Health had evolved, so that major responsibility for the Panhandle region was assumed by them, with coordination of IHS participation being pursued through the social workers at the Service Units. Within IHS some regional responsibilities were also established, and an effort was initiated to avoid duplication and provide coordination of services by utilizing either the social services staff or mental health staff at Kotzebue, but not necessarily both, until all units were covered. The Social Service Branch provided the coordination supplemented by school based consultation. In Fairbanks, a state clinic was also available for clinical services, and a state health department office provides for local needs often met by IHS. Kodiak also began developing the second Comprehensive Mental Health Center in Alaska, relieving pressures for services other than consultation that might develop from the Aleutian peninsula and islands as well as from the lower Kenai Peninsula and Kodiak Island. This mental health center is known as the Kodiak-Aleutian Center, since the opprobrious associations with the term "mental health" were disliked intensely by the Native Corporation which helps support it.

C. Reciprocity Through Consultation

In light of these cooperative arrangements, the network of services for the entire state begins to show signs of knitting together as a substantial
and unique pattern. The State Mental Health System records that approximately 60% of its caseload is an Alaska Native population while approximately 40% of those seen in the IHS hospitals also have a psychiatric diagnosis. Full reciprocity is hard to achieve however, since only in the Panhandle region were IHS services offered on any substantial basis to non-Natives. In the Juneau area there is a large U.S. Coast Guard installation, all of whose personnel and dependents use IHS for medical services. They make up about 30% of the total caseload in the Panhandle region. Other military installations, Naval and Air Force units being particularly prominent in several Service Units, provide their own medical services, and some IHS mental health consultation is occasionally sought, offered or exchanged.

Along the frontiers, emergency medical and other aid is certainly not withheld simply because IHS has a mandate to serve a limited and defined population. Many non-Native personnel are reached by the mental health branch through their consultation activities. Five of the Area professional mental health staff, and five Service Unit social workers who act as Mental Health Coordinators listed all other medical and social agencies with whom they held consultative conferences during one month in the spring of 1973. The following table shows the number of these ten professionals naming each type of agency, and whether the focus of the consultation was on individual patients or on program development. While the proportion of formal contracts to consultations is small (8 out of 213), there seems to be much opportunity for exchange of ideas and expertise. (See Table page 35.)

V. DECENTRALIZATION

Until fiscal 1973 the Alaska Mental Health Services had maintained a centralized staff of ever-increasing specialization. Although fairly successful at stimulating and maintaining services to the outlying Service Units, the travel strains and competing demands have at times been almost overwhelming. As the Service Units have been able to utilize Mental Health Services, the
<table>
<thead>
<tr>
<th></th>
<th>About Patients</th>
<th>About Programs</th>
<th>Formal Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHS physicians</td>
<td>9</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>IHS nurses in clinics</td>
<td>9</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>IHS P.H. nurses</td>
<td>6</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Other IHS staff</td>
<td>7</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Private Drs. and clinics</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>State and County P.H.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Community health reps.</td>
<td>7</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Public schools</td>
<td>8</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>BIA schools</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Parochial schools</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>H.S. Boarding program</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Head Start programs</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Day care programs</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>State and county welfare depts.</td>
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<td>5</td>
<td></td>
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<tr>
<td>BIA social services</td>
<td>9</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Vocational rehabilitation</td>
<td>9</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Community H.H. clinics</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>State hospitals</td>
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<td></td>
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<tr>
<td>Traditional healers</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Alcoholism pro. cours.</td>
<td>7</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Detoxification unit staff</td>
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</tr>
<tr>
<td>Halfway house staff</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>State and local courts</td>
<td>7</td>
<td>2</td>
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<tr>
<td>Local police and sheriff</td>
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</tr>
<tr>
<td>Jails</td>
<td>5</td>
<td>2</td>
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</tr>
<tr>
<td>State troopers</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tribal leaders</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Church leaders</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>136</td>
<td>77</td>
<td>8</td>
</tr>
</tbody>
</table>

* Information provided by 5 Area office professionals and 5 Service Unit SW/MH coordinators. Numbers indicate how many individual staff members had these consultation contacts during one month. The number of consultations cannot be inferred, since some may have had several consultation sessions with the same or similar agencies within the same month. For example, 9 out of 10 staff members had at least one contact with IHS nurses about patients; 4 out of 10 reported program consultations. Only 1 in 10 reported a formal contract for this type of consultation.
local Native population has learned to utilize professional help, and the
demand for service has outstripped the capacity of the Area office-based
staff to deliver them. The problem is a difficult one to solve, since the
intra-team stimulation and consultation is vital to the professionals, while
supervision and training are needed by paraprofessionals.

A. Nome 1971-72 IHS Mental Health Activities

1. Norton Sound Health Corporation

Technically, as shown on the maps, Nome is part of the Service Unit based
in the hospital at Kotzebue, on a peninsula to the north. Because this region
has many distinct features and because of the development of the Norton Sound
Health Corporation which has a high level of Alaska Native involvement it
deserves some special description of its own.

The following pages developing the demography, geography and health pat-
terns of the region are taken from a report of Phase I of a study made in 1971
by the Hospital Planning Associates of San Francisco as a prelude to designing
a comprehensive care plan for the Norton Sound Region. Page numbers are indi-
cated in [ ] following each passage, since those materials basic to an under-
standing of the mental health problems have been utilized, but the interested
reader is referred to the whole volume for details of problems of hospital care,
nutrition, infectious diseases and other aspects that affect a total health
care system. Following this background material, a brief description of the
activities of the Mental Health team developed by Mr. Muhls and its continuing
activities will be presented.

THE PLACE AND THE PEOPLE

The Norton Sound Community is that described by the Nome Census Division
or by the Nome Election District of the State of Alaska. It comprises
25,248 square miles of tundra and sixteen major communities along the shore-
of the Seward Peninsula and Norton Sound from Shishmaref to Stebbins and on
the islands of St. Lawrence and Little Diomede. The average population den-
sity is one person for every 4.39 square miles, a statistic that suggests the
extreme inaccessibility of most of the places of residence and implies the
great distances that must be traveled to reach medical care.
People travel 50 to 120 miles by air to reach the medical clinic or hospital. The Eskimo majority, making up three-quarters of the population, is distributed throughout the area, while the non-native population, mostly white, is largely concentrated in Nome (about 620 of 2,468 urban residents).

The people native to Norton Sound include several distinct ethnic and lingual groups. The tribes of the peninsula form the largest part of the population: the Kingikmiut of Wales; the Kauverak of the central coast; the Tapakakmiut of Shishmaref; the Ukuvukmiut of King Island; the Inguklimiut of Diomede; and the Malemiut of Kobuk. Members of these tribes speak Inupik, the language of the Northern Eskimos. Along the south and east coasts of the sound are the Unaligmiut people at Unalakleet, Golivin, St. Michael, and Stebbins. Most of this group speaks Yukin. Another ethnic group, the Eiwhuelit of St. Lawrence Island, belong to the Siberian Eskimo culture. They speak yet another language.

Largely isolated from western cultures until relatively recent times, the native people today retain their ethnic identification and traditional lands, continuing to depend significantly on traditional social and economic forms. However, accelerating change resulting from expanding contacts and interaction with the industrialized world after the second world war has threatened the foundations of the traditional hunting society. Hughes says flatly that the day of the hunter has passed. In his study of Gambell he writes:

'The industrialized world has moved too much into the arctic regions and has disturbed ancient animal migration routes; it has destroyed plant and animal life on which an Eskimo economy is based; and through the medium of contact and presentation of alternative models for behavior, it has sapped the strength of sentiments supporting the old way of life. Thus for those Eskimos who are successful in adapting themselves to the ...(outside), that adaptation consists in a metamorphosis, not a symbiotic relationship.... The people who adapt themselves are no longer Eskimos, no longer people who retain a cultural tradition of their own, fitting only certain aspects of their social and economic cycles with those of the...(outside). They perforce have to forsake the overarching structure of Eskimo belief and practice if they, as separable human personalities, are to attain that maximum of satisfaction from their life situation which one may call security. In effect, if they are to adjust to the white world, they must become as much like white men as possible.'

A part of rapid cultural and economic changes, western views of health and illness and forms of medical care largely supplant traditional medical practices. At the same time, new patterns of illness emerge as yet another manifestation of changes that occur. This means that demands on available medical care systems also change, and, at the
same time, increase as acculturation proceeds. Forms of medical care acceptable and appropriate today will be inadequate tomorrow.

Nome

Nome is the trade and communication center for the Seward Peninsula and Norton Sound areas in modern times. It is a hub for mail and charter air service to St. Lawrence Island, Diomede, and most of the villages of Norton Sound. It is also the center for tourism, as well as industrial activities of the region.

Nome has not always had such economic importance, however. Before 1848, the year commercial whaling on a large scale began in the Bering Sea, the trade center for Norton Sound was Wales (Chance):

Here the Siberian Eskimo met the Eskimo from the region of Norton Sound. Once trading at this center had been concluded the Cape of Prince of Wales Eskimo sailed to the second major rendezvous near Kotzebue. At this center, inland Eskimo of the Noatak and Kobuk Rivers obtained trade goods of Asiatic origin, which they then took back with them in the fall.

To the south, the trade route from Wales passed through the old center for the Kauwarak tribe, now Mary's Igloo, and eastward across the peninsula along the major rivers to Koyuk. Another route followed the coast, reached Koyuk, then continued south to Unalakleet and St. Michael. The chief trade relations of the Eiwhuelit people of St. Lawrence Island were with the Eskimo of the Chukchi Peninsula, with whom they shared language and cultural patterns.

Population

The population of the Norton Sound area in 1970 was counted at 5,740 persons, a decrease from 6,091 in 1960 (see Table I-1). This decrease, resulting from a net migration out of the area, occurred in spite of rapid natural increase of population, an increase amounting to about 2.9 percent per year. Such excessive emigration did not occur in the decade 1950-1960. Another change occurring over the same period of time was the concentration of population in Nome (and in certain villages), accompanied by decrease of population in isolated rural locations.

During the thirty-one years summarized in Table I-1 the most impressive growth in population (approximately 60 percent) occurred in Nome -- from 1,559 (in 1939) to 2,488 (in 1970). In recent years the rate of increase of the population of Nome dropped sharply.

The explosive natural increase of population within Norton Sound results from a high fertility rate combined with a decreased death rate and is a consequence of successful public health measures and modest economic improvements. The fertility rate in 1969 was about 126 births per 1,000 women aged 15 to 44 years. This very high fertility rate reflected itself in a high birth rate, even though women of childbearing age made up only 19 percent of the population. A high birth rate combined with a decreasing death rate resulted in an explosive natural rate of
increase within Norton Sound. The birth rate in 1970 was 21.3 per 1,000 population as compared with a rate of 24.9 for all Alaska and 18.0 for the United States.

Net migration out of the Norton Sound area, probably to the larger population centers of the state, slightly exceeded the natural increase of population of Norton Sound area in the decade of the 1960s. The out-

ward migration during that decade (1960-1970) was 1,550 persons, a quarter of the initial population (see Appendix Table A-3). The limited economy of the region makes such migration mandatory. Within the subsis-
tenance economy and existing culture of the area the ability of the land and sea to support the population is maximally used and any large growth of population threatens to bring with it poverty or starvation. Further encouragement to emigration is desire for employment and associated material gains.

Of the infants born in the Norton Sound area, 89 percent are native; as for those persons under 25 years of age, 84 percent are native. Older age groups have lower proportions of natives, and in the group aged 45 to 64 only 54.9 percent are natives. Downward shifts of the native com-

position in population groups of increasing age stems from the differences in numbers of births and in patterns of migration between native and non-
native peoples. Simply stated, non-natives often come to the area as adults. It is also true that among the non-native adults the number of males greatly exceeds the number of females, with a ratio as high as two to one.

Of the total Norton Sound area population, 48 percent is under 18 years of age while 52 percent is under 20 years of age. In the native population, the younger age groups make up even higher proportions. This great preponderance of children and young adults in the population is a demographic characteristic that helps explain the morbidity and mortality patterns of the area, and such understanding is essential in planning for health services (see Appendix Table A-1). The high proportion of children and young adults in the population of Norton Sound area makes services for young people -- not only health services, but educational services and recreation programs -- of greatest importance in the total structure of public programs. The problems of children are greater than those of other age groups because of the relative frequency of such problems (for example, diseases of children, such as otitis media and certain other infectious diseases, are among the most frequent seen in hospital and clinic).

Population Projection

Problems in Forecasting

The accuracy of the count of population in the 1970 census has been questioned by authorities of the Alaska Area Native Health Service who believe that the native population was undercounted. We estimate the magnitude of the possible undercount to be not over three to five percent. This possible error is involved in all rates calculated for vital and health statistics and reported here. The rates calculated for this report use the lower of the reported numbers for census of native
population and therefore they err on the high side.

For determination of future needs for services such as hospital care, an estimate of future population is necessary. The accuracy of a projection of population for Norton Sound area depends most on an accurate projection of net migration. Trends of births and deaths tend to follow relatively smooth curves, but migration varies widely in response to economic changes, changes not amenable to long projection. Possible major commercial developments for the area are mining and tourism. While spectacular development of mining may occur at a future time, forecast is impossible, because feasibility is affected by unknown factors such as world-wide market conditions. Since mineral development in the area requires capital for all phases including exploration, and because of the complicating land claim issues, private investment at present appears unlikely. In contrast to the uncertainties of mining, tourism appears to be well-established and capable of some growth at a slow pace. Since the most likely future involves no major economic changes, the most likely future population is that consistent with the support-capacity of the subsistence economy. This means a relatively stable total population for the Norton Sound area and moderate economic growth.

If employment opportunities outside the Norton Sound area improve, however, the rate of emigration may be expected to rise and the total population may tend to decrease. In periods of unemployment elsewhere, the reverse may be expected. The downward trend in the Norton Sound birth rate during the decade of the 1960s was associated with a decrease of the natural rate of population increase, from 169 persons per year in 1960 to 92 in 1969. If further decline of birth rate occurs, it may reflect itself in a declining population, assuming that migration rates hold up.

