EVALUATION OF THE NEED FOR HEALTH PSYCHOLOGY SