

**GUAM HEALTH PLAN, GOALS
OBJECTIVES AND RECOMMENDATIONS**

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Abstract Summary: Guam Health Plan
Goals, Objectives and Recommendations



A. INTRODUCTION

The ultimate purpose of health planning is the improvement of the health status of the population and the maintenance of a high level of wellness.

The World Health Organization defines Health as:

"a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Although this definition is general and relatively all inclusive, the measurement of "health", or "health status" remains one of the most difficult health planning tasks. It is not feasible to measure health, or health status in its true sense, because of the relative nature of the phenomenon to be quantified or measured. The absence of a demonstrable illness, or the absence of death are simply not the only definitions of "Good Health", neither can health be defined as a state of "well-being" in that "well'being", or the idea of "wellness is also a relative and very subjective concept".

Perhaps, the most critical aspect of health planning is the need for adequate assessment or measurement techniques to determine what is happening, and the trends that have led to the present as well as point to what problems, or difficulties the future might hold unless there are deliberate interventions. Assessment provides a

score card and a cautioning signal system. In addition, it establishes the basis for planning strategy determinants.

Traditionally, health has been measured in a negative way. That is, the presence of a demonstrable disease, or illness, and the occurrence of death was used to determine the poor health status of the population at risk. However, if this is true, then the inverse also becomes true - that is, those who are not sick, or dead, are therefore, well, or healthy...which is obviously not true, due to the relative nature of the phenomenon to be measured.

Health Status, a measurement, or indicator of the population's health, also represents a measure of the success of the health care delivery system in meeting identified health needs.

That is, based upon the premise that the ultimate purpose of health planning is the improvement of the health status of the population and the maintenance of a high level of wellness, the health status of the populations, therefore, should influence (to the greatest extent possible) the direction of the health system, so that the system's elements, or components (i.e. facilities, manpower, services, equipment, etc.) are organized and coordinated to establish and maintain an effective, efficient and interrelated system that positively affects the health of the population. However, the perennial, or inherent difficulty in implementing this concept is the gross inability (state of the Health Planning Art) to determine the nature and degree of the impact of the health system

on improvement in the health status of the population. In other words, there ought to be a distinct and direct relationship between improvements implemented on the existing health care delivery system and actual improvement of the population's health status.

INPUTS/OUTPUTS

This presentation shall attempt to summarize priority Health Goals, Objectives, and Recommendations presented in the Guam Health Plan prepared by the Guam Health Planning and Development Agency. The Guam Health Planning and Development Agency is mandated by U.S. Public Law 93-641 (The National Health Planning and Resources Development Act of 1974) and Executive Order 77-20 to prepare and implement a Guam Health Plan (GHP) covering a five-year period. The GHP is a description of both the Territory's health status, and state of the existing health care delivery system, as well as an articulation of desired achievements for improvement in the health status of the Territory's residents and in the health system serving the population. (It should be noted that although the GHP covers a five-year period, it is subject to a continuous planning process. That is, the GHP shall be reviewed, revised and updated to reflect currently available data, technology, accomplishments, and changes in the Community's priorities. The GHP is a "rolling plan", rather than a static document.)

The remainder of this presentation shall address itself to the aforementioned categories:

1. HEALTH STATUS GOALS, OBJECTIVES, AND RECOMMENDATIONS
2. HEALTH SYSTEM GOALS, OBJECTIVES, AND RECOMMENDATIONS
3. ENVIRONMENTAL HEALTH GOALS, OBJECTIVES, AND RECOMMENDATIONS

B. OVERALL HEALTH STATUS GOALS

In an attempt to set forth a more direct approach towards facilitating and demonstrating the first order of priority of health status goals, objectives and recommendations as described from the Guam Health Plan document, this presentation shall address itself to summarizing the following areas of health status concerns:

1. General Health Status
2. Mortality
3. Morbidity

GENERAL HEALTH STATUS

Accurate and reliable measures, or indicators of the general health status of the Territory's population have not been developed. However, it is assumed that the individual levels of wellness collectively comprise the population's level of wellness. It is also an accepted fact that the infusion of Federal and Local dollars into the present illness-oriented health system has not made a positive impact upon the health status of the population. To this end, the following goal has been selected as the highest Territorial health status goal:

GOAL 1: EVERY RESIDENT OF THE TERRITORY SHOULD HAVE A HIGH LEVEL OF AWARENESS OF PERSONAL HEALTH, THE KNOWLEDGE AND CAPABILITY TO ACHIEVE, IMPROVE, AND MAINTAIN A HIGH LEVEL OF WELLNESS AND PROTECTION FROM ILLNESS, INJURY, DISABILITY, AND PREMATURE

DEATH THROUGH THE ACCEPTANCE OF INDIVIDUAL RESPONSIBILITY,
AND ACTION FOR PERSONAL AND COMMUNITY WELL-BEING.

