This is to certify that the

thesis entitled

UTILIZATION OF A NON-EMERGENT CARE CENTER
IN PATIENTS WITH AN IDENTIFIED PRIMARY CARE PROVIDER

presented by

Kathleen Lynn Boardman

has been accepted towards fulfillment
of the requirements for

Master of Science degree in Nursing

Barbara Given
Major professor

Date 3/17/94

UTILIZATION OF A NON-EMERGENT CARE CENTER IN PATIENTS WITH AN IDENTIFIED PRIMARY CARE PROVIDER

By

Kathleen Lynn Boardman

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE DEGREE

College of Nursing

1994

ABSTRACT

UTILIZATION OF A NON-EMERGENT CARE CENTER IN PATIENTS WITH AN IDENTIFIED PRIMARY CARE PROVIDER

By

Kathleen Lynn Boardman

A descriptive study was undertaken to determine perceived barriers to primary care use in patients with an identified primary care provider who were utilizing a non-emergent care center (NECC). The researcher used a random, convenience sample of 30 adult patients with an identified primary care provider who presented for care at a NECC. Patients completed questionnaires to determine possible perceived barriers to seeking primary care. Melnyk's concepts of barriers to care were used as the framework for this researcher. Patients reported that cost and relationship with provider were not barriers to seeking primary care. In fact, patients reported being quite satisfied with their primary care provider. Site-related barriers to primary care were identified as only a slight barrier by patients. Overall, patients identified the convenience of the NECC as the primary reason they sought care at the NECC.

The NECC was identified as more convenient because of longer operating hours, being open on weekends, no appointment needed at the NECC, and the convenience of the location of the NECC.

ACKNOWLEDGEMENTS

The completion of this thesis would not have been possible without the support of several people. I would like to acknowledge their contributions.

I would like to thank the members of my thesis committee for their guidance and patience: Barbara Given, RN, PhD, FAAN, Thesis Advisor; Sharon King, RN, PhD; Patty Peek, MS, RN; and Charles W. Given, PhD. My thanks also go to Manfred Stommel for his assistance in the analysis of data. My appreciation also extends to Kaye Arnett for preparing the final copy of my thesis.

Sincere thanks go to Nancee Radtke, RN, MSN, Administrative Director of the Ambulatory Care Department at Foote Hospital for allowing me to recruit study participants. I would also like to thank the Ambulatory Care Department triage nurses who assisted me in recruiting participants, especially Deb Mackinder. The patients who agreed to participate and completed questionnaires deserve my gratitude.

Finally, my most sincere thanks and love is extended to my husband, Bernie, and my mom, Carol Larson. Their love, patience, and strong support helped me through this challenge.

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

TABLE OF CONTENTS (continued)

LIST OF FIGURES

LIST OF TABLES

CHAPTER I

THE PROBLEM

Introduction

There is growing reliance on emergency rooms and hospital outpatient departments as the sole source of health care, especially among the uninsured and those receiving Medicare (Kasper, 1987). Yet, emergency departments and outpatient departments do not provide primary care. Usually a patient will see a different provider each time they visit. Each provider has to again develop a history on the patient.

Two studies reported that more than 70 percent of patients visiting a non-emergent care center (NECC) indicated that they had a family physician (Kinney & Gerson, 1983; Rizos, Anglin, Grava-Gubins, & Lazar, 1990). With more than 86.6 million visits annually to emergency departments and NECCs (AHA, 1989), this represents a large number of patients with private health care providers that are not receiving primary care at a particular contact.

One of the dangers associated with increased use of outpatient and emergency services is the lack of continuity of care. This may lead to poorer quality care (Kasper, 1987). There is evidence that continuity of care results in improved patient satisfaction, compliance, and appointment keeping (Fleming & Andersen, 1986).

The increased cost of emergency and outpatient visits is another concern for patients and insurance companies. Often, use of emergency services results in the patient receiving two bills, a physician bill and an outpatient bill from the hospital (Cohen, 1989). Shapiro, Hayward, Freeman, Sudman, & Corey (1989) found that out-of-pocket

expenses significantly affected the decision to seek care. Kasper (1987) found that the cost of care is increased for children whose primary source of care was a hospital outpatient clinic or emergency room when compared to costs for children with a regular primary care health care provider. In an era of growing concern for health care cost containment, providing quality care at the lowest cost is a major focus for health care providers.

Finally, the effect of different family structures on utilization of health care has not been thoroughly documented. With increases in both dual-income families and single-parent families, changes in patterns of utilization of primary care may occur.

Primary health care is defined by consumers as "accessible around the clock, available in a place where it is easily reached . . ., and is affordable" (Fagin, 1977, p. 35). Patients may be seeking care at emergency departments or NECCs because they perceive barriers in access to primary care.

This researcher will look at specific perceived barriers that cause patients to seek alternate, and perhaps more costly, care in NECCs. Implications for how these patient perceptions might affect the delivery of primary care will also be addressed. Melnyk's (1988) constructs of barriers to seeking preventive care will be the basis for this study.

Melnyk (1988) has identified five specific barriers to seeking preventive care. These are cost, site-related, relationship with provider, inconvenience, and fear barriers.

Although Melnyk used these constructs in relation to preventive care, apparently the barriers could also be used to describe barriers to

seeking primary care in general. Preventive care is one component of primary care.

As will be discussed further in Chapter II, the barriers of inconvenience and fear are not adequately defined by Melnyk. As currently defined, there is overlap with site-related barriers and with relationship with the provider. For this study, inconvenience barriers will be combined with site-related barriers and fear barriers will be combined with relationship with the provider.

Barriers to Seeking Care

Cost

Cost is defined as "the amount . . . paid for something" and the "outlay or expenditure . . ." (Webster, 1972). Out-of-pocket costs, inadequate or lack of health insurance, and lost work time costs have been specifically identified as barriers to seeking care and will be explored more thoroughly.

Shapiro, Ware, & Sherbourne (1986) found that as out-of-pocket costs increased, there was a decrease in utilization of health services for both serious and nonserious symptoms for patients with co-pay insurance or no insurance. Tucker and Tucker (1985) found that users of walk-in clinics expect lower costs in those sites than in physician offices. Other researchers found that users of walk-in clinics are more likely to be lower in income than patients who utilize private physicians (Carroll & Gagon, 1983; Woodside, Nielsen, Walters, & Muller, 1988) and therefore may not be able to afford private physicians who often demand payment upon service.

Inadequate health insurance or a lack of insurance is another possible barrier to seeking primary care. Aday, Fleming, & Andersen

(1984) found that the type of insurance affected utilization of primary care. Others found that the increased out-of-pocket costs associated with Medicare and Medicaid were a barrier to seeking primary care (Shulman, Martinez, Brogan, Carr, & Miles, 1986; Stefl & Prosperi, 1985). However, Branch, Jette, Evashwick, Polansky, Rowe, & Diehr (1981) found health insurance coverage to have little affect on elders' utilization of hospital and physician services.

Lost work time costs may also be a factor for a segment of the working population. This may be especially true for dual income families or single parent families. It may be difficult to take time off work to go to a private physician. Users of walk-in clinics tend to be employed in blue collar occupations (Carroll & Gagon, 1983; Woodside et al, 1988). Since urgent care centers offer varied operating hours, they may be more available to some populations than the traditional eight-to-five hours when physicians' offices are open.

In a study conducted by Ortinau (1986), respondents felt that the cost of a NECC would be less than a hospital emergency room. However, these same respondents felt that the cost of seeing a private physician would be less than going to a NECC.

There are many potential cost-related barriers to seeking primary care. These barriers may include out-of-pocket expenses, lack of or inadequate health insurance, and lost work time costs. This researcher will examine these potential barriers as part of this study.

Site-Related Barriers

Site-related barriers can be defined as observable characteristics of the specific health care delivery system (Melnyk, 1988). Two

potential site-related barriers have been consistently identified. These barriers are appointment time and transportation/location.

Limited office hours by private physicians have been identified as a significant barrier (Antczak & Branch, 1985; Jacoby & Jones, 1982; & Pisarcik, 1980). Further, a wait for an appointment was also found to be a deterrent by Grembowski & Conrad (1986) and O'Grady, Manning, Newhouse, & Brook (1985). Tucker & Tucker (1985) found patients were seeking more flexible hours. Miller, Lairson, Kapadia, & Kennedy (1985) found that extended waiting times after arriving for appointments at the regular provider prompts some patients to seek less time consuming care at NECCs.

Location and a lack of transportation were found to be barriers by Antczak & Branch (1985) and Aday et al. (1984). Since urgent care centers are usually located in urban areas, they are often more easily accessible to all populations by public transportation. Poland, Ager, and Olson (1987) found that 36 percent of the pregnant women in their study sought prenatal care at a NECC because of convenient location, no appointment was needed and perceived lower cost compared with a physician's office. Similarly, in a study conducted by Rizos, Anglin, Grava-Gubins, & Lazar (1990), patients with a regular provider also reported that convenient location of the NECC, unavailability of their regular provider, and that no appointment was needed at the NECC were the most common reasons given for seeking care at a NECC.

Relationship with Provider

Relationship with the health care provider can be defined as the comfort level a patient feels with their provider. Jacoby & Jones (1982) and Pisarcik (1980) identified that patients utilizing emergency

rooms for non-urgent care felt that the staff was more tolerant, informal, and flexible than their regular provider. Tucker & Tucker (1985) found patients expected a higher quality of physician services in walk-in clinics.

Melnyk (1988) identified that language barriers and/or biases by the patient or provider may also act as deterrents to continued patient care by a provider. Some patients may not wish to intrude on the provider. They may feel that their problem is not serious enough to warrant interrupting a busy schedule. Further, a lack of agreement between patient and provider about treatment regimen may also act as a barrier (Lauck & Bigelow, 1983), causing the patient to seek care elsewhere.

Statement of The Problem

It is important to understand what prevents patients from using the primary health care provider as the major source of care. Only then can the Family Clinical Nurse Specialist begin to address these concerns. Hopefully, this would lead to decreased patient dependence on the use of costly emergency and outpatient departments. The problem to be studied is: Among patients with an identified primary care provider using a non-emergent care center, what are the identified barriers that prevent them from using their primary care provider? Additionally, what are the sociodemographic characteristics of these patients? This study will be descriptive in design.

Definition of Concepts

The following are definitions of concepts identified in the research problem and used throughout the study:

Barriers

Barriers are the perceptions or beliefs of the consumer concerning the cost, financial or psychological, of taking a health action (Cummings, Becker, & Maile, 1980).

Adult Patients

For this study, adult patient is defined as any male or female of at least eighteen years of age, who is noncritically ill and is cognitively intact. There is no upper age limit. Children and adolescents have been excluded because they usually do not make decisions regarding health care.

Primary Health Care Provider

Primary health care provider is defined as the family (or general) practitioner, internist, pediatrician, or corresponding clinical nurse specialist, physician's assistant, or nurse practitioner responsible for providing care on an ongoing basis.

Non-Emergent Care Center

This is defined as an outpatient department which sees patients with non-life-threatening illnesses and injuries on a walk-in, no appointment required basis (Lumpkin, Glower, Fineberg, & Jekel, 1986). While this study is based on a hospital-based NECC, it is believed that results may be generalizable to other non-hospital-based NECCs.

Limitations of This Study

The following limitations are identified:

1. Data are being collected in only one site at one point in time. Therefore, generalizations may not be made to other sites or under different conditions.

2. Data are collected with only one contact with the patient. It is possible, therefore, that this singular experience may not accurately reflect the patient's usual behavior.
3. All potential barriers may not be identified by the researcher.

Assumptions of This Study

This research is based on the following assumptions:

1. The barriers identified are valid indicators of patient perceptions.
2. The data collected will adequately reflect patients' perceptions at this point in time.
3. Patients can label the barriers with the terms used in the study.

Overview of the Thesis

The thesis is organized into six chapters. Chapter I includes the introduction of the problem, the problem statement, and purpose of the study.

In Chapter II, discussion of the conceptual framework and definition of the concepts used to direct the study is presented, also the conceptual limitations and assumptions. Chapter III reviews the relevant literature based on the chosen framework.

The methodology, research design, and procedures used to conduct this study will be outlined in Chapter IV. Also to be included are descriptions of instrument development, data collection, and method of data analysis. In Chapter V, the analysis of data and findings will be reported.

In Chapter VI, interpretation and summary of findings is reported. Recommendations for application to advanced nursing practice and research in primary care are also presented.

CHAPTER II

CONCEPTUAL FRAMEWORK

Overview

The theoretical framework which provides the basis for this study will be discussed in this chapter. The concept of barriers, as defined by Melnyk (1990), will be presented more precisely. This will be followed by a discussion of how these barriers will be modified for use in this study and how this relates to primary care.

