To the Graduate Council:

I am submitting herewith a dissertation written by Monday Achilefu Nwangwa entitled "Administrative Impacts on Selected Primary Health Care Centers." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Health Education.

Warren J. Huffman
Warren J. Huffman, Major Professor

We have read this dissertation
and recommend its acceptance:

Robert N. Kick

Charles Hamilton

Bill C. Wallace

William Worley

Accepted for the Council:

L Evans Roth
Vice Chancellor
Graduate Studies and Research

ADMINISTRATIVE IMPACTS ON SELECTED PRIMARY HEALTH CARE CENTERS

A Dissertation

Presented for the

Doctor of Philosophy

Degree

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Monday Achilefu Nwangwa

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ABSTRACT

Poverty and ill health have long been recognized as a major focus of community concern and action in the United States. The prevalence of disease among the poor and the inadequacy of the health care generally available to them have at various times spurred efforts in providing them access to health care. From the dispensaries of the 18th century to the current community primary health care centers, programs and facilities have been established in response to meeting the health care needs of the poor.

The purpose of this study was to provide data regarding administrative impacts on the operation of primary health care centers in East Tennessee. The data were gathered by means of a questionnaire administered to directors of the primary health care centers. Usable responses totaled 100 percent.

Three research questions were developed for this study. The questions and brief summaries of their answers are as follows:

1. Are there administrative impacts which are common to a majority of the primary health care centers? Analysis of the data revealed that 17 of the 24 administrative areas included in the study posed problems which were common to a majority of the participating centers. Of these, record keeping, relations with government organizations, and

employee orientation posed difficulties to more centers than any other category, being respectively reported by 100 percent of the clinics. Other areas that impacted on the administration of a majority of the centers included meeting demand for services, determining manpower needs, recruitment, training, community agencies, and patient fees.

2. Are there administrative impacts which are disruptive to the service functions of centers? Findings showed that each administrative area included in this study posed major problems, that is, problems which have been disruptive to the service functions of centers. Five of these areas are specially noteworthy, as they had been disruptive to the service functions of a majority of the participating centers. Recruitment was a major impact on over eight-tenths of the centers, and record keeping had led to disruptive difficulties in over three-fourths of the programs. Relations with government organizations, employee turnover, and professional community had been major impacts on over one-half of the centers.
3. Do administrative impacts which may be disruptive to the service functions of centers vary in regard to selected characteristics of centers? These

characteristics are clinic type, administrative structure, ownership, demographic location, and policy-making body. Findings of this study indicated that there were administrative problems which tended to vary with respect to selected characteristics of centers. Some noteworthy findings are as follows: a relatively small percentage of group practice clinics experienced major impacts in most of the areas studied, and a relatively large percentage of the clinic federation experienced major difficulties in the areas of external relations and general administration.

The gap in knowledge with respect to administrative impacts on primary health care centers in medically underserved and economically depressed areas in East Tennessee and a nearby Kentucky county extends far beyond the scope this study. However, it is hoped that the findings in this study will offer incentive and provide aid to other researchers in the conduct of future study. The need for such research is urgent not only in determining why administrative difficulties exist, but also in offering possible remedies before patterns of practice become solidified.

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CHAPTER I

INTRODUCTION

It is generally recognized that there are serious deficiencies in health care and health care systems in the United States (U.S. Congress, 1970). The deficiencies are commonly attributed to shortage of manpower among health professionals, inefficient utilization of manpower, lack of access to care, unavailable services, and high cost of medical and hospital services. The seriousness of the problem has been aptly stated in the Report of the National Advisory Commission on Health Manpower:

> The indicators of such crises are evident to us as commission members and private citizens; long delays to see a physician for routine care; lengthy periods spent in the well-named "waiting rooms," and then hurried and sometimes impersonal attention in a limited appointment time; difficulty in obtaining care on nights and weekends, except through hospital emergency rooms; unavailability of beds in one hospital while some beds are empty in another; reduction of hospital services because of lack of nurses; needless duplication of certain sophisticated services in the same community; uneven distribution of care as indicated in health statistics of a developing country; obsolete hospitals in our major cities; costs rising sharply from levels that already prohibit care for some and create major financial burden for many more.[1]

This gloomy outlook of the health care delivery has called for a change in the system. In 1973, the Tennessee

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[1] J.L. Miller, Report of the National Advisory Commission on Health Manpower, Vols. I and II (Washington, D.C.: U.S. Government Printing Office, 1967).

Assembly passed the Primary Care Act, authorizing the Tennessee Department of Public Health to demonstrate a new primary care center concept, also authorizing physicians to allow registered nurses to assume extended roles under their medical license in providing medical care. In addition, Section 1502 of Public Law 93-641, the National Health Planning and Resources Development Act of 1974, sets as one of its priorities the need to provide health care to the medically underserved, especially those living in rural and economically depressed areas.

Since the passage of the two pieces of legislation, community health clinics have been established in East Tennessee and many parts of the United States to address the problem of medical underservice. Over the past few years, 17 primary care clinics have been established in East Tennessee counties and nearby Kentucky (Appendix A). Writing about the primary care clinics in an unpublished report entitled "Primary Care Services in East Tennessee," the East Tennessee Health Improvement Council made the following observation concerning management problems which confront primary care clinics: "Management of a primary care clinic is an enormous responsibility and requires astute business skills."[2]

The present study focused on administrative problems

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[2]East Tennessee Health Improvement Council, "Primary Care Services in East Tennessee," 1976 (unpublished report).

and assesses their impact on the operation of primary health care clinics in East Tennessee.

I. PURPOSE OF THE STUDY

The purpose of this study was to identify major administrative characteristics and assess their impact on the operation of primary health care clinics in East Tennessee and nearby Kentucky.

II. STATEMENT OF THE PROBLEM

This study identified some administrative characteristics and examined their impact on the operation of primary health care clinics in East Tennessee. The following research questions were considered pertinent for this investigation:

Research Question I. Are there administrative difficulties which are common to the majority of the primary health clinics in East Tennessee?

Research Question II. Are there administrative impacts which are disruptive of the service functions of the primary health clinics?

Research Question III. Do administrative impacts which may be disruptive of the service functions of the primary health clinics vary with regard to selected characteristics?

III. NEED FOR THE STUDY

The health care delivery is undergoing a rapid change in the United States. The effect of the change is mostly felt by many families when they cannot find a system of medical care, such as a family physician, when they cannot obtain medical assistance at the time they need it, and when they cannot find the quality and standard of care they desire.

The traditional general practitioner or family physician, whose number had been declining, although on the rise again, seems to have established himself in the past as an effective primary care provider. As community health clinics begin to assume a more carefully defined primary care role, their administration must be critically examined as to their capacity for performing different primary care functions. Thus, a crucial and yet unanswered question is whether a community-based primary care center can perform the functions as effectively as a private family physician.

This study, in addition, attempted to provide a systematic approach to the study of administrative difficulties encountered in the operation of primary health centers at a time when the results may be utilized in planning future health programs. Thus, this study was designed to add to the body of knowledge concerning primary health centers at a critical point in time--at a time when the primary health center movement is progressing from a

conceptual model to a functional reality.

Finally, as the primary health care movement is progressing to a functional reality, it is important to point out deficiencies and make recommendations for remedies before patterns of practice become solidified.

IV. DELIMITATIONS

The research was confined to the study of administrative impacts on 13 community-based health clinics operating in East Tennessee. The clinics are located in East Tennessee counties and nearby Kentucky which have been declared medically underserviced by the United States Department of Health, Education, and Welfare (Appendix B).

V. LIMITATIONS

This study was based on administrative impacts reported by the directors of the participating primary health clinics as opposed to the observance of the impacts by the researcher. Thus, four clinics were excluded from the study because they did not have directors. This approach by which the clinic directors report the administrative impacts is an important advantage in determining the existence of difficulties by questioning the director. There are instances in which it would be impossible for an impartial observer to determine if an administrative difficulty actually existed. For example, in an instance in which a clinic director presented a matter to a committee for its

recommendation, the committee failed to comply with this request after six months, could it be assumed that there was a problem? Since committees are sometimes used as a means of delaying or preventing an action,[3] only the clinic director would be in a position to state with certainty whether or not a problem existed.

Another limitation of the study was the questionnaire technique[4] utilized. However, this technique can generate valid data if used properly.[5] Accepted research principles discussed in Chapter III, under Methodology and Design of Study, were utilized in the interest of developing and using the questionnaire in a manner which would lead to the procurement of reliable data.

Since the number of all eligible clinics studied in its entirety was small, the findings of this research could not be generalized beyond this population.

VI. BASIC ASSUMPTIONS

The following basic assumptions were considered essentially relevant to the study:

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[3]Harold Koontz and Cyril O'Donnell, Principles of Management: An Analysis of Managerial Functions, 3rd ed. (New York: McGraw-Hill Book Co., 1964).

[4]A discussion of limitations of the questionnaire technique is presented in Claire Selltiz et al., Research Methods in Social Relations (New York: Rinehart & Winston, 1965), pp. 236-243.

[5]F.J. Rummel and W.C. Ballaine, Research Methodology in Business (New York: Harper & Row, 1963), p. 108.

1. Understanding of administrative impacts can lead to better delivery of primary care.
2. The questionnaire and interview technique elicited valid data.
3. It is further assumed that the responses were honest hence the request by the respondents that their names be kept anonymous.

VII. DEFINITIONS

Administrative Impacts

Administrative impacts refer to problems which pose difficulties as an organization attempts to do its work through people. They include major impacts (those posing difficulties which are significantly disruptive of service functions of the primary health clinics) and minor impacts (sources of problems not significantly disruptive of services but created difficulties in the service functions of the health clinics).

What is A Primary Care Center?

A primary care center is a public or private community-oriented organization with permanent facilities that provide the entry point into the health care delivery system to primarily out-patients of all ages.

What is Primary Care?

Primary care, as defined by the National Health Services Corps, is "majority care, the components of which

ordinarily include (1) care of acute and chronic disease and injury, both major and minor, (2) diagnostic services, (3) health maintenance, disease detection, and prevention, (4) evaluation and management of medical-dental conditions on a continuing basis, including appropriate referrals and follow-up, and (5) provision of care to ambulatory patients."[6]

Primary Care Providers

Primary care is usually provided by generalists and combines the medical skills shared by family practitioners, pediatricians, and internists in a health team. The team may represent an economy of skill utilization by relying on physician extenders and other health staff to supplement physicians. Dental care and mental health services are often provided by additional team members.

Physician Extenders

These are non-physician health care providers with varying educational backgrounds and professional skills. In this category are physician's assistants, nurse practitioners, and nurse clinicians who may undertake screening activities, routine services, follow-up procedures, and counseling under the supervision of a licensed physician, perhaps through a written protocol.

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[6]National Health Services Corps, "Recommendations of Subcommittee on Scope of Services," December 1, 1972.

Physician's Assistants

The physician's assistant is trained by a physician to be his subordinate and carry out those tasks more appropriate to the level of his training; the education takes place in a physician's office on an apprenticeship basis, in hospital clinics, in agency clinics, in continuing education programs, or in medical schools; the length of the program may vary from six weeks to two years plus a one-year internship.

Nurse Practitioner

Nurse practitioner is a registered nurse prepared in a continuing education program to assume extended role under a physician. The training may be as short as six weeks or as long as two years. Included in this category are Primex Nurses, Pediatric Nurse Practitioners, and Family Nurse Practitioners.

Nurse Clinician

A nurse clinician is a master clinician. This is a person who has a master's degree in an allied field (Bowns, 1973). The program may range from one year of intensive graduate study to two years that includes an "internship." At successful completion of the work, the student receives a master of science degree. The titles Community Health Nurse, Family Clinician, and Family Nurse Clinician are used interchangeably.

Clinic Types

For the purposes of this research, the East Tennessee primary care clinics can be grouped into three organizational types:[7] the physician extender clinic, the clinic federation model, and the group practice.

Physician Extender Clinic

The physician extender clinic can be characterized as a community-controlled health program staffed almost exclusively by a physician extender, either a family nurse practitioner or a physician's assistant. Although physicians serve as preceptors for these physician extenders, their supervision is indirect with the physician making limited visits to the practitioner site, generally only one-half day a week. Generally, this clinic type is located in those areas with especially low population densities where the support of a full-time physician is not economically viable.

Clinic Federation Model

The clinic federation model consists of a coalition of several physician extender clinics with a corporate board composed of local clinic members who represent their individual programs. Although local boards continue to have authority over individual clinic sites, general

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[7]East Tennessee Health Improvement Council, "A Special Report: Primary Care Clinics in East Tennessee," June, 1978 (unpublished).

policy-making is delegated to the larger federation board. The clinic federations are frequently managed by a full-time administrator and also have their own physician who circuit-rides between the various clinic locations.

Group Practice

The review of literature reveals that the group practice model is more widely known than either of the other two clinic types discussed. For the purposes of this study, the focus was on those group practices in East Tennessee which are managed by community boards and emphasize primary care delivery.

Scope of Services

Scope of services include the following:

1. Non-urgent care (including initial health assessments, return visits, prenatal care, well-child care, immunization programs and counseling); the disorder is minor and not acute. The patient may require attention in a few days or weeks, might be handled by telephone consultation, or might not require any attention at all.
2. Urgent care (disease intervention treatment of non-life or limb threatening injuries); the disorder is acute but not necessarily severe. There is danger to the patient if he does not receive prompt attention; the patient requires medical

attention within 12 to 24 hours.

3. Emergency care (includes life-or-death services); the disorder is acute and potentially threatens life or function. The patient requires immediate medical attention.
4. Consultative care includes medical and surgical subspeciality services, mental health, and dental health.
5. Special services include social service counseling and health education (including nutritional counseling).
6. Non-ambulatory care includes medical management of short-term hospitalization, discharge planning, extended care, and home health services.

In cases where some of these services cannot be provided at the primary health center facilities, continuity of care is maintained by a formal arrangement with outside resources.

VIII. ORGANIZATION OF THE STUDY

This study is divided into three parts. Part One, Chapters I through III, includes background material to place the findings and conclusions of the study in their proper perspective. Chapter I introduces the nature and contributions of the study, the research questions which form the core of the study, basic assumptions, delimitations,

limitations, definitions and explanations, and organization of the study. Chapter II is a review of selected literature which relate to background, history, and evaluation of various aspects of primary health care centers. Chapter III discusses the research methodology and design utilized, with emphasis upon providing that information needed to enable the reader to properly evaluate the findings and conclusions of the study.

Part Two, Chapters IV through V, presents the findings of the study. Chapter IV describes administrative impacts common to a majority of the centers. Those administrative impacts which have been disruptive to the service functions of the programs are discussed. Chapter V discusses relationships between major administrative impacts and selected characteristics of primary health centers.

Part Three consists of Chapter VI and VII. Chapter VI presents a summary of the findings, conclusions, and recommendations for future planning. Chapter VII presents the epilogue.

CHAPTER II

LITERATURE REVIEW

I. NEIGHBORHOOD PRIMARY HEALTH CENTERS: BACKGROUND AND BRIEF HISTORY

In the United States the dichotomy between poverty and ill health has long been recognized as a major focus of community concern and action. Awareness of the prevalence of disease among the poor and the inadequacy of the health care delivery available to them have at various times motivated efforts to improve their health by providing more effective care. Programs and facilities ranging from the dispensaries of the 18th century to the current neighborhood health centers have been created in response to meeting the needs of the poor.

The First Health Centers

The health center concept was initiated in response to the needs of the immigrants from Europe. The conditions under which they lived in clusters were poor and adverse to health.

In 1971, a demonstration center for maternal and child care was started in a Polish district of Milwaukee by Wilbur Phillips.[8] The medical staff of the demonstration

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[8]Wilbur C. Phillips, "The Trends of Medico Social Effort in Child Welfare Work," American Journal of Public Health 2 (1972):875-82.

center provided preventive consultations. The programs were carried out by the municipality through its health department which directed the work of social organization, promotion, and education as well.

An Educational Health Center, which provided the basis for a Social Unit Organization, was started in the Mohawk-Brighton district of Cincinnati. Subsequently, the Mohawk-Brighton district of Cincinnati became a center for carrying out a social unit community experiment on a large scale. By 1917, plans had been developed for a neighborhood health center through which the aims of the league of social units might be achieved.

The community experiment was carried out in a neighborhood of some 15,000 inhabitants of whom between 5 and 10 percent were recent immigrants.[9] A Citizens' Council represented the people of the district, while an Occupational Council, which was a neighborhood planning body, secured the interest and cooperation of the various occupational and professional groups in the district.

The model was tried in parts of New York. In 1913, the New York Milk Committee established a health center on the lower West Side of Manhattan to serve a district largely populated by Syrians and Irish Americans, where

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[9]N.A. Nelson, "Neighborhood Organization Vs. Tuberculosis," Modern Medicine 1 (1919):26-31.

housing was poor and medical resources were limited.[10] To this end, the Bowling Green Neighborhood Association, composed of local residents and outside specialists, was formed to administer the center which provided antepartum and infant care. Many of such neighborhood associations composed of voluntary groups of citizens worked with the New York City Health Department.[11]

In 1915, as a result of Goldwar's move, an experimental health district was established on the lower East Side of Manhattan in an area almost entirely populated by Jews.[12]

During this period, several health centers had spread to many cities. The scope of the development is illustrated by the following statistics obtained by the Red Cross during the latter part of 1919 in a survey of existing and planned health centers.[13] The report showed that as of January 1, 1920, there were 72 centers in 49 communities, of which seven cities had more than one center, and 33 centers were being proposed or planned in 28 other communities. An analysis of the existing and proposed

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[10]Michael M. Davis, Immigrant Health and the Community (New York: Harper & Bros., 1921), pp. 406-07.

[11]"Annual Report of the Department of Health of the City of New York for the Calendar Year 1914," New York, 1915, p. 25.

[12]Davis, Immigrant Health, pp. 381-84.

[13]Michael M. Davis, "Goal-Post and Yard Sticks in Health Center Work," American Journal of Public Health 17 (1927):433-40.

centers showed that at the time of the report, 33 centers were administered entirely by public authorities, 27 were under private control, and 16 were under combined public and private control.

The succeeding decades witnessed a further development of health centers and districting of health services. The most imaginative approach was made by Hermann Briggs in 1920 when he attempted to deal with health services for rural areas in New York State.[14] As Commissioner of Health, Briggs proposed the establishment of local health centers to include one or more of the following elements: hospitals, clinics (for tuberculosis, venereal disease, prenatal and child care, mental illness, dental care, and general medical care), laboratories, public health nursing, and district health administration. He had realized that the development of community health services required an integration of preventive and curative medicine, which was an advancement over hitherto established community health centers concerned with curative services.

Since 1920, this concept has spread in several directions. Among these, the idea of comprehensive group practice coupled with pre-payment, as exemplified by the Kaiser-Permanente Foundation and the Health Insurance Plan

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[14]Milton Terris, "Herman Brigg's Contribution to the Modern Concept of Health Centers," Bulletin of Medical History 20 (1946):387-412.

of Greater New York, has been proven practicable.

The Decline of the Health Center Movement

There was a decline of the health center movement in the decade following the twenties and thirties. From the time of World War I, the circumstances and needs of the urban poor, particularly the immigrant whose conditions brought about the concept of a local health center, were changing. Immigrants decreased during the war years, and legislations of 1921 and 1924 were restrictive to immigrants. Thus, the war conditions and restrictive legislations regulated the number of immigrants entering the United States. As the immigrants became less crowded, their living conditions improved and, coupled with the influence of economic and education opportunities,[15] there was a tendency for the immigrants to move out of the areas of initial settlement where the health centers had been established.

Eventually, the potential clientele for local health centers changed its character and turned more and more to the use of private health care. The limited nature of the services provided in most local health centers reinforced the tendency. There was practically no integration of preventive and curative services, and in 1921, Michael Davis

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[15]"Report of the President's Research Committee on Social Trends," Recent Social Trends in the United States (New York: McGraw-Hill Book Co., 1933).

wrote about it:

> Curative work furnished the best approach to preventive service. In field of medical and health work, there is particular need for emphasizing. . . that the study of people must run parallel to the study of technique. As a corollary to this, curative work must be connected with preventive work, so that the services which the people seek of their own initiative can be supplemented by the services which we believe the larger interests of all require.[16]

In addition, the improvement of economic conditions towards the end of the depression of the 1930's coincident with the outbreak of World War II which made it financially possible for more people to seek private medical care, labor-management negotiations provided varying forms of health insurance. Thus, the local health centers tended to lose one part of the justification for their creation.

Renewal of Interest in the Role of the Health Center

After 1946, following the passage of the Hill-Burton Act, there was a renewal of the earlier interest in the role of the health center. A proponent of the idea who tied it to regionalization was John B. Grant of the Rockefeller Foundation.[17] Three developments should be noted--the neighborhood health center movement, renewed interest in the community hospital as the organizational

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[16]Davis, Immigrant Health, p. 419.

[17]John B. Grant, "Health Care for the Community," in Selected Papers, ed. Conrad Seepp (Baltimore: Johns Hopkins Press, 1963), pp. 5-6, 21-24.

focus for community medical care, and, finally, renewed interest in prepaid group practice (now renamed Health Maintenance Organization).

