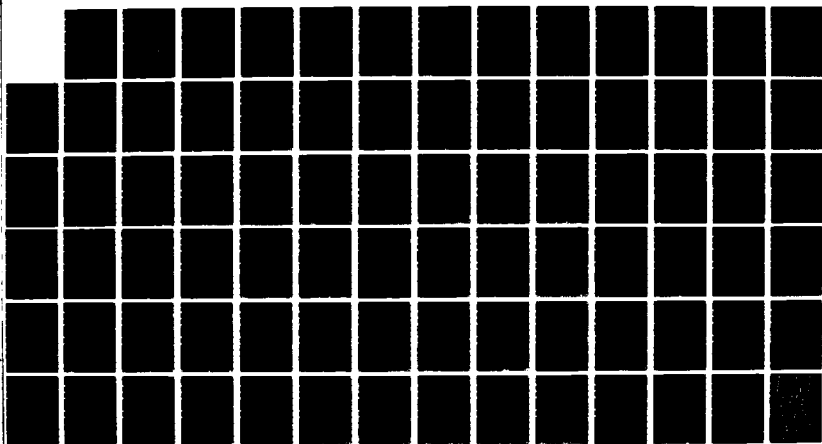
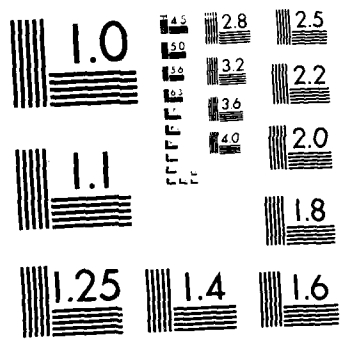


NO-255 091

A STUDY TO DETERMINE THE BEST DESIGN FOR A FAMILY
PRACTICE CENTER AT WOMA. (U) ACADEMY OF HEALTH SCIENCES
(ARMY) FORT SAN HOUSTON TX HEALTH C. G A DALE
01 JUN 79 MCA-9-88 F/G 5/6 NL

UNCLASSIFIED





AD-A195 591

A STUDY TO DETERMINE THE BEST DESIGN
FOR A FAMILY PRACTICE CENTER AT
WOMACK ARMY HOSPITAL
FORT BRAGG, NORTH CAROLINA

A Problem Solving Research Project

Submitted to the Faculty of

Baylor University

In Partial Fulfillment of the

Master of Health Administration

by

Captain Glyndon A. Dale, MSC

Fort Bragg, North Carolina

June 1979

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REPORT DOCUMENTATION PAGE

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1a. REPORT SECURITY CLASSIFICATION Unclassified			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION / AVAILABILITY OF REPORT Approved for public release; Distribution Unlimited		
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE					
4. PERFORMING ORGANIZATION REPORT NUMBER(S) 9-88			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
6a. NAME OF PERFORMING ORGANIZATION U.S. Army-Baylor University Grad Prog in Hlth Care Admin.		6b. OFFICE SYMBOL (if applicable) HSHA-IHC	7a. NAME OF MONITORING ORGANIZATION		
6c. ADDRESS (City, State, and ZIP Code) Ft Sam Houston TX 78234-6100			7b. ADDRESS (City, State, and ZIP Code)		
8a. NAME OF FUNDING / SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (if applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER		
8c. ADDRESS (City, State, and ZIP Code)			10. SOURCE OF FUNDING NUMBERS		
			PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.
			WORK UNIT ACCESSION NO.		
11. TITLE (Include Security Classification) A STYDY TO DETERMINE THE BEST DESIGN FOR A FAMILY PRACTICE CENTER AT WOMACK ARMY HOSPITA, FORT BRAGG, NORTH CAROLINA.					
12. PERSONAL AUTHOR(S) Glyndon A Dale, CPT, MSC					
13a. TYPE OF REPORT Thesis		13b. TIME COVERED FROM <u>July 78</u> TO <u>June 79</u>		14. DATE OF REPORT (Year, Month, Day) <u>1979, June, 9</u>	
15. PAGE COUNT 79					
16. SUPPLEMENTARY NOTATION <i>facilities,</i>					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP	Health Care, Family Practice Center, <i>Procedures,</i>		
19. ABSTRACT (Continue on reverse if necessary and identify by block number) The author discusses the importance of, and some of the factors influencing the develop- ment of a Family Practice Center. <i>Keywords:</i> <i>medical, family members, Clinical medicine, Military medicine</i>					
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT ☒ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT. ☐ DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION		
22a. NAME OF RESPONSIBLE INDIVIDUAL Lawrence M. Leahy, MAJ, MS			22b. TELEPHONE (Include Area Code) (512) 221-6443/6136		22c. OFFICE SYMBOL HSHA-IHC

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ACKNOWLEDGMENTS

Special thanks must be given to Colonel Chester L. Ward,
Colonel Ellis F. Hall, Jr., Mrs. Brenda K. High, and The
Staff of Womack Army Hospital.



Accession For	
NTIS GSA&I	☒
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CHAPTER I
INTRODUCTION

Fort Bragg is a large military installation located in Cumberland County, North Carolina, and covers an area of more than 130,000 acres. Fort Bragg is the home of the XVIII Airborne Corps, whose major units are the 82nd Airborne Division and the 101st Airborne Division (located at Fort Knox, Kentucky). Other major units stationed at Fort Bragg are the John F. Kennedy Center for Military Assistance, and a variety of support units. The population eligible for health care from Fort Bragg exceeds 158,000. A breakout of that population is shown in Table 1.

TABLE 1
POPULATION ELIGIBLE FOR HEALTH CARE FROM FORT BRAGG

CATEGORY	NUMBER
Active Duty and Dependents Residing on Fort Bragg	56,641
Active Duty and Dependents Residing on Pope AFB	5,881
Active Duty, Dependents, Retirees, and Dependents of Retirees Residing Off-Post Within 50 Miles of Fort Bragg	80,587
Active Duty, Dependents, Retirees, and Dependents of Retirees Residing Off-Post Beyond a 50 Mile Radius of Fort Bragg	<u>15,305</u>
TOTAL	158,414

The mission of the XVIII Airborne Corps is to "deploy by air on short notice to any part of the world, prepare to fight, or accomplish any other assigned mission." The large number of troops stationed at Fort Bragg as well as the mission requirement to maintain a unique state of readiness, results in great emphasis being placed on the support services available for the soldier, his dependents, and retirees and their dependents.

Primary hospital services available in the immediate area are shown in Table 2.

TABLE 2
COMMUNITY HOSPITAL SERVICES

NAME	LOCATION	DRIVING TIME FROM FORT BRAGG	NO. OF BEDS
Betsy Johnson Memorial	Dunn NC	45 minutes	117
Cape Fear Valley	Fayetteville NC	15 minutes	476
Highsmith Rainey	Fayetteville NC	15 minutes	98
Veterans Administration	Fayetteville NC	15 minutes	391
St. Joseph of the Pines	Southern Pines NC	45 minutes	85
Lee County	Sanford NC	45 minutes	142
Southeastern General	Lumberton NC	35 minutes	352

The first medical facility at Fort Bragg was opened in 1918, and consisted of two dispensaries and a headquarters facility. The first hospital at Fort Bragg was a planned 500-bed unit, and opened in 1919. In 1932, a new 83-bed brick facility was completed. This fully equipped, modern hospital served Fort Bragg through the 1930's.

With the onset of World War II, the medical facilities at Fort Bragg were greatly expanded. Two cantonment type hospitals were constructed, housing a total of 2,920 beds. In addition, 6,000 beds were set up as a convalescent hospital.

With the ending of the war, the 6,000 convalescent bed facility, the brick hospital facility, and a 920 bed cantonment hospital were all closed. The brick facility was converted to use as an administrative building, and currently is used to house the Headquarters element of the XVIII Airborne Corps.

By 1949, all medical facilities at Fort Bragg were being housed in the remaining cantonment hospital. This facility was designated a U. S. Army hospital.

In August 1958, a new nine-story permanent facility was completed and named in honor of PFC Bryant H. Womack, a native of North Carolina. PFC Womack served as a medical aidman with the 25th Infantry Division in the Korean Conflict and was awarded the Medal of Honor posthumously.

A new clinic wing and a supply warehouse were added to the hospital building in 1974. At the present time the hospital is in the midst of undergoing a 5.9 million dollar electrical/mechanical upgrade, currently scheduled for completion in July 1980. This electrical/mechanical upgrade was undertaken in order to meet the requirements of the Joint Commission on Accreditation of Hospitals and the National Life Safety Code of the National Fire Prevention Act.

Womack Army Hospital has 288 operating beds with an average beds occupied rate of 174. During 1978, there were 529,830 outpatient visits. A work force of over 1,400 military and civilian personnel are required to deliver this health care. Womack Army Hospital is part of one of the largest Medical Department Activities in the U. S. Army.

Since January 1974, a Department of Family Practice has provided comprehensive primary medical care services at Womack Army Hospital, and in July 1974, a Family Practice residency training program was initiated. The Family Practice Activity was initially located on the ninth floor of Womack Army Hospital. However, it rapidly outgrew the confines of its area and was relocated to the first floor of Womack Army Hospital, adjacent to the Emergency Room. The Family Practice Activity was then relocated to its current location, the basement area of Womack Army Hospital. This area of the basement was originally designed to serve as a physical examination facility and a preventive medicine facility. At present, these two activities are located in temporary structures in the old cantonment hospital area.

