A STUDY TO DETERMINE PATIENT PREFERENCES FOR PRIMARY CARE AT DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER

By

Karen J. Johnson

Captain, MS

A Graduate Research Project
Submitted in Partial Fulfillment of the Requirements for
the Army-Baylor University Graduate Program
in Health Care Administration
Academy of Health Sciences, US Army
Fort Sam Houston, Texas 78234

12 June 1986

ACKNOWLEDGEMENTS

The author gratefully acknowledges the contributions of several individuals during the research and preparation of this paper. I am appreciative of the support provided by my Preceptor, Colonel Robert T. Maruca, throughout this project and my entire residency year.

A special thanks is extended to Major Richard Sherman and Katherine Harris of Clinical Investigations for their technical expertise and advice. I also thank the many patients who responded to the survey, facilitating the ability of Dwight David Eisenhower Army Medical Center to *Reach Out With Excellence* in the area of primary care.

I am indebted to Martha Lutier whose editing abilities helped to make this project a reality.

I truly appreciate all the love and support provided to me by my husband, Jeffrey, and daughter, Jennifer, during this research effort and throughout my graduate education.

SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION N/A	1b RESTRICTIVE MARKINGS N/A
2a. SECURITY CLASSIFICATION AUTHORITY N/A	3. DISTRIBUTION/AVAILABILITY OF REPORT Unclassified/Unlimited
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE N/A	
4. PERFORMING ORGANIZATION REPORT NUMBER(S) 97-89	5. MONITORING ORGANIZATION REPORT NUMBER(S)
6a. NAME OF PERFORMING ORGANIZATION Dwight David Eisehnower AMC	6b. OFFICE SYMBOL (If applicable) N/A
	7a. NAME OF MONITORING ORGANIZATION US Army-Baylor University Graduate Program in Health Care Administration
6c. ADDRESS (City, State, and ZIP Code) Fort Gordon, GA. 30905-5650	7b. ADDRESS (City, State, and ZIP Code) AHS San Antonio, TX 78234-6100
8a. NAME OF FUNDING/SPONSORING ORGANIZATION N/A	8b. OFFICE SYMBOL (If applicable) N/A
	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER N/A
8c. ADDRESS (City, State, and ZIP Code) N/A	10. SOURCE OF FUNDING NUMBERS

PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.

11. TITLE (Include Security Classification) A STUDY TO DETERMINE PATIENT PREFERENCES FOR PRIMARY CARE AT DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER

12. PERSONAL AUTHOR(S)
JOHNSON, KAREN J.

13a. TYPE OF REPORT	13b. TIME COVERED	14. DATE OF REPORT (Year, Month, Day)	15. PAGE COUNT
FINAL	FROM 7/85 TO 7/86	86/6/12	40

16. SUPPLEMENTARY NOTATION

17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
FIELD	GROUP	SUB-GROUP	Dwight David Eisenhower Army Medical Center (DDEAMC)

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

This study was done to determine patient preferences for primary care at Dwight David Eisenhower Army Medical Center, Fort Gordon, GA.. The author concluded by stating several facts to improve the operation; Patients would like a choice in their primary care, Patients desire physician continuity, The need to improve patient-staff interpersonal relationships and the need to increase the recruitment of female physicians into the OB-GYN arena.

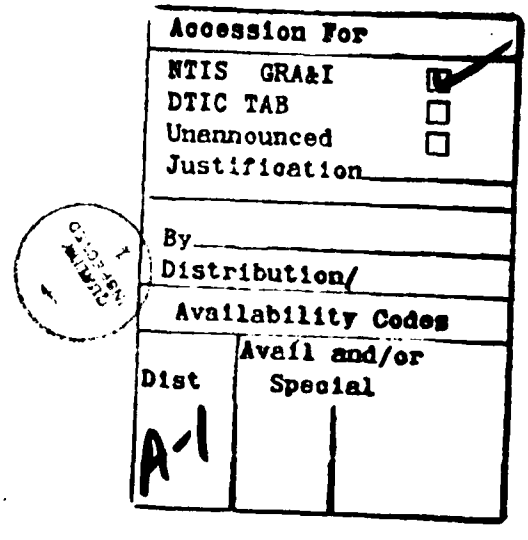
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT	21. ABSTRACT SECURITY CLASSIFICATION
☒ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT. ☐ DTIC USERS	N/A

22a. NAME OF RESPONSIBLE INDIVIDUAL	22b. TELEPHONE (Include Area Code)	22c. OFFICE SYMBOL
Major Leahy	(512) 221-2324/6345	

DD Form 1473, JUN 86 *Previous editions are obsolete.* SECURITY CLASSIFICATION OF THIS PAGE

TABLE OF CONTENTS

ILLUSTRATIONS/LIST OF TABLES



A Study to Determine Patient Preferences for Primary Care At Dwight David Eisenhower Army Medical Center

INTRODUCTION

General

This study preceded the January 1986 reorganization of primary care services at Dwight David Eisenhower Army Medical Center (DDEAMC). The main goal of the reorganization was to offer all permanent party active duty families a choice of primary health care services. This study was conducted to determine patient preferences for primary care before reorganizing the delivery of services.

Prior to this reorganization, the three sources of primary health care offered at Fort Gordon for active duty permanent party families were: troop medical clinics, general medicine clinic, and family practice clinic. Dependents of active duty soldiers also had the option of obtaining primary care from civilian physicians if they chose to cost-share under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). [1]

Most active duty soldiers received primary care at the troop medical clinics, while their family members obtained care from the general medicine clinic located in DDEAMC. Additionally, active duty soldiers who were assigned to units proximate to DDEAMC and soldiers assigned to the medical center obtained primary care directly from the general medicine clinic. The troop medical clinics and the general medicine clinic operated on a walk-in "sick-call," first-come/first-served basis.

In lieu of this arrangement, families could apply to the Department of Family Practice to seek enrollment in one of the family practice panels. The Department of Family Practice operated a residency training program with 11 staff and 27 residents. Panel membership was limited to 1750 families (including retirees), and there was a long list of individuals waiting to be accepted into family practice. Over time, the proportion of retired families had increased to 63% as active duty families permanently changed duty station, and additional retirees' families were added to family practice panels from the top of the waiting list. In 1985, the only new active duty

families added to family physician panels were those with the types of medical problems (e.g., obstetrical patients) needed to round out the family practice teaching program to meet accreditation requirements established by the American Board of Family Practice. This practice created concern that retirees and their dependents were receiving preferential treatment over active duty personnel and their dependents.

Primary care physicians are the portal to entry into military medical care facilities, and patients are examined by specialists and subspecialists only upon appropriate referral from a primary care physician. At Fort Gordon, there was a perception that Family Practice patients received responsive, concerned care through the single provider/provider panel concept. The alternative method of entry into the primary care system was through the troop medical clinics and general medicine clinic--both of which operated on a walk-in basis. Although these clincs also provided access to the primary care system, patients voiced their dissatisfaction to the patient representative and others that queues were long, care was impersonal, and there was no provider continuity. It was therefore imperative that a system be developed to ensure equitible access into the primary health care system for the greatest number of beneficiaries possible within the limitations of the existing primary care provider base.

Army Regulation 40-3, Table 2-1, stipulates priorities for medical treatment for different categories of beneficiaries in Army Medical Department medical treatment facilities. An excerpt of pertinent information from this source appears at Table1. Members of the uniformed services on active duty and their dependents have priority for medical treatment, and Commanders are required to ensure that the priority system is used.[2]

Other eligible beneficiaries such as retirees and dependents of retirees are authorized medical care on a space-available basis. Heretofore, military medical treatment facilities have generally had excess capacity, and retirees have been able to obtain health care as needed. In fact, most retirees view access to health care in military medical facilities as a right--not a privilege. Only in recent years have resources become constrained so that priorities for care have been enforced. As a result, queues have lengthened and access to care has become an issue. Retiree access to health services, although a related topic, was not addressed in the scope of this study.