This brief history of the health center movement shows a parallel with the current neighborhood health center movement which has come into being to provide for the needs of the urban poor, of people who have migrated to the city and who live under circumstances highly adverse to health. These "primary health centers" clearly fill an immediate need, and no doubt fulfill their purpose better than did the earlier centers.[18]

II. FEATURES OF NEIGHBORHOOD HEALTH CENTERS

There exists a dearth of information concerning the features of individual neighborhood health centers, and the material regarding administrative impacts is very limited. The available literature consists primarily of discussions of their operation, their goals, their importance, the services they offer and evaluation of some of their functions. The highlights of this information are discussed.

Geiger has written about the Columbia Point Health Center as a major facility of the medical school and a primary instrument for service, teaching, and research in

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[18]Gerald Sparer, "Evaluation of OEO Neighborhood Health Centers," American Journal of Public Health 61 (1971):931-42.

the community. Geiger has described the experience of the Division of Community Health, Department of Preventive Medicine, Tufts University School of Medicine, Boston, in the operation of the neighborhood health center.[19] He described the experience of the faculty as a "series of alternating cycles of pain and discomfort followed by learning." He identified the pain and learning cycles and attempted to dispel the fears and disbeliefs concerning the function of the neighborhood health center. From these fears and disbeliefs, Geiger has learned that the neighborhood health center is the primary source of care. Another problem area which he emphasized was that of setting up new patterns of medical care organization which would involve the creation of new professional roles and interprofessional developments. He suggested a means of solving the problem of unmet need for care and of the shortage of trained professionals.

In another writing, Lashof[20,21] saw as a major problem facing medicine in the urban center the development of an organized approach to the delivery of medical care to large

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[19]H.J. Geiger, "The Neighborhood Health Center Education of the Faculty in Preventive Medicine," Archives of Environmental Health 14 (1967):912.

[20]J. Lashof, "The Health Care Team in the Mile Square Area in New York," Bulletin of New York Academy of Medicine 44 (1968):363.

[21]M.H. Lepper et al., "An Approach to Reconciling the Poor and the System," Inquiry 5 (1968):37.

groups. The development of this Mile Square Health Center of New York City was an attempt to meet the challenge. Lashof described the organization of health services in the center around three echelons of care, represented by the home, the health center, and the hospital. He pointed out the functions of the medical care team comprising the community and administrative staff of the center. For the staffing of the team, he included the physician, the registered nurse, the licensed practical nurse, the aides, and the clerks. Lashof concluded by saying that the key to successful neighborhood center program and the medical care team lay in maintaining a multiple-discipline approach which "is both flexible and innovative."

Using the Denver experience, Warner [22] contended that the solution of health problems in the inner-city must be tackled from a systems approach which includes the solution of social problems of income, housing, consumer education, political power, civic responsibility, cultural pride, quality education, and indigenous leadership development.

Wise[23] presented the Montefiore Hospital Neighborhood Medical Care Demonstration (NMCD) as a case study. The

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[22] A.L. Warner, "Problems in Delivering Comprehensive Health Care in the Inner City," Archives of Environmental Health 17 (1968):383.

[23] H.B. Wise et al., "Montefiore Hospital Neighborhood Medical Care Demonstration," Milbank Memorial Fund Quarterly 46 (1968):297.

study described the goals and operations of a typical neighborhood health center. The original objectives, according to Wise, were to provide family medical care, train neighborhood residents in health service roles, involve community residents as employees and in an advisory capacity in the operation of the health center and evaluation of the program.

Community Involvement in Neighborhood Health Centers

The involvement of local residents has been viewed as an important ingredient in the successful design and operation of a community health center. Wise et al.[24] described the experience of one such center that reached out into the community and mobilized the residents around two activities. The activities were complemented with a third approach through an extensive training and employment program for local people. In conclusion, Wise raised the critical issue of consumer control of center policies and programs.

A closer look at the operation of the Neighborhood Medical Care Demonstration has revealed that to attack the problem of poverty, ill health and injustice, lawyers, doctors, nurses, and educators, and residents of the neighborhood must share their insights and skills.

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[24]H.B. Wise et al., "Community Development and Health Education--Community Organization as a Health Tactic," Milbank Memorial Fund Quarterly 46 (1968):325.

Family Health Workers in Neighborhood Health Centers

The training and utilization of the family health workers have been reviewed by Bates,[25] Wise,[26] and Zahn,[27] as well as by many authors describing their individual programs.

Bates described the use of Family Health Teams in the Watts Multipurpose Health Center, placing emphasis on the role of the neighborhood health agent. He pointed out how the center made use of Family Health Teams to deliver comprehensive medical care and neighborhood health agents to implement "acculturation," the process by which the health facility and the community adjust to each other.

He noted that a conflict might arise if the health team member who belonged to the minority group did not identify with the group he served, but instead identified with the dominant society. He suggested that such a conflict could be resolved through the help of the neighborhood health agent.

Also, Bates warned about the negative effect it would have when a health team member of the dominant culture

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[25] J.E. Bates, H.M. Lieberman, and R.N. Powell, "Provision for Health Care in the Ghetto: The Family Health Team," American Journal of Public Health 60 (1970):1222.

[26] H.B. Wise et al., "The Family Health Worker," American Journal of Public Health 58 (1968):1828.

[27] S. Zahn, "Neighborhood Medical Care Demonstration Training Programs," Milbank Memorial Fund Quarterly 46 (1968):344.

consciously or unconsciously opposed the struggles of the patient minority while technically functioning as his advocate. This might happen if the interest of the health team member is threatened by any change in the status quo linked to perpetuation of the minority.

Wise reported on the training and employment of family health workers in a neighborhood health center program located in an impoverished area of the Bronx. He pointed out how the public health nurse might be utilized economically. In the program, a neighborhood resident trained for six months and supervised by public health nurses performed many of the functions traditionally assigned to public health nurses and social workers. Apart from the economic use of time, the program was designed to simplify the complexity of health and social services which were available to poor patients.

Zahn focused on the role of the lawyers in training family health workers recruited from the low-income area being served for careers in the field. The training was designed to prepare the family health worker to help patients make their own decisions and teach them to learn how to avoid or solve problems instead of depending on the professional.

III. EVALUATION OF CARE

Effects of Neighborhood Health Centers on Medical Care Utilization

So far, Bellin et al.,[28] are the only investigators who have published any quantitative data on the effects of neighborhood health centers on medical care utilization, and Morehead's paper is, perhaps, the only published report on any attempt to evaluate the quality of medical care in health centers.[29]

The purpose of Bellin's study was to measure the effect of the neighborhood health center on the demand for hospital beds.

Data for this study were obtained from a sample of residents at Columbia Point from two sources--Medical records at Boston City Hospital and medical billing records at the Boston City Welfare Department. The hospital furnished hospital in-patient utilization for all residents as far as they were hospitalized at that facility.

The findings of the study revealed that in the 12 months before the Health Center opened its doors, the demand for hospital beds by the Columbia Point Community

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[28] S. Bellin et al., "Impact of Ambulatory Health Care Services on the Demand for Hospital Beds," New England Journal of Medicine 280 (1969):808.

[29] M.A. Morehead, "Evaluating Quality of Medical Care in Neighborhood Health Center Programs of the Office of Economic Opportunity," Medical Care 8 (1970):118.

approximated that of the general population of the United States, whether calculated in terms of hospital admissions, total hospital days, or average length of a hospital stay. Boston Hospital accounted for nearly two of three hospital admissions in the year before the Neighborhood Health Center was established. Excluding the elderly, the number of admissions to Boston City Hospital in-patient facilities and the total number of bed days spent there, on the basis of hospital medical records, markedly declined after the center was opened. Furthermore, it was found that the sharpest reduction took place in the Health Center's second year of operation. Admissions to the hospital for all diagnosis had declined by 41 percent during the center's first year, and 75 percent from the figure for the second year. Thus, by the end of the second full year of operation, admissions to Boston City Hospital had been reduced by 84 percent of those occurring in the 12 months before the advent of the center. Althqugh there is a limit to which these findings may be generalized, this study did show that the Neighborhood Health Center demonstrated the potential effectiveness of comprehensive primary health care services in reducing the demand for hospital beds in a low-income community.

Morehead's study was designed to assess the quality of performance of 24 OEO Neighborhood Health Centers in specific clinical areas of adult medicine, infant care, and

obstetrical care relative to other centers and to indicate to the central agency (OEO) those centers which might be in need of technical assistance.

The methodology used in this study was the review of selected charts to determine the extent to which professional standards for patient management were adhered. Two types of audits were used in the reviews--one based on the index-approach to auditing, called the base line survey, and the other, using the peer judgment approach known as the clinical audit.

In base line surveys, selected items considered fundamental to adequate care of adults, small children, and pregnant women were abstracted from selected medical records. Numerical weights were assigned to these items and a score was obtained for each case. For each case scored, the abstractor used his judgment in determining whether selected items were sufficiently documented to receive credit. Criteria were set for the review samples, adult patients, children, and obstetrical patients. The number of records reviewed was 15 in each category. Adherence to standards outlined in the base line reviews assured that minimal procedures were being accomplished, but it did not necessarily indicate that clinical judgment was adequate or that the patient was receiving care appropriate to his needs. Hence, clinical audit was necessary.

In clinical audit, reviews by experienced clinician

surveyors were conducted in the fields of medicine, pediatrics, obstetrics, gynecology, and general surgery. Reviews were also undertaken of the laboratory and x-ray services. In addition, an administrative review was undertaken of those areas affecting quality of care, patient volume, physician scheduling, follow-up mechanism, etc.

Approximately 25 records were selected on the basis of their inherent serious nature in each field from encounter sheets of visits four months prior to the review.

Surveyors applied ratings of good, fair, or poor to the items on each case review card. Each case had the potential score of 100, and the score for each speciality was the average of all cases reviewed.

The findings of this study revealed variations in performance levels when the centers are compared to each other:

1. Over one-half of the 24 groups examined had scores in medicine and obstetrics in the upper two quarters.
2. Ratings in pediatrics relative to medicine and obstetrics were lower; almost two-thirds of the pediatric scores fell into the third and fourth quarters.
3. The obstetrical scores indicated lack of information about delivery period and failure to record that contraceptive advice had been discussed or

given received ratings in the lower ranges of the rating scale.

4. Scores for adherence to recommended number of visits in relation to the month of gestation and the performance of routine weights, blood pressure, and testing for albumin and sugar in the urine on each visit were in the upper range of the rank order.

Different Systems of Primary Medical Care Delivery in the United States

In a most recent study, Burdette et al.[30] made an evaluation of different primary medical care systems in the United States. The study was designed to compare and evaluate different systems of primary medical care delivery in the United States.

Methodology of the Study

A classification of current systems of primary medical care and a comprehensive set of criteria for comparison and evaluation of these systems was developed. The concept of the "indicator case" was used to select out of a system certain aspects of medical care on a random basis and to record, evaluate, and compare them in detail. An indicator

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[30]James A. Burdette et al., "Primary Medical Evaluation, The AAFP-UNC Collaborative Study," Journal of American Medical Association 230 (December, 1974):1669-73.

case was defined as an example of either health or illness care that is statistically frequent, which may be provided by a variety of different systems, about which there is general agreement concerning appropriate management and in which maintenance or improvement of health status of the individual studied can be objectively measured. Eight criteria were developed for assessment, four of which were measurements of physician-patient interaction-care. Questionnaires were developed for criteria seven and eight, physician awareness of patient concerns about condition, and attitudes towards physicians as measure of patient satisfaction.

The findings of the study were not presented in the report. However, the report suggested a need for extension or duplications of the study with a greater variety of primary health care systems.

Earlier Study

A previous study on the organization, utilization, and assessment of primary medical care was undertaken by B.S. Halka et al.[31] Their study was designed to determine the barriers and stimulants to the utilization of medical services.

For the study design, the household survey was chosen

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[31]B.S. Helka et al., "The AAPC-UNC Study of the Organization, Utilization, and Assessment of Primary Medical Care," American Journal of Public Health 63 (1973):494-501.

as the primary means of data collection on the determinants of utilization and non-utilization of medical care in a total community. A specific household survey instrument was designed to collect data on family characteristics, symptoms, and medical care utilization.

In conjunction with the household survey, a separate questionnaire designed to measure attitudes toward physicians and primary medical care was used. The questionnaire was constructed using the Equal Appearing Interval technique of Thurstone.[32]

After the development of the instrument, Fort Wayne, Indiana, was chosen as the study site. At the time the article was published, the study was in progress. Hence, the findings cannot be reported here. Extensive search of literature has not disclosed further mention of the study other than what has been reported here in this review.

Sociological Evaluation of Medical Care

In a paper entitled "An Audit of the Quality of Care in Social Medicine," Brooke[33] presented a method of evaluating program policy establishing that the agency would attempt to effect changes in the social, cultural, economic,

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[32]B.S. Helka et al., "A Method of Measuring Physicians' Awareness of Patients' Concerns," HSMHA Health Reports 86 (August, 1971):741-51.

[33]R. Brooke, "An Audit of the Quality of Care in Social Medicine," Milbank Memorial Fund Quarterly 46 (1968):351.

environmental and emotional, as well as the traditional health patterns of community life. He divided the audit of social medicine into four gross areas, namely:

1. Input, or the existing health level of the community and the subcultural attitudes toward health and folk-patterns of seeking professional and informal medical care.
2. Treatment process, or evaluating the quality of care rendered by each medical team, each professional and subprofessional.
3. Output, or end results of the treatment process.
4. The interrelations of input, treatment and output to help point out possible means to more efficient use of input and treatment to achieve maximum output.

Brooke went on to identify activities which play a role in evaluating the quality of care rendered in the four areas of social medicine.

The Watts Neighborhood Health Center

Milton S. Davis et al.,[34] have described an organizational problem of intergroup conflict in the Watts Neighborhood Health Center. They illustrated the conditions thought to be necessary for such conflict and considered

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[34]Milton S. Davis et al., "A Sociological Evaluation of the Watts Neighborhood Health Center," Medical Care 7 (1969):105.

how intergroup conflict had been influenced by:

1. The felt need for joint decision-making among the OEO, the medical school, and by a community health council.
2. Differences in perception of goals.
3. Differences in perception of reality.

They have considered the ways in which these three situations had arisen and the effects they had had on realization of the objectives of the program.

They have drawn two related conclusions which they called logical and strategic from this report. In their logical conclusion, it was their belief that in the implementation of a publicly-funded program designed to solve community health problems, it really was not necessary to give a lay community group decision-making power. Community people should be involved, but involved as advisors. Strategically, their conclusion was that if success was important, the question was not whether to involve the community or not, but how to involve the community in a way which provided the local people with autonomy and a sufficiently strong power base to insure a major influence so that they had the opportunity to control their own destiny.

In another report, Gordon[35] blamed the lack of

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[35]Jeoffry B. Gordon, "The Politics of Community Medicine Projects: A Conflict Analysis," Medical Care 7 (1969): 419.

political realism on the part of many of the participants in the operation of community health centers for the barriers to the success of the centers. He presented a sociological analysis of project evolution, demonstrating the many opportunities for controversy and conflict to develop. He also presented inferences from conflict theory to show how a sophisticated approach to controversy could expedite social change. Gordon pointed out that there had been a tendency to overlook the considerable difficulties being encountered in the creation of the health centers and that no comprehensive perspective of the problems had been undertaken by any of the parties involved. He concluded by observing that many obstacles have prevented the fulfillment of many of the programs. Although some people have been provided with medical care that is of better quality, or would not have been available otherwise, he went on to say that in many centers, services are underutilized, community participation is not powerful, the support of the medical establishment is tenuous, social innovation is minimal or inefficacious.

Administrative Problems of Neighborhood Health Centers

Most of the literature reviewed so far did mention administrative problems involved in the operation of the neighborhood health center, but none concentrated on this aspect in any great length except the article written by

P.R. Torrens.[36] In his article, Torrens reviewed some of the major administrative problems which affected neighborhood health centers once they were established and functioning. The problems were those related to finances, personnel, the exercise of authority and control, and the manner of organization of the health services themselves. He raised some questions which he thought the administrators of neighborhood health centers must face. One of these being that administrators of neighborhood health centers should become analytical about the benefits and the cost of their new programs.

IV. METHODOLOGY

The researcher used a modified version of the methodology utilized by Jack White (1969) in an unpublished dissertation entitled "Administrative Problems Encountered in the Operation of Community Mental Health Centers." In the study, White attempted to answer the three Research Questions which the present study is about to answer.

White's research instrument was based on the review of related literature, pilot studies, interviews, and a pretest. The development of the instrument for the present study was based on review of literature and a pretest.

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[36]P.R. Torrens, "Administrative Problems of Neighborhood Health Centers," Medical Care 9 (1970):487.

V. SUMMARY

The health centers of the early part of this century grew out of a recognition that existing arrangements and programs in the United States were not satisfactorily meeting the complex health needs of the poor. In consequence, the neighborhood health center has been developed to remedy this situation by providing "a one-door facility, in which virtually all ambulatory health services are available; close coordination with other community resources; professional staff of high quality; and intensive participation by and involvement of the population to be served."

The roots of the health center movement, which began around 1910, are to be found in the changes which occurred in American society during the preceeding decades. From 1860 to 1910, the urban population had risen from 19 to 45 percent of the total due in large amounts to a flood of immigrants which poured into the cities and industrial towns where workers were in demand.

CHAPTER III

METHODOLOGY

I. OVERVIEW

The purpose of this research was to critically assess administrative impacts on the operation of primary health care centers in East Tennessee. The emerging administrative problems as perceived by the center director were identified for better understanding, and solutions to the problems were suggested. In this chapter, the following are presented: The population, instrumentation, collection of data, and analysis of data.

II. POPULATION

Parameter

The population of the study consisted of 13 primary health clinics in East Tennessee. These primary health clinics are located in East Tennessee and nearby Kentucky counties designated by the United States Department of Health, Education, and Welfare as medically underserved areas (MUA). The index of MUA was obtained by weighted data based on the following characteristics (Appendix B):

1. Ratio of primary care physicians to population.
2. Infant mortality rates.
3. Percentage of the population which is age 65 and over.

4. Percentage of the population with family income below the poverty level.

Subjects

The subjects of this study were the directors of the 13 clinics. Four of the clinics did not meet the clinic director criterion and were thus excluded from the study. Each of the six clinic directors had been contacted to participate in the study and all responded indicating their willingness to participate. Three of the six directors administered three centers each, while two directors were in charge of one clinic each, and two clinics were directed by one person.

A formal system of random selection of subjects was not necessary because the population of the clinic directors was studied in its entirety.

III. INSTRUMENTATION

The research instrument utilized for the collection of data was a questionnaire (Appendix C), supplemented by on-site interviews.

Development of the Questionnaire

The information on which the questionnaire was based stemmed from the review of the literature and pretest of the questionnaire.

Various techniques were utilized to help to insure a

satisfactory rate of response to the questionnaire. A draft copy of the questionnaire was sent to 10 selected center directors of Office of Economic Opportunity-sponsored primary health centers for endorsement. Additional credence was given the study by sending the cover letter on letterhead of The University of Tennessee, Division of Health and Safety. Other inducement to cooperation in participating in the study included a guarantee of confidentiality, an appeal through the goal of the study, the use of individually typed letters for personalization, and the enclosure of self-addressed stamped envelopes for the respondents' convenience.

Pretest of the Questionnaire

Before the questionnaire was administered in its final form, a pretest of a draft of the questionnaire with its cover letter was conducted on selected OEO Neighborhood Primary Health Centers. Participants in this pretest were selected from the Directory of Community Health Centers, Bureau of Community Health Services (Appendix D).

Center directors were asked to complete the draft questionnaire and Dr. Goolsby of The University of Tennessee, College of Business Administration, was requested to examine it carefully. All participants were further requested to express their opinions concerning various aspects of the draft questionnaire:

1. Ambiguous questions.

2. Words which were unfamiliar.
3. Ideas of the participants which were not brought out by the questions.
4. Words which could be misunderstood.
5. Suggested improvements.

The completed research instrument was analyzed in an effort to identify answers that were superficial, those that were omitted, and those that were not useful for analysis purposes. Questions and instructions were revised based on suggestions of the participants in the pretest and an analysis of the answers to the questions in the draft questionnaire.

The Research Questions

The core of this study consisted of three research questions. The primary aspects of the investigation by means of these questions were administrative impacts encountered in the operation of the primary health centers. Research Questions I and II were the vehicles through which the impacts were identified. They are as follows:

Research Question I. Are there administrative impacts which are common to a majority of the participating primary health centers?

Research Question II. Are there administrative impacts which are disruptive to the service functions of centers?

When administrative impacts have been identified, it

is possible to direct research efforts toward determining if these impacts vary in regard to other aspects of centers. Research Question III was designed to lead to the information pertinent to variability of the impacts.

Research Question III. Do administrative impacts which may be disruptive to the service functions of centers vary with regard to selected characteristics of centers? Selected characteristics of centers related to Research Question III are as follows:

1. Clinic Type (Group Practice, Physician Extender, and Clinic Federation).
2. Administrative Structure (Independent Center, Tennessee Health Services Area (THSA), and miscellaneous).
3. Ownership Categories (voluntary, county, state, and miscellaneous).
4. Demographic location (primarily metropolitan, primarily non-metropolitan, combination of the two).
5. Policy-making body (board of directors, advisory council, board of directors and others, government agency, and miscellaneous).