Conceptual Framework

Melnyk's Concepts of Barriers to Access of Care

Melnyk's (1985) original work on barriers to access of care focused primarily on barriers to preventive care. She has since expanded this model to include health and illness behavior related to seeking care. Melnyk (1990) has since narrowed her definitions to two basic types of barriers, extrinsic and intrinsic.

Intrinsic barriers are described as barriers perceived by the patient because of past lifestyle and experiences. Examples of intrinsic barriers include fear and the inconvenience of seeking health care (Melnyk, 1990). She further says that intrinsic barriers are the most difficult barriers to modify since they are rooted in the patient's beliefs.

Melnyk (1990) has apparently used the concept "fear" to represent patient attitudes toward health care providers based on previous experience by the patient. In previous work, Melnyk (1988) discussed attitudes and patient knowledge as closely related. Melnyk apparently associates patient knowledge of previous medical encounters with the

attitudes developed from those encounters to explain the "fear" construct.

Extrinsic barriers are more amenable to modifications by the health care provider. Extrinsic barriers include cost, site-related barriers and the relationship with the health care provider. These barriers arise directly from the health care delivery system (Melnyk, 1990) rather than directly from patient attitudes.

Cost

The barriers associated with cost can mean different things to different patient consumers. In the Health Belief Model, Becker (1974) defined cost as the negative aspects of undertaking a health behavior. These negative aspects include not only the financial costs of seeking care but also the psychological and social aspects of assuming the sick role. Aday and Andersen (1974) expanded this definition to include such costs as waiting time for appointments and time lost from work. Most recently, however, the cost considered is the direct cost of the service to the patient. Several authors have cited this barrier in relation to: the use of preventive dental services (Antczak & Branch, 1985); the use of mental health services (Stefl & Prosperi, 1985); and in follow-up associated with hypertension therapy (Shulman, Martinez, Brogan, Carr, & Miles, 1986). These authors found that higher out-of-pocket costs for the patient were directly related to decreased use of services.

O'Grady, Manning, Newhouse, and Brook (1985) found that the level of insurance coverage was directly related to use of an emergency room. In their study, patients with co-pay insurance used the emergency room only two-thirds as often as patients who had full insurance coverage. O'Grady et al. (1985) also noted that there was a 90 percent increase in

emergency service use for non-urgent diagnoses in patients with full insurance coverage compared with patients who had a co-pay.

Site-Related Barriers

Melnyk identified several potential site-related barriers: limited office hours, travel distance and travel costs, and appointment waiting time. Both travel distance and the cost of that travel have been identified as barriers to access of health care (Grembowski & Conrad, 1986), although this may be more of a barrier to poor and elderly patients (Antczak & Branch, 1985; Grembowski & Conrad, 1986).

The delay in the availability of appointments was identified as a barrier by Antczak & Branch (1985). However, Lauck & Bigelow (1983) did not find that long waits for an available appointment to be a barrier. They did find that not immediately setting a specific appointment time after emergency psychiatric care created a barrier to obtaining further psychiatric care. Poland, Ager, & Olson (1987) found that pregnant women used urgent care clinics as the primary source of prenatal care since no appointment was needed. Black Americans also used emergency rooms more frequently than physicians' offices because no appointment was needed (Neighbors, 1986). Other authors found that patients turned to emergency rooms because of the perceived speediness of service (Jacoby & Jones, 1982; Pisarcik, 1980). Studying patients using a NECC, Rizos et al. (1990) found that patients perceived they required care within 24 hours of the onset of symptoms. They further concluded that it is the patient's perception of the urgency of the problem that ultimately decides where and when the patient seeks care.

Relationship With Provider

Perhaps the most important site-related barrier is the relationship with the health care provider. Several factors may influence this relationship: individual biases by the physician (Hagebak & Hagebak, 1980), lack of agreement between the physician and patient about the treatment regimen (Lauck & Bigelow, 1983), or a fear of intruding on the physician. Individual bias by the physician apparently refers to the decision by physicians not to care for certain types of patients. An example is whether a physician cares for Medicaid patients. Dougherty (1988) found that 21 percent of all primary care physicians do not care for Medicaid patients. Although Dougherty did not cite specific reasons, one might suppose that increased paperwork involved in Medicaid, delays in receiving Medicaid payments, and the increased propensity of Medicaid patients filing lawsuits might account for this statistic.

A lack of agreement between the physician and patient regarding diagnosis and/or treatment options may cause the patient to seek out other opinions. Patients may feel that a particular physician treats them only as a disease entity or a number, instead as an individual. Patients may use the emergency room or NECC to elicit another opinion.

Beisecker & Beisecker (1990) found that patients wanted to know about their medical care but did not necessarily want to be responsible for making medical care decisions. They also found that the patient's diagnosis, length of the interaction with the physician, and the specific reason for the patient's visit affected how much information patients sought.

Patients sometimes feel that they should not bother the physician during office hours with telephone calls (Aday, Fleming, & Andersen, 1986). Perhaps more commonly, the receptionist at the physician's office may prevent phone calls from reaching the physician. This may be an attempt to keep on schedule.

Some patients choose emergency rooms because they feel the staff is more flexible and tolerant than their physician (Jacoby & Jones, 1982; Pisarcik, 1980). Yet, Rizos et al. (1990) found that patients using a NECC were not dissatisfied with their primary care physician but were looking for the convenient location and operating hours of the NECC.

The same components of relationship with provider and site-related barriers were described differently by Aday & Andersen (1974) in their framework for access of care. However, the outcome of their model is essentially the same.

Aday & Andersen (1974) described the health care delivery system as composed of two parts - resources and organization. They defined resources as the health care personnel and equipment used to provide health services. Organization is defined as "the characteristics of the system that determines what happens to the patient following entry into the system" (p.213). They felt that access to the health care system and utilization of health services was directly affected by the delivery system.

The extrinsic factors identified by Melnyk could help in developing an understanding why some patients chose an alternate method of care although they have a primary care provider. The framework for this research will be based on these constructs. While these factors are not

the only factors to influence utilization, these seem to be the most important to primary care.

Although Melnyk's work has focused primarily on the effect of barriers on seeking preventive care, there are enough similarities between it and the Aday & Andersen model to expect that Melnyk's work could be applied to health-seeking behavior in primary care. Also, as has been previously discussed, preventive care is actually one component of primary care. This researcher will focus on the illness care component of primary care to find if Melnyk's extrinsic barriers also explain the health-seeking behaviors of patients using a nonemergent care center.

Discussion

Melnyk was fairly clear when discussing the extrinsic barriers to care. The extrinsic barriers correspond readily to barriers as described in other barrier and access literature. Terms for extrinsic barriers have been well-defined and have clear boundaries. There is no apparent overlap between the extrinsic terms.

Unfortunately, Melnyk's intrinsic barriers are less clearly defined. Melnyk used different definitions in each of her writings for what is included in intrinsic barriers. Further, she has not expanded on the intrinsic barriers. There seems to be a great deal of overlap between the intrinsic and extrinsic barriers.

Inconvenience as defined by Melnyk seems to overlap a great deal with the site-related barriers. In none of her writings can I find mention of what "fear" represents or where the term came from. The closest match may be patient attitudes as the description.

Knowledge as a barrier to care was mentioned by Melnyk (1988), but no mention of it can be found in her later work. In none of her writings is there mention of lack of social support as a potential barrier to health care.

While Melnyk's work serves as a beginning point for a discussion of potential barriers to obtaining health care, it should not be considered the complete work on the subject. For these reasons, inconvenience barriers will be combined with site-related barriers for this study. Also, fear barriers will be combined with the relationship with provider barrier for this study.

Framework for Proposed Study

The conceptual framework for this study will use the extrinsic barriers developed by Melnyk but adapted as described above. Also to be included are patient demographics such as age, gender, insurance availability, educational level, income, and ethnic background, as a way to identify who is using a NECC. Finally, information related to specific utilization patterns will also be elicited such as past visits to physician and NECC. This will be a descriptive study by design. A proposed taxonomy, which is the basis for this research, is presented in Figure 1.

Conceptual Definitions

Barriers

The perceptions or beliefs of the consumer (patient) concerning the cost, financial or psychological, of taking a health action (Cummings, Becker, & Maile, 1980).

Figure 1

Proposed Taxonomy for the Study of Utilization of a NECC by Patients with a Primary Care Provider

I. Barriers to Primary Care

- A. Cost
- B. Site-related
- C. Relationship with Provider

II. Demographic Characteristics

- A. Age
- B. Gender
- C. Ethnic Background
- D. Education
- E. Income
- F. Insurance

Cost

The financial expenses to the patient seeking health care. This includes out-of-pocket costs, travel costs, time lost from work costs, and the expense of the treatment.

Relationship with Provider

This is the subjective perception of the patient regarding their comfort level with their regular source of primary care.

Site-Related Barriers

Those structural components which affect the patient's access to seeking primary care. This includes such things as travel problems, parking difficulties, and inaccessibility for disabled people.

Conceptual Assumptions

This research study is based on the following assumption: Barriers to seeking primary care will affect non-emergent care center utilization.

Conceptual Limitations

These potential limitations of the research study are also identified: 1) Other factors not identified or used by this researcher may contribute to utilization, such as patient's past experiences, and may confound the findings. These are beyond the scope of this research. 2) The Melnyk model has not been tested extensively with illness behavior and may prove an inappropriate model for this group of patients.

Implications for Advanced Nursing Practice & Primary Care

There are four major implications for nursing practice. These are: 1) How nurses, especially those in advanced practice, can affect the perceived barriers to help patients in receiving the health care they

need; 2) What barriers need to be identified or more clearly defined to more completely understand the difficulties patients encounter; 3) How can advanced practice nurses assist patients to appropriately use the primary health care system; and 4) How does the cost effectiveness of primary care differ from a NECC.

Nurses in advanced practice could potentially have a major impact on changing patients perceptions toward health care. For example, since these nurses tend to take more time with patients, there could be an improvement in the patient-provider relationship. Advanced practice nurses may wish to consider more flexible office hours with easier access to the office to attract and keep patients.

Since Melnyk's model is clearly at the beginning stage of defining barriers to health care, much research will be needed to identify other barriers and to more completely define the barriers already identified.

Summary

Many factors are involved in an individual's decision to seek health care. By understanding some of these factors, primary health care providers probably can influence the appropriate use of the type of care selected. This might be accomplished either by education of the patient population or by adapting the services provided.

In Chapter III, a review of the literature will be provided. Articles pertaining to utilization of health care, specifically related to outpatient departments will be reviewed.

CHAPTER III

LITERATURE REVIEW

Overview

The purpose of this chapter is to review pertinent literature and research related to specific perceived barriers to use of an identified primary care provider. These specific barriers are cost, relationship with provider and site-related barriers. A discussion of the literature and implications for the present study will also be included.

This researcher will also review literature pertinent to the sociodemographic characteristics of patients most likely to seek care at a non-emergent care center (NECC).

Primary care is shown to be less costly (Shapiro, Hayward, Freeman, Sudman, & Corey, 1986) and more continuous (Beland, 1990) than care at NECCs. However, some patients are finding primary care less accessible than NECCs. Literature explaining why this occurs will also be reviewed. Implications for primary care and primary care providers will be discussed.

Cost Barriers

Shapiro et al. (1986) reported that as out-of-pocket costs for medical care increased, the likelihood of seeking care for both serious and non-serious symptoms decreased. This study focused only on costs related to office visits and not to outpatient care. Further, patients were asked only about the cost for the office visit above what their insurance did not cover. Other costs that might affect seeking care were not identified.

In a similar study, Shapiro, Ware, and Sherbourne (1986) showed a 30 percent reduction in physician visits for those with a cost-sharing insurance plan compared with those whose insurance paid all expenses. This study was conducted on a different sample than the previous study. However, this study also looked only at utilization of physician visits and not total utilization of health care. Overall, both studies found that out-of-pocket costs for the patient directly affects whether care will be sought.

Newacheck (1989) studied the access of adolescents to health services. He found that poor adolescents receiving no Medicaid were 35 percent more likely to have not seen a physician within two years than adolescents with Medicaid coverage. However, adolescents with Medicaid coverage had similar physician contact rates as non-poor adolescents. Although it was not directly stated in the article, the findings largely suggested direct out-of-pocket costs were studied and not other cost factors that might also contribute to a perceived lack of access.

In 1985, O'Grady, Manning, Newhouse, and Brook studied cost-sharing related to emergency department utilization. They found that patients who received free care, that is had 100 percent insurance coverage, had a 90 percent higher use of the emergency department for non-emergent diagnoses than those patients with copay insurance. Persons with some form of co-pay used the emergency department only two-thirds as often as patients with full coverage for both emergent and non-emergent diagnoses.

While all studies involved large samples of patients, only costs related directly to the service provided were studied. Other costs may affect the decision on where care is sought. Costs of transportation,

medications, and time lost from work are only a few of the other costs that may impact on this decision.

This study will attempt to further identify perceived financial barriers to seeking primary care.