Table 1: Designated Priorities for Medical Care

Priority	Category	Authority and degrees of entitlement
1	Members of the uniformed services on active duty...	Complete and unqualified for US personnel.
2	Dependents of active duty members...	Care must be provided for when facilities and staffing permit.
3	Members of the Senior Reserve Officers . Training Corps of the Armed Forces.	Care may be provided when it is required during periods of attendance at training camps.
4	Retired members of the uniformed services, their dependents, and the dependents of deceased retired members.	Care may be provided when facilities and staffing permit.
5	Civilian employees of the Federal Government ... covered by the Federal Employees/Health Service Program.	Care may be provided when facilities and staffing permit.
6	All others	Care may be provided when facilities and staffing permit.

Army Regulation 40-3, Table 2-1, Medical Services: Medical, Dental, and Veterinary Care, Headquarters, Department of the Army, Washington, DC, US Government Printing Press, 15 February 1985, p.55.

Generally, as Friedman noted, "Patients who do not pay directly for care, because of government sponsorship or first-dollar coverage, often do not protest compromised access-it's looking a gift horse in the mouth."[3] In recent years, however, health care consumerism has increased as the media has focused on health care issues such as cost, malpractice, and access to care. As consumers become more educated about health care matters and more aware of their rights, they have become more outspoken on these issues.

Military beneficiaries have mirrored the national trend, and the new skepticism is breeding a different attitude toward military hospitals as well. Patients are increasingly educated, better informed, and much more questioning. Recent articles in a variety of publications have criticized military health care, creating the perception that there exists a "Mess in Military Medicine."[4]

For the most part, the incidents that are discussed in the media are isolated problems that occur in every healthcare system. These problems are not the norm, but overshadow the many successes and the consistently high quality medical care that has been provided to soldiers and their families for many years. Hence, military medicine suffers not so much from a quality of care deficit, as from a maligned image. [5]

The message is clear: military treatment facilities must improve both access to, and the image of, military medicine. Being cognizant of the need for image enhancement, the Commanding General of DDEAMC declared "image" to be his top priority:

> "IMAGE: Through excellence in all spheres of activities, we will develop a reputation second to none as viewed by beneficiaries at Fort Gordon and the region, the management staffs of SGO and HSC, and by professionals in the military and civilian communities." 6

Image is defined as the "structure of beliefs and attitudes pertinent to a hospital and its associated facilities, staff, and services." [7] It was neccessary to change the image of primary care at DDEAMC. First, however, information had to be obtained on patients' beliefs and attitudes about Fort Gordon health services and on their preferences for primary care services.

These two reasons--improving access to primary care for active duty families and image enhancement--provided the catalyst for initiating this study.

Problem Statement

To Determine Patient Preferences for Primary Care at Dwight David Eisenhower Army Medical Center.

Objectives

The objectives of this research project were to:

1. Develop a patient preference survey.

2. Pretest the survey.

3. Select the study population.

4. Determine the sample size.

5. Measure patient preference for primary health care services.

6. Compile data.

7. Analyze results.

8. Report results and make recommendations on reorganization of primary care.

Criteria

1. Data was considered statistically significant at the .05 level of significance.

2. A 30-percent response rate from patients surveyed was acceptable for this study.

Assumptions

1. Patients indicated their true preferences for obtaining primary health care.

2. Views of the respondent were shared by the entire family.

3. Beneficiaries surveyed provided a representative sample of patient preferences for the total permanent party active duty patient population and their dependents.

Limitations

Since health care provider resources for delivering primary care are constrained by DDEAMC's missions to provide high quality tertiary care to the Southeastern United States and to conduct graduate medical education training programs, the scope of the study was limited to the primary beneficiary categories of active duty soldiers and dependents of active duty soldiers. It was also recognized that many of Fort Gordon's soldiers were only on station for a short time while attending course at the Signal School or Dwight David Eisenhower Army Medical Center. Becuase their use of primary care was limited, the scope of the study was further restricted to include only permanent party personnel and their families (i.e., individuals who were assigned to Fort Gordon for at least six months of duty). The period for data collection was confined to the three-month period October-December 1985 in order to rapidly obtain data which would provide the basis for an implementation decision at the earliest possible time.

Literature Review

The interest in collecting information on patient satisfaction and preferences has paralleled the growth of the consumer movement in general. Although the literature is replete with studies on patient satisfaction and preferences for care in the civilian sector, most studies of the military health care sector merely focus on outpatient satisfaction.

Many people question the efficacy of using patient opinion polls for shaping policy on the context that consumers are not appropriate sources for judgments about such technical and important issues as access to medical care. They argue that it is difficult to establish the reliability and validityof consumer satisfaction and other attitudes, and that consumers are not qualified to technically evaluate the field of medicine.[8] However, as Aday et al. (1980) note:

> . . . the defense of querying consumers derives from the very notions on which democracy itself is defended: that it is appropriate for the public to be invited and even urged to voice judgments and that such opinions should be taken seriously. Should consumers' views appear ill-informed to policy makers or those who possess more technical information on the subject, it is their perogative (sic) in turn to try to convince the consumers otherwise by making further information available to them. 9

The written questionnaire was selected as a survey instrument of choice because it was the only way to reach the large number of individuals required. Use of the questionnaire also had the advantage of being inexpensive, easy to administer, and anonymous. Given that the surveyor was a member of the hospital staff, it was believed that patients would respond with more spontaneity and honesty when afforded the anonymity of a questionnaire which could not be traced back to them. Since the survey was to be mailed through military distribution channels, in lieu of being given to clinic patients, a more representative sample could be obtained that included individuals who rarely or never used clinical services. Goldsmith's (1983) research compared the effectiveness of interviews and surveys, and supported the chosen methodology.[10]

However, Goldsmith (1983) also pointed out that written questionnaires have some disadvantages which must be considered when interpreting data. Because they are impersonal and anonymous, they offer

little insight into the reasons for, and thus the significance of, patients' answers.[11] The potential problem of subject misinterpretation of survey questions may distort the findings. Moreover, it is difficult to know who did not respond and whether non-respondents are significantly different from those who returned the surveys.

Suchman and Ware (1965) have reported that acquiescent response set (ARS), a tendency to agree with statements of opinion regardless of their content, is a source of bias in surveys of patient satisfaction with physicians and medical care services. These biases are greatest for lower educational and income groups.[12, 13] To preclude bias due to acquiescent response set, survey questionnaire items were structured to eliminate favorable or unfavorable bias. Instead of wording a question pertaining to general satisfaction:

"In general, I liked the health care my family received."

with possible Likert-type scale responses[14] ranging from "Strongly Agree" to "Strongly Disagree," the item was worded:

"In general, how did you like the care your family received?"

allowing for responses on a continuum from "Very Satisfied" to "Not Satisfied."

Methodology

Survey Instrument

A questionnaire was developed to survey patient preferences for primary care. A copy of the questionnaire and the transmittal letter are found at Appendix A. The items on the questionnaire were selected to obtain information that would be helpful in designing primary care options for active duty families. Key staff members were queried to determine factors which they considered relevant (e.g., family usage rates) in the design of a comprehensive primary care package. Questions pertaining to the patients' military rank and unit were not asked to ensure anonymity, increase the survey return rate, and afford a true picture of the stated

patient preferences for primary care without regard to rank, unit of assignment, etc.