A military construction, Army (MCA) project for a Family Practice Center has been approved, and tentatively scheduled to begin in FY 83. This project, when completed, will provide a permanent Family Practice Center at Fort Bragg. This clinic will serve as many families as practicable, within the scope of the expanding Family

Practice Program, of the more than 158,000 active duty military and military retiree population and their dependents.

There are currently no adequate facilities at Fort Bragg to accommodate the Family Practice Program.

Conditions Which Prompted the Study

With the termination of the physician draft, the number of physicians assigned to Womack Army Hospital began to noticeably decrease. As of March 1979, there were 67 physicians assigned against a recognized requirement of 93. Projections for the near future for physician staffing are increasingly gloomy. Certain medical specialties will experience severe shortages and possibilities exist that certain services at Womack Army Hospital will have to be terminated, and in some cases drastically curtailed.

This reduction of capability has placed additional pressures on the Family Practice Department and in turn on the Family Practice training program.

The growth in the size of the Family Practice Department is reflected in Appendix B and Appendix C. Workload data for the Family Practice Clinic is shown in Appendices D through H.

The increasing demand for Family Practice services has precipitated this review of the Family Practice facility currently in operation. Given that the demand for services will not diminish, and, in all probability, may increase, this research project has

concentrated on finding the design for a Family Practice Clinic that will enable the rising demand for services to be met in the most effective manner possible.

Problem Statement

The problem was to analyze the existing clinic and alternative designs for a Family Practice Center at Womack Army Hospital, Fort Bragg, North Carolina, and make recommendations to select the best alternative.

Limits to Problem Solving Alternatives

The funding available within the Department of the Army for facility construction is extremely limited and the time it takes for approval of the project and have a project actually started is counted in years. A project to construct a Family Practice Center at Fort Bragg is already being planned, and is scheduled to be staffed by Congressional Committees in Fiscal Year (FY) 82. Therefore, the problem of space inadequacies in the Family Practice Clinic has already been acknowledged. The various workable alternatives to be considered to resolve the problem are limited by the existing physical facility, available funds, and alternative physical facilities.

Research Obstacles

Information collected over an extended period of time and periodic randomly sampled customer survey responses analyzed using

appropriate statistical methods would be the optimum method of collecting and interpreting data. This would have required a research project beyond the scope and time constraints of this study. However, the information gleaned from available sources allowed conclusions to be reached using the best available data.

Funding constraints on travel funds precluded the visiting of other military medical facilities that either were operating, or contemplating the initiation, of a Family Practice Center. Civilian institutions in the vicinity of Fort Bragg have no existing or future plans to enter the field of Family Medicine. However, information was obtained telephonically and by letter from some military medical facilities having a Family Practice operation. This information was very beneficial, and whenever used in this study will be noted. The assistance, advice, and critical comment of the Health Facility Project Officer at Fort Bragg was invaluable.

Literature Review

The family physician provides continuing and comprehensive care in a personalized manner to patients of all ages and to their families, regardless of the presence or absence of disease or the nature of the presenting complaint. He accepts responsibility for the management of an individual's total health needs. Most of the patient's health care needs are taken care of personally by the

family physician. For health care needs not provided by the family physician, referrals are made to appropriate specialists. The efforts of all health professionals are coordinated by the family physician, who has ongoing responsibility for the patient.¹

However, this does not mean that the family physician can allow his patients to abdicate their responsibilities in the maintenance of their own good health. He must manage the health care of his patients in concert with the patient, and not as a sole entity. His relationship with his patients is iatrogenic, and the more responsible he makes his patients, the less responsible for their health he must be.

The family physician practicing family medicine has several distinct functions. He functions first of all as a health maintainer. His specific functions as a health maintainer includes preventive medical techniques such as diets and immunizations, and includes the treatment of disease. Health maintenance also includes anticipating medicine: discouraging the heavy smoker or heavy drinker before irreversible health problems develop. Another distinct function of the family physician practicing family medicine is that of educator. Education is the tool used to carry out all other roles. Perhaps the most frequently used educational method is simply that of answering patient inquiries. To most patients, the family physician is the physician who will listen to their problems and answer their questions, especially the "why" questions.

By practicing the "why" educational technique, the family physician shares the responsibility for treatment and creates a less dependent patient.

The practice of family medicine involves an attitude beyond, or different from, that of the limited practitioner who sees only an organ system, age group, or category of disease. The family physician surveys the whole person in a real world situation to better detect early evidences of altered behavior, anatomy, or feelings. With these evidences intervention can proceed at an appropriate time and at the necessary level.

Where does one begin to narrate the history of family practice? Do we begin in the Twentieth Century or start in prehistoric times? Each period in history has probably had some kind of a family doctor. Whether dealing with religious figures, philosophy, medicine men, spirits or gods (or a combination of several), family health has always been administered in some way.

The story of the evolution of medicine and the family physician in other than modern times is beautifully written by Benjamin Lee Gordan, in a work entitled Romance in Medicine.² However, the following brief historical outline of the evolution of family medicine will encompass only the period beginning with the Twentieth Century.

The family physician developed from the metamorphosis of the commonly acknowledged traditional deliverer of health care to the entire family, the general practitioner.

In the early part of the Twentieth Century, an overwhelming majority of all physicians would have been classified as general practitioners or general physicians. During the time of the Flexner Study, events occurred that would cause a drastic change in the complexion of American medicine. Many of the medical schools were nothing more than diploma mills seeking only a profit. These medical schools were not institutions of quality teaching and began to lose their glamour. The Flexner Report caused a number of these diploma mills to cease operations, and state supported schools and private universities began to pour dollars into the development of quality medical training. The medical schools remaining began to turn out better doctors owing to a much longer and much more comprehensive training program. From that time on, with the increased availability of knowledge and facilities, a shift began toward specialization and subspecialization in medicine.

In 1931, more than 80% of the practicing physicians in the United States were general practitioners. It was at about this time that a steady decline in the number of general practitioners began, and a corresponding increase in the number of specialists began. During the 1940's, the United States was deeply involved in a global war, and had committed the Country's resources to total victory. This was also the period in which medical specialization thrived and became firmly established. The foundation for this rapid growth of specialization came about because of the government's involvement

in the categorizing of physicians for mobilization. This categorization of physicians by specialty caused specialization to become even more entrenched in the medical community. However, during this time, the American Academy of General Practice was founded in effect to preserve and foster the concept of General Medicine.³

During the 1950's, concern was shown in the areas of medical education and practice. It was felt by many that health care provision had to become more comprehensive, yet remain scientific.

During the 1960's and 1970's, many new concerns were expressed about the state of health care in the United States. This period was marked by a dramatic increase in the involvement of the Federal Government in the health care arena. This involvement was most noticeable in the vast amounts of legislation enacted that impacted on health care. It was also during this time that public concern over health matters began to grow. The mass media chronicled public opinion regarding American health care and made public a number of articles and shows that expressed the public discontent and dissatisfaction with the health care situation. During this time, the conflict between general and specialized medicine continued to grow. At the same time public concern continued to grow, regarding physician shortages, quality of care, and the tremendous rise in health care costs.

One of the most important steps taken in the process of getting family medicine recognized as a medical specialty was the

establishment in 1947 of the American Academy of General Practice (renamed the American Academy of Family Practice in 1971). The establishment of the American Academy of General Practice enabled an organized leadership role to be taken in developing the new specialty of family practice. By 1950, the first residency training programs in general practice were approved by the American Medical Association. However, the number of general practitioners continued to decline.

In 1959, an independent group not officially sanctioned by the American Academy of General Practice submitted a resolution to the American Medical Association to establish a Board of General Practice. However, because this group did not have the support of the American Academy of General Practice leaders, the resolution was not favorably acted upon by the American Medical Association.⁴

By the early 1960's, the American public, the Federal Government, and organized medicine as a whole began to recognize the problems caused by overspecialization and a continuing decline in the number of general practitioners. A series of events began which enhanced the cause of family medicine.

In 1961, Dr. Ward Darley, a prominent medical educator, spoke out endorsing the concepts of family medicine. He said that fragmentation of medicine in specialties continued to increase the fragmentation of patient care. He in essence proposed a new specialty, family medicine.⁵

In 1962, the World Health Organization's Expert Committee on Professional and Technical Education and Medical Auxiliary Personnel met in Geneva to discuss the worldwide shortage of family physicians. Their report stressed the need to train family doctors to serve as physicians of first contact with the patient, and concluded that every medical student's training should include exposure to family practice.⁶ Also in 1962, the American Academy of General Practice initiated a study of the feasibility of a board of general practice, and in 1963 resolutions were presented to the American Academy of General Practice House of Delegates concerning board certification. However, the resolutions were not favorably acted upon. In 1964 and in 1965, resolutions to establish a certifying board for Family Practice were again submitted to the American Academy of General Practice, but were not adopted. Later in 1965, resolutions were presented to the American Medical Association House of Delegates calling for the establishment of a board of general or family practice. These resolutions were submitted to the Council on Medical Education for further study.

