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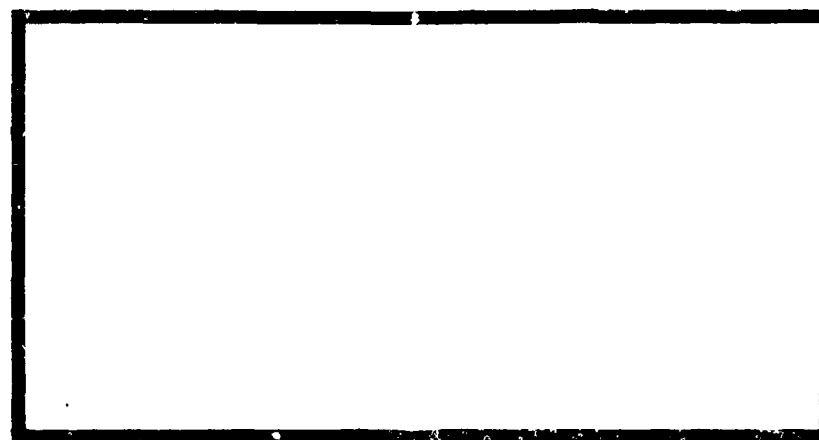


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A BENEFIT/COST ANALYSIS BETWEEN THE BLUE CROSS
AND BLUE SHIELD FEDERAL EMPLOYEE HEALTH
INSURANCE PROGRAM AND THE MILITARY HEALTH
SERVICES SYSTEM SUPPLEMENTAL CHAMPUS PROGRAM

Richard M. Taylor, Captain, USAF

LSSR 63-81

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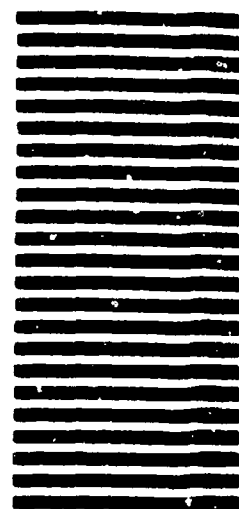
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The increases in costs of operating the Military Health Services System (MHSS) and the increasing general dissatisfaction by the non-active duty (NAD) personnel with the CHAMPUS program have led the military managers to recognize their responsibility to provide a comprehensive health care benefit package. A benefit cost study was accomplished to find an alternative health care system which provided the same or better health care benefits while also reducing costs to the government. From the analysis made and the studies cited, an approach is presented to improve the NAD personnel's health care systems by transferring the retired population to a civilian health insurance program and accomplishing all the active-duty dependent population health care in-house. This thesis concluded that by following this approach, both increased satisfaction by the NAD personnel and reduced cost to the government should be achieved.

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FEDERAL EMPLOYEE HEALTH INSURANCE PROGRAM AND THE MILITARY
HEALTH SERVICES SYSTEM SUPPLEMENTAL CHAMPUS PROGRAM

A Thesis

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology

Air University

In Partial Fulfillment of the Requirements for the
Degree of Master of Science in Engineering Management

By

Richard M. Taylor, BS
Captain, USAF

September 1981

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CHAPTER I

INTRODUCTION

Overview

The military services of the United States maintain an extensive health care delivery system to ensure the most appropriate and timely care of its active duty forces. By law, the Department of Defense (DOD) is assigned two primary health functions. The first is to maintain the peacetime health of the active duty force and to be prepared to attend the sick and wounded in time of war. The second is to provide a health benefit as a condition of service to eligible beneficiaries (20:xiv). The importance of health care to the DOD was demonstrated by the former Secretary of Defense Brown in the Consolidated Guidance for FY 81-85:

With regard to defense manpower, it is United States policy to: attain a cost-effective Military Health Services System which satisfies military medical support requirements and provides quality care to all beneficiaries as part of a benefit package which is an explicit, integral component of a military compensation policy [17:9].

It is the second function, a condition of service, that makes the health care system a very important component of the military compensation package. In recent years, the military member and his family have become dissatisfied with the present system (20:xv). One of the problems that faces senior military managers and decision makers is how to provide adequate health care for the fewest amount of dollars while at the same time keeping the user satisfied with that health care system.

Background

The Military Health Service System (MHSS) is one of the largest employer-owned and operated health benefit systems in the United States. The MHSS, like the civilian health industry, finds itself facing a conflict between not being able to provide all the services that are demanded of it, while at the same time operating at much less than capacity (17:1).

The four major components of the MHSS are: the Medical Departments of the Air Force; the Army; the Navy (which also provides health services to the Marine Corps); and the Office of Civilian Health and Medical Program of the Uniformed Services (OCHAMPUS). Each Medical Department is directed by its own Surgeon General. The fourth component, CHAMPUS, is a field office of the Secretary of Defense.

The primary objective of the MHSS is the maintenance of the military force in a physically and mentally combat ready status. Other objectives include assuring the timely availability of trained manpower and other health resources required to provide support for the armed forces during combat as well as peace time; providing health care as a part of the military pay benefit and compensation package; and maintaining these functions as efficiently and effectively as possible within the constraints of assigned mission and responsibilities (17:3).

In recent years health care has become a major and essential component of competitive compensation packages offered by big business of this nation (18). At one time, the MHSS was generally considered as

offering the best medical benefits available within this country (20:xv). While health care for the military member on active duty is considered excellent, health care for non-active duty dependents apparently has decreased in both quality and quantity (20:94). It is this subject of health care as part of a compensation package and its decline which is of concern to management. Today, with a limited Defense Budget, the question for management has become how can the Department of Defense provide: (1) better health service to non-active duty personnel for the same cost, or (2) the same service for less cost, or (3) better service for less cost? This problem is highlighted by the era of the all-volunteer force whose problems in recruiting and retention which have drawn attention to this important compensation area (17:8).

Several factors influence the amount of dissatisfaction that can be found within the current MHSS compensation package. These factors include unrealistic expectations regarding benefits, inaccurate and vague descriptions of those benefits, problems with delivery, and the participation rate of physicians in the CHAMPUS program. Figure 1-1 shows how these factors, taken two at a time, relate. The arrows indicate the direction of the relationship. The sign associated with the arrow indicates whether a direct (+) or inverse (-) relationship exists between the factors. For example, as dissatisfaction with the MHSS increases there will be a decrease in the retention rate among the military.

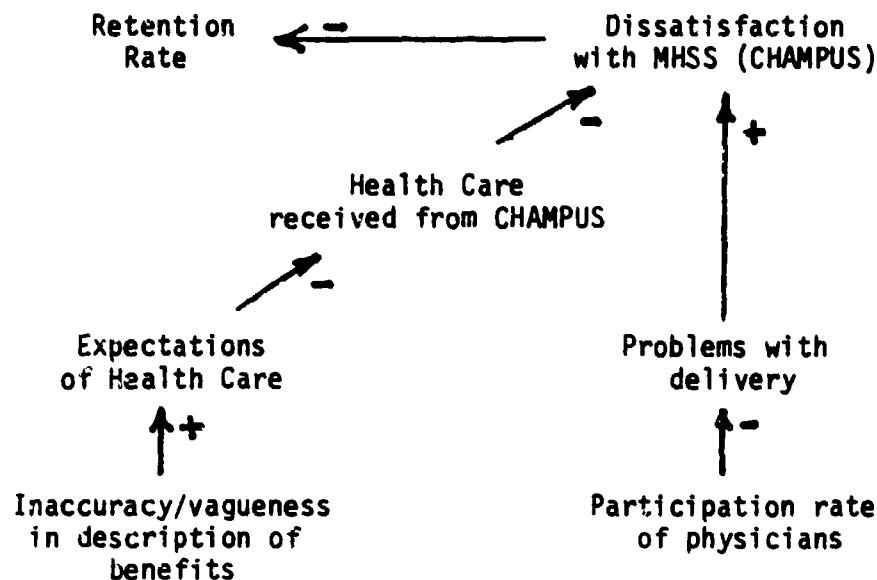


Fig. 1-1. Factor Relationships.

A basic understanding of the factors that contribute to the dissatisfaction rate is needed to appreciate the significance and relationship of the beneficiaries' perceptions of benefits. The beneficiaries of the MHSS include active duty personnel, dependents of active duty, retired service members, dependents of retirees, and dependents of personnel who died while on active duty (21:144). It is the beneficiaries' perceptions of and satisfaction with the entitlements to medical care benefits that cause the initial dissatisfaction because many military members do not know exactly what their medical benefits or those of their dependents really are. This dissatisfaction comes from two sources: unrealistic expectations and problems with delivery.

The high expectations are caused by poorly defined medical benefits, leading to the impression that the individual and his family are entitled to more than they will or have received (21:54). Since good quality health care is a major and continuing concern of every military member, particularly for those who have dependents, expectations of medical benefits are a key issue. Inaccurate, vague, or misleading recruiting and advertising literature has contributed to false and unrealistic expectations and thus beneficiary frustration and dissatisfaction. Examples of recruiting literature and advertising include:

As an Air Force officer you receive a good salary, medical care for you and your family, thirty days paid vacation a year . . . ask yourself: Do civilian firms offer: Free medical care? Free dental care? . . . don't forget about medical and dental care for you and your family! . . . Free medical and dental care . . . The Corps gives you unmatched health and medical benefits [21:55].

The impression one gains from such advertisements is that all medical needs will be met and active duty dental needs will be met. Some even imply that family dental needs, which are excluded from coverage, will be met.

In actuality, the medical benefit entitlement is legally established and provides that:

Active duty members are entitled to medical and dental care in any facility of the uniformed services.

Active duty dependents and survivors of active duty members are entitled to medical and dental care subject to availability of space, facilities, and medical and dental staffing capability.

Retired members, dependents, and survivors may be given medical and dental services subject to availability of space, facilities, and medical and dental staffing capabilities [21:55-56].

For dependents and retirees who must pay deductibles and co-payments of up to 25 percent of the total cost of medical care received under CHAMPUS, care is not free; but, because of the sweeping language of many enlistment and reenlistment ads, the legal entitlement may not be apparent to the beneficiary.

Additional factors which contribute to a high dissatisfaction rate with CHAMPUS are problems associated with the low participation rate of physicians (8:35). Today fewer doctors and hospitals are participating in the CHAMPUS program. A civilian doctor is said to participate in CHAMPUS if he agrees to fill out the CHAMPUS claim forms and accept payment from CHAMPUS. DOD statistics show a steady drop in doctor participation rates from 60 percent in 1970 to 48 percent in 1980. These statistics are based on CHAMPUS claim forms filled out by CHAMPUS users themselves. Some CHAMPUS users may be turned down by one or more doctors before finding one that will participate, so the true participation rate for doctors may be even lower than statistics show (8:35). In a national survey conducted in 1976, 32 percent of 7,464 CHAMPUS beneficiaries surveyed had to contact three or more physicians before they were able to obtain medical care utilizing CHAMPUS for reimbursement (12:8).

Officials in DOD have implied that the low doctor participation rate is caused by the official red tape, slow processing of claims and low payments (8:35). Many doctors who had participated in CHAMPUS dropped out after 1976, when CHAMPUS payment rates fell from a maximum of 90 percent of the amount charged to only 75 percent. This reduction on reimbursements was due to the higher participation rate by dependents and retired personnel in the CHAMPUS program (12:8). Many doctors have been encouraged by the American Medical Association (AMA) to bill the patient directly instead of billing government health plans (8:35). A recent report on CHAMPUS by retired Navy Rear Admiral David M. Cooney stated, "Low doctor participation rates are a prime cause of dissatisfaction with CHAMPUS among active duty people, retirees, and their dependents [8:35]."

The high overall dissatisfaction rate was highlighted in a recent Health Care Survey conducted by the Air Force Times and its sister publications, Army Times and Navy Times, between 14 January and 4 February, 1980. Eighty-three percent of the 11,397 military people who participated in the survey said they wanted to leave the CHAMPUS system and join a civilian health care plan (2:1). Increasing dissatisfaction with the unavailability of once convenient in-house services, long waiting lines, administrative mix-ups, attitudes of providers, and the excessive cost of CHAMPUS were among the most frequently heard complaints. The most striking conclusion to be drawn from the survey is that military people do not want to be locked into CHAMPUS; they want a choice similar to other federal employees (2:16). Several examples of military families that quit CHAMPUS were presented. The reasons ranged from low payment (\$761 for a \$1,976 surgeon fee) to dissatisfaction with finding doctors (2:16). The seriousness of this situation and its impact on each military member who has dependents, emphasizes the need for understanding the development of both the military health care program and the CHAMPUS program in particular.

Recent Literature

The CHAMPUS program has been studied by many groups which have been recommending its improvement since the Nixon administration (12:1). It has undergone almost constant scrutiny from many different congressmen, senior medical officials, and the heads of all military services. Recent concerns have centered around the decreasing quality and quantity, and increasing costs of dependent and non-active duty health care. Rising program costs throughout the years due to greater participation by military

dependents, have caused the DOD and the Office of Management and Budget (OMB) to change the regulations in an effort to reduce its cost. Many of these changes have had the adverse effect of reducing military health care and resulted in medical and morale problems for service people. These people have thought, and still think, that health care was included in their contract when they joined the armed forces (12:2).

An early study of health care was done in the 1974-75 time frame by the office of Special Studies and Analysis, Headquarters USAF. The Saber Health-Alpha Study studied the cost of Air Force hospitals by realigning the cost of military health facilities along the same lines as most large civilian hospitals and clinics (25). The Saber Health-Bravo Study, a follow-on study, compared the costs of CHAMPUS to in-house care for dependents and retired personnel. It concluded that it was less costly to provide in-house care than to provide care through the private sector (26). These early studies focused on ways of finding less costly means of providing quality health care for the military population.

In 1975, two studies were done focusing on the MHSS. The first study conducted by DOD, OMB, and the Health Department of Education and Welfare (HEW) concluded that military families dissatisfied with CHAMPUS should be allowed to select a health plan "that better suits their desires [2:16]."

The second report done in 1975 by the Naval Post Graduate School, suggested that the way to minimize the total cost of providing health care to all military groups was to shift some care responsibilities to the private sector. That report developed a simple model analyzing the comparative costs of providing in-patient care to the non-active duty population

in either military or civilian hospitals. Based upon the assumptions used in the study, the model concluded that with an increasing non-active duty population, a shift to civilian care would provide a possible cost savings for the MHSS (23:28-29).

The latest of the DOD health studies was completed in February 1979 by the Rand Corporation. This study was critical of the CHAMPUS program and recommended that an alternative health care plan be made available to service members and their dependents (20:102). It also recommended that a test be conducted and that such a test require beneficiaries opting for another plan to share in the premium cost as civil servants do now. The study also suggested that an improved CHAMPUS or other health care plan could possibly relieve the current military doctor shortages (20:80).

While the Rand Study did not do a cost analysis of other health care plans, it did do a detailed comparison of the benefits offered by the largest and most comprehensive of the health plans currently offered to the civil service. The plan used for comparison was the High Option Government-wide Service Benefit Plan offered by Blue Cross and Blue Shield (BCBS). This study established fifty different health care categories. It then gave a detailed description of each system's coverage by category. This comparison is included as Appendix A to aid the reader in understanding the complexity of the health care industry (21:107-130). BCBS is currently the most comprehensive and expensive of all the health plans now in use by the federal government (18).

While health care in general is expensive, it is ranked by service personnel as the second most important (after retirement) of all the military benefits. Findings of the Cost and Value Survey suggest that the health

benefit is a very efficient compensation tool. Military personnel, on the average, value this benefit at several times its cost to the government (17:8). Civilian employers have long recognized this fact and have improved their health care benefit programs and made them more competitive, but the quality of the military benefit appears eroded in absolute, as well as, relative terms (20:94). To understand how the quality of military health care could erode, a brief explanation of the CHAMPUS organization and how it became part of the MHSS will follow.

CHAMPUS Organization

Health care for military dependents and retired personnel and their dependents has long been recognized as an important and necessary benefit to military personnel since it was first authorized by Congress in 1884 (12:2). In 1956, Congress passed Public Law 569, The Dependents Medical Care Act (12.2). This Law authorized the medical care benefit as an entitlement to the dependents of active duty and retired personnel. As a result of the Military Benefits Amendment of 1966, the present day CHAMPUS program became effective on 1 January 1967 with the passing of Public Law 89-614 (27:862). The purpose of CHAMPUS, in its original charter, was to insure that medical care was available to spouses and children of active duty members, retired members and their dependents, and the surviving dependents of active duty and retired members (12:3). If military medical clinics or dispensaries were not available for dependent or retiree care, CHAMPUS permitted the use of civilian doctors and medical facilities to supplement the in-house care. It is this supplement concept that has caused the CHAMPUS program to become so complex (13:80).

Although CHAMPUS is not a health insurance program, it is similar in many respects to health insurance provided by private employers. It does not involve any premium payments by the beneficiaries. However, it does require beneficiaries to share the cost of care that is obtained in the civilian community (15:1).

Critics of the present health care system, and in particular CHAMPUS, claim the program has been mismanaged and is thus too costly. A recent thesis reviewed the organization of the Office of CHAMPUS (OCHAMPUS) to determine the interactions of that office with the DOD, the fiscal administrators, and the beneficiaries. The claims process was also reviewed and described. It was the opinion of that report that the program's management was and is concerned about costs and ways of reducing those costs (13:79-80).

The idea of modern up-to-date medical care has been the subject of interest in many areas of the DOD. Top level military managers, congressmen, and DOD civilians have all shown some degree of concern on this subject at one time or another. This continued interest in medical care for the military dependent has kept the CHAMPUS program in front of Congress from time-to-time and has lead to suggestions on ways to improve the CHAMPUS program. Major General Dean Tice, Deputy Assistant Secretary of Defense for Military Personnel Policy, recently told a House Subcommittee that "Our military personnel ought to have . . . improved medical facilities and a better dependent care program [4:3]."

CHAMPUS Director Theodore D. Wood proposed a \$229.5 million CHAMPUS dental plan to the House Military Personnel and Compensation Subcommittee. Wood has proposed other improvements in CHAMPUS medical coverage that would

include basic eye care, eliminate deductible payments, and put a \$1,000 cap on out-of-pocket payments. Assistant Secretary of Defense for Health Affairs, John H. Moxley, III has supported Wood in these requests (6:2).

The House of Representatives approved and passed a dependent dental care plan in 1980, but it was killed by the Senate due to lack of funding. Rep. Richard White (D-TX) reintroduced this same dental care bill this year. Representative White is the chairman of the House Armed Services Subcommittee on Investigations. His bill (HR 2181) contains a graduated deductible payment scale and a cost-sharing provision based on categories of coverage. It would also allow for dependents to receive dental care on military installations on a space-available basis (4:4). Since funding is a major part of the decision process, and the availability of funds for these improved health care programs is questionable, a brief look at the DOD health care costs will follow.

Defense Health Care Costs

DOD health care expenditures have remained relatively stable at approximately three percent of the overall DOD budget. However, DOD health care expenditures have been decreasing as a percentage of the Federal health care expenditures in the past few years. Major DOD health costs are identified in Program VIII (Training, Medical and other General Personnel Activities). Additional expenses are contained in Program I (Strategic Forces), II (General Purpose Forces), VI (Research and Development), and IX (Administration and Associated Activities). The medical expenses in these programs are integrated with larger mission categories and represent only a small part of the overall DOD health budget (21:2).

The two major components of growth within Program VIII are:
(1) care in Defense Facilities (i.e., all funds budgeted for manning, operating, and building military treatment facilities), and (2) CHAMPUS. It is apparent from Figure 1-2 that the largest component of DOD health costs is for care in defense medical facilities. The percentage growth for the two has been approximately equal.

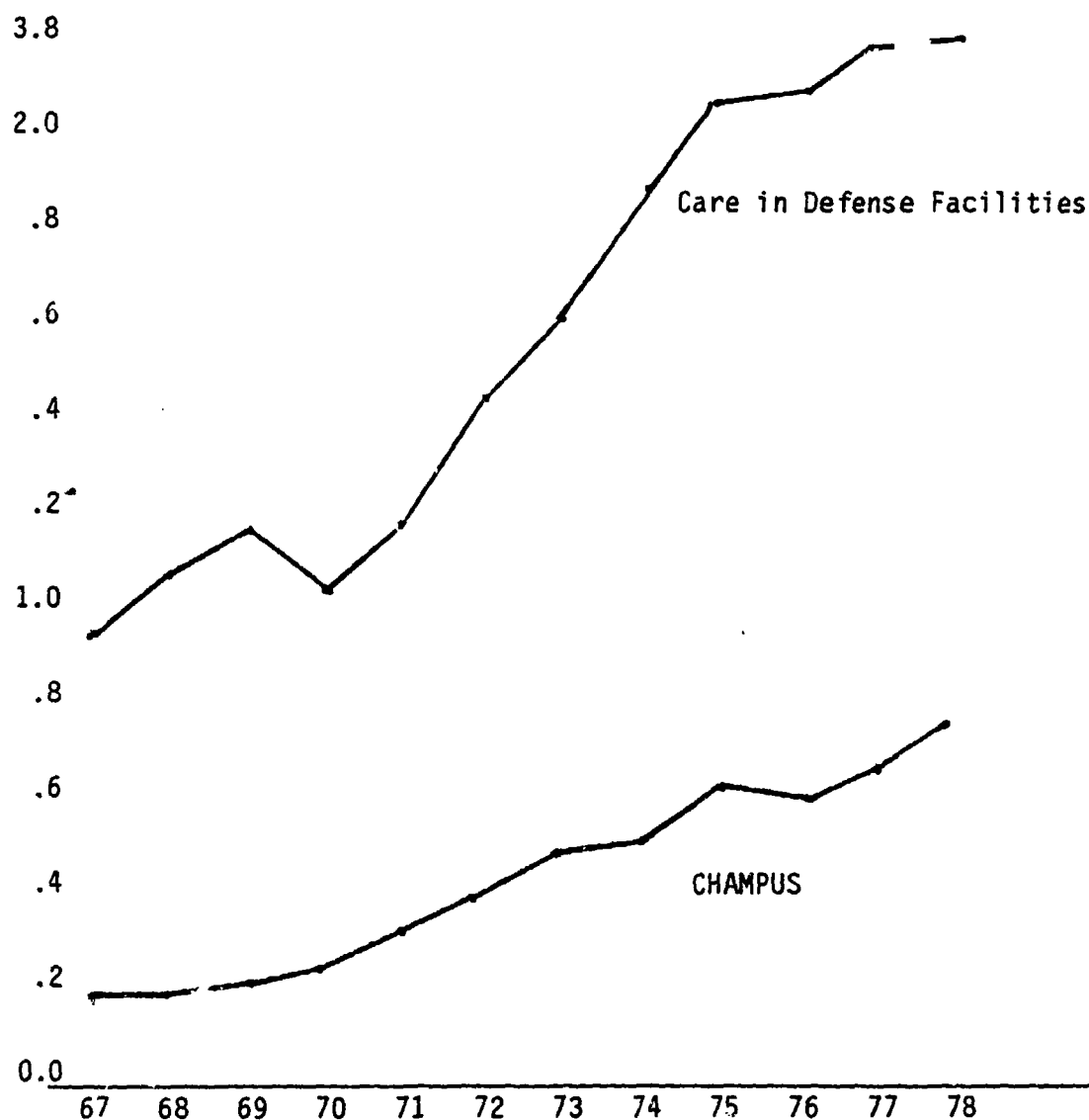


Fig. 1-2. "Program VIII Costs [21:2]."

While there has been a 30 percent real growth over the past eleven years for Program VIII health activities, there has also been an increase in the level of dissatisfaction by the non-active duty military personnel. There has been an equal trade off between the costs of CHAMPUS and that of direct care. CHAMPUS increased its share of the DOD health outlay by 9 percent while outlays for direct care in defense facilities decreased by 9 percent. Today the DOD health budget represents a larger percentage of the overall Defense budget than it did ten years ago. Much of the growth is associated with increases in CHAMPUS (21:6).

Problem Statement

The lack of perceivable improvements in the dependent health care program currently constitute a prime threat to the morale and well-being of the armed forces of the United States (12:2). The active duty military, their dependents, and retired personnel, perceive that the current MHSS and in particular, CHAMPUS, does not provide for non-active-duty military health care needs. The past solution to this problem has been to attempt to increase the funding for the MHSS, but this appears to have failed. A current proposal allows the non-active-duty military to choose an alternate system of health care. This proposal, currently being tested, does not include information as to the costs of benefits of this or any other alternate health care system. A systematic benefit/cost study is needed to identify the costs and benefits of alternate health care systems to insure that senior military managers and decision makers establish an appropriate level of quality health care for non-active-duty military.

Justification

The Surgeon Generals of the three major military services are searching for a cost-effective method of providing the health care demanded by both the active and retired military member. The rising cost of health care delivery systems necessitates minimizing the number of scarce health care inputs (doctors, nurses, and dollars) that are devoted to the military-related health industry.

Senator John C. Stennis, in his report to the Committee on Appropriations on 19 November 1980, supports the recommendation made in both the 1975 OMB/DOD/HEW military health care study and the 1979 Rand study that DOD should test the concept of using alternative health care delivery systems in lieu of the current CHAMPUS reimbursement system. He further stated that:

. . . offering the beneficiary a choice would relieve the pressure of excess demand on the current system, enhance beneficiary satisfaction, and introduce an element of competition into the current system. Further . . . offering a choice is consistent with national policy, such as stated in the 1973 Health Maintenance Organization Act (HMO) (Public Law 93-222) which requires all employers of more than twenty-five persons to offer an HMO option [24:92].

Mr. Theodore Wood echoed these sentiments about a choice of alternatives when he stated:

This is something we can do for military people which probably wouldn't cost very much . . . The idea has been around for a long time. It's time for a test . . . and allow the military folks to join the (health) plans that are already open to federal civil servants [1:2].

Because of these considerations it is desirable to test and evaluate alternative methods of delivering health care benefits to retired military personnel and military dependents. The scientific process of evaluating any alternative requires that the cost of both systems be known. This report will therefore, provide a cost/benefit comparison of BCBS and CHAMPUS.

Research Hypotheses

The purpose of this research is to provide the decision makers with the additional information needed to improve the present MHSS. It will objectively determine whether or not Blue Cross and Blue Shield, which is currently used by part of the federal sector, is a more cost effective alternate to CHAMPUS, which is the current dependent health care system.

The hypotheses will focus on the following two systems of health care: (1) CHAMPUS, and (2) Blue Cross and Blue Shield as used by the federal sector.

(1) H_0 : There is no difference in the benefits (Quantity and Quality) of the two systems.

(2) H_0 : There is no difference in the costs of the two systems.

Certain questions must be answered in order to test these hypotheses.

These questions are:

(1) What are the present health care benefits currently offered by both systems?

(2) What are the total costs of the two systems to the government?

(3) What are the benefit/cost ratios of the two systems?

Conclusion

This chapter presented a brief introduction to the present MHSS and to the CHAMPUS organization. The high level of dissatisfaction with CHAMPUS appears to have been caused by unrealistic expectations, inaccuracy and vagueness in policy benefit statements, and problems with delivery. A suggested choice of an alternate form of non-active-duty health care and the requirement for additional information in this area were also addressed.

Two hypotheses were presented which are the basis for this report. The following chapters will describe in detail the methodology and analysis for testing these theories. Conclusions and recommendations will be discussed in the final chapter.

CHAPTER II

METHODOLOGY

Introduction

This chapter describes in detail the processes which answered the research questions and tested the hypotheses presented in Chapter I. There are two parts to this chapter. The first section of this chapter addresses the data gathering process. The second is concerned with the data manipulation processes. The assumptions and criteria used for the analysis are covered within each section.

The population group for this study is the non-active-duty military personnel. This group is divided into two distinct groups. The first group is the active-duty-military dependent referred to as dependents. The second is retired military personnel and their dependents, referred to as retired personnel. Comments made to "non-active-duty personnel" refer to the entire population group.

The sources of data which were required to determine the associated cost for CHAMPUS and BCBS were collected for fiscal years 1976 through 1980. The Statistics Branch of OCHAMPUS, the Department of Defense, Information Operations and Report Division, and the Blue Cross and Blue Shield Federal Employee Program all supplied information and data used in this report.

Data Gathering Process

The data gathering process focused on comparing the benefits under CHAMPUS with those from Blue Cross and Blue Shield (BCBS), as well as the associated cost of both programs. At the present time, Blue Cross and Blue Shield is the most expensive plan currently available to the federal civil service employee (18). By comparing CHAMPUS and the program recognized as the most expensive, theoretical maximum cost to the government can be found and analyzed.

Costs

Currently, the military dependent does not pay a monthly premium for his/her health care. CHAMPUS requires that the beneficiary (or sponsor) pay part of the expenses through a specified deductible amount and a percentage-cost-sharing on allowable expenses. In most cases, the cost share is less for active duty dependents than for retired beneficiaries. The cost sharing percentage varies with the patient's status and type of medical service; i.e., whether the patient was active duty dependent or retired, and whether he/she was an in-patient or an out-patient. These costs are identified in the CHAMPUS Regulations DOD 6010.8-R and are summarized in the CHAMPUS Handbook (15:55-61).

OCHAMPUS does not have accurate information pertaining to the beneficiary costs of participating in the program (21:147). Therefore, only the cost to the government will be included in this report. The actual government CHAMPUS cost will be presented and compared with a theoretical government cost of BCBS.

The exact total government costs of CHAMPUS were available and are divided into two parts, administrative and claims. The CHAMPUS costs for this study were calculated for each population group by totalling the amounts paid for claims and an appropriate percentage share of the yearly administrative costs. There is no break-out of administrative costs available for each individual group of beneficiaries. It was therefore assumed that each group's portion of the administrative costs were based on its share of the claims cost.

A hypothetical estimate of government cost for BCBS was calculated for two groups of non-active-duty personnel. The calculations were based on taking the government's share of the yearly premium and multiplying it by the number of personnel in each group. The DOD publications entitled Selected Manpower Statistics for fiscal year 1976 through 1980 were used to determine the total number of active duty personnel with dependents as well as the total number of retired personnel for each year. The U.S. Postal Workers Health Program, as administered by BCBS, was used to determine the annual premium cost. Because the U.S. Postal Workers have a wide age group within their work force, their rates were assumed to be representative for the active-duty and non-active-duty personnel. The family rate was used for all the calculations involving military members and retired personnel with dependents. The family rate had to be used because unless dependents are enrolled on a family contract, they are ineligible, at the present time, for benefits (14).

Benefits

The second area of interest was the benefits of each medical plan. This report used the same basic format as presented in Defense Resource Management Study of 1979 (21). This format is given in Figure 2-1.

BENEFIT	BLUE CROSS AND BLUE SHIELD	CHAMPUS
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Fig. 2-1. Medical Benefits Format.

This report attempted to eliminate any subjectivity from its comparison by dividing the benefits into fifty areas. The areas ranged from semi-private rooms to radiation therapy to out-patient care. Each benefit was cited and the available coverage of the two systems was given as a comparison. These references were provided by the CHAMPUS regulations and the Blue Cross and Blue Shield Benefits Book for Federal Employees. A detailed description on how the two different benefit programs were quantified is given in the data analysis section of this chapter.

Data Analysis Process

The data analysis portion is presented in two parts. The first allows for a quantifiable comparison between both benefit systems. The second combines the cost data generated in part one of this chapter and the benefit analysis from part two of this chapter to allow a benefit/cost index to be determined.

Benefits

The comparison of the benefits of programs is a subjective process. Some of the subjectivity can be reduced through the use of scoring models. Scoring models permit the decision maker to examine the performance of different projects or programs on several criteria as a basis for decision making (22:145). Scoring models provide a moderately quick analysis, without a great sacrifice in accuracy.

A scoring model consists of absolute scales for scoring the worth of each benefit relative to a set of desired characteristics. These characteristic scores are then totaled to give a single value number. The scoring model used was:

$$T_j = \sum_i W_i S_{ij}$$

where T_j is the total value of the j th alternative, S_{ij} is the score for benefit, on the i th criterion; and W_i is the criterion weight. In this report, W_i equals 1. The use of W_i allows different significance to be placed on each benefit. This report assumed that each benefit had equal weight in hopes of reducing some of the subjectivity. It is assumed that certain benefits are used more extensively than others but actual break-out of each benefit used was not available (3).

The scoring scale ranged from 0 to 4. The value breakdown is given in Figure 2-2.

- 0 no benefit
- 1 75% of acceptable*
- 2 80% of acceptable*
- 3 full after \$25 or \$4.65 daily
- 4 paid in full

*The amount paid is based on the reasonable cost/charge for the particular service or supply as determined by the CHAMPUS Contractor that processes the claim (15:61).

Fig. 2-2. Score Values.

There are fifty benefit categories which were evaluated. The perfect score $T_{\max}$ is given by:

$$T_{\max} = 50 \times 4 = 200$$

An example of this model is illustrated in Figure 2-3. Figure 2-3 shows the format that was used in this report to find T_j for each benefit. T_j will be used later for the benefit/cost index.

BENEFIT		CRITERION		WEIGHTED SCORE
i	x	S_{ij}	=	T_j
<u>BENEFIT</u>				<u>TYPE OF COVERAGE</u>
		A	B	C
Semi-private room		4	3	2
Radiation Therapy		4	2	1
Out-patient home and office		2	2	1
	T_j	10	7	4

A = Blue Cross and Blue Shield; high option coverage
 B = CHAMPUS coverage for active duty dependent
 C = CHAMPUS coverage for retired and retired dependent

Fig. 2-3. Model Example.

Benefit/Cost

The costs calculated represent the total yearly amount that the government pays for each of the two health care programs. The federal worker and the government each contribute a share of the total premium. The U.S. Postal Workers use a 25/75 percent sharing plan. The Postal Workers pay 25 percent of the yearly cost of their health care while the federal government pays the remaining 75 percent. This is still higher than the rate of 15/85 percent which is proposed for the 1981 HMO test in Portland, Oregon (24:93). This report compares these two cost sharing plans as well as a 0/100 plan where the government would pay 100 percent

of the premium. All these costs will be presented in tables as well as graphs. A recommendation to convert the existing CHAMPUS plan to the Blue Cross and Blue Shield Plan will not be made unless it will result in a 10 percent yearly savings to the government. The 10 percent savings is the present government guide line for cost comparisons (10:4).

The total value, T_j , for each benefit package together with the cost will be combined to provide a benefit/cost index I_j . The benefit/cost index I_j is given by:

$$I_j = B_j/C_j$$

where B_j is the benefit total and C_j is the total program cost. The I_j index for BCBS will then be compared against the I_j index for both the dependent and retired populations. It is assumed that the higher the index, the more favorable the program package.

A second value will be determined which will aid in evaluating each benefit package. A percentage score was used:

$$R_j = T_j/T_{\max}$$

where R_j is the relative score of the j th alternative. This relative score will show the percentage difference over which the benefit totals ranged.

Conclusion

This chapter has presented the methodology by which a benefit/cost index comparison for both Blue Cross and Blue Shield and CHAMPUS was made. This comparison must be made before a reasonable decision can be made to change the present system, retain the present system, or convert to a new system.

The following chapters will present the actual analysis and results. Recommendations as to appropriate actions based on the results of the analysis and various issues related to the problem will also be presented.

CHAPTER III

ANALYSIS

Introduction

This chapter presents the analysis of the hypotheses presented in Chapter I. The first section addresses the cost data while the second focuses on the area of benefits and the related cost/benefit index.

Costs

The data collected and generated for this study are shown in the first four tables. Tables 3-1, 3-3 and 3-4 deal with annual costs while Table 3-2 includes related estimated annual manpower for DOD.

Table 3-1 shows the annual cost of CHAMPUS for the fiscal years 1976 through 1980. The costs are subdivided into three areas: claims paid, administrative costs, and their respective totals. Furthermore, these costs are subdivided according to two different populations: active-duty dependents and retired personnel. The dollar amounts in Table 3-1 are actual figures for these fiscal years.

Table 3-2 presents manpower statistics showing the number of personnel in three categories: active-duty, active-duty with dependents, and retired personnel. These figures are averaged-estimates as of 30 September (end of fiscal year) and are published annually in Selected Manpower Statistics (7).

TABLE 3-1
CHAMPUS ANNUAL COST

YEAR	TYPE*	CLAIMS	ADMINISTRATIVE	TOTAL
1976	1	253,312,448	12,668,320	265,980,768
	2	251,740,033	12,589,680	264,329,713
1977	1	262,731,877	13,341,700	276,073,577
	2	269,675,148	13,694,300	283,369,448
1978	1	290,009,335	13,331,800	303,341,135
	2	294,434,046	13,535,200	307,969,236
1979	1	320,930,271	13,239,840	334,170,111
	2	325,737,572	13,438,160	339,175,732
1980	1	338,107,928	14,604,570	352,712,498
	2	356,416,833	15,395,430	371,812,263

*1 = Active Duty Dependents
2 = Retired and Retired Dependents

SOURCE: OCHAMPUS, Statistics Branch (3)

TABLE 3-2

MANPOWER STATISTICS*

YEAR	ACTIVE DUTY PERSONNEL	ACTIVE DUTY W/DEPENDENTS**	RETIRED PERSONNEL***
1976	2,083,581	1,154,679	1,109,357
1977	2,074,543	1,133,989	1,175,026
1978	2,062,404	1,115,455	1,219,844
1979	2,027,494	1,140,260	1,261,913
1980	2,050,627	1,089,826	1,306,232

*Note that these figures are based on fiscal year ending on 30 September.

**There are approximately 1.4 dependents for each sponsor.

***There are no statistics to determine the number of dependents for each retiree.

SOURCES: Selected Manpower STATISTICS, Table 2-1, 2-6, and 5-3 (7)

Table 3-3 shows the Blue Cross and Blue Shield (BCBS) High Option annual premium rates currently used by the U.S. Postal Workers. The premiums are based on past claims experience and reflect the actual cost of medical care (11:32). The first column is the family rate while the second column is the individual rate. The individual rate is approximately 46 percent of the family rate.

Table 3-4 is a combination of the manpower statistics from Table 3-2 and the annual costs from Table 3-3. This represents the theoretical total annual cost to the government for BCBS. Two other sets of costs are presented in columns two and three which are the 85 percent and 75 percent figures representing the shift downward in government costs as worker participation in the cost-sharing aspect of premium payment is increased.

Figures 3-1 and 3-2 are graphical representations of Tables 3-1 and 3-4. Each represents the annual costs of both Blue Cross and Blue Shield, and CHAMPUS by fiscal year and category of beneficiary. These graphs show that Blue Cross and Blue Shield costs are approximately four times greater than CHAMPUS. The primary reason for the vast difference is because the theoretical annual cost to the government was computed using the family rate. The BCBS graphs therefore, reflect the total cost of medical care for dependents as well as their military sponsor. Since the military sponsor would not require CHAMPUS coverage, those high costs should potentially be less. In addition, the BCBS program cost is experience-rated, which means that future premiums are determined by actual payments for subscriber benefits. When premium income exceeds benefit

TABLE 3-3
BLUE CROSS AND BLUE SHIELD COSTS*

YEAR	COST FAMILY	INDIVIDUAL	COST**
1976	1,599	728	871
1977	1,891	875	1016
1978	1,783	823	960
1979	1,997	943	1054
1980	2,247	1,148	1099

*Note these costs are the annual rates as used by the U.S. Postal Workers.
 **Difference between family rate and individual rate.

SOURCE: Ms. Marilyn Quintal (19).

TABLE 3-4
BLUE CROSS AND BLUE SHIELD COSTS
FOR THE ARMED FORCES

YEAR	TYPE*	COST		
		<u>100%</u>	<u>85%</u>	<u>75%</u>
1976	1	1,846,331,721	1,569,381,963	1,384,748,791
	2	1,773,861,843	1,507,782,567	1,330,396,382
1977	1	2,144,373,199	1,822,717,219	1,608,279,899
	2	2,221,974,166	1,888,678,041	1,666,480,625
1978	1	1,988,856,265	1,690,527,825	1,491,642,199
	2	2,174,981,852	1,848,734,574	1,631,236,389
1979	1	2,277,090,000	1,935,530,000	1,707,817,000
	2	2,520,040,261	2,142,034,222	1,890,030,196
1980	1	2,448,839,022	2,081,513,169	1,836,629,267
	2	2,935,103,304	2,494,837,809	2,201,327,478

1 = Active Duty Dependent
2 = Retired and Retired Dependent

Note this table is a combination of Tables 3-2 and 3-3.

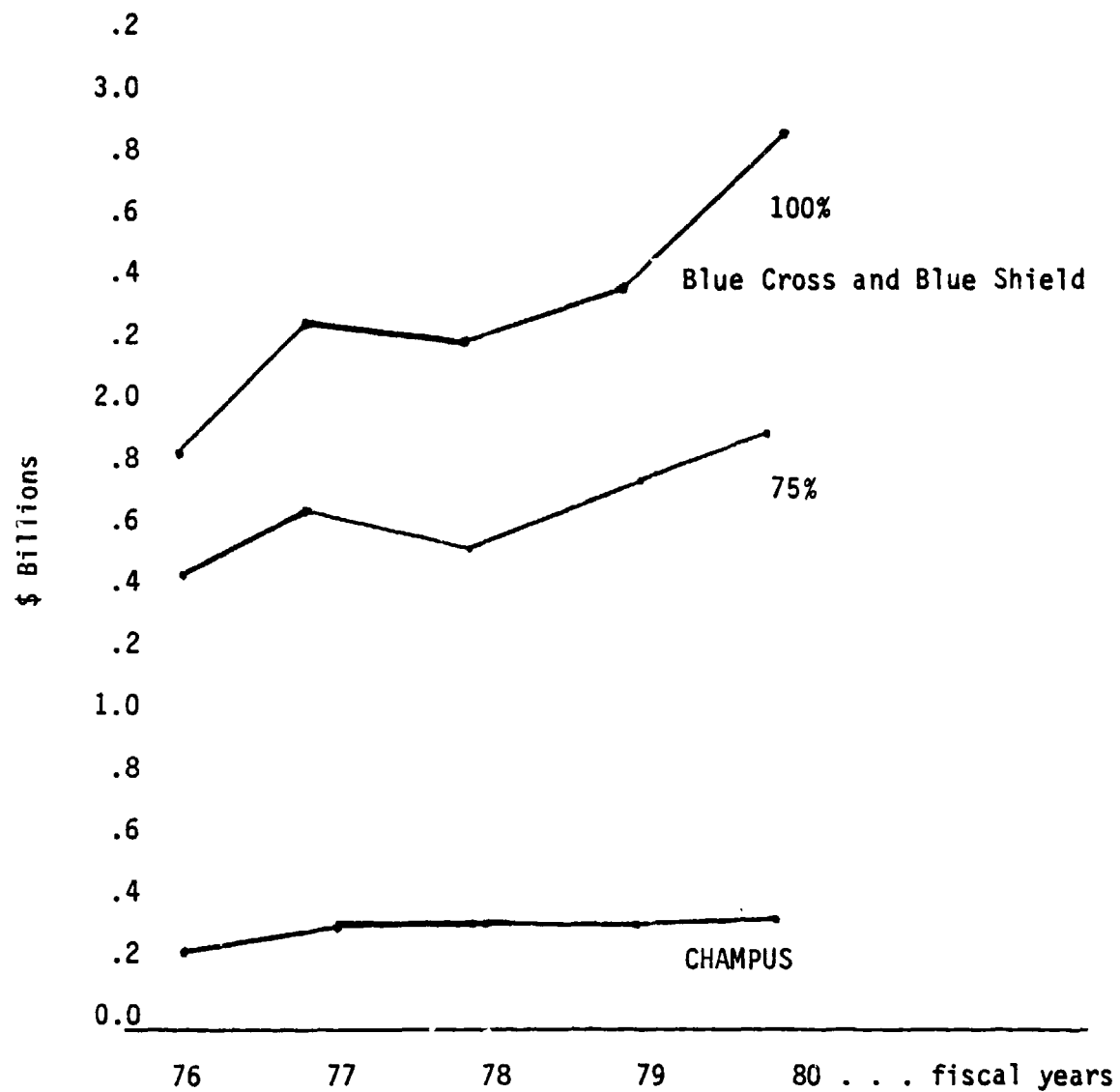


Fig. 3-1. Active Duty Costs.

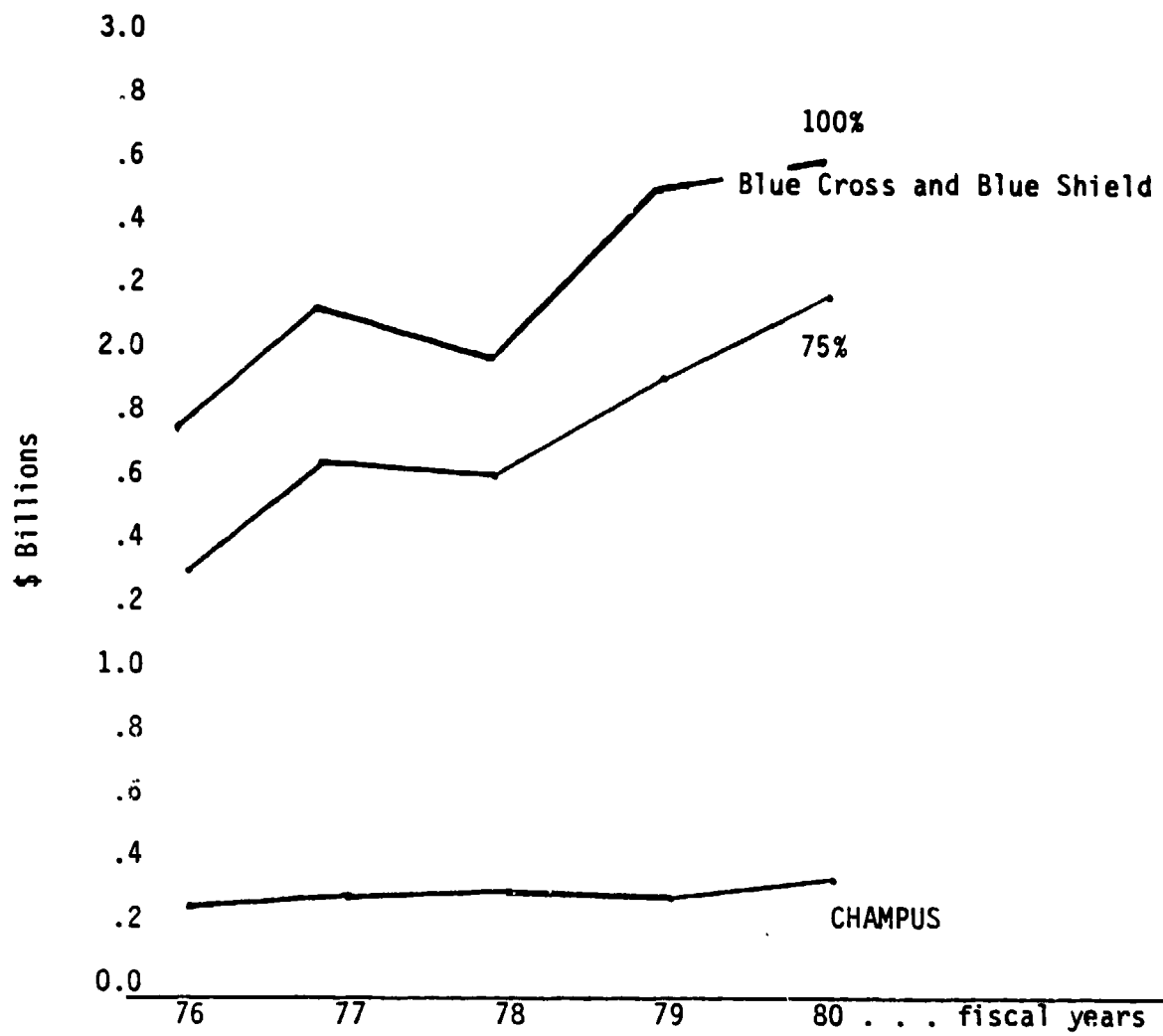


Fig. 3-2. Recipients Costs.

payments and other expenses, producing an excess, the excess is held in reserve to offset future rate increases or to provide new benefits (14). The use of these reserves might also be expected to reduce the high costs associated with BCBS.

The CHAMPUS graphs, which portray very low costs, reflect those actual costs of dependent health care which did not occur in military facilities. CHAMPUS is a supplemental program which does not reflect all the costs of dependent or retired personnel care. Some of the non-active-duty (NAD) personnel health care costs are contained in the other components of Program VIII. Figure 1-2 shows how the costs of Program VIII far exceed those of CHAMPUS. Program VIII costs are divided into fixed and variable expenses. The fixed expenses are represented by hospital buildings, equipment, and contingency staffing requirements. Total costs rise at a constant rate after satisfying the minimum (contingency) requirements (23:6). The variable costs are incurred as patient load increases above the contingency staff levels. The need for increased personnel and associated supplies caused by an increase in the non-active-duty population causes an increase in the variable costs and thus, in total costs. From the analytical model developed by Terasawa and Whipple, they theorized that these variable costs amount to approximately 36 percent of in-house care (23:20-28). Therefore, a more accurate NAD cost curve is:

$$C + V_C = T_C$$

where T_C is the total cost of NAD care; C is the CHAMPUS costs; and V_C is the variable costs associated with the NAD personnel.

There are approximately 1.4 dependents for every active duty military sponsor (7:21). It is not known how many dependents are associated with each retiree. When the active duty member retires, he/she becomes one of the NAD personnel, and although the number of dependents probably drops, it can be assumed that the total retired population may very well exceed the active-duty dependent populations.

Since the exact number of NAD users of DOD medical facilities is unknown, and the exact proportion of retired personnel to active duty dependents is also unknown, six hypothetical cost sharing ratios were developed to better analyze the total NAD costs. These ratios split the estimated 36 percent variable costs between the retired user and the active duty dependent. Since the total government Program VIII costs were not available after 1978, this thesis used 1978 cost information from Figure 1-2 for these and all remaining calculations. Total NAD costs for 1978, as shown in Figure 3-3, reflect the hypothetical ratios of active duty and retired users.

<u>36% SHARING RATIO</u>		<u>TOTAL COST (1978)</u>	
<u>Active</u>	<u>Retired</u>	<u>Active</u>	<u>Retired</u>
0	36	.303	1.153
10	26	.538	.998
18	18	.726	.730
20	16	.773	.683
30	6	1.008	.448
36	0	1.149	.307

Fig. 3-3. Total NAD Costs.

The two extreme ratios are not very plausible because neither group of dependents would likely have exclusive use of all non-active-duty care. Given the lower priority of retirees at medical facilities and the fact that some retirees do not reside at or near a military installation, a logical ratio would be 20:16, or even 30:6, with the active duty dependent accounting for the greater percentage of the variable cost. These adjusted NAD costs, therefore reflect a more accurate cost of dependent health care to be used for comparison.

The total cost of BCBS includes the entire family, both active-duty personnel and non-active duty personnel. Thus, for a true cost comparison, the costs for BCBS should be reduced so as not to include active-duty personnel. The health care cost currently being used in the CHAMPUS CHOICE program is a plausible means for determining the reduction method.

CHAMPUS CHOICE is a test program which allows the NAD personnel to choose a health plan that best suits the individual family's needs. The program is different from CHAMPUS in several ways. This test program, which allows NAD personnel to choose a Health Maintenance Organization (HMO) in place of CHAMPUS, is currently being undertaken in Portland, Oregon. The family must pay part of the premium and sometimes a small charge for each visit to the doctor or hospital. Access to health care (and choice of primary care physician) is assured in a prepaid health plan. The out-of-pocket costs to the beneficiaries are intended to be lower than their current CHAMPUS costs (9). An example of yearly costs is given in Figure 3-4. The higher costs are those charged by the BCBS-HMO. The

benefits offered under BCBS-HMO are comparable to the High Option Plan. According to Commander Evans, OCHAMPUS Public Affairs Officer, these premium costs represent 30 percent of the total cost to the government for the retired personnel and 10 percent of the total cost to the government for the active duty personnel.

<u>GROUP</u>	<u>YEARLY INDIVIDUAL PREMIUMS</u>
Active duty spouse	\$25.08 to 52.08
Active duty family	55.68 to 90.36
Retired-retiree only	\$150.72 to 280.08
Retired-family	354.36 to 604.80

Fig. 3-4. CHAMPUS CHOICE Premiums (9)

Because the costs reflected in Figure 3-4 are less than the single rate charged by BCBS, a new revised theoretical cost of BCBS was calculated. The new rate was the difference between the family rate and the single rate. This new rate factor represents a 46 percent decrease over the family rate. Again, using 1978 figures, this more realistic estimate of costs for BCBS is \$1.06 billion for dependents and \$1.17 billion for retired personnel. These reduced BCBS costs are still higher than the estimated total NAD costs presented earlier in Figure 3-3, except for the two extreme ratios.

Benefits

The results of the benefit comparisons are in Table 3-5. Table 3-5 presents each type of coverage in columns A, B, and C. The first column titled "benefits" lists the fifty different categories of health care benefits. The scoring scale for each category of benefit ranged from 0 to 4. The T_j and R_j for each type of coverage is included in the table. A maximum of two hundred points was possible for T_j .

The CHAMPUS supplemental health system was originally modeled after BCBS's high option plan (9). Therefore, both plans were expected to have a very similar T_j benefit index total and R_j ratio percentage. Table 3-5 reflected this similarity. There is a marked drop in the CHAMPUS (Ret) ratio which can be attributed to the larger percentage the retired personnel must pay when CHAMPUS is utilized. The drop may also be partially attributed to the design of the scoring scale used for benefits. BCBS has higher scores for most, but not all, of the different categories.

TABLE 3-5
SCORING MODEL T_j

BENEFIT	TYPE OF COVERAGE		
	A	B	C
Semi-Private Allowance	4	3	1
Allowance Toward Private Room	2	3	1
In-patient Hospital Services *1	4	3	1
Maternity	4	3	1
Abortion	4	3	1
Sterilization (Surgically induced)	4	3	1
Dressing, Lab, etc.	4	3	1
Surgery	4	3	1
Illness	4	3	1
Accidental Injury	4	3	1
Physicians In-House Consultations *2	4	3	1
Maternity	4	3	1
In-patient Physical Therapy	4	3	1
In-patient Radiation Therapy	4	3	1

TABLE 3-5--Continued

BENEFIT	TYPE OF COVERAGE		
	A	B	C
Out-patient Radiation Therapy *3	4	2	1
Cast & Suture Removal	4	2	1
Diagnostic and Laboratory	4	2	1
Accidental Injury	4	2	1
Out-patient Surgery	4	2	1
Sterilization	4	2	1
Medical Emergencies	4	2	1
Accidental Injury *4	4	2	1
Emergency Dental Care	2	0	0
Medical Emergencies	4	2	1
Out-patient (Office) Consultation	2	2	1
Out-patient Psycho-Therapy	2	2	1
Diagnostic, Laboratory, etc.	4	2	1
Out-patient Surgery	4	2	1
Out-patient Home and Office (Routine)	2	2	1

TABLE 3-5--Continued

BENEFIT	TYPE OF COVERAGE		
	A	B	C
Out-patient Psychiatry	2	2	1
Prescription Drugs and Medicines	2	3	1
Ambulance Services	2	2	1
Private Duty Nursing	2	3	1
Medical Equipment Rental	2	2	1
Blood Transfusions	2	3	1
Orthopedics	2	3	1
Day-Night Hospital Care (Nervous & Mental)	2	3	1
Out-patient Group Psychotherapy	4	2	1
Family Counseling	0	2	1
Hypnosis	0	2	1
Services by School	0	2	1
Halfway House	0	2	1
Treatment Center	0	0	0
Sex Change	0	0	0
Speech Therapy	0	2	1

TABLE 3-5--Continued

BENEFIT	TYPE OF COVERAGE		
	A	B	C
Visual Training	0	0	0
Domiciliary Care	0	0	0
Maximum (Dollar) Benefit	4	0	0
Deductible	4	3	3
Coinsurance	N/A	N/A	N/A
T _j	134	106	45
R _j	67%	53%	22.5%

*1 = In-patient hospital services

*2 = Physicians services while hospital patient

*3 = Out-patient hospital services

*4 = Physicians services while out-patient

A = Blue Cross and Blue Shield; High Option coverage (BCBS)

B = CHAMPUS coverage for active duty dependent (A/D)

C = CHAMPUS coverage for retired and retired dependents (Ret)

Benefit/Cost.

The benefit/cost index, I_j , is shown in Figures 3-5 and 3-6. Included are both the original theoretical costs and the revised theoretical costs of both BCBS and CHAMPUS.

<u>COVERAGE</u>	<u>BENEFIT/COST INDEX (I_j)</u>	
	<u>Original</u>	<u>Revised</u>
BCBS (A/D)	70.5	126.4
BCBS (Ret)	63.8	118.6
CHAMPUS (A/D)	349.8	*
CHAMPUS (Ret)	146.6	*

*See Figure 3-6 for these revised costs.

Fig. 3-5. Benefit/Cost Comparisons

<u>36% SHARING RATIO</u>		<u>BENEFIT/COST INDEX (I_j)</u>	
<u>Active</u>	<u>Retired</u>	<u>Active</u>	<u>Retired</u>
0	36	349.8	39.0
10	26	197.0	49.0
18	18	146.0	61.6
20	16	137.1	65.9
30	6	105.2	100.4
36	0	92.3	146.6

Fig. 3-6. Revised NAD Benefit/Cost Index.

As can be seen, CHAMPUS (A/D) leads in the original index and all but the last two revised categories. The CHAMPUS (Ret) index, which has the second highest original benefit/cost index, has a marked decrease when revised costs are considered. This decrease in the retired population's index is caused by the relative low value of the T_j benefit index total. A 33:03 ratio for the retired personnel is required for the benefit/cost index to equal that of the revised BCBS. A different ratio of 23:13 is required before the active duty ratio used in calculating CHAMPUS's index to equal that of the revised BCBS. The revised BCBS index increases for both population groups because the cost of health care was reduced to a more realistic dollar amount by eliminating the active-duty military premium costs.

The index for CHAMPUS drops approximately 15 percent when two adjustments are considered. Once the proposed dental plan costing \$0.23 billion, and the \$1,000 cap of out-of-pocket costing \$0.1 billion are considered, the benefit/cost I_j index drops to 137, while the ratio percentage, R_j , increases to 55 percent.

Even with the additional costs associated with CHAMPUS improvements, the benefit/cost index for (A/D) personnel still leads in the revised categories, meaning that CHAMPUS provides the best benefit for the cost to the government.

A reasonably revised benefit/cost index for the (Ret) personnel is still considerably lower than the next closest category, which is BCBS (Ret). To raise the benefit/cost index for the retired population, the

numerator, which is the T_j benefit component, could be increased, but such an increase would cost additional money. The denominator, which is the cost factor, could be decreased, but this seems unlikely when today's economic factors are considered. The exact costs associated with an increase in the total benefits for the retired population are beyond the scope of this thesis.

Conclusion

This chapter analyzed the benefit/cost index comparison for BCBS and CHAMPUS. Adjustments to the high cost of BCBS were made by logically reducing some of the hidden and/or extraneous costs. The apparently lower CHAMPUS costs were increased due to costs associated with dependent care which were included in the Program VIII costs. The benefit/cost indexes for each health care plan were given along with a comparison of each plan. The final chapter consists of the conclusion and recommendations drawn from the analysis, as well as recommended areas for future study.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

Summary

Chapter I presented an overview of the MHSS as an essential part of the military compensation package. CHAMPUS is the non active duty (NAD) personnel's link to this compensation package. A requirement to possibly reduce this dissatisfaction by a systematic benefit/cost study of the current Blue Cross and Blue Shield Federal Employee Health Program and CHAMPUS was identified. Two hypotheses, focusing on benefits and costs, as well as three related questions, were also developed.

The methodology used to accomplish this benefit/cost study, along with sources of data and the associated population groups, were then identified. The population group for this study was non-active-duty military personnel. The data gathering and data analysis process were then detailed for a five year period starting with fiscal year 1976. A scoring model to analyze this data along with the benefit/cost equations were then detailed in Chapter II.

Chapter III consisted of tables, graphs and figures which developed directly from the methodology of Chapter II. These data were then analyzed, focusing on the two health care systems which lead to a benefit/cost study. Some initial reasons for the differences between the two systems were discussed.

The initial discussions of Chapter III are continued and expounded in this chapter (Chapter IV). Each research hypothesis is discussed and a concise recommendation for changing the supplemental CHAMPUS program is presented. The chapter then concludes with suggested areas for further study.

Hypothesis 1.

H_0 : There is no difference in the benefits (Quality and Quantity) of the two systems.

The two systems were compared using a 200 point scoring model. See Table 3-5 for the results of this model. Analysis of Table 3-5 leads to two basic conclusions. Blue Cross and Blue Shield has a slightly better, but not significantly so, benefit system when compared with CHAMPUS for active-duty-dependents. However, there is a significant difference for the retired and retired dependents. The retired populations have very few actual benefits under the present CHAMPUS system. Therefore, the hypothesis (H_0) for the active-duty dependent is accepted while the H_0 for retired personnel must be rejected.

Hypothesis 2.

H_0 : There is no difference in the costs of the two systems.

Initially the actual cost of CHAMPUS was compared to a theoretical cost of BCBS. The results are shown in Figures 3-1 and 3-2. It is apparent that there is a significant cost difference with CHAMPUS being far less costly. The average annual difference between the two systems is \$1.4 billion. When comparing the graphs for both population groups, the cost

differentials are similar. The discovery of such a large cost differential led the author to explore areas of possible hidden costs within both systems. Taking into account these hidden costs resulted in a reduction of BCBS costs and an increase in the cost of CHAMPUS¹. Thus, the disparities shown in Figures 3-1 and 3-2 were narrowed greatly. The annual revised cost difference for the active duty population ranged from \$0.757 to \$0.09 billion and for the retired population ranged from \$0.863 to \$0.02 billion. Therefore, the hypothesis (H_0) must be rejected. There is a reasonable cost differential between the two health care systems.

Recommendations

One goal of the DOD is to provide quality health care to all beneficiaries as part of a benefit package. This goal appears to have been partially achieved for the active-duty dependent. But, because of the reduced quantity of CHAMPUS care and the long queues at DOD medical facilities, many retirees seek other health care systems (2:16). If this is true, then apparently, the goal of quality health care has not been achieved for the retired population. The retiree became accustomed to a certain level of health care for himself and his dependents while on active duty. He might rightly expect that both the quantity and quality of health care would continue when he retired. To achieve the stated DOD goal for retirees, the government should attempt to raise the level of benefits to a level comparable to that of active duty dependents.

¹ More precisely the increase was a summation of the total NAD costs rather than CHAMPUS alone.

It was pointed out in the discussion of the costs associated with the increased level of retired health care benefits that additional money is needed. The present BCBS program provides a cost effective way of achieving this goal rather than increasing the present CHAMPUS budget. Therefore, it is recommended that in order to achieve quality health care for all beneficiaries that the retired population be eliminated from the present MHSS health care system and incorporated into the present Blue Cross and Blue Shield Federal Employee Health Care Program or other comparable civilian program.

The additional cost of the civilian health care program could be paid for through several means. Some of the cost could be paid for through a cost sharing plan similar to the ones used in the CHAMPUS CHOICE test, or the current Postal Workers payment plan in which beneficiaries pay 25 percent of the premium cost. There should also be some reduced cost to the government through the reduction of medical facilities needed and the reduced workload of the military physicians as the number of people using the MHSS decreases. This reduced cost could offset the additional cost of providing an increased quality health care for the retired population.

The present quality of health care provided by in-house physicians is assumed to be adequate. It can also be assumed that as the quantity of health care is reduced, the quality of that care should increase. With the reduction of the physician workload, more active-duty dependents should be able to be given in-house medical care. In-house medical care of dependents could possibly increase the actual and perceived level of satisfaction of dependents with the MHSS. The CHAMPUS program could therefore be substantially reduced.

Further Study Areas

During this research, areas were identified which needed further study. These areas may provide a starting point for other related research.

The Terasawa and Whipple study implied that approximately 36 percent of the in-house medical care costs could be attributed to dependents and retired personnel. They stated that "It is not at all clear that any of the true fixed and variable costs exist [are known] at the present time [23:18]." Because this type of information was and is lacking, estimates and generalizations were used to construct their model. Therefore, a study focusing on the actual fixed and variable costs in DOD medical facilities is needed. The following is a suggested method by which their model could be proven correct/incorrect. Wright-Patterson AFB, OH could be used to discover the costs associated with a hospital having a large civilian, retired, and dependent population. A northern tier base, such as Minot AFB, ND could be used to discover the costs of a smaller hospital with a population comprised primarily of active-duty and active-duty-dependents.

The present Federal Employee Program uses a 25/75 percent cost sharing plan. A study should be considered which would find actual out-of-pocket cost of CHAMPUS care. It has been assumed that these out-of-pocket costs are presently less than 10 percent. The OCHAMPUS office does not keep these costs. OCHAMPUS keeps only government costs paid and number

of claims filed. Finding out actual out-of-pocket expenses would aid greatly in determining how much each individual or family would be willing to pay for a non-MHSS health care package.

Conclusion

A simple benefit/cost analysis incorporating actual and theoretical components affecting the comparative costs and benefits of providing health care to the eligible non-active duty population was accomplished. The analysis indicated that the present CHAMPUS system provides the best benefit to cost ratio for active-duty dependents. It also indicated that the retired population receives substantially fewer health care benefits after they separate from active-duty.

At a time when one of the socio-economic problems facing the military services is the demand for more equitable access to a quality health care system, the Surgeon Generals of the three major military services are diligently searching for the least-cost method of providing the care which is demanded by the eligible dependent population. From the analysis made and the studies cited, this thesis recommended an approach to meet that objective and improve the non-active-duty personnel's health care system. Specifically, that recommendation is to transfer the retired population to a civilian health insurance program and accomplish all the active-duty dependent population health care in-house. The author believes that this thesis will assist in both increasing the satisfaction by NAD personnel with their health care and also possibly reduce the overall health care costs to the government.

APPENDICES

APPENDIX A
CHAMPUS VS. BCBS

TABLE III.6-1
CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
(HIGH OPTION)

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
INPATIENT HOSPITAL SERVICES ^{2/}			
Semi-Private Allowance	PAID IN FULL for up to 365 days per confinement in a member hospital; 80% of average daily charge in a non-member hospital for up to 365 days per confinement.	80% of covered charges for days in excess of 365.	For each confinement ^{3/} of spouses and children of active duty members, pays hospital charges less \$25 or \$4.65 per day, whichever is greater. For each confinement of retired members and their spouses and children and surviving spouses and children of deceased active duty and deceased retired members, pays 75% of hospital charges.
Allowance Toward Private Room	Limited to the hospital's average daily charge for semi-private accommodations, for up to 365 days per confinement. However, if the patient's isolation is required by law of a state or other government body, the full private room charge is covered.	80% of covered charges for days in excess of 365.	If private room medically necessary for each confinement ^{3/} of spouses and children of active duty members, pays hospital charges less \$25 or \$4.65 per day, whichever is greater. For each confinement of retired members and their spouses and children and surviving spouses and children of deceased active duty and deceased retired members, pays 75% of hospital charges.
Inpatient Hospital Services	PAID IN FULL for up to 365 days per hospital confinement.	80% of covered charges for days in excess of 365.	For each confinement ^{3/} of spouses and children of active duty members, pays hospital charges less \$25 or \$4.65 per day, whichever is greater. For each confinement of retired members and their spouses and children and surviving spouses and children of deceased active duty and deceased retired members, pays 75% of hospital charges.
Facilities of operating room, recovery room intensive care unit, and other treatment rooms; drugs and medicines for use in the hospital when listed in official formularies.			

SOURCE: [21:107-130].

TABLE III. 6-1 (Cont)
CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN

BENEFIT	GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD) (HIGH OPTION) 1/			CHAMPUS BASIC MEDICAL PROGRAM
	INPATIENT HOSPITAL SERVICES2/	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	
Maternity		Room and board and other hospital services PAID IN FULL as for illness and injury for up to 365 days per hospital confinement in semi-private accommodations under both self only and family enrollments.	For maternity care with complications, 80% of covered charges for days in excess of 365; for normal maternity--no benefit.	Same as above
Abortion		PAID IN FULL for subscribers both under family and self-only coverage.	80% of expenses not covered under Basic.	Same as above.
Nervous and Mental		Room and board and other hospital services PAID IN FULL for up to 365 days per hospital confinement in semi-private accommodations.	80% of covered charges in non-member nervous and mental institutions or for days in excess of 365 in a member hospital.	Same as above.
Sterilization (Surgically Induced)		Room and board and other hospital services PAID IN FULL for up to 365 days per hospital confinement in semi-private accommodations.	80% of expenses not covered under Basic.	Same as above.

TABLE 111.6-1 (Cont)
CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
(HIGH OPTION) 1/

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
INPATIENT HOSPITAL SERVICE 2/	PAID IN FULL	Not applicable	Same as above
Dressings, ordinary splints, plaster casts, x-ray and laboratory examinations, electrocardiograms and electroencephalograms; basal metabolism examinations; renal dialysis; radiation therapy, physical therapy, anesthetics and oxygen and their administration; intravenous injections and solutions.			
Surgery	Room and board and other hospital services PAID IN FULL for up to 365 days per hospital confinement in semi-private accommodations.	80% of covered charges for days in excess of 365.	Same as above
Illness	Room and board and other hospital services PAID IN FULL for up to 365 days per hospital confinement in semi-private accommodations.	80% of covered charges for days in excess of 365.	Same as above

TABLE III.6-1 (Cont)
CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
(HIGH OPTION) 1/

BENEFIT		CHAMPUS BASIS MEDICAL PROGRAM
INPATIENT HOSPITAL SERVICE 2/	BASIC BENEFITS	CHAMPUS BASIS MEDICAL PROGRAM
Accidental Injury	Room and board and other hospital services PAID IN FULL as for illness and injury for up to 365 days per hospital confinement in semi-private accommodations, but the total of inpatient days utilized for accidental injuries is not deducted from the total of days available for basic hospital benefits.	Same as above
	SUPPLEMENTAL BENEFITS 80% of covered charges for days in excess of 356.	

TABLE III.6-1 (Cont)
CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
(HIGH OPTION) 1/

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
PHYSICIAN'S SERVICES 4/ (Rendered to a Hospital Inpatient)			
In-Hospital Consul- tations (Other than Radiological)	PAID IN FULL (limited to one per physi- cian per hospital admission).	80% of usual, custo- mary and reasonable charges for those consultations not covered by Basic Benefits (such as second consultation by same physician during same admis- sion)	Same as above
Maternity	PAID IN FULL (including pre and postnatal care) under both self only and family enrollment.	NOT APPLICABLE	Same as above
In-Patient Physical Therapy	PAID IN FULL (if patient is eligible for in-hospital medical care).	80% of usual, custo- mary and reasonable charges not paid by Basic Benefits	Same as above
Radiation Therapy	PAID IN FULL	NOT APPLICABLE	Same as above

TABLE III.6-1 (Cont)
 CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
 GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
 (HIGH OPTION) 1/

BENEFIT	GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD) (HIGH OPTION) 1/		CHAMPUS BASIC MEDICAL PROGRAM
	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	
OUTPATIENT HOSPITAL SERVICES			
Radiation Therapy	PAID IN FULL	Not applicable	For spouses and children of active duty members, pay 80% of allowable charges after annual deductible requirement has been met. For retired members and their spouses and children and surviving spouses and children of deceased active duty and deceased retired members, pay 75% of allowable charges after annual deductible. Annual fiscal year deductible is \$50 for the first claimant or \$100 for two or more members filing claims.
Cast and Suture Removal	PAID IN FULL	Not applicable	Same as above
Diagnostic X-Ray and Laboratory Services (Including ECGs, EKGs, and Basal Metabolism Tests)	PAID IN FULL when rendered in connection with maternity care, an illness, injury, or definitive set of symptoms (except allergy tests and surveys).	Not applicable except for allergy tests and surveys which are covered at 80% of usual, customary and reasonable charges.	Same as above
Accidental Injury	All covered services PAID IN FULL when rendered in connection with and within 72 hours of an accidental bodily injury (except no time limit on x-ray and laboratory services).	80% of charges for covered services rendered after 72 hours	Same as above

TABLE III.6-1 (Cont)
 CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
 GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
 (HIGH OPTION) 1/

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
OUTPATIENT HOSPITAL SERVICES			
Outpatient Surgery (including Fractures, Dislocations, Burns, Renal Dialysis, Electroshock Therapy, Oral Surgery and Removal of Impacted Teeth)	All covered services PAID IN FULL when rendered in connection with and within 72 hours of outpatient surgery, wherever performed (except no time limit on x-ray and laboratory services).	80% of charges for covered services rendered after 72 hours	Same as above. However, dental coverage limited to those instances in which oral disease or infection is significantly complicating a medical or surgical condition under medical treatment
Sterilization (Surgically Induced)	PAID IN FULL	Not applicable	For spouses and children of active duty members, pays 80% of allowable charges after annual deductible requirement has been met. For retired members and their spouses and children and surviving spouses and children of deceased active duty and and deceased retired members, pays 75% of allowable charges after annual deductible is \$50 for the first claimant or \$100 for two or more members filing claims.
Medical Emergencies	All covered services PAID IN FULL when rendered in connection with and within 72 hours of onset of medical emergency (except there is no time limit on x-ray and laboratory service and rabies injections).	80% of charges for covered services rendered after 72 hours.	Same as above

TABLE III. 6-1 (Cont)
CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
(HIGH OPTION) 1/

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
OUTPATIENT PHYSICIANS' SERVICES (Rendered in Outpatient Department of a Hospital or in a Doctor's Office)			
Accidental Injury	PAID IN FULL for services rendered in connection with and within 72 hours of an accidental bodily injury (except no time limit on x-ray and laboratory services and rabies injections).	80% of usual, customary and reasonable charges rendered after 72 hours.	For spouses and children of active duty members, pays 80% of allowable charges after annual deductible requirement has been met. For retired members and spouses and children and surviving spouses and children of deceased active duty and deceased retired members, 75% of allowable charges after annual deductible. Annual fiscal year deductible is \$50 for the first claimant and \$100 for two or more family members filing claims. NOTE: There are no limits under CHAMPUS as to where the treating physician may provide authorized services in order to be considered a coverable outpatient benefit.
Emergency Dental Care	NO BENEFIT	80% of usual, customary and reasonable charges not paid by Basic Benefits.	NO BENEFIT

TABLE III.6-1 (Cont)
CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
(HIGH OPTION) 1/

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
OUTPATIENT PHYSICIANS' SERVICES			
rendered in Out-Patient Department of a Hospital or in a Doctor's Office			
Medical Emergency	PAID IN FULL for covered services rendered in connection with and within 72 hours of onset of medical emergency (except no limit for diagnostic x-ray and laboratory services).	80% of usual, customary and reasonable charges for covered services rendered after 72 hours.	For spouses and children of active duty members, pays 80% of allowable charges after annual deductible requirement has been met. For retired members and spouses and children and surviving spouses and children of deceased active duty and deceased retired members, 75% of allowable charges after annual deductible. Annual fiscal year deductible is \$50 for the first claimant and \$100 for two or more family members filing claims. NOTE: There are not limits under CHAMPUS as to where the treating physician may provide authorized services in order to be considered a coverable benefit.
Outpatient (Office) Consultation	NO BENEFIT	80% of usual, customary and reasonable charges.	Same as above.
Outpatient Psychotherapy	NO BENEFIT	80% of usual, customary and reasonable charges.	Same as above.

TABLE III.6-1 (Cont)
 CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
 GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
 (HIGH OPTION) 1/

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
OUTPATIENT PHYSICIANS' SERVICES Rendered in Out-Patient Department of a Hospital or in a Doctor's Office			
Diagnostic X-Ray and Laboratory Services (including EKG's, EEG's, ENG's and Basal Metabolism Tests)	PAID IN FULL (except allergy tests and Surveys)	NOT APPLICABLE (except for allergy tests and surveys which are covered at 80% of usual, customary and reasonable charges)	For spouses and children of active duty members, pays 80% of allowable charges after annual deductible requirement has been met. For retired members and spouses and children and surviving spouses and children of deceased active duty and deceased retired members, 75% of allowable charges after annual deductible. Annual fiscal year deductible is \$50 for the first claimant and \$100 for two or more family members filing claims. NOTE: There are no limits under CHAMPUS as to where the treating physicians may provide authorized services in order to be considered a coverable outpatient benefit.
Outpatient Surgery (Including Fractures, Dislocations, Burns, Renal Dialysis, Electroshock Therapy, Oral Surgery and Removal of Impacted Teeth)	PAID IN FULL	NOT APPLICABLE	Same as above. However, dental coverage limited to those instances in which oral disease or infection is significantly complicating a medical or surgical condition.

TABLE III.6-1 (Cont)
 CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
 GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
 (HIGH OPTION) 1/

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
Outpatient Home and Office (Routine)	NO BENEFIT	80% of usual, customary and reasonable charges.	Same as above.
Outpatient Psychiatry	NO BENEFIT	80% of usual, customary and reasonable charges.	Same as above.

TABLE III.6-1 (Cont)
CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
(HIGH OPTION) 1/

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
OTHER MEDICAL SERVICES & SUPPLIES			
Prescription Drugs and Medicines and Insulin	NO BENEFIT	80% of usual, customary and reasonable charges	When furnished in a hospital, drugs are cost-shared as inpatient hospital services. When obtained by a patient other than an inpatient, they are cost-shared as other outpatient services. (See Deductibles and Co-insurance below).
Professional Local Ambulance Service	NO BENEFIT	80% of usual, customary and reasonable charges.	Ambulance service is considered to be an outpatient service and is cost-shared as other outpatient services.
Private Duty Nursing (Licensed RN or PN)	NO BENEFIT	80% of usual, customary and reasonable charges.	Services of a private duty nurse are covered by CHAMPUS when ordered by the attending physician. If provided as part of an inpatient confinement, they are cost-shared as inpatient hospital services. When provided a patient in the home, they are cost-shared the same as other outpatient services.
Rental of Durable Medical Equipment	NO BENEFIT	80% of usual, customary and reasonable charges.	Cost-shared as other outpatient services.
Blood Transfusions Including the Cost of Blood and Blood Plasma	NO BENEFIT	80% of usual, customary and reasonable charges.	Cost-shared as inpatient services when provided as part of hospital services to an inpatient. Cost-shared the same as other outpatient services when provided on an outpatient basis.

TABLE III.6-1 (Cont.)
CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
(HIGH OPTION) 1/

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
OTHER MEDICAL SERVICES & SUPPLIES			
Orthopedic Braces Crutches and Prosthetic Appliances Such as Artificial Limbs and Eyes	NO BENEFIT	80% of usual, customary and reasonable charges	Same as above.
Day-Night Hospital Care (Nervous and Mental)	NO BENEFIT	80% of usual, customary and reasonable charges.	Cost-shared same as other outpatient services.
Outpatient Group Psychotherapy, Collateral Visits, and Services of Members of Mental Health Teams, i.e., Physician, Clinical Psychologist, Psychiatric Nurse, Psychiatric Social Worker	NO BENEFIT	When performed by a physician or clinical psychologist and when performed by other therapists under the supervision of a physician.	Outpatient psychotherapy is covered and cost-shared by CHAMPUS as an outpatient benefit with same deductible and coinsurance as other outpatient benefits. Psychotherapy can be provided on an individual or group basis. Services of clinical psychologists do not require a referral or supervision by a physician. All other psychotherapy when provided by a non-M.D. therapist must be referred by and certified as to necessity and appropriateness by an M.D. and recertified every 30 days.
Marital, Family or Other Counseling	NO BENEFIT		Coverable if provided by a physician or clinical psychologist.
Hypnosis or Hypnotherapy	NO BENEFIT		Same as above.

TABLE III.6-1 (Cont.)
CHAMPUS VS A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
(HIGH OPTION) 1/

BENEFIT	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
OTHER MEDICAL SERVICES & SUPPLIES			
Services Rendered or Billed by a School	NO BENEFIT	NO BENEFIT	NO BENEFIT
Charges for Room and Board in a Halfway House	NO BENEFIT	NO BENEFIT	Coverable if part of a prescribed psychiatric treatment program.
Charges for Room and Board in a Residential Treatment Center for Emotionally Disturbed Children and Adolescents	NO BENEFIT	NO BENEFIT	Same as above.
Services and Supplies Related to Sex Gender Change or Sexual Dysfunctions or Inadequacies	NO BENEFIT	NO BENEFIT	NO BENEFIT
Speech, Occupational, Recreational, or Educational, or Educational Therapy or Other forms of Non-medical Self-Care or Self-Help Training	NO BENEFIT	NO BENEFIT	Speech and occupational therapy are coverable if part of a medically prescribed treatment plan. Cost-shared as inpatient if provided as an in-hospital service; cost-shared as outpatient if provided as an outpatient service.

TABLE III.6-1 (Cont)
 CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
 GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
 (HIGH OPTION) 1/

BENEFIT	OTHER MEDICAL SERVICES & SUPPLIES	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
Eye Exercises or Visual Training		NO BENEFIT	NO BENEFIT	NO BENEFIT
Custodial or Domiciliary Care		NO BENEFIT	NO BENEFIT	NO BENEFIT

TABLE III.6-1 (Cont)
CHAMPUS VS. A REPRESENTATIVE FEDERAL EMPLOYEES HEALTH BENEFIT PLAN
GOVERNMENT-WIDE SERVICE BENEFIT PLAN (BLUE CROSS & BLUE SHIELD)
(HIGH OPTION) 1/

BENEFIT	OTHER BENEFIT PROVISIONS	BASIC BENEFITS	SUPPLEMENTAL BENEFITS	CHAMPUS BASIC MEDICAL PROGRAM
Maximum (Dollar) Benefits		NOT APPLICABLE. (Basic Benefits have no dollar Maximum; monies paid out as Basic Benefits do not count toward Supplemental maximums.)	Lifetime limit of \$250,000 per person except for nervous and mental illness limit is \$50,000 per subscriber.	No dollar limitations.
Deductible		NO DEDUCTIBLE APPLICABLE to Basic Benefits.	\$100 per person per calendar year with maximum of two deductibles per family per year ^{5/} .	The payment of the first \$50 of the charges each fiscal year for all types of outpatient care is the responsibility of the patient. However, a family group of two or more persons is required to pay collectively no more than \$100 each fiscal year.
Coinsurance		NO COINSURANCE	Subscriber pays 20% coinsurance applicable only to charges for services under Supplemental Benefits ^{6/} .	The beneficiary who is the dependent of an active duty member pays 20% of allowable charges for authorized outpatient services after annual deductible requirement has been met. All other beneficiaries pay 25% of allowable charges for authorized outpatient services. The coinsurance required of active duty dependents for inpatient charges is \$25 per inpatient confinement or \$4.65 per day of inpatient confinement, whichever is the greater. All others pay 25% of all charges for inpatient service.

FOOTNOTES

- 1/ This is a brief summary of the Government-wide Service Benefit Plan administered by Blue Cross and Blue Shield and assumes that the High Option Blue Shield Benefits are being provided on a "Paid-in-Full" (no income limit) basis. For specific benefits and limitations reference should be made to the applicable Brochure (BRI 41-25) furnished by the Civil Service Commission and Surgical Medical Benefits Folder that is applicable to the area in which services are received.
- 2/ Paid-in-Full" benefits provided in member hospitals and overseas hospitals. If services are rendered in non-member hospitals (other than overseas), benefits are provided at 80% of usual and customary charges for semi-private accommodations and 80% of charges for other covered hospital services.
- 3/ CHAMPUS does not restrict coverage to a specific number of days. Rather, coverage is continued so long as hospitalization is determined to be medically necessary and contributes to the active treatment of the patient. Coverage is terminated when care is no longer active medical care but has become custodial or domiciliary or when the medical care required to treat the patient's condition can be provided in an outpatient setting.
- 4/ High Option: Blue Shield physicians agree to accept the Plan's payment for covered Basic services as PAID IN FULL without regard to income. For complete information, see applicable Basic Surgical-Medical Benefits Folders for specific area.
Low Option: Basic Blue Shield Benefits provided on basis of allowance, based on \$300 schedule. For list of allowances, see applicable Basic Surgical-Medical Benefits Folder for specific area.
- 5/ The Supplemental Benefits deductible is waived for any subscriber also enrolled in Part B of Medicare.
- 6/ The Supplemental Benefits coinsurance is waived for any subscriber also enrolled in Part B of Medicare.

TABLE III.6-2
BLUE CROSS-BLUE SHIELD EXCLUSIONS

SERVICES AND SUPPLIES

- | | |
|---|--|
| <ul style="list-style-type: none"> o Not medically necessary for the diagnosis or treatment of an illness, injury, or bodily malfunction. o Not provided in accordance with accepted professional standards. o For routine examinations, periodic physical examinations, immunization shots, the removal of corns or calluses, or the trimming of nails. o Provided for treatment of obesity or for weight reduction. o To the extent charges are in excess of usual, customary, and reasonable. o Furnished or billed for by an extended care facility, nursing home, or other non-covered facility. o For cosmetic purposes (except for congenital anomalies) unless related to an accidental injury occurring while the subscriber was covered by this Plan or changed to this Plan from another under the Federal Employees Health Benefits Program. o Required as a result of occupational disease or injury for which benefits are payable, whether or not such benefits have been applied for or paid, under workmen's compensation or similar laws. | <ul style="list-style-type: none"> o For personal comfort, such as beauty and barber services, radio, television, and telephone. o Furnished during periods when the subscriber is temporarily absent from the hospital; however, benefits may be provided, at the discretion of the Carrier, for up to 48 hours of temporary absence when prescribed by the attending physician as a part of the patient's treatment. o Furnished without charge, or paid for directly or indirectly by a governmental agency (local, State, or Federal). o For which the subscriber has no legal obligation to pay, or for which no charge would be made if the subscriber had no health insurance coverage. o Required for illness or injury sustained on or after the effective date of enrollment (1) as a result of an act of war within the United States, its territories, or possessions, or (2) during combat. o Related to sex transformation or sexual dysfunctions or inadequacies. |
|---|--|

TABLE III.6-2 (Cont)
BLUE CROSS-BLUE SHIELD EXCLUSIONS

HOSPITAL ADMISSIONS

- o Diagnostic admissions--Hospital services and in-hospital physician care (other than surgery) when the hospital admission or continued confinement is primarily to perform X-rays, laboratory, and pathological services, and machine diagnostic tests, if the tests could have been performed on an outpatient basis without adversely affecting the patient's physical condition or the quality of medical care rendered. However, medically necessary X-ray, laboratory, and pathological services, and machine diagnostic tests are covered during such an admission.
- o Milieu or milieu therapy (confinement in an institution primarily to change or control environment).
- o Custodial care, which includes the provision of room and board (with or without routine nursing care, training in personal hygiene and other forms of self-care) and supervisory care by a doctor for a person who is mentally or physically disabled and who is not under specific medical, surgical, or psychiatric treatment to reduce the disability to the extent necessary to enable the patient to live outside an institution providing medical care. This exclusion applies even when the care is provided by a hospital.
- o Inpatient care by Veteran's Administration facility except where the Carrier determines that emergency care at such a facility was imperative.
- o Convalescent care or rest cures.
- o Domiciliary care, which is institutional care provided because care in the home is not available or is unsuitable.

TABLE III.6-2 (Cont)
BLUE CROSS-BLUE SHIELD EXCLUSIONS

OTHER SERVICES AND SUPPLIES

- o X-ray, laboratory, and pathological services, and machine diagnostic tests not related to a specific illness or injury or a definitive set of symptoms.
- o Speech, occupational, recreational, or educational therapy, or other forms of nonmedical self-care, or self-help training.
- o Routine physician's care or examination of a newborn child.
- o Eye and hearing examinations not rendered in connection with medical or surgical treatment of an illness or injury.
- o Hearing aides; eyeglasses, and contact lenses except as required by intraocular surgery or ocular injury.
- o Eye exercises or visual training (orthoptics)
- o Travel, even though prescribed by a physician.
- o Air conditioners, dehumidifiers, and purifiers.
- o Services or supplies not listed as covered.

BASIC BENEFITS AND MATERNITY BENEFITS

- o Hospital services and in-hospital physician care (other than surgery) if admission or continued hospitalization is primarily for physical therapy or rehabilitation; however, Supplemental Benefits are provided when these services could not have been rendered on other than an inpatient basis.
- o Hospital services and in-hospital physician care (other than surgery) rendered to a subscriber who, on the date the enrollment in this Plan first became effective, is confined in a hospital as long as the subscriber is continuously confined therein.
- o Services or supplies for dental care or treatment, except for covered oral surgery; however, Basic Hospital Benefits are provided if the subscriber has a nondental organic impairment which makes hospitalization necessary to safeguard the health of the patient from the effect of dentistry.

NOTE: The fact that a physician may prescribe, order, recommend, or approve a service or supply does not, of itself, make it medically necessary or make the charge an allowable expense, even though it is not specifically listed as an exclusion.

TABLE III.6-2 (Cont.)
BLUE CROSS-BLUE SHIELD EXCLUSIONS

SUPPLEMENTAL BENEFITS

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|---|--|
| <p>o Services, supplies, or appliances for dental care or treatment unless required as a result of, and directly related to, accidental bodily injury occurring while the subscriber is covered by this Plan or at any time if the subscriber changed to this Plan from another under the Federal Employees Health Benefits Program, except covered oral surgery is not excluded.</p> | <p>o Services or supplies required for normal maternity care, or any condition related to maternity other than maternity care involving complications.</p> |
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TABLE III.6-3

CHAMPUS EXCLUSIONS

General Conditions. In general CHAMPUS will not pay for services, supplies and equipment--

- o Which are not medically necessary for the diagnosis or treatment of an illness, injury or bodily malfunction or not provided in accordance with accepted professional standards.

- o Which are not reasonable or customary;

- o Which are paid for directly by another program

- o Which neither the beneficiary nor any other person or organization has a legal obligation to pay for or provide;

Exclusions from Coverage. CHAMPUS will not pay for the following services, supplies or equipment or similar services, supplies or equipment--

- o Therapeutic absence from an inpatient facility which exceeds 72 hours;

- o Acupuncture;

- o Alterations to living spaces and permanent fixtures attached thereto even where necessary to accommodate installation of covered medical equipment or to facilitate access or regress;

- o Camping, even though organized for a specific therapeutic purpose, e.g., a diabetic camp or a camp for emotionally disturbed children;

- o Chiropractic services;

- o Ritual circumcision;

- o Christian Science Service characterized as absent treatment;

- o Colonic irrigation;

- o Cosmetic surgery performed solely for psychiatric purposes;

- o Services of pastoral, family, child and marital counselors; (covered pending final court determination of temporary injunction CA 75-0649, 6/9/75, U.S. District Court for the District of Columbia);

- o Custodial and domiciliary care;

- o Routine dental care and dental appliances;

- o Donor service costs and fee for artificial insemination;

- o Donor service costs and fee for organ transplant;

TABLE III.6-3 (Cont)
CHAMPUS EXCLUSIONS

- | | |
|--|--|
| o Non-legend drugs; | o Routine physical examinations and associated tests; |
| o Electrolysis for cosmetic or esthetic purposes; | o Supplies or services for the treatment of obesity, if obesity is the sole condition being treated; |
| o Routine eye examination, refractions; | o Any item or services prohibited by law in the jurisdiction in which provided; |
| o Hearing aids and other auditory sensory enhancing devices; | |
| o Homemaker or attendant services furnished to assist in meeting personal family and domestic needs, such as preparing meals, assisting in bathing and dressing; | o Any item or services provided by immediate relatives of the beneficiary; |
| o Routine immunizations and inoculations; | o Sex behavior modification; |
| o Intern and resident charges other than those included as house staff and covered as a hospital service. | o Sex change surgery (gender alteration) |
| o Megavitamin psychiatric therapy; | o Services prescribed solely to induce a patient to stop smoking; |
| o Orthomolecular psychiatric therapy; | o Routine well-baby care; |
| o Orthopedic or other special footwear, devices to support the feet, or items which correct ordinary shoes, e.g., arch supports; | o Autopsies. |
| o Perceptual and visual training; | |
| o Personal comfort items and amenities such as radio, television, and telephone service; | |

APPENDIX B
ABBREVIATIONS AND DEFINITIONS

BCBS	=	Blue Cross and Blue Shield
CHAMPUS	=	Civilian Health and Medical Program of the Uniformed Services
DOD	=	Department of Defense
HEW	=	Health, Education and Welfare
HMO	=	Health Maintenance Organization
MHSS	=	Military Health Service System
NAD	=	Non-Active-Duty
OCHAMPUS	=	Office of Civilian Health and Medical Program of the Uniformed Services
OMB	=	Office of Management and Budget

SELECTED BIBLIOGRAPHY

A. REFERENCES CITED

1. Barnard, Richard C. "Other Health Plans Get New Focus," Air Force Times, 7 April 1980, p. 2.
2. _____. "Survey: 83 Percent Want to Quit CHAMPUS," Air Force Times, 31 March 1980, pp. 1 & 16.
3. Barnett, Richard D. Chief, Statistics Branch, Office of Civilian Health and Medical Program of the Uniformed Services, Aurora CO: Letter, subject: Program and administrative costs, 22 May 1981.
4. Carver, Martha L. "Tice: Improve the Quality of Life in the Military," Air Force Times, 2 March 1980, pp. 1 & 4.
5. _____. "Generous Kin Dental Bill Due Early Hill Hearings," Air Force Times, 16 March 1980, p. 3.
6. "CHAMPUS Plan Must Compete for \$\$," Air Force Times, 6 April 1981, p. 2.
7. Directorate for Information Operations and Reports: Office of the Secretary of Defense. Selected Manpower Statistics. Washington: Government Printing Office, FY 1976-1980.
8. "Doctor Participation in CHAMPUS Dips," Air Force Times, 6 March 1981, p. 35.
9. Evans, CDR Frank, USN. Public Affairs Officer, OCHAMPUS, Aurora CO: Telephone interview. 13 July 1981.
10. Executive Office of the President: Office of Management and Budget. Cost Comparison Handbook. Washington: Government Printing Office, March 1979.
11. Government-wide Plans Division: Office of Personnel Management. Service Benefit Plan. Washington: Government Printing Office, 1 January 1981.
12. Hanchett, Major Barry L., USMC. "CHAMPUS: A Sinking Ship in Need of Help." Unpublished research report, unnumbered, Air Forces Staff College, Maxwell AFB AL: November 1979.

13. Maassen, LCDR Leland, USN., and David Whipple. "Organization Structure and Operation of CHAMPUS." Unpublished technical report No. NPS55Wp75091, Naval Post Graduate School, Monterey CA: September 1975. AD-A018313.
14. Mahler, Renate. Senior Statistical Analyst, Financial Administration. Letter, subject: Benefits and utilization of the Blue Cross and Blue Shield Federal Employee Program, 5 August 1981.
15. Office for the Civilian Health and Medical Program of the Uniformed Services. CHAMPUS. Catalog No. D-1.6.:C49. Washington: Government Printing Office, January 1980.
16. "Oregon to Test CHAMPUS Plan," Air Force Times, 15 June 1981, p. 2.
17. Porter, Stephen Warren. "Evaluating the Impact of Alternate Forms of the Military Health Care Benefit: The Application of a Health Service Behavioral Framework." Unpublished master's thesis, University of Minnesota, June 1980. AD-092544.
18. Quintal, Marilyn. Manager, Blue Cross and Blue Shield Services Information System, Washington: Telephone interview. 3 March 1981.
19. _____. Letter, subject: Blue Cross and Blue Shield program costs, 27 April 1981.
20. Rice, Donald B. Defense Resource Management Study: Final Report. Washington: Government Printing Office, February 1979.
21. _____. Defense Resource Management Study: Supporting Papers. Washington: Government Printing Office, February 1979.
22. Souder, William E. Management Decision Methods for Managers of Engineering and Research. New York: Van Nostrand Reinhold Company, 1980.
23. Terasawa, Katsuaki and David Whipple. "On the Comparative Costing of Military vs Civilian Modes of Health Care Delivery," Unpublished technical report, No. N00018-76-WR-G0002, Naval Postgraduate School, Monterey CA: November 1975. AD-A020104.
24. U.S. Congress. Senate. Committee on Appropriations. Report No. 96-1020. Hearings, 96th Congress, 2nd Session, 1980. Washington: Government Printing Office, 1980.

25. U.S. Department of the Air Force: Office of Special Studies and Analysis. A Cost Study of Air Force CONUS Medical Treatment Facilities: Saber Health-Alpha. Washington: Government Printing Office, June 1974.
26. _____. A Cost Evaluation of CHAMPUS as an Alternative for Providing Dependent and Retiree Medical Care: Saber Health-Bravo. Washington: Government Printing Office, February 1975.
27. U.S. Statutes. United States Statutes at Large. Public Law No. 89-614, 89th Congress, 2nd Session. Washington: Government Printing Office, 1966. Vol. 80.