Population Projection for Norton Sound

The near-future, according to information currently available, promises some increase in the resources available for support of services for the rural population and, possibly, some gain in local employment through growth of tourism and related industry. Our best estimate for future population is for slight growth, with a total final population (1980) of approximately 6,000 persons (the projected range for the decade being 5,500 to 6,500 persons). These estimates assume no major technologic or economic changes in the area, such as development of major new mining or commercial fishing activities. [2-11]

The rates of hospital care and statistics concerning mortality in this region have particular significance for a Mental Health system that is an integral part of a health system. The utilization of hospital care is about 3,000 days per 1,000 population per year as compared to about 1,200 days per year in the
United States as a whole. The Alaska Psychiatric Institute reports about 300-500 days per 1,000 population per year additional. The rates for general hospitalization may be slightly inflated by the care of psychiatric patients locally, but not to the extent that would account for the high increase over United States rates of usage of hospitals. The Norton Sound Health Corporation report analyzes the illness patterns for both the Norton Sound, Kotzebue and over-all Alaska as follows:

Death rates for major causes of death among natives and non-natives of Alaska and for natives of the Kotzebue Service Unit are presented in Table II-1. Rates calculated for the Service Unit should be taken as rough approximations, since the small numbers of deaths in single-cause categories makes the error of the estimate of rates fairly large. The rates shown indicate that the general patterns of cause of death among natives of the Norton Sound-Kotzebue region resemble those for all natives of Alaska. As do all Alaskans, residents (native and non-native) of the Norton Sound-Kotzebue region experience accidental or other violent deaths at rates far above the national averages, while death-rates related to heart disease, cancer and stroke are lower. Among the native population accidents and other violent deaths are even more frequent, as are deaths due to infectious diseases and alcoholism.

Data prepared by the Alaska Department of Health and Welfare show that the distribution of causes of death in Alaskans shifted in the decade between 1960 and 1970. During this decade the total number of deaths per 100,000 population decreased by about 25 percent in both native and non-native populations, while native deaths due to infection (including tuberculosis) decreased steadily, although the gain was partially cancelled by increasing rates of death due to alcoholism, cirrhosis of the liver, and homicide. The rate of accidental death among natives remained at the same high rate during the decade, while among non-natives it increased (see Appendix Tables A-4 and A-5).

The leading categories of illness requiring hospital care among natives of the area -- excluding normal childbirth -- are infections of the respiratory system and related conditions. The prominent specific illnesses among these are pneumonia, acute upper respiratory infection, and otitis media. Other common illnesses involve injuries of various sorts (lacerations, superficial injuries, and fractures being most often reported) and mental illness. The same pattern of illnesses were observed in an analysis of native inpatients in 1967-1968 and 1969-1970.3 [15-21]

3 For comparable national data refer to United States Public Health Service, Inpatient Utilization of Short-stay Hospitals by Diagnosis, United States - 1965, National Center for Health Statistics Series 13, Number 6, 1970.
An analysis of the number of patients admitted to the Maynard McDougall Hospital in Nome (a church sponsored private hospital) between January 1, 1969, and March 31, 1970, reveals the following pertinent figures for the six leading causes:

<table>
<thead>
<tr>
<th>Diagnosis or Diagnostic group</th>
<th>All</th>
<th>Under 14 years</th>
<th>6 months to 14 years</th>
<th>15-64 years</th>
<th>65 years and over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Diseases of the respiratory system</td>
<td>166</td>
<td>26</td>
<td>5</td>
<td>40</td>
<td>34</td>
</tr>
<tr>
<td>Deliveries or complications of pregnancy, etc.</td>
<td>159</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injuries or adverse effects</td>
<td>138</td>
<td>-</td>
<td>1</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Diseases of the digestive system</td>
<td>93</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Symptoms, senility or ill-defined conditions</td>
<td>75</td>
<td>3</td>
<td>2</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Mental, psycho-neurotic or personality disorder</td>
<td>61</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

A high proportion of all serious illness in the Norton Sound area involves children. Infants under one year of age account for almost 20 percent of all deaths (1963-70). It should be noted that approximately 25 percent of all patients admitted to Maynard McDougall Hospital are under fifteen years of age. Deaths among children result from infectious disease, particularly respiratory infections; and, among infants, congenital malformations and certain diseases of early infancy are of importance as well. Infectious disease also leads among children hospitalized. It is a fact that respiratory infections and otitis media accounted for half of all children admitted during the sample period. Injuries afflicted 11 percent of children; other infective and parasitic diseases eight percent, and diseases of the digestive system (predominantly appendicitis) accounted for seven percent. Among the specific infections prevalent in the area, but of decreasing incidence, are tuberculosis and Fichinococcus disease. [18-21]
The utilization data presented before indicate that physicians send the patients directly to the hospital at Kotzebue, although the frequency of such referral has decreased since 1969. The annual average number of Norton Sound residents entering the hospital at Kotzebue from 1967 to 1969 was 232 as compared with an average of 64 from 1969 to 1971. This change in pattern of referral is a probable result of a change in Alaska Native Health Service policy: in 1969 one Public Health physician from the Kotzebue Service Unit was assigned to full-time practice at the Maynard McDougall Hospital.

Other important barriers to utilization of the Nome hospital are: lack of knowledge of the medical care system by villagers; difficulties encountered by families visiting patients; lack of communication between physicians and village-based families of patients; and isolation and separation of the villager from familiar social and cultural environment. Special knowledge of particular interest to older villagers include: how to use the modern medical care system; how to behave as a patient; and how to talk to physicians and other professionals of a foreign culture. The hospital environment offers little that is familiar. The language of the hospital is English, and even the Alaska natives on the hospital staff may be of a cultural group foreign to the patient. Finally, the hospital diet may represent a sharp change from the accustomed pattern of foods.

Persons interviewed about hospital services particularly emphasized the problems for families of patients. If they remain at home, they receive little information about progress of the illness, and if they travel to Nome with the patient, they may experience housing problems. Although the Alaska Native Health Service contracts with several households in Nome to provide housing for patients, families visiting patients generally prefer staying with relatives or with other migrants from their own community -- and for some, such accommodations are unavailable.

For the family remaining at home, the only medium for information from the hospital is the daily radio contact between the village health aide and the physician. These messages are of low priority, yielding to other traffic. We are told that a local public radio station will, on request, transmit such condition reports, but has not developed any routine system for doing this. It is quite evident that a uniform policy on hospital-to-village communications must soon be adopted.

For the villager (as compared with the Nome resident) the chances of being sent to Kotzebue for hospital care are greater. According to the medical records of Alaska Native Hospital at Kotzebue, of the 56 Norton Sound residents admitted to the hospital at Kotzebue in 1970-1971, 32 were from rural areas (84 percent). Thirty-six patients (or 72 percent) were sent to Kotzebue directly from the villages and had no prior medical care at Nome for the illness in question. The summary of the medical record for these persons appears in Appendix Table A-1.
Analysis of the distribution of diagnostic categories among natives admitted to Maynard McDougall and to Alaska Native Hospital at Kotzebue in 1967-1968 shows different patterns of diagnosis in the two groups. Native patients from Norton Sound with pneumonia, diseases of the digestive system or injuries most often gained admittance to Maynard McDougall Memorial, while those patients suffering disease of the nervous system or mental illness most often entered the Kotzebue hospital. The commonest conditions equally distributed, on a percentage basis, between Maynard McDougall and the Kotzebue facility were pregnancy, deliveries and complications of pregnancy. Apparently this diagnosis-related pattern of hospitalization has continued: for example, among the fifty residents of Norton Sound referred to the hospital at Kotzebue during 1970-1971, nine (18 percent) suffered disease of the nervous system or mental illness.

The explanation of this persistent pattern of referral based on diagnosis probably lies in management of the contract between the Alaska Area Native Health Service and Maynard McDougall Memorial Hospital for patient care. Because the aggregate annual expenditure for inpatient care under this arrangement is fixed in advance the physician is under continuing pressure to closely control (limit) utilization of the program. When he is presented with a patient whose condition is expected to require a longer period of hospital care he is more likely to make a referral to Kotzebue. The physician might possibly make the decision to refer on the basis of appropriateness of staffing and facilities for certain conditions; however, the physicians at both hospitals reported in interviews that the treatment capabilities of Maynard McDougall Memorial and the Alaska Native Hospital were essentially equal (for the opinions of village health aides and of villagers on this issue refer to chapter on the Norton Sound Area Health Care Opinion Survey at the end of Section III).

Contrasting with these patterns of medical care for the native population, patterns for non-natives involves a different system of institutions and administrative procedures. Although use of Maynard McDougall is similar for natives and non-natives hospital care outside of Nome for non-natives involves the voluntary hospital system rather than federal hospitals. Since the non-native has arrangements for financing hospital care which permits a degree of choice of hospitals, he may elect to seek care at Anchorage or at Seattle.

The use of Maynard McDougall Memorial Hospital per 1,000 non-native population (using the non-native population of the entire Norton Sound Area as a denominator for calculation) was 192 admissions and 751 days of care during the average year, 1967-1970. These rates differ with those for an average group in the United States of the same age and sex composition (154 admissions and 1,208 days of care). [59-50]

The youthful nature of the population and the high incidence of hospitalization are both factors that need to be taken into account in planning dental
Health services. Not only are preventive Mental Health services apt to focus on this portion of the population, but the high degree of stress indicates that attention to factors involving separation from family and support for the families during these periods of stress are primary care needs. It will be noted that the focus on training CHR's in Mental Health techniques and the heavy reliance on school referrals and consultations only partially meets these needs.

The patterns of illnesses shown by vital and hospital statistics deviate sharply from those found in the average United States community. The predominance of infective diseases and injuries and the heavy burden of illness among children are illness patterns attributable to the low level of economic development combined with an adverse environment. The climatic rigors of the area, poor housing, primitive sanitation measures, uncontrolled accident hazards and the compounding elements of rapid socio-cultural change and educational deficits are major factors accounting for illness.

Health problems of epidemic proportions afflicting the Eskimo population not fully revealed by the hospital and vital statistics are alcoholism, dental deterioration, and malnutrition. In addition, the special problems of mental illness, aggravated by modernization of society, are masked by these statistics. These health problems that require major resources of the medical care system are more fully discussed further on. [22]

Since accidents and violent deaths including homicides are often considered indicators of emotional problems and include any relevant information on suicides, the sections of the preliminary report dealing with these patterns are quoted below:

Injury due to accidental and violent causes results in more deaths than does any other cause, and accounts for about 13 percent of all hospital admissions. The rate of accidental and violent death among natives exceeds that for other races. Most frequent among the causes are boat accidents and other accidents around water resulting in drowning. The next most frequent causes are suicide and homicide, followed by fires causing death by burning. The increased frequency of accidents and violence shows, in part, a failure to develop effective public health programs, as well as to establish controls over mounting hazards of the environment created by man.
The number and rate of deaths due to accidents and violence in the entire state for natives and for non-natives, and the number for natives only for the Kotzebue Service Unit appear in Table II-5. Because the number of deaths for the Kotzebue Service Unit is small, the rates calculated should be viewed as only rough approximations of the true average rates for that population. Rates for natives of that area do not show any important difference from those for natives of the whole state. Additionally, there is no reason to believe that accidental and violent death rates for non-natives of Norton Sound differ from the state-wide averages shown in Table II-5.

Suicide deaths fail to show the high number of suicide attempts. During the first nine months of 1971, the Nome Police Department reported four suicides but 22 suicide attempts. They also noted the major role of alcoholism in suicide. All but one person dying by suicide were intoxicated.

Although non-native Alaskans die from accidents and violence less frequently than do natives, their accidental and violent death rates exceed national averages by a considerable margin. The leading causes of accidental death among non-natives are motor vehicle accidents and aircraft accidents. Water-related accidents with drowning rank third.

The frequency of death in or on the water betrays the special role the ocean plays in the economy of the state, and is sustained by inadequate or primitive safety measures in boating and fishing. Fundamental to water safety are ability to swim and proper techniques in small boat handling and in work over ice (Haldeman).

Another important cause of death is fire. Deaths from fires often involve children, and in a majority of cases in Alaska, occur in burning homes during the winter season. Defective home heating equipment apparently is an important factor.

Alcoholism

Nome has eight bars, one for every 300 residents, (it should be borne in mind that the largest number of urban residents is children). Sale of alcoholic beverages in the area is one of the largest industries and ability to consume alcoholic beverages is a source of pride among residents. In Nome, as elsewhere in Alaska, the bar is a favored place for conducting important business and the Nugget Inn (Alaska Airlines) casually labels their fire hydrant "Fire Water." Liquor is delivered by the case to villages otherwise spared regular supplies, and drinking to excess is the norm.

Most arrests are for alcohol-related problems, and alcohol is implicated in many of the accidental deaths resulting from injuries and assaults. Alcohol contributes heavily to the burden of social disruptions; Bland reports that three-quarters of welfare cases in Nome involving child-neglect result from alcohol and that a third of the Social Service caseload of the Bureau of Indian Affairs results from alcohol-related problems.
Alcoholism afflicts children as well as adults, and profoundly affects the social life as well as health of the community. Drunken adolescents are a regular sight on Front Street and the visitor from the villages may make the bar his first stop on arrival in Nome. But the hidden costs of drinking to the community are recognized only infrequently — the direct expense of medical care and social services as well as the indirect social and economic losses.

The number of deaths due to alcoholism among natives of Alaska per 1,000 native population shows dramatic increase between 1960 and 1969 and the Norton Sound area probably shares a similar increase.