IV. COLLECTION OF DATA

The final questionnaire and cover letter were mailed to the center directors of the 13 centers included in the

study. The names and business addresses of the center directors were obtained by means of telephone inquiries made to the East Tennessee Health Improvement Council and Appalachian Regional Center for Healing Arts. Each director was asked to complete the questionnaire which was collected by the researcher during the on-site interview, in the Fall quarter, 1978.

The purpose of the on-site interview was to ensure 100 percent response since the population studied was relatively small (six center directors). Furthermore, the on-site interview helped to check completeness, accuracy of the data, and clarification of ambiguous answers.

V. ANALYSIS

Analysis of this study consisted of three stages. The first phase was a review of answers contained in the completed questionnaires and the elimination of non-usable responses.

The second stage of the analysis was tabulation of the data. The frequency of scores, which largely formed the basis of findings presented in Chapters IV and V of this dissertation was tabulated. It also provided the multi-dimensional cross tabulation on which Chapter V is based.

In the third stage, the tabulated data were analyzed. Analysis of the data relating to Research Questions I and II posed few problems in that they required only the

presentation of frequency distributions.

However, contingency table tests, based on chi-square and analysis of variance tests, were considered in regard to data relative to Research Question III. But the small number of items contained in the cells precluded the use of these tests.

As a result, possible variations of major administrative impacts with respect to selected characteristics of centers were analyzed by means of comparing the relative percentages of categories of selected characteristics for which any given impact was reported.

For example, the selected characteristic "ownership" is divided into four categories: voluntary, county, state, and miscellaneous. The percentage of each category reporting major impacts, say, in orienting new employees to their jobs would be found. Such analysis would lead to the assumptions relative to the variability of the impacts of ownership categories on the operation of the centers.

Research Question I refers to all participating centers as against those to which any given question might be applicable. For example, let's say that five respondents reported problems in recruiting nurse practitioners. But because the rest of the participating centers did not employ nurse practitioners, the question of recruiting them was not relevant to those other centers. However, in keeping with the requirements of Research Question I, the study would report five respondents as a percentage of the total

participants, and not as a percentage of the program which utilized nurse practitioners, which experienced recruitment difficulties. The fact that some impact areas did not apply to all centers tended to reduce the commonality of impact areas.

Since Research Question I concerns reported difficulties common to a majority of all participating centers, the failure of center directors to respond to any given question in the research instrument would not reduce the base figure on which percentages are computed. For example, suppose two of the participating directors did not answer the question on the recruitment of dentists, this would not reduce the total number of centers from 13 to 11 because the fact remains that six centers, 46 percent of the total 13 participating centers, would report such difficulties. Thus, commonality of reported problems, rather than degree, is the critical factor which must be stressed.

The procedures described in the last two paragraphs above were utilized in the analysis of data relative to Research Questions II and III to insure comparability of data and consistency of method.

CHAPTER IV

IDENTIFICATION AND ANALYSIS OF ADMINISTRATIVE IMPACTS

I. IDENTIFICATION OF COMMON ADMINISTRATIVE IMPACTS

For the purpose of this study, administrative impacts refer to problems which pose difficulties as an organization attempts to do its work through people.[37] They include major impacts (those posing difficulties which are significantly disruptive of service functions of the primary health clinics) and minor impacts (sources of problems not significantly disruptive of services but created difficulties in the service functions of the health clinics).

In this chapter, the administrative impacts which have affected the majority of the clinics participating in the study are defined. These impacts are divided into six categories:

1. Personnel management.
2. External relationships.
3. Financial management.
4. General administration.
5. Overview of center services.
6. Fiscal viability, efficiency, and accessibility.

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[37] Harold Koontz, "The Management Theory Jungle," Management: A Book of Readings, ed. Harold Koontz and Cyril O'Donnell (San Francisco: McGraw-Hill Book Co., 1964), p. 14.

A. Personnel Management

The review of the literature revealed that the most critical personnel areas were certain staffing functions, employee training, employee turnover, and employee morale. The findings concerning this subject are discussed in terms of staffing and personnel areas other than staffing.

Staffing

Problems relating to the staffing of the clinics have been voiced, but a study of the particular staffing activities, which are responsible for the problems, has not been undertaken. This research has examined the area of staffing from the standpoint of a number of its integral functions which were revealed as sources of difficulty (Table 1). These areas are orientation, the determination of manpower needs, recruitment, selection, and hiring.[38] With the exception of hiring, which was reported as a problem area by 46.2 percent of the respondents, these functions were listed as sources of difficulty by a majority of the clinics.

Orientation

This staffing function involves efforts directed towards helping incoming employees to adjust to their new

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[38]The listing of staffing activities utilized in this study was taken from Dale Yoder, Personnel Management and Industrial Relations, 5th ed. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1962), p. 272.

TABLE 1

STAFFING FUNCTIONS BY PERCENTAGE OF RESPONDENTS* REPORTING DIFFICULTIES

Category	Orientation	Determining Manpower Needs	Recruitment	Selection
Overall Staffing Functions	100	92.3	92.3	61.5
Individual Personnel Classifications				
Primary Practitioners	38.5	53.8	69.2	7.7
Physician Extenders	38.5	38.5	69.2	38.5
Nurses	7.7	7.7	7.7	0
Clinical Support Personnel	46.2	84.6	23.1	23.1
Administrative Personnel	69.2	84.6	53.8	38.5

*All figures are expressed as percentages of the 13 clinics participating in the questionnaire survey.

environment.[39] Since the primary health clinic movement is relatively new, most employees will not have the necessary training backgrounds. As a result, personnel management activities must play an important role in the orientation of employees.

Employee orientation was reported as a source of difficulty by all of the clinic directors. The most common problem was that of orienting administrative personnel to their new jobs, reported by 69.2 percent of the centers. Difficulties in 38.5 percent of the clinics were encountered in efforts to orient both primary practitioners and physician extenders to their new tasks in the clinics. Orientation posed staffing difficulties to clinical support personnel in 46.2 percent of the centers. Nurses were found to be a source of similar difficulties to 7.7 percent of the participating clinics.

Determining Manpower Needs

Determining manpower requirements is the first step in the staffing process.[40] Over four-fifths of the clinics, 92.3 percent, reported difficulty in determining the manpower requirements for their clinics. The most common

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[39]George S. Odiorne, Personnel Policy: Issues and Practices (Columbus, Ohio: Charles E. Merrill Books, Inc., 1963), p. 116.

[40]George Strauss and Leonard R. Sayles, Personnel: The Human Problems of Management, 3rd ed. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972), p. 375.

complaints expressed by 84.6 percent of the respondents were those of deciding upon the needs for clinical support and administrative personnel. Similar difficulties pertaining to primary practitioners were reported by 53.8 percent of the respondents. Over one-third of the clinics, 38.5 percent, found it difficult to determine manpower requirements for physician extenders. Determining manpower needs for nurses was found to be a source of difficulty to 7.7 percent of the clinics.

Recruitment

Recruitment involves activities directed toward finding an adequate number of candidates to fill personnel positions.[41] Recruitment ranked third (Table 2) with 92.3 percent of the clinics reporting difficulties in this area of their staffing functions. Primary practitioners and physician extenders proved to be the most difficult categories of personnel to recruit, causing difficulties to 69.2 percent of the programs. The recruitment of administrative personnel was an obstacle to 53.8 percent of the clinics. About one-quarter of the clinics, 23.1 percent, experienced problems in finding persons to consider for clinical support positions while 7.7 percent reported such difficulties with nurses.

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[41]Dale Yoder, Personnel Management, pp. 272, 299.

TABLE 2

PERSONNEL CLASSIFICATION RANKED IN ORDER OF NUMBER OF STAFFING PROBLEMS REPORTED

Category	Orientation	Determining Manpower Needs	Recruitment	Selection
Primary Practitioners	3.5	3	1.5	4
Physician Extenders	3.5	4	1.5	1.5
Nurses	5	5	5	5
Clinical Support Personnel	2	1.5	4	3
Administrative Personnel	1	1.5	3	1.5

Selection

Selection is a process primarily aimed at deciding if applicants are qualified to fill personnel positions.[42]

This staffing function was reported as posing problems to 61.5 percent of the centers. Physician extenders and administrative personnel workers were the most troublesome categories, as 38.5 percent of the clinic directors expressed difficulty in selecting such candidates. Clinical support workers posed selection problems to 23.1 percent of the clinics, while primary practitioners led to such complaints in 7.7 percent of the clinics.

Analysis of Personnel Categories

Selected personnel classifications were the avenues through which staffing difficulties were identified. Viewed from this perspective, administrative personnel workers were found to be a major source of staffing problems. As shown in Table 2, this group ranked first as a source of difficulties in three out of four staffing activities, namely, orientation, determining manpower needs, and selection. Administrative personnel also ranked third as a difficult group for which candidates were to be recruited.

More clinics reported difficulties in recruiting

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[42]Stephen Habbe, "Recruiting and Selecting Employees," Management of the Personnel Function, ed. I.L. Heckman and S.G. Huneryager (Columbus, Ohio: Charles E. Merrill Books, Inc., 1962), pp. 254-55.

primary practitioners and physician extenders than for any other personnel categories. In addition, these two personnel categories ranked third in reporting problems related to orientation of new workers.

Physician extenders ranked second to administrative personnel workers as a major source of staff problems. As shown in Table 2, physician extenders ranked first as a source of difficulties in two out of four staffing activities, namely, recruitment and selection. Fewer clinics reported difficulties in determining manpower needs for physician extenders than for three personnel categories, namely, administrative personnel, clinical support workers, and primary practitioners.

Clinical support personnel ranked first in encountering difficulties related to determining manpower requirements and second in orientation difficulties. This category also ranked third in selection problems and fourth in recruitment difficulties.

Staffing difficulties for nurses were non-existent for three of four staffing activities. However, the only source of difficulties was reported in orientation and was even the last, ranking fifth.

Personnel Areas Other Than Staffing

Additional areas related to personnel management included in this study were: employee training, employee turnover, employee morale, lack of funds, and unfilled job

positions. The first three areas mentioned were reported as a source of difficulties by a majority of the clinic directors and are, therefore, discussed in detail below. The latter two areas were not treated in depth as they did not represent difficulties common to a majority of the participating clinics. Lack of funds was reported as a difficulty by 30.8 percent of the respondents while unfilled job positions led to complaints by 23.1 percent.

Employee Training

Training is any formal procedure within the organization to teach, instruct, coach, develop employees in technical skills, knowledge, principles, techniques, and to provide insights into and attitudes toward the organization.[43,44,45,45]

As shown in Table 3, employee training was reported as a problem by 92.3 percent of the participating clinics.

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[43]Avice Saint, "Learning Can Be Productive," in Learning at Work: Human Resources and Organizational Development, ed. Avice Saint (Chicago, Ill.: Nelson-Hall Co., 1974), p. 3.

[44]William McGehee and Paul W. Thayer, Training in Business and Industry (New York: John Wiley & Sons, Inc., 1961), p. 3.

[45]Robert E. Sibson, "Human Resources Development," in Increasing Employee Productivity, ed. Robert Sibson (New York: A Division of American Management Association, 1976), pp. 1-3.

[46]Malcolm W. Warren, Training for Results: A Systems Approach to the Development of Human Resources in Industry (Reading, Mass.: Addison-Wesley, 1969), pp. 1-3.

TABLE 3

PERSONNEL AREAS (OTHER THAN STAFFING) BY PERCENTAGE OF RESPONDENTS REPORTING PROBLEMS*

Category	Employee Training	Employee Turnover	Employee Morale
Overall Personnel Function	92.3	84.6	84.6
Individual Personnel Classifications			
Primary Practitioners	7.7	46.2	61.5
Physician Extenders	15.4	61.5	53.8
Nurses	15.4	0	15.4
Clinical Support Personnel	69.2	7.7	38.5
Administrative Personnel	84.6	38.5	61.5

*All data are expressed as percentages of the 13 clinics participating in the questionnaire.

Training problems among administrative personnel were shared by 84.6 percent of the participating clinics while 69.2 percent reported problems regarding clinical support personnel, and 15.4 percent had problems with physician extenders and nurses, respectively. Only 7.7 percent of the respondents reported problems stemming from the training of primary practitioners.

Employee Turnover

Employee turnover relates to the separation of employees constituting the labor force. It is of particular significance in that it is symptomatic as well as problematic, indicating that the underlying causes must be uncovered and remedied.[47,48] As shown in Table 3, the area was reported as a problem by 84.6 percent of the participating clinics. Employee turnover problems among physician extenders were shared by 61.5 percent of the respondents while 46.2 percent reported problems with primary practitioners, and 38.5 percent had problems regarding administrative personnel workers. Less than one-tenth of the respondents, 7.7 percent, reported difficulties stemming from the turnover of clinical support personnel.

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[47]Strauss and Sayles, Personnel, pp. 356-357.

[48]Michael J. Jucius, Personnel Management, 5th ed. (Homewood, Ill.: Richard D. Irwin, Inc., 1963), pp. 122-123.

Employee Morale

Morale pertains to the attitude of employees toward their work as related to the presence or absence of such feelings as zeal and espirit de corps.[49] It was identified as a problem area by 84.6 percent of the participating clinics. The most common complaint expressed by 61.5 percent of the respondents concerned the morale of primary practitioners and administrative personnel workers. Both physician extenders (53.8 percent) and clinical support personnel (38.5 percent) were a source of concern in this respect. Less than one-fifth, 15.4 percent, of the directors viewed the morale of nurses as a problem.

Analysis of Personnel Categories

Administrative employees were a leading category with respect to difficulties reported in the general personnel areas, ranking first in employee training and in morale and third in turnover, as shown in Table 4. Primary practitioners were listed most often concerning morale, second in turnover, and fifth in training.

B. External Relationships

A basic goal of the primary health clinic is the support by the community in which the clinic is situated.

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[49]Walter D. Scott, Robert C. Clothier, and William R. Spriegel, Personnel Management, 5th ed. (New York: McGraw-Hill Book Co., 1954), p. 454.

TABLE 4

PERSONNEL CLASSIFICATIONS RANKED IN ORDER OF NUMBER OF PERSONNEL PROBLEMS (OTHER THAN STAFFING) REPORTED

Category	Employee Training	Employee Turnover	Employee Morale
Primary Practitioners	5	2	1.5
Physician Extenders	3.5	1	3
Nurses	3.5	5	5
Clinical Support Personnel	2	4	4
Administrative Personnel	1	3	1.5

In this context, the clinic functions as an integral part of the organizations in the community. In doing so, the clinic must establish relationships with individuals and groups external to the clinic. This study reveals that such relationships have led to difficulties shared by a majority of the clinics (Table 5). These areas of difficulty concern the professional community, the lay community, affiliates, the parent organization, community agencies, and government organizations.

Professional Community

As an integral part of the primary health care delivery services, the clinic must establish working relationships with professional individuals and groups which share its interests in the delivery of primary health care in the community which they mutually serve. Such relationships were reported as areas of difficulty by 76.9 percent of the clinics. The problem most frequently reported by respondents, 76.9 percent, resulted from opposition of primary care providers not connected with the clinics about the new organizational patterns of care used in these programs. Over two-thirds, 69.3 percent, of the clinic directors reported conflict among professionals over control of the clinic, while 7.7 percent reported various other types of conflict among professionals in the community causing difficulties.

TABLE 5

EXTERNAL RELATIONSHIPS BY PERCENTAGE OF RESPONDENTS REPORTING DIFFICULTIES*

Category	Professional Community	Lay Community	Affiliates	Parent Organizations	Community Agencies	Gov't Organizations
Overall Problem Area	76.9	30.8	61.5	30.8	92.3	100
Professional Community Categories:						
Opposition	76.9					
Conflict--Control of Center	69.3					
Other Conflicts	7.7					
Lay Community Categories:						
Community Group Resistance to Provision of Services		30.8				
Community Leaders Resistance to Providing of Services		23.1				
Affiliate Categories:						
Communication Problems			61.5			
Failure of Affiliates to Keep Commitment			30.8			
Parent Organization Categories:						
Excessive Guidelines				23.1		
Excessive Regulations				23.1		
Lack of Guidelines				30.8		
Lack of Regulations				30.8		

TABLE 5 (Continued)

	Professional Community	Lay Community	Affiliates	Parent Organizations	Community Agencies	Gov't Organizations
Community Agency Categories:						
Relation with Tax Supported Agencies					93.5	
Relation with Non-Tax-Supported Agencies					53.8	
Government Organization Categories:						
Excessive Guidelines						76.9
Excessive Regulations						100.0
Lack of Guidelines						38.5
Lack of Regulations						23.1
Conflict Among Agencies						84.6

*All figures are expressed in percentages of the 13 clinics participating in the questionnaire survey.

Lay Community

The clinic also has dealings with lay individuals and groups within the community. The lay community has continuing relationships with clinics, ranging from interested civic groups to patients. A total of 30.8 percent of the clinics reported that the lay community was a source of difficulties. Community groups caused problems for 30.8 percent of the respondents. Also, 23.1 percent experienced difficulties because of resistance of lay community leaders to providing services.

Affiliates

Clinics are affiliated with other health institutions in efforts to deliver needed care. Such affiliations were reported as areas of difficulties by 61.5 percent of the clinics. Communication problems were most reported by 61.5 percent of the respondents. Over one-third, 38.5 percent, of the clinics reported difficulties stemming from affiliates misunderstanding their roles, while failure of affiliates to keep commitments was reported as a source of difficulty by 30.8 percent of the directors.

Parent Organization

The clinics receive their regulations and guidelines from the parent organization in order to operate. A total of 30.8 percent of the clinics reported that the parent organization was a source of difficulties. Lack of needed guidelines resulted in hardships for 30.8 percent of the

participating clinics. Nearly one-quarter, 23.1 percent, of the directors reported that excessive guidelines as well as excessive regulations led to difficulties in the operation of their programs. The same number, 23.1 percent, stated that lack of regulations was an obstacle to clinic operation.

Community Agencies

Clinics work in conjunction with various community agencies to provide comprehensive health care. Over nine-tenths of 92.3 percent of the respondents reported difficulties stemming from relationships with such community agencies. Dealings with tax-supported agencies resulted in problems for 92.3 percent of the clinics while relationships with non-tax supported agencies accounted for difficulties in 53.8 percent of the programs.

Government Organizations

Government organizations were reported as a source of difficulties by 100 percent of the respondents. The most commonly expressed complaint, issued by all the clinics, stemmed from excessive government regulations. Over three-quarters, 84.5 percent, of the clinics stated that conflicts among various government agencies was responsible for difficulties. Excessive guidelines resulted in hardships for 76.9 percent of the clinic programs, while lack of guidelines accounted for such hardships in 38.5 percent of the programs. Only 23.1 percent of the clinics reported

that lack of regulations was a source of problems.

C. Financial Management

Direct staffing and construction grants from the federal government are not very important in the operation of the clinic programs. However, a few clinics reported that such grants were a source of financial problems (Table 6).

Federal Staffing Grants

Over one-third of the directors, 38.5 percent, indicated that federal staffing grants were the source of financial problems. Centers reporting such problems pointed out that difficulties rested with the federal programs per se, while only 7.7 percent of the total respondents pointed out that the problems stemmed from their inability to obtain the required matching share of funds.

Patient Fees

Patient fees were a source of difficulties for 92.3 percent of the participating clinics. Difficulty in obtaining payments from patients was the chief complaint, being reported by 76.9 percent of the respondents, while 69.3 percent reported difficulties in obtaining third party reimbursements. The establishment of patient fee schedules was reported as a problem by 46.2 percent of the participating clinics.

TABLE 6

FINANCIAL PROBLEM AREAS BY PERCENTAGE OF RESPONDENTS REPORTING DIFFICULTIES*

Categories	Patient Fees	Services	Staffing Grants
Overall Problem Area	92.3	46.2	38.5
Patient Fee Categories:			
Establishing Fee Schedule	46.2		
Obtaining Payment from Patient's Third Party Reimbursements	69.3		
Service Categories:			
Primary Practitioner		30.8	
Physician Extender		46.2	
Nurses		7.7	
Clinic Support Personnel		46.2	
All Center Services		38.5	
Staffing Grant Categories:			
Matching Funds			7.7
Federal Funds			38.5

*All data are expressed as percentages of the 13 clinics participating in the questionnaire survey.

Analysis of Center Services

Financial difficulties related directly to services were reported by 46.2 percent of the clinics. Services rendered by physician extenders and clinic support personnel suffered and led to difficulties in 46.2 percent of the clinics. A total of 38.5 percent complained of financial hardships stemming from overall center services.

Financial problems resulting from the operation of primary practitioner services were reported by 30.8 percent of the participating clinics. Funds needed to provide nursing services were cited as a problem by 7.7 percent of the clinic directors.

D. General Administration

A number of other problem areas related to administration of the clinics were included in the study: record keeping, meeting demand for services, tax-supported agencies, staffing difficulties, government guidelines, determining need for services, and non-tax-supported agencies. Each of these problems was shared by a majority of the clinics participating in the study.