The next major event was the report of three major committees formed to study education and health care delivery in the United States. The Folsom Committee was commissioned by the National Health Council and the American Public Health Association and published a report entitled "Health is a Community Affair" in 1966. The Citizen's Commission on Graduate Medical Education was commissioned by the American Medical

Association and their report became known as the Millis Report. The third committee was the Ad Hoc Committee on Education for Family Practice of the Council on Medical Education of the American Medical Association. Their report, published in 1966, was known as the Willard Report. All three of these reports helped to lay the foundation for the eventual success in recognizing Family Practice as a specialty. Each of these reports agreed on the need for a physician to provide continuing comprehensive care for his patients. The Folsom Committee termed this person the "personal physician," the Millis Report used the term "primary physician," and the Willard Report used the term "family physician."⁷

The Willard Report was published in 1966, and later that year the American Medical Association adopted the recommendations of the Ad Hoc Committee on Education for Family Practice. The report pointed out that board certification was necessary to provide status to the specialty of family medicine and would serve to attract more physicians to careers in family medicine.⁸

In late 1968, the American Academy of General Practice, the American Medical Association's Council on Medical Education, and the Section Council for General Practice of the American Medical Association in concert formed an Ad Hoc Committee to draft the essentials for residency training programs in family practice.⁹

In September 1968, The Essentials for Training in Family Practice which had been developed by the joint conference Ad Hoc

Committee of the American Academy of General Practice and the American Medical Association, were approved by the American Academy of General Practice Congress of Delegates and by the American Medical Association's Council on Medical Education. In February 1969, the Liaison Committee for Specialty Boards considered the final application, and on February 8, 1969, the final approval was obtained for the creation of Family Practice as a medical specialty.¹⁰

The certification board that was created was very unique. It was composed not only of family practice members, but of representatives from the other medical specialties. It was also unique in that there would be no "grandfather" certification by the American Board of Family Practice. Each diplomate, without exception, must take and pass the certification examination. The methods to gain admission to the examination originally were through a three-year training program, or specific requirements of practice and continuing education that would qualify a practicing physician who had not taken the residency to be able to take the examination. However, after July 1978, the only method to become a diplomate of the American Board of Family Practice was by taking a three-year training program in family practice.¹¹ The American Board of Family Practice also requires its' diplomates to be recertified every six years. The recertification process was controversial, as it was the first such requirement of any medical

specialty board. The recertification process is a combination of continuing education, clearance of licensure, and documentation of competent treatment of patients.¹²

Since the American Board of Family Practice approval in 1969, the number of training programs has increased from 15 to 342, and the number of residency positions to over 5,000. The goals of family practice today are to increase the number of training programs, to improve the existing programs, and to continue to develop the process for training the physician who will give comprehensive and continuing care to families.¹³

Skyrocketing costs, dehumanization of medical care, and decreased quality and availability of care have touched off a consumer revolt against the medical profession and the system of delivering health care. The public is demanding that the medical profession shift its emphasis from medical science to medical care. The fragmented system of hospital-based, disease-oriented, assembly-line medicine is being rejected by the consumer. This consumer activism and political agitation are forcing the medical profession to acknowledge health care as a right, and to broaden the concept of medical practice.¹⁴ Family Medicine places equal emphasis on the maintenance of health and the quality of life. By accepting as its area of responsibility and expertise the continuing health maintenance of the family, family medicine offers a meaningful and affirmative approach to meeting the health needs of contemporary society.¹⁵

The current literature dealing with the facilities' requirements for Family Practice is limited. In general, information must be extracted from the broad category of Family Practice. Much of the literature indicates that there is an awareness of the need for adequate facilities, however, for the most part the requirements are expressed in generalities. Probably the most specific information on facilities' requirements is contained in the Guide for Residency Programs in Family Practice, published by the American Academy of Family Physicians.¹⁶

The purpose of this portion of the research paper was a brief review of the current literature and research which related to this study. An excellent, comprehensive doctoral study was found which detailed the facilities' requirements for Family Medicine educational programs,¹⁷ and numerous architectural papers were found that detailed the specifics of constructing a family medicine facility.

Writers in the field of family medicine are aware of the need for adequate facilities, and space requirements have been expressed both in detail and in generalities. The space requirements have been adequately documented by the 1975 Hilliard Study, and the architectural design of a family practice facility has been detailed by numerous architectural firms. This study will endeavor to determine the best alternative for a Family Practice Center at Womack Army Hospital, Fort Bragg, North Carolina.

Research Methodology

After conducting a review of available pertinent literature, and obtaining an understanding of the development of Family Medicine, an approach to solving the research problem was developed. This was completed in the following sequence:

1. Obtain through personal observation, staff interviews, and review of available documents, an understanding of how the current Fort Bragg family practice system functions.
2. Obtain, evaluate and analyze statistical data on the growth of Family Medicine and the Family Practice Residency Program at Fort Bragg. This data was obtained through a thorough survey of hospital records.
3. Use experience from other facilities, staff interviews, Army standards, American Academy of Family Physician standards, and literature reviewed.
4. Analyze and compare the advantages and disadvantages of each alternative.
5. Arrive at conclusions and recommendations.

The discussion in the following chapter will provide the results of the steps outlined above.

Definition of Terms

Primary care is a type of medical care delivery which emphasizes first contact care and assumes ongoing responsibility for the patient in both health maintenance and therapy of illness.

It is personal care involving a unique interaction and communication between the patient and the physician. It is comprehensive in scope and includes the overall coordination of the care of the patient's health problems, be they biological, behavioral, or social.¹⁸

The term primary physician describes one who should usually be primary in the first contact sense. When a patient needs hospitalization, the service of other medical specialists, or other medical or paramedical assistance, the primary physician will see that the necessary arrangements are made, giving such responsibility to others as is appropriate and retaining his own continuing and comprehensive responsibility.¹⁹

The family physician provides health care in the discipline of family practice. His training and experience qualify him to practice in several fields of medicine and surgery.²⁰

Family practice is comprehensive medical care with particular emphasis on the family unit, in which the physician's continuing responsibility for health care is neither limited by the patient's age or sex, nor by a particular organ system or disease entity.²¹

Footnotes

¹Robert E. Rakel and Howard F. Conn. Family Practice, 2nd ed. (Philadelphia: Saunders and Company, 1978), p. 3.

²Benjamin Lee Gordan. Romance in Medicine (Philadelphia: Davis, 1945).

³Rakel, Ibid., p. 4.

⁴R. Neil Chisholm, "The History of Family Practice," Family Medicine, ed. Robert B. Taylor (New York: Springer-Verlag, 1978), p. 8.

⁵Ibid.

⁶Ibid.

⁷Ibid., p. 9.

⁸Report of the Ad Hoc Committee on Education for Family Practice of the Council on Medical Education, Meeting the Challenge of Family Practice (Chicago: American Medical Association, 1966), p. 1.

⁹Chisholm, Ibid., p. 10.

¹⁰Ibid.

¹¹Ibid., p. 11.

¹²Paul C. Bruckner, "The Statue of Family Practice," The Roles of Family Practice, Internal Medicine, Obstetrics and Gynecology and Pediatrics in Providing Primary Care, ed. D. M. Beruick (Columbus, Ohio: Ross Laboratories, 1977), p. 6.

¹³Chisholm, Ibid., p. 12.

¹⁴Lynn P. Carmichael, "Family Medicine," Family Health Care, ed. Debra P. Hynovick and Martha Underwood Barnard (New York: McGraw Hill, 1970), p. 61.

¹⁵Ibid., p. 57.

¹⁶American Academy of Family Physicians, Guide for Residency Programs in Family Practice, 1971 (Kansas City, Missouri: American Academy of Family Physicians, 1971).

¹⁷Robert Wayne Hilliard, "A Study of Space Required for an Educational Program for the Practice of Family Medicine in Diversified Modalities" (Ph. D. Dissertation, The George Washington University, 1975).

¹⁸Rakel, Ibid., p. 4.

¹⁹Ibid.

²⁰Ibid., p. 5.

²¹Ibid.

CHAPTER II

DISCUSSION

Current Family Medicine System at Fort Bragg

The mission of the Department of Family Practice is to train physicians in the medical specialty of Family Practice within the context of a structured three-year residency training program, which is approved by the Residency Review Committee, Council of Medical Education, American Medical Association. The formal family medicine program at Fort Bragg had its beginning in the summer of 1975, when the first patients were seen by a family practice resident. Since that time, the program has grown tremendously in the volume of patients seen (Appendix D - H), the number of Family Practice Residents in training (Appendix C), and the number of Family Practice staff committed to supervising and conducting the program (Appendix B).

When the family practice program first began at Fort Bragg, it was located on the top floor of Womack Army Hospital. It soon outgrew the confines of its station on the ninth floor, and was relocated to an area on the first floor of Womack Army Hospital adjacent to the Emergency Room. This area is now the location of the Acute Minor Illness Clinic (AMIC). This area

was poorly designed to hold a functioning family practice residency training program and to contain the operations of a growing family medicine program. The area lacked suitable conference and study space, lacked sufficient space for residents, staff physicians, and support personnel to properly perform their functions. There also was no space for the maintenance of family practice health records separate from the records of the general population.

A clinic wing had been added to Womack Army Hospital and was opened for operation in late 1974. This clinic wing enabled the outpatient clinics to be concentrated in one area of the hospital, with pharmacy and radiology support readily available for outpatients. In the basement of this new clinic wing, a large area had been designed especially for the Physical Examination Section and the Preventive Medicine Activity. Both of these activities were located in wooden buildings located across the street from Womack Army Hospital. The buildings were poorly designed, inadequate for the workload being performed, and were in atrocious condition.

However, before the clinic wing was completed it was decided to not relocate the Physical Examination Station nor the Preventive Medicine Activity into Womack's new clinic wing. It was decided instead to relocate the growing family medicine program into the new clinic wing.

The current location of the family medicine program did provide a degree of stability for the program, the residents, and the staff. There was space available for conferences and a small library. Administrative offices were located away from the mainstream of patient activity, and there was space to maintain health records separate from the general health record files. Adequate space was also available to provide office space for the family practice residents.

With the continued growth of the Family Medicine Program at Fort Bragg, and the growing interest in and emphasis on family medicine, the clinic operation has outgrown the confines of its current location. The family medicine program at Fort Bragg provides services to patient panels of over 12,000 patients, out of an eligible population of over 158,000 active duty soldiers, retirees, and their dependents. The health records area is no longer able to adequately contain all the health records of the serviced population. The physical layout of the clinic lends itself still to the functions of a physical examination station and a preventive medicine function.

Plans to expand the family practice residency program, and to therefore expand the number of patients seen in the family practice clinic will stretch the physical plant's capabilities to the extreme and will make the current situation even more difficult and untenable.

At the present time, a plan to construct a Family Medicine Center at Fort Bragg is tentatively scheduled to begin in Fiscal Year 1983. This center will be both a training center for family practice residents, and a service clinic for family medicine patients.

Before planning progressed further, the Medical Department Activity Executive Officer directed me to evaluate the various alternatives to meeting the Family Medicine Center space requirements. In the next section a brief discussion of the various alternatives is presented.

Alternatives to the Existing System

This study will not delve into the architectural interpretation of the defined functional requirements of the various operational components of the needed physical facility. That study would be for those qualified as architects, and is therefore beyond the capability of this writer. Instead, a brief discussion of the various alternatives to resolving the physical plant needs of the Family Medicine Center will be undertaken.

The most obvious alternative is to do nothing, and maintain the status quo. Maintaining the status quo would not require the expenditure of funds, nor the relocation of personnel and equipment. These are the only advantages to maintaining the current situation. The disadvantages are many: the design of the existing facility does not meet the standards established

by the American Academy of Family Physicians; the current facility does not facilitate the best use of personnel and equipment; the existing facility design does not allow for expansion; and the existing physical plant is not being put to its best utilization. The requirement to provide family medicine services at Fort Bragg will not diminish. As a matter of fact, the residency training program and the patient population served are rapidly expanding. The emphasis is more and more going toward primary care, health education, and prevention of illness and injury. With the current facility design, there is much unnecessary congestion, which is further aggravated by a lack of expansion capability.

A second alternative is to relocate from the existing family medicine facility into another on-post facility. This relocation would probably entail a great deal of renovation of any facility being converted for family medicine use. Alteration and modernization of an existing facility can be an acceptable alternative. The first general problem with relocating into and renovating an existing facility is finding an acceptable basic structure. If the basic building is structurally sound, of the right size, and if the mechanical systems are usable, renovation costs can be much lower than the cost of new construction. This alternative would require the relocation of personnel and equipment (and an interruption in services), and the removing of an activity from any building to be renovated. A review of the

medical buildings at Fort Bragg reveals them to be mainly the troop medicine clinic (TMC) type of facility, ranging in size from 2,239 square feet to 4,575 square feet (Appendix I). These facilities are for the most part temporary wooden buildings constructed in World War II, and are not large enough to accommodate a Family Medicine Center. None of the existing medical facilities on post meet the design criteria established by the American Academy of Family Physicians for Family Medicine Centers. Of the many other buildings at Fort Bragg, none are readily available for occupation as a Family Medicine Center, either with or without renovation. The inherent problem with any renovation project is that the design and cost control aspects of the project are more difficult because of the many unknowns and potential restrictions on working conditions. The functional floor plan and interior design for a Family Medicine Center would have to be compromised to meet the restrictions and limitations of the existing facility.

The third alternative considered is to construct a new facility, expressly designed to function as a Family Medicine Center. The most obvious advantage of this alternative is that a facility could be designed specifically for use as a Family Medicine Center. This facility could be designed to meet all requirements of the American Academy of Family Physicians. The potential users of the facility would have an opportunity to provide input to make necessary changes to the design or interior

layout of the facility. The design could take into account the Space Planning Guidelines developed in the Hilliard Study (Appendix J), and therefore would facilitate the best use of personnel and equipment according to manpower utilization guidelines and equipment utilization standards. Being designed specifically as a Family Medicine Center could have a favorable impact on the delivery of quality family medicine. A well-designed, spacious facility would enable the level of productivity to be enhanced. The major disadvantage of this alternative is that it is the most costly (currently projected at over three million dollars for a facility of 29,000 square feet), and the most time consuming (currently projected to begin in FY 83 with a completion date in FY 85 or FY 86). With the state of today's economy, the possibility of cost overruns or drastic increases in the cost of the project is very great. Within this alternative, there exists the further question of whether the facility should be freestanding and separate from Womack Army Hospital, or constructed as an addition to the existing hospital. The resolution of that question is beyond the scope of this paper and would require a thorough evaluation by engineers, architects, and comptrollers to determine economically the method that would best meet the family medicine needs at Fort Bragg.

In reviewing the discussion of the alternatives, certain limitations were imposed in order to assist in reaching a conclusion.

No alternative will be acceptable that would necessitate the expenditure of funds beyond that amount appropriated or allocated for the project. No alternative is acceptable that does not meet the standards established by the American Academy of Family Physicians.

In conducting this study, certain assumptions were also made. It was assumed that the requirement for a Family Medicine Program to exist at Fort Bragg will not be diminished, and that personnel necessary to staff this Family Medicine facility will continue to be available.

The Family Medicine activity presently occupies space in the basement of the clinic addition of the hospital and has no room for expansion. This space was originally designed for the Physical Examination Station and the Preventive Medicine Activity, and is urgently needed for relocation of those activities. These activities currently occupy space in the old hospital area that is scheduled for demolition in the near future. There are no buildings currently on the installation that meet the design criteria established by the American Academy of Family Physicians for Family Practice Centers. This deficiency can best be resolved by the construction of a new facility to house the Family Medicine Program in accordance with design criteria recommended by the American Academy of Family Physicians. This alternative will also allow functions in the old hospital area to relocate in Womack Army Hospital as originally planned.

CHAPTER III

CONCLUSION

The design and functional layout of a Family Medicine Center are extremely important. They can have a major impact on the efficiency and effectiveness of the staff and the comfort and privacy of the patient. The clinic staff is a valuable source of experience and can contribute a great deal to the design of the facility and should be allowed to participate, but should not be considered the ultimate authority since their knowledge may be somewhat limited.

The design of a facility is a compromise between limitations imposed by the site, functional requirements of the program, and budgetary constraints. It is not practical to develop a prototype design for the ideal physical facility because functional requirements, staffing patterns, and site problems may vary significantly from facility to facility.

The Family Medicine Center should provide an environment that is most responsive to the needs of the people it will serve, the patients, the residents, and the staff. It should be attractive and pleasing, yet not excessive in cost. Much benefit can be obtained through the judicious and imaginative use of color, lighting, furniture, and materials.

The facility currently serving as the Family Medicine Activity at Fort Bragg is grossly inadequate. It is not designed to serve as a Family Medicine facility and does not allow for expansion. The construction of a new Family Medicine Center at Fort Bragg will allow the Family Practice Residency Program to continue to grow and provide more and better service to the Fort Bragg community.

APPENDIX A

GUIDE FOR RESIDENCY PROGRAMS IN FAMILY PRACTICE 1974
(AAFP REPRINT #132-C)

Guide for Residency Programs in Family Practice

I. INTRODUCTION

A. General Information About the Guide

This Guide was prepared by the Residency Review Committee for Family Practice to provide helpful information for all those concerned with residency training for family practice. It is derived from and supplements specific guidance found in the "Essentials of Approved Residencies" published by the American Medical Association in its annual *Directory of Approved Internships and Residencies*.

The Residency Review Committee recognizes that sound education for family practice may be acquired in a variety of ways. It also believes that training methods change with the advance of medical science and with improvements in health care delivery. Therefore, this Guide is not a list of rigid, static requirements but may be of assistance to family practice program directors in developing a program and completing the application form for approval of a program.

B. Definition and Purpose of Accreditation

Accreditation is the process by which an authorized agency or organization evaluates and recognizes a program of study or an institution as meeting certain predetermined qualifications or standards. The purpose of accreditation in medicine is to assure both the public and persons in training that health care personnel will be educated in training programs of high quality.

C. Background

For many years, comprehensive health care services (primary medical care) have been provided for patients and families by physicians who have been educated in several clinical disciplines such as general practice, internal medicine, pediatrics, etc. Their training has emphasized care for hospitalized patients with relatively serious organic disease. They have learned other aspects of comprehensive health care such as management of the ambulatory person and health maintenance largely through experience while caring for their patients in practice. A new design of a graduate medical education program was needed to better train physicians for this type of care.

An ad hoc Committee on Education for Family Practice was

appointed by the A.M.A. Council on Medical Education in 1964. Its report, "Meeting the Challenge of Family Practice" was approved by the A.M.A. House of Delegates in 1966. This document defines a family physician, outlines how he should function, presents basic principles as well as details of his education, and discusses other related important issues and implications.

The "Essentials" for family practice residencies were drafted in 1968 and approved by the A.M.A. House of Delegates in December of that year. These new graduate training programs are designed to prepare physicians to provide patients and families with all aspects of comprehensive health care on a continuing basis.

D. Structure and Functions of the Residency Review Committee for Family Practice (hereafter referred to as the Committee)

The Committee is made up of three representatives from each of three parent bodies: the American Board of Family Practice, the American Academy of Family Physicians and the American Medical Association Council on Medical Education.