Table II-6
Deaths Due to Alcoholism by Race and Year, 1960-1969
(State of Alaska)

<table>
<thead>
<tr>
<th>Year</th>
<th>Native Deaths</th>
<th>Non-Native Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>4.7</td>
<td>0.7</td>
</tr>
<tr>
<td>1961</td>
<td>9.2</td>
<td>0.7</td>
</tr>
<tr>
<td>1962</td>
<td>11.2</td>
<td>2.6</td>
</tr>
<tr>
<td>1963</td>
<td>11.0</td>
<td>3.6</td>
</tr>
<tr>
<td>1964</td>
<td>23.7</td>
<td>2.5</td>
</tr>
<tr>
<td>1965</td>
<td>19.6</td>
<td>3.8</td>
</tr>
<tr>
<td>1966</td>
<td>16.5</td>
<td>3.3</td>
</tr>
<tr>
<td>1967</td>
<td>20.3</td>
<td>4.1</td>
</tr>
<tr>
<td>1968</td>
<td>31.9</td>
<td>4.9</td>
</tr>
<tr>
<td>1969</td>
<td>25.4</td>
<td>4.3</td>
</tr>
</tbody>
</table>

If we conservatively assume that half of Alaskan deaths due to accident and homicide involve consumption of alcohol, and add deaths due to cirrhosis of the liver as well as deaths ascribed directly to alcoholism, the total number of deaths involving alcohol amounts to over 20 percent of all deaths among the native population and 16 percent among non-natives. Alcohol can therefore be considered the leader among specific causes of death in Alaska.

Since much of the treatment of alcoholism is conducted by social agencies and the police, the medical care system is not fully aware of the burden of this illness. Alcoholism is hidden in hospital and clinic statistics by physicians' practice of assigning other diagnostic labels or omitting mention of alcohol when it is involved in illness. One hospital where alcoholism stands out among causes is the Alaska Psychiatric Institute. A positive history of alcoholism was found in half of all patients admitted, and alcoholism was the fourth most common primary diagnosis (Koutsky).
Mental Illness

The most important measure of social problems due to mental illness is the number of persons hospitalized for mental illness. Much hospital care for mental illness is provided by the two general hospitals -- Maynard McDougall and Alaska Native Hospital -- and the analysis of admitting diagnoses for these hospitals results in the discovery of between 30 and 50 psychiatric cases per year from the Norton Sound area. The records of the Alaska Psychiatric Institute, assuming Norton Sound contributes a share of admissions to that hospital proportionate to population, yield an additional 19 cases (1970-1971). The rates of hospitalization for mental illness derived from these numbers are equal to or higher than the national averages (see Table II-7):

Table II-7
Number of Admissions to Hospitals for Treatment of Mental Illness per 1,000 Population per Year

<table>
<thead>
<tr>
<th>Population</th>
<th>Admissions to General Hospitals</th>
<th>Admissions to Psychiatric Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Civilians, 1965 or 1966</td>
<td>3.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Alaskans, 1970</td>
<td>not available</td>
<td>1.4</td>
</tr>
<tr>
<td>Norton Sound area residents (1970-71)</td>
<td>5.2 - 8.7*</td>
<td>3.3</td>
</tr>
</tbody>
</table>

* Includes admissions for mental illness to Maynard McDougall Hospital and Alaska Native Hospital at Kotzebue only.

As it is increasingly true of community hospitals everywhere, the hospitals for Norton Sound communities provide a primary source for inpatient care of mental illness. However, the low average duration of hospital stay for patients diagnosed as having mental illness suggests that the care received at these local institutions remains less than ideal. In 1968, the stay for all natives with mental illnesses at Maynard McDougall averaged but two days, and at Alaska Native Hospital at Kotzebue, the average stay was only about 15 days. The average length of stay of patients of Alaska Psychiatric Institute, on the other hand, is about 101 days.

Other than general clinics, the only outpatient professional care for mental illness is provided by the Mental Health Team at Nome. Their registers, opened in March, 1971, accumulated a total of 45 cases during the first five months of operation. These patients were referred from the hospital outpatient department (about 40 percent). Staff for the team reports that the professional assessment of need for mental health services far exceeds the capabilities of available resources.
One important element moderating the need for psychiatric care services and facilities is the social structure of the Eskimo community. The family structure facilitates care at home for persons who, in a less integrated society, would be wards of the public; and the less demanding rural environment allows persons with fairly severe mental illness to function at a viable level. Optimum community care of discharged patients is impeded, however, by difficulties of access to villages by the Mental Health Team and by other workers for consultation with family and community, and management of continuing drug therapy. [30-38]

Alcoholism has become a major concern of all Mental Health programs oriented to the needs of American Indian and Alaska Native populations. In many areas the Alcoholism Programs are separately organized and funded, and IHS plays a consultative or supplementary role in the casefinding, treatment, and rehabilitation of persons who are abusing the use of alcohol and/or drugs. In Alaska this is also the case, but to a certain extent no health agency can overlook the incidence or the problems created by alcohol abuse. The Norton Sound Health Corporation report summarizes its findings in this field as follows:

Programs for treatment and prevention of alcoholism

Plans dealing with the problem of alcoholism in Nome have called for education, counselling and recreational programs. These proposals, designed to prevent this illness, are based on popular notions about causation. None of the plans has included medical treatment for the alcoholics and no plans including this desirable feature have been funded. It is noteworthy that the total state tax collected on alcoholic beverages and liquor licenses (1970-71) amounted to 5.2 millions of dollars (representing 5.7 percent of all state revenues). Of this amount only a few thousand have been budgeted by the state for alcoholic rehabilitation programs.

The latest plan for an alcoholism program was submitted by the Norton Sound Health Corporation to the Indian Health Service Alcoholism program. It calls for a recreation center for youths. The wording of the plan suggests that alcoholism is a manifestation of anomie, "economic pressures," cultural change and "social pressures."

Unfortunately, the level of development of alcoholism treatment and prevention is equally limited in all parts of Alaska, and progress in this important effort is impeded by lack of public and professional support. [102]
Finally, the Norton Sound study attempts to come to grips with the problems of serious mental illness in the Norton Sound community.

Program for Mental Health

Under the psychiatric services of the Alaska Area Native Health Services a new community mental health program called the Mental Health Team was inaugurated in Nome in 1971. Staffed by a psychiatrist, social worker and a mental health assistant, the Team provides continuing care for local residents discharged from the Alaska Psychiatric Institute or referred by other hospitals or clinics. The Team makes a limited number of visits to villages in the area for consultation and for follow-up of patients. Support, training and supervision for the Team come from the Medical Center at Anchorage. [103]

It is against this background that the Anchorage Area Office deployed Mr. Muhs to Nome for the year 1971-1972.

2. Fred Muhs, M.S.W., 1971-1972

The first effort to decentralize professional staff by establishing them at a base away from Anchorage was made in 1971 when Mr. Fred Muhs, M.S.W., accepted an assignment to Nome. Mr. Muhs had made consulting visits to this Service Unit base in the course of his other duties, and with a small plane of his own, felt that he could reach the villages and also remain in touch with Fairbanks, Anchorage, and Kotzebue. He liked the outdoors and made himself one of the men of the community, participating in fishing and whaling expeditions and generally accommodating to life out from the foci of civilization. There was, however, one large, insurmountable problem: No house or apartment or other living quarters was available. There could be an entertaining saga written around the adventures of that year -- of how he used a teacherage for a few weeks during the summer, but had to vacate as the school year arrived and with it the teachers who had first claim on the apartments -- about using empty cabins when folks were away, and about sleeping on couches and in spaces shared with a variety of families. As was mentioned in the introduction, it is extremely expensive to
provide housing, and IHS did not have the $50 to $60,000 to spend. Even had they been able to make the commitment, it would have taken a year at the least to order and ship the materials and install a trailer or other type of housing. It is a small example of the pioneering spirit that Mr. Muhs was able to stay for a year under these conditions and establish a local base for Mental Health Services, as well as forge links between agencies and the native populations, both in Nome and in the villages nearby.

Nome is the focal community for the Norton Sound Health Corporation, which in IHS initial planning had not included Mental Health services, but was rather interested in organizing so that prepaid health insurance, as well as IHS contracts, could provide for basic medical care. There is a non-governmental hospital in Nome which does serve the native population on a contract basis. However, if stays of a week or so are required, IHS generally prefers to forward patients to the Kotzebue hospital across the sound, which has more beds for longer care. Kotzebue has a general surplus of beds except in emergencies and epidemics and is able to manage hospital stays of several weeks, but if a situation is more critical or requires specialists, then it arranges for transport to Anchorage. This pattern applies to Mental Health services as well as medical and surgical cases.

Mr. Muhs worked with a Mental Health worker from one of the nearby islands (community of Savunga) and also with a PHN from the hospital staff, and the CHR's from the villages. The CHR's in the villages have much more training and also more responsibility than many CHR's in tribal positions in the "lower 48," where contact with IHS and local health facilities seems closer. Actually this may be an illusion. A visiting evaluator from World Health Organization suggests that the services available in Alaska are adequate and, because of the communications systems by telephone and radio and the use of air transport, are probably getting to people in need as quickly, with as adequate care, as anywhere.
in the world. Having just read of a six hour wait for an ambulance reported by a resident of a major Eastern metropolis, this seems quite credible.

The CHR's learned Mental Health principles and were able to make use of consultations and to schedule either a transport of the person in distress to Nome or a consultation through a visit to the village when this was indicated. Regular village schedules were established. This was no easy feat since the budget requires that they be planned a year in advance and, of course, many outsiders feel that each village should be visited equally. However, Mr. Muhs and his colleagues arranged the schedules so that those villages where former mental patients resided, or where there were other indications of high risk, were visited more frequently than some of the other villages.

It is not always clear whether the availability of services develops an appetite for them, or whether if no outside resources are available, it is too much trouble to make things known to the rest of the world. Certainly, there seem to be some fluctuations that parallel availability. For instance, during the winter when it is available by ice sled and again when open water allows boat transportation, the fifty miles to St. Lawrence Island shrinks, and a rash of referrals and consultations may occur. However, when contact was cut off by barriers to transport, reports also decreased. There is some feeling that this may also be related to the greater availability of alcohol during the periods of relatively easy contact, and if so, the number of Mental Health referrals should decrease as the village has decided to exercise some controls on importation of alcoholic beverages as a means of local control of what is a chronic problem.

During the time Mr. Muhs was working actively with Nome and its villages, there were two villages that were hit with suicide epidemics. In these instances there seems to be a kind of chain reaction, not unlike the one glimpsed in the case example of Egegik reported earlier. These two series occurred about two years apart in time, and in each about seven people died before the matter was
brought under control. In one of these the original Mental Health Worker was one of the casualties, which caused a very serious morale problem.

However, a second Mental Health Worker has been recruited, Ms. Lucy Trigg who lives in Nome with her family (a husband and four children). She received training at the specialist training course at Fort Sam Houston, which is a resource also used by the Oklahoma Area, and has found it extremely valuable in her work. With the support of the local Public Health Nurse, there is the nucleus of a team to focus the efforts of CHR’s and mediate between the local population and the other resources. Ms. Trigg and her family live in apartments made from an old BIA dormitory and also care for two foster children who come in from the villages to attend the Nome Regional High School. In this role she provides consultation both formally and informally to other families who serve as foster parents, both in the dormitory apartments and around the rest of Nome.

School consultation began in two ways: (a) Mr. Wuhs consulted regularly with the Dormitory staffs during his two years of involvement. (b) Dr. Nachman who had worked with the elementary schools, followed students into the High School at Nome and opened up consultation channels in the schools themselves.

(a) The Dormitory, linked to the High School by tunnels for use in inclement weather provided living quarters for the students from the villages. However, in 1973 it was closed down and the Nome BIA and State Schools combined into one regional school for the Borough. Children from outlying settlements are now placed, usually two at a time, with families in town, rather than huddled in a dormitory. This provides many positive situations more like normal family life and should improve the odds that the youth so placed will be better able to function in homes of their own as adults than the many who had never experienced home life after elementary school age.
This placement and supervision of pupils is a growing activity of the local Norton Sound Corporation, but it was not met with enthusiasm at first. The police for instance felt that it was simpler to keep all the problems bottled up in the Dormitory -- and it was easy to send any and all youngsters back there rather than find out who they were, where they lived, and what they were doing. However, the townspeople, on the whole, find it working out well, and the Nome police are beginning to find that there are fewer rather than more problems of a delinquent nature to take their time and attention.

(b) The school consultations deserve further mention. As has been noted, evaluation of children with both learning and behavior problems has been a special interest of the psychologists attached to the Area Office. Since the local village schools, both state and BIA administered are generally elementary schools, this was the initial focus for Dr. Nachman and later Mrs. Doak. As pupils with whom they worked entered the Regional Borough High School at Nome, it was natural to follow them and to use the case consultation method with the secondary school staffs as it had been utilized with the elementary teachers.

In addition, there is a parochial school near Nome, although technically in the Bethel Service Unit region. St. Mary's School is selective in its admission policy, and pupils are sent there by families who especially desire the benefits of church related education, as well as its high standards. The home support and the links between home and school maintained by the teaching Fathers, as well as local priests, set an example of what can be done with local Alaska native pupils and their normal resources. The IHS team also consults to this school, which has elementary pupils who may after the eighth grade proceed to Nome Regional High School. (Few, if any, of St. Mary's pupils enter BIA Boarding Schools.)

These links have developed into a solid consultation relationship and enable the psychologists also to make regular visits and to offer supportive
clinical expertise to the Mental Health Worker and Public Health Nurse who live in Nome, and to the CHR's in the villages.

The Norton Sound Health Corporation also became interested in the use of a Crisis Line, since all the villages in this area are served by a fairly reliable telephone system. It was formed in response to the needs seen during one of the suicide epidemics mentioned earlier and after considerable reading about how such hotlines worked in other places. The planning involved the use of volunteers who received basic Mental Health training and developed counselling skills. This mobilized the attention of the city in the general promotion of Mental Health Services. The Hotline itself has now evolved into a cluster of services for crisis intervention, including a drop-in store front clinic and a network of referral resources.

These services, including the IHS consultations and work with the State Troopers and local police mentioned earlier, tended to work so well that it no longer became the first move to send someone who became disturbed to either the Alaska Psychiatric Institute or AMC for treatment. Instead, a number of options developed. A CHR, with consultation and back-up, might choose to handle the situation herself or to utilize the staff in Nome. If brief hospitalization was required, then either the Nome Hospital or the IHS hospital in Kotzebue could be used. Going to Anchorage could become a relief from the rigors of the Arctic frontier, but it also involved separation from family and community. Often the choice could be left to the individual and the family, and follow-up plans could be initiated almost before departure, if the trip away were elected.