The transmittal letter stated that all of those surveyed comprised a group of families similar to themselves. It requested respondents' assistance in providing information on which health care services they preferred and their current experience with Army health care. To increase the perception of command interest in order to enhance return rates, the transmittal letter was typed on Department of the Army letterhead stationary, signed by the Commanding General of DDEAMC, and sent out through military distribution channels. The letter accompanied the questionnaire. A self-addressed, franked return envelope was provided for respondents.

The two-page survey instrument was composed of questions requiring yes/no, or rating scale answers with a place for comments after three questions. It briefly defined three proposed options for primary care at DDEAMC: (1) "a family doctor, a specialist trained in family medicine assigned to provide ongoing, complete health and medical care for your entire family"; (2) "a group of specialists including internal medicine, and pediatrics (children's doctor). You will have an assigned doctor to go to for each of these specialities"; (3) "an urgent care center, a group of doctors who will provide general medical care to patients who walk in, or have appointments." In this "high-tech/high-touch" era, the multispecialty option offered "high-tech"; the family practice, "high-touch"; the urgent care center, convenience; and CHAMPUS, disillusionment with the military health care system.

The questionnaire also requested information on:

(a) respondents' stated preference for primary care;
(b) respondents' current source(s) for receiving primary care;
(c) whether respondents were currently impaneled in family practice, and whether they had ever applied and been refused for family practice;
(d) remaining length of time that respondents would be stationed at Fort Gordon;
(e) number of family members (including the sponsor) at Fort Gordon;
(f) frequency of Medical Center usage by sponsor and family members;

(g) general satisfaction with the current health care received;
(h) whether respondents would be more satisfied if they could choose their primary care option;
(i) importance of female physician availability;
(j) duty status of respondents--i.e., active duty military or family member;
(k-l) demographic characteristics; and
(m-n) importance of physician continuity.

The survey was pretested first on a cross section of hospital staff members, then on hospital clinic patients awaiting appointments, prescriptions, radiographic reports, etc. The language and questions were refined based on their responses.

Subject acquisition

The population for this study was all active duty permanent party soldiers assigned to Fort Gordon. Standard Installation/Division Personnel System (SIDPERS) records were used to identify these individuals. In October 1985 there were 15,283 active duty soldiers assigned to Fort Gordon, of whom 7,725 were permanent party soldiers (N = 7725). The SIDPERS data base was used to generate unit address labels for the sample survey. Labels were printed in social security number order by unit. Individual's social security numbers were not printed on the labels to ensure anonymity. Based on the variation from the pretests, it was determined that five hundred responses would be sufficient to assure a representive sample of this population if the surveys were distributed equitably between units. It was felt that response rate of 25 percent could be assured and that 30 percent was very likely. The sample size was limited to 2000 soldiers (25.8 percent) of the population. Every fourth label was used to ensure equitable unit representation. Smaller units were purposely overly represented to ensure at least minimal representation.

Of the 2000 letters sent out, fifty-eight were returned as not deliverable. These were remailed to another soldier of the same rank, sex and unit of the soldier originally surveyed. In seven cases, it was not possible to match both gender and rank; instead, a soldier in the same unit of the same sex and the next higher, or lower, rank was selected (e.g., Second Lieutenant was replaced by a First Lieutenant, or vice versa; Staff

Sergeant and Sergeant First Class were also interchanged). This procedure helped to maintain equitable unit and gender representation.

Data Analysis

All the data were entered into a computer and analyzed using the Statistical Package for Social Sciences (SPSS). Question items not answered by respondents were considered unusable and were not included in the analysis. For purposes of analysis, responses from individuals who received their primary care at the troop medical clinics were combined with those respondents who received primary care at the general medicine clinic. Most questionnaires were filled out completely with the exception of question "N," which was ambiguous to many respondents. Differences between groups were determined by Chi-square analysis of frequency distribution for both row and column contingency. For items in which there was an ordinal or interval scale, Pearson's Product-Moment Correlation Coefficients were used to determine the degree of relationship. Descriptive statistics were used for assessing characteristics of the study population and responses to survey questions. Four areas were analyzed: demographic characteristics, frequency of clinic use, general satisfaction, and desired versus actual source of primary care.

Discussion

Response Rate

Of the 2000 letters sent out, 912 were returned (45.6 percent). Forty-three percent (n = 866) of these were in a useful condition, representing 11.2 percent of the 7,725 member population.

Profile of Respondents

The typical respondent was a thirty-three year old male active duty soldier with three dependents and ten months remaining at Fort Gordon. The typical family obtains primary care from the general medicine clinic and uses hospital services approximately 10.35 times a year.

The graph in Figure 1 depicts the distribution of respondents' ages by sex:

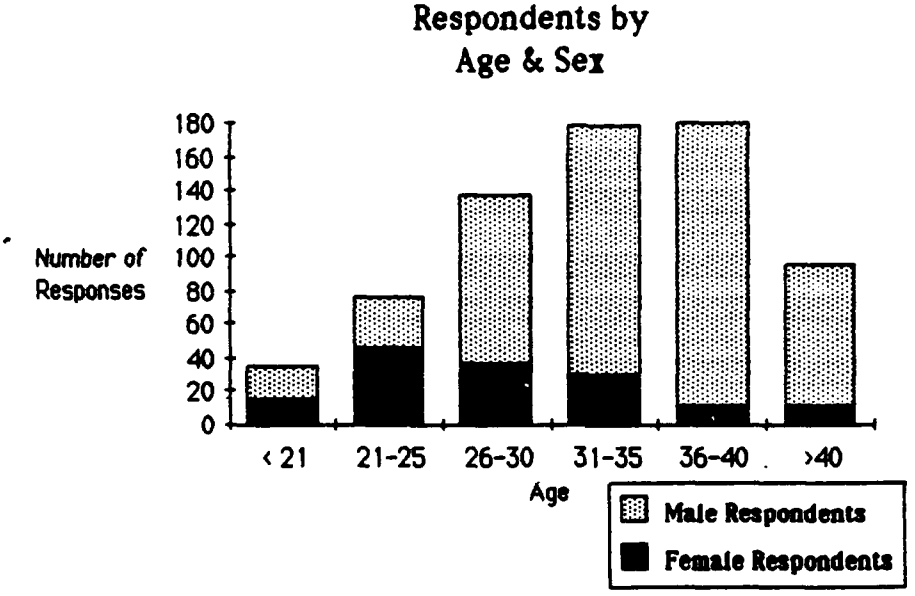


Figure 1

Overall, respondents represented all age categories. Women tended to be fewer in number (17.2 percent) and younger than men--a reflection of the smaller number of career women in the Army.

Respondents' family sizes varied from one to twelve members. More than a quarter of all families had four members (26.5 percent). The other frequently reported family sizes were two members (21.8 percent), three members (20.6 percent), and one member (17.6 percent). This information is graphically represented in Figure 2.

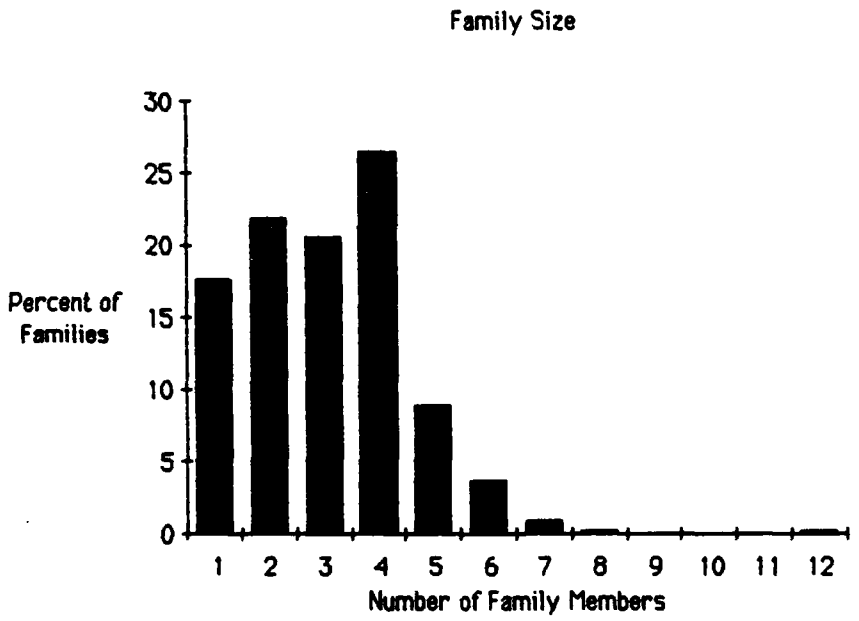


Figure 2

The graph in Figure 3 illustrates aggregate clinic visits as reported by respondents. Sponsors averaged 3.6 clinic visits per year, while their dependents visited clinics an average of 6.75 times annually. Therefore, the mean number of visits per family was 10.35. In general, the average number of clinic visits increased with age. Increase in sponsors' service use with increase in age was less significant (χ^2 = 54.1 with 40 *df* and p = .068), than increase in dependents' use as they aged (χ^2 = 70.68 with 40 *df* and p = .002).

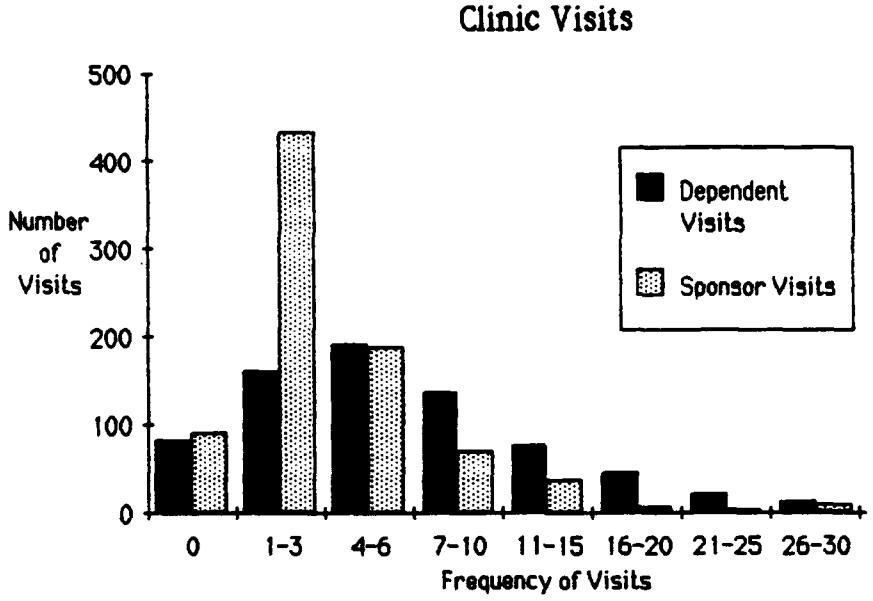


Figure 3

Frequency of use was very highly associated with gender ($\chi^2 = 61.74$ with 8 *df* and $p < .0001$). While most men (66.8 percent) visited clinics three times or less per year, only 59.1 percent of the women visited clinics at least four times a year. This information is shown in Figure 4. In correlating clinic use with gender using the Pearson Product-Moment Correlation Coefficient, increased clinic use by females was very highly significant ($r = .2137$, $p < .0001$).

Sponsors' Clinic
Visits by Sex

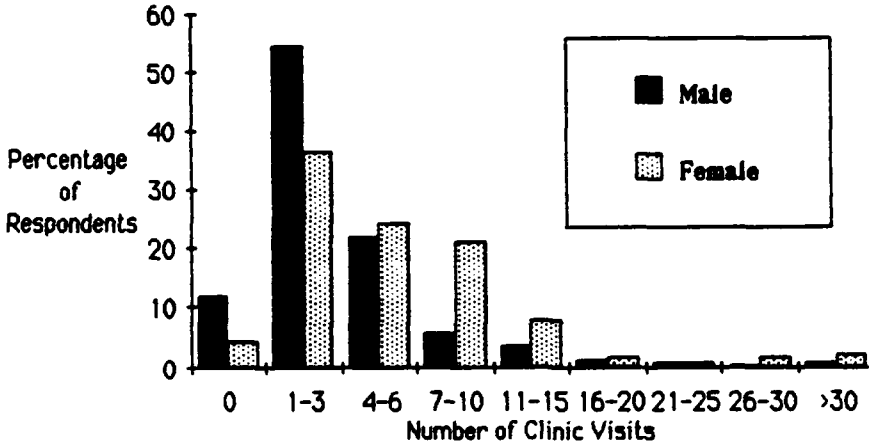


Figure 4

Overall Satisfaction

Over half of all respondents (61.2 percent) were generally satisfied with the care received. There were 22.5 percent who indicated they were "Very Satisfied," 38.7 percent reported being "Satisfied," 24.4 percent reported being "Somewhat Satisfied," and 14.4 percent were "Not Satisfied." (See Figure 5.)

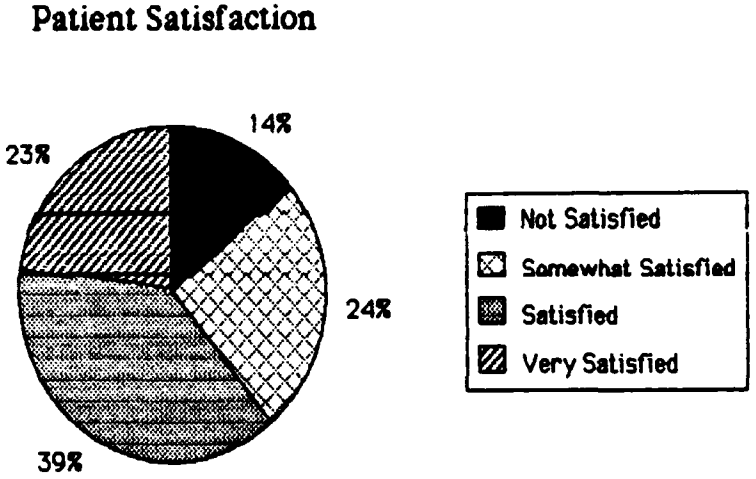


Figure 5

Written comments were both positive (11 percent) and negative (89 percent) to question "G": "In general, how do you like the care your family received?" Positive comments focused on the quality of care provided and caring attitude of the staff. Most of the negative written comments on question "G" pertained to waiting time, lack of provider continuity, rude treatment/bad attitude of staff members, inadequate numbers of staff, slow ancillary services (particularly pharmacy and radiology), appointment difficulty, rushed care, poor quality of care, and loud televisions in patient waiting areas.

Age appears to have a mitigating effect on patient dissatisfaction. As age increases, so does patient satisfaction ($\chi^2 = 28.66$ with 15 *df* and $p = .0178$). The Pearson's Correlation ($r = .1305$) was also very highly significant ($p = .0001$), further substantiating the relationship between satisfaction and age. In comparing the interaction of age and satisfaction, the results of this survey parallel those of Fleming and Anderson (1976), who reported a tendency for the aged to be less critical than the young in terms of their health beliefs.[15]

Eighty-eight percent of the individuals surveyed unambiguously indicated that they would be more satisfied if they were able to select their primary care option. Most respondents wanted to be able to choose their source of primary care, and their desire to be able to make that selection did not differ based on their expressed primary care choice. However, those who were the least satisfied, were most likely to believe they would be happier if they could choose their primary care option (χ^2 = 42.82 with 3 *df*, and p = .0001). The Pearson's Product-Moment Correlation Coefficient was also very highly significant (r = .2199, p < .0001), again indicating that there was a high correlation between those who were dissatisfied and those who would be happier if they could choose their source for primary care.

Desired versus Actual Care

A family doctor was the most popular primary care choice, preferred by 540 individuals (62.5 percent). A group of specialists was selected by 267 respondents (30.9 percent), while forty-five (5.2 percent) wanted an urgent care center, and only twelve people chose CHAMPUS cost-sharing (1.4 percent). A graph of patient preferences for primary care appears on the next page. There were no significant differences between choices for primary care by age (χ^2 = 18 with 15 *df*, p = 0.263).

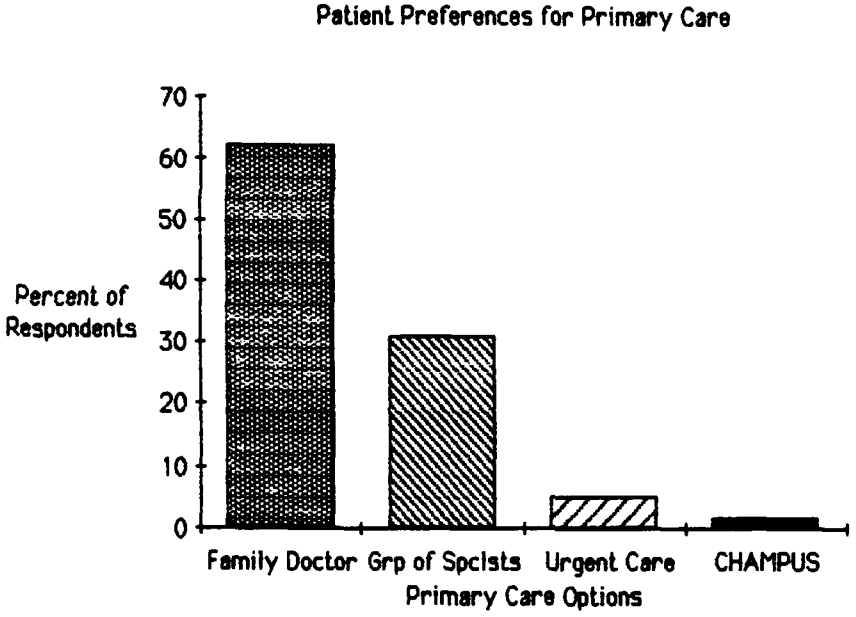


Figure 6

Comparing family size with primary care option yielded highly significant results (χ^2 = 44.53 with 24 *df*, and p = .006). Larger families (families of more than four members) were most likely to select " A Family Doctor" as their choice for primary care, followed by a preference for "A Group of Specialists." Although choosing "A Family Doctor" for primary care was also the favorite option of the majority of respondents (62.5 percent), larger families requested family practice at a higher rate (70.6 percent). No families larger than six members chose either "An Urgent Care Center" or "CHAMPUS." Correlating family size and preference for primary care using the Pearson Product-Moment Correlation Coefficient was very highly significant (r = -.1108, p < .0006).

It was interesting to note that nearly all respondents valued continuity of care. When asked "How important is it that you see the same doctor each visit?," 91 percent of those surveyed felt that it was either "Very Important" (50 percent), or "Important" (41 percent) to see the same physician, while 7 percent thought it "Doesn't Matter," and only 2 percent felt that physician continuity was "Not Important." The importance of physician continuity did not differ significantly with age (χ^2 = 18.0 with 15 *df*, and p = .2625).

According to the American Board of Family Physicians,

> "Continuity of care is the most important element of the family physician's training and practice. Even when consultation with another specialist is required, the family physician does not relinquish responsibility for supervision of the patient. The family physician maintains contact, and reassumes full responsiblity for the patient when other specialists are no longer needed." 16

Examining the ages of individuals who were already impaneled in family practice yielded very highly significant differences (χ^2 = 25.25 with 5 *df*, p = .0001). Since the numbers of those in family practice roughly followed a negatively skewed bell-shaped curve, it is likely that most of the differences in numbers enrolled by age can be accounted for by number of respondents by age. Again, Chi-square analysis showed that the proportions of individuals who indicated they had applied for family practice and been refused were also highly significant (χ^2 = 19.20 with 5 *df*, p = .0018). However, the proportions appeared largely to parallel the population proportion.

Because the precept of continuity of care is embodied in the practice of family medicine, it was expected that respondents who selected "A Family Doctor" as their choice for primary medical care would also value continuity and be more likely to feel that it was "Very Important" or "Important" to "See the same doctor each visit." The results of the survey indicated that virtually all respondents valued continuity of care, as evidenced by the fact that 90.6 percent responded that it was "Important" or "Very Important" to "see the same doctor each visit." The erratic jumps in the graph in Figure 7 (χ^2 = 58.018 with 9 *df*, and $p < .0001$) are probably a function of the small number of individuals who selected "Urgent Care Center" and "CHAMPUS" as their choices for primary care.

Desire for Physician Continuity

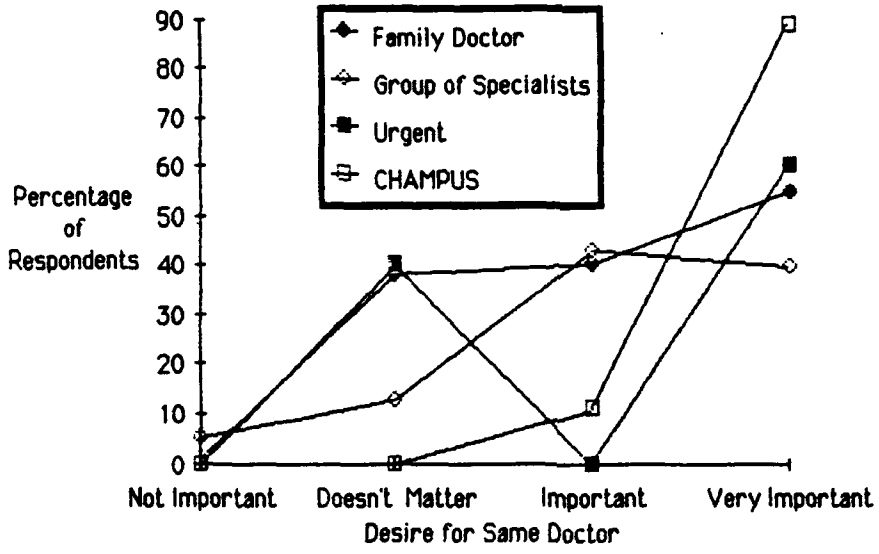


Figure 7

In comparing differences between expressed importance for physician continuity for males and females, both felt that continuity was "Important" or "Very Important", but females tended to feel more strongly about the issue with 57.6 percent indicating that it was " Very Important" versus 48.8 percent of the male respondents. Most of the respondents described how physician continuity would heighten the quality of care, decrease time wasted by repeating medical history, and improve patient-physician relations.

Almost a third (32 percent) of the respondents felt that it was important to have a female physician available for either themselves or another family member. Although this is not an extremely high proportion of the population, it is significant to note that only 12.5 percent of the physicians assigned to Dwight David Eisenhower Army Medical Center are women. Another factor to consider is that, of the assigned female physicians, none work in OB/GYN--the area considered by respondents to be the most critical for access to a female physician.

There was a very highly significant negative correlation between age and desire for access to a female physician (χ^2 = 22.34 with 5 *df*, and

$p = .0005$); ($r = .136$, $p = .0001$). When subjects were grouped according to sex and age, there was no significant difference in the proportion of females desiring access to a female physician for any age group ($\chi^2 = 7.022$ with 5 df and $p = .219$). On the other hand, more younger males felt that a female physician should be available for their family members ($\chi^2 = 23.768$ with 5 df and $p = .0002$). (See Figure 8.) Using the Pearson Product-Moment Correlation Coefficient to analyze the degree of relationship between age and males' desire to have access to a female physician for their family members yielded very highly significant differences ($r = .1379$, $p = .0001$).

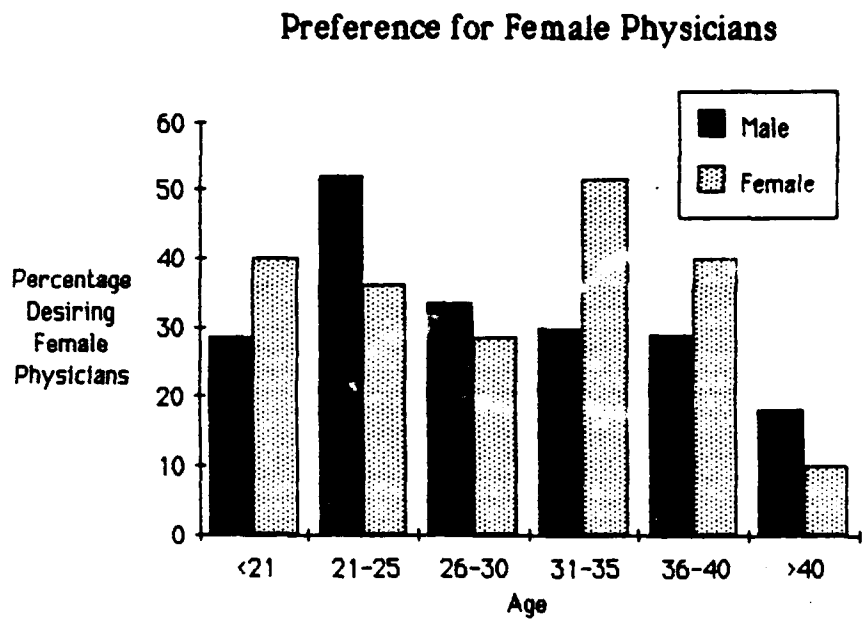


Figure 8

The largest number of comments were made to question "N," which was answered by respondents who did not select "Urgent Care Center" as their choice for primary care. Question "N" asked "If you felt that you needed to be seen soon, but your doctor already had all his/her appointments filled, would you be willing to see another doctor, or would you rather wait to see your own doctor?" Based on comments, respondents desired more information on the urgency of their need "to be seen soon," the projected length of the wait to see their assigned physician, and the

availability of another "competent physician" who would confer with their assigned physician on the treatment rendered.

Although there was no statistical significance to the respondents' replies, their comments appear to substantiate the findings of Yamada and Goldsmith (1977) who reported that "the principal criteria for a good family practice clinic were good physicians, a short wait to see the physicians, and being able to see the same physician at each visit."[17]

Conclusion

This study provided the only major research of permanent party active duty preferences for primary care at Dwight David Eisenhower Army Medical Center. The survey was valuable as a diagnostic instrument for identifying (1) a profile of the permanent party patient population, (2) general level of patient satisfaction with services, and (3) discrepancies between the primary care patients are currently receiving and their primary care desires.

Analysis of survey results led to six major conclusions:

(1) Patients would rather have a choice in selecting the type of primary care they receive;

(2) They desire physician continuity;

(3) There is a large discrepancy between the percentage of active duty permanent party families in family practice (22 percent) and those who would like to be in family practice (62.5 percent);

(4) Over 30 percent of respondents indicated a preference for "A Group of Specialists"--an option heretofore not available to them;

(5) There is a need to improve patient-staff interpersonal relationships;

(6) There is an unmet desire for access to female physicians.

The results clearly indicated that there is a need for reform of the primary care services delivery. In general, 61.2 percent of patients surveyed were satisfied with the care they received, but many expressed dissatisfaction with specific aspects of the primary care system: the long

waits, appointment difficulty, impersonal care, and poor staff-patient interpersonal relations. However, 88 percent indicated that they would be more satisfied if they could choose their source of primary care. Almost a third of those surveyed desired access to a female physician for some member of their family--particularly for OB/GYN services. Virtually all individuals surveyed (90.6 percent) valued provider continuity.

Results are of interest at two very different levels. First, at the level of the Hospital Commander, policy should be changed regarding point of primary care delivery for permanent party soldiers and their families. Secondly, a number of mangerial implications can be drawn for Department and Service Chiefs.

Recommendations

Hospitals seek to satisfy many publics. Increasing patient satisfaction by offering a choice of primary physicians may concomitantly reduce physician satisfaction by forcing some specialists (e.g., internal medicine and pediatric physicians) to function as primary care providers. The crux of the issue must be examined within the tripartate mission of functioning as a teaching institution, while providing primary and tertiary care to eligible beneficiaries.

Based on the data and the foregoing conclusions, the following recommendations are made:

(1) One way to improve both the access to, and image of, medical care provided at military medical treatment facilities such as Dwight David Eisenhower Army Medical Center and its satellite troop medical clinics may be to personalize medical care by allowing beneficiaries to select alternatives for obtaining primary care, and to designate primary care physicians for those who desire one. This upgrading of care was viewed as part of a necessary effort to improve the quality of life in today's All Volunteer Army.

(2) A program should be developed to improve the interpersonal skills of staff members. The program should receive Command emphasis to

tie in employee behavior to the system of rewards/evaluations, and to make courtesy part of Dwight David Eisenhower Army Medical Center's corporate culture.

(3) A concerted effort should be made to recruit female physicians--especially OB/GYN physicians--to work at Dwight David Eisenhower Army Medical Center.

Leaders in military health care are surrounded by opportunities for making improvements. Despite image setbacks that have occurred in military medicine, the climate for improving primary care is ripe. Here are just a two indicators: (1) The rash of critcism of military medicine that flourished during the past few years is being replaced by a realization that debating past and present accomplishments and shortcomings is inadequate for dealing with the future. (2) A growing number of people realize that the image of military medicine must be improved, not only for our own satisfaction, but also for the benefit of our patients and the medical readiness of the Armed Services. It is essential for our future that we provide the leadership necessary for making changes that will better meet the needs of our primary beneficiaries.

On a more general note, managers have the responsiblity to choose and make policy. Just because patients desire lengthy appointments with providers, physician resources may not be adequate to meet all the expressed wants. As Kotler and Clarke (1986) stated in their article "Creating the Responsive Organization:"

> Healthcare managers must differentiate between their responsibility to be fully responsive to consumers versus the abrogation of their management and policy-making responsibilities to consumers. A fully responsive organization, while responding to the greatest extent possible to its consumers, is, still managed by the individuals hired and charged with that responsibility. 18

So, for example, the Commander of DDEAMC may not have the flexibility to hire more physicians or to increase the number of female physicians commissioned into the Army. A more reasonable interpretation of the marketing concept would be to strive to create a high level of

satisfaction in its consumers, while weighing these efforts against the other needs of, and pressures upon, the organization. [19]

Afternote

At DDEAMC, burgeoning interest in improving the image of military medicine created a concomitant emphasis on access to primary care--the portal to hospital services. A new set of primary care choices titled "The Primary Care Initiative" are being offered to permanent party active duty families.

Responsive organizations manage to imbue their employees with a spirit of customer service,[20] and although training is important, DDEAMC truly is in the business of patient care. The organization is becoming more responsive, if indeed,

> A responsive organization is one that makes every effort to sense, serve, and satisfy the needs and wants of its patients and publics within the constraints of its budget, political, regulatory, and reimbursement environment. 21

The system that has been initiated will improve the quality of care provided active duty soldiers and their families by expanding the available options for care.

APPENDIX A

Patient Preference Survey
and
Transmittal Letter

DEPARTMENT OF THE ARMY
HEADQUARTERS DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER
FORT GORDON, GEORGIA 30905-5650

14 November 1985

HSHF-DCA/CS-R

SUBJECT: Patient Preference Survey

TO: ALL PERMANENT PARTY PERSONNEL

1. We need your help to provide active duty military families with a choice of health care services. We want to provide you with the services of your choice.

2. You have been selected to represent a group of military families similar to yourself. Please take a few moments to answer the questions on the next two pages and return the survey. It is important that we get information on what health care services you want. Your answers will help us to develop primary health care options for all active duty families at Fort Gordon. Thank you for helping us to serve you better.

Enclosure

ALCIDE M. LANOUE
Brigadier General, MC
Commanding

Reaching Out With AMC EXCELLENCE

PATIENT PREFERENCE SURVEY

First, let's look at some health care choices:
Assume you have three options. Under each option, you will be able to:

* use the emergency room for emergency medical treatment,
* be referred to a specialist such as a cardiologist ("heart doctor"), or dermatologist ("skin doctor"),
*be admitted to the hospital for treatment.

Would you prefer to receive medical care for your family from:

1)--a **family doctor**, a specialist trained in family medicine assigned to provide on-going, complete health and medical care for your entire family,

2)--a **group of specialists** including internal medicine, and pediatrics (children's doctor). You will have an assigned doctor to go to for each of these specialities,

3)--an **urgent care center**. A group of doctors who will provide general medical care to patients who walk in, or have appointments.

A. My choice for family medical care is: (please choose one)

- ☐ A family doctor
- ☐ A group of specialists
- ☐ An urgent care center
- ☐ CHAMPUS -cost sharing
- ☐ Other (Please explain)_____

B. Where do you get health care now? (check all that apply):

- ☐ General Medical Clinic
- ☐ Family Practice
- ☐ Pediatrics
- ☐ OB-GYN
- ☐ Other (please explain) _____

C. Are you in family practice now? (YES or NO): _____

If no, have you ever applied for family practice and been refused?
(YES or NO): _____

D. How many more months will you be at FT Gordon? _____

E. How many family members (including yourself) are with you at FT Gordon?____

F. About how many times a year do you use Eisenhower Army Medical Center services? _____ Other members of your family? _____

G. In general, how did you like the care your family receives? (Pick one):

Very Satisfied ☐ Satisfied ☐ Somewhat Satisfied ☐ Not Satisfied ☐ Did Not Use ☐

Comments_____

H. Would you be more satisfied if you were able to choose one of the health care options on page 1? (YES or NO): _____

I. Is it important to you to have a female doctor available?(YES or NO): _____

J. Is the person filling out this survey on active duty? (YES or NO): _____

K. How old are you? (Pick one):

Under 21 ☐ 21-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ Over 40 ☐

L. Are you Male or Female? _____

If you selected the "urgent care" choice on page 1, you are finished with this survey. Please return it in the enclosed self-addressed, stamped envelope. Thank you very much for your help.

****

Only answer these questions if you selected either the group of specialists, or family practice options.

M. How important is it that you see the same doctor each visit?

Very Important ☐ Important ☐ Doesn't Matter ☐ Not Important ☐

Comments_____

N. If you felt you needed to be seen soon, but your doctor already had all his/her appointments filled, would you be willing to see another doctor, or would you rather wait to see your own doctor?

See Another Doctor ☐ Rather Wait ☐

Comments_____

THIS IS THE END OF THE SURVEY. Please return the survey in the enclosed self-addressed, franked envelope. If you want more information about these choices, please call SFC Rugh: 791-4656, or CPT Johnson: 791-4654.

THANKS FOR HELPING US TO BETTER SERVE YOUR HEALTH CARE NEEDS!

F. About how many times a year do you use Eisenhower Army Medical Center services? _____ Other members of your family? _____

G. In general, how did you like the care your family receives? (Pick one):

Very Satisfied ☐ Satisfied ☐ Somewhat Satisfied ☐ Not Satisfied ☐ Did Not Use ☐

Comments_____

H. Would you be more satisfied if you were able to choose one of the health care options on page 1? (YES or NO): _____

I. Is it important to you to have a female doctor available?(YES or NO): _____

J. Is the person filling out this survey on active duty? (YES or NO): _____

K. How old are you? (Pick one):

Under 21 ☐ 21-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ Over 40 ☐

L. Are you Male or Female? _____

If you selected the "urgent care" choice on page 1, you are finished with this survey. Please return it in the enclosed self-addressed, stamped envelope. Thank you very much for your help.

****

Only answer these questions if you selected either the group of specialists, or family practice options.

M. How important is it that you see the same doctor each visit?

Very Important ☐ Important ☐ Doesn't Matter ☐ Not Important ☐

Comments_____

N. If you felt you needed to be seen soon, but your doctor already had all his/her appointments filled, would you be willing to see another doctor, or would you rather wait to see your own doctor?

See Another Doctor ☐ Rather Wait ☐

Comments_____

THIS IS THE END OF THE SURVEY. Please return the survey in the enclosed self-addressed, franked envelope. If you want more information about these choices, please call SFC Rugh: 791-4656, or CPT Johnson: 791-4654.

THANKS FOR HELPING US TO BETTER SERVE YOUR HEALTH CARE NEEDS!

Footnotes

[1]DoD Regulation 6010.8-R, "Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), 10 January 1977.

[2]Army Regulation 40-3, Table 2-1, Medical Services: Medical, Dental, and Veterinary Care, Headquarters, Department of the Army, Washington, DC, US Government Printing Press,15 February 1985, p.55.

[3]Emily Friedman, "What Do Consumers Really Want?" Healthcare Forum 29 (3) (May/June 1986) p.21

[4]Donald Robinson, "The Mess in Military Medicine,"Readers Digest (February 1985) pp. 49-53.

[5]J.C. Lind, e t., "Rx for the future-Message from the Surgeon General," Officers Call (May-June 1986) p.5.

[6] BG Alcide M. LaNoue, Eisenhower Army Medical Center 1985-1986 Commander's Guidance.

[7] Gregory D. Douglas, "Building on your hospital's competitive image." Trustee 39 (3) (March 1986) p. 16.

[8] John E. Ware, Jr., Development and Validation of Scales to Measure Patient Satisfaction with Health Care Services: Volume 1 of a Final Report. Prepared for the National Center for Health Services Research, Department of Health, Education and Welfare (1976).

[9] Lu Ann Aday, Ronald Andersen, and Gretchen Fleming, Health Care in the U.S.: Equitable for Whom? Beverly Hills: Sage Publications, 1980, p. 142.

[10] Geoffrey A. Goldsmith,"Patient satisfaction with a family practice clinic: comparison of a questionnaire and an interview survey," The Journal of Ambulatory Care Management (May 1982): p.29 .

[11] Geoffrey A. Goldsmith,"Patient satisfaction with a family practice clinic: comparison of a questionnaire and an interview survey," The Journal of Ambulatory Care Management (May 1982): p.25 .

[12] E. A. Suchman, "Social patterns of illness and medical care," Journal of Health and Human Behavior 6 (2) 1965.

[13] John E. Ware, Jr., "Effects of Acquiescent Response Set On Patient Satisfaction Ratings," Paper presented at the American Public Health Association, Miami, Florida, October 1976.

[14] R. Likert, " A Technique for the Measurement of Attitudes," Archives of Psychology No. 140 (1932).

[15] Gretchen V. Fleming and Ronald Andersen Health Beliefs of the U.S. Population: Implications for Self-Care. Perspectives A-11, Chicago: Center for Health Administration Studies, University of Chicago, 1976.

[16] "Family practice at a glance---," phamphlet published by the American Academy of Family Physicians, Kansas City, Missouri p.2.

[17] C.S. Yamada, and G. Goldsmith, "Patient evaluation of the family practice clinic/Sacramento Medical Center," Unpublished manuscript University of California, Davis Family Practice Clinic, Sacramento, California (1977).

[18] Philip Kotler and Roberta N. Clarke, "Creating the Responsive Organization." Healthcare Forum 2 (3) (May/June 1986), p. 30.

[19] Philip Kotler and Roberta N. Clarke, "Creating the Responsive Organization." Healthcare Forum 2 (3) (May/June 1986), p. 32.

[20] Thomas J. Peters, and Robert H.Waterman, Jr. In Search of Excellence. New York: Warner Books, 1984.

[21] Philip Kotler and Roberta N. Clarke, "Creating the Responsive Organization." Healthcare Forum 2 (3) (May/June 1986), p. 32.

WORKING BIBLIOGRAPHY

Books

Aday, Lu Ann; Andersen, Ronald; and Fleming, Gretchen, V. Health Care in the U.S.: Equitable for Whom? Beverly Hills: Sage Publications, 1980.

Altenstetter, Christa (Ed). Innovation in Health Policy and Service Delivery. Cambridge, MA: Oelgeschlager, Gunn and Hain Publications, 1981.

Conrad, Peter & Rockelle, Kern (Editors). The Sociology of Health and Illness: Critical Perspectives. 1981.

Daniel, Wayne W. Biostatistics: A Foundation for Analysis in the Health Sciences. Second Edition. New York: John Wiley and Sons, Inc., 1978.

Daniel, Wayne W. Applied Nonparametric Statistics. Boston: Houghton-Mifflin Company, 1978.

Donabedian, Avedis. The Criteria and Standards of Quality: Explorations in Quality Assessment and Monitoring. Volume II. Ann Arbor, Michigan: Health Administration Press, 1982.

Hamilton, Patricia A. Health Care Consumerism. St. Louis, MO: C. V. Mosby Company, 1982.

Keppel, Geoffrey. Design and Analysis: A Researcher's Handbook. Enlelwood C Cliffs, New Jersey: Prentice-Hall, Inc., 1982.

Larsen, Richard J. Statistics for the Health Sciences. Columbus, Ohio: Charles E. Merrill Publishing Co., 1975.

Spiegel, Allen D. & Backhaut, Bernard H. Curing and Caring. New York: Medical and Scientific Books, 1980.

Periodicals

Andersen, Ronald, et al. "The Public's View of the Crisis in Medical Care: an Impetus for Changing Delivery Systems." Economic and Business Bulletin 24 (Fall 1971): 44-52.

Brown, David A. "Patient Acceptance of an Operational Family Practice Clinic: An Alternative Method of Health Care Delivery to Families of Deploying Units." Military Medicine (October 1980): 709-11.

Driggers, David; Fink, Carolyn; and Huff, Charles. "The Family Continuity of Care Contract." The Journal of Family Practice 15, No. 3 (1982): 471-3.

Fielding, Jonathan E. "Preventive Medicine and the Bottom Line." Journal of Occupational Medicine 21, No. 2 (February 1979): 79-88.

Freeman, George. "Continuity of Care in General Practice: a Review and Critique." Family Practice-An International Journal 1, No. 4 (1984): 245-252.

Friedman, Emily. "What do Consumers Really Want?" Healthcare Forum 29 (3) (May/June 1986): 19-24.

Freer, James A.; Burdette, James A.; and Crocker, Max A. "Patient Satisfaction with a Model Family Practice Center." The Journal of Family Practice 4, No. 5 (1977): 971.

Goldsmith, Geoffrey A. "Patient Satisfaction with a Family Practice Clinic: comparison of a questionnaire and an interview survey." The Journal of Ambulatory Care Management 6, No. 2 (May 1983): 24-31.

Gregory, Douglas D. "Building on Your Hospital's Competitive Image." Trustee 39 (3) (March 1986): 16-19.

Hansen, John P.; Stinson, James A.; and Herpok, Franz J. "Cost Effectiveness of Physicians in a University Health Clinic." Journal of the American College Health Association 28 (February 1980): 211-214.

Hilton, Thomas F.; Butler, Mark C.; and Nice, D. Stephen. "Patient and Provider Satisfaction in Navy Family Practice and Non-Family Practice Clinics." The Journal of Family Practice 18, No. 4 (1984): 569-73.

Hines, Brian L.; Clarkson, Quentin D.; and Smith, David D. "Development of a Patient Satisfaction Questionnaire." The Journal of Family Practice 4, No. 1 (1977): 148-9.

Hudson, James I.; and Nourse, Shepley, Editors. "Perspectives in Primary Care Education." Journal of Medical Education 54 (July 1979): 524-33.

Kotler, Philip and Clarke, Roberta N. "Creating the Responsive Organization." Healthcare Forum 29 (3) (May/June 1986): 26-36.

Likert, R. "A Technique for the Measurement of Attitudes." Archives of Psychology, 140 (1932).

Nice, D. Stephen; Butler, Mark C.; and Dutton, Linda. "Patient Satisfaction in Adjacent Family Practice and Non-Family Practice Navy Outpatient Clinics." The Journal of Family Practice 17, No. 3 (1983): 463-6.

Pope, C. R. "Consumer Satisfaction in a Health Maintenance Organization." Journal of Health and Social Behavior 19 (1978): 291-303.

Robinson, Donald. "The Mess in Military Medicine." Reader's Digest, February 1985, pp.49-53.

Roddy, Pamela C. "Need-Based Requirements for Primary Care Physicians." JAMA 243, No. 4 (Jan 25, 1980).

Sloane, Philip; and Egelhoff, Claudia. "The Relationship of Continuity of Care to Age, Sex, and Race." The Journal of Family Practice 16, No. 2 (1983): 402-5.

Suchman, E. A. "Social Patterns of Illness and Medical Care." Journal of Health and Human Behavior 6 (2) 1965.

Wall, Eric M. "Continuity of Care and Family Medicine: Definition, Determinants, and Relationship to Outcome." The Journal of Family Practice 13, No. 5 (1981): 655-664.

Wilson, Jim L. "Patient Satisfaction in a Navy Family Practice Clinic." The Journal of Family Practice 4, No.3 (1977): 594.

Other

"Family practice at a glance---," pamphlet published by the American Academy of Family Physicians, Kansas City, Missouri.

LaNoue, Alcide M., Eisenhower Army Medical Center 1985-1986 Commander's Guidance.

Officers Call, (May-June 1986): pp. 4-7. Edited by J.C. Lind. "Rx for the Future-Message from the Surgeon General."