OBJECTIVE 1. The Department of Public Health and Social Services will adopt and make public by January 1979, a "Public Policy" recognizing and reinforcing the importance of the promotion of wellness and the preservation of good health, including the Department's intention to commit appropriate and necessary resources towards these ends.

RECOMMENDATION 1. Engage in an intensive educational effort directed towards key Department of Public Health and Social Services personnel and medical staff demonstrating the potential value of a wellness-oriented health system, as well as the potential long-range health benefits which could never be realized through the maintenance of the present illness oriented health care delivery system.

2. Launch an intensive educational effort directed towards the Governor, the Legislators, and other health providers demonstrating the potential value of a wellness-oriented health system, as well as the potential long-range health benefits which could never be realized through the maintenance of the present illness-oriented health care delivery system.

MORTALITY

The Territory's average crude death for the period 1970-1976 was 4.4 per 1,000 population, with the lowest rate being 3.9 in 1971; and the highest being 4.8 in 1973 and 1974.

These rates compare to the U.S. crude death rate of 9.5 in 1970 and 9.2 deaths per 1,000 population in 1974. The average ^(U.S.) crude death rate for the period 1970-1974 was 9.3 per 1,000 population, with the lowest rate being 9.2 in 1974, and the highest rate being 9.5 in 1970. While the U.S. crude death rate was decreasing, the Territory's crude death rate was rising.

The high risk age groups 0-4, and 55 and over consistently represented the highest average percentage of total deaths recorded between the years 1971-1976. Deaths in these age groups represented an average of 61.8% of total deaths recorded for the same period.

Based on these findings, the following goals, objectives and recommendations were set forth:

GOAL 1: TO MAINTAIN OR FURTHER REDUCE THE TERRITORY'S ANNUAL DEATH RATES TO BE EQUAL TO, OR BE LESS THAN THE TERRITORY'S 1970 DEATH RATE OF 4.1. PER 1,000 POPULATION.

OBJECTIVE 1: The Department of Public Health and Social Services, In Concert with the Guam Memorial Hospital, Health Oriented Voluntary Organization,s and Other Health Providers Should Develop, Establish and Implement an Islandwide, and On-going Communicable and Chronic Disease Prevention, Screening, Detection and Treatment Program by 1980.

RECOMMENDATIONS: 1. The Guam Health Planning and Development Agency will assist and advise the Department of Public Health and

Social Services in the development and implementation of an on-going islandwide disease screening, detection, treatment, and prevention program.

2. The Guam Health Planning and Development Agency will assist the Department of Public Health and Social Services in mounting an intensive educational effort directed towards all health care providers and the public, demonstrating the need and potential benefit of establishing, implementing and participating in an on-going, islandwide disease screening, detection, treatment, and prevention program.

SUB-GOAL - A. TO MAINTAIN, OR FURTHER REDUCE THE RATES OF DEATH DUE TO CARDIOVASCULAR DISEASES AT OR BELOW THE TERRITORY'S 1976 RATE OF 7.9 PER 1,000 POPULATION IN THE 45 AND OVER AGE GROUP.

This goal was based on the findings that mortality due to cardiovascular diseases accounted for an average of 25% of total deaths reported between the period 1972-1976. Deaths due to cardiovascular diseases accounted for an average of 35% of all deaths reported among the Territory's ten (10) leading causes of death. In addition, deaths from heart diseases, in and of themselves, have consistently been listed as the Territory's number one (1) leading cause of death between the period 1972-1976. Furthermore, of the total 575 recorded deaths due to cardiovascular diseases during the period 1972-1976, a

total of 497 deaths (or 86.4%) were among persons 45 years of age and over. Stated in another way, of the average 115 deaths due to cardiovascular diseases recorded during the 1972-1976 period, a total of 99.4 deaths were among the 45 and over age group. This represents an average of 7.7 deaths per 1,000 population in this age group.

OBJECTIVE:

1. The annual mortality Rate Due to Cardiovascular Diseases should not exceed 6.7 deaths per 1,000 population among the Territory's 45 and over age group by 1983.
2. The annual Mortality Rate Due to Cardiovascular Diseases should not exceed 7.1 deaths per 1,000 population among the Territory's 45 and over age group by 1980.
3. A coordinated islandwide cardiovascular disease screening, detection, treatment, and prevention program should be developed and implemented on an on-going basis by 1979.

RECOMMENDATION:

1. The Guam Health Planning and Development Agency will assist and advise the Department of Public Health and Social Services, and the Guam Heart Association in developing and implementing a coordinated, on-going, and islandwide cardiovascular disease screening, detection, treatment, and prevention program in all health facilities.

2. The Guam Heart Association will develop in coordination with the Health Education officers of the Department of Public Health and Social Services, medical and health education staff of the islands' two Health Maintenance Organizations, several mass media public education programs that would increase the public's awareness, knowledge and vigilance regarding the symptoms, treatment and prevention of cardiovascular diseases.

SUB GOAL - B.