That this system worked well is reflected by the half serious accusations that IHS was attempting to keep patients out of the Alaska Psychiatric Institute and that they had a shortage of patients. However, relationships between the State facility and IHS continued to be flexible. When there was an
emotional overload on the Kotzebue staff, or a real shortage of beds and nurses, the Alaska Psychiatric Institute could pick up the overload on a flexible basis, and admit patients on IHS request. As the inpatient unit at Anchorage developed, this offered still another option and exchanges could be made both between staff and between patients, according to the needs of the various parts of the system. This provision for flexibility has kept the mounting tensions of an emergency, or series of emergencies, from breaking any of the links by overstraining their capacity to function adequately, and probably optimally.

Although, in a sense, the effort at decentralizing the professional staff appears to be a failure, since no permanent assignment could be made to Nome, in another sense the experience demonstrated the value of even a one-year investment in full-time professional expertise at an outpost. The continuation of the gains made during this year seem clear, and they are solid accomplishments.

B. Anchorage: Alaska Native Medical Center

1. Genesis Under Pressure: The Inpatient Ward

Although the initial planning of the Mental Health Team in Alaska was for broad involvement of all resources available into a coordinated mental health program having its immediate impact on the outlying rural areas, some of the Area administrative staff persistently held the belief that the clinical expertise of the mental health staff should be made available through the Alaska Native Hospital in Anchorage. This facility is a 300-bed hospital which not only serves as a general medical
unit for the Anchorage vicinity, but as a referral and specialty hospital for the entire Area. Psychiatry was defined in the Area Administration and Hospital Directors' minds as a parallel specialty with orthopedics, surgery, pediatrics or cardiology. Mental health more broadly defined seemed to belong to the same category as other preventive and outreach programs, for which there is scant time, insufficient staff, and consequently little emphasis in comparison with direct medical service. The pressure from the physicians and from those administrators who shared this point of view was continuous from the beginnings of the program.

In 1971, an expansion of the budget enabled the IHS mental health unit to bring on board an additional psychiatrist and a General Medical Officer interested in receiving something like the equivalent of residency training. Dr. William Richards was assigned full time to the Alaska Native Medical Center in Anchorage, by consultant psychiatrist and Dr. Kirkpatrick also allotted a portion of his time to that service. Dr. Richards did not immediately open an in-patient service, but continued on a more extensive basis the pattern of physician consultation around patients and of training and case conferences for other staff at the Anchorage facility. Psychiatric patients from outlying Service Units, as well as those whose disturbance showed up after admission, were given attention and consultation while remaining the patients of a general or specialty ward appropriate to their other difficulties. In appropriate cases transfer was made to Alaska Psychiatric Institute for short or long term stay, and the Harborview Institution in Valdez for the mentally retarded was also utilized.
2. Setting-up and Staffing the Inpatient Ward

By mid 1972 (fiscal year 1973) it became evident that the shakiness of the resources at Alaska Psychiatric Institute together with the increasing use of the Anchorage Hospital now that resources were available and staff had been sensitized to recognize emotional disturbances, led to the move to establish a full-time in-patient ward. This was accomplished in an unusual exchange of roles among the IHS staff. The psychiatrist, who for two years had headed the Area program, Dr. Charles Hudson, elected to remain with IHS after completion of his two year tour of duty, and to take over the in-patient ward and hospital consultation activities. Dr. Richards, who had been attached full time to the hospital, also elected to remain in IHS and in Alaska, and assumed charge of the Area-wide mental health program.

Three native Alaskan nurses were assigned to the ward, along with other IHS nursing personnel. Linkage had already been established through consultation with the vocational rehabilitation unit which provides occupational therapy for work tolerance, and vocational counselling activities for medical as well as psychiatric patients. Volunteers also provide religious and recreational opportunities for patients both in the hospital and on pass to the off-grounds settings. The Social Service Branch, rather than the Mental Health Branch, provides social work liaison with families and communities once a patient is admitted.

Space was allocated in a wing formerly devoted to TB patients, now no longer needed in the waning of that epidemic. The atmosphere is certainly one of hospital and a medical setting. There are few, if any, visitors,
and contact with those not directly on the staff is limited. The nursing
station, offices, laboratory facilities and paging loudspeakers, as well as
the room arrangements leave no doubt about the type of institutional context
or the medical flavor of the treatment to be expected.

3. Techniques and Philosophy

The treatment modalities are traditionally and medically
oriented. There is heavy reliance on medications and drug therapies, and
use of electro-convulsive shock as well as conventional one-to-one and
small group therapy. In 1973 there were frequent staff and patient group
meetings but these were closed to visiting observers. It was a general
impression, however, that under Dr. Hudson's leadership this group meeting
was far from the democratic and often free-ranging interaction that charac-
terizes the IHS Gallup Ward. For one thing, there are relatively few native
staff, and all activities are pretty much conducted in English, even
though studies in other minority groups suggest that where bi-lingualism
exists, many core emotional attitudes are encoded in the primary or
familial language, and do not emerge in the second language (in this
case, English). However, if one does not have available trained or in
training representatives of Eskimo, Aleut and Indian therapists, one must
manage within these limitations. And if one is working within a hierarchical
medical setting that is familiar, one may do well to preserve those aspects
which free one to manage relationships that are therapeutic within that
context rather than risk needless tension. These choices are well within
the prerogatives of the head of the service and the resulting choices appear
to be establishing a fairly efficient inpatient ward along traditional lines.
The case load of patients tends to be young, mainly persons below thirty and to be largely made of character disorders and personality disturbances which may also be associated with suicidal gestures, violence, and alcoholism or drugs, and stresses of adjustment between cultures. The resources of the specialty hospital are available for any concomitant medical problems and the the types of treatment can proceed in parallel when necessary. The psychiatrist in charge also functions as a general medical officer in rotation on weekends and nights as OD of ANMC as a whole.

Long term care for chronic psychotic patients for whom no return to the community can be planned is still the responsibility of Alaska Psychiatric Institute and the Harborside Home for the Mentally Retarded. Potentially, a few elderly persons in this category might be placed in Alaska's nursing homes, but these are few in number and tend to secure their residents more directly.

Although this description seems rather sterile, the feeling one has on visiting the ward is of the intense concern and dedication of the staff and of a very human interaction between staff and patients within its own context. One chance contact with the patients revealed that they do have some activities of a social-learning variety. During a weekend stay in nurses quarters, there was opportunity to observe a group of lively young men in their early twenties on a "treasure hunt." They were active in groups of two or three querying the switchboard operators, security guard, visitors and others available in the public spaces of the hospital for the definitions of a list of abstract words such as
"Joy", "peace", "violence", etc. Following each definition, they solicited an observable example of the concept around the hospital. "Violence" illustrated by someone who had observed the security guard's interception of a potential car thief a short while before; "Joy", by the description of a mother and child reunited during visiting hours, etc.

4. The Future

The Anchorage ward results from six years of efforts to meet the needs of both the medical and surrounding community for intensive and segregated treatment of disturbed persons, and the inability to locate and support adequate other resources for this purpose in the non-federal support system. Whether it remains an integral part of the system in the future, or whether as the local and state support systems develop further it will phase into other functions, remains to be seen.

One reason for optimism about the potential of the unit is the fact that the psychiatrists most have shared each other's functions and have been seasoned by prior INS experience in the Alaska Area. They have also drawn into a consultative arrangement the private and state psychiatrists in the Areas, as well as teaching and research faculty. There are some strains in the initial stages, particularly as outsiders are easily confused about the exchanged roles of the two principals. But as they themselves sort out their differing responsibilities, it would seem that after six years of mental health work directed toward outlying Service Units, the introduction of the in-patient facility into the total range of services extends that range rather than limits it.
C. Other Service Units: Bethel and Fairbanks

1. Bethel

By 1973-74 some additional moves toward decentralization were being made. Verner Stillner, M.D., who had had previous IHS experience as General Medical Officer at Wind River Reservation in Wyoming completed his residency in psychiatry at Harvard in June of 1973 and accepted a placement at Bethel, Alaska. There he is developing a comprehensive program including work with the Community Health Representatives, Mental Health Workers and IHS medical staff at the Bethel Service Unit. Some of his activities involve the surrounding villages and coordination with the Yukon Kuskokwim Health Corporation.

After the first year, in July of 1974, Dr. Stillner and his wife Marianne Stillner, R.N., MS, presented an account of their experiences and problems in adaptation to the isolation and the far north at the International Symposium on Circumpolar Health at Yellow Knife, Northwest Territories, Canada. This account, which is quite frank and personal, is one of the few narratives from IHS professionals to deal with the issues involved in isolated assignments in general, and the effects of the Arctic winter in particular. For this reason it is quoted below in its entirety as a thought-provoking and unique document.
ADAPTATIONAL EXPERIENCES IN AN EXTREME ENVIRONMENT

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Introduction:

Providing mental health services to a rural environment is a challenging, often neglected endeavor. This is particularly due to the urban professional's reluctance to assume demanding and often alien life styles. The U.S. Department of Health, Education, and Welfare is now addressing this deficiency by designating medical shortage areas and offering incentives for medical personnel to serve in these areas. (4)

Since the recruitment of medical manpower in extreme environments will not be readily resolved, the training of local practitioners could help alleviate the critical shortage. Relevant and effective training will require the professionals to leave their urban "educational citadels" and assume exotic life styles.

The ensuing psychological, physical, and cultural stresses will have implications on the effectiveness and longevity of the urban educated professionals. Effective exchange between rural "trainee" and urban "trainer" is a reciprocal motivational process requiring the "trainers" to make a sound adaptation to their new environment. This paper describes our stresses in adapting to a medical shortage area.

Southwestern Alaska is both a medical shortage area and an extreme environment. (4) It represents a sub-Arctic region of 75,000 square miles. The predominant native (Eskimo and Indian) population numbers 15,000. A major portion (80%) of this population reside in 57 villages next to the rivers and the Bering Sea.

Bethel is the hub of Southwestern Alaska, with a population of 2,000-3,000. The town is accessible only by air and the Kuskokwim River. Winter windchill factors reach -75°F. Permafrost complicates water and sanitation conveniences. Fishing is the major industry. The per capita income is low ($1,670.00); and the cost of living is the highest in Alaska. (12)

We moved to Bethel in July 1973 to work as Alaska's first full-time rural psychiatrist and child psychiatric nurse. This placement of a Public Health commissioned psychiatrist was part of the Alaska Native Mental Health Service decentralization program. The hiring of a child psychiatric nurse by the local Native Yukon-Kuskokwim Health Corporation was a first attempt to offer preventive mental health services to children.

Recent participant observations describing the behavior of Arctic and Sub-Arctic peoples have been published. Jean Briggs (2) lived with Canadian Arctic Eskimos for 17 months. She vividly described her personal reactions to the Utuku and their psychological behavior, in particular their emotional concepts. Norman Chance (3) provided a study of changing social patterns of North Alaskan Eskimos. He described dynamics of change including personal identity and personality factors.

*Note: The Stillners are referring to the entire peninsula rather than the Service Unit of Bethel. Some of these villages are served by the Kotzebue Service Unit to the North. However, the lack of correspondence between geographic and administrative boundaries, and the relative difficulty of dealing with that many small communities in the intimate ways that mental health programs are accustomed are some of the stress inducing factors of the Arctic environment.
A few observations of psychological reactions of "newcomers" to extreme environments have been printed. T.J. Boag (1) made personal observations of behavior problems such as sleep loss, apathy and personal isolation among men temporarily living in the Arctic. J.S. Willis (13) also discussed difficulties of men living in a Canadian Arctic settlement. Willis emphasized privacy of family units, recreational facilities, adequate medical services and schooling, and community grievance committees as important considerations in planning a northern community.

There have been a number of specific studies of men stressed by wintering in the Antarctic. E. Gunderson (4) studies individual behavior patterns in confined groups. In 1972, M. Popkin et. al. (10) conducted psychological and biochemical testing on 22 men after 12 months of South Polar isolation. The authors were unable to link two discrete behavioral phenomena of "staring" and "drifting" with a thyroid and thiamine clinical abnormality. Several investigators have described sleep disturbances, irritability, cognitive impairment and depression as regular occurrences of the wintering experience in Antarctica. (7,8,9,11)

Personal descriptions of family, professional, and social experiences of practicing rural professionals have not been recorded in the literature. We will give an account of our adaptational process in an extreme environment.

During the first six months we made serial tape recordings totaling 5 hours. These described our subjective and objective observations. One recording was conducted in a semi-structured manner by a psychiatric consultant. The others were open-ended. We arranged the content into three categories: personal-family, social-political, and professional. In addition we each scored ourselves on the Zung Self-Rating Depression Scale (14) 12 weeks before moving and at eight and sixteen weeks after arriving in Alaska.

Personal-Family:

Our departure from the Northeastern United States separated us from our friends, family, mentors and an enjoyable environment. We felt guilty for leaving aging parents. Our six month old son was deprived of his grandparents. Seeing our new home left us lonely and stunned by its strangeness.

The closed physical environment increased our feelings of alienation. We experienced sensory deprivation. The treeless, excoriated tundra around our tract home presented visual monotony. Ankle-deep mud from summer rains, poor roads, and the inability to get away made us feel trapped.

Living in a new housing project complicated our initial adjustment. There was no fire exit in our small frame house and several burned housing "skeletons" stood nearby as grim reminders of this threat. Because of frozen water and sewage pipes from the previous winter, we used "dish" water and a "honey bucket". The packed water, with its high iron content, was suspected for any slight regression in our son's health and precipitated fears of exotic diseases.

Our behavior during the first six weeks could be termed hypomanic. We were constantly engaged in domestic chores and professional preoccupations; yet, we have no motivation to pursue hobbies. We were not elated. These concerns and obsessions resulted in decreased family communication and recreation.
Much of our behavior was consistent with symptoms of depression. (9) We experienced initial insomnia. One of us had terminal insomnia. Both of us experienced decreased libido. We were subjected to 20 hours of daylight and constant physical fatigue. Occasional nocturnal doses of Diazepam (5-10 mg.) aided us on our sleep.

We began to reverse these symptoms during a weekend visit to a coastal village. This excursion enabled us to transcend our daily environmental stresses and professional demands.

Returning, we initiated our only mutual recreational activity: bi-weekly karate classes. Not only was karate an excellent physical conditioner, but it also provided an outlet for the anger, frustration and aggression we were beginning to accumulate.