Relationship with Provider Barriers

Dougherty (1988) said that the ability to identify a primary care physician and have access to that physician is a mark of quality health care. A segment of the population may not have access since they lack health insurance. Another segment who have Medicaid as their insurance may also lack access to a primary care provider since "21 percent of primary care physicians do not participate in Medicaid" (Dougherty, 1988).

Hayward, Bernard, Freeman, and Corey (1991) identified four major reasons patients lack a primary care provider: 1) financial problems; 2) inaccessibility of local physicians; 3) the patient did not want a primary care provider; or 4) the patient was suffering a transitory loss of their regular source of primary care. Further, they found that the patients most likely to lack a primary care provider were those uninsured, in excellent or good health, males, Hispanics, Blacks, and those between 13 and 44 years of age. A major flaw in this study was the use of a telephone survey to collect data. This resulted in an underrepresentation of the poor and elderly who may be less likely to have telephones. A telephone survey also cannot sample those persons who are homeless.

In a study conducted by Rizos, Anglin, Grava-Gubins, and Lazar (1990), 321 people with a primary care provider were asked their reasons for using a NECC. A significant group (80%) felt that their symptoms

required care within 24 hours. Most patients (75%) said they had not even tried to contact their regular provider. However, most patients visiting NECC, by definition, have conditions that could be treated at a later time. Ultimately, it is the patient, and not the physician, who decides where and when medical attention is sought. It is the patient's perception of the urgency that most influences this decision (Rizos et al., 1990).

In a similar study, Kinney & Gerson (1983) found that 71 percent of patients using a free-standing emergency center listed a primary care physician. However, results from this study may be skewed since they reported an unusually high number of flu cases during the study period. This may disproportionately increase those with a primary care physician seeking care in an alternate site, since their provider may have been unable to accommodate a large influx of patients.

Contact with a regular provider has been consistently shown to improve access (Dougherty, 1988) and continuity of care (Beland, 1990). Identifying perceived barriers that prevent a therapeutic relationship with a primary care provider should help to promote access and more appropriate use of the health care system. This researcher will describe some barriers identified by patients with an identified primary care provider who seek care in a NECC.

Site-Related Barriers

An interesting study done by Poland, Ager, and Olson (1987) looked at perceived barriers to obtaining prenatal care. They studied 111 women who had varying degrees of prenatal care. These women identified several barriers to care--location, cost, transportation, babysitters, and whether an appointment was required.

Many women (36%) used a walk-in clinic as the primary source of care during their pregnancy because an appointment was not required. They also reported that the convenient location of walk-in clinics affected their decision. In a related area, women who received the most prenatal care use the most expensive transportation, i.e., cars or taxis. Women who had the least amount of prenatal care either walked or took public transportation. Poland et al. (1987) also reported that all of the women in the study complained about problems with babysitter and long waits to see physicians after they arrived for appointments.

A major drawback of this study is its extremely homogeneous sample. Naturally, 100 percent of the respondents were female, but nearly 100 percent of the respondents were black. Another limitation was the retrospective design of the study.

In the previously reported study by Rizos et al (1990), reasons for use of a walk-in clinic were reported by patients with a regular provider. The reasons reported were convenient location, could not get an appointment with their regular provider, and no appointment was needed at the walk-in clinic. More than one-half (55%) of visits to the walk-in clinic occurred after regular office hours. Patients reported that it was the convenience of the walk-in clinic, and not dissatisfaction with their regular provider, which was the most important factor.

Another interesting finding of the Rizos' study was that only 20 percent of the patients were concerned about continuity of care. Continuity of care has long been identified by health care researchers as a goal of, and sometimes a measurement of, quality primary care. Yet

patients in this study did not think continuity as important as convenience.

Site-related barriers may be the easiest barriers to alter since they are among the most objective indicators of perceived barriers. Primary care providers could alter site-related barriers by changing office hours, location of the office, and accessibility for disabled patients. This study will examine site-related barriers indirectly by studying why patients chose a NECC instead of their regular provider.

Sociodemographic Characteristics

Age

Wolinsky and Arnold (1988) point out that age, as a variable, is often not a good predictor of health services utilization, especially for the elderly. One reason this occurs is due to limited categorization of variables. Frequently, all elderly are lumped into the category of anyone age 65 or older. Instead, Wolinsky and Arnold suggest that categories should be defined more clearly by ten year increments, even after age 65.

A study conducted by Miller, Lairson, Kapadia, and Kennedy (1985) looked at characteristics of patients using two free-standing emergency centers. They found that the centers were primarily used by healthy people between the ages of 19 and 44. Their conclusion was that these patients usually require only episodic care, whereas elderly and chronically ill patients would be more likely to seek care with their regular health care provider.

Hayward et al. (1991) found similar results to the Miller study. They found that persons age 13-44 were likely to lack a primary care

provider. These patients are also more likely to be in excellent or good health and perhaps lack health insurance.

Neighbors (1986) found no relationship between age and use of an emergency room in a black population. The only age group, in this study, that had a higher emergency room utilization was those persons age 55 or older, with chronic health problems, or no regular source of care. A major problem with the Neighbors' study is that the data was collected between 1979 and 1980, more than ten years ago.

Most studies show that adolescents and young adults tend to use emergency rooms and NECCs more frequently than other populations. The most commonly cited reasons are the relatively good health of this age group, lack of a regular provider, and need for only episodic care. Patient age will be examined by this study to see if similar patterns emerge. This researcher will determine if certain age groups are more likely to use a NECC and what reasons the patients give for this use.

Income

White-Means & Thornton (1989) studied nonemergent visits to emergency rooms by both black and white patients over a fourteen-month period. They found income to not be a significant indicator of emergency room use for either blacks or whites. However, they did not measure out-of-pocket or travel costs in the study. These costs may significantly affect utilization by low income persons of either race.

Orr, Charney, Straus, and Bloom (1991) found that low income children with a regular source of care do not use emergency rooms disproportionately more than children with private insurance. Again, however, their data is old, having been collected between 1976 and 1981. They compared low income children in their study with national

statistics from 1978. It is important to note that low income children in this study had a regular health care provider.

By contrast, Neighbors'(1986) study of emergency room use by black patients found that lower income was associated with increased emergency room use. He attributed this to a lack of a primary provider in low income patients.

In most studies, income appears to be a significant factor in utilization of health services. Income will also be examined in the present study.

Insurance

O'Grady, Manning, Newhouse, & Brook (1985) studied the impact of insurance co-pay on use of an emergency room. They found that patients who had some form of co-pay used the emergency room only two-thirds as often as patients whose insurance paid the entire cost. Another interesting finding was that patients with no co-pay, or full coverage, used the emergency room 90 percent more for non-urgent diagnoses than patients with co-pay. However, both groups had increased emergency room use associated with longer waiting times for appointments with their regular provider.

In a similar study, Shapiro, Ware, & Sherbourne (1986) looked at the effect of co-pay insurance on utilization of a physician's office. They found a 30 percent reduction in visits for those patients with minor symptoms on the cost-sharing plan. However, patients on the cost-sharing plan with serious symptoms such as chest pain or trouble breathing were not significantly less likely to seek treatment than persons with full insurance coverage.

White-Means & Thornton (1989) compared nonemergency visits to emergency rooms by black and white patients. Their findings show that insurance coverage for blacks did not significantly alter their utilization patterns. In white patients, only those with Medicaid had significantly increased utilization of the emergency room.

Poland, et al. (1987) found that pregnant women without insurance received much less, or no, prenatal care when compared to those with insurance.

Researchers suggest that the extent of insurance coverage directly affects seeking emergency care and prenatal care. This researcher will examine the effect of insurance on utilization of a NECC.

Ethnic Background

Hayward et al. (1991), studying access to care and source of regular care found that Hispanics and blacks were less likely to have a regular health care provider. They felt this occurred mostly because of decreased income and/or a lack of insurance.

A study done by White-Means & Thornton (1989) found that blacks were more likely to use the emergency room as their usual source of care than whites. For whites, those with Medicaid coverage were more likely to use the emergency room.

Both studies find that blacks, especially, are more likely to lack a regular health care provider and to use emergency rooms more. This researcher will examine the potential impact of ethnic background along with insurance and income to see if there is an identifiable pattern in utilization of the NECC.

Gender

Several studies found that males were more likely than females to use emergency rooms. Hayward et al. (1991) found that males without a regular health care provider were more likely than males with a regular health care provider to use an emergency room. White-Means & Thornton (1989) found that white males were also more likely to use emergency rooms than white females. This may occur because women may be more likely to have a regular health care provider because of being childbearers.

Rizos et al. (1990) found, however, that 60 percent of patients using a NECC were women. Working women may find a NECC more convenient.

This researcher will examine which group, males or females, with a regular provider use a NECC more frequently.

Education

White-Means & Thornton (1989) found that higher education levels in whites were a deterrent to use of an emergency room. However, educational level in blacks was not a significant predictor of emergency room use.

Branch, Jette, Evashwick, Polansky, Rowe, & Diehr (1981) found that elders with more education made more frequent dental visits than those with less education. They also reported that elders with lower educational levels spent more days as inpatients than those with more education.

It appears that educational level may play some role in predicting utilization of NECC services. This researcher will determine if this occurs in this study population.

Summary

Perceived barriers are some of the most important reasons patients chose one type of health care over another (Melnyk, 1990). The data suggests that, perhaps, patients do not value continuity of care as much as convenience. This has many implications for primary health care providers who may want to consider eliminating some barriers so as to attract and keep patients in the competitive health care market.

One implication is locating a primary care practice where it can best serve the people it intends to serve. This may mean being located on bus routes or in downtown locations instead of in the suburbs.

Another factor to consider is the hours that the practice is open. With the increase in dual-income and single parent families, it is difficult for many people to go to their regular provider during regular office hours. For many, this involves time and money lost from work, beyond the direct costs of the visits and any treatments. Thus, a practice with evening and/or weekend hours might better be able to serve its clients.

A third implication is, possibly, the education of patients to help them understand the importance of continuity of care. Clearly, in the Rizos' study patients were not aware of the benefits of continuous care. A related education issue is helping patients to understand what symptoms require a visit to an emergency department or NECC versus those conditions that can be followed within 24 hours.

Perceived barriers, as defined by Melnyk, may help understanding of why patients with a regular provider seek alternate sources of health care. This study will attempt to further define those perceived barriers as it relates to patients seeking care in a NECC.

This researcher will examine the perceived barriers and demographic characteristics of patients to determine if patterns can be found. Also, if patterns of utilization exist, how should this influence advanced nursing practice and primary care practice?

In Chapter IV, this researcher will discuss the research methodology used in this study. Study design, subject selection, instrument development, data collection, scoring, and statistical analysis techniques will be discussed.

CHAPTER IV

METHODOLOGY

Overview

The intent of this research is to determine some characteristics of patients who use a non-emergent care center (NECC) instead of their identified primary care provider for a non-emergent condition. The patient characteristics and barriers to seeking primary care will be studied in patients with an identified primary care provider using a NECC. Statistical inferences will be made after data analysis.

The purpose of this chapter is to describe the research methodology to be used in this study. Sample, data collection site, instrument development, data collection, and reliability and validity of the instrument are discussed.

Sample

Participants in this study will be a volunteer convenience sample of 30 adult patients who are seeking treatment at a hospital-based non-emergent care center. Criteria for selection are listed:

1. The patient must be at least 18 years of age and capable of making decisions regarding health care. The patient must not be critically ill and must be able to make cognitive decisions. There is no upper age limit.
2. The patient must list a primary health care provider as their usual source of health care and have seen this provider within the last two years.

3. The patient must not be seeking treatment for follow-up of a condition treated previously, either at the emergency department or non-emergent care center or for treatment of a laceration requiring sutures at the time of this contact.
4. The patient must speak, read, and write in English.

Due to the voluntary nature of sample selection, results of the study can be only generalized to patients possessing characteristics similar to those of the study sample.

Data Collection Site

The agency to be used in the selection of participants for this study is a 500 bed community hospital in a midwestern county of approximately 150,000 people. This hospital has a separate emergency department and non-emergent care center. Patients are triaged by a registered nurse and sent to either the emergency department or non-emergent care center based on their chief complaint and a brief assessment by the nurse.

Written approval will be obtained from the hospital for the purpose of recruiting study participants.

Operational Definitions

Patient Characteristics

Patient characteristics are defined as the sociodemographic characteristics of the patient seeking treatment. These include age, gender, ethnic background, education, income and type of insurance. This will be defined by Questions 4-9.

Adult Patient

An adult patient is defined as any male or female of at least eighteen years of age, who is cognitively able to make his/her own decisions regarding health care.

Primary Health Care Provider

A primary health care provider is defined as the family (or general) practitioner, internist, pediatrician, physician's assistant or corresponding clinical nurse specialist or nurse practitioner responsible for providing care on an ongoing basis.