The members of the Committee serve for three-year terms, staggered so that one from each parent body is elected each year. They may serve two successive terms.

The Committee meets several times a year. It spends much time in the evaluation of individual residencies (mechanics of this process described in another chapter), and in discussing what constitutes satisfactory educational experiences for the residents. Each member brings with him to the meetings information and attitudes accumulated from varied experiences in both practice and education. In addition, the Committee has profited through communication with program directors and others involved in residency programs who have been gaining experience in this type of training during the past several years. An effort has been made to incorporate such experience into this edition of the Guide.

While the Committee is aware of the urgency to develop a large number of new residencies for family practice, it believes that only those programs which provide a sound education of high quality should be approved.

E. Philosophy and Objectives of Residencies for Family Practice

To adequately acquire the knowledge, skills and attitudes necessary to become a proficient family physician, residents should provide families with comprehensive health care on a continu-

ing basis under the supervision of experienced family physicians. The residents should retain their identity as family physicians and their base will be an ambulatory care facility appropriately named - such as The Family Practice Center (or Office). In this model of family practice, the residents will become imbued with the philosophy of family practice and an understanding of the role of the family physician.

The program should further:

1. Help the residents acquire knowledge in appropriate depth of various fields of medicine encompassed by family practice.
2. Help the residents acquire expertise in diagnosis, treatment, technical procedures and patient management appropriate for family practice.
3. Provide opportunity for the resident to develop mature clinical judgement and appreciation of the limitations of his competence.
4. Provide understanding of research methodology in solving problems relating to the delivery of health service as well as the basic processes of health and disease.
5. Encourage residents to develop life-long habits of learning and understanding of the necessity of continuing medical education in maintaining professional excellence.

II. SPONSORSHIP AND CATEGORIES OF PROGRAMS

A. Hospital Organization

Residencies are usually sponsored by and located in or near a hospital. The Residency Review Committee needs evidence of the commitment of the institution and its staff to education for family practice. Overall quality of the hospital is reflected by the status of its JCAH (Joint Commission on Accreditation of Hospitals) approval.

The Residency Review Committee must assure itself of a critical mass and mix of hospital patients, medical staff, facilities and financial support adequate to sustain a quality program. If a sponsoring hospital is itself not large enough to provide adequate support, it may associate with other institutions in the community or region.

All major and most subspecialty clinical disciplines should be available to support the teaching program. The presence of other residencies, and full-time directors in other departments,

contributes to the strength of training in family practice, but is not mandatory.

B. Categories of Program Sponsorship

Because residencies for family practice may involve one or more institutions, for purposes of clarification, the following descriptive categories of program sponsorship have been developed. These may apply to either community hospital or university-sponsored programs.

- Sponsor is a single hospital, with the majority of the teaching program in that hospital's confines. One model family practice unit. One matching number.
- Sponsor is a single hospital, with one model family practice unit and one matching number. However, a significant portion of the educational responsibility for the residents is delegated by that hospital program to other institutions.
- A conjoint program, where more than one hospital or institution is a co-equal sponsor. One family practice unit and one matching number.
- An affiliated program, with two or more institutions participating, each with their own model unit. Multiple matching numbers are used.
- An integrated program, with two or more institutions participating, each with their own model unit, but only one match number utilized.

For purposes of administration of the accreditation process including site surveys when more than one hospital participates, the following description of the types of residency programs is being used by the Liaison Committee on Graduate Medical Education. This applies to all specialty fields.

An "Integrated Program" has the following characteristics:

1. It employs the clinical facilities of two or more hospitals.
2. Program direction is the responsibility of a single program director who is responsible for selection and assignment of residents (including rotation to participating hospitals) and for instruction of the residents.
3. At the time of survey and subsequent evaluation by the Committee, all components of the program will be surveyed and considered together.
4. Integrated programs will be specifically designated as such at the time of their approval in the formal letter of

notification. The listing of these programs in the annual "Directory" will be under a program name, with component hospitals indented below their name. Hospitals involving rotations of less than six months will ordinarily not be listed.

An "Affiliated Program" has the following characteristics:

1. A given residency program may affiliate with another institution for the purpose of strengthening its own program. It may, for example, provide certain aspects of subspecialty training or ambulatory care which are not available in the parent program.
2. When a program plans to establish affiliation with another hospital not previously described in applications or surveys, the Program Director must notify the Committee. The content of the rotation and the names and qualifications of those responsible for the instruction of the residents should be included.
3. It is imperative that Program Directors submit letters of agreement from affiliating hospitals stating the terms on which residents are to be accepted and what is to be expected in return.
4. Prior approval is not required for rotational periods of three months or less.
5. Rotational periods of longer than three months require prior approval but a survey is not required unless specifically requested by the Residency Review Committee.
6. If the rotation to the affiliating hospital is six months or more that hospital is to be surveyed.
7. In accordance with the "Essentials", the Committee will not recommend approval of programs in which the resident's period of rotation to affiliated hospitals is greater than 12 months. In such cases an integrated program should be developed.

C. The Administrative Unit

Every residency program should have an administrative unit responsible for developing and supervising the training program. This unit should have status and prerogatives equivalent to other clinical departments and should be responsible for the development of the training curriculum and the family practice clinical service.

The administrative unit is usually called a Department of

Family Practice (or Family Medicine). Even though a university hospital may in the beginning have a division responsible to the Dean of the Medical School, it should work toward developing a department.

Program directors should be full-time. They should be on the governing body or executive committee of the hospital. The Department (or Division) of Family Practice should have representation on major committees of the hospital.

III. THE FAMILY PRACTICE CENTER

The "Essentials of Approved Residencies" refers to a "Model Family Practice Unit." The Committee now believes it desirable to discontinue to use the words "model" or "unit" and to speak of the Family Practice Center, Service or Office. It should have an appropriate identification of the premises. Only under unusual circumstances should it be used by other departments or for purposes not related to the family practice training programs. Unless an institution can develop an adequate family practice center where residents can conduct a family practice under supervision, a family practice residency cannot be approved.

The facility should be organized to simulate a family practice and be large enough so that the faculty, residents and non-physician staff will each have adequate space whenever working there. It should have its own reception room which is attractive and comfortable for patients. There should be an appointment system. There should be enough consultation and examining and treatment rooms so that no resident or faculty member should have to wait to use one. A small operating or special procedures room is desirable and all rooms should be properly equipped. Laboratory and x-ray rooms and equipment should be available either in the office or within walking distance for patients. Residents should have basic laboratory, diagnostic, and clinical support equipment available. Reference books, journals, etc., should be immediately at hand.

The facility should be designed to permit an efficient patient flow. Its distance from the hospital (measured in minutes rather than miles) should be such that the residents will not spend an excessive amount of time traveling.

Patient care records should be well organized, complete, and legible. They should be readily available whenever necessary for the care of the patient. Patient care data should be readily retrievable.

IV. CONTINUITY OF CARE OF FAMILIES

To develop adequate understanding and skill in the care of persons who are ill, assisting persons to maintain optimal health, residents must assume responsibility for the continuing comprehensive care of patients and their families for a significant period of time. By doing so, they should be able to develop satisfactory in-depth physician-patient and physician-family relationships and should learn to apply the principles of the discipline of family medicine. Emphasis should be placed on enrolling families interested in this type of care.

It is assumed that during the period of the residents' training program they will gradually assume the responsibility for care of an ever increasing number of families. This number will, of necessity, initially be small in the first year as the residents' responsibilities will be primarily with rotations on in-patient services. However, beginning in the latter part of the first year, and well into the middle portion of the third year, the residents should have the opportunity to constantly expand their ambulatory practice. The program director must, however, exercise a careful review of the residents' patient responsibilities in the family practice center so that they may devote adequate time to reading and study. The desirability of providing experience through caring for families from a variety of social, economic and ethnic groups should also be emphasized.

Community physicians should be encouraged to refer families for the program, and cooperate when some of their private patients decide to seek professional services from the program.

The statement has been made that the family seems to be missing in family practice residencies. Even though the traditional concept of the family may be decreasing in importance in our present day society, if one accepts the definition of a family as a significant group of intimates with a history and a future, the intra-family relationships important to family medicine will at least be similar. Only through repeated experiences in applying the principles of this discipline and through continuing comprehensive care of families will residents learn to be effective. This may include care of a single individual.

V. FAMILY PRACTICE STAFF

A. Director of Residency

Program directors should have had some experience as family physicians. It is desirable that their abilities as family physicians be recognized through certification by the American Board of Family Practice (or be Board-eligible and planning to become a Diplomate, or Board certified in a related clinical discipline with a commitment to training for family practice). Experience as a teacher in a medical school or teaching hospital, participation as an assistant director or member of the faculty of an established family practice residency, visits to a number of such programs, and participation in conferences on family practice training may be helpful in developing the program.

B. Family Practice Faculty

The assistant director and all members of the faculty, whether full-time, part-time, or voluntary, should likewise be experienced and able family physicians regardless of their graduate training (general practice, internal medicine, pediatrics, etc.). They must possess enthusiasm and skill in teaching and show a willingness to devote time regularly to the program. Teaching continuity and comprehensiveness of care requires that the teaching staff itself develop on-going relationships with patients and their families in the family practice office. Their care of patients should be exemplary. The use of part-time and voluntary physicians should contribute to the experiences of the residents and help to establish rapport and communication between the family practice department and other departments in the hospital as well as the medical community in general.

C. Specialty Consultations

When the residents need the assistance of a consultant, these services by a recognized specialist in the appropriate field should be readily available. Individual consultations may take place wherever and however convenient but conference-type consultations in which all residents and faculty may participate should be encouraged in the family practice center.