Another positive contribution to our adaptation was the enjoyment we experience rearing our son. Observing his maturational progress helped give an objectivity to our stresses.

At 12 weeks one of us made the statement: "I feel like I've made it, but I have lived 10 years in 3 months." It took approximately another eight weeks before both of us were functioning at our pre-move levels.

According to the Zung Self-Rating Depression Scale one author experienced anticipatory stress prior to the move, with a rapid resolution to normal range after eight weeks in Bethel. The second author scored in the normal range pre-move, and experienced greatest stress at eight weeks post-move. By sixteen weeks both authors scored in the low normal range according to the Zung Scale.

In examining our motivations for moving to an extreme environment, we recognize in each of us latent desires to become medical missionaries as a fulfillment of our religious backgrounds. We were however confronted with ambivalent feelings about introducing our particular psychiatric models into another culture. Unfortunately, the same forces which generate a desire to "help" others often result in infantilization of the "helped". We tried to minimize this problem by understanding our own "dynamics".

Living outside the local economy created root feelings in us. Most of our supplies were shipped in from distant merchants. We began to feel like invading entrepreneurs and thus tried to work harder to dispel these thoughts.

Conquering the challenges that our environment provided became a strong motivational force in itself. Although it was difficult and frightening, we developed self-confidence. This was accomplished through a strong familial unit and through gradual entry into the community by way of native colleagues.

Socio-Political:

We left friendships in a highly inbred professional environment. In our new home we felt we were a minority, both professionally and racially. Living away from the "medical compound" separated us socially from hospital peers. Socializing with people of varied backgrounds, training, and ages was a new experience. Moreover, townspeople scrutinized us closely and were cautious of our interest in "activities of the mind." The confidentiality of our work made us feel isolated.
The closed nature of the community illuminated all social interactions and their underlying political ramifications. Much of the sub-grouping that we encountered resulted from socio-political inbreeding of agencies. This made it difficult to socialize in any group without becoming politically earmarked. The temptation to be seduced into territorial power struggles frustrated us. Power was the important commodity in daily exchanges. People assumed that because we dealt with behavior and the mind, we would naturally agree with their social hypotheses, be it the firing of a school teacher or voting the town "wet" or "dry" in the coming election. We had numerous invitations from groups to align with their causes. Due to the political crossfires generated by these power struggles, we remained socially isolated. Another difficulty in forming close friendships was the migratory patterns of potential friends. Living in Bethel is like living in an airport. For both recreational and professional reasons, we were absent from the town about 25% of the year. Our work colleagues had similar schedules. Social interactions with colleagues remained forms for work-related issues. Consequently, we developed a social life with professional colleagues living 500 miles away.

Professional:

We completed our respective educations in Boston, Massachusetts immediately prior to our arrival in Bethel. Thus, the transcultural, rural exposure presented a first in almost all aspects of our work. Fortunately, two reconnaissance visits to Alaska in the nine months preceding our move allowed us to anticipate some of the differences between the two environments. As we were the first full-time mental health workers to live in Bethel, community expectations were high and often unrealistic about what our services could provide. Our knowledge of the previous year's homicide and suicide rates provoked a statement recorded at 5 weeks: "I feel like I'm a lifeguard on a sea of psychoses." Our exposure to violent behavior, often alcohol related, fostered a fear of verbal and physical aggression, including homicide. This fear lessened as we became familiar with community's cultural patterns of expression. The geographical distance from past mentors and supervisors also contributed to our insecurities. Our extensive personal library of professional books and journals served as a tranquilizing influence on these uncertainties. Gradually, we learned to use two visiting psychiatric consultants. As experience accumulated, we evolved a greater reliance on consultation from our Eskimo colleagues and from the Yukon-Kuskokwim Social Service Study Committee, a group of village men.

Interviewing Eskimo adults and children posed problems due to our inability to understand non-verbal and facial expressions. For example, a person might respond affirmatively by the slightest raising of the eyebrows or negatively by twitching the nose. Written material and children's drawings were easier to obtain than verbal production.

Lengthy interviewing through third party translators frustrated client, translator and interviewer. Interviews sometimes violated social taboos. Certain words were difficult to translate; quantification and establishment of temporal relationships seemed to be less relevant. This occurred primarily with adults. Communication with children through play and drawings was less complicated.
The lack of understanding prevalent norms created nosological problems. For example, apparent affective disorders did not respond to intervention with "tricyclics." Therefore, emphasis was placed on symptom alleviation rather than on diagnosis.

Long term treatment, similar to us in our training, was often impossible due to the migratory nature of the clients. Job opportunities, medical and legal needs, and schooling precipitated constant travel from village to town to city. Consequently, short term therapy had to be effective in one to three sessions or through written correspondence.

Proper regiments of psychotropic medications were difficult to prescribe through third parties on short-wave radio. Initial heavy reliance on psychotropic medication decreased after becoming familiar with the behavior, thoughts, and feelings of the people. The establishment of effective native mental health workers also reduced reliance on medication.

These workers aided us in establishing a village outreach program. The surrounding 57 villages presented a network of clients that generated consultations from sources including health aide, public health nurse, teacher, clergyman, village council or agency worker. The villages are delicate ecological units. Visitation by non-native behavioral scientists easily disrupted the psychological homeostasis. Successful village outreach required proper invitations, introductions, and village participation. In addition, we required psychologically knowledgeable translators.

The training and psychological support of bilingual mental health workers were difficult due to the problems in the selection of the relevant educational content and communication difficulties. However, we soon recognized that the training of local health workers would bring the best long term results. They bridged many other trans-cultural difficulties. Once we were able to allow these workers maximum professional freedom, the reciprocal learning process progressed.

Comment:

Our total immersion in an extreme environment has been a painful maturation process. A number of factors stand out as beneficial to our adaptation.

The two pre-move Alaskan visits enabled us to dispel some of the fantasies we had about living in Alaska. We were able to prepare ourselves for the environmental changes. During these visits we developed colleagues from whom we received preparatory information on housing, food and clothing.

These visits also stimulated self-analysis of our motivations for working in an extreme environment. Our husband-wife competitiveness had to be acknowledged before isolating ourselves in an area where professional activities assumed so much time and energy. We became aware of potential stresses to our marriage. Also, we developed a new awareness of rescue fantasies and delusions of professional grandiosity. By keeping these notions in check during the year, we prevented two relatively common side effects and psychological stresses became less overwhelming after we developed an activity to keep physically fit.
Professionally, establishing a relationship with knowledgeable, trusted consultants provided us with valuable periodic input. The selection of competent indigenous colleagues helped us develop a reciprocal working relationship and broaden our clinical skills.

In summary, there are those features that are unique to an extreme environment and those that are common human experiences. All personal experiences are magnified where there is an environment with few exits. Proper anticipation of these stresses can facilitate a good adjustment to the total environment. Before training of rural manpower can be effective, the urban "trainer" has to make a good adaptation to his extreme environment.

REFERENCES


2. Fairbanks

Roger Coleman, M.F.T., who had one year of psychiatric residency and who has been associated with the dormitory programs at the University of Alaska, is now available in the Fairbanks Area. A Social Work Associate is also assigned to this Service Unit and has been active in knitting together services within the Tenana region, especially around nursing homes, the local state health department, the Fairbanks clinics and the Tanana Chiefs Corporation.

D. Summary

Difficulties in decentralizing from Anchorage are many. The long term effort to deploy Mr. Muhs to Nome is a typical rather than an isolated problem. Housing remains a critical factor for any new professionals or their families. It can also be critical for Native paraprofessionals who do not already have a home in the location to which they might be assigned, making flexibility of working assignments very difficult away from the major cities. In addition, there is the problem of keeping in touch with the other professionals in one’s own specialty. There is a tendency for the natural operation of the ‘out of sight, out of mind’ phenomenon. One Social Worker acting as Mental Health Coordinator mentioned bitterly that while he could call Anchorage if he had a problem, he would like once in a while just to talk with someone. He wondered if anyone else was noticing the same phenomena
with patients, or had thought of trying tactics the same as or similar to therapeutic strategies that he had been developing. And of course, he hoped that someone might have some new ideas that he might try. However, when he arrived two and a half years before, there had been no Area-wide gathering of Mental Health staff, and no funds for trips to and from his Service Unit. He appreciated the unified vote of confidence in his abilities but felt left out at the same time. This isolation could be a danger to morale and efficiency that might offset other desiderata of decentralized programs.

VI. PATIENT CHARACTERISTICS AND FLOW

It is important to describe a program not only in terms of its own efficiency and morale, or how well it seems to represent a balanced ideal team, but also in terms of the patients it serves and changes in the characteristic flow of people through the services offered. Like all other JHS Mental Health programs, Alaska has not had the benefit of separate records during its formative years. A new data collection system, problem-oriented but making provision for diagnostic categories where these are appropriate, will be in full use by both Mental Health and Social Services personnel within fiscal year 73-74. Until these data are available, the diagnostic entries in hospital and Service Unit charts are all that can be used to get any picture of the patient population and its changes during the expansion of the Mental Health Services programs.

The accompanying tables were prepared from raw data provided by the Office of Systems Development for the Alaska Area Native Health Service.
Tables Ia and Ib describe the distribution of the Mental Health Service clientele according to sex and age for the years 1968 through 1973.

With the exception of a decline during the years 1969 and 1970, the pattern has been a progressive increase in total patient census over the years. The nature of the increase is particularly interesting: while there is a slight decline in the absolute numbers of women served over this period, there is both an absolute and relative increase in the numbers of men. The caseloads are consistently weighted with adults in their middle years during the period surveyed.

Table II was prepared in an attempt to shed some light on the change in male/female patient composition. From this table, it is quite clear that there has been a striking increase in the proportion of patients with alcohol and alcohol-related disorders, and that the major increase has been among male patients served with this disorder.

An interesting comparison can be made with figures provided by an analysis of the first two years of patients seen by the Mental Health Team and subsequently given psychiatric diagnoses. A rather complete discussion of these first cases is reported by Dr. Bloom in "Psychiatric Problems and Cultural Transitions in Alaska", Arctic 25:3 Sept. 72. Although different categorical descriptions are used and though Dr. Bloom presents more detail, Table III has been constructed from his data for comparative purposes with the 1973 figures. The table evidences the continued trend of increasing attentions to alcohol-related disorders, though offering no explanation.
ALASKA AREA NATIVE HEALTH SERVICE

ADMISSIONS DUE TO MENTAL DISORDERS

I. Demographic Characteristics

1a. Sex

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
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Table III

ALASKA AREA NATIVE HEALTH SERVICE: PSYCHIATRIC CASELOAD
COMPARISON OF DIAGNOSTIC CATEGORIES AND SEX OF ADMITTEES

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<tr>
<td>1. Alcoholism and alcohol-related</td>
<td>7%</td>
<td>6%</td>
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<tr>
<td>2. Chronic brain disorder other than alcoholism</td>
<td>5%</td>
<td>2%</td>
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<tr>
<td>Totals</td>
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It is not clear whether this increase in the proportion of alcohol-related disorders is due to a change in diagnostic style, or whether it may be based on new service policy, such as an alcohol outreach program. (One would tend to discount the alternate hypothesis, that there has been an increase in the incidence of alcoholism in the general population during this period.) In any event, it is through the alcohol disorders that an increasing number of male patients seem to be finding their way into the mental health care system.

Another observation regarding age characteristics: on a year-by-year basis, approximately 15 percent of the patient population is under the age of twenty. However, some 50% of the total Native population of Alaska is under twenty. Thus, in spite of school consultation programs, etc., there is a great disparity between the resources expended on this population age-group and their representation in the general community. This is, of course, not a unique situation. One wonders, however, if the pattern of responding to crises such as alcoholism which diverts attention from other priorities such as children’s services, is not something which will have to be re-examined when there is a spare moment or two (which seems unlikely), to reconsider long-term goals and programs.

VII. AN OVERVIEW

A. Problems, Current and Potential

The strong growth of the Alaska Area IHS Mental Health Program has only been sketched in with broad brush strokes. However, it has not been an even progress, nor is it necessarily a smoothly running operation at the present time. Several problem areas seem to have potential for further growth.
and integration into one another, and in time may hopefully be made to operate
hand in hand.

1. Urban Emphasis

This is an urban and town program, meeting the needs of the
Native peoples who are in transition from the villages and traditional ways of
life. To one estimator, only about 30\% (15-20,000), at most, of the current
Native population still retain traditional ways and make their livelihood
from the game, fish and sea mammals of the far north, rather than from
wages or welfare and cash economy. Until these traditional people have a
desperate need for whiteman's medicines or skills, they do not come into
contact with IRS clinics, and the villages are too small, too scattered and
too remote to be efficiently reached by a mental health team no matter
how desirous these might be of shoring up traditional coping styles and
aiding in times of emotional stress. Only one member of the mental health
staff professionals has had any real experience with living at the village
level as one of the people, and one has had public health nurse contact
with smaller communities. However, until both decentralization and travel
problems are solved, the use of paraprofessionals or community health
representatives in this remote level of the population will probably be
unsuccessful since professional back-up and contact is so infrequent and
erratic.

As a mitigating remark against interpreting this as a condemnation, one might
imagine one hospital in the city of Houston being held responsible for delivering
front line mental health services to all communities in Texas. This is
about the geographic scale of the problem of each of the seven Service Units within Alaska, and should be acknowledged.

2. Staff Morale

The staff is large and heterogeneous, being officed for the most part in Anchorage. Nevertheless, there exists a definite lack of means for exchanging ideas and developing common goals and programs. The size of the staff has already been commented upon, but the group's heterogeneity must be experienced to be comprehended. One finds Jungians and traditional analytically-persuaded therapists; transactional analysis experts and those who favor electro-shock and chemotherapy; those who utilize individual case conferences as a means of teaching and those who prefer to work with community leaders and political power structures. Some have the requisite patience for research and careful sifting of data; others are more likely to roll up their sleeves and meet immediate crises head-on. The staff is a fertile mixing of minds and talents and suggests that, if properly harnessed, their energies could find beneficial ways to those patients and situations where they are most needed.