TO MAINTAIN, OR TO FURTHER REDUCE THE RATE OF DEATH DUE TO MALIGNANT NEOPLASMS FROM THE TOTAL TERRITORIAL 1976 RATE OF 2.7 DEATHS PER 1,000 POPULATION IN THE 45 AND OVER AGE GROUP.

This goal was based upon the findings that death in the territory due to malignant neoplasms were second only to deaths due of cardiovascular diseases. This trend is identical to that which has been occurring in the U.S. mainland.

In addition, deaths due to malignant neoplasms accounted for an average of 9% of the total number of deaths recorded during the 1972-1976 period. This represents an average of .5 deaths per 1,000 population, or an average of 40.4 deaths per year. This rate compares to the U.S. mainland rate of 1.74 deaths per 1,000 population. The higher U.S. mainland rate per 1,000 population can be attributed to the differences in the age composition between the two population. That is, because deaths due to malignant neoplasms generally occur among

the older population, the U.S. rate should be higher in that it is on older population. This is further reinforced by the findings that 85% of recorded deaths due to malignant neoplasm were among the 45 and over age group. This represents an annual death rate of 34.3 deaths out of 40.4.

- OBJECTIVE:
1. The Mortality rate due to malignant neoplasm should not exceed 2.4 deaths per 1,000 population among the Territory's 45 and over age group by 1983.
 2. A coordinated islandwide cancer screening, detection, treatment, and prevention program should be developed and implemented on a continuing basis by 1979.

- RECOMMENDATION:
1. The American Cancer Society/Guam Chapter will, in cooperation with the Health Planning and Development Agency, the Department of Public Health and Social Services, and Private health providers, develop and coordinate a Bi-Annual Cancer screening, detection, treatment, and prevention program with an emphasis towards screening residents who are 45 years of age and over by 1979.
 2. The American Cancer Society will, in cooperation with health educators of the Department of Public Health and Social Services and private health providers, the various local mass media groups, develop and implement a public awareness and knowledge regarding the common and early signs of cancer, and existing screening, detection and treatment services available.

SUB GOAL:

- C. TO REDUCE THE TERRITORY'S 1971-1976 AVERAGE INFANT MORTALITY RATE FROM 20.7 INFANT DEATHS PER 1,000 LIVE BIRTHS TO 17.0 INFANT DEATHS PER 1,000 LIVE BIRTHS.

This goal was based on the findings that the Territory's average infant mortality (deaths to newborn babies under one (1) year) rate during the 1971-1976, period was 20.7 infant deaths per 1,000 live births.

This represents an average of 46.7 infant deaths per year. This compares to the U.S. rate (1970-1974) of 18.4 infant deaths per 1,000 live births.

It must be noted, however, that the Territory's population is a very young population, as compared to the U.S. population.

For addition, the Territory in 1975 had a median age of 18.9, and a projected median age of 22 in 1985. This compares to the estimated U.S. median age of 29.4, and 31.9, in 1974 and 1985 respectively.

This Territorial age phenomenon indicates that persons under the age of fifteen (15) will continually move into the 15 and over age group, increasing the population in the 15-44 age group. Stated in a different way, there will be more women moving into the child bearing ages of 15-44, - thus, consequencing an increase in the number of births per year.

Furthermore, an average 35.0 infant deaths (or 75%) occurring during the 1971-1976 period, occurred during the neonatal (newborn babies under 28 days) stage; and an average of 11.6 infant deaths (or 25%) occurring during the post-neonatal (newborn babies 28 days to 11 months) stage. These figures represent an average rate of 15.5 neonatal, and 5.2 post-neonatal deaths occurring per 1,000 live births during the period.

Something missing the objectives & recommendations

1976 AVERAGE OF .16 PER 1,000 POPULATION TO .13
PER 1,000 POPULATION.

This goal was based on the findings that the average annual number of deaths from diabetes for the period 1972-1976 was 13 (12.8), representing an average annual rate of .16/1,000 population. This compares to the U.S. mainland's average diabetes mortality rate for the period 1971-1973, of .18/1,000 population.

It should be noted that although the Territory's diabetes mortality rate decreased from .22/1,000 population in 1972, to .21, .10, and .07 per 1,000 population in 1973, 1974 and 1975 respectively, it again climbed to .22/1,000 population in 1976.

Of the 64 deaths due to diabetes occurring during the 1972-1976 period, a total of 35 deaths, or 54% of total deaths occurred among the 45-64 age group, followed by 26 cases, or 41% of total deaths occurring in the 65 and over age group, with both age groups representing a total of 61 deaths, or 95% of all deaths. These figures, in and of themselves, indicate that mortality due to diabetes occurs, primarily, in the older (45 and over) population.

Stated in another way, the Territory's average age specific mortality rates for the period 1972-1976, were .004/1,000 population under the age of 25, .024/1,000 population between 25-44, .67/1,000 population between 45-64, and 2.20/1,000 population in the 65 years of age and over population.