Record Keeping

Record keeping was reported as a problem by more clinics than any other single issue, with 13 (100 percent) reporting difficulties in this area. An overview of difficulties relevant to record keeping is presented in

Table 7. Over nine-tenths, 92.3 percent, of the clinics indicated that the flow of information between the various services of the clinics was a source of difficulty. Also, 92.3 percent of the clinic directors cited government requirements as a source of difficulties in their record keeping. The development of adequate forms was an obstacle in 69.3 percent of the participating clinics. A lack of standard terminology in preparing records was found in 61.5 percent of the clinics to be a source of problems. Automating the record system was indicated as a problem by 30.8 percent. It is interesting to note that of the seven functional areas of record keeping covered by the study, only confidentiality failed to be a problem common to a majority of the clinics, being reported by 7.7 percent.

Difficulties stemming from record keeping were also explored from the perspective of services offered by clinics. Over eight-tenths, 84.6 percent, of the respondents mentioned such difficulties pertaining to services provided by clinical support personnel and all other clinic services. Record keeping difficulties were reported by 76.9 percent of the directors in regard to services of primary practitioners as well as those of physician extenders. Keeping records for the services of nurses was indicated as a problem by only 7.7 percent of the clinics.

TABLE 7

RECORD KEEPING BY PERCENTAGE OF RESPONDENTS REPORTING DIFFICULTIES*

Category	Percentage of Respondents Reporting Difficulties
Record Keeping	100
Functional Areas of Record Keeping:	
Flow of Information Between Center and Community Agencies	92.3
Government Requirements	92.3
Developing Forms	69.3
Lack of Standard Terminology	61.5
Forms Used in Parent Organizations	46.2
Automating the Record System	30.8
Confidentiality	7.7
Record Keeping Difficulties Regarding Services:	
Clinic Support Personnel	84.6
All Center Services	84.6
Primary Practitioner	76.9
Physician Extender	76.9
Nurses	7.7

*All data are expressed as percentages of the 13 clinics participating in the questionnaire survey.

Meeting Demand for Services

Twelve out of the 13 clinics studied served rural and sparsely populated communities. The only exception served an inner-city population. Complaints common to a large percentage of the clinics (92.3 percent) concerned difficulties in meeting the demand for services emanating from catchment areas, as shown in Table 8. Over nine-tenths, 92.3 percent, of the respondents reported difficulties in providing primary practitioner category of services. Obstacles to the provision of desired physician extenders category of services was noted by 53.9 percent of the participating clinics, while 46.2 percent of the respondents experienced such difficulties in regard to clinical support personnel and administrative personnel categories of services. Difficulties in making nurses category of services available were encountered by only 15.4 percent of the programs.

Tax-Supported Agencies

The clinics work with various agencies to provide community health needs. A majority of the respondents, 92.3 percent, reported difficulties stemming from working with tax-supported agencies. The most common complaint expressed by 92.3 percent of the respondents concerned difficulties in working with tax-supported agencies in providing services in the physician extender category. Over eight-tenths, 84.6 percent, of the clinics experienced

TABLE 8

OTHER AREAS OF GENERAL ADMINISTRATION BY PERCENTAGE OF RESPONDENTS REPORTING DIFFICULTIES*

	Meeting Demand for Services	Difficulties With Tax-Supported Agencies	Staffing Difficulties	Lack of Gov't Guidelines	Determining Need for Services	Difficulties With Non-Tax-Supported Agencies
Overall Difficulty Areas	92.3	92.3	84.6	76.9	61.5	53.8
Primary Practitioner	92.3	76.9	53.9	46.2	38.5	46.2
Physician Extender	53.9	92.3	53.9	76.9	15.4	53.9
Nurses	15.4		7.7		7.7	
Clinic Support Personnel	46.2	84.6	69.3	69.3	53.9	53.9
All Center Services	46.2	84.6	69.3	69.3	46.2	46.2

*All data are expressed as percentages of the 13 clinics participating in the questionnaire survey.

difficulties in the overall clinic services and in clinical support service category because of working with tax-supported agencies. Slightly more than three-fourths, 76.9 percent, of the clinics indicated that working with tax-supported agencies presented problems in providing services in the primary practitioner category.

Staffing

A total of 84.6 percent of the clinics shared staffing problems in providing services. The major complaints were in the categories of clinical support personnel and overall clinic services reported by 69.3 percent of the clinics, respectively. Similar difficulties were reported by 53.9 percent of the respondents for services in primary practitioner and physician extender categories. Only 7.7 percent of the directors reported staffing problems for services in the nurses category.

Lack of Government Guidelines

Difficulties stemming from lack of government guidelines were reported by 76.9 percent of the clinics. As shown in Table 8, service difficulties in clinical support and overall clinic service categories were respectively shared by 69.3 percent of the participating clinics. The chief complaints, indicated by 76.9 percent of the directors, were in the physician extender category of services. Only 46.2 percent of the respondents reported similar problems for services in the primary practitioners category.

Determining Need for Services

Determining need for services was a problem for 61.5 percent of the participating clinics. The most prevalent problems were those of defining requirements for services in the clinical support personnel category, which were mentioned by 53.9 percent of the clinics. Ascertaining the need for overall center services was reported as a source of difficulties in 46.2 percent of the clinics while over one-third of the programs, 38.5 percent, were troubled in defining needs for the services in primary practitioner category. Services in the physician extender category were a problem in this regard to 15.4 percent of the centers, while services in the nurses category were indicated as an area of difficulty by 7.7 percent of the respondents.

Non-Tax-Supported Agencies

As shown in Table 8, the area was reported as a problem by over one-half of the respondents, 53.8 percent. Difficulties in providing services in physician extender as well as those services in clinical support categories were reported by 53.8 percent of the clinics, respectively. Obstacles were encountered in working with non-tax-supported agencies for provision of services in primary practitioner and in all center services categories by 46.2 percent of the participating directors.

E. Overview of Center Services

Services represent one avenue through which general administration, finances, and relationships with government organizations were studied. Table 9 presents a ranking of services according to problems reported by clinic directors in regard to pertinent aspects in the above-mentioned areas.

Services Categories

The number of problems concerning the clinical support category of services was found to be relatively consistent. It was mentioned by more clinic directors as involving difficulties in record keeping, staffing, determining need for services, and dealing with non-tax-supported agencies. On the other hand, this service was fourth among the five elements pertinent to meeting demand for services. This element ranked second in relation to tax-supported agencies and government organizations.

Physician extender was the category of service most often mentioned in regard to problems in both tax-supported agencies and government organizations. This category also ranked relatively high in other respects, i.e., second for meeting demand for services and third in both record keeping and staffing problems. Physician extender category of services was fourth in the number of respondents reporting problems in relationships with government organizations.

TABLE 9

SERVICES RANKED IN ORDER OF NUMBER OF PROBLEMS IN SELECTED AREAS

Services	Meeting Demand for Services	Tax-Supported Agencies	Record Keeping	Staffing	Gov't Organi-zations	Deter-mining Need for Services	Non-Tax-Supported Agencies
Primary Practitioner	1	4	3.5	3.5	4	3	3.5
Physician Extender	2	1	3.5	3.5	1	4	1.5
Nurses	5	5	5	5	5	5	5
Clinical Support	3.5	2.5	1.5	1.5	2.5	1	1.5
All Center Services	3.5	2.5	1.5	1.5	2.5	2	3.5

Both record keeping and staffing difficulties were reported as a problem more often in connection with all clinic services. Also, this category was second in regard to problems of determining need for services, third in both relationships with tax-supported agencies and government organizations, and fourth in both meeting demand for services and in relationship with non-tax-supported agencies.

Meeting demand for services was a problem more often reported in connection with the category of services provided by primary practitioners. Primary practitioner category of services was third in the number of respondents reporting difficulties in determining need for services, and fourth in relationships with tax-supported agencies, non-tax-supported agencies, and government organizations. This service category also ranked fourth in difficulties stemming from record keeping and staffing.

Nurse category of services was the least troubled in all functional areas.

It is of interest to note that finances were not reported as a common problem in all service categories.

F. Fiscal Viability, Efficiency, and Accessibility

The review of literature revealed that East Tennessee health clinics fall under the general category of Community Health Centers designed to deliver primary health care to medically underserved populations.

The United States Department of Health, Education, and Welfare has a responsibility to monitor the performance of the Community Health Centers using uniform criteria. The program priorities on which the criteria indicators are based include:

1. Financial viability (for prepaid Community Health Centers).
2. Efficiency of operation.
3. Accessibility.

Financial Viability

Since East Tennessee primary health clinics are not the prepaid type, this study did not use the program indicators for financial viability constructed by the Department of Health, Education, and Welfare, namely, actual enrollees at the end of grant years as a percentage of minimum break-even enrollment, and percent of operating deficit that is covered by grant funds.[50]

Instead, the study utilized the percent of service-generated revenue to assess the economic viability of the clinics. This source of revenue includes third party reimbursements (insurance, medicare, and medicaid), direct collection from patients and other sources.

Table 10 shows the percent of service-generated revenue

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[50]Bureau of Community Health Services, "Program Indicators," September, 1976 (unpublished data).

TABLE 10

PERCENTAGE OF SERVICE-GENERATED REVENUE, GRANTS, AND DONATIONS

Clinic Type[a]	Medicare	Medicaid	Insurance	Direct	Other*
			Group Practice		
4-A	4.1	10.4	3.6	27	55
5	12	28	7	29	24
Mean	8	19.2	5.3	28	39.5
			Physician Extenders		
1-A	5	10	1	16	68
B	2	13	0	18	67
C	1	15	0	18	66
4-B	1.8	13	0.5	29.7	55
6	0	68	0	10	25
Mean	2	23.8	0.3	18.3	56.2
			Clinic Federations		
2-A	11	22	13	32	22
B	11	23	4	48	14
C	4	28	11	39	18
3-A	15	20	15	50	0
B	15	25	20	40	0
C	10	20	10	60	0
Mean	11	23	12.2	44.8	9
Grand Mean	7	22	5.9	30.3	34.9

[a]The clinics are coded to maintain their anonymity. The numbers 1-6 refer to the directors, while the letters are for the clinics.

*This is revenue from grants, donations, and salaries of professional staff paid by other agencies.

from the components constituting the methods of payment. The mean percent revenue from other sources is highest, 34.9 percent, closely followed by direct collection, 30.4 percent. Direct grants, donations, and in-kind services, such as professional staff whose salaries are paid by the public health department constitute other sources.

The mean percent of the receipts from medicaid users was reported to be 21.9 percent, while the percent revenue generated from medicare users averaged 6.9 percent. The least of these sources was revenue generated from insurance with a mean percent of 5.9.

Efficiency

A commonly made criticism of Community Health Centers is that personnel productivity is below that found in other health provider delivery systems.[51] But the uniqueness of Community Health Centers would not justify such a comparison since the population serviced, the health problems encountered, and, to some extent, the goals established differ among various systems. However, there is a need to assure that services are being provided in an efficient manner to justify continued expenditures for this form of health services delivery.

Table 11 shows the staffing ratios and productivity for the key staff directly involved in patient health.

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[51]Bureau of Community Health Services, "Program Indicators."

TABLE 11

STAFFING RATIOS AND PRODUCTIVITY FOR KEY STAFF DIRECTLY INVOLVED IN PATIENT CARE

	Patients Seen Per PP Hour	Average Cost Per Medical Encounter	Percentage Administrative Personnel Cost	Ratio FTE PP* to Active Registrants	Ratio FTE Clinic Support Personnel to FTE PP	Ratio FTE Nurse to Registrant
Group Practice Clinics						
4-A	2.8	$16.50	16	1:9000	1.7:1	1:9000
5	2.3	$18.00	10	1:1350	2.1	1:1350
Physician Extender Clinics						
1-A	2.5	$18.50	18	1:9000	15:15	
B	2	$19.00	13	1:6000	6:1	
C	2	$22.00	19	1:7500	6:1	
4-B	1.7	$17.90	13	1:1317	5:1	
6	3	$12.50	6	N.A.	3:1	
Clinic Federation						
2-A	1.4	$19.10	22	1:0883	2:1	
B	1.6	$18.00	22	1:3000	4:4	1:3800
C	1.2	$20.80	22	1:6640	10:1	
3-A	2	$19.00	20	1:3000	12:11	
B	2	$19.00	20	1:1000	2:1	
C	2	$16.00	20	1:3000	2:1	

TABLE 11 (Continued)

Clinic Type	Patients Seen Per PP Hour	Average Cost Per Medical Encounter	Percentage Administrative Personnel Cost	Ratio FTE PP* to Active Registrants	Ratio FTE Clinic Support Personnel to FTE PP	Ratio FTE Nurse to Registrant
Norm	2.7	$23.0	15	1:1500	4:1	1:1200
Means	2.5	$17.3	13	1:5175	1.85:1	1:5175
	2.2	$18.0	13.8	1:5954	7:1	
	1.7	$18.7	21	1:2921	5.5 :1	1:3500
Grand Mean	2.2	$18.0	15.9	1:4683	4.9 :1	1:4537

*Full Time Equivalent Primary Practitioner.

The number of patients seen by the hour is a measure of productivity. The group practice type clinics reported highest mean (2.53) for patients seen per primary practitioner hour, followed by physician extender type clinics which reported a mean of 2.24. The lowest mean, 1.7 was reported by clinic federations type.

The average cost per medical encounter for the three types of clinics was about the same, $17.50 for group practice, $18.00 for physician extender, and $18.60 for clinic federations.

The percentage cost for administrative personnel over the total clinic expenditure ranged from 6 percent to 22 percent. Administrative personnel cost was reported highest among the clinic federations type and least among the physician extender type.

The ratio of Full-Time Equivalent (FTE) primary practitioner to active clinic registrants varies considerably, from 1:9000 for group practice and physician extender types to 1:1000 for clinic federations type. The mean ratio for group practice type is 1:5175 while that for clinic federations type is 1:2921.

Group practice clinics reported the fewest number of clinic support personnel used per FTE primary practitioner. The mean ratio of FTE clinic support personnel to FTE primary practitioners was about 2:1 for group practice clinics, 6:1 for clinic federations type, and 7:1 for physician extender clinics.

This study revealed that over 80 percent of the participating clinics do not employ nurses. The group practice clinics employ nurses and their mean ratio of FTE nurse to active registrants is 1:5175. Since physician extender clinics do not have nurses, no ratio of FTE nurse to active registrant was calculated for them. One clinic among the clinic federations employs a nurse and has a ratio of 1:3000 FTE nurse to active registrants.

Accessibility

One of the national health priorities recommended in Section 1502 of Public Law 93-641 is the provision of primary care services for medically underserved populations to help solve the problem of accessibility among other things. This study considered the accessibility of services by reporting the percent of usage by the population's various age groups. It was beyond the scope of this study to evaluate the factors that affect accessiblity, such as travel time, economic conditions, and geographic locations.

As shown in Table 12, the highest mean percent for all clinic users, about 43 percent, was reported by 13-44 age group, followed by 0-12 age group with a mean percent of 25.7. Age group 45-64 years reported a mean percent of 19.5, while 65 years and above reported a mean of 12.12 percent. When this is considered relative to clinic types, the same pattern as reported above is repeated for all three types of clinics.

TABLE 12

CLINIC USE BY PERCENTAGE OF AGE GROUP

Clinic Type	0-12 Years Percentage	13-44 Years Percentage	45-64 Years Percentage	Over 65 Percentage
		Group Practice		
4-A	19.6	47	18.9	14.5
5	N.A.	N.A.	N.A.	N.A.
Mean	19.6	47	18.9	14.5
		Physician Extender		
1-A	41	43	8	8
B	37	43	13	7
C	40	38	12	10
4-B	40	45.6	7.6	6.8
6	30	40	25	5
Mean	37.6	41.9	13	7
		Federation Clinics		
2-A	24	41	22	13
B	20	51	18	11
C	20	43	24	13
3-A	25	35	25	15
B	15	30	35	20
C	15	35	35	15
Mean	19.8	39	26.5	14.5
Grand Mean	25	42.7	19.5	12.1

Summary

This chapter has shown that 17 of the problem areas included in this study are common to a majority of the primary health clinics which participated in this project (Table 13).

The most common problems fell within the area of personnel management. For example, employee orientation was listed as a problem area by all respondents, being reported by 100 percent of the directors. Determining manpower needs, employee recruitment and employee training, also in the area of personnel management, were second in rank, each being reported by 92.3 percent of the respondents. In addition, employee turnover, employee morale and staffing difficulties, in the same area, were each ranked third and reported by 84.6 percent of the clinics, respectively. The remaining one in personnel administration posing problems to a majority of the clinics was less outstanding since employee selection ranked fifth, reported by 61.5 percent of the directors.

A number of external relationships led to problems shared by a majority of the participating clinics. Government organizations, cited by 100 percent of the directors and community agencies, listed by 92.3 percent, ranked first and second, respectively, as problem areas. The professional community ranked fourth as a problem area reported by 76.9 percent of the clinics and affiliates, which posed difficulties to 61.5 percent, were fifth.

TABLE 13

PROBLEM AREAS RANKED IN ORDER OF NUMBER OF PROBLEMS REPORTED

Problem Area	Percentage of Respondents Reporting Problems	General Administration	Personnel Management	External Relationships	Financial Management
Record Keeping	100	1			
Government Organizations	100			1	
Employee Orientation	100		1		
Meeting Demand for Services	92.3	2			
Determining Manpower Needs	92.3		2		
Employee Recruitment	92.3		2		
Employee Training	92.3		2		
Community Agencies	92.3			2	
Patient Fees	92.3				2
Employee Turnover	84.6		3		
Employee Morale	84.6		3		
Staffing Difficulties	84.6		3		
Board of Directors	76.9	4			
Professional Community	76.9			4	
Determining Need for Services	61.5	5			
Affiliates	61.5			5	
Employee Selection	61.5		5		

The same number in general administration areas were reported as a source of problems by a majority of the respondents, also. Record keeping was listed as a problem area by all the clinics, being reported by 100 percent of the directors. This finding is enhanced by the fact that four of the seven functional areas pertaining to record keeping represented problems shared by a majority of the clinics. Questions regarding clinic services also led to findings of interest; four of the five areas in this category were identified as problems by a majority of the respondents. The second largest number of complaints encountered in the study, issued by 92.3 percent of the respondents', stemmed from difficulties in meeting community demand for services while the fourth and fifth ranking areas were the board of directors and determining need for services, mentioned by 76.9 percent and 61.5 percent, respectively.

Only one financial aspect of clinic operation ranked relatively high as a source of difficulties. Patient fees were second in this respect with 92.3 percent of the respondents indicating such problems.

Seventeen of the findings presented in this chapter are noteworthy, not only as related to the participating centers, but also when viewed from the perspective of the entire study population. Since the following areas led to problems in most of the 13 participating clinics, they are

common to a majority of the 17 clinics constituting the study population:

1. Record keeping.
2. Relations with government organizations.
3. Employee orientation.
4. Meeting demand for services.
5. Determining manpower needs.
6. Employee recruitment.
7. Employee training.
8. Community agencies.
9. Patient fees.
10. Employee turnover.
11. Employee morale.
12. Staffing difficulties.
13. Board of directors.
14. Professional community.
15. Determining need for services.
16. Affiliates.
17. Employee selection.

II. IDENTIFICATION OF MAJOR ADMINISTRATIVE IMPACTS

This section answers Research Question II: Are there administrative impacts which are disruptive to the service functions of clinics? Major administrative impacts, for the purposes of this research, have been defined as those administrative difficulties which have been significantly

disruptive to service functions of the primary health clinics. The importance of such difficulties lies in their negative impact upon care provided to the medically underserved as well as efforts to provide preventive and comprehensive health services. These impacts will be presented under the same general categories presented in the first section of this chapter. These are: personnel management, external relationships, financial management, general administration, overview of the clinic services, and fiscal viability, efficiency, and accessibility.

A. Personnel Management

Those activities and concepts of personnel management that pose difficulties which significantly disrupt the clinics' service functions are discussed in this section. These areas have been discussed under the headings of staffing and personnel areas other than staffing.

Staffing

Each staffing area included in this study is discussed in order of the number of major impacts reported, that is, recruitment, orientation, hiring, selection, and determining manpower needs.

Recruitment

Recruitment was reported as making a disruptive impact by more respondents than any other staffing activity,

84.6 percent, as shown in Table 14. About two-thirds, 61.5 percent, of the clinics experienced major difficulties in finding primary practitioners to consider for positions, while about one-fourth, 23.1 percent, of the programs encountered such obstacles in finding administrative personnel.

Orientation

Difficulties with this activity led to disruption in service functions of 46.2 percent of the participating clinics. This activity ranked second in terms of the number of major staffing difficulties reported. Difficulties in orienting administrative personnel to adjust to their new environment led to interference in the provision of services in 23.1 percent of the programs while orientation problems relevant to physician extender workers were reported by 15.4 percent of the directors. The orientation of primary practitioners posed disruptive problems to a small percentage of the clinics, 7.7 percent.

Hiring

Hiring is the activity of employing those candidates which have been determined as qualified to fill open positions.[52] Difficulties with this activity led to disruptions in the service functions of 15.4 percent of

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[52]Yoder, Personnel Management, p. 272.

TABLE 14

STAFFING FUNCTIONS BY PERCENTAGE OF RESPONDENTS REPORTING MAJOR IMPACTS*

Category	Recruitment	Orientation	Hiring	Selection	Determining Manpower Needs
Overall Staffing Functions	84.6	46.2	15.4	15.4	7.7
Individual Personnel Classifications					
Primary Practitioner	61.5	7.7	0.0	0.0	0.0
Physician Extender	0.0	15.4	0.0	7.7	0.0
Nurses	0.0	0.0	0.0	0.0	0.0
Clinical Support Personnel	0.0	0.0	0.0	0.0	0.0
Administrative Personnel	23.1	23.1	15.4	7.7	7.7

*All data are expressed as percentages of the 13 participating clinics in the questionnaire survey.

the participating centers. This activity ranked third in terms of the number of major staffing problems reported. It is interesting to note that it was the only staffing function not reported as an area of difficulty by a majority of the clinics and was, therefore, the only one staffing activity not discussed in detail earlier in this chapter.

The lack of ability to attract available administrative personnel workers to join the staff of the clinics was the only major complaint with regard to hiring, being reported by 15.4 percent of the respondents.

Selection

Major difficulties in determining if applicants were qualified to fill positions at the clinics were reported by 7.7 percent of the respondents. The only complaint, issued by 7.7 percent of the directors, concerned difficulties in the selection of physician extenders.

Determining Manpower Needs

Major problems in determining manpower needs were reported by 7.7 percent of the clinics. The determination of manpower needs for administrative personnel was the only source of complaint, causing major problems in 7.7 percent of the clinics.

Analysis of Personnel Categories

Administrative personnel was cited as presenting major staffing problems to clinics in all five areas of staffing functions. In two staffing activities, hiring and determining manpower needs, administrative personnel was the only source of major problems, causing service disruption in 15.4 percent of the clinics in hiring and in 7.7 percent of the clinics in determining manpower needs. This group was ranked first in relation to orientation and selection and second in regard to recruitment.

Primary practitioners and physician extenders were critical sources of major staffing difficulties in the remaining staffing activities. Primary practitioner categories was the first in recruitment and third in orientation while physician extender category was ranked first in orientation and selection.

Personnel Areas Other Than Staffing

Major impacts related to additional areas of personnel management are discussed. These areas include employee turnover, training, lack of funds, employee morale, and unfilled positions. An overview of these problems is presented in Table 15.

Employee Turnover

The turnover of employees led to major difficulties in more clinics than any of the other general personnel

TABLE 15

PERSONNEL AREAS (OTHER THAN STAFFING) BY PERCENTAGE OF RESPONDENTS REPORTING MAJOR DIFFICULTIES*

Category	Turnover	Training	Lack of Funds	Morale	Unfilled Position
Overall Staffing Functions	69.2	46.2	38.5	23.1	23.1
Individual Personnel Classifications					
Primary Practitioner	46.2	7.7	7.7	7.7	23.1
Physician Extender	23.1	7.7	7.7	7.7	0.0
Nurses	0.0	0.0	0.0	0.0	0.0
Clinical Support Personnel	0.0	7.7	7.7	7.7	0.0
Administrative Personnel	0.0	23.1	15.4	0.0	0.0

*All data are expressed as percentages of the 13 clinics participating in the questionnaire survey.

areas, causing disruption to service in 69.2 percent of the programs. The turnover of primary practitioners is outstanding as a source of disruptive difficulties, with the most commonly encountered problems being present in 46.2 percent of the clinics. About one-fourth, 23.1 percent, of the clinics experienced turnover difficulties with physician extender workers. Only in these two areas of personnel classification that major impacts were reported in regard to turnover.

Training

Major difficulties in training clinic employees were encountered by 46.2 percent of the programs. The training of administrative personnel was the disruptive difficulty more frequently reported, being mentioned in 23.1 percent of the clinics. The remaining one-half of the complaints was equally shared by three other personnel areas, namely, primary practitioners, physician extenders, and clinical support personnel. For each of the personnel areas mentioned, major problems were reported in 7.7 percent of the clinics.

Lack of Funds

A lack of needed funds led to major difficulties in 38.5 percent of the clinics. A lack of funds has proved to be a major cause of disruptive difficulties, even through it was not an area found to be common to a majority

of the programs in terms of total impacts (including both major and minor impacts).

The lack of funds interfered with center services most often in the case of administrative personnel workers, reported by 15.4 percent of the respondents. One-half as many clinics (7.7 percent) experienced major financial difficulties with provision of services by primary practitioners, physician extenders, and clinical support personnel workers.

Morale

Problems stemming from the attitudes of employees toward their work were disruptive to the services provided by 23.1 percent of the clinics. Such problems were equally shared, being reported by 7.7 percent of the directors in services provided by primary practitioners, physician extenders, and clinical support personnel.

Unfilled Positions

Disruptive difficulties arising from shortage of manpower to fill personnel positions were reported by 23.1 percent of the clinics. The only personnel classification outstanding as a source of disruptive unfilled position difficulties was primary practitioners.

Analysis of Personnel Categories

Table 15 shows that major difficulties were reported for all personnel categories in regard to the services provided by primary practitioners, the most frequently mentioned being turnover problems by 46.2 percent of the clinics. Problems related to unfilled positions were the second most frequently reported in regard to primary practitioners.

With the exception of unfilled positions, major difficulties were reported for services provided by physician extenders in four categories of personnel areas other than staffing. One-half (23.1 percent) of the total difficulties encountered in the four areas stemmed from turnover problems. The other half was equally distributed (7.7 percent) among the other three areas.

Three categories, namely, training, lack of funds, and morale, each accounting for major problems in 7.7 percent of the clinics, proved to be a source of difficulties for clinical support personnel workers.

Major administrative personnel obstacles stemmed from training and lack of funds as reported by 23.1 percent and 15.4 percent of the clinics, respectively, while no major problems were reported for services rendered by nurses in any of the problem areas.

B. External Relationships

This section presents a discussion of external relationships in terms of difficulties which are disruptive to the service functions of the clinics. These areas include the professional community, community agencies, the lay community, and government organizations. A composite listing of these disruptive difficulties is presented in Table 16.

Professional Community

Relationships with the professional community resulted in major problems for over one-half, 53.8 percent, of the participating clinics. The most common complaint, issued by 30.8 percent of the respondents stemmed from opposition of other primary care providers not affiliated with the clinics. Conflict among professionals over control of the programs resulted in disruptive difficulties in 23.1 percent of the clinics. In addition, 7.7 percent of the clinic directors reported major problems as a result of other types of conflicts among professionals.

Community Agencies and the Lay Community

Relationships with community agencies and the lay community were not reported to have caused disruptive difficulties.

TABLE 16

EXTERNAL RELATIONSHIPS BY PERCENTAGE OF RESPONDENTS REPORTING MAJOR IMPACTS*

Category	Professional Community	Community Agencies	Lay Community	Gov't Organi-zations
Overall Problem Area	53.8	0.0	0.0	69.2
Professional Community Categories:				
Opposition	30.8			
Conflict--Control of Center	23.1			
Other Conflict	7.7			
Community Agencies		0.0		
Lay Community			0.0	
Gov't Organization Categories Function Areas:				
Excessive Guidelines				53.8
Excessive Regulations				69.2
Conflict Among Agencies				61.5
Lack of Guidelines				15.4
Service Categories:				
Primary Practitioners				23.1
Physician Extenders				38.5
Clinical Support Personnel				46.2
All Center Services				46.2

Government Organizations

The external relationship most often described as leading to major difficulties were those with government organizations. Close to seven-tenths of the participating clinics, 69.2 percent, experienced difficulties in working with government organizations. Excessive regulations were reported by all the clinic directors who complained about major difficulties with their relationships with government organizations. Conflicts among various government agencies resulted in major problems for 61.5 percent of the clinics. Excessive guidelines accounted for complaints from 53.8 percent of the clinics while lack of guidelines led to major problems in 15.4 percent of the clinics.

C. Financial Management

Disruptive problems in financial management were divided into six categories: center services, federal staffing grants, federal construction grants, personnel categories, patient fees, and borrowed funds. Table 17 is an overview of these findings.

Center Services

Very few, 7.7 percent, of the respondents indicated major financial difficulties related to the various clinic services. The same percentage of directors as reporting major problems in all service areas (7.7 percent) complained of obstacles in various services provided by primary

TABLE 17

FINANCIAL PROBLEMS BY PERCENTAGE OF RESPONDENTS REPORTING MAJOR IMPACTS

Category	Services	Federal Staffing Grants	Personnel Categories	Patient Fees	Federal Construction Grants
Overall Problem Area	7.7	23.1	15.4	46.2	15.4
Service Categories:					
Primary Practitioners	7.7				
Physician Extenders	7.7				
Nursing	0.0				
Clinical Support Personnel	7.7				
All Center Services	7.7				
Staffing Grant Categories					
Matching Funds		7.7			
Federal Funds		23.1			
Personnel Categories:					
Physician Extenders			7.7		
Primary Practitioners			7.7		
Nurses			0.0		
Clinical Support Personnel			7.7		
Administrative Personnel			15.4		
Patient Fee Categories:					
Obtaining Third Party Reimbursements				38.5	
Obtaining Payment from Patients				7.7	

TABLE 17 (Continued)

	Services	Federal Staffing Grants	Personnel Categories	Patient Fees	Federal Construction Grants
Construction Grant Categories:					
Matching Funds					0.0
Federal Funds					15.4

practitioners, physician extenders, and clinical support personnel workers.

Federal Staffing and Construction Grants

Federal staffing grants were reported as a source of major difficulties. Almost one-fourth (23.1 percent) of the clinics stated that activities related to matching funds and increasing reporting requirements for federal funds were disruptive to services.

Federal construction funds posed problems to 15.4 percent of the clinics. All directors issuing such complaint pointed to difficulties related to matching funds.

Personnel Categories

Over one-third, 38.5 percent, of the clinics reported financial problems relative to personnel categories. This subject was discussed in detail earlier in the chapter under the heading of Personnel Areas Other than Staffing.

Patient Fees

Patient fees posed problems to 46.2 percent of the clinics. Major difficulties in obtaining third party reimbursement were experienced by 38.5 percent of the programs and major problems in obtaining payments from patients were reported by 7.7 percent.

Borrowed Funds

None of the clinics reported making use of borrowed funds.

D. General Administration

Seven additional areas of clinic operation were studied. These areas are record keeping, meeting community's demand for services, developing services, determining need for services, other problems, maintaining hours of operation, and making potential clients aware of services.

Record Keeping

Record keeping was cited as a source of major problems by more respondents than any other area included in the study, with 76.9 percent of the clinics indicating such difficulties. A listing of the responses pertinent to record keeping is shown in Table 18.

All the clinics (76.9 percent) that experienced major problems in various aspects of record keeping, also cited disruptive difficulties resulting from requirements set forth in government organizations. About one-fourth of the respondents, 23.1 percent, complained of disruptive obstacles caused by flow of information between clinic and community agencies. A lack of standard terminology was indicated as a major problem by 15.4 percent of the directors, and the same number also reported of disruptive difficulties in developing forms. The automation of the

TABLE 18

RECORD KEEPING BY PERCENTAGE OF RESPONDENTS REPORTING MAJOR IMPACTS*

Category	Percentage of Respondents Reporting Major Impacts
Record Keeping	76.9
Functional Areas of Record Keeping:	
Lack of Standard Terminology	15.4
Flow of Information Between Center and Community Agencies	23.1
Developing Forms	15.4
Automating the Record System	7.7
Government Requirements	76.9
Record Keeping Problems Regarding Services:	
Primary Practitioners	30.8
Physician Extenders	7.7
Nursing	7.7
Other Center Services	7.7

*All data are expressed as percentages of the 13 clinics participating in the questionnaire survey.

record-keeping system posed major problems to 7.7 percent of the clinics.

Disruptive record-keeping problems were also studied in terms of individual services offered by the clinics. Services provided by primary practitioners were cited as posing such problems by the largest proportion, 30.8 percent of the respondents. Difficulties with record-keeping activities were disruptive to physician extender, nursing, and all clinic services in 7.7 percent of the programs.

Meeting Demand for Services

About one-fourth of the participating clinics, 23.1 percent, experienced major problems in meeting the community's demand for services (Table 19). Such difficulties were most common in regard to services provided by primary practitioners being reported by 23.1 percent of the directors. The rest of the service elements, physician extender and nursing services, were each reported by 7.7 percent of the clinics as posing major difficulties.

Developing Services

Difficulties encountered in the development of services were described as disruptive to the service functions of programs by 15.4 percent of the respondents. Establishment of primary practitioner services, physician extender services, and clinical support services were mentioned as disruptive difficulties by 7.7 percent, respectively.

TABLE 19

OTHER AREAS OF GENERAL ADMINISTRATION BY PERCENTAGE OF RESPONDENTS REPORTING MAJOR DIFFICULTIES*

Category	Meeting Demand for Services	Develop-ing Services	Maintain-ing Hours of Operation	Determin-ing Need for Services	Making Potential Clients Aware of Services	Other Problems
Overall Problem Area	23.1	15.4	7.7	15.4	7.7	15.4
Service Categories						
Primary Practitioners	23.1	7.7	7.7	15.4	7.7	15.4
Physician Extenders	7.7	7.7	0.0	7.7	7.7	15.4
Nurses	7.7	0.0	0.0	7.7	0.0	0.0
Clinical Support Personnel	0.0	7.7	0.0	7.7	7.7	15.4
All center Services	0.0	0.0	0.0	7.7	0.0	7.7

*Data are expressed as percentages of the 13 clinics participating in the questionnaire survey.

Determining Need for Services

Obstacles encountered in determining the need for clinic services resulted in disruption of the service functions in 15.4 percent of the programs. Determining need for primary practitioner services was the most frequently mentioned in this regard, being reported by 15.4 percent of the respondents. Determining need for physician extender, nursing, clinical support personnel, and all center services was each cited as causing disruption of services by 7.7 percent of the respondents.

E. Other Problems

Other major general administrative problems were reported by 15.4 percent of the respondents. Ambiguous government guidelines were described as major problems in regard to services of primary practitioners, physician extenders, and clinical support personnel, and each was reported by 15.4 percent of the clinics. In this regard, 7.7 percent of the directors cited all other clinic services as a major problem.

Maintaining Needed Hours of Operation

Major problems in maintaining needed hours of operation were reported by 7.7 percent of the respondents. The only area was primary practitioner services, cited by 7.7 percent of the directors.

Making Potential Clients Aware of Services

Obstacles encountered in failure to make potential clients aware of services resulted in disruption of the service functions in only 7.7 percent of the programs. The same proportion of respondents reported major difficulties in making potential clients aware of services provided by primary practitioners, physician extenders, and clinical support personnels.

F. Summary

This section of the chapter has presented findings pertaining to administrative impacts which are disruptive to the service functions of primary health clinics in East Tennessee and which can thus be described as major problems. An overview of disruptive problems reported is shown in Table 20.

The area of personnel administration proved to contain the largest number of problem areas included in the study. Recruitment represented the most commonly reported major personnel problem; it ranked first in the study as a source of major difficulties, being reported by 84.6 percent of the respondents. Employee turnover was described as disruptive difficulty by 69.2 percent of the respondents and ranked 3.5 as a major problem area. Orientation and training of employees were both cited as disruptive difficulties by 46.2 percent of the respondents and thus

TABLE 20

PROBLEM AREAS RANKED IN ORDER OF NUMBER OF MAJOR PROBLEMS REPORTED*

	Percentage of Respondents Reporting Problems	General Administration	Personnel Administration	Financial Management	Relationship External
Recruitment	84.6		1		
Record Keeping	76.9	2			
Government Organizations	69.2				3.5
Employee Turnover	69.2		3.5		
Professional Community	53.8				5
Patient Fees	46.2			7	
Orientation of Employees	46.2		7		
Training of Employees	46.2		7		
Financial Problems Regarding Services	38.5			9.5	
Lack of Funds for Personnel	38.5		9.5[b]		
Meeting Demand for Services	23.1	12			
Staffing Grants	23.1		12		
Unfilled Positions	23.1		12		
Hiring	15.4		16		
Developing Services	15.4	16			
Determining Need for Services	15.4	16			
Construction Grants	15.4			16	
Other Problems	15.4	16			
Determining Manpower Needs	7.7		21		
Hours of Operation	7.7	21			

TABLE 21 (Continued)

	Percentage of Respondents Reporting Problems	General Administration	Personnel Administration	Financial Management	Relationship External
Morale	7.7		21		
Selection of Personnel	7.7		21		
Making Potential Clients Aware of Services	7.7	21			

*Data are expressed as percentages of the 13 clinics participatin in questionnaire survey.

[b]Problem area related to both Personnel Management and Financial Management.

ranked seventh as major problem areas. Lack of funds for personnel was reported as a major difficulty by 38.5 percent of the directors and ranked 9.5. The unfilled position of primary practitioners, reported by 23.1 percent of the directors, was a source of major staffing problems, and ranked twelfth in this respect. Hiring ranked sixteenth as a major problem area, being reported by 15.4 percent of the respondents. Ranking twenty-first, respectively, and reported by 7.7 percent of the directors were determining manpower needs, employee morale, and selection of personnel.

The area of general administration proved to contain several major problems. Record keeping was reported as a disruptive problem by 76.9 percent of the respondents. Government requirements were the most complaint in this regard, issued by over three-fourths, 76.9 percent, of the directors. Meeting the demand for services ranked twelfth as a major problem, being mentioned by nearly one-fourth, 23.1 percent, of the respondents. The sixteenth ranking areas, developing services, determining need for services, and other problems, were reported by 15.4 percent of the respondents, respectively. The remaining two areas of general administration, hours of operation, and making clients aware of services posed major problems to 7.7 percent of the clinics, respectively.

Several types of financial difficulties caused interruption to services. Financial problems, related to patient

fees, ranked seventh and reported by 46.2 percent of the respondents. Financial problems related to various center services and lack of funds for personnel, each ranking 9.5 as a major problem, were mentioned by 38.5 percent of the respondents. Staffing grants were indicated as major difficulties by 23.1 percent of the directors (ranking twelfth) and construction grants by 15.4 percent (ranking sixteenth).

Only two types of external relationships were noteworthy in regard to disruptive difficulties. Relationship with government organizations represented major obstacles to the provision of services in 69.2 percent of the clinics ranking 3.5 in this respect. The professional community was a source of major problems in over half, 53.8 percent of the clinics, ranking fifth in terms of total problem areas.

CHAPTER V

VARIATION OF MAJOR ADMINISTRATIVE IMPACTS WITH RESPECT TO SELECTED CENTER CHARACTERISTICS

Major administrative impacts--those which cause disruption to the service functions of the primary health centers--were identified in Chapter IV. The questionnaire for collection of data concerning these impacts also indicated data relating to selected center characteristics. It is the purpose of this chapter to present a multi-dimensional cross tabulation of these two sets of data--major administrative impacts and center characteristics--in order to provide information about the extent to which administrative impacts vary with respect to selected clinic characteristics. In this regard, this chapter is a step toward understanding why these major difficulties exist.

The selected characteristics of the clinics to be considered are as follows:

1. Clinic type.
2. Administrative structure.
3. Ownership.
4. Demographic location.
5. Policy-making body.

Each of these characteristics will be discussed in terms of four types of impacts considered in this study: personnel management, external relationships, financial management, and general administration.

I. CLINIC TYPE

East Tennessee primary care clinics are of three types: (1) Group Practice Clinics, (2) Physician Extender Clinics, and (3) Clinic Federations. These have been discussed in Chapter I in the section on definitions.

The number of clinics included in each of these types, for the purposes of this study, is as follows:

1. Two group practice clinics.
2. Five physician extender clinics.
3. Six clinic federation clinics.

Staffing

Analysis of data relating to major staffing difficulties indicated that three of five areas--determining manpower needs, selection, and hiring--were not common, and that the remaining two major problems that were common tended to vary a little with respect to clinic types.

Problem Area	Group Practice	Physician Extender	Clinic Federation
Recruitment	7.7	23.1	30.8
Orientation	7.7	7.7	23.1
Determining Manpower Needs	0.0	7.7	0.0
Selection	0.0	7.7	0.0
Hiring	0.0	7.7	0.0

However, two variations of note are the 1:3:4 ratios

among group practice physician extender, and clinic federation clinics regarding major difficulties in recruitment, and the 1:1:3 ratios regarding major problems in orientation. It is also noteworthy that major problems relating to recruitment are experienced with increasing difficulties, group practice reporting the least, followed by physician extender, and clinic federation reporting the most.

Personnel Areas Other than Staffing

The following data regarding major impacts in personnel areas other than staffing reveal inconsistencies in each problem area with the exception of employee turnover.

Problem Area	Group Practice	Physician Extender	Clinic Federation
Employee Turnover	7.7	23.1	23.1
Training	7.7	0.0	23.1
Unfilled Positions	7.7	0.0	23.1
Lack of Funds	0.0	15.4	0.0
Morale	7.7	0.0	0.0

Although group practice clinics were encountering major difficulties in four of the areas--employee turnover, training, unfilled positions, and morale--of interest was their consistent, relatively small percentage in this category. On the other hand, a relatively large percentage of clinic federations experienced major difficulties in three areas--employee turnover, training, and unfilled

positions. Also, a relatively large percentage of clinics categorized as physician extender clinics have experienced major problems in two of the areas--employee turnover, and lack of funds.

External Relationships

The following figures show that major impacts stemming from external relationships vary to some degree in regard to organizational types of clinics.

Problem Area	Group Practice	Physician Extender	Clinic Federation
Professional Community	7.7	15.4	38.5
Lay Community	7.7	0.0	0.0
Government Organizations	7.7	15.4	46.2

These data reveal two variations: the 1:2:5 ratios among group practice, physician extender, and clinic federation clinics regarding major problems with the professional community, and the 1:2:6 ratios with regard to major difficulties encountered with government organizations.

Financial Management

An interesting trend is noted in the following data regarding major problems in financial management.

Problem Area	Group Practice	Physician Extender	Clinic Federation
Patient Fees	7.7	7.7	23.1
Federal Staffing Grants	7.7	15.4	0.0

Federal Construction Grants	7.7	7.7	0.0
Lack of Funds for Personnel	7.7	7.7	0.0

While a relatively high percentage of clinic federation clinics have experienced major difficulties in one (patient fees) out of four, a relatively low percentage of both group practice and physician extender clinics have encountered major problems in four problem areas.

General Administration

A trend almost similar to that noted above is found in the following data concerning major impacts in the area of general administration.

Problem Area	Group Practice	Physician Extender	Clinic Federation
Record Keeping	7.7	23.1	46.2
Maintaining Needed Hours of Service	7.7	7.7	0.0
Developing Services	7.7	15.4	0.0
Determining Need for Services	7.7	0.0	0.0
Meeting Demand for Services	7.7	15.4	0.0
Making Potential Clients Aware of Services	0.0	15.4	0.0
Other Problems	0.0	15.4	0.0

With the exception of record keeping, in which a relatively high percentage of the clinic federation clinics

have experienced major problems, this organizational type has not encountered major problems in the rest of the general administration areas studied. Programs based in physician extender clinics ranked higher in reporting disruptive difficulties than clinics in group practice in almost all areas of general administration, except one--determining need for services.

II. ADMINISTRATIVE STRUCTURE

With regard to administrative structure, the participating primary care centers belong to two categories: (1) independent centers, (2) centers classified as "others." The latter category consists of centers that are administratively linked to two or three others, a satellite to a medical center, and a clinic administered by the Public Health Department.

The number of centers included in each of these categories is as follows:

1. Five independent centers.
2. Eight classified as others.

Personnel Management

Staffing. Analysis of the data relating to major staffing difficulties indicated that such problems tended to be inconsistent with respect to administrative structure.

Problem Area	Independent Clinics	Others
Determining Manpower Needs	7.7	0.0
Recruitment	0.0	53.9
Selection	7.7	0.0
Hiring	7.7	0.0
Orientation	7.7	30.8

Two variations of note in the above figures are the ratios of approximately 54 to zero and four to one between independent centers and those categorized as others regarding problems in recruitment and orientation, respectively.

Personnel Areas Other than Staffing

In contrast to the staffing functions, the following data regarding major impacts in personnel areas other than staffing reveal consistencies in each problem area.

Problem Area	Independent Clinics	Others
Training	0.0	30.8
Turnover	0.0	30.8
Morale	0.0	30.8
Unfilled Positions	0.0	30.8
Lack of Funds	7.7	7.7

Of special interest in the above figures is the ratio of approximately 31 to zero between independent centers and those classified as others in four of the problem areas.

External Relationships

The following figures show that major difficulties stemming from external relationships do not vary considerably in regard to administrative structure.

Problem Areas	Independent Clinics	Others
Professional Community	23.1	30.8
Lay Community	7.7	0.0
Government Organizations	38.5	30.8

Consistencies in the data regarding major problems in external relationships are evidenced by the ratios of three to four, eight to zero, and five to four between independent centers and those categorized as others in their relationships with the professional community, the lay community, and government organizations, respectively.

Financial Management

The following data reveal certain variations in major financial problems with respect to the two administrative types.

Problem Areas	Independent Clinics	Others
Patient Fees	15.4	30.8
Federal Staffing Grants	15.4	7.7
Federal Construction Grants	7.7	7.7
Lack of Funds for Personnel	7.7	7.7

Independent centers ranked lower in terms of the percentage of centers experiencing major problems with patient fees while centers classified as others ranked lower in major problems stemming from Federal Staffing Grants.

General Administration

Findings about disruptive difficulties in general administration as related to administrative structure are interesting in terms of consistency.

Problem Areas	Independent Clinics	Others
Record Keeping	38.5	30.8
Maintaining Needed Hours of Service	7.7	7.7
Developing Services	7.7	15.4
Determining Need for Services	7.7	7.7
Meeting Demand for Services	7.7	15.4
Making Potential Clients Aware of Services	7.7	7.7
Other Problems	7.7	7.7

Data related to record keeping, one of the most prevalent problems studied, show only slight variations in major difficulties between the two administrative structures. The percentage of centers reporting major problems is relatively low with respect to remaining problem areas, and almost evenly shared between the two administrative types.

III. OWNERSHIP

Questionnaire for information concerning ownership was included as a vehicle for analyzing the extent to which the major impacts varied. Six categories of ownership were included: (1) city, (2) county, (3) state, (4) federal, (5) proprietary, and (6) others. Inspection of the data did not reveal different ownership categories as all the clinics reported that they belonged to "other" category. Since all the clinics belonged to similar ownership type, discussion of how the impacts varied relative to ownership categories was not justified.

IV. DEMOGRAPHIC LOCATIONS

In this study, participating primary care centers identified with two demographic categories:

1. Catchment areas which are composed of rural and sparsely populated areas.
2. Inner-city--containing older and more densely populated central sections of a city.

The distribution of centers within these demographic categories is as follows:

1. Twelve centers serving rural and sparsely populated areas.
2. One center serving an area classified as inner-city.

Staffing

The following data indicate that major problems encountered in the conduct of certain staffing activities vary according to demographic location.

Problem Area	Rural and Sparsely Populated	Inner-City
Determining Manpower Needs	0.0	7.7
Recruitment	61.6	0.0
Selection	0.0	7.7
Hiring	0.0	7.7
Orientation	30.8	7.7

The data concerning the recruitment of employees, showing a ratio of approximately 62 to zero between the rural and sparsely populated and inner-city classifications, show a marked difference noted, followed by the data concerning the orientation of new employees, showing a ratio of four to one. However, the inner-city clinic alone experienced major problems in the areas of determining manpower needs, selection, and hiring.

Personnel Areas Other than Staffing

Inconsistencies in the following data, however, suggest that major problems in personnel areas other than staffing vary with respect to demographic locations.

Problem Area	Rural and Sparsely Populated	Inner-City
Training	30.8	0.0
Employee Turnover	53.9	0.0
Morale	7.7	0.0
Lack of Funds	7.7	7.7
Unfilled Positions	30.8	0.0

Centers serving rural and sparsely populated areas consistently rank high in regard to major problems in employee training, turnover, and unfilled positions. It is of interest to note that the center serving the inner-city has not experienced major problems in these areas, except in lack of funds, also reported as a source of major difficulties by 7.7 percent of the clinics serving rural and sparsely populated areas.

External Relationships

Consistencies are evident in the data concerning major problems stemming from external relationships.

Problem Areas	Rural and Sparsely Populated	Inner-City
Professional Community	46.2	7.7
Lay Community	7.7	0.0
Government Organizations	46.2	7.7

Relatively large variations exist in the data regarding the professional community and government organizations,

showing ratios of six to one between centers serving rural and sparsely populated areas and the center located in the inner-city.

Financial Management

Data relating to major problems show relatively noticeable differences stemming from specific financial areas with respect to demographic locations.

Problem Area	Rural and Sparsely Populated	Inner-City
Patient Fees	30.8	7.7
Federal Staffing Grants	7.7	7.7
Federal Construction Grants	7.7	0.0
Lack of Funds for Personnel	7.7	7.7

The ratio of four to one between centers located in rural and sparsely populated areas and the clinic in the inner-city should be noted with respect to major difficulties stemming from patient fees.

General Administration

A degree of consistency exists in the following figures pertaining to major difficulties encountered in each of the areas of general administration.

Problem Area	Rural and Sparsely Populated	Inner-City
Record Keeping	61.6	7.7
Maintaining Needed Hours of Service	15.4	0.0

Developing Services	23.1	0.0
Determining Need for Services	15.4	0.0
Meeting Demand for Services	15.4	0.0
Making Potential Clients Aware of Services	7.7	7.7
Other Problems	7.7	7.7

For the most part, the center in the inner-city has not experienced major problems with regard to four of seven general administration areas. However, it is of interest to note that relatively large percentages of clinics serving rural and sparsely populated areas have experienced major difficulties stemming from record keeping.

V. POLICY-MAKING BODY

For the purposes of this analysis, the participating primary health care centers were asked to indicate the types of policy-making bodies which provided guidelines for their operation. Only two types were identified and they are as follows:

1. Twelve centers with policy direction from boards of directors or trustees.
2. One center receives policy directions from a source classified as "others."

The lone clinic identifying with "others," is specified as receiving policy directions from Director, Regional Public Health Department.

Variations exist in the following data relative to all the four types of impacts--personnel management, external relationships, financial management, and general administration--considered in this study (Table 21).

It is noteworthy that the clinic receiving policy guidelines from the category classified as "others," has not experienced any major problems whatsoever in all the problem areas. However, it is of interest to note that relatively high percentage of the clinics receiving policy guidelines from local board of directors experienced major difficulties stemming from recruitment, government organization, record keeping, and employee turnover.

VI. SUMMARY

This chapter has presented a multidimensional cross tabulation of data pertaining to major administrative impacts on centers and selected center characteristics. The findings indicated major difficulties which tend to vary with respect to some of these characteristics.

Regarding clinic types, two observations of interest are noted. One is the relatively small percentage of group practice clinics which generally experienced major problems in most of the areas. The other is the fact that a relatively large percentage of the clinic federation group experienced major problems in the areas of external relationships and general administration. The variations

TABLE 21

VARIABILITY OF MAJOR IMPACTS BY PERCENTAGE REPORTED BY POLICY-MAKING BODY

Problem Area (Personnel Management)	Board of Directors	Others
Determining Manpower Needs	7.7	0.0
Recruitment	69.3	0.0
Selection	7.7	0.0
Hiring	7.7	0.0
Orientation	38.5	0.0
Personnel Areas Other than Staffing		
Training	30.8	0.0
Turnover	46.2	0.0
Morale	15.4	0.0
Lack of Funds	15.4	0.0
Unfilled Positions	30.8	0.0
External Relationships		
Professional Community	38.5	0.0
Lay Community	7.7	0.0
Government Organizations	61.6	0.0
Financial Manpower		
Patient Fees	38.5	0.0
Federal Staffing Grants	15.4	0.0
Federal Construction Grants	7.7	0.0
Lack of Funds for Personnel	15.4	0.0
General Administration		
Record Keeping	69.3	0.0
Maintaining Needed Hours of Service	15.4	0.0
Developing Services	23.1	0.0
Determining Need for Services	15.4	0.0
Meeting Demand for Services	23.1	0.0
Making Potential Clients Aware of Services	15.4	0.0
Other Problems	15.4	0.0

noted with respect to clinic types do not prove the superiority of one type over the other. It would be misleading to generalize that one organizational type is superior or inferior based on the findings of this study.

With respect to administrative structure, it is found that the participating centers are divided into two. A relatively large percentage of centers classified as others have experienced major problems in personnel management and external relationships.

Concerning demographic location, a relatively large percentage of the centers serving rural and sparsely populated areas (of course, this category constitutes 92.3 percent of all the participating centers), tended to encounter major personnel problems, especially in staffing areas as well as personnel areas other than staffing.

Clinics serving rural and sparsely populated communities also ranked high in major problems with certain areas in external relationships, financial management, and general administration.

Concerning the type of policy-making body, it was noted that centers headed by board of directors ranked high and have experienced major problems in all the areas studied; the only center categorized as "others," has not experienced any major problems in operating the programs. Again, evidence based on these findings is not enough to conclude that centers headed by board of directors are inferior to the clinic classified under "others."

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

This chapter presents the summary of the conclusions drawn from the findings based on analysis of data collected. The chapter is divided into three sections: (1) summary of purposes, procedures, collection of data, and methods used to analyze the data, (2) conclusions, and (3) recommendations for further planning.

Purposes of the Study

The purposes of this study were: (1) to identify administrative impacts common to East Tennessee primary health care centers, (2) to assess the extent to which administrative impacts were disruptive to service functions of centers, and (3) to determine the variability of administrative impacts which may be disruptive of service functions with regard to selected center characteristics. The following questions were posed and answered by the study:

1. Are there administrative difficulties which are common to the majority of the primary health clinics in East Tennessee?
2. Are there administrative impacts which are disruptive of the service functions of the primary health clinics?

3. Do administrative impacts which may be disruptive of service functions of the primary health clinics vary with respect to selected characteristics?

Procedures of the Study

The procedures of the study are summarized as follows:

The investigator sent a letter to each of the center directors requesting their consent to participate in the study. A questionnaire was developed by the investigator and distributed to the center directors.

The questionnaire contained six sections: (1) the personal information which furnished data concerning the director, (2) center characteristics, (3) impacts on staffing classifications, (4) impacts on services, (5) impacts on general administration, and (6) information on the centers' fiscal viability, efficiency, and accessibility. A rating scale to determine the extent to which the impacts were disruptive of services was used: Major Impacts = 2, Minor Impacts = 1, No Impacts = 0.

Collection of Data

The subjects used for this study were six directors of 13 primary health centers in East Tennessee. At the time of this study, there were 17 primary health clinics operating in East Tennessee. Four of the clinics were excluded from the study because they had no directors. Three

directors were each in charge of three clinics, two administered one center each, while two clinics were managed by a director. The questionnaires were returned by the six clinic directors; this represented a 100 percent return rate.

Methods Used to Analyze Data

The data were classified, coded, and tabulated. The computations--percentages, ratios, rank orders, and means--pertinent for the answering of the research questions were manually done by the investigator. A descriptive analysis was used to answer the three research questions. For the purposes of this study, an impact was classified as major if it was a cause of difficulties significantly disruptive of center services. Majority constituted 50 percent or more of the participating clinics which reported impacts in any given problem area included in this study.

II. CONCLUSIONS

This study has attempted to provide answers to three research questions relating to administrative impacts on community primary health care centers in East Tennessee. The first question deals with the identification of administrative impacts which are common to a majority of the primary health centers. The second question concerns itself with the extent to which these impacts are disruptive of the service functions of the health clinics. The

third question investigates whether disruptive impacts vary in regard to selected characteristics of centers.

In answer to Research Question I,

> Are there administrative impacts which are common to a majority of the 13 participating primary care centers in East Tennessee?

analysis of the data revealed that 17 of the 24 administrative areas included in this study posed problems which were common to a majority of the participating primary care centers.

The most common problems were those related to personnel management. Of these, employee orientation posed difficulties to more centers than any other area in this category, being reported by all participaing clinics (100 percent).

The second largest number of difficulties encountered in the study also fell within the area of personnel management and resulted from problems in determining manpower needs, employee recruitment, and training. Employee turnover, morale, and staffing, each ranked third in regard to personnel management. One additional personnel management area, although posing problems to a majority of the clinics, was less outstanding. Employee selection ranked fifth, posing difficulties to a little less than two-thirds of the centers.

Several general administration activities were a source of problems to a majority of the centers. Of these,

record keeping posed difficulties to all the clinics participating in this study. The extent of record keeping programs is highlighted by the fact that problems in four of the seven functional areas pertaining to this activity represented problems that were shared by a majority of the centers.

Occupying the second position with the three areas in personnel management was meeting demand for community services which posed problems to 92.3 percent of the clinics. Board of directors ranked fourth, causing problems to a majority, 76.9 percent, of the clinics, and determining the need for services was fifth posing difficulties in a little less than two-thirds of the programs.

External relationships also resulted in problems for a majority of the centers. Government organizations caused problems in all the centers, and ranked first with employee orientation in the area of personnel management, and with meeting demand for community services in the area of general administration.

Community agencies caused problems in over nine-tenths of the clinics while relationship with the professional community posed such difficulties to over three-quarters of the centers. Problems with affiliates have appeared in slightly less than two-thirds of the centers.

Financial management of the centers ranked relatively low as a source of difficulties. The most and only

disruptive problem in this regard was patient fees which led to obstacles in more than nine-tenths of the clinics. Within the category of patient fees, obtaining payment from patients and obtaining third party reimbursements posed problems to over three-fourths and two-thirds of the clinics, respectively.

It should be noted that a number of the above-mentioned areas have led to problems in more than nine of the 13 participating primary health care centers. Therefore, problems in these areas are common not only to a majority of the participating clinics, but also to a majority of the 17 clinics constituting the population. These problems are:

1. Record keeping.
2. Relations with government organizations.
3. Employee orientation.
4. Meeting demand for services.
5. Determining manpower needs.
6. Employee recruitment.
7. Employee training.
8. Community agencies.
9. Patient fees.
10. Employee turnover.
11. Employee morale.
12. Staffing difficulties.
13. Board of directors.

14. Professional community.

15. Determining need for services.

16. Affiliates.

17. Employee selection.

In answer to Research Question II,

Are there administrative impacts which are disruptive to the service functions of centers?

the findings of this study showed that each personnel administration area in this study posed problems which are disruptive to the service functions of clinics, that is, major impacts. Two of these areas were especially noteworthy since they were disruptive to the service functions to a majority of participating centers. Recruitment was a major problem to over eight-tenths of the centers and employee turnover led to disruptive difficulties in over two-thirds of the clinics.

Also, the study revealed that each general administration area included in this study was a source of problems which were disruptive to the service functions of clinics, that is, major impacts. One of these areas was outstanding since it was disruptive to the service functions of a majority of participating clinics. Record keeping posed problems to over three-fourths of the centers. Other areas were not so outstanding, as meeting demand for services posed a major problem to a little less than one-fourth of the clinics, while developing services and determining need for services posed major difficulties in approximately

two out of 10 centers.

Most areas related to financial management were disruptive to the service functions of the centers, although the problems were not common to the participating clinics. Problems related to patient fees were disruptive in approximately five out of 10 clinics while disruptive difficulties concerning developing services and funds for personnel had affected roughly four of the 10 programs. The remaining two areas in financial management posed major difficulties in less than one-fourth of the centers, from problems in staffing grants in roughly 23 percent of the programs to difficulties connected with construction grants appearing in about 15 percent of the clinics.

Regarding external relations, two areas posed major difficulties to the centers studied. Relation with government organizations ranked high as a source of major difficulties, being reported by over two-thirds of the clinics, while relationships with the professional community had been disruptive in over 50 percent of the centers.

In answer to Research Question III,

> Do administrative impacts which may be disruptive to the service functions of centers vary in regard to selected characteristics of centers?

the findings of this study indicated that there were major administrative impacts which tended to vary with respect to certain selected characteristics of centers.

One point of interest is noted with regard to the

selected center characteristics. With the exception of organizational type which divided the clinics into three types, administrative structure, demographic location, and policy-making body, each separated the clinics into two divisions, respectively. For ownership, there was only one type.

In terms of organizational types, a relatively large percentage of federation clinics tended to encounter some of the major problems, although both group practice and physician extender clinics tended to have major difficulties more frequently.

Regarding administrative structure, the centers were categorized as independent or others. Independent clinics constituted three clinics of the clinic federation type, one of group practice, and physician extender types, respectively. "Others" constituted of one group practice, and three each of physician extender and clinic federation types. A relatively small percentage of clinics classified as independent had experienced major problems in nearly all of the primary areas studied.

The participating centers were also categorized by the type of population they served. They served two types of populations--the inner-city, and rural and sparsely populated areas. Although the major impacts did vary with respect to the two demographic locations, the number of clinics in each demographic location would render any

comparisons unfair either by intensity or frequency of the major problems encountered. Twelve centers were located in rural and sparsely populated areas while one clinic was in the inner-city. However, it should be noted that the center serving the inner-city had experienced major problems in all the primary areas included in this study, although the percentage of other centers reporting major difficulties was relatively larger.

Pertaining to the type of policy guidance provided, again, centers were divided into two--those which received their policy guidelines from board of directors, and those classified as "others." A center alone was under "others." This center had not encountered any major problems in any of the primary areas included in this study--personnel management, external relationships, financial management, and general administration. Although the centers that received their policy guidance from board of directors had encountered all the major problems in this respect, it should be emphasized that recruitment in personnel management and record keeping, in the area of general administration, had caused disruptive difficulties in slightly less than three-fourths of the clinics, while relationships with government organizations had caused major problems in slightly less than two-thirds of the centers.

In assessing the economic viability of the clinics, analysis of the data revealed that the clinics depended

heavily on grant subsidies, as slightly over one-third of their revenues came from this source. With the exception of one clinic whose third party reimbursements contributed to 68 percent of its total revenue, the rest of the clinics generated relatively small percentage of their revenue from third party reimbursement. However, clinic federations appeared to be the most self-supporting as more than 40 percent of its average revenue was generated from direct payments while only nine percent represented grant subsidies. In other areas of revenue sources--medicare, medicaid, and insurance--clinic federations, on the average, also generated more revenue when compared to the other clinic types.

Regarding productivity of key staff, the findings showed that a majority of the clinics did not meet the national norms on all areas considered in this study. In over 80 percent of the clinics' patients seen per primary practitioner hour were less than the national average of 2.7 patients per hour. All the clinics charged less than the national average of $23.50 cost per medical encounter, while over three-fourths of the centers spent above 15 percent of their revenue--the national average cost--to keep their administrative personnels. In most of the centers, the ratios of Full-Time Equivalent (FTE) primary practitioner to active registrants was higher than the national average of one to 1500. Less than one-third of the clinics

had a ratio of FTE clinic support personnel to FTE primary practitioner higher than the national norm of four to one. Three of the clinics used the services of nurses, and their ratios of FTE nurse to registrants was higher than the national average of one to 1200.

With respect to accessibility to the clinics, analysis of data showed that on the average, 43 percent of the clients, age 13 to 44 years, had access to the clinics. The next highest users were those age zero to 12 years with average of 26 percent, while the age group of 45 to 64 years averaged about 20 percent. Those over 65 years of age had the least access to the clinics, averaging about 12 percent.

III. RECOMMENDATIONS

One of the objectives of this study was to examine the administration of East Tennessee primary health clinics as to their capacity to perform primary care functions as effectively as the disappearing family physician. Such examination extends far beyond the scope of this study. It is hoped that this document will kindle stimulus to other researchers for future study and that the findings will offer assistance in the conduct of such research.

The administrative difficulties identified in this study can serve as a systematic approach for future research projects in the area of primary health care

delivery systems. Future projects could not only undertake to determine the reasons why administrative difficulties exist but also could offer remedies. Of particular concern are major problems which occur in relatively large percentage of the primary health clinics. Two of these are recruitment of primary practitioners and record keeping. Valuable contributions to the community primary health clinic movement could be made of in-depth studies of ways of attracting primary practitioners in rural and economically depressed areas as well as studies of problems in automating the record system and in meeting government requirements.

This study has also analyzed the extent to which the participating clinics are fiscally viable, productive, and accessible. Future studies can build upon these pieces of information in an effort to determine why most of the clinics fail to meet the national norms in these assessments. A valuable research project might be the determination of why there is relatively low revenue generated from third party reimbursement. It would likewise be of benefit to pursue in depth the reasons why clinics serving the inner-city tend to have difficulties in financing their programs.

In addition, this study analyzed the extent to which administrative difficulties vary with respect to selected clinic charactersitics. It would be a valuable contribution to community primary health clinic movement to determine

why such variations occur. Another useful research project might be the determination of why group practice clinics tend to rank low in terms of personnel management difficulties encountered.

Another research project that could be useful is a study on the technique of maximizing revenues of all sources of monies that may legitimately come to the programs and of developing methods of obtaining the maximum from each source. For example, the organizational types could be studied in depth as to their qualifications for arrangements that may promise higher revenues. Similarly, clinics in the rural and sparsely populated areas could be so structured as to qualify for reimbursement to provide comprehensive benefits to Medicare and Medicaid clientele. A legislative action may be necessary as the State of Tennessee is one of several states with low Medicare/ Medicaid eligibility coverage.[53]

Also, an in-depth study as to the reasons why clinic federation clinics rank high in terms of major external

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[53]Source: Social and Rehabilitation Services, "Public Assistance Recipients of Money Payments," Public Assistance Statistics, State and Other Areas, 1971 and other monthly reports (Washington, D.C.: U.S. Office of Economic Opportunity) (unpublished data); "Persons and Families Below Low Income Level by State, 1969." U.S. Census of Population 1970, Vol. 1 (Washington, D.C.: U.S. Bureau of the Census, 1970); "Persons Between 100 Percent and 125 Pervent of Low Income Level," Current Population Reports, Series P-60, No. 81 (U.S. Bureau of the Census, 1970).

relationships with the professional community and government organizations would be beneficial.

Other questions which might provide useful answers concerning the operation of East Tennessee primary health clinics are:

1. Why do physician extender clinics rank high in major problems within the areas of general administration?
2. Why do independent clinics tend to rank low in major personnel management while clinics classified as others rank high?
3. Why potential clients are not aware of services provided by the clinics?
4. What changes in power relationships are required to achieving the goals of altering the behavioral and attitudinal patterns necessary for fashioning primary health care systems?

The importance of research projects aimed at providing answers to these and other related questions could not be overemphasized, especially if they were pursued in the relatively near future. The primary care center movement is in a state of transition--a transition from a conceptual model to a functional reality. It is at this point in time that research efforts can best assist to ensure a more orderly growth of this important movement and help individual primary health care clinics in accomplishing their

basic goal--the provision of a wide range family-oriented, ambulatory health care service to communities thought of as medically underserved.

CHAPTER VII

EPILOGUE

For many years, American citizens have been lobbying the federal government to adopt policies which would result in good health care for the medically underserved and economically depressed populations, both rural and urban. While these efforts, particularly with regard to nationalization of the health care delivery systems are being debated, individual communities with the support of state and local governments are doing what they can to meet their health needs.

A newly emerging model of health care delivery which holds promise for medically underserved communities is the primary health care center. Although primary health care centers have some common characteristics, they take a variety of forms throughout the United States. Some are fixed (Davis and Marshall, 1977) facilities, while others use mobile vans to rotate their small communities on a schedule basis. Some are freestanding health centers, others are satellites of a group practice, a comprehensive health center in a large town or a community hospital. Some health centers have affiliated with other primary health centers to share physician personnel or administrative services. Davis and Marshall further pointed out that part-time physician services may be obtained from

private practicing physicians in more distant, large communities from medical school faculty, National Health Service Corps physicians, or physicians directly employed by the primary health center. Most of these characteristics are typical of East Tennessee primary health care centers.

While the primary health care center movement is basically advantageous for many communities, this approach to health care has several inherent drawbacks. One major difficulty is in the area of management. Literature search has revealed that emphasis placed upon good management provided by non-physician, trained administrators has been a major strength of the group practice approach to primary health care delivery. Davis and Marshall explained that in some cases physicians were at first reluctant to add administrators for fear that this would reduce physician income. The authors went on to say that after trying the approach, physicians were convinced that physician incomes rose rather than decline through the acquisition of skilled administrator. In addition, they observed that the removal of the paperwork burden and duties of collecting patient revenues made physicians generally more satisfied with rural practice. In conclusion, the writers noted that efficient management of the practices made the centers financially viable even in fairly low income areas.

The purposes of this research project were threefold:

1. To identify common administrative difficulties to

primary health care centers in East Tennessee.

2. To determine if such difficulties were disruptive of service functions of centers.
3. To assess the extent to which the difficulties varied with respect to selected center characteristics.

Data relating to the above were collected through a questionnaire administered to center directors participating in the study.

Analysis of the data produced the following results:

1. Seventeen of the 24 problem areas included in this study were common to a majority of the clinics, and 13 of these problems were in management.
2. Twenty-three of the problems were disruptive to the service functions of the centers, and 21 of them were related to management. These findings ostensibly support the need for more efficient management of the primary care clinics studied. As communities establish primary health centers they should be aware of the difference that good management makes in the delivery of quality care, and should confront the reality of the need before entering into the business. One of the tenets stemming from this study is that the health care executive must assume the responsibility for

> efficient organization and management of health care delivery. Regardless of the form the emerging system may take, the responsibility for increased efficiency and productivity of the various health occupations within an organizational framework will rest with the health care executive.

In Health Strategy Game: Challenge for Reorganization and Management, Hepner and Hepner (1973) contend that the major cause of this country's health care problems and dilemma is the absence of national health leadership. Hepner blamed this condition on the fact that everybody appears to have a strategy and all wish to play the game but no person or group has been willing to assume the necessary and vital leadership to reorganize the health care system.

The field of health administration is relatively new. Only in the last quarter of a century have professional health administrators been trained. But the relative newness of the profession should not obscure the role of health administrators as leaders and managers. The business executive has demonstrated his effectiveness in providing necessary leadership in business firms. Since the professional health administrator is now trained very much like the business executive, managers are challenged to accept the responsibility to direct and support the

health concept. The health manager needs to develop a social consciousness if he is going to provide the necessary leadership. He is the coordinator of diverse interest groups, a long range planner, the determiner of capital funding, and overseer of the operations of the health organization over which he is the manager. These responsibilities single him out as a generalist that leads and develops a community health care system that combines social and environmental concepts to meet national health priorities: (1) easy access to care, (2) availability of comprehensive care, (3) better financing and cost containment, (4) quality care, and (5) better utilization of health manpower.

Ill-planned funding has often rendered the solution of the nation's health problems illusive. Time and time again the federal government has "pumped" money into health programs only to discover that more complex problems were created than were set to solve. This study revealed that the quality of health care in the participating clinics was not at stake because of lack of funds as it was because of other managerial difficulties.

The author agrees with Levey and Loomba (1973) that the health administrator can be effective only if he views his job as a manager--not as an administrator. They distinguished between manager and administrator as of philosophy and scope. The manager in this context is

concerned not only with the implementation of policies but also with formulation of those policies. An administrator, on the other hand, is conceived as one who implements policies but usually does not formulate them. Dual action implications of the role of a health administrator are noted by Levey and Loomba. First, they recommend that the modern student of health administration prepare himself to be a manager and, therefore, ought to familiarize himself with the philosophy, potential, and limitations of various schools of management. Secondly, he should assume leadership in creating, reshaping, and improving the organizational climate of health institutions in order to move the field towards such an orientation.

The author acknowledges that this view tends to be simplistic in the light of the social, economic, and political environment in which the community health care centers operate in medically underserved and economically depressed areas. The complex phenomenon which is characteristic of management is by no means diminished in the argument presented here. Management involves a process of effective integration of the efforts of a purposeful group whose members have a common goal. The goal of efficient delivery of health care, irrespective of the environment, therefore, cannot exist in a management vacuum. According to Levey and Loomba:

> Management is not a static concept; it is rather a dynamic process which takes place in a social and

> political world. Management both creates and controls "change." With the ever-increasing rate of social and technological developments that are taking place in our time, management is the central activity needed for human survival. Without management and the resulting order of things, the whole social structure will collapse. Management pervades all aspects of human life and the process of management takes place at all levels of human interest and cooperative systems. All activities performed in a system involving two or more people require management for their effective and efficient execution. This is as true for a hospital as it is for a business form or a government agency. Any organization, producing goods or services must essentially perform the same basic functions: securing sufficient financial resources; recruiting, training, and developing manpower; acquiring the materials, tools, and machinery; organizing the capabilities; producing goods or services; arranging distribution channels; engaging in research and development; and in general planning for the survival and growth of the organization.[54]

While the author does not pretend that management is a panacea, the above quote is very applicable to the health care because of the rapid change that is creeping into the system. To effect the desired change will require the physician, administrator, the politician, and the consumer to adopt one mission, one goal, that is, to provide quality care at an affordable cost for every citizen in this country.

Executive management is most efficient in an environment of effective policy-making body--board of directors. In any organization, the board of directors is responsible

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[54]Samuel Levey and N.P. Loomba, Health Care Administration: A Management Perspective (Philadelphia: J.B. Lippincott Co., 1973).

for much of the character, strength, and decision making that takes place. The quality of decisions and leadership roles reflect the wisdom and clarity with which the policy-making body performs.

Findings in this study revealed that majority of the health centers were experiencing problems stemming from board of directors. Lack of board interest in the center's goals and board involvement in execution as opposed to development of policy were specifically identified as the sources of the difficulties. These problems seem to result from lack of understanding as to what roles board members should play. It cannot be overemphasized, therefore, that board members prepare themselves for board membership. They should understand the reasons for the board existence, have the interest of the organization at heart, understand the goals, objectives and operating procedures, and enhance their general knowledge, interest and concern with reading, sensitivity, study and careful observation.

In addition to a multitude of reasons, having board of directors is consistent with democratic principles of the American society which stresses rule of the people, by the people, and for the people, through representation. Representative government and the process of board control are so anchored in American life that individuals do not make very many public decisions. Thus, if we want to participate in the decision-making process, it is important

that we become knowledgeable about democratic institutions, the structure and functioning of boards.

The existence of boards in most organizations is suggestive of their relevance. Boards exemplify democratic principles for the utilization of collective wisdom. For health programs they would provide the knowledge, insight, and personal contacts of a group of people who are committed, dedicated, and able to help develop policy and direct its course of action. If the competence and contacts of board members are used effectively, boards are powerful means of securing support in the general community. Support and continuous advance in programs depend on the explanation and interpretation of the board.

Whatever methods and criteria are used in selecting a board, there should be a diversity of membership. Age, economics, education, ethnicity, experience, expertise, religion, residence, sex, special interests, and views should be taken into consideration. Selection should consider those who "make things work."

A lot has been written and discussed about what boards should know and must generally do, and in the opinion of the author, strategies should be developed to orient board members to their roles in short training sessions and seminars. The writer presents the following ideas, the origin of which he does not claim, which he considers helpful in improving the operation and

effectiveness of the boards: (1) the patterns and procedures of board meetings should be reduced to routine as far as possible so that constant decisions do not need to be made about them, (2) the board meeting should be a culmination of a long process of preparation, (3) reports made to the board should be as well presented as possible, (4) as much of the meeting time as possible should be reserved for discussion, (5) there should be as much information as possible, and (6) meetings should be kept brief.

It should be recognized that the board is far from being a simple mechanism and that the board is not better than its members. It is also significant to realize man's capacity for continuous intellectual growth. Boards work better if members know clearly waht they are doing and relate effectively to one another. The desired goals of any organization can be attained only as the board and the executive work together carrying out their functions and conscious of a common focus of interest that the goals of particular units are in harmony with the overall goals of the organization.

The three organizational clinic types--group practice, physician extender, and clinic federation, studied in the present investigation, did not reveal marked variations relative to problems encountered. Such a finding would tend to suggest that physician extender and clinic federation clinics which do not have full-time physicians are as

effective in delivering primary health care as group practice clinics with full-time physicians. Unfortunately, primary practitioners in physician extender and clinic federation clinics are legally restrained from delivering certain health services unless endorced by a physician. The effect of such legal restraint seems obvious. Services to clients are delayed and the potential productivity of physician extenders is hampered. In addition, such restraint would tend to down grade the quality of care provided in physician extender and clinic federation clinics. The public should be educated to face the fact that the existing economic conditions in most of the areas served by primary care centers cannot support full-time physicians. Communities served by health centers and other concerned citizens should rise up to the occasion by contacting our legislators to enact a law that would remove the dependency of physician extenders on physicians, at the same time making it clear that physician extenders are no substitutes for physicians.

It is no secret that millions of Americans who are near poor, that is, those whose incomes are just above the poverty level, can ill afford their health care bills. Several near-poor citizens are residents of the same demographic areas as the poor who receive assistance from the state and/or the federal government. Regretably, the rural or the inner-city health clinic takes on the image of a

handout and are understandably shunned by the middle income class and the well to do in the community. Everyone needs maintenance care such as provided by primary health care centers, and that care should be with dignity. A primary health care center should be accessible to all in the community regardless of their social and economic status. Medicare and Medicaid coverages should be extended to include the near-poor, and services provided in primary health centers should be of such quality that attracts the middle income class as well as the rich.

One way of improving the image of primary health centers in rural areas and inner-cities is by using them as a means of economic development. Ferguson[55] has discussed ways this might be achieved. Two of such methods are highlighted.

Ferguson suggested that as customers to local financial institutions, health centers might use such relationships to economic advantage. Banks might be induced to perform services for the center to pay interest on the center's deposits or to make loans to the center on relatively favorable terms. He pointed out how centers might bargain for some advantage to residents of the area by depositing funds only in banks which follow non-discriminatory hiring

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[55]Allen R. Ferguson, "The Role of Neighborhood Health Centers in Economic Development," Neighborhood Health Center Seminar Program Monogram Series, 1972.

practices or which are willing to expand socially desirable loans, such as student, housing, small-business, or minority-business loans.

Another strategy which might contribute to economic development, according to Ferguson, is through leverage in purchasing. He advised that the volume of purchasing done by health centers, individually and collectively, might be large enough to permit them to exercise some influence over local businesses. He recommended the boycott of businesses whose policies the centers deem antisocial, and the use of inducement to encourage local merchants whose policies contribute to economic development. Perhaps the main focus of any attempt at exerting leverage, Ferguson said, should be the realization that the key to the development of economically depressed areas was the existence of opportunities for selling labor services at a living wage. Caution must be exercised, warned Ferguson, as any one of these programs, carried out too far, could itself turn out to be bad economics. He pointed out that buying only from local enterprises might turn out to be supporting local monopolies, and that outside competition is essential to sound economic development in depressed areas.

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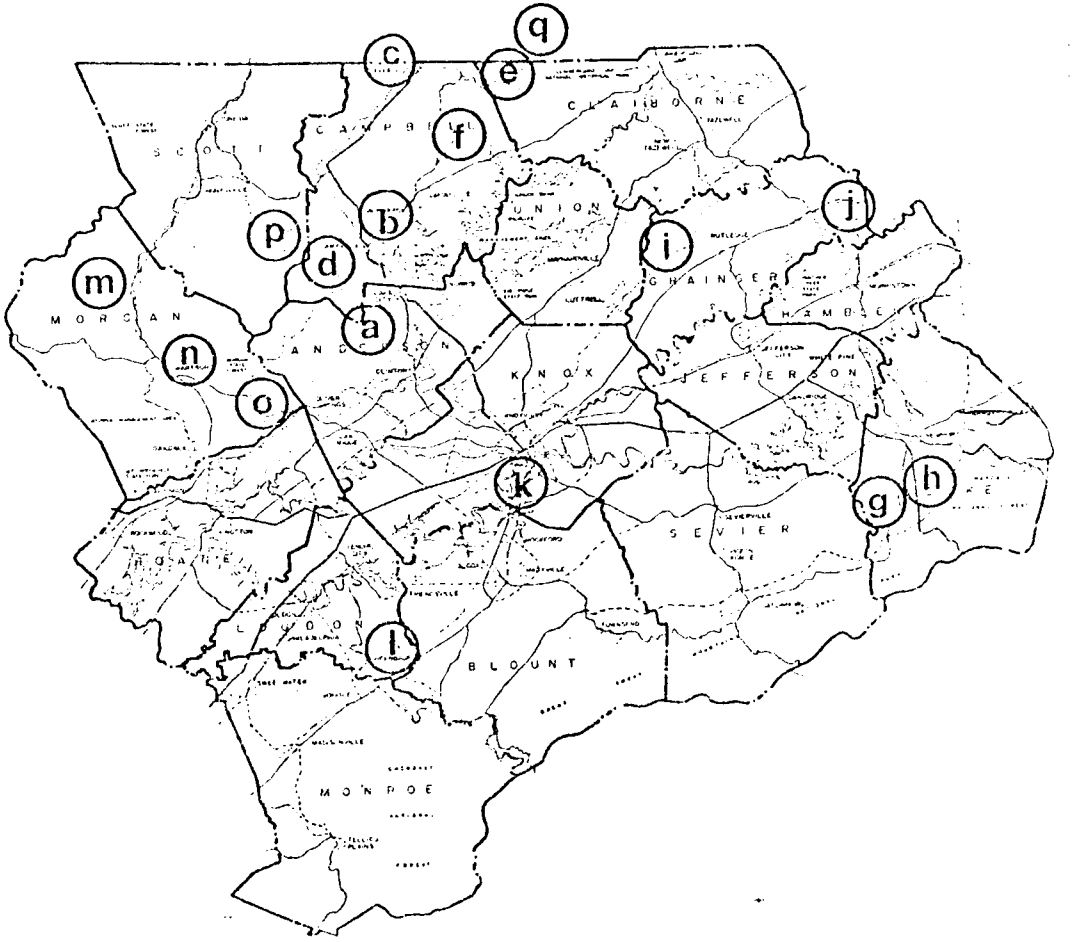
APPENDICES