However, a child psychiatrist may find himself assigned to operating an adult clinic, and a specialist in developmental examinations may be unable to consult with a specialist in family therapy because their orbits and interests have never been exposed to one another in a working relationship. In addition, there are enough psychiatrists within the IHS and in private practice within the state that these staff members find their social and professional needs met without including other disciplines,
resulting in stratification, cleavages, and unfortunate imbalances. Even without decentralizing, low morale exists in some segments of the staff due to a feeling of isolation from others just down the hall, and frustrations result from the distinct lack of an integrated program in which their hard work can earn a recognized place. In time, these feelings may become even more critical as the decentralization trend tends to leave more and more people isolated, both geographically and intellectually.

3. Paraprofessional Utilization

Alaska has set a very high standard for its paraprofessional personnel. The Alaska Natives who have been most successfully retained are truly technicians; Psychology Technicians are fully capable of giving and scoring complex psychological tests; Social Work Associates have had extremely careful and thorough training, and their supervision is constantly ongoing process. However, little provision has been made to allow these people to receive academic credit for their knowledge and experience. As a result, one Social Work Associate (who has completed a rough equivalent of the major part of the work-and-experience credentials of most M.S.W. candidates) would have to enter the academic system as a freshman and complete six years of college before being properly certified by Civil Service to assume the responsibilities with which she is so ably coping at this moment.

A shadowy question exists as to how much exploitation of Native persons this situation represents, and how much of a real opportunity the paraprofessional career can be. This must be put into perspective compared to the less skilled detail work that is usually assigned to Native personnel. At this writing there seems to be no parallel development of paraprofessional skills for
usage in treatment programs and counselling interventions. To some extent, considering the points mentioned above and since supervision and support would be difficult to provide here, this may be a wise move. However, inasmuch as the clinical role of paraprofessionals has proved quite useful in other areas, it should be considered as one possible extension of manpower in Alaska.

4. Need for Epidemiology

For planning purposes, one of the most acute problems facing the IHS in Alaska is the lack of knowledge of the real extent of the country's needs and of the most efficient modalities of service. A problem common to most mental health programs, it becomes more severe here because of the Mental Health Team's ambiguous stake in each aspect. Indeed, the Team seems forever caught between defending its own objectives and programs, and responding at the same time like an emergency rescue squad to the demands and requests of physicians, community agencies, Native corporations, and individual patients. One model of approach to solving this confusion is the evaluation project in alcoholism. Other research is still much at the exploratory stage, as in the cases of the Boarding School studies and the psychologists' involvement with evaluational techniques in village schools. For the time being, most problem-solving centers around doing what can be done with what is available at the cost of the interests in longer range plans and objectives. As such, this situation makes self-assessment a nearly impossible task. Long range planning that is self-generating, instead of administratively demanded, might be worth considering before the next major crisis arises.
In all fairness to the Alaska Mental Health Services staff, it must be recognized that some efforts to match long range needs with demographic data has already been done. Dr. Bloom, after leaving IHS, has remained interested in these problems and has published a study of "Population Trends of Alaska Natives and the Need for Planning", American Journal of Psychiatry, 128:8, Feb. 1972.

5. Children's Services

The population explosion described in Dr. Bloom's article anticipates an increasing need for services to children, adolescents and young adults, but there is little indication that IHS as a whole is preparing to respond to these burgeoning needs. A critical challenge for the Mental Health Team staff is going to be how to create time enough to utilize information of this nature and subsequently develop rational programs as a response to adequate information instead of to the more common occurrence of an unforeseen and full-blown emergency.

6. Budget

Unmentioned so far has been the problem of budgeting. This issue is certainly related to preceding matters in terms of planning, and also has ramifications within the IHS in terms of the difficulties and jealousies that develop as a direct result of separate budgeting for the Mental Health Services. This topic, common to most Areas and Service Units, will be dealt with later. Suffice it to say now that budget problems are more real due to the mysteries of allocation than to considerations of adequacy of funding.

7. Need for Administrative Clarity

Finally, Alaska has never really solved the line/staff problem of to whom Mental Health programs report, and to whom they are
directly responsible. This is both an Area problem and an IHS problem, and will be discussed in the overview chapter in the light of all the Areas' methods of coping with similar difficulties. To a certain extent, the maximum effectiveness of the Mental Health Team staff will not be realized until clear channels of relationship within IHS are established.

B. Progress and Achievements

1. Balanced Development

In spite of almost overwhelming problems and crises, there are many positive aspects discernible in the first seven years of Mental Health Services operation in the Alaska Area. From the earliest moments of its arrival and inception, the Mental Health Team has been forced to divide its attentions between effecting the model of a specialty service adjoined to a hospital (as envisioned by the Area Office), and developing a broad program of community mental health specifically adapted to the Alaskan setting. In retrospect, much evidence exists to suggest that both needs are being met on at least a preliminary minimal basis. An inpatient ward has been established as an integral part of the ANMC service as a specialty hospital. Outpatient service delivered closer to patients' homes is also being accepted increasingly by both the local communities involved and by IHS. Active consultation programs are in operation and there are some indications of an increasingly positive development of services working in conjunction with state and community facilities, rather than in parallel or even in competition. The introduction of a balanced program instead of a narrow specialization is a major achievement, and as such it most certainly deserves recognition.
2. Retention of Seasoned Personnel

A second related achievement has been the retention of expertise as the result of continued activity and participation by IHS mental health personnel. Two of the three original staff members are still at work in the Alaska Area Office, although their roles have been specialized somewhat since the department's inception. Mr. Poussard is currently Chief of the Social Services Branch, and his knowledge of mental health needs and of manpower requirements has enabled his branch to work more closely with the Mental Health program than in true some other Areas. Dr. Nachman's psychological services to children and youths are deeply rooted in her fund of personal Alaskan experiences, and nobody on her staff is apt to make errors because of a lack of cultural familiarity. The third member, Dr. Bloom, although now in private practice in Anchorage, has remained available to IHS on a consultant basis.

The current roster suggests that this pattern of retention is also a continuing one. In addition to the original team, two other staff stayed on in Alaska for significant periods, again with shifts in specialization. Dr. Hudson has moved from the Area Office into the Ward position for an additional two year tour of duty. Fred Muhs, M.S.W., joined the staff in 1969, and stayed until fiscal 75 when he transferred to the Billings Area.

Certainly not to be overlooked by any professional egocentrism, Arlene Pannone was the first staff secretary and still functioned in this capacity some 6 years later. Two of the original Mental Health Workers who signed on in 1971 are continuing their work and training.
More than half of the staff in all categories except that of the paraprofessionals have had four or more years of experience within the Alaska Mental Health Services. Not only is this an enviable record, but it attests strongly to the enthusiasm of the staff members and promises even better rates of return for the future.

3. Relationships with Other Agencies

A mutual respect between the Mental Health Services and the Alaska Area Native Health Board is evinced in many ways. Closer contact and coordination with Native corporations has been established with these health services than has been possible between the corporations and other state and local agencies. Such coordinations are largely due to the Mental Health Services constant recognition of the need to operate and interact efficiently with other agencies because of limitations of manpower and other resources. Formal contracts with the State Department of Mental Health have actually been developed toward this end. One proposed goal is the creation of a service network which might allow key positions to be filled interchangeably by staff members of different agencies, and more effective delineation in staff reports could serve to bring such utilization of personnel about. The number and the evolving nature of consultation services is not well documented, but it is most certainly through these vital links that the staff's overall effectiveness is multiplied to meet the needs of a widely scattered population.

Consultation within IHS is also maintained, although in some ways a
description of such services is more difficult than that of their counterparts in outside agencies. Certainly the task is more difficult in view of the high rates of turnover of medical and nursing personnel, and especially so considering the frontier-emphasized feelings of crisis and emergency that pervade the IHS hospitals. Ambiguities of line and staff relationships among Mental Health personnel also make such a description difficult. Nonetheless, the problems of effective and ready consultation are ones of which the Mental Health staff is aware, and solutions are being sought. The appointment of someone with fundamental training in both administrative procedures and Mental Health to the staff of Chief of Area would be a positive step in this direction.

b. Patient Involvement and Increasing Caseloads

It should also be noted that while problems remain to be solved about extending preventive services to those who might benefit most from them, still there has been not only an increase in the absolute number of persons seen as a result of medical filtering processes, but also an increase in the number of self-referrals and in the number of opportunities to serve men as well as women. More thorough epidemiological studies and planning should soon be possible due to a new data-reporting system by which to document these services.

Awareness of populations at risk is high, particularly as regards adolescents and young adults, and this is commendable since demographic studies show that case loads do not represent these two groups proportionately. The staff is currently developing techniques for meaningful interactions with these age groups as a prerequisite to launching broader, more comprehensive programs. Thanks to the fortuitous locating of most
foci of service deliveries in towns through which Native peoples tend to migrate, this large population at risk is afforded much more care than would otherwise be possible.

5. Developmental Tasks

The Alaska Mental Health Services has rapidly expanded since its initial phases of exploring the dimensions of the tasks at hand, when "flying teams" were the extent of mental health services available. At the moment, its staff seems spread perilously thin as a result of such rapid expansion, and during the past seven years the dangers of specialisation and decentralisation have begun to present new challenges to the problems of balanced service delivery. Nonetheless, despite great and constant pressure to meet new crises, some time is being allotted to research and planning. The very tentativeness of some programs is an acknowledgement of the need for a more solid understanding of the problems involved, before proceeding further.

6. Evaluation

When unmet needs are still so great, it is almost impossible to stop and evaluate gains. However, increasing attention to the need for an evaluation of accomplishments, for planning replication of successful programs, and for the further development of new ones out of the contexts of experience, seem to be goals that all staff members could agree upon. The Alaska Area Mental Health Services seem to be ready to begin undertaking these tasks, and considering the staff's stability at the moment, such meaningful self-evaluations may soon be initiated.
RISK ANALYSIS: A CONCEPT AND ITS
APPLICATION TO ALCOHOLISM AND MENTAL HEALTH

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HSM 76-72-328
ISSUED BY HSMA, ALASKA AREA NATIVE HEALTH SERVICE
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**APPENDIX:**

- TABLE 1 - List of Risk Factors
- FIGURE 1 - "Data Base for Alcohol Related Problems To Develop A Progressive Treatment Program"
- FIGURE 2 - "Data Base for School Age Population"
ABSTRACT

A PROJECT TO ANALYZE RISK
TO ALCOHOL ABUSE AMONG ALASKAN NATIVES

The Alaska Native Health Board is conducting a project to determine those factors which will predict a person's chances for getting better, worse, or remaining the same in treatment. The project is introduced by presenting its conceptual basis. The project was begun by establishing a list of possible risk factors with the help of over 40 local experts. A list of 80 possible risk factors was finally agreed to after several months of negotiating with local experts. The presence or absence of these risk factors was determined by each participating agency for each client on whom they filled out a "Data Base for Alcohol Problems". The state or degree of severity was then correlated with the various risk factors. Risk factor analysis will be used as a screening tool to assist in determining where critical resources should be directed. The initial results provide interesting epidemiological data. However, the greatest value of the study is in following a cohort of clients across time to determine their transition from one stage of severity to another and relating their transition to a profile of risk factors.
ACKNOWLEDGEMENTS

The Alaska Native Health Board and the Mental Health Evaluation Project staff would like to express deep appreciation to all those who aided in making possible this phase of the Risk Analysis Project. We would especially like to thank the Honorable Frederick McGinnis, Ph.D., Commissioner of Health and Social Services, State of Alaska and his staff in the State Office of Alcoholism. The study would not have been possible without the cooperation of Ms. Marilee Fletcher, University of Alaska-Center for Alcohol & Addiction Studies.

The method used to develop the initial list of possible risk factors involved calling upon local and regional experts in the areas of alcoholism, suicide, school age mental health and Native health affairs. The following people took time out of their busy schedules to assist the project's development: Mrs. Lena Andree, Mr. Billy Backford, Mr. Bill Bailey, Mr. M. Baring-Gould, Mrs. Katie Beals, Dr. Joseph Bloom, Dr. David S. Boyd, Dr. Richard Bruce, Mrs. Sophie Chase, Mr. Robert Clark, Mr. Charles Degnan, Dr. Marie Doyle, Mrs. Lori Eakan, Mr. Ralph Eluska, Mrs. Margie Ewan, Ms. Jackie Graham, Mr. Bob Harrington, Mr. Carl Heyano, Dr. Charles Hudson, Dr. Clifford Hunt, Mrs. Mary Jones, Mr. John Keating, Ms. Loretta Kenton, Dr. Krause, Dr. J.R. Langdon, Major Lynce, Mr. L. W. Macatee, Dr. Robert Madigan, Mr. Mawe, Mr. Bob Mitchell, Dr. Richard Mohr, Ms. Tina Monigold, Mrs. Robert Morgan, Mrs. Bertah Moses, Mrs. Evelyn Myers, Mrs. Lillie McGarvey, Mrs. Agnes Nichols, Ms. Marilee Nicholson, Mr. Alex Nick, Mr. Ed Obie, Mr. James Parson, Captain Robert Penman, Mr. Jack Peterson, Dr. Phillips, Dr. Robert Porter, Dr. William Rader, Dr. Bill Richards, Mr. Joe Ryan, Mr. Sigwein Savok, Mr. Jack Shields, Dr. Dorothy Whitmore, Dr. Aaron Wolf, and Dr. John D. Wreggit.
Special thanks should go to both the school and alcoholism programs that are participating in the study. These agencies include the Wildwood Boarding Home Program, Mt. Edgecumbe Boarding School Program and the Cook Inlet Native Association Boarding School Program. Alcoholism agencies include the Social Development Center, Alaska Psychiatric Institute, Greater Anchorage Area Borough Health Department and the Seward Council on Alcoholism. In addition, the Cook Inlet Native Association Bingo Committee assisted the project by providing a third group area in which data was collected.

We would like to thank all those who provided encouragement and support to the project. Without the support and cooperation of all of these people this study would not have been possible.
INTRODUCTION:

There is generally no argument among health and social service professionals that all people with a given health problem are not alike. And further, it is recognized that all individuals with the same severity or stage of a health problem are not alike. The social scientist says that such individuals have different needs. The physicians may say they have different prognoses and the hospital administrators may say they have differential abilities to pay their bill. For a group of individuals at the same stage of a health problem, there are at least as many distinguishing characteristics as there are disciplines or viewpoints to devise them.

To what purpose do we distinguish between different groups or subsets of individuals at a given stage of a particular problem? The most general purpose is to enable the health worker to respond differentially and appropriately to individuals in a manner that is consistent with the characteristics of that subset. Just as it is not always appropriate to apply the same treatment plan to all patients with a given health problem (e.g. to treat all alcoholics alike), it is not always appropriate to treat all patients at a given stage of a health problem alike.

The differential response of a health worker may take two basic forms. First, different treatment plans may be employed, each with its own unique probability of success.

Second, the health worker may respond to patient subsets with differing urgency, frequency, order, or extent of therapeutic efforts. Most generally, the health worker may respond to different patient subsets in a priority manner.
Of the long list of characteristics that could be used to identify patient subsets, two have obvious utility in enabling the health worker to respond intelligently and differentially to patients. The first characteristic is the patient's risk of progression. "Risk" is the probability that an individual will progress from one stage of a problem to a more severe stage of that health problem. Progression for an individual patient is, of course, an all-or-none condition, but predictions can be made as to the probability of progression that fall between 0% and 100%. For example, the weatherman may state that there is a 30% chance of snow, although whether or not snow actually occurs in an all-or-none condition. Therefore, with adequate criteria, patients at a given stage of a health problem can be divided into high risk (high probability of progression) and low risk (low probability of progression).

The second characteristic is the patient's outcome after a given course of therapy. Predicted outcomes may also be expressed as a probability ranging between 0% and 100% recognizing that with specific criteria for success, a single observed outcome is either successful or unsuccessful. Therefore, patients at a given stage of a health problem can be divided into a subset with a high probability of successful outcome and a subset with a low probability of successful outcome for a given strategy of intervention.

The characteristics of risk and expected outcome are usually independent, however, there may be an overlap in the patient subsets. From this derives the utility of the concept of risk analysis. Consider the following example.

A hypothetical population of 1,000 contains 100 patients at Stage III of a certain disease process, represented in Figure 1 as the area within Box A. The area outside the box represents the 900 patients who are not at Stage III of the disease process.
If a risk analysis is done on the 100 patients, we may find that 40 of the patients are in the high risk group as represented in Figure 2 by the Circle B.

If an analysis of expected outcome after a certain treatment strategy is also performed on the 100 patients, we may find that 80 of the patients are in the group with a high probability of successful outcome designated as Circle C in Figure 3.

The results of the risk analysis and the analysis of expected outcome

3. 117
may be viewed simultaneously as in Figure 4. Suppose there were 30 patients who fell inside both circles B & C. We can see that the 100 patients are grouped into four distinct subsets. Subset 1 includes the patients in B who are not in C. They are the 10 patients at high risk for whom the treatment has a low probability of success. Subset 2 includes the patients in C who are not in B. They are the 50 patients with a high probability of success but at low risk. Subset 3 includes the patients in both B & C. They are the 30 patients at high risk for whom the treatment has a high probability of success. Finally, subset 4 includes the patients who are neither in B or C. They are the 10 patients at State III of the disease who are at low risk and with a low probability of success for the treatment strategy.

It can be seen that health workers should respond differentially to the four subsets of patients. Subsets 1 and 3 require some degree of urgency because they are at high risk to progression to a more severe stage of the disease. However, broad extent of application of the treatment in subset 1 is not particularly warranted due to its low probability of success. Perhaps a different type of treatment should be considered for this subset at high risk. Urgency and broad extent of application is appropriate for subset 3 since they are the group at high risk with a high probability of successful outcome. Subset 2 should receive relatively broad application of the treatment strategy.

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4.
but since the patients of this subset are low risk, extreme urgency is probably not warranted. Subset 4 would be the least appropriate group to address with this particular treatment since they are at low risk and the strategy has a low probability of success. Recognizing that such an approach can be used at all stages of the health problem including the well patient at risk, the wise health system manager with limited resources available to address the problem, will first address the patients of subset 3 for each problem stage and strive for broad extent of application.

Consider the variations of this example as illustrated in Figure 5. In the first situation, there is a great deal of overlap in the high risk group and the group with a high probability of successful outcome. That is to say, there is a relatively small number of patients at high risk for whom the strategy is relatively ineffective. In the second situation, however, there is no overlap in the two groups. The intervention strategy has a low probability of success for the entire high risk group, which is to say there is no subset 3.

Consider a second example involving two strategies of intervention for which analysis of expected outcome have been performed. Figure 6 illustrates the distribution of strategies X and Y in the population. It is readily
apparent that strategy X is expected to be effective for a larger group of patients than strategy Y. However, if strategy X is twice as expensive per patient as strategy Y the "best" approach is uncertain. If the high risk group distributes itself as in Figure 7, then the "best" approach with limited resources may well be to employ strategy Y which is cheaper and is effective for most of the high risk group.

Obviously the possibilities suggested by such an analysis are numerous, especially when two or more intervention strategies are compared with the high risk group.

Within the community mental health movement there has been emphasis on application of primary prevention for mental health problems. Prevention would be far superior from the standpoint of both the patient, his family, and his health care system. Preventive services for mental health problems,
however, are also expensive, somewhat unproven and time consuming. Applying preventive services to a population group in a shotgun manner would be difficult to achieve, expensive, and most likely would tax the patience of the community. Application of a reliable tool for the identification of a specific population subset of high risk to a problem would allow preventive services to be focussed on the individuals who are most likely to benefit from them.

The ANHB Expanded Mental Health Project is developing a tool to identify individuals of school age at high risk for alcoholism, suicide and suicide attempt, and dropping out of school. Further, a tool is being developed to predict the outcome of therapy for clients with an alcohol problem.

OBJECTIVES:

The objective of the project was two-fold. The first was to identify a set of risk factors capable of identifying the school age child at risk for alcohol abuse, suicide or suicide attempt, and dropping out of school. The second objective was to identify the risk factors which predict the therapeutic outcome for a patient with an alcohol problem under a specific type of therapy.

METHODOLOGY:

Identification of potential risk factors: In consultation with 40 regional experts in mental health, a list of risk factors was developed. The consultant group comprised a variety of health professionals including Native counselors, psychiatrists, and school personnel who commonly deal with adolescent and adult mental health problems in Alaska. The consultants were asked to list risk factors specific for alcoholism, suicide and attempted
suicide, and school drop-outs in an adolescent population and factors specific for the outcome of therapy in a group with an alcohol problem.

In selecting potential risk factors, the consultants were instructed in the following criteria for an acceptable risk factor:

1. Objectivity - the factor should be amenable to gross quantification when possible.

2. Discrimination - the factor should be somewhat limited to the high risk group. Even if a factor is very predictive, but present in all members of the population (e.g. unemployed in the bush in winter) it loses its ability to accurately predict the high risk group.

3. Timing - the factor must be present prior to the onset of the problem if it is to have utility in prediction.

4. Etiology - the factors do not have to be etiologically related to the health problem.

5. Stability - the presence of the factor should not vary over time.

A list of 80 risk factors was identified and appears as Table 1 of the appendix. In order to minimize inter-observer bias, the risk factors were gathered in a self-administered mode. Thus, the risk profiles represent the subjective response of each individual.

Measures of outcome: In order to assess outcome for patients in an alcoholism program the staging mechanism developed in Phase III of the Alaska Native Health Board Mental Health Evaluation Program was used. The staging mechanism allows the severity of an alcohol problem to be objectively graded from Stage 0 to Stage IV for six, physical, social and economic parameters of the problem. This instrument has been described in detail in a report by
the Alaska Native Health Board titled, "A System To Improve Care for the Alaska Problem Drinker" (October, 1974), and appears as Figure I of the appendix.

In the adolescent population a subjective assessment of severity of alcohol and associated problems was made by the school personnel. They recorded their assessments as none, slight, moderate, and severe as shown in Figure II of the appendix. An assessment of school drop out and suicide attempt was obtained from the individual at the time of collecting the risk factors.

Study sites: Adolescent data was obtained from the Wildwood and Mt. Edgecumbe Boarding School Programs and from the Cook Inlet Native Association (CINA) Boarding Home Program. A cohort of adults with alcohol problems included those individuals presenting at the following alcoholism treatment programs: Social Development Center, Alaska Psychiatric Institute, Greater Anchorage Area Borough Health Department and the Seward Council on Alcoholism.

For the purposes of preliminary analysis, adult bingo players at a Wednesday night CINA game were randomly selected, their stages of severity assessed, and risk factors collected. The latter group is not a satisfactory "control group" and will be used only in preliminary analysis.

Data collection & analysis: Data from the adolescent population is being collected at four points in time as shown in Figure 1. A cohort of individuals are being followed from November, 1974 through the end of the school year 1976, with factor data and health problems assessment obtained as shown in the figure. Risk factor profiles obtained at $T_0$, $T_1$ and $T_2$ will be analyzed to determine the stability of the factors. Changes in assessments
will be analyzed with risk profiles by multivariate analysis to determine the risk profiles specifically predictive of an alcohol problem, suicide or suicide attempt, and school drop out.

\[
\begin{array}{cccc}
T_0 & T_1 & T_2 & T_3 \\
\text{(Nov. 74 - Feb. 75)} & \text{(Apr. - May 75)} & \text{(Sept. - Oct. 75)} & \text{(Apr. - May 76)} \\
\text{Problem assessment} & \text{Problem assessment} & \text{Problem assessment} & \text{Problem assessment} \\
\text{Risk profile} & \text{Risk profile} & \text{Risk profile} & \text{Risk profile}
\end{array}
\]

**FIGURE 1**

Data from the adult cohort is being collected at three-month intervals as in Figure 2. \(T_0\) represents the client's first visit to the agency and \(T_1\) through \(T_4\) follow at three-month intervals. A staged assessment will be made at each point in time and risk profiles will be obtained at \(T_0\) and \(T_2\).

Outcomes will be of two types. For clients remaining in or completing a course of therapy, the change in assessment by stage will be analyzed with risk profiles to determine that profile which was predictive of the observed outcome.

Where sample sizes permit, the type of therapy employed will become an independent variable and analysis of risk profile and outcome will be done to determine the risk profile predictive of therapeutic success for given therapeutic modality. For clients dropping out of therapy, the risk factors will be analyzed to determine the risk profile predictive of noncompletion of the course of therapy. As in the adolescent data, a multivariate analysis will be employed.
Stage I Risk profile
Stage 2 Risk profile

FIGURE 2

PRELIMINARY DATA INSPECTION:

Initial inspection of the data collected at $T_0$ from both the school age and adult cohorts is encouraging. In the school age cohort, several risk factors discriminate between students with and without an alcohol problem. Similar patterns are detected in the data regarding suicide attempts and school dropouts in this group and level of severity in the adult cohort.

However, it should be emphasized that mere association of a factor with a given health status is not adequate proof of its ability to predict. Before any such conclusions can be made, data from the other time frames must be gathered and analyzed for those factors which appear in individuals prior to a change in their health status. In addition a larger sample is required before statistical methods can be properly applied.

One interesting benefit from the project has already occurred for at least one agency. In this instance the risk factor inventory is obtained from the client and is available to the counselor while the client is evaluated. The risk factors then serve to aid the counselors in thoroughly evaluating the client.
CONCLUSIONS:

The utility of a methodology for analysis of risk to progression and response to therapeutic modality has been discussed for mental health problems. The current project is developing the criteria for identifying both the adolescent at risk to alcoholism, suicide and suicide attempt, and school drop out; and the adult with a high probability of success in a given treatment method. This is accomplished by following cohorts of individuals over time, collecting risk factors, and observing changes in health status. Factors appearing prior to a change in health status are then analyzed as to their ability to predict the change. The final product of the project will be a set of factors and criteria for predicting which adolescents are at high risk to alcoholism, suicide, and school drop out, and the adults with a high probability of success in a given treatment mode.
TABLE 1 OF APPENDIX
Please answer these questions. If you do not want to answer a question, you do not understand it, or if it is not appropriate, leave it blank.

**QUESTION**
How many brothers and sisters were in your family when you were growing up? ______
How many of these were older than you? ______

<table>
<thead>
<tr>
<th>Are you a heavy smoker?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you dream of drinking?</td>
<td></td>
<td></td>
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<tr>
<td>Are you moving constantly?</td>
<td></td>
<td></td>
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<tr>
<td>Have you stopped going to church?</td>
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<td></td>
</tr>
<tr>
<td>Are you bored with life?</td>
<td>* * * * * * * *</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Are you sick often?</th>
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<tbody>
<tr>
<td>Have you stopped believing in a god figure?</td>
<td></td>
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<tr>
<td>Are you intelligent and sensitive?</td>
<td></td>
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<tr>
<td>Do you dislike competing?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you having housing problems?</td>
<td>* * * * * *</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Do any people close to you never drink?</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Have you been separated from home and sent to a hospital?</td>
<td></td>
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<tr>
<td>Are you shy?</td>
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<td></td>
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<tr>
<td>Are you impatient?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you lonely?</td>
<td>* * * * * *</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are you homesick?</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Has anyone close to you separated from their spouse?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have arguments with people close to you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has anyone close to you had an unwanted pregnancy?</td>
<td></td>
<td></td>
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<tr>
<td>Do you expect too much from yourself?</td>
<td>* * * * * *</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Do you have trouble speaking English?</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Have you ever been kicked out of school?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has anyone close to you had a miscarriage?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you think you have too much responsibility?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you earning less money than you used to earn?</td>
<td>* * * * * *</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Would you rather live in the old Native ways than have a job?</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Have you ever been fired from your job?</td>
<td></td>
<td></td>
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<tr>
<td>Does anyone close to you have an unhappy marriage?</td>
<td></td>
<td></td>
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<tr>
<td>Did you ever live in a foster home as a child?</td>
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<tr>
<td>Were you ever sent from home to a boarding school?</td>
<td>* * * * * *</td>
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</table>

<table>
<thead>
<tr>
<th>Do you think you have too little responsibility?</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you ever dropped out of school?</td>
<td></td>
<td></td>
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<tr>
<td>Has anyone close to you had an abortion?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does anyone close to you have a drinking problem?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When you were growing up did your parents live together?</td>
<td>* * * * * *</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Have you ever been unhappy with your job?</th>
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</thead>
<tbody>
<tr>
<td>Do you dislike yourself?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you plan too far ahead?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Agency # _______________ Social Security # _______________ Date _______________
<table>
<thead>
<tr>
<th>QUESTION</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you easily depressed?</td>
<td></td>
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<tr>
<td>Do you have a physical handicap?</td>
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<tr>
<td>Did your parents neglect you as a child?</td>
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</tr>
<tr>
<td>Have you tried drugs like marijuana, LSD or speed?</td>
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<tr>
<td>Are you using them now?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do people close to you look down on you?</td>
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<td></td>
</tr>
<tr>
<td>Has anyone close to you died of drinking?</td>
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<tr>
<td>Have you been arrested in the past year?</td>
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<td></td>
</tr>
<tr>
<td>Has anyone close to you been arrested in the past year?</td>
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<tr>
<td>Have people close to you rejected you?</td>
<td></td>
<td></td>
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<tr>
<td>Has anyone close to you had a mental or nervous breakdown?</td>
<td></td>
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<tr>
<td>Have you had a recent death among people close to you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever had problems with your sex life?</td>
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<td></td>
</tr>
<tr>
<td>Have you dropped out of alcohol rehabilitation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you dependent on agencies like DTA, Manpower or Welfare?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you had a nervous or mental breakdown?</td>
<td></td>
<td></td>
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<tr>
<td>Have you ever tried to hurt yourself physically?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were you trying to kill yourself?</td>
<td></td>
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<tr>
<td>Have you ever been divorced?</td>
<td></td>
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<tr>
<td>Are you separated from your spouse?</td>
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<tr>
<td>Do you have a happy marriage?</td>
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<tr>
<td>Has your spouse been gone from home a long time?</td>
<td></td>
<td></td>
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<tr>
<td>QUESTIONS FOR WOMEN</td>
<td></td>
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<tr>
<td>Have you had an unwanted pregnancy?</td>
<td></td>
<td></td>
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<tr>
<td>Have you had an abortion?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you had a miscarriage?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you been in the military in the past?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you are a student, are you in a foster home, or have you ever been in one?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you are a student, are you in a boarding school?</td>
<td></td>
<td></td>
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<tr>
<td>If you are going to school now, does the school seem strange or hard to you?</td>
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<tr>
<td>Do you think you have a drinking problem?</td>
<td></td>
<td></td>
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<tr>
<td>Do you think you are an alcoholic?</td>
<td></td>
<td></td>
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<tr>
<td>If the above 2 questions are true, do you think you can be helped?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever had contact with an agency that treats people with drinking problems?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever had treatment before for a drinking problem or alcoholism?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How did you get to this agency for treatment? (Circle best answer or answers)

a. sent by court or police
b. sent by family
c. decided to come by yourself
d. sent by friend
e. sent by employer

Do you feel depressed now?
Do you feel anxious now?

Agency #   Social Security #   Date

Page 2 of 2 pages   FORM A
### Data Base for Alcohol Related Problems

**To Develop a Progressive Treatment Program**

**Physical/Psychiatric Assessment**

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>INJURIES DUE TO INTOXICATION</th>
<th>PATHOLOGIC CHANGES</th>
<th>FAMILY RELATIONSHIPS</th>
<th>NON-FAMILY RELATIONSHIPS</th>
<th>EDUCATIONAL/VOCATIONAL or other Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>None</td>
<td>No problems related to alcohol abuse</td>
<td>None</td>
<td>No problems related to alcohol abuse</td>
</tr>
<tr>
<td></td>
<td>Only one alcohol related injury in the past 3 months that required medical att'n.</td>
<td>Subtle medical symptoms of organ damage</td>
<td>Threatened breakage of family ties because of alcohol abuse</td>
<td>Usually associates with alcohol abusers.</td>
<td>Some problems related to alcohol abuse with school, job, employability, or normal activities</td>
</tr>
<tr>
<td></td>
<td>More than one injury in the past 3 months that required medical att'n.</td>
<td>Obvious symptoms of organ damage</td>
<td>Breakage of family ties because of alcohol abuse (Divorce, drinker leaves home, etc.)</td>
<td>Only associates with alcohol abusers.</td>
<td>Threatened with expulsion from school or loss of job because of alcohol abuse.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Functional evidence of liver damage</td>
<td>Functional evidence of brain damage</td>
<td></td>
<td>Out of school or unemployed because of alcohol abuse.</td>
</tr>
</tbody>
</table>

### Treatment Plan for Alcohol Abuse

**Residential Admission**

<table>
<thead>
<tr>
<th>Plan for:</th>
<th>Past 3 Months</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sleep Off Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Halfway House</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Quarterway House</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Comprehensive Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Psychiatric Hospitalization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Nursing Home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Rehabilitation Facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Non-medical Detox</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Problems Which May Contribute to Alcohol Abuse**

<table>
<thead>
<tr>
<th>Plan for:</th>
<th>Present</th>
<th>Past 3 Months</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Physical</td>
<td>Yes</td>
<td>No</td>
<td>Past 3 Months</td>
</tr>
<tr>
<td>21. Psychiatric</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Vocational/Educ.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Family</td>
<td></td>
<td></td>
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<tr>
<td>24. Housing</td>
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<td></td>
<td></td>
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<tr>
<td>25. Legal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Physical/Psychiatric Assessment**

**Personal Data**

Name: ___________________________ Last: ______ First: ______ Initial: ______

Individual's Agency Number: ___________________________

Social Security Number: ___________________________

Birth Date: ______/Month ______/Day ______/Year

Sex: Male: ______ Female: ______


Marital Status: Married: ______ Separated: ______ Divorced: ______

Signatures of Therapist and Job Description: ___________________________

Today’s Date: ______/Month ______/Day ______/Year

**Instructions: Stages refer to factors present in past 3 months only. Circle appropriate boxes. Write additional information on reverse side.**
FIGURE 2 - APPENDIX
DATA BASE FOR SCHOOL AGE POPULATION

NAME ____________________________ AGENCY # ____________________________

AGENCY ____________________________ SOCIAL SECURITY # ____________________________

AGE ____________________________ BIRTH DATE /mon. /day /yr.

SEX: Male ______ Female ______

IF STUDENT, NAME OF SCHOOL CURRENTLY ATTENDING: ____________________________

DATE OF INTERVIEW: ____________________________

USE MAP TO CHECK HOME TOWN REGION

PROBLEM LIST

<table>
<thead>
<tr>
<th></th>
<th>NONE</th>
<th>SLIGHT</th>
<th>MODERATE</th>
<th>SEVERE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Home sickness</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
<td>Feeling of grief</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3.</td>
<td>Feeling of isolation</td>
<td></td>
<td></td>
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<tr>
<td>4.</td>
<td>Reading disability</td>
<td></td>
<td></td>
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<tr>
<td>5.</td>
<td>Learning disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Negative feeling regarding physical appearance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Boredom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Alcohol Abuse Problems</td>
<td></td>
<td></td>
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<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Note: If alcohol problem is present, refer to &quot;Data Base for Alcohol Problems&quot;.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

TREATMENT PLANS

Individual Counselling, Problem # ____ Group Counselling, Problem # ______
Extra Tutoring, Problem # _____ Play Therapy, Problem # ______
Other (Specify) ____________________________ Problem # ______
Several newspaper articles have also described the work of the Alaska Native Health Board:


"Rural Alcohol Treatment Services", ANCHORAGE DAILY NEWS, August 30, 1973.


"ANH Board Committed To Highest Quality of Health Care", TUNDRA TIMES, January 15, 1975.

DESCRIPTION OF PROJECTS:

Mental Health Evaluation Project — Phase I and II developed a mechanism to stage the severity of alcohol abuse problems, evaluated the problem solving process and conducted an attitude survey.

Mental Health Evaluation Project — Phase III developed and tested a data base system to correct some of the deficiencies identified in Phase I and II.

Expanded Mental Health Evaluation Project — Extended the Phase III effort to additional demonstration sites and began a Risk Analysis for alcoholism, suicide and other mental health problems.

Mental Health Evaluation Project — Phase IV, a continuing effort to refine the "Data Base for Alcohol Problems", quality assurance activities and the Risk Analysis Project.

Medical Care Evaluation Project — Develop standards of problem solving for three medical problems (strep/rheumatic fever, iron deficiency anemia and hypertension) and evaluate the continuity and effectiveness of services delivered.

Alaska Native Health Board Technical and Clinical Consultants:

Dr. Gregory Shorr, IHS, Office of Research & Development—EMCRO Project, Tucson, Arizona

Dr. Paul Nutting, IHS, Office of Research & Development—EMCRO Project, Tucson, Arizona

Mr. Larry Berg, Associate Director for Planning & Coordinating, IHS, Office of Research & Development, Tucson, Arizona

Dr. Sheldon L. Miller, Associate Professor of Psychiatry, Case Western Reserve University, Cleveland, Ohio

Dr. Donald Funk, Clinical Director, Mt. Edgecumbe PHS Alaska Native Hospital, Mt. Edgecumbe, Alaska

Dr. Thomas Bender, Director, PHS Communicable Disease Center, Anchorage, Alaska

Dr. David Templin, Chief of Medicine, Alaska Native Medical Center, Anchorage, Alaska

Dr. Stanley Hadley, Jr., Chief, Office of Patient Care Services, Standards and Evaluation, Alaska Area Native Health Service

If you have questions or comments, please write:

Alaska Native Health Board
Health Care Evaluation Projects
Edward Helmick, MPH Director

William Thomas McClure, M.A.
Associate Director
P. O. Box 41808
Anchorage, Alaska 99509

Phone (907) 279-6661, Ext. 145
health services delivery system is to provide support and problem solving at the individual, family, community, and regional levels. The community's health status is viewed as that collective health problems of the individuals in that community, and whatever can be done to improve the health status of the individual, subsequently improves community health status.

Each of the five basic elements of the problem solving process (information gathering, assessment, treatment planning, treatment and follow-up) can be expressed at a finite set of tasks of various complexity requiring different levels of skill and training. Skills required to solve problems in a health services delivery system should be built from the requirements of specific problems being addressed. A given individual health worker at a point in time possesses a finite set of different levels of skills for each problem solving step and a potential for acquiring additional skills. The level of skills required for an element of the problem solving system is a function of the complexity of the problem and the problem setting. With the development of standards for defining problems, their assessment, treatment planning, treatment and follow-up on a problem specific basis, near optimum allocation of existing skills would be possible.

Improving health services delivery as a problem solving system assumes the following: (1) existing resources, primarily manpower, are being underutilized by health delivery systems, (2) appropriate standards and necessary tasks with defined skill levels can be established for solution of individual and community health problems, (3) health services delivery systems can be evolved into health problem solving systems, (4) provided the tools, the health systems will be monitored on their success of solving individual and community health problems, and (5) a dynamic self-correcting health problem solving system can be established which provides high quality care.

The purpose of developing a problem solving system how can these ideas be constructively applied to “real world” programs? Perhaps this can best be answered by listing the operational strategy of a problem solving project.

1. Stage the severity of the problem along a continuum by simple, identifiable objective and subjective clinical criteria.
2. Identify those individuals at greatest risk to experiencing the problem.
3. Allocate available resources differentially among risk groups.
4. Generate standards of problem solving
   a. standards for information gathering
   b. standards for assessment by stage
   c. standards for treatment planning including follow-up by stage and risk level
   d. standards for treatment
5. Translate standards of problem solving into specific tasks and performance criteria.
6. Provide training for personnel to enable them to meet performance criteria for each task.

During the past two and a half years the Alaska Native Health Board, Health Care Evaluation Projects, through its professional staff, technical and clinical consultants, have conducted health services research projects involving evaluation, monitoring and standards. The role of the Board has been that of a consumer advocacy group with a highly trained staff working hand in hand with professional providers of service for the assurance of high quality care. Questions have frequently been raised regarding the concepts and evaluation principles utilized by the projects and their relationship to “real world” operating programs. The five projects conducted by the Board to date have all had as their objective the development of a dynamic, self-correcting health problem solving system. This grandiose goal indeed requires an explanation.

The inferred purpose of a health services delivery system is to provide support and problem solving at the individual, family, community, and regional levels. The community’s health status is viewed as that collective health problems of the individuals in that community, and whatever can be done to improve the health status of the individual, subsequently improves community health status.

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The ability to control and/or prevent health problems, efficiency is the degree of effectiveness achieved with existing resources. Acceptability means meeting the felt needs of the consumer, the professional in the community, and the community itself.

The problem solving process provides the methodology for evaluation which will allow the examination of the treatment process and the treatment outcome relationships to identify weaknesses in the health care system. The identification of weaknesses will provide a rational method of suggesting changes in the health care system. The methodology will provide the basis for the formalization and utilization of standards of care to assist clients through a health care delivery system with the greatest impact on their physical, social and economic well being.

Standards are defined as those conditions, activities or elements which are necessary to solve or resolve and/or prevent health problems. The phrase “standards of problem solving/prevention” should then be considered to replace the more common phrase, “standards of care”.

“Standards of problem solving/prevention” have several purposes. First, they provide explicit guidelines of acceptable care for health workers (staff education). Second, they establish objective criteria to evaluate the quality and necessity of care delivered (quality assessment). Finally, they define basic requirements for program design (planning).

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In addition, the project staff has been requested to give presentations at three nationally sponsored conferences:


PAPER PRESENTED:
“A Constructive Monitoring and Evaluation Scheme”

Ninth Joint Meeting of the Professional Associations of the U.S. Public Health Service - April 8-11, 1974, Washington, D.C.

PAPERS PRESENTED:
“Evaluation of Alcoholism Treatment Services In the State of Alaska”
“Health Worker Opinions About Mental Illness In Alaska”

NCA Sixth Annual Medical-Scientific Session - April 28-29, 1974, Milwaukee, Wisconsin

PAPER PRESENTED:
“The Demonstration of An Evaluation Scheme To Improve Care For the Alaskan Problem Drinker”