D. Non-Physician Staff

The Center should be staffed with an adequate number of secretaries, nurses, technicians, and other personnel to assist with care of patients and families in the office or in the home of families. The family practice should be an organized group practice with residents, physicians and other staff such as social workers, public health nurses, pharmacists, dietitians, and health educators participating in the teaching program whenever appropriate.

E. Residents

1. *Number:* The Committee does not designate the exact number of residents which should be appointed to a program. However, a minimal critical mass of residents is necessary to any program. If evaluation of the program discloses an imbalance between teaching resources and those being taught, the director will be so advised and correction would be expected.
2. *Candidates:* Family practice residents should be highly motivated to provide continuing comprehensive care to persons in their family and community settings. They should understand that family practice consists of ambulatory and inpatient care. When their patients are ill enough to need consultation they should continue their care responsibilities and obtain and coordinate consultative services in the best interest of the patient.
3. *Duration of Training:* The family practice residency is a three-year integrated program and residents may enter it directly from medical school. There are unusual circumstances, however, which dictate that residents be accepted into the second or third year from other training programs such as military service, practice, etc. A fourth year may be offered to provide additional training to prepare the residents to practice where consulting physicians are not readily available. Alternatively, this fourth year could become a teaching fellowship. (For additional information on this subject see Page 53 of *The Report of the Ad Hoc Committee on Education for Family Practice of the Council on Medical Education of the American Medical Association - Willard Report.*)
4. *Recruitment:* Programs with excellent educational experiences will fill their offered positions. The best ad-

vocates of any program are satisfied residents. Affiliation with a medical school and involvement of medical students at all levels may be helpful in obtaining applicants, although such affiliation is not required.

VI. TEACHING IN OTHER SPECIALTIES

A. General

To function well in practice, the residents must learn the diagnosis and treatment of disease in the broad range of clinical disciplines appropriate to their practices. The more adequate this aspect of their education, the more proficient they will become in the care of most diseases found in ambulatory patients and in the coordination of traditional specialty services whenever this becomes necessary.

B. Patient Care Responsibilities

To assume mastery of the clinical disciplines, residents must have the opportunity to assume substantial patient care responsibility under adequate supervision on both specialized in-patient services and in the out-patient clinics. Graded responsibility by residents for patient care requires the cooperation and support of all clinical departments.

C. Content

Within reasonable limits the content of family practice programs should be flexible to fit varying backgrounds and interests of the residents and the anticipated requirements of their practices. Various combinations of content and emphasis are, therefore, not only possible but desirable.

Descriptions of the contents appropriate for family practice in internal medicine, pediatrics, surgery, psychiatry, obstetrics-gynecology, and other medical and surgical subspecialties, community medicine, and in the social and behavioral sciences are given in considerable detail on Pages 24 to 28 in the Willard Report.

D. Curriculum for Teaching Other Specialty Disciplines

Development of the curriculum to teach other specialties to family practice residents should be a joint effort between the

director of the program and the chiefs of the various clinical services. Broad, general objectives are given for each specialty in the "Essentials" and in the Willard Report. More specific and detailed objectives should be outlined and a curriculum should be designed that will attain these objectives.

Multiple methods exist for teaching these clinical disciplines and all may be used in residency training for family practice. The most common method is through assignment to both in-patient and out-patient clinical services during which time the residents have direct patient care responsibilities under appropriate supervision of qualified teacher-practitioners. Departmental conferences, grand rounds, short-term preceptorships in private offices, etc., may enhance the experiences of residents significantly. Whatever method is applied, other specialty faculty should participate fully in family practice training and provide the same enthusiastic teaching for the family practice residents as they do for their own residents.

Development of curricula has been the subject of yearly workshop conferences conducted by the Division of Education of the American Academy of Family Physicians. Transcripts of the proceedings may be purchased from the Academy at nominal cost.

VII. OTHER COMPONENTS OF THE TRAINING PROGRAM

A. Conferences

Family medicine conferences to discuss patient care and intra-family relationship problems and the effects of these on the health of members of the family should be held regularly and frequently. There should be participation by all concerned with care of the family. Conferences to discuss the diagnosis and management of diseases should be organized and conducted by family practice residents as well as by residents in other specialties. Regularly scheduled morbidity, mortality, and death conferences are an essential part of good teaching programs. Conferences involving such fields as law, economics, philosophy and politics may be helpful learning experiences to develop the family practice resident as a broadly educated person.

B. Emergency Room

To develop proficiency in the initial management of trauma

and serious surgical and medical emergencies, the residents should work in the emergency room under the supervision of appropriate qualified faculty for periods of time throughout their training.

C. Library and Journal Club

In addition to the regular hospital or medical school library, the family practice office should have a number of textbooks, manuals and journals that residents can consult quickly when the need arises while caring for patients.

Journal Club meetings to report on the recent medical publications will help the residents keep up with what is happening in the world of medicine as well as help them develop good reading habits.

D. Research

Research is desirable for the development of family medicine as a scholarly discipline. The Society of Teachers of Family Medicine, the American Academy of Family Physicians, the College of Family Physicians of Canada, and similar organizations throughout the world have special committees on research which are developing methodologies for research appropriate for family physicians.

The family practice residency program director should create and stimulate research among his trainees. This will in time contribute to the core of knowledge of family medicine as a medical discipline and reinforce its contributions among its colleagues and other specialties.

E. Evaluation

The quality of training should be a matter of constant concern. Good communications between trainees and staff are needed to ensure adequacy and effectiveness of educational activities. Formal evaluation and analysis by both faculty and residents of the patient care process and outcome may help improve the program. Evaluation of the residents and assessment of their progress by members of the faculty should take place throughout the three years of training. In-training examinations are encouraged. Evaluation of faculty performance is also desirable.

F. Preceptorships

Short term preceptorship experiences such as one-half day to one week with a member of the faculty in his private office are satisfactory. Longer periods of time (maximum 3 months) must be arranged so that this learning experiences does not interfere significantly with the residents' continuity of care of their families. All preceptorships must be evaluated to insure they have an educational aim.

G. Autopsies

Autopsies are recognized as one result of the quality of an educational program and a reasonable rate of autopsies by the institution is expected. Family practice residents are expected to attend all autopsies under their care.

VIII. THE ACCREDITATION PROCESS

A. Procedure

1. When the Department of Graduate Medical Education of the American Medical Association receives a request for application forms or information about developing a residency for family practice, the application form, a copy of the "Essentials", a copy of the "Guide", a copy of the Willard Report, and a list of all presently approved programs are mailed to them.
2. When the director of the residency program completes the application form, he should return two copies to the Department of Graduate Medical Education of the American Medical Association, where the Secretary of the Committee reviews it to determine if the application is properly filled out and if the program meets minimum requirements of the "Essentials." The director should retain the designated copy for his files.
3. When the Secretary decides the application is complete and the program appears to meet the minimum requirements of the "Essentials", a site survey is scheduled with a member of the regular Field Staff of the Department of Graduate Medical Education. On completion of this survey, a copy of the report is sent to the A.M.A. Department of Graduate Medical Education and added to the file on the residency program.

4. The surveyor's report and the information supplied by the director in the application are the sources of information considered by the Committee when it reviews the program at its next regular meeting. The program is reviewed by two Committee members from differing parent bodies. The educational merits of the program are evaluated by the Committee following which it votes on the recommendation to be made to the Liaison Committee on Graduate Medical Education.

5. The Liaison Committee on Graduate Medical Education has recently been established with representatives from the American Board of Medical Specialties, the American Hospital Association, the American Medical Association, the Association of American Medical Colleges, the Council of Medical Specialty Societies, the federal government, and the public.

Whereas the Coordinating Council on Medical Education with similar representation has authority over all the liaison committees, particularly as to policy considerations, it has delegated authority for the approval of graduate training programs to the Liaison Committee on Graduate Medical Education. Residency Review Committees will continue to function as they have in the past but their actions will be in the form of recommendations to the Liaison Committee on Graduate Medical Education which will take action on those recommendations from the Residency Review Committee.

6. A letter of notification from the A.M.A. Staff to the director of the program with copies to the other two parent bodies of the Residency Review Committee for Family Practice will be sent to the program director transmitting the action taken by the Liaison Committee on Graduate Medical Education.

B. Types of Recommendations by the Committee

Although fulfillment of the essentials is prerequisite to approval, the overall quality of the educational experience for the trainees and the total integration of the program as judged by the residency review committee will determine whether or not approval is granted.

1. Provisional Approval

The Residency Review Committee will recommend this action to the LCGME for all new programs if they fulfill the "Essentials" of a residency in family practice and show promise of providing a sound educational experience in all aspects of family practice.

2. *Continued Provisional Approval*

The Residency Review Committee will recommend to the LCGME such action for succeeding years through the completion of training for at least two groups of residents who receive a certificate of completion of residency in family practice.

3. *Approval*

The Residency Review Committee will recommend this action to the LCGME upon review of a program after two groups of residents have completed the provisionally approved program and such review indicates that the program fulfills the "Essentials" and demonstrates the soundness of the experience.

4. *Probationary Approval*

The Residency Review Committee will recommend such action when a fully approved program develops one or more serious deficiencies. Only under unusual circumstances will approval be withdrawn from a fully approved program without a period of probation. This status is a confidential matter between the Committee, the program director, and the hospital administrator. Residents need not be notified, in contra-distinction to the situation when approval of a program has been withdrawn. Probationary approval does not affect the status of the residents, but serves to remind the program director, administrator, and the Committee that certain improvements are necessary.