Non-Emergent, Hospital-Based Care Center

A non-emergent, hospital-based care center is defined as an outpatient department which sees patients with non-life-threatening illnesses or injuries on a walk-in, no appointment-required basis.

Cost Barriers

The financial expense of seeking care at the regular source of health care as perceived by the patient. This will be measured by Questions 13, 14, 19, 22, 30, 31, 34, and 36.

Site-Related Barriers

The system barriers of a particular health care provider's practice as perceived by the patient, i.e., office location, appointment delay. This will be measured by Questions 16, 18, 21, 23, 25-27, and 29.

Relationship with Provider

Patient perceptions related to accessibility and comfort with a particular health care provider. This will be measured by Questions 15, 17, 20, 24, 28, 32, 33, and 35.

Instrument Development

The instrument used in this study was developed by the researcher using the "Barrier Scale" developed by Melnyk (1990) as a guide. Adaptations from Melnyk's scale were made because it was felt that questions were not specific to the population being studied. Also, it was determined that many questions developed by Melnyk were ambiguous. Since this instrument has not been previously tested, it will be pilot tested on a convenience sample of three patients to determine clarity of questions.

Included from the scale are questions related to relationship with the health care provider and questions related to the characteristics of the health care system. Also included are demographic information about the patients and the patient's history of use of the health care system.

Data Collection

Recruitment of patients will be conducted by registered nurses triaging patients presenting for non-emergent care based on selection criteria. Triage nurses will be instructed by the investigator in group and individual meetings on the purpose of the study and the procedure for recruiting study participants. The selection criteria will be posted in the triage area to serve as a reminder for the nurses.

The triage nurse will explain to potential participants that the study is being conducted in partial fulfillment of a Master of Science Degree in Nursing. The patient will then be asked if they are willing to consider participating in the study. If the patient is interested, they will be given a letter of explanation and consent form. After the consent is signed it will be returned to the triage nurse. Next, the patient will be given a questionnaire which will be marked with an

identifying number and a pencil. The patient can take the questionnaire to the waiting area to complete it. Since the average waiting time before being taken to an exam room in this facility is 24 minutes, the patient should have adequate time to complete the survey and return it to the triage nurse before being taken to an exam room. In the event that it is not completed before being called to an exam room, the patient may complete the survey in the exam room and return it to the triage nurse upon discharge. Ninety-nine percent of NECC patients in this facility are discharged and they leave through an exit door by triage. Therefore, it is likely that questionnaires will be returned to the triage nurse. The completed questionnaire will be returned to the triage nurse in a sealed envelope. Completed questionnaires will be collected from the triage nurse by the investigator daily.

Reliability and Validity

The questionnaire was developed by the investigator using commonly used sociodemographic characteristics and using Melnyk's Barriers Scale (1990) as a guide. However, while the intent of Melnyk's scale was followed, questions were rewritten to better reflect the population under study.

Reliability is a measure of the dependability of consistency with which an instrument measures what it was designed to measure. Reliability in this study will also be calculated using alpha coefficients prior to analysis of the data by this researcher.

Validity is the degree to which the questionnaire accurately represents what it is supposed to measure. This is difficult to establish. Face validity of the questionnaire is supported by similar instruments used in previous studies.

Protection of Human Rights

Guidelines specified by the University Committee for Research Involving Human Subjects at Michigan State University will be followed to insure protection of the rights of study participants. The researcher will not have direct contact with the study participants.

Participants will be informed of the nature and purpose of the study and assured of confidentiality at the time of enrollment using a letter of explanation and consent form. Number coded questionnaires will be separated from consents by the investigator prior to data compilation and analysis.

Summary

Methodology to be used in this study was presented in Chapter IV. The sample, data collection site, instrument development, data collection techniques, reliability and validity of the instrument, and protection of human rights were discussed in detail.

In Chapter V, data obtained in the study will be presented, analyzed, and interpreted. Results of the statistical analysis will be interpreted. Implications of findings will be discussed.

CHAPTER V

DATA PRESENTATION

Overview

The intent of this researcher is to present an analysis of data and discuss interpretation of results. Data which describe the study population and the possible perceived barriers to seeking primary care are presented. Descriptive statistics are used to describe the study population in terms of age, gender, ethnic background, income, insurance coverage, and educational level.

Data were analyzed using several different statistical analysis techniques with the SPSS PC+ program. A reliability analysis was used to examine potential relationships between barrier subgroup questions since the instrument was previously untested. Descriptive statistics utilized include frequencies, percentages, ranges, and means to describe the sociodemographic characteristics of the study population. Correlations were computed between the ordinal sociodemographic descriptors and each of the proposed barrier subscales. ANOVA analysis was conducted for each of the nominal sociodemographic descriptors and the proposed barrier subscales. Data are presented in the following sequence: 1) reliability analysis of the instrument; 2) descriptive analysis of the sociodemographic descriptors; 3) analysis of barrier subscales--cost, site-related, and relationship with provider; and 4) correlations and ANOVA analysis.

Presentation of data will be followed by a summary of the data as it relates to the research questions. Interpretation of the data will follow. Methodological issues will be described. Additionally,

limitations of the data available for this study will be discussed. Finally, a summary of conclusions based on the research will conclude the chapter.

Reliability Analysis of the Instrument

Reliability analysis was conducted on each of the proposed barrier subscales--cost, site-related, and relationship with provider to determine the relatedness of the subscale components since this is an untested instrument (see Table 1 for questions remaining after reliability analysis completed).

For the proposed cost-related barrier subscale, the Cronbach's alpha coefficient was 0.53 after removal of Question 19, which was originally intended to measure an indirect cost of seeking primary care. The remaining seven cost questions measured the out-of-pocket costs associated with seeking primary care. This low alpha coefficient may be explained by too few questions remaining after analysis or due to the items having little in common.

The proposed site-related barrier subscale proved to be more troublesome. Only the questions related to appointment availability and the convenience of primary care office hours (#21, 23, and 27) appeared to group together significantly. The Cronbach's alpha coefficient for these three site questions was 0.58. Questions related to travel distance, location of the primary care provider or NECC and structural barriers, e.g., difficult steps or parking problems, did not appear to group together. Again, this may be explained by too few remaining questions after analysis or the lack of commonality among questions. Revision of these scales are needed prior to use in future studies.

Table 1.

Remaining Questions After Reliability Analysis

Cost

13. My insurance pays for the Walk-In Clinic, but does not pay for an office visit.*
14. I have to pay for an office visit immediately after seeing my primary care provider.*
22. The cost of transportation to the primary care provider is too high.*
30. It cost me more to go to my primary care provider than to go to the Walk-In Clinic.*
31. I have to pay a co-pay when I go to the primary care provider's office.*
34. I do not have to pay a co-pay when I go to the Walk-In Clinic.*
36. My primary care provider orders less expensive tests than the providers at the Walk-In Clinic.

Site

21. I can get appointments quickly at the primary care provider's office.
23. I chose the Walk-In Clinic because I do not have to wait for an appointment.*
27. My primary care provider is open hours that are convenient for me.

Relationship with Provider

15. My primary care provider does not think my problems are important.*
20. I do not like my primary care provider.*
33. I usually see the same provider each time I go to my primary care provider's office.
35. I think I have a good primary care provider.

---

*Reflected

For the proposed relationship with provider barrier subscale, the alpha coefficient was more encouraging at 0.79. This suggests a good inter-item correlation and overall reliability. Questions related to perceived comparisons between the PCP and the provider at the NECC (#24, 32) were removed. This may be explained by the fact that some respondents had not previously been to the NECC. Therefore, some of the respondents had no frame of reference and were unable to compare the NECC against their own primary care provider (PCP). Question 28 was also removed. This question explored the potential effect of the PCP's receptionist in preventing access to the PCP. There was no variation in the responses to this question. Respondents did not identify this as a problem. Since the relationship with provider barrier subscale measured direct characteristics of the primary care provider, it has the highest reliability of all the barrier subscales.

Analysis of Data

Study Sample

Forty people were approached regarding participation in this study. Five people (12.5%) refused participation. An additional five people (12.5%) agreed to complete questionnaires but filled them out so incompletely that they could not be used for analysis. The study sample consisted of 30 adults, with an identified primary care provider, who were seeking care at a non-emergent care center.

Sociodemographic Descriptors

The sociodemographic descriptors used in this study were age, gender, ethnic background, income, insurance coverage, and educational level. In addition, patients were asked about the frequency of visits

to this particular NECC and when the last visit occurred (See Table 2 for sociodemographic descriptors).

Ninety percent (N=27) of the study sample were Caucasian. African American comprised 10 percent (N=3) of the sample. There were no other ethnic groups identified by study participants (See Table 2). The majority of the sample (63.3%, N=19) were female. Male participants accounted for 36.7 percent (N=11) of the sample (See Table 2).

Only two participants (6.7%) reported their age as less than 20 years. Thirty percent (N=9) of patients were between the ages of 20 and 29. Eight patients (26.7%) were age 30 to 39 years. Five patients (16.7%) were between 40 and 49 years of age. Patients age 50 to 59 accounted for only 6.7 percent (N=2) of the sample. There was only one person (3.3%) age 60 to 69. Two patients (6.7%) were between the ages of 70 and 79. There was one patient between the ages of 80 and 89 years. No patients were older than 89 years of age. The ages ranged from 18 years to 85 years. The mean age was 38.2 years (See Table 2).

Thirty percent (N=9) of the sample reported less than a high school diploma as the highest educational level attained. Ten people (33.3%) had completed high school. Eight patients (26.7%) reported some college education. Two patients (6.7%) reported a bachelor's degree and one patients (3.3%) completed graduate school (See Table 2).

Interestingly, fifty-percent (N=15) reported an annual income of less than $10,000. Sixty-nine percent (N=20) reported an annual income of less than $20,000. Six people (20%) reported an income between $20,000 and $40,000 annually. Ten percent (N=3) of the sample reported an annual income between $70,000 and more than $80,000. One person did not report their income (See Table 2). The data suggests that 50

Table 2.

Sociodemographic Characteristics of Those Seeking Care at a NECC (N=30)

Characteristic	Number	Percentage	Mean	SD
Ethnic Background				
Caucasian	27	90.0	N/A	
African-American	3	10.0		
Sex				
Female	19	63.3	N/A	N/A
Male	11	36.7		
Age				
18-19	2	6.7		
20-29	9	30.0		
30-39	8	26.7		
40-49	4	16.7	38.17	18.15
50-59	2	6.7		
60-69	1	3.3		
70-79	2	6.7		
80-89	1	3.3		
No answer	1	3.3		
Educational Level				
Grade School	1	3.3		
Some High School	8	26.7		
High School Diploma	10	33.3	N/A	N/A
Some College	8	26.7		
Bachelor's Degree	2	6.7		
Graduate Degree	1	3.3		
Income				
0-$9,999	15	50.0		
$10,000-19,000	5	16.7		
$20,000-29,000	4	13.3		
$30,000-39,000	2	6.7		
$70,000-79,000	2	6.7		
$80,000 or more	1	3.3		
No answer	1	3.3		

percent (N=15) of persons completing this survey have incomes below the poverty level.

Only two people (6.7%) reported having no insurance coverage. Fifty percent (N=15) reported Medicaid as their source of insurance coverage. Three people (10%) reported Medicare as their primary insurance. Ten people (33.3%) reported Blue Cross or other paid insurance plans as their primary insurance (See Table 3).

All of the patients reported visiting their primary care provider at least twice within the past two years. Thirteen patients (46.4%) had seen their PCP more than four times in the past two years. The range number of visits was 2 to 30 visits in the past two years. The mean was 6.6 visits. Two patients did not report the number of visits (See Table 3).

Almost 60 percent (N=16) of patients reported visiting their primary care provider within the last three months. Twenty-two patients (81.5%) had seen their PCP within the last twelve months. The range for visits was 1 month to 21 months. Three people (10%) did not report the date of when their last visit occurred (See Table 3).

When asked how often subjects used the NECC, 50 percent (N=15) of patients reported one or fewer visits to the NECC within the last two years. Another seven people (26.7%) had been to the NECC between four and none times within the past two years. The mean number of visits to the NECC for the study population was 2.3 visits in the last two years (See Table 3).

Patients were asked to remember when their last visit to the NECC occurred. Of the 23 patients who had been to the NECC previously, six (20%) could not recall when their last visit occurred. Two patients

Table 3.

Health-Related Descriptors of Those Seeking Care at a NECC (N=30)

Characteristic	Number	Percentage	Mean	SD
Insurance				
No Insurance	2	6.7		
Medicaid	15	50.0	N/A	N/A
Medicare	3	10.0		
Blue Cross or Similar	10	33.3		
Number of PCP Visits/2 Years				
2-5	16	53.3		
6-10	9	33.3	6.61	6.99
11 or more	3	10.0		
No answer	2	6.7		
Months Since Last PCP Visit				
1-3	16	53.3		
4-8	4	13.3		
9-12	3	10.0	5.96	6.20
13-18	2	6.7		
19-24	2	6.7		
No answer	3	10.0		
Visits to NECC/2 Years				
0-1	15	50.0		
2-4	10	33.3	2.33	2.56
5 or more	5	16.7		
Months Since Last NECC Visit				
1-3	6	20.0		
4-8	4	13.3		
9-12	2	6.7	10.94	11.12
21-24	3	10.0		
26-36	2	6.7		
No answer	13	43.3		

Table 3 (continued).