OBJECTIVE:

1. To reduce the five-year average rate of deaths due to diabetes to .13 per 1,000 population by 1983.
2. To reduce the three-year average rate of deaths due to diabetes to 2.0 per 1,000 population among the Territory's 45 and over age group by 1981.

RECOMMENDATION:

1. The Department of Public Health and Social Services' Chronic Disease Control Program, in collaboration with other Territorial health providers, will develop, implement, and coordinate a continuing islandwide diabetes screening, detection, treatment and prevention program.
2. The Department of Public Health and Social Services' Communicable and Chronic Disease Control Program, in collaboration with the Department's Health Education Office, and representatives from the various Territorial health providers, develop and conduct a mass media public education program to increase the public's awareness and knowledge regarding existing treatment, screening and prevention programs.

SUB GOAL: E. TO REDUCE THE RATE OF ACCIDENTAL DEATHS IN THE TERRITORY TO A MAXIMUM OF .50 PER 1,000 POPULATION.

This goal was based upon the findings that the Territory's average rate of fatalities due to accidents during the 1972-1976 period was .81/1,000 population. This compares to the U.S. mainland average rate of .47/1,000 population during the 1970-1975 period.

An average of 32.6 motor vehicle fatalities, 21.8 other accidents and 8.8 drownings were recorded during the 1972-1976 period. Stated in terms of percentages, an average of 51% of the total accidental fatalities were due to motor vehicle accidents, followed by 34% of all other

accidents, and 14% due to drownings, and the Territory's fatality rate due to all accidents was 72% higher than the U.S. rate, while the Territory's fatality rate due to motor vehicle accidents was 110% higher than the U.S. rate.

OBJECTIVE:

1. To reduce the accident mortality rate from .81/1,000 populations, to 50/1,000 population by 1983.
2. To reduce the three-year accident mortality rate to .60 per 1,000 population by 1981.

RECOMMENDATION:

1. Assist and support existing accident prevention programs of departments and agencies of the Territorial Government including the office of Highway Safety and Department of Public Safety.

MORBIDITY:

Because the Territory's morbidity data are neither timely, or accurate, Territorial "synthetic" rates of selected Chronic Diseases are used. The Territorial synthetic rate is derived by applying population characteristics. The chronic disease conditions to be estimated include Heart Disease and Diabetes.

GOAL:

1. THE PREVENTION OF THE OCCURRENCE AND SPREAD OF COMMUNICABLE AND CHRONIC DISEASE CONDITIONS, AND MAINTENANCE OF ACCEPTABLE LEVELS OF CLINICAL CHRONIC DISEASE IN THE TERRITORY AND THE RESTORATION AND MAINTENANCE OF THE GREATEST POSSIBLE FUNCTIONAL CAPACITY OF THOSE INDIVIDUALS SO AFFECTED.

SUB GOAL:

- A. TO REDUCE THE RATE OF MORBIDITY DUE TO HEART DISEASE IN THE TERRITORY FROM THE 1972 U.S. MAINLAND RATE

This goal was based upon the findings that in the application of the 1972 heart disease prevalence rate of 50.4/1,000 population to the Territory's 1977 population, an estimated Territorial synthetic rate of 4,269 persons were derived (this includes hypertensive disease without heart involvement). However, it should be noted that 41.0 percent of the U.S. prevalence rate were hospitalized cases. Applying this 41.0 percent of hospitalized cases to the Territory's 1977 estimated prevalence rate of 4,269 cases indicates an estimated figure of 1,750 heart disease cases were hospitalized and discharged in 1977. The 2,945 figure heart disease cases. This excess indicates that, perhaps, the Territory's estimated prevalence of heart disease is higher than estimated.

OBJECTIVE: 1. Morbidity rates due to heart diseases would be less than 50.4 per 1,000 population by 1983.

RECOMMENDATION: 1. The Guam Health Planning and Development Agency will assist the Department of Public Health and Social Services' Communicable and Chronic Disease Control Program develop and implement an on-going heart disease screening, detection, treatment, prevention, and education program.

2. The Department of Public Health and Social Services' communicable and Chronic Disease Control Program should develop, implement and maintain a heart disease registry for the Territory.

SUB GOAL: B. TO REDUCE THE RATE OF MORBIDITY DUE TO DIABETES IN THE TERRITORY FROM THE 1973 U.S. MAINLAND RATE OF 20.4 PER 1,000 POPULATION.

This goal was based upon the findings that in the application of the 1973 diabetes prevalence by rate of 20.4/1,000 population to the Territory's 1977 population, an estimated territorial synthetic rate of 1,728 persons with diabetes were derived.

However, it should be noted that 29.4 percent of the U.S. prevalence rate were hospitalized cases. Applying this 29.4 percent of hospitalized cases to the Territory's 1977 estimated prevalence rate of 1,728 cases indicates an estimated figure of 508 diabetes cases hospitalized. In reality, a total of 1,261 actual diabetes cases were hospitalized and discharged in 1977. The 1,261 figure indicates a 148 percent excess in the Territory's estimated hospitalized diabetes cases. This excess indicates that, perhaps, the Territory's estimated prevalence of diabetes is higher than estimated.

OBJECTIVE: 1. Morbidity rates due to diabetes should be less than 20.4 per 1,000 population by 1983.

RECOMMENDATION: 1. The Guam Health Planning and Development of Public Health and Social Services; Communicable and Chronic Disease Control Program develop and implement an on-going diabetes screening, detection, treatment, prevention and education program.

2. The Development of Public Health and Social Services' Communicable and Chronic Disease Control Program should develop, implement and maintain a diabetes registry for the Territory.

SUB GOAL: C. TO REDUCE THE ESTIMATED HOSPITAL MORBIDITY RATE DUE TO NEOPLASMS IN THE TERRITORY FROM THE TERRITORY'S 1977 RATE OF 16.8 PER 1,000 POPULATION.

This goal is based upon the findings that in 1977, a total of 1,424 cases of neoplasms were admitted and discharged from the hospital.

This represent a neoplasms morbidity rate (based on hospital discharges

by diagnosis) of 16.8 per 1,000 population. This rate was almost three (3) times greater than the U.S. mainland prevalence rate of 4.3 per 1,000 population.

OBJECTIVE: 1. Morbidity rates (based on hospital discharges) due to neoplasms should be less than 16.8 per 1,000 population by 1983.

RECOMMENDATION: 1. The Guam Health Planning and Development Agency will assist the Department of Public Health and Social Services and other health care providers develop and implement an on-going neoplasm screening, detection, treatment, prevention, and education program.

SUB GOAL: D. TO REDUCE THE RATE OF MORBIDITY DUE TO TUBERCULOSIS IN THE TERRITORY FROM THE TERRITORY'S 1970-1976 AVERAGE MORBIDITY RATE OF .76 PER 1,000 POPULATION.

This goal was based upon the findings that during the period 1970-1976, the Territory experienced an average tuberculosis morbidity rate of .76 per 1,000 population. This represent an average incidence rate of 56.7 Tuberculosis cases per year during the 1970-1976 period. This compares to the U.S. average rate of .16 per 1,000 population during the period 1970-1975. This comparison shown that the Territory's experiences an average rate of new active tuberculosis cases 3.75 times greater than the U.S. rate.

OBJECTIVE: 1. To reduce the rate of new cases of all forms of tuberculosis from .76 per 1,000 population, to .50 per 1,000 population by 1983.

RECOMMENDATION: 1. The Guam Health Planning and Development Agency will assist the Department of Public Health and Social Service Tuberculosis Program in improving the coordination and effectiveness of the various components of the Department of Health in the identification, treatment, and follow-up of tuberculosis cases.

SUB GOAL: E. TO MAINTAIN OR FURTHER REDUCE THE TERRITORY'S 1975-1976 AVERAGE GONORREA MORBIDITY FROM 3.99 PER 1,000 POPULATION.

This goal is based upon the findings that the Territory experienced an average of 3.99 cases of Gonorrhea per 1,000 population during the 1975-1976 period - with 294 and 354 cases of gonorrhea cases being reported in 1975 and 1976 respectively. This compares to the U.S. mainland's rate of 4.14 for the year 1973. These figures shown that the Territory's 1975-1975 average rate per 1,000 population was 4 percent lower than the U.S. However, because of the nature of the disease and reporting difficulties, it is felt that the 1975-1976 average rate of gonorrhea is considerably lower than the actual reservoir of this disease.

OBJECTIVE: 1. The three-year gonorrhea morbidity average should not exceed 3.99 per 1,000 population by 1983.

RECOMMENDATION: 1. The Department of Public Health and Social Services

Venereal Disease Control Program should expand its services and case finding activities. It is expected that with this program experiment and improved case findings activities, there will be an increase in the number of cases reported. However, the increase should be attributed to better case finding rather than actual increase in incidence. If this is true then we can expect that the number of reported cases will begin to decline shortly thereafter.

OVERALL HEALTH SYSTEMS GOAL

The following health system goal was developed to guide the future development of the system.

GOAL 1. THE ORGANIZATION AND OPERATION OF A SYSTEM OF HIGH QUALITY HEALTH SERVICES FOR THE TERRITORY, EFFICIENTLY PROVIDED, EITHER DIRECTLY OR INDIRECTLY, OR THROUGH COOPERATIVE ARRANGEMENTS, IN SUCH MANNER; IN SUCH NUMBERS; AND IN SUCH LOCATIONS, AS TO ASSURE THE MOST EFFECTIVE UTILIZATION OF TERRITORIAL HEALTH RESOURCES IN MEETING THE PUBLIC NEED FOR SERVICES, BY:

- PROVIDING HEALTH ^{services} WHICH HAVE BEEN DETERMINED BY ACCEPTED CRITERIA TO BE BOTH NEEDED AND APPROPRIATE;
- PROVIDING HEALTH SERVICES WHICH ARE REASONABLY ACCESSIBLE TO THOSE WHO NEED THEM AT A TIME AND LOCATION APPROPRIATE TO THE NEED;
- PROVIDING HEALTH SERVICES WHICH ARE ORGANIZED AND INTERRELATED SO AS TO BRING THE CONSUMER INTO CONTACT WITH THE APPROPRIATE

SERVICE AS THE NEED ARISES;

- PROVIDING HEALTH SERVICES WHICH ARE DESIGNED AND DELIVERED IN A MANNER WHICH PROMOTE MUTUAL RESPECT BETWEEN THE CONSUMER AND THE PROVIDER AND ENHANCES THE ACCEPTABILITY OF THE SERVICES PROVIDED;
- ASSURING THAT HEALTH SERVICES ARE PROVIDED BY HEALTH PERSONNEL PERFORMING AT, OR ABOVE, LEVELS OF MINIMUM STANDARDS FOR THE TERRITORY, AS DETERMINED BY PEER PROVIDERS AND CONSUMER REPRESENTATIVES;
- PROVIDING HEALTH SERVICES AT THE LEAST COST CONSONANT WITH ADEQUATE QUALITY, ACCESSIBILITY, AND ACCEPTABILITY.

This goal is based upon the fact that the admixture of public and private sources of medical care and other health service characteristics of the pluralistic health industry of the U.S. mainland ~~that~~ exists in the Territory.

All health services in the Territory are part of either the Government owned and operated "state" sub-system, or the Private Provider sub-system.

The Territorial Government has a legal commitment to the provision for the total health needs of the Territory's residents. At the same time, there is an assumed professional commitment of Private health care providers for the delivery of health care services to the Territorial residents based upon their professional

and organizational purpose. Therefore, both sub-systems should mutually accept the responsibility for assuring the public that its health system is designed and operated in the most effective and efficient manner possible, and, moreover, that the services it provides actually improve the health status of the Territory's residents.

Answer
A clear delineation of desirable attributes and expectations of performance is essential to developing and maintaining an effective system of health services. These attributes, or characteristics of a desirable system of health services must be defined as a basis for formulating goals for health services. These attributes, or characteristics are availability, accessibility, quality, acceptability, continuity and cost of health care services. These characteristics are described as follows:

- Availability of health services

Every individual in the Territory, regardless of where he, or she lives, should have access to the minimum health services to meet their needs. The concept of minimum employed here is not bare survival, but rather appropriate comprehensive services that are neither too restrictive nor too elaborate. Thus the health system should be expected to provide an appropriate array of services to meet the anticipated and known needs of individuals, families, villages, districts, and island groups. Needs and services will, of course, vary according to the needs of specific population groups over time.

The concept of comprehensiveness embraces the notion that a full range of health services is available, including those

services directed toward primary prevention, health promotion and maintenance, predictive or detection services, diagnosis, treatment, and rehabilitation. Within each category or type of service, specific services should be determined to match the specific needs of the Territory. It is understood that the adequate provision of these direct services is dependent upon the availability of the necessary supportive and ancillary services, and adequate resources.

Those specialized services which are not justified by the small population of the Territory should be made available to the citizens through cooperative arrangements with off-island providers of services, or by the periodic visitation of specialist consultants to the Territory at planned periods.

Comprehensive services also include personal health services for which consumers should take direct responsibility. The function of the consumer in the protection and maintenance of his own health is an essential component of a good system of health services.

The range of professional and ancillary personnel needed for the adequate planning and delivery of services is another concern in providing comprehensive services. The availability of the proper personnel is essential for the provision of an appropriate scope of services.

Accessibility of health services

Inability or undue difficulty in reaching or making contact

with needed health services may be the result of one or a number of conditions or circumstances. These conditions maybe related to time, geographic distance, cost, inconvenience, or physical or social factors.

Accessibility is related to urgency of need, frequency of need, and consumer perceptions of the value of the service. What may constitute a significant barrier to accessibility for one service may be insignificant for another.

The problem of accessibility can be examined from the perspective of closeness, as one measure. Travel time, geographic distance and the costs of travel to the consumer are important variables that affect the accessibility of health services. The residents of the Northern and Southern villages experience this type of barrier, although there are some who may rationally argue the point.

Another consideration is convenience. Here a compromise must be achieved between convenience of the consumer of health services and that of the provider. Cost and other considerations affect the ability to deliver services in locations that are in those proximity and convenient for every individual.

Physical barriers such as curbs, doorways, and inadequate parking facilities may impede access to health services by the physically handicapped.

Low motivation health services, such as important preventive, promotional, and health maintenance services are often ignored

when access is constrained by inconvenience or need for personal effort on the part of the consumer.

Inaccessibility of health services largely controls personal decisions that permit deterioration of health conditions to serious and often irreversible states before the necessary effort and expense to seek attention appears justified to the consumer.

- Quality of health services

Medical authority as the informed evaluator of the adequacy of health services is still accepted in *the Territory*. Nevertheless, consumers continuously evaluate health care rendered by physicians, dentists, hospitals, and others in a manner that not only reassures the consumer, but also develops means of enhancing and maintaining quality of health services.

The question of efficacy of service is one that needs to be addressed. For example, means for determining that therapy achieves what it is supposed to achieve need to be developed and implemented.

There also is concern that not all providers of health service, nor the skills which they employ are necessarily as advanced as the state-of-the-art and local conditions will permit. It is often cited that highly trained providers are essentially out-of-date in such rapidly advancing technology within a year following the completion of formal training. The Territory has adopted protective measures such as licensure, registration, and prepared practitioners of the healing arts. Although these measures may be adequate as

requirements to commence practice, their value as a continuing indication of competence must be questioned. One means of maintaining current knowledge required by health practitioners is a good continuing education program for health professionals and their allies to assure that the latest knowledge is available to them.

- Acceptability of health services

One of the factors most likely to inhibit the use of health services is the lack of acceptance by those who should, or, do receive them. This often is related to lack of knowledge as to when and how health services should be used. Individual preferences and expectations also determine acceptance or rejection of health services, just as preferences and tastes determine selection of food and diet, style of dress, use of leisure time, and other social activities.

The vast majority of the determinants of acceptability relate to cultural and social attributes of individual residents.

The concept of personal dignity is difficult to express, but it should be noted that different cultures and societies have separate and cherished forms of conduct which contribute to individual feelings of dignity. For example, since concepts of modesty vary widely among cultures, a form of physical examination that would not be questioned in one might be wholly unacceptable in another.

Similarly, the attitude of the provider toward the consumer in the delivery of service is important. This is often a problem where services are free and alternatives are absent.

Likewise, the degree to which health services are acceptable to citizens is somewhat dependent on the extent to which physical surroundings are compatible with those where the consumer lives. Acceptability is also affected strongly by the length of waiting time.

Because such cultural and social factors are important in determining the acceptability of health services, the organization of health services should take these factors into account.

By involving consumers in the design and implementation of health services, the important cultural and social attributes can better be understood and accommodated in the design and delivery of services.

Continuity of health services

A major concern in assessing health services is their organization and inter-relationship for the provision of a continuous sequence of outreach, health care, follow-up, and surveillance services. The recipient should not be lost to the system, nor within the system. Needs should be cared for appropriately as they arise, and transfer or referral should be made as required. This concept of progressive services holds that the total spectrum of health services should represent a continuum of services ranging from the least complicated health maintenance and promotional services to the most highly specialized institutional care.

For example, ambulatory services for both well and ill persons could range from community contact by the public health nurses to hospital clinic visits. These, in turn, could be linked with

the spectrum of inpatient services encompassing general medical and surgical services and the most complicated services rendered in the intensive care unit. Transfer between levels of inpatient care in the Territory is facilitated by the existence of two facilities. One which offers comprehensive acute inpatient care, and the other coalescent and long-term care.

All services and all providers should be included, often at several places, along this continuum.

From the consumers perspective, entry into the continuum of health services should be possible at the point most appropriate to immediate need or demand.

Central to this concept is some means for coordinating and inter-relating services which now are often separated and unrelated, particularly between the Department of Public Health and Social Services, Private Providers, and the Hospital. This would necessitate, for example, some means of assuring that adequate patient information is available to the appropriate providers at any point in the system where such information is needed. In addition, an information system should exist that will "capture" individuals in need of care in the system and inform providers of the progress of the patient between levels of service and alert them as to the need for additional care.

- Cost of health services

Costs are the expenses incurred in the provision of health services. This should be distinguished from charges, which are the prices

assigned or the amount billed the public for services rendered.

Since the primary provider of health care is the Territorial Government through its network of Public Health village centers, and hospital, one might not see any reason for concern for the cost of health services in the Territory. Through the Government owned and operated sub-system, the user, by law, receives Public Health Care and services free of charge; and, at the same time, has a right to receive hospital care regardless of ability to pay. In addition, this lack of concern for the cost of health care maybe reinforced by the fact that over 45% of the Territorial residents are covered under one of three existing Prepaid Health Plans (Plan membership consisting, primarily, of Government of Guam employee and Federal employees).

However, upon closer investigation the consumer also "pays" an additional percentage of the cost through taxation, a portion of which the government allocates to health services. Moreover, in an economy which limits the total expenditures allowed for health services, as at present in this Territory, the cost of delivering specific services or performing specific activities becomes important because undue costs in one area may delimit the allocation of necessary funds to other important areas, or preclude the introduction of needed services which are presently unavailable.

Because there is a direct relationship between cost and health of the other characteristics to be considered in the health services system, the trade-offs between these factors need to be explicitly considered in the assessment and in the development of goals, objectives, and recommendations.

SUB-GOALS

At the present time, our analysis of the Health System's sub-systems and services is being conducted by the Guam Health Planning and Development Agency and their findings, in terms of goals, objectives and recommendations at the sub-systems and services level, will be published in the Guam Health Plan Document. Although an analysis of the Health System at this level is essential, it remains immensely difficult to address inefficiencies and deficiencies at the system level which involve such consideration as the overall organization of the system in relation to its purpose; the inter-relationship among sub-systems and services which comprise the total system; the allocation of resources and effort among these sub-systems and services, system wide problems such as management and supervision; quality assurance and cost containment.

Given the foregoing concern, the following overall health systems sub-goals have been developed towards recognizing and addressing these concerns:

SUB GOAL 1. Improve the efficiency and effectiveness of the system of health services by reorganizing the system to improve the relationship of the sub-systems to one-another, and to the whole, and their individual and collective contributions to the achievement of the overall goal.

SUB-GOAL 2. Improve the efficiency and effectiveness of the system of health services by improving management capability and methods at the system; sub-system; and, program levels.

- SUB-GOAL 3. Improve the effectiveness of the system of health services by realigning the allocation of health resources to reflect relative impact of subsystems and programs on health status improvement.
- SUB-GOAL 4. Improve the quality of services provided by the health system by establishing, implementing, and monitoring a medical and nursing care quality assurance program.
- SUB-GOAL 5. Constrain the increasing cost of developing and maintaining the health system by achieving the appropriate balance between:
- (a) on-island capabilities and off-island services.
 - (b) institutional need and community need for services, equipment, and facilities.
 - (c) quality, accessibility, acceptability, availability, continuity, and the relative costs of attaining desired levels of these characteristics.
 - (d) specialized, generalist, and ancillary personnel.

ENVIRONMENTAL HEALTH

This section shall address Territorial goals, objectives and recommendations related to sewage/wastewater disposal.

- GOAL 1. THE PROVISION AND UTILIZATION OF APPROVED METHODS OF SEWAGE COLLECTION AND DISPOSAL TO MEET EPA AND TERRITORIAL REQUIREMENTS.

This goal was based on the fact that the Territory does not have an islandwide sewage/wastewater collection system, and that the Territory's topographical characteristics shows that the northern section of the island is composed mainly of highly permeable limestone where surface water sinks rapidly into the limestone carrying with it contaminants which have been deposited on, or in the soil; while the southern section of the island is composed mainly of highly non-permeable volcanic soil.

A potential threat of contaminating the network of underground watersheds, which supplies drinking water to a large portion of the Territory's population is present where sewer lines are unavailable, and sewage/wastewater is deposited directly into the northern end's highly permeable soil.

A different situation exists in the southern end of the island where less permeable soil is found. In the south, where sewer lines and sewage treatment plants are presently unavailable, individual cess-pools, and/or septic tanks are utilized to dispose of sewage and wastewater. Often times, this system fails resulting in the problem of overflowing cess-pools and septic tanks contaminating the surrounding environment well-used by village residents. This breakdown of individual sewage/wastewater disposal system poses a real threat to the health of village residents, and integrity of the surrounding environment.

- OBJECTIVE 1. To provide a sewer service for identified areas where such service is highly recommended, and ensure that area residents utilize sewer service provided by 1983.
2. To enforce the proper installation of septic tanks and drain fields at areas where such a method is approved.

RECOMMENDATION --

1. The Territorial Government should expand its existing program to provide sewer service to identified areas where such service is highly recommended, and to ensure the immediate utilization of the services by all area housing units.
2. The Environmental Protection Agency should carry out a more effective program to enforce the EPA requirements regarding the proper installation and utilization of septic tanks and drain fields, and to provide education and consultation to the communities where such method is approved, and being used.

GOAL 2. DISPOSAL OF SEWAGE AND WASTEWATER BY BOTH THE PUBLIC AND BUSINESS SECTORS IN A MANNER CONCLUSIVE TO HEALTHFUL LIVING BY TERRITORIAL RESIDENTS AND WILDLIFE, AND MAINTENANCE OF THE INTEGRITY OF THE TERRITORY'S NATURAL RESOURCES.

This goal is based upon the findings for Goal #1.

- OBJECTIVE 1. Develop and maintain a more comprehensive data base regarding the environmental quality needs and problems

RECOMMENDATION --

1. Discussions should be held between those professionals at the Environmental Protection Agency, the Department of Public Health and Social Services; Environmental Health and Sanitation Section, other government agencies charged with the responsibility of enforcing environmental and sanitation quality control and standards, and the Guam Health Planning and Development staff. The purpose of these discussions, which should be initiated by the Guam Health Planning and Development Agency, would be to arrive at a consensus of opinion on the types of environmental information needed for health planning purposes and to make arrangements for this information to be provided to the Guam Health Planning and Development Agency on a timely basis.