5. *Approval Withheld*

This action is taken on first application or reapplication when the Committee decides the program does not meet present standards of graduate medical education for family practice.

6. *Approval Withdrawn*

The Residency Review Committee will recommend this action to the LCGME when a program on provisional or probationary approval has not been able to develop a satisfactory residency for family practice, or has been unable to correct deficiencies about which it has been notified.

7. *Action Deferred*

This action is taken when the information supplied on the application form or in the surveyor's report is not adequate or is not clear. The Committee may direct its Secretary to write to the director of the program requesting specific information or under exceptional circumstances it may direct that a survey be made by a Specialist Site Visitor.

C. Specialist Site Visitors

Specialist site visitors are physicians who are recognized as being most knowledgeable about family practice residency training. Most of them have had long experience as directors of fully approved residencies for family practice. Following a site survey, a report is submitted which is added to the other available information, all of which is then reviewed by the Committee before deciding on the type of action to be taken on the application.

D. Letters of Notification

Recommendations of the Committee are recorded and referred to the LCGME by the Secretary who will send a letter to the director of the program and administrator of the hospital notifying them of the action of the LCGME and giving a list of deficiencies, if any. Copies of this letter are sent also to the American Board of Family Practice and the American Academy of Family Physicians.

E. Request for Reconsideration of Actions

The Liaison Committee on Graduate Medical Education is establishing a procedure for reconsideration of its actions. All such requests should be addressed to the Liaison Committee on Graduate Medical Education in care of the Secretary of the Residency Review Committee for Family Practice.

F. Completing the Application Form

The information supplied by program directors on this form constitutes a major portion of the data on which the Committee bases its decision. Therefore, directors should follow carefully the instructions supplied with the form and state as clearly and as concisely as possible, how this program accomplishes the intent of the "Essentials" as described under each clinical discipline. They should indicate who is doing the teaching and supervising, precisely what is being taught, and how the learning experiences are conducted and the residents evaluated.

G. Consultations

Beyond the issuance of this Guide and notifying program directors of deficiencies when these are found in programs, the Committee does not act in an advisory capacity to programs. Neither the Committee nor its individual members (including the Secretary who is an ex-officio member, without vote) can act as advisors or counsellors to program directors.

A list of consultants, physicians most knowledgeable about residency programs for family practice, is available from the Division of Education of the American Academy of Family Physicians. The Committee recommends that the services of a consultant, available at reasonable cost, be obtained whenever indicated: designing a curriculum, completing the application form, or explaining the meaning of listed deficiencies. On the other hand, although the Committee supplies the list of consultants, it assumes no responsibility for the quality of the services provided or for their financing.

H. Interim Changes in Curriculum Design

A director of a program who contemplates a significant alteration of curriculum design involving three months or more of the residents' time should so notify the Residency Review Committee in advance, by letter, and obtain approval before implementation.

I. Reapplication

With the exception of "action deferred," further requests for approval of a residency program should include a newly completed application. The Committee shall decide if a resurvey of the program will be necessary.

Even though the Committee lists certain specific deficiencies, this merely means that these were typical defects noted during the first review. Often, during the review of a reapplication, other serious deficiencies may be noted. Therefore, the Committee urges each program director to carefully evaluate, with perhaps the aid of a consultant, every aspect of the entire program at the time a reapplication is submitted.

Requests for approval of residency programs for family practice, or other inquiries should be addressed to:

The Secretary
Residency Review Committee for Family Practice
Department of Graduate Medical Education
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

APPENDIX B
FAMILY PRACTICE STAFF POSITIONS

FAMILY PRACTICE STAFF POSITIONS

<u>YEAR</u>	<u>NUMBER OF STAFF POSITIONS</u>
1975	5
1976	6
1977	6
1978	8
1979	10

APPENDIX C

FAMILY PRACTICE RESIDENT POSITIONS

FAMILY PRACTICE RESIDENT POSITIONS

<u>YEAR</u>	<u>NUMBER OF RESIDENT POSITIONS</u>
1975	11
1976	11
1977	18
1978	20
1979	22

APPENDIX D

FAMILY PRACTICE CLINIC VISITS 1975

FAMILY PRACTICE CLINIC

Visits

1975

<u>MONTH</u>	<u>WORKLOAD</u>
July	2,178
August	2,206
September	2,359
October	2,342
November	2,183
December	1,798

APPENDIX E

FAMILY PRACTICE CLINIC VISITS 1976

FAMILY PRACTICE CLINIC

Visits

1976

<u>MONTH</u>	<u>WORKLOAD</u>
January	2,414
February	2,386
March	2,846
April	3,624
May	3,379
June	NOT AVAILABLE
July	2,488
August	2,708
September	3,359
October	3,355
November	2,929
December	NOT AVAILABLE

APPENDIX F

FAMILY PRACTICE CLINIC VISITS 1977

FAMILY PRACTICE CLINIC

Visits

1977

<u>MONTH</u>	<u>WORKLOAD</u>
January	2,931
February	3,177
March	3,313
April	3,002
May	3,445
June	3,361
July	2,628
August	NOT AVAILABLE
September	3,302
October	NOT AVAILABLE
November	2,680
December	3,226

APPENDIX G

FAMILY PRACTICE CLINIC VISITS 1978

FAMILY PRACTICE CLINIC

Visits

1978

<u>MONTH</u>	<u>WORKLOAD</u>
January	1,820
February	2,462
March	2,391
April	1,973
May	2,809
June	2,635
July	2,134*
August	869*
September	802*
October	6,399*
November	2,626*
December	915*

*Validity of data is suspect. These are figures reported during the computerization of the data reporting system for Family Practice visits.

APPENDIX H
FAMILY PRACTICE CLINIC VISITS 1979

FAMILY PRACTICE CLINIC

Visits

1979

<u>MONTH</u>	<u>WORKLOAD</u>
January	8,356*
February	4,242
March	4,067

*Validity of data is suspect. This is a figure reported during the computerization of the data reporting system for Family Practice visits.

APPENDIX I
MEDICAL FACILITIES INVENTORY

MEDICAL FACILITIES INVENTORY

<u>BUILDING NUMBER</u>	<u>SQUARE FOOTAGE</u>	<u>CONDITION OF BUILDING</u>	<u>PRESENT USE</u>
A-T-5736	2,239	Fair	Troop Medicine Clinic (TMC) 4
C-5333	3,707	Good	TMC 9
C-3831	3,707	Good	TMC 10
C-7342	3,707	Good	TMC 11
C-5332	3,621	Good	TMC 12
D-2612	3,661	Good	TMC 13
C-9160	3,621	Good	TMC 15
2-S-2012	2,326	Fair	TMC 17
M-T-2308	2,253	Fair	TMC 20
M-T-7408	2,239	Fair	TMC 21
P-3956	4,575	Good	TMC 22
4-2843	411,334	Good	Womack Army Hospital
4-T-1825	3,621	Fair	Physical Examination Station
4-T-1925	3,621	Fair	Blood Donor Center

APPENDIX J

SUGGESTED SPACE PLANNING GUIDELINES FOR
FACILITIES PROGRAMMING OF FAMILY PRACTICE CLINICS

Suggested Space Planning Guidelines for Facilities Programming of Family Practice Clinics

A. ADMINISTRATIVE FUNCTIONS

Function	Basis For Planning	Planning Range In Square Feet
Director's Office	1 per clinic	*140-180
Assistant Director's Office	1 per clinic when assistant director is programmed	140
Education Coordinator Office	1 per clinic when education coordinator is programmed	110
Faculty Office	1 per faculty member programmed	110
Nurse's Office	1 per clinic when nurse is programmed	110
Nurse Station	1 per clinic	110
Administration Assistant Office	1 per administrative assistant + 85 SF per each additional personnel	110
Secretary's Office	1 per secretary + 85 SF per each additional clerical personnel	110
Business Office (Manager)	1 per manager + 85 SF per each additional personnel	110
Reception Area	1 per clinic	110

*The square footage assigned each function has been taken from DOD Instruction 6015.17 and Dental Department/Service Space Planning Criteria for Military Facilities

Function	Basis for Planning	Planning Range In Square Feet
Dietitian's Office	1 per dietitian programmed	110
Nutritionist Office	1 per nutritionist programmed	110
Physician Assistant Office	1 per physician assistant programmed	110
Physician Assistant Examination Room	2 per physician assistant programmed	110
Consultation Room	1 per clinic	110
Treatment Room	1 per 6 work stations or major fraction	160-200
Minor Surgical Procedures Room	1 per clinic	120-140
Audiobooth Room	ENT--Ears, nose, and throat visits/week X .5 3 visits/hour/room X 35 hours/week Minimum of 1 per clinic	90
Audiobooth Room (large two-room booths)	1 per clinic when an audiologist or speech therapist is programmed	200
Electrocardiograph Room (EKG/ECG)	<u>ECK test/week</u> 3 tests/hour/station X 35 hours/week	110
Immunization Room	<u>Station = Injection/week</u> 20 injections/hour/station X 35 hours/week Minimum 1 per facility	110 Station

Function	Basis For Planning	Planning Range In Square Feet
Record Area	Projected numbers of records of patient population	$NFS = \frac{\text{Projected Records} \times .65}{70 \text{ Record/Linear Feet}}$
Record Transcribing	1 station for each clerk programmed	60 SF/clerk minimum of 60 SF
Dictation Booth	Individual Study	15/Booth