Characteristic	Number	Percentage	Mean	SD
Presenting Complaint or Symptom				
Musculoskeletal Injury	8	26.7		
Upper Respiratory	4	13.3		
Flu (GI)	3	10.0		
Rash	2	6.7		
Eye Infection	2	6.7		
No Answer	11	36.7		
Reason for Using NECC				
Convenience	12	40.0		
Location	4	13.3		
Insurance Pays	2	6.7		
Hours NECC Open	4	13.3		
No appointment needed	3	10.0		
Felt problem too urgent	4	13.3		
No answer	1	3.3		
Time of NECC Visit				
11:00 a.m.	2	6.7		
12 noon	1	3.3		
1:00 p.m.	2	6.7		
2:00 p.m.	0	0.0		
3:00 p.m.	1	3.3		
4:00 p.m.	0	0.0		
5:00 p.m.	2	6.7		
6:00 p.m.	3	10.0		
7:00 p.m.	5	16.7		
8:00 p.m.	4	13.3		
9:00 p.m.	2	6.7		
10:00 p.m.	2	6.7		
No answer	6	20.0		

(6.7%) reported visits occurring more than two years previously. Five patients (16.7%) reported visits within the last month. Forty percent (N=12) of patients reported using the NECC within the past year (See Table 3).

Patients were asked their reasons for the NECC visit. By definition, all patients receiving care at the NECC could safely be treated in 24-48 hours. Six patients (20%) were being treated for musculoskeletal injury, such as a sprain or contusion. Four patients (13.3%) complained of upper respiratory infection symptoms. Flu symptoms (G.I.) were reported by three patients (10%). Rashes and eye infections were reported by two patients (6.7%). Thirteen people did not answer this question (See Table 3).

Finally, patients were asked their reason for choosing the NECC for this visit. Forty percent (N=12) of patients chose the NECC because of convenience. Location and operating hours of the NECC accounted for four patients (13.3%). Ten percent (N=3) chose the NECC because they did not need an appointment. Four patients (13.3%) felt their problem was too urgent to wait for their primary care provider, although by definition, all patients had non-emergent problems. Two people (6.7%) said their insurance would pay for a NECC visit, and presumably, not a visit to the PCP. It could be argued that the location and operating hours of the NECC and the lack of a required appointment at the NECC are also indicators of the convenience of the NECC. This would account for 76.6 percent (N=23) of the respondents who felt the NECC was more convenient than their regular primary care provider (See Table 3).

The days of the week that patients were seen were balanced. Respondents in this study were seen on each day in fairly equal numbers.

Most patients were seen between 6:00 p.m. and 11:00 p.m. (N=16, 53%). This is also the time that most primary care offices are closed. It should be noted that this particular NECC is only open from 11:00 a.m. to 11:00 p.m. (See Table 3). It was not unexpected, by this researcher, that more patients were seen after traditional office hours.

The average patient in this study was a Caucasian female with a high school education in her mid-thirties. This person tended to have a low income and have Medicaid insurance. Most of these people had seen their primary care provider at least four times within the last two years and had seen their provider within the last three months. Finally, most of the respondents had visited the NECC one or fewer times, suggesting they regularly followed with their primary care provider and did not use alternative sources of care.

In the next section, scores for each proposed barrier subscale will be reported.

Barrier Subscales

In this section how the barrier subscales were calculated and the results of those calculations will be described. For all three proposed barrier subscales, a 5-point Likert scale was used. The scales were coded so that higher values would indicate higher satisfaction with primary care and lower values for the NECC. Scores were calculated for each proposed barrier subscale after removal of unrelated items and then summed by scale.

The cost barrier subscale values ranged from 2.29 to 4.0, with a mean of 3.33. The standard deviation was 0.48. This shows a tendency toward use of primary care. Cost was not the predominate reason for

choosing the NECC. Apparently, having Medicaid insurance did not prevent patients from accessing their primary care provider.

Site-related barrier subscale values ranged from 1.00 to 4.67, with a mean score of 2.93. The standard deviation was 0.88. Site-related barrier scores showed a slight tendency toward the NECC, suggesting that the NECC was slightly more convenient to access than the primary care provider. Patients reported that they could get appointments to their primary care provider but apparently had not tried to get an appointment for this particular incident.

The subscale values for relationship with provider ranged from 2.75 to 5.00, with a mean of 4.12. The standard deviation was 0.58. This is a higher score than the other two subscales and suggests that, overall, patients are very satisfied with their primary care provider. Therefore, it is unlikely that this was a factor in the patient's decision to seek care at the NECC. In fact, one would expect that this obvious satisfaction with the primary care provider would be a barrier to seeking care at the NECC.

Basically, the barrier subscale used in this study did not provide useful in describing the behaviors of patients using the NECC. Possible reasons for this occurrence will be discussed in the next chapter.

Correlations and ANOVA analysis

Correlations were first calculated between each of the three proposed barrier subscales: cost, site related, and relationship with provider (See Table 4). All correlations were positive. The only significant correlation, however, was between the relationship with provider and site-related barrier subscales (0.5371). This might be expected since the site-related subscale questions measured the

Table 4.

Correlations Between Proposed Barriers

	Relation	Site	Cost
Relation	1.0000	.5371*	.3820
Site		1.0000	.2844
Cost			1.0000

* p<.01, one-tailed.

availability of appointments with the primary care provider. One could expect that the increased ease in obtaining appointments would be positively related with a good relationship with one's provider. There was a weak positive correlation between cost and relationship with provider subscales (0.3820). Finally, there was a very weak positive correlation between site-related and cost barrier subscales (See Table 4).

Correlations were also calculated between the ordinal sociodemographic variables and each of the proposed barrier subscales. These were all very weak relationships. The reader needs to the weak reliability among the barrier subscales (See Table 5). The weakest correlations occurred between cost and age and cost and income. Only the correlation between site and income reached the significant level.

Finally, ANOVA analysis was conducted between each of the nominal sociodemographic variables and the three proposed barrier subscales to determine possible correlations. These levels were not significant. The weak reliability between the barrier subscales may have contributed to this result (See Table 6).

Summary of Data

Two research questions were addressed by this study: 1) Among patients, with an identified primary care provider, using a non-emergent care center, what are the identified barriers that prevent them from using their primary care provider; and 2) What are the sociodemographic characteristics of these patients?

Melnyk (1990) proposed three extrinsic barriers to seeking care: cost, site-related and relationship with provider. This study utilized those three barriers also. However, this study was focused in primary

Table 5.

Correlations Between Ordinal Sociodemographic Variables and Proposed Barrier Subscales

	Age	Income
Relation	.2580	.3002
Site	.3459	.4463*
Cost	-.0422	-.0083

*p< .05, two tailed.

Table 6.

ANOVA Analysis Between Nominal Sociodemographic Variables and Proposed Barrier Subscales

	Sex F	Education F	Insurance F
Relation	1.352	1.458	1.679
Site	.859	1.531	3.408
Cost	.112	1.038	.689

care while Melnyk's research has been primarily in the area of preventive care.

The question studied by this researcher was: Among patients with an identified primary care provider using a non-emergent care center, what are the identified barriers that prevent them from using their primary care provider?

This researcher found that cost barriers and site-related barriers did not prove to be a barrier to seeking primary care. The relationship with provider barrier showed that patients were quite satisfied with their primary care provider; therefore, it was also not a barrier to seeking primary care. The most likely reasons why patients sought care at the NECC had nothing to do with these proposed barriers. The reason given most frequently by patients for using the NECC was the immediate convenience of the NECC.

Melnyk's scale was developed for a working population who had private health insurance. Since the population in this study was skewed towards very low income people receiving Medicaid, the questions in Melnyk's scale may not apply or may not capture individuals with very low income. These scales did not capture barriers patients did experience.

Discussion

This research showed that extrinsic barriers: cost, site-related, and relationship with provider did not provide an explanation why patients sought care at the NECC instead of with their regular primary care provider. This leads to the conclusion that other factors not studied may account for reasons why patients sought care at the NECC. There are at least two possible explanations. One is that the NECC was

more convenient; that is, it is open when the primary care provider's office is not and most patients chose to seek care after primary care office hours. The second explanation is that patients perceived their situation to be more serious than it actually was. The challenge for the primary care clinical nurse specialist is to address both concerns through patient education and by facilitating changes within the health care delivery system. This will be discussed further in the next chapter.

Methodological Issues of This Study

Three major methodological issues surfaced in this study. The first issue involves the small sample size. It was originally felt by the researcher that there would be more potential study participants than were actually obtained. One reason for this was the limitation that persons requiring sutures be excluded from the study. Although the premise that these people require immediate care and cannot wait for the primary care provider's office to open still stands, this eliminated many study participants. Another limitation was the exclusion of children from the study. The original premise was the children do not make decisions regarding health care and, therefore, should not be included in the study. However, after extensive observations by the researcher, it was found that greater than fifty percent of the people using the NECC were children. Therefore, children might be included in a future study by studying their parents' responses. This might show different results than questioning adults only since parents' perceptions of when their child needs care would likely vary.

Due to the small sample size, there may be little variability between subjects. A larger sample may produce different results.

The second methodological issue involved the study instrument used. Since this was an untested instrument, reliability proved to be problematic. A few items in the subscales, as originally written, did not measure what they intended. A problem was that some items were not mutually exclusive and provide difficult for participants to answer. These items yielded inconsistent results. Discussion of how these problems could be remedied for future studies will be discussed in the next chapter.

In addition, the questions asked in the questionnaire may not have been relevant for the population studied. The researcher did not expect to find 50 percent of the study population reporting Medicaid as their source of insurance or to have such low incomes. The questions may not truly reflect concepts of convenience or out-of-pocket costs for this population.

The third methodological issue involves whether Melnyk's instrument was appropriate for this population. Her instrument was developed for testing primary care patients. Although the patients in this study identified themselves as primary care patients, it is possible that they do not utilize their primary care provider in the purest sense of primary care. These patients may feel that the primary provider is the person you go to only for your annual physical exam.

Summary

The intent of this research was to decide if there are perceived barriers that prevent use of a primary care provider. It was found that perceived barriers have less of an impact than on the decision to seek care at a NECC than the immediate convenience of the NECC and the perceived seriousness of the presenting symptom.

It is difficult to determine if there is less indiscriminate use of the NECC than anticipated based on the results of this study. This occurred because most patients using the NECC did not meet criteria for inclusion in this study, so it is impossible to determine their reasons for use of the NECC.

In the following chapter a summary of all preceding chapters will be presented. A theoretical framework will be discussed. Recommendations for future nursing research, education, and advanced nursing practice will be made.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Overview

The purpose of this research was to determine possible barriers affecting the decision of patients, with an identified primary care provider (PCP), causing them to seek an alternate source of care, namely a non-emergent care center (NECC). The results of this study found cost and site not to be barriers. Further, the relationship with the PCP was found to be strong and not a barrier. The primary reasons given for utilization of the NECC were convenience and perceived seriousness of the presenting problem. The implications of these results will be discussed.

The conceptual framework that guided this study will be presented. Implications of study findings and how they relate to the conceptual model will be discussed. Recommendations, based on this research, for future advanced nursing practice, education, and research will also be presented.

Conceptual Model

Health Belief Model

Concepts developed by Melnyk (1988, 1990) were used as the basis for this research. Melnyk drew heavily from the Health Belief Model (Becker et al., 1974) for her concepts. She also drew, to a lesser extent, from Andersen's (1968) model of health systems utilization. Consequently, the Health Belief Model (HBM) was used as the conceptual framework for this study.

The HBM was originally developed to explain the behavior of people who did not take advantage of low cost of free preventive health screening tests. The HBM has been expanded to explain health behavior related to preventive care, illness behavior, sick role behavior, and chronic illness behavior.

There are five main components of the HBM. These include: 1) perceived susceptibility; 2) perceived seriousness; 3) perceived benefits of taking action and barriers to taking action; 4) cues to action; and 5) demographic and sociopsychological variables. Each of these components will be discussed in greater detail (see Figure 2).

Perceived susceptibility refers to the person's subjective risk of contracting a condition. It is measured along a continuum from complete denial to a feeling of real risk. The perception of susceptibility is partially dependent on prior knowledge of the condition and potential consequences of contracting the condition.

Perceived seriousness is the person's subjective feelings toward the severity of the condition. It includes the patient perception of potential effects of treating or not treating the condition. It further includes the potential effects on work, family, etc. As with perceived susceptibility, this perception is partially dependent on previous knowledge.