APPENDIX A

MAP OF EAST TENNESSEE COUNTIES SHOWING HEALTH CENTER LOCATIONS

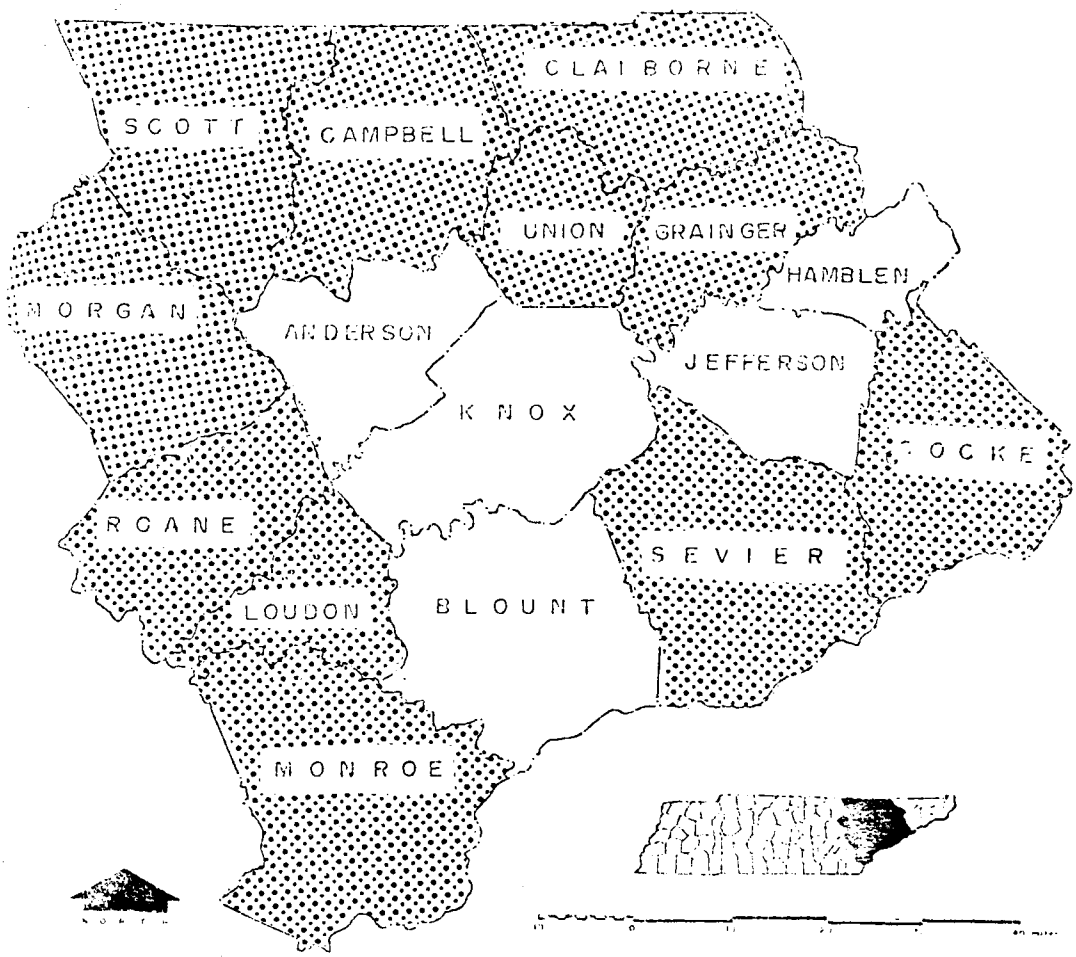
PRIMARY CARE CLINICS IN EAST TENNESSEE



APPENDIX B

MAP OF EAST TENNESSEE COUNTIES SHOWING MEDICALLY UNDERSERVED COUNTIES

MEDICALLY UNDERSERVED AREAS IN THSA - 2



Portions of the following other counties have also been designated as MUAs: Anderson, Blount, Hamblen, Jefferson, Knox

APPENDIX C

PRETEST PARTICIPANTS: DIRECTORS OF OEO NEIGHBORHOOD PRIMARY HEALTH CENTERS

PRETEST PARTICIPANTS: DIRECTORS OF OEO NEIGHBORHOOD

PRIMARY HEALTH CENTERS

1. Economic Opportunity Family Health Center, Inc.
   P.O. Box 663
   Biscayne Annex
   Miami Florida 33152

   Mr. Joseph McConagy

2. Lincoln Community Health Center, Inc.
   P.O. Box 427
   Durham, North Carolina 27702

   Dr. Evelyn Schmidt

3. Mathew Walker Comprehensive Health Center
   1501 Herman Street
   Nashville, Tennessee 37208

   Mr. Gladstone Fairweather

4. Alton Park Comprehensive
   Neighborhood Family Health Center
   100 East 37th Street
   Chattanooga, Tennessee 37410

   Mr. Irwin Overton

5. Park Suvalle Neighborhood Health Center
   1817 South 34th Street
   Louisville, Kentucky 40211

   Mare Goldberg

6. Comprehensive Health Services
   Lister Hill Health Center
   Montgomery, Alabama 36104

   Haynes C. Cyone, M.D.

7. North Memphis Community Health Center
   278 Greenlaw Avenue
   Memphis, Tennessee 38104

   Ms. Ola Campbell

8. Franklin C. Fetter Family Health Center
   49 Nassau Street
   Charleston, South Carolina 29403

   Dr. Leroy F. Anderson

9. Jackson-Hinds Comprehensive Health Center
   P.O. Box 3437
   2875 Delta Drive
   Jackson, Mississippi 39207

   Dr. Aaron Shirley

10. Memphis Health Center, Inc.
    374 East H Crump Boulevard
    Memphis, Tennessee 28126

    Mr. Craig Clark

APPENDIX D

THE QUESTIONNAIRE

DIVISION OF HEALTH AND SAFETY
THE UNIVERSITY OF TENNESSEE
KNOXVILLE

Instructions: 1. Space has been provided for answers. If more space is needed, the reverse side of the sheet may be used.

2. Definitions are provided on a separate sheet for your information.

Sections I and II of this questionnaire are designed to furnish data concerning the director and center characteristics. Confidential treatment will be given to all information which you provide.

Section I: The Director

Age_____ Sex_____

1. Length of experience:

   a) In the center: ____ years ____ months
   b) In another center: ____ years ____ months
   c) Related experience: ____ years ____ months
   d) Please describe related experience:

2. Education and training:

   a) Number of years of school completed ____ years
   b) Degrees held and major field (e.g., M.A. in Sociology) _____

3. How many hours per week do you work:

   a) At this center ____ hours per week
   b) At another center ____ (if applicable) ____ hours per week

4. Which of the following activities did you perform during the past week? Please circle as many as apply.

   a) Patient intake
   b) Diagnosis
   c) Job counseling
   d) Job training
   e) Job development
   f) Educational services
   g) Medical services
   h) Legal services
   i) Emergency services
   j) Social services (housing, welfare, etc.)
   k) Supervision of staff
   l) Management
   m) Clerical, secretarial, bookkeeping, etc.
   n) Maintaining patient records
   o) Research and evaluation
   p) staff training
   q) Community relations
   r) Other (please describe)
      _____

5. For the activities you checked on the preceding page, which one would you say you spent the most time doing?

Section II; Center Characteristics

6. Name of center_____

7. Location_____

8. When did center first offer services?
Month_____ Year_____

9. When did your center's federal staffing grants begin?
Month_____ Year_____

10. Name of organizations which are affiliated with your center by contract or formal agreement for the purpose of providing one or more of your center's services:

a)_____ b)_____

c)_____ d)_____

11. Check each phrase below which is descriptive of the administrative structure of your center program:

a)____ University based
b)____ Medical school based
c)____ Hospital based
d)____ Independent center
e)____ Other_____
(please specify)

12. Check each category which is descriptive of the ownership of your center:

a)____ City
b)____ County
c)____ State
d)____ Federal
e)____ Proprietary
f)____ Other_____
(please specify)

13. Check each phrase below which is descriptive of a significant portion of your center's catchment area:

a)____ Inner-city
b)____ Urban (population over 50,000)
c)____ Suburban
d)____ Small city (population 25,000-50,000)
e)____ Small town (population 5,000-25,000)
f)____ Rural
g)____ Sparsely populated
h)____ Other_____
(please specify)

14. Check each phrase below which is descriptive of groups which formally aid in development of center policy:

a)____ Board of directors (trustees)
b)____ Advisory board
c)____ Steering committee
d)____ Other_____
(please specify)

15. Indicate below the age distribution of your center's clients:

Age	Percent
a) 0-14	_____
b) 15-44	_____
c) 45-64	_____
d) 65 and above	_____

16. What percent of your center's service cost is paid by each of the following methods?

Method of Payment	Percent
a) Medicare	_____
b) Medicaid	_____
c) Private insurance (e.g., Blue Cross/ Blue Shield)	_____
d) Direct payment by patient	_____
e) Other_____ (please specify)	_____

17. The scope of services provided by a primary health center is arranged in these categories below. (Consult the definition on the scope of services.) Indicate the category and percent of total service provided by your center:

Category of Service	Percent
a) Non-urgent care	_____
b) Urgent care	_____
c) Emergency care	_____
d) Consultative care	_____
e) Special service such as social service	_____

f) Non-primary care, e.g., short term hospitalization _____

g) Referrals _____

18. Staffing:

Indicate the number of a) full-time employees (working 35 or more hours per week), b) part-time employees (working less than 35 hours per week), and c) unfilled positions for each job category.

Job Category	Full-Time	Part-Time	Unfilled Position
a) Primary Practitioner			
internists	_____	_____	_____
pediatricians	_____	_____	_____
general practice	_____	_____	_____
family practice	_____	_____	_____
b) Physician Extender			
nurse clinician	_____	_____	_____
medex	_____	_____	_____
physician assistant	_____	_____	_____
nurse practitioner	_____	_____	_____
nurse midwife	_____	_____	_____
c) Nurse			
registered nurse	_____	_____	_____
public health nurse	_____	_____	_____
licensed practical nurse	_____	_____	_____
d) Clinic Support Personnel			
lab technician	_____	_____	_____
x-ray technician	_____	_____	_____
pharmacist	_____	_____	_____
medical recorder	_____	_____	_____
community health advocate	_____	_____	_____
social service	_____	_____	_____
e) Administrative Personnel (please specify)			
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

Sections III and IV of this questionnaire are based on three categories of impacts as defined below. In indicating responses to questions in these sections, please base your response on the definition given.

MAJOR IMPACTS: significantly disruptive of services.

MINOR IMPACTS: not significantly disruptive of services but created difficulties.

NO IMPACT: self explanatory.

Section III: Staffing

Indicate your rating of the impact your center has experienced (past or present) in each of the problems areas listed in items 1 through 10 below with regard to each of the staffing classifications in vertical columns (a) through (e) on the right.

Please use the following rating code:

MAJOR IMPACT - 2 MINOR IMPACT - 1 NO IMPACT - 0

PROBLEM AREAS / JOB CLASSIFICATIONS	(a) Primary Practitioner	(b) Physician Extender	(c) Nurse	(d) Clinical Support Personnel	(e) Administrative Personnel
1. Determining manpower needs					
2. Finding people to interview					
3. Selecting among candidates to offer a job					
4. Hiring candidates when selected for the job					
5. Orienting the employee to the job					
6. Training employees					
7. Employee turnover					
8. Employee morale					
9. Lack of funds					
10. Position has never been filled					

Section IV: Services

Indicate your rating of the extent of the impact (difficulty) your center has experienced (past or present) in the problem areas listed below 1 through 13 with respect to each service categories as represented by staffing needs listed in the vertical column (a) through (e) in the right.

Please use the following rating code:

MAJOR IMPACT - 2 MINOR IMPACT - 1 NO IMPACT - 0

PROBLEM AREAS / SERVICE CATEGORIES	(a) Primary Practitioner	(b) Physician Extender	(c) Nurse	(d) Clinic Support Personnel	(e) All Center Services
1. Lack of governmental guidelines					
2. Difficulties in working with tax-supported agencies					
3. Difficulties in working with non-tax-supported agencies					
4. Difficulties with record keeping					
5. Difficulties with affiliates					
6. Difficulties maintaining needed hours of operation					
7. Financial difficulties					
8. Difficulties in developing the service category indicated					
9. Staffing difficulties					
10. Difficulties in determining the need for services					
11. Difficulties in meeting community demand for the service					
12. Making potential clients aware of services available					
13. Any other problems (please specify)					

Section V: General Administration

Indicate in the right-hand column your rating of the extent of the impact (difficulties) your center experienced (past or present(in each of the problem areas listed in items (A) through (L) below. Please base your response on the definitions given.

Please use the following rating code:

MAJOR IMPACT - 2 MINOR IMPACT - 1 NO IMPACT - 0

	Rating
A. Record Keeping	
1. Lack of standard terminology	_____
2. Confidentiality of records	_____
3. Flow of information between center and community agencies	_____
4. Forms used in core organization or agency	_____
5. Developing forms	_____
6. Automating the record	_____
7. Government requirements	_____
B. The Professional Community	
1. Opposition by professionals not affiliated with your center	_____
2. Objections to your center developing patient fee schedules	_____
3. Conflict over control of center	_____
4. Others conflicts (please specify)	_____
C. Federal Staffing Grants	
(If you have had no staffing grants, omit this item)	
1. Difficulties with matching funds	_____
2. Difficulties with federal funds (please explain)	_____
D. Federal Construction Grants	
(If you have had no construction grants, omit this item)	
1. Difficulties with matching funds	_____
2. Difficulties with federal funds (please explain)	_____

E. Borrowed Funds — Rating

(If you do not use borrowed funds, omit this item)

1. Obtaining funds _____
2. Repayment of borrowed funds _____

F. Patient Fees

1. Establishing patient fee schedules _____
2. Obtaining payment from patients _____
3. Obtaining third party reimbursements _____

G. The Lay Community

1. Community group resistance to provision service _____
2. Community leader resistance to providing service _____

H. Affiliates

(If your center has no affiliates, omit this item)

1. Communication with affiliates _____
2. Affiliates misunderstanding roles _____
3. Failure of affiliates to keep commitments _____

I. Your Parent Organization

(If your center does not have a parent organization, omit this item)

1. Excessive guidelines _____
2. Excessive regulations _____
3. Lack of guidelines _____
4. Lack of regulations _____

J. Government Organizations

1. Excessive guidelines _____
2. Excessive regulations _____
3. Lack of guidelines _____
4. Lack of regulations _____
5. Conflict among agencies _____

K. Local Community Agencies

1. Relationship with tax-supported agencies with whom your center has a close working relationship _____
2. Relationship with non-tax-supported agencies with whom your center has a close working relationship _____

L. Board of Directors — Rating

(If not applicable, omit this item)

1. Lack of board interest in center's goals (serving indigent, for example) _____
2. Board involvement in execution (as opposed to development) of policy _____

Section VI: Fiscal Viability, Efficiency, and Accessibility

Percent

1. What percent of actual cost of service is paid by patients? _____
2. What percent of center's expenditure is supported by third party (insurance, medicare, medicaid, etc.) and direct collection from patients? _____
3. How many patients are seen per primary physician hour? _____
4. What is the average cost per medical encounter? _____
5. What percent of center's expenditure is administrative personnel cost? _____
6. What is the center's ratio of Full-Time Equivalent (FTE) primary practitioners on staff to active registrants? _____
7. What is the center's ratio of FTE clinic support personnel on staff to FTE physician? _____
8. What is the ratio of FTE nurses on staff to active registrants? _____
9. What percent of active registrants use the services of a primary practitioner? _____
10. What percent of active registrants in the following age group use the services of a primary practitioner?

Age	Percent
0 - 14	_____
15 - 44	_____
45 - 64	_____
65 and over	_____

DEFINITIONS

1. Active Registrant: an individual who has had at least one encounter with a primary health center provider in the preceding 18 months.

2. Encounter: a face-to-face meeting between a health care provider and a recipient in which a significant health care service is provided. The provider of care must be acting independently and not just assisting another provider.

3. Medical Encounter: an encounter, other than a home encounter in which medical care is provided (excluding mental health care).

Center Personnel

4. Full-Time Equivalent (FTE): a statistical concept which expresses the time worked by full-time and part-time workers in terms of a standard 40-hour work week. The figure is calculated by dividing the sums of hours worked by 40 (hours) and expressing the result as a decimal fraction. For exampke, if a full-time worker works 35 hours as a full work week, the 35 hours are divided by 40 to obtain .88 FTEs, or if a full-time worker works 20 hours in administration and 20 hours in dental services, the person is .50 FTEs in administration and .50 FTEs in dental services.

5. Primary Practitioner: internists, pediatricians, general practice, and family practice medical doctors and doctors of optometry and physician extenders who provide primary health services to adults and children. For these purposes, obstetrician-gynecologists and other physician specialists are not included as primary physicians. In the calculation of FTE primary practitioners, a physician extender is counted as one-half of a primary practitioner.

6. Physician Extender: a professionally trained provider who will provide services independent of a physician but will usually refer diagnostic problems and serious treatment activities to a physician. Physician extenders have advanced training and may be licensed or certified, depending on state requirements and may include the following personnel: Nurse Clinician, Medex, Physician Assistant, Nurse Practitioner, Nurse Midwife.

7. Nurses: professionally trained personnel who usually assist the physician but can provide health services (encounters) on orders or according to traditional nursing practice. The group includes registered nurses, public health nurse, and licensed practical nurse.

8. Clinic Support Personnel: people assigned to the following cost center: laboratory, x-ray, pharmacy, medical records, and medical. Personnel in the medical cost center would be exclusive of primary practitioners and other physicians.

9. Scope of Services: scope of services include the following:

   (a) Non-urgent care: (including initial health assessments, return visits, prenatal care, well-child care, immunization programs and counseling)--the disorder is minor and not acute. The patient may require attention in a few days or weeks, might be handled by telephone consultation, or might not require any attention at all.

   (b) Urgent care: (includes disease intervention treatment of non-life or limb threatening injuries)--the disorder is acute but not necessarily severe. There is danger to the patient if he does not receive prompt attention; the patient requires medical attention within 12 to 24 hours.

   (c) Emergency care: (includes life-or-death services)--the disorder is acute and potentially threatens life or function. The patient requires immediate medical attention.

   (d) Consultative care: medical and surgical subspeciality services, mental health, and dental health.

   (e) Special services: social service counseling and health education (including nutritional counseling).

   (f) Non-ambulatory care: medical management of short-term hospitalization, discharge planning, extended care, and home health services.

   (g) Referrals: in cases where some of these services cannot be provided at the primary health center facilities, continuity of care is maintained by a formal arrangement with outside resources.

APPENDIX E

LETTER OF TRANSMITTAL TO REQUEST CONSENT OF SUBJECTS

The University of Tennessee
Knoxville
School of Health, Physical Education and Recreation

Division of Health and Safety
1914 Andy Holt Avenue
Knoxville, Tennessee 37916

(615) 974-5041

As a doctoral candidate at The University of Tennessee, Knoxville, I am undertaking a study of "Administrative Impacts on Selected Health Care Centers" in East Tennessee.

The purpose of the study is to assess the impacts of emerging administrative problems as perceived by the center director. As a result, problems in this relatively new area will be identified before patterns of practice become confirmed and recommendations will be made to solve the problems.

The success of the study depends upon the development of a profile of the centers. Such a profile will be compiled using your response to a questionnaire with personal interview regarding your clinic.

Confidential treatment will be given to all information which you provide. Each respondent will receive a report of the findings and conclusions of the study.

Your cooperation will be a key element in the achievement of the goals of this study and will be a significant contribution toward the identification and solution of administrative difficulties encountered by the community-based primary health care centers in East Tennessee.

An addressed, stamped envelope is enclosed for your convenience in replying to indicate your willingness to participate in the study.

Thank you very much.

Very Sincerely,

Monday A. Nwangwa

APPENDIX F

LETTER OF TRANSMITTAL FOR PRETEST OF QUESTIONNAIRE

The University of Tennessee
Knoxville
School of Health, Physical Education and Recreation

Division of Health and Safety
1914 Andy Holt Avenue
Knoxville, Tennessee 37916

(615) 974-5041

We are undertaking a study of "Administrative Impacts on Selected Primary Health Care Centers" in East Tennessee. The study will be based on the administrative problems reported by the center director of the participating health centers in East Tennessee.

We recognize your expertise in primary health center movement and hope that you can help us develop a valid questionnaire which will be a key element in the achievement of the goals of the study.

We are forwarding a draft of the questionnaire to be used in the study. We would appreciate any evaluations you may wish to make with regard to:

a) ambiguous questions;

b) words or phrases that are unfamiliar or objectionable to you;

c) ideas which are not brought out by the questions, and

d) suggestions for improvement in the questionnaire.

Your willingness to participate in this pretest of the research instrument is appreciated.

An addressed, stamped envelope is enclosed for your convenience to return the completed questionnaire to us.

Yours Sincerely,

Monday A. Nwangwa
Project Coordinator

VITA

Monday Achilefu Nwangwa, born May 20, 1942, at Owo Ahiafor (Eastern Ngwa County), Imo State of Nigeria. He attended Government Teachers Training College, Uyo and graduated in 1959. In January, 1960, he began teaching as an Assistant Headmaster in Qua Iboe Church Education Authority and served in that position for one year. The following year he was appointed a Headmaster and worked in that capacity in three different elementary schools until August, 1966. In the meantime, he took overseas correspondence courses which enabled him to pass the University of London General Certificate of Education at the Ordinary and Advanced Levels.

In September of 1966, he entered York College, Nebraska, but transferred to Elizabeth City State University, North Carolina, in Spring of 1968 and received the B.S. degree in Biology/Pre-Med in 1970. He earned his way through college by working at different jobs as operator in an Army Ammunition Plant, a salesman in a publishing company, and as a night manager in a fast food chain.

He started graduate work at Tennessee State University in September of 1970, but withdrew to work as a research technician in the Biochemistry Department of Vanderbilt University from January, 1971 to June, 1972.

In September, 1972, he entered Fisk University as a graduate assistant and received the M.A. degree in

Chemistry in 1974. He worked in a Nashville textile mill as a plant chemist from July, 1974 to August, 1975.

In September 1975, he entered The University of Tennessee, Knoxville, received the M.P.H. degree in Health Planning/Administration in August, 1976, and continued for doctoral studies in Health Education.

In 1977, he was a consultant to Louisville Neighborhood Health Center, Louisville, Kentucky.

In winter of 1979, Mr. Nwangwa was hired as a graduate teaching assistant in the Division of Health and Safety, The University of Tennessee, Knoxville.