B. TREATMENT FUNCTIONS

Physician Office	1 per physician programmed	110
Physician Examination Room	2 per physician's office programmed	110
Resident's Office/Study	1 per two residents	110
Family Nurse Practitioner Office	1 per clinic when family nurse practitioner is programmed	110
Family Nurse Practitioner Examination Room	2 per family practice nurse	110
Social Worker Office	1 per social worker programmed	110
Speech Therapist Office	1 per speech therapist programmed	110
Occupational Therapist	1 per occupational therapist programmed	110
Physical Therapist	1 per physical therapist programmed	110

Function	Basis for Planning	Planning Range In Square Feet
Group Therapy Room	1 per clinic when requirement exists. Additional rooms may be programmed by individual study based on work load	120-200
Observation Room	Individual Study	80-110
Well Baby Room	1 per clinic additional space verified by individual study	110
Proctoscopic Room	1 per clinic	120-140
Physical Therapy Cubicle	Individual study	120
Exercise Study	Individual study	60
Extremity Whirlpool	Individual study	80
Family Consultation Room	1 per clinic	110
Dental Treatment Room (DTR)	For DTR requirement multiply the projected number of dentists by 2.5 DTRS per dentist	110-115 NSF/DTR
Oral Hygiene Treatment Room (OHTR)	1 per projected number of dental hygienists or dental hygiene technicians programmed	110-115
Dental X-ray	2DTRS and OHTRs or less, place unit in DTR	110-115 NSF plus 36 NSF if panoramic unit is programmed

Function	Basis for Planning	Planning Range In Square Feet
G. SUPPORT FUNCTIONS		
Pharmacy	Individual study	Individual study
Laboratory (limited)	1 per clinic	80-110
X-ray diagnostic	Individual study	270
Darkroom	1 per clinic when X-ray station is programmed	
Sterilizer Area	Individual study	Individual study
Kitchen	Individual study	Individual study
Conference Room/	10-17 personnel	240-280
Library	18-29 personnel	380-460
	30-40 personnel	630-690
	Above 40 personnel programmed add 8 NSF per person	
Classroom	The following factors will be used to determine the classroom space for teaching purposes:	
	1. Speaker's table audio-visual equipment	100-150
	2. Spaces for seats	Add 7-8 NSF for each conference trainee
Patient Education Room	Individual study	120-140
Vestibule	Individual study	100-200
Waiting Area	2.6 spaces per examination or treatment room; 12 spaces per injection station	14/space 25/wheelchair space

Function	Basis for Planning	Planning Range In Square Feet
Family Waiting Room Consultation Room	Individual study	80-120
On Call Sleeping Room	Individual study	80-100/ person
ADP Terminal Area	1 per 220 visits/day or major fraction (110 visits/day required to justify individual terminal site)	20
Screening Area	Individual study	Individual study
Dressing Area	Individual Study	20/cubicle
Litter and wheelchair storage	1 per clinic	40-80
Coat Room	Individual study	Individual study
Linen Alcove	1 per clinic	50
Utility Room	1 per clinic	80
Soiled Collection	1 per clinic	50
Clean storage	1 per clinic.	10/examination room. Minimum 80 Sf, maximum 200
Storage Room	1 per clinic	50-80
Student Lounge	Individual study	110-115. Add 10 NSF/person pro- grammed over 10.

Function	Basis for Planning	Planning Range In Square Feet
Personnel Lounge	Individual study	110-115 NSF. Add 10 NSF/ person pro- grammed over 10.
Nurse Lounge	Individual study the lounge areas can be consolidate, mini- mum 1 per clinic	110-115 NSF. Add 10 NSF/ person pro- grammed over 10.
Patient Toilets	The number of fixtures to be provided will be based on the total number of patients during the peak period as indicated by the number of seats in the waiting room. The following guidelines should be fol- lowed: 1. Each 15 women or fraction thereof (includes staff) 2. Each 20 men or fraction thereof	50 NSF; 1 water closet, labora- tory. 30 NSF for each additional fixture 75 NSF; 1 water closet, 1 labora- tory, 1 urinal. 30 NSF for each additional fix- ture
Bath	Individual study	Individual study
Janitor Closet	1 per clinic	40

BIBLIOGRAPHY

BIBLIOGRAPHY

Government Publications

- U.S. Department of the Army. Headquarters, Health Services Command. Family Practice Models for an Army Community - A Demonstration Project. Fort Sam Houston, Texas: U.S. Army Health Services Command, July 1976.
- U.S. Department of the Army. Headquarters, Health Services Command. Organization and Functions Policy, HSC Regulation 10-1. Fort Sam Houston, Texas: U.S. Army Health Services Command, 20 May 1976.
- U.S. Department of the Army. Womack Army Hospital. Family Practice Residency Program. Fort Bragg, North Carolina.
- U.S. Department of the Army. Womack Army Hospital. Organization and Functions Manual. Fort Bragg, North Carolina, 1 October 1976.
- U.S. Department of Health, Education, and Welfare. Minimum Requirements of Construction and Equipment for Hospital and Medical Facilities, DHEW Publication No. (HRA) 76-4000.
- U.S. Department of Health, Education, and Welfare. Guidelines to Functional Programming, Equipping, and Designing Hospital Out-patient and Emergency Activities, DHEW Publication No. (HRA) 77-4002.
- U.S. Department of Health, Education, and Welfare. Space Guidelines for Ambulatory Health Centers, DHEW Publication No. (HSA) 77-5500.

Books

- Farley, J.H., ed. Hospital/Healthcare Building Costs. 2nd ed. New York: McGraw-Hill Incorporated, 1977.
- Johnston, David G., Primary Care Centers Design and Construction. Washington: Appalachian Regional Commission, 1977.
- Rakel, Robert E., ed. The Year Book of Family Practice. Chicago: Year Book Medical Publishers, Inc., 1978.

Rakel, Robert E. and Conn, Howard F., ed. Family Practice. 2nd ed. Philadelphia: W.B. Saunders Company, 1978.

Taylor, Robert B., ed. Family Medicine Principles and Practice. New York: Springer-Verlag, 1978.

Toffler, Alvin. Future Shock. New York: Random House, 1970.

—Report of the Ad Hoc Committee on Education for Family Practice of the Council on Medical Education, Meeting the Challenge of Family Practice. Chicago: American Medical Association, 1966.

—Report of the Citizen Committee on Graduate Medical Education, The Graduate Education of Physicians. Chicago: American Medical Association, 1966.

—Report of the National Commission on Community Health and Services, Health is a Community Affair. Cambridge: Howard University Press, 1966.

Periodicals

Baker, A. Sherwood. "What do Family Physicians in a Prepaid Group do in Their Offices?" Journal of Family Practice 6 (February 1978): 335-340.

Boufford, Jo Ivey. "Primary Care Residency Training: The First Five Years." Annals of Internal Medicine 87 (September 1977): 359-368.

Bowling, John S. "Expansion: The Importance of Involving Department Managers in the Planning Process - and How to Achieve It." Hospital Topics 55 (March-April 1977): 60-63.

Boyar, Robert L. "Flexibility Planning Keys Cost-Effective Construction." Hospitals 52 (May 1, 1978): 79-80.

Carlisle, Ben. "Construction Manager Can Reduce Costs, Frustrations." Hospitals 52 (May 1, 1978): 87-92.

Ellis, Barbara. "Hospitals Beef Up Building Systems to Cut Waste, Costs." Hospitals 51 (December 16, 1977): 99-100.

Geyer, Robert F., Jr. "Planning: Learning to Live with the Big Picture." Hospitals 52 (April 1, 1978): 139-141.

- Moore, Ann L., Moore, James T., Kane, W.J. and Hunter, David P. "The Team Leader: A Concept for Family Physician Faculty Development." Journal of Family Practice 6 (February 1978): 378-381.
- Newmark, Gaylen L. "Proposal for Monitoring Emergency Department, Outpatient Department Activities Creates Quandary." Hospitals 51 (August 16, 1977): 30.
- Oertley, Robert and Hammer, Theodore S. "Saudi Clinic Design Benefits Patient Flow, Staffing Efficiency." Modern Health Care 7 (February 1977): 46-48.
- Sacks, Terence J. "It Takes a Sense of Survival." Hospitals 52 (April 16, 1978): 101-102.
- Scarano, Joe. "Construction Management Ensures Flexibility in Project Delivery." Hospitals 51 (November 1, 1977): 99-102.
- Schroeder, R.E. "Satisfaction of Patients in Two Air Force Family Practice Programs." Journal of Family Practice 4 (April 1977): 731-733.
- Skaggs, Ronald L. "Programming and Design of Hospital Ambulatory Care Facilities." Hospital Topics 55 (July-August 1977): 42-44.
- Tudor, John M. Jr. "Organizational Complexity in Family Practice: A Sociological Model of a Family Practice Group." Journal of Family Practice 6 (February 1978): 343-352.
- Wilson, Jim L. "Patient Satisfaction in a Navy Family Practice Clinic." Journal of Family Practice 4 (March 1977): 594-595.
- Zilm, Frank; Arch, D.; Brimhall, Dennis and Ryan, Dorothy. "Ambulatory Care Survey Paves Way to the Future." Hospitals 52 (June 1, 1978): 79-83.

Theses

- Hilliard, Robert W. "A Study of Space Required for an Educational Program for the Practice of Family Medicine in Diversified Modalities." Ph.D. Dissertation. The George Washington University, 1975.

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