The perceived benefits of taking action and barriers to taking action are based on the person's beliefs about the efficacy and availability of various courses of action. Barriers are the actual or perceived negative aspects of taking health action.

Cues to action are the instigating event. Cues may be internal or external. Internal cues may include perceptions of one's health.

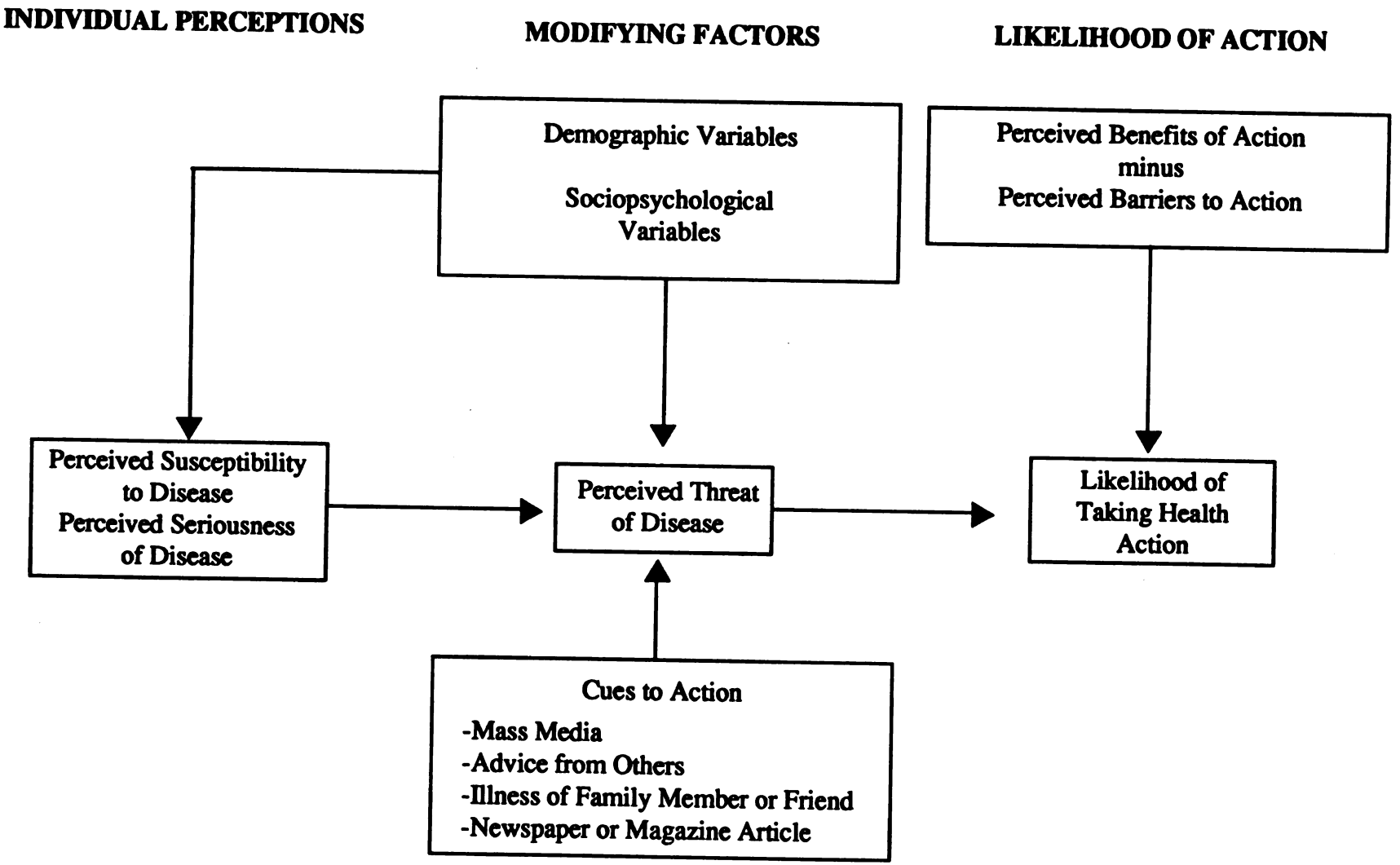

Figure 2
Adapted from Becker, et al (1974). "The Health Belief Model"

External cues may come from communication with others or by reading an article, for example. The intensity of a cue needed to trigger a response depends on the circumstances involved and each individual.

Demographic variables include such traits as age, sex, race, etc.

Sociopsychological variables include interactions with peers, one's personality, and social class. This study concentrates on the perceived barriers to access of the primary care provider.

Melnyk's definition of concepts encompassed parts of the Health Belief Model and most specifically, perceived barriers. These overlapping areas will be discussed next.

Melnyk's Concepts of Barriers to Seeking Care

Melnyk defined three extrinsic barriers and two intrinsic barriers to seeking care. Her research has primarily focused on preventive health behavior.

The three extrinsic barriers Melnyk defined were the same barriers measured by this research study and included cost, site-related, and relationship with provider. These correspond with the HBM's perceived barriers to seeking care.

The two intrinsic barriers defined by Melnyk were fear and inconvenience. As previously discussed, these barriers are the least well-defined by Melnyk. It seems that fear could be compared similarly to the perceived threat of contracting a condition as defined in the HBM. Inconvenience is more difficult to categorize since it seemed to this researcher to overlap with site-related barriers. Melnyk's barrier questions related to inconvenience were essentially the same as site-related barriers. For instance, one question about inconvenience inquired as to the convenience of parking while another talked about

scheduling appointments. This researcher felt that these questions were more directly site-related barriers. In Melnyk's discussions about the differences between extrinsic barriers (cost, site, relationship with provider) and intrinsic barriers (inconvenience and fear), she distinguished intrinsic as being rooted in the patient's past experiences and beliefs and not easily amenable to change by the health delivery system. However, it seems to this researcher, that parking and appointment scheduling can be manipulated by the health delivery system, and therefore, are extrinsic barriers. While Melnyk has attempted to refine the HBM, she has not attempted further refinement of her concepts to this point.

Conceptual Model for This Study

The conceptual model used for this study incorporated portions of the HBM and Melnyk's concepts to attempt to describe the barriers and sociodemographic characteristics involved in patients seeking care at a non-emergent care center (see Figure 3).

This researcher used the Health Belief Model as the basis of the research with adaptation of the perceived barriers, as defined by Melnyk. Additionally, the model was adapted by incorporating patient perceptions of the convenience of the NECC. This researcher was originally guided by the barrier concepts developed by Melnyk. However, these concepts were inadequate to explain the responses given in this study. The concepts defined by Melnyk did not explain all of the perceived barriers experienced by the patients using the NECC. Particularly, the concept of convenience seems to be inadequate as defined by Melnyk.

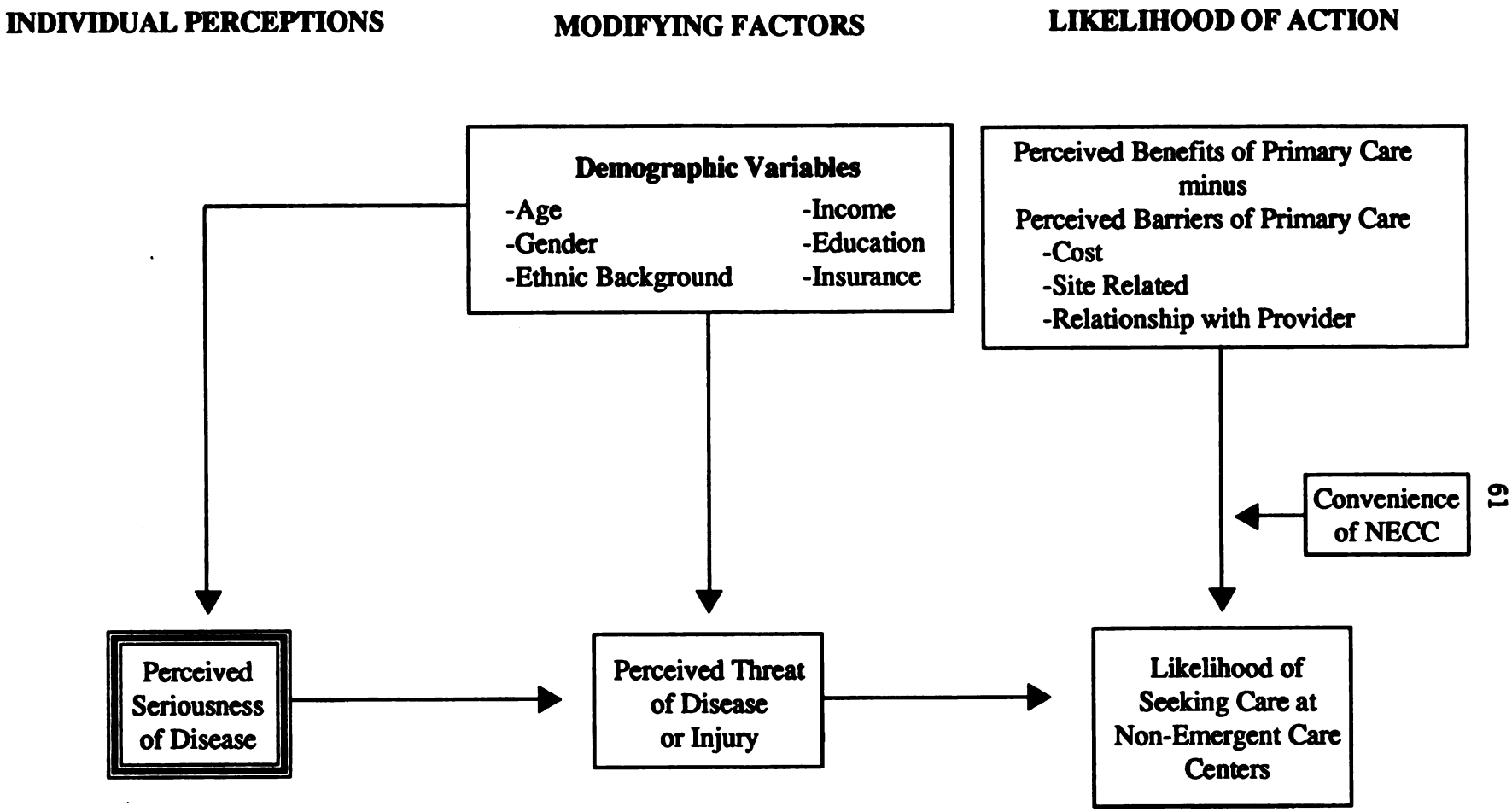

Figure 3
Conceptual Model for Present Study

The results of the study showed that an obviously important concept was not measured by this research. That concept was the perceived urgency of the presenting symptom. Respondents identified this as one reason they sought care at the NECC. Some respondents (N=4, 13.3%) felt their condition was too urgent to wait for an appointment to their primary care provider. As previously discussed, Rizos et al. (1990) found that 80 percent of patients using a NECC felt their symptoms required treatment within 24 hours. This researcher found that the perceived urgency of the presenting complaint was not identified by this population to be as an important reason for seeking care at the NECC unlike the population in the Rizos' study, which identified seriousness as a major reason for seeking care. Respondents identified convenience as the primary reason for seeking care at the NECC in this study.

One might expect this idea of perceived urgency to be even more of a factor in choosing alternate care for children. It is often difficult for parents to assess how ill the child is or determine the affliction, especially in pre-verbal children. This may cause the parent to seek care sooner for a child than they would for themselves with a similar condition.

All of the respondents reported symptoms that, by definition, could have been treated within 24-48 hours at their primary care provider's office. Many of the patients did not document what condition/symptoms caused them to seek treatment at the NECC. For those who did report symptoms, they ranged from minor musculoskeletal injuries to flu symptoms and respiratory infections to rashes and eye infections. The convenience and availability of the NECC were indicated as the reasons

why care was sought at the NECC instead of waiting until primary care office hours.

The most likely reason respondents gave for selecting the NECC over their primary care provider was the convenience of the NECC. This was identified by 76 percent of respondents (N=23) as the reason they sought care at the NECC. Reasons given by the respondents included the operating hours of the NECC and the general convenience of the NECC. The NECC is open after traditional office hours, at night, and on weekends. It is also not necessary to make an appointment to be seen at the NECC, although respondents did not feel appointment availability to the primary care provider was a barrier. Some people have become accustomed to the "fast food mentality." That is, they want service when they want it and do not want to wait until the next available appointment. As discussed in the Rizos' (1990) article, only 20 percent of patients were concerned about the continuity provided by primary care. Patients in Rizos' study also found convenience more important than continuity.

In the next section, implications of the results of this study on advanced nursing practice, education, and research will be discussed in greater detail.

Recommendations

Advanced Nursing Practice

In advanced nursing practice, there are many roles the Family Clinical Nurse Specialist (FCNS) can assume with potential outcomes on helping patients to choose primary health care over alternate health care options.

First, as educator, the FCNS needs to teach the benefits of primary care versus alternate sources of care. The FCNS may speak at forums or community groups to explain the advantages of primary care. Additionally, each time the FCNS sees a client who used an alternate source of care, the FCNS can explain the benefits that would have occurred if primary care had been sought instead. These benefits include cost and continuity. Continuity of care is important. Continuity of care involves seeing the same provider on an ongoing basis. First, continuity of care assumes an ongoing assessment of all the biopsychosocial aspects of the patient's care. Secondly, continuity of care helps to eliminate costly and repetitive duplication of treatments and tests because there is only one person managing the patient's care. It should be explained to patients that primary care is comprehensive care that includes management of preventive and acute conditions. It should be noted that, in this particular NECC, a degree of continuity of care does exist. It is possible to retrieve previous medical records from visits to the NECC or the hospital. Additionally, a copy of the NECC record is sent to the primary care provider. However, it is not currently possible to access medical records in private primary care offices. Further evolution in computer technology might enable the medical record portion of continuity of care to be available in the future.

The FCNS also needs to educate patients and families as to when they need to seek treatment immediately and when they can wait for an appointment. Most patients treated at the NECC have illnesses or injuries that could be treated within 24-48 hours by a primary care practitioner. The FCNS can encourage appropriate use of NECCs by making

their practice more accessible for patients. This could be accomplished by allowing drop-in patients in the office or by being available by phone to determine the actual urgency of the patient's condition. By improving accessibility, patients may feel that the primary care setting has become as convenient as the NECC.

The Family Clinical Nurse Specialist can also act as a consultant; to be available for telephone consultation for patients and families during and after primary care hours. In this way, the FCNS can help the patient to select the most appropriate source of care for the presenting complaint. In fact, the FCNS may choose to refer patients to the NECC or the emergency department, but many times the patient could safely wait for an office visit. Often, reassurance to the patient to wait for an appointment the next day would be all that would be required. This requires clinical expertise and judgement by the FCNS to make decisions although the patient is not immediately in front of them.

The FCNS is an expert clinician and through this experience should direct patients on care and treatment until an appointment can be arranged. Through this assessment and direction, the FCNS can help the patient develop self-care habits that the patient can use when confronted with similar situations in the future.

Thirdly, the FCNS can function as an assessor to identify health care system needs. After a careful assessment, the FCNS may find that evening or weekend hours at the primary care office may be appropriate to adequately serve the needs of the client population. The FCNS might offer to work these non-traditional hours in exchange for additional time off, paid conference time, increased salary, or as part of the regular work schedule.

As change agent, the FCNS may serve three different roles. Change agent for the patient may involve successfully changing patient behavior to limit use of alternate sources of care, such as NECCs. Change agent for the health care system may involve setting up the extended practice hours suggested after a needs assessment to determine the costs/benefits of such a practice. In addition, the FCNS can work toward developing lines of communication with the NECC to make sure that necessary information about patient care flows between the primary care provider and the provider at the NECC and back to the primary care provider. Change agent for the health care system as a whole may mean supporting or initiating legislative efforts to make primary care access for all people a reality. Another change agent effort could be to fight for legislation to ensure third party reimbursement for nursing services and then become qualified to receive third party reimbursement. The FCNS needs to be active in encouraging other nurses to seek third party reimbursement.

The role of the FCNS as researcher is important. In this role, the FCNS can conduct research to determine changes in patient behavior and changes in the health care delivery system that may require adaptation by the primary care provider to continue to provide affordable, continuous, and accessible health care.

The FCNS can act as a client advocate by encouraging patients to choose the most appropriate source of care. Appropriate use of care is determined on an individual basis and is determined by symptoms reported, the availability of the usual source of primary care, and the availability of alternate sources of care. Often, clients need to be reassured that their health care decisions are the correct ones.

Another way the FCNS can act as a client advocate is to help patients understand what health care options are available, what risks and benefits occur with each option, and how the patient can seek other options. For patients who have chosen to seek care at the NECC, the FCNS can still be a client advocate by being available for phone consult with the provider at the NECC. Through this consultation, the FCNS may be able to provide information about the patient that will prevent the need for additional, unnecessary tests.

As collaborator, the FCNS can work with other members of the health care team to plan a patient's care, including the available resources for the patient after regular primary care hours. When possible, the patient should be involved in these collaborative efforts. This is another method to promote self-care behaviors in some patients.

The FCNS should remember that his/her accountability for the patient does not diminish just because another health provider has participated in the client's care. In fact, the accountability may increase as the FCNS coordinates care with other providers.

Finally, the FCNS should be involved as an evaluator. If the FCNS evaluates his/her practice and finds that many of his/her patients seek after hours care at NECCs, he/she may decide to expand office hours or make the practice more available and accessible for patients. The FCNS may evaluate his/her practice and decide that the patients really need classes in basic first aid or in managing major illness. The FCNS could teach the classes or arrange for speakers. Periodically, the practice of the FCNS should be evaluated by the FCNS and by peers to decide if the needs of the patients are being adequately addressed.

Advanced Nursing Education

One goal of advanced nursing education is to prepare clinical nurse specialists to be patient educators. To be able to teach patients about the benefits of primary care, the FCNS must clearly articulate the importance of continuity of care to patients, families, and other health care providers. The FCNS also can discuss the cost benefits of primary care. Cost benefits of primary care occur when unnecessary and unneeded tests are not ordered because the provider at the NECC is not familiar with the patient. Occasionally, cost savings may occur if the patient is not required to be seen at all. This patient education must occur regularly with positive reinforcement for patients who use the health care system in a way that promotes primary care use. The FCNS can counsel and further educate patients who consistently choose alternate sources of health care in ways that are not cost effective and do not promote continuity of care.

Another goal of advanced nursing education is to prepare nurses to be role models and educators for other nurses. The FCNS can develop, teach, and promote continuing education classes for other health care providers, community education, and lay groups on the benefits of primary care and when to use alternate sources of health care.

Additionally, the FCNS should assist in identifying barriers at any level that prevent access to primary care by patients. The FCNS should work within the health care system to reduce or eliminate these barriers.

Advanced Nursing Research

There are several ways that this research study could be expanded and improved. One obvious way would be to increase the size of the

study sample. This may be accomplished by conducting the research over a long period or by changing some characteristics of the study population. One change to the population would be the addition of children, accompanied by a parent, with an identified primary care provider, using the NECC. From observations made by the researcher, at least one-half of persons using the NECC were children.

A significant method of improving the instrument would be to increase the number and types of questions in each subscale. Since many questions were removed from the present instrument, the barriers were not explored in as much detail as needed. One way to improve the instrument would be to, more specifically, define the barriers related to primary care. One area that needs more refinement is an exploration of the effect of out-of-pocket costs as a potential barrier to primary care access. Another area that could be improved would be to better refine what makes the NECC more convenient than the primary care provider. In addition, the questions asked of respondents need to better incorporate all levels of income. More questions need to be developed to reflect the very low income respondents, as this was missing in the current questionnaire.

Another way to improve the instrument would be to add questions about other subscales not measured by this research. Examples of this might include research into Melnyk's concepts of fear and inconvenience, questions designed to measure patient's perceptions about continuity of care, and questions designed to measure patient's knowledge about illness/injury severity.

The concept of fear might be expanded by specifically asking patients open-ended questions about prior health care experiences that

caused them fear or anguish. Another way to measure fear would be to ask clients "what about this illness or injury worries you?"

The concept of inconvenience should be measured by exploring not only the perceived inconvenience of primary care, but also the perceived convenience of the alternate source of care, the NECC. One way to accomplish this would be to ask patients, "What specifically made you decide to use the NECC today?" Also, it would be helpful for the researcher to know how long the symptoms or injury had occurred for deciding the urgency of this NECC visit.

Questions related specifically to perceived urgency of the presenting complaint would be beneficial. Additionally, questions exploring perceptions of the convenience of the NECC would be helpful. Use of a focus group and qualitative interviews may be useful in exploring patient perceptions.

Further research could include more NECC settings. This study examined only a hospital-based NECC that was only open until 11:00 p.m.; however, there are other types of NECCs. One example is a NECC run by primary care providers that operates after-hours and weekends. Some NECCs are run by hospitals off the main campus of the hospital. Some NECCs are run by for-profit organizations. An interesting study might examine differences in patient choices between different sites. For example, the researcher could compare patient types by diagnosis with the choice of NECC site and with the ancillary services provided at the NECC. Another study might examine what made the patient choose one NECC over another. This might be interesting if there were several different types of NECCs operating within close geographic proximity of each other.

Finally, an intervention study might be undertaken to see if changes in utilization patterns would occur. Several possible interventions might be possible. One example would include a patient education program. The FCNS could educate patients who used a NECC to help them better decide when and where to seek care. Helping patients to realize which situations are truly emergencies, and therefore need to be treated at the NECC or emergency department, and which situations can wait until primary care hours to be resolved might be the focus of such an educational program. Patients could then be followed longitudinally to find if changes in utilization patterns occurred.

Another intervention might involve a change in the operating hours at the primary care site. Since there are many dual-income and single parent families, primary care hours should be expanded to better provide service. This might include evening hours and weekend hours.

A third example might involve the telephone consulting service offered by the FCNS, as previously mentioned. The FCNS could be part of a service that was available to help patients and families to decide the necessity for seeking immediate care versus waiting for primary care hours. The FCNS can suggest alternate methods of care that would prevent a condition from becoming more serious and, thereby, prevent a costly emergency department visit.

These ideas for advanced nursing practice, education, and research provide a wealth of opportunity for the Family Clinical Nurse Specialist who would like to make a difference in health care utilization practices.

Summary

This study explored potential barriers to use of primary care services by patients using a non-emergent care center. The results showed that the primary reasons for use of the NECC were the perceived seriousness of the presenting complaint and the immediate convenience of the NECC. The challenge for the FCNS is to continually assess the health delivery system to make primary care an accessible choice for patients.

LIST OF REFERENCES

Aday, L.A., & Andersen, R. (1974). A framework to the study of access to medical care. Health Services Research, 9(2), 208-220.

Aday, L.A., Fleming, G.V., & Andersen, R. (1984). Access to Medical Care in the United States: Who Has It, Who Doesn't. Chicago, IL: Pluribus Press, Inc.

American Hospital Association. (1989). 1989-1990 Hospital Statistics. Chicago, IL: AHA.

Andersen, R. (1968). A Behavioral Model of Families' Use of Health Services. Research Series No. 25. Chicago, IL: Center for Health Administration Studies, University of Chicago.

Antczak, A.A., & Branch, L.G. (1985). Perceived barriers to the use of dental services by the elderly. Gerodontics, 1(2), 194-8.

Becker, M.H., (ed). (1974). Personal Health Behavior. Thorofare, NJ: Charles B. Slack, Inc.

Beisecker, A.E., & Beisecker, T.D. (1990). Patient information-seeking behaviors when communicating with doctors. Medical Care, 28(1), 19-28.

Beland, F. (1990). A descriptive study of continuity of care as an element in the process of ambulatory medical care utilization. Canadian Journal of Public Health, 80(8), 249-254.

Branch, L., Jette, A., Evashwick, C., Polansky, M., Rowe, G., & Diehr, P. (1981). Toward understanding elders' health service utilization. Journal of Community Health, 7(2), 80-92.

Carroll, N.V., & Gagon, J.P. (1983). Identifying consumer segments in health service markets: An application of conjoint and cluster analyses to the ambulatory care pharmacy market. Journal of Health Care Marketing, 3(1), 22-34.

Cohen, J.W. (1989). Medicaid policy and the substitution of hospital outpatient care for physician care. Health Services Research, 24(1), 33-66.

Cummings, K.M., Becker, M.H., & Maile, M.C. (1980). Bringing the models together: An empirical approach to combining the variables used to explain health actions. Journal of Behavioral Medicine, 3(2), 123-145.

Dougherty, C.J. (1988). American Health Care: Realities, Rights, and Reforms. Oxford: Oxford University Press.

Fagin, C.M. (1977). Nature and scope of nursing practice in meeting primary health care needs. Primary Care by Nurses: Sphere of Responsibility and Accountability. Kansas City, MO: American Academy of Nursing.

Fleming, G.V., & Andersen, R. (1986). The Municipal Health Services Program: Improving access to primary care without increasing expenditures. Medical Care, 24(7), 565-578.

Grembowski, D., & Conrad, D.A. (1986). Coinsurance effects on dental prices. Social Science and Medicine, 23(11), 1131-8.

Hagebak, J.E., & Hagebak, B.R. (1980). Serving the mental health needs of the elderly: The case for removing barriers and improving service integration. Community Mental Health Journal, 16(2), 263-272.

Hayward, R.A., Bernard, A.M., Freeman, H.E., & Corey, C.R. (1991). Regular source of ambulatory care and access to health services. American Journal of Public Health, 81(4), 434-438.

Jacoby, L.E., & Jones, S.L. (1982). Factors associated with ED use by "repeater" and "nonrepeater" patients. Journal of Emergency Nursing, 8(4), 243-246.

Kasper, J.D. (1987). The importance of usual source of care for children's physician access and expenditures. Medical Care, 25(5), 386-398.

Kinney, T.J., & Gerson, L. (1983). Utilization of a free-standing emergency center by patients with and without private physicians. Annals of Emergency Medicine, 12(12), 762-764.

Lauck, B.W., & Bigelow, D.A. (1983). Why patients follow through on referrals from the emergency room and why they don't. Nursing Research, 32(3), 186-187.

Lumpkin, J.R., Glower, J.J., Fineberg, H., & Jekel, J. (1986). Community perceptions of appropriate sources of emergency care. Annals of Emergency Medicine, 15(2), 191-195.

Melnyk, K.A. (1985). Perceived barriers to preventive health care. Unpublished doctoral dissertation, University of Rochester, Rochester, NY.

Melnyk, K.A. (1988). Barriers: A critical review of recent literature. Nursing Research, 37(4), 196-201.

Melnyk, K.A. (1990). Barriers to care: Operationalizing the variable. Nursing Research, 39(2), 108-112.

Miller, K.E., Lairson, D.R., Kapadia, A.S., & Kennedy, V.C. (1985). Patient characteristics and the demand for care in two free standing emergency centers. Inquiry, 22(4), 418-425.

Neighbors, H.W. (1986). Ambulatory medical care among adult black Americans: The hospital emergency room. Journal of the National Medical Association, 78(4), 275-282.

Newacheck, P.W. (1989). Improving access to health services for adolescents from economically disadvantaged families. Pediatrics, 84(6), 1056-1063.

O'Grady, K.F., Manning, W.G., Newhouse, J.P., & Brook, R.H. (1985). The impact of cost sharing on ED use. New England Journal of Medicine, 313(8), 484-490.

Orr, S.T., Charney, E., Straus, J., & Bloom, B. (1991). Emergency room use by low income children with a regular source of care. Medical Care, 29(3), 283-286.

Ortinau, D.J. (1986). Discriminating users and nonusers of preventive health practices and emergency walk-in clinics. Journal of Health Care Marketing, 6(2), 26-37.

Pisarcik, G. (1980). Why patients use the emergency department. Journal of Emergency Nursing, 6(2), 16-21.

Poland, M.L., Ager, J.W., & Olson, J.M. (1987). Barriers to receiving adequate prenatal care. American Journal of Obstetrics and Gynecology, 157(2), 297-303.

Rizos, J., Anglin, P., Grava-Gubins, I., & Lazar, C. (1990). Walk-in clinics: Implications for family practice. Canadian Medicine Association Journal, 143(8), 740-745.

Rosenstock, I.M. (1974). Historical origins of the Health Belief Model. Health Education Monographs, 2(1), 27-59.

Shapiro, M.F., Hayward, R.A., Freeman, H.E., Sudman, S., & Corey, C.R. (1986). Out-of-pocket payments and use of care for serious and minor symptoms: Results of a national survey. Archives of Internal Medicine, 149(7), 1645-1648.

Shapiro, M.F., Ware, J.E., & Sherbourne, C.D. (1986). Effects of cost sharing on seeking care for serious and minor symptoms. Annals of Internal Medicine, 104(2), 246-251.

Shulman, N.B., Martinez, B., Brogan, D., Carr, A.A., & Miles, C.G. (1986). Financial cost as an obstacle to hypertension therapy. American Journal of Public Health, 76(9), 1105-1108.

Stefl, M.E., & Prosperi, D.C. (1985). Barriers to mental health service utilization. Community Mental Health Journal, 21(3), 167-178.

Tucker, F.G., & Tucker, J.B. (1985). An evaluation of patient satisfaction and level of physician training. Journal of Health Care Marketing, 5(3), 31-38.

Webster's Seventh New Collegiate Dictionary. (1972). Springfield, MO: G. & C. Merriam Company, Publishers.

White-Means, S.I., & Thorton, M.C. (1989). Nonemergency visits to hospital emergency rooms: A comparison of blacks and whites. The Millbank Quarterly, 67(1), 35-57.

Wolinsky, F.D., & Arnold, C.L. (1988). A Different Perspective on Health and Health Services Utilization. In G. Mattox & M.P. Lawton (eds.), Annual Review of Gerontology and Geriatrics.

Woodside, A.G., Nielsen, R.L., Walters, F. & Muller, G.D. (1988). Preference segmentation of health care services: The old-fashioned, value conscious, affluents, and professional want-it-alls. Journal of Health Care Marketing, 8(2), 14-24.

APPENDIX A

MICHIGAN STATE UNIVERSITY

OFFICE OF VICE PRESIDENT FOR RESEARCH
AND DEAN OF THE GRADUATE SCHOOL

EAST LANSING • MICHIGAN • 48824-1046

April 29, 1992

Kathleen Boardman
3027 Tulsa Dr.
Jackson, MI 49203

RE: UTILIZATION OF A NON-EMERGENT CARE CENTER IN PATIENTS WITH AN IDENTIFIED PRIMARY CARE PROVIDER, IRB #92-166

Dear Ms. Boardman:

The above project is exempt from full UCRIHS review. The proposed research protocol has been reviewed by a member of the UCRIHS committee. The rights and welfare of human subjects appear to be protected and you have approval to conduct the research.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval one month prior to April 22, 1993.

Any changes in procedures involving human subjects must be reviewed by UCRIHS prior to initiation of the change. UCRIHS must also be notifed promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to my attention. If I can be of any future help, please do not hesitate to let me know.

Sincerely,

David E. Wright, Ph.D., Chair
University Committee on Research Involving
Human Subjects (UCRIHS)

DEW/pjm

cc: Dr. Barbara Given

APPENDIX B

The study in which you are about to participate is designed to measure why patients with a regular health care provider use a non-emergent walk-in care center.

Participation in the study is completely voluntary and will take approximately 10 minutes of your time. You are asked to answer questions as honestly and accurately as possible. There is no one correct answer. Your answers will be held completely confidential and no attempt will be made to identify you in any way. If you agree to participate, please sign the following statement.

You may, at any time, decide to not finish the study. Please turn the questionnaire back in to the triage nurse. In no way will completing or not completing the survey affect your care. Thank you very much for your cooperation.

Sincerely,

Kathleen Boardman, BS, RNC
Family Clinical Nurse Specialist Candidate
Michigan State University
College of Nursing

I, _____, state that I understand what is required of me as a participant in the above-described study and agree to take part in this investigation.

_____ _____

(Signature) (Date)

APPENDIX C

D #__

Questionnaire

The following questions are to ask your views about receiving care from your primary care provider and the Walk In Clinic. A primary care provider is defined as your family doctor, internist, pediatrician, nurse practitioner, or physician's assistant. The term primary care provider does not include specialty doctors, such as orthopedists, surgeons, obstetricians, etc.

The first set of questions will describe general things about you and your family. Although I would appreciate that you answer every question, if you prefer not to answer a particular question, feel free to leave it blank and go on to the next question. This information will be kept confidential. It should take approximately 10 minutes to complete this questionnaire. Thank you for your time.

1. Name of your usual primary care provider: (Write in name)

_____

2. a. How many times have you seen your primary care provider in the last 2 years? (Write in approximate number) _____
   b. When was your last visit with your primary care provider? _____ (month and year)
   c. What was the reason you saw your primary care provider? (Write in reason)

_____

3. a. How many times in the past 2 years have you visited the Walk-In Clinic at Foote Hospital? (write in approximate number) _____
   b. When was your last visit to the Walk-In Clinic? (month and year) _____
   c. What is your reason for this visit? (write in)

_____

   d. What made you decide to come to the Walk-In Clinic today rather than going to your primary care provider? (write in)

_____

_____

4. Ethnic background: (check one)

White/Caucasian _____ Oriental/Asian American _____
Black/African American _____ American Indian _____
Hispanic/Mexican American _____
Other (please specify) _____

5. Sex: (check one)

Male _____
Female _____

6. Age: (write in)

I am _____ years old.

7. Education: (highest grade completed in school, including college- check one)

Grade school or less _____
Some high school _____
High school diploma _____
Vocational diploma _____
Some college _____
Bachelor's degree _____
Graduate/Professional school _____

8. Income: Total family income for the past 12 months (check one)

0 - 9,999 _____
10,000 - 19,999 _____
20,000 - 29,999 _____
30,000 - 39,999 _____
80,000 or more _____
40,000 - 49,999 _____
50,000 - 59,999 _____
60,000 - 69,999 _____
70,000 - 79,999 _____

9. Type of insurance: (check all that apply)

No insurance _____
Medicaid _____
Medicare _____
Health maintenance _____
Health Central _____
Blue Cross or other similar insurance (specify) _____

10. What was the most important reason for choosing Foote Hospital Walk-in Clinic?: (check only one)

Convenience _____
Location _____
Cost _____
Insurance pays _____
Hours open _____
Couldn't get appointment to my primary care provider _____
Felt problem was too urgent to wait for appointment _____
Other (please specify)
_____

11. Today is: (please check one)

Sunday	_____	Thursday	_____
Monday	_____	Friday	_____
Tuesday	_____	Saturday	_____
Wednesday	_____		

12. Time of day is:

_____ a.m. or p.m.

The following questions are to measure your views about receiving health care from your primary care provider and the Walk In Clinic. Please indicate how much you think each of these statements affect your decisions about seeking care. Try not to skip any item. Circle the word you select as your answer.

13. My insurance pays for the Walk-In Clinic but does not pay for an office visit.

Strongly Agree Agree Unsure Disagree Strongly Disagree

14. I have to pay for an office visit immediately after seeing my primary care provider.

Strongly Agree Agree Unsure Disagree Strongly Disagree

15. My primary care provider does not think my problems are important.

Strongly Agree Agree Unsure Disagree Strongly Disagree

16. I do not have to travel a long distance to get to my primary care provider's office.

Strongly Agree Agree Unsure Disagree Strongly Disagree

17. My primary care provider does not speak English very well.

Strongly Agree Agree Unsure Disagree Strongly Disagree

18. My primary care provider's office has difficult steps or doorways.

Strongly Agree Agree Unsure Disagree Strongly Disagree

19. I do not have to take time off from work to go to my primary care provider's.

Strongly Agree Agree Unsure Disagree Strongly Disagree

20. I do not like my primary care provider.

Strongly Agree Agree Unsure Disagree Strongly Disagree

21. I can get appointments quickly at the primary care provider's office.

Strongly Agree Agree Unsure Disagree Strongly Disagree

22. The cost of transportation to the primary care provider is too high.

Strongly Agree Agree Unsure Disagree Strongly Disagree

23. I chose the Walk-In Clinic because I do not have to wait for an appointment.

Strongly Agree Agree Unsure Disagree Strongly Disagree

24. I feel my primary care provider is more competent than the doctor and nurses at the Walk-In Clinic.

Strongly Agree Agree Unsure Disagree Strongly Disagree

25. The Walk-In Clinic is not in a convenient location.

Strongly Agree Agree Unsure Disagree Strongly Disagree

26. My primary care provider has the lab and x-ray services I might need for this problem.

Strongly Agree Agree Unsure Disagree Strongly Disagree

27. My primary care provider is open hours that are convenient for me.

Strongly Agree Agree Unsure Disagree Strongly Disagree

28. The receptionist at the primary care provider's office makes it difficult to speak with the provider when I want to.

Strongly Agree Agree Unsure Disagree Strongly Disagree

29. Parking is easier at the Walk-In Clinic than at my primary care provider's office.

Strongly Agree Agree Unsure Disagree Strongly Disagree

30. It costs me more to go to my primary care provider than to go to the Walk In Clinic.

Strongly Agree Agree Unsure Disagree Strongly Disagree

31. I have to pay a co-pay when I go to my primary care provider's office.

Strongly Agree Agree Unsure Disagree Strongly Disagree

32. My primary care provider takes more time to listen to me than the provider at the Walk In Clinic.

Strongly Agree Agree Unsure Disagree Strongly Disagree

33. I usually see the same provider each time I go to my primary care provider's office.

Strongly Agree Agree Unsure Disagree Strongly Disagree

34. I do not have to pay a co-pay when I go to the Walk In Clinic.

Strongly Agree Agree Unsure Disagree Strongly Disagree

35. I think I have a good primary care provider.

Strongly Agree Agree Unsure Disagree Strongly Disagree

36. My primary care provider orders less expensive treatments than the providers at the Walk In Clinic.

Strongly Agree Agree Unsure Disagree Strongly Disagree

37. If there are any other reasons why it is difficult to see your doctor/nurse practitioner, please list them below.

_____

_____

Thank you for your cooperation in completing this questionnaire. Please return it to the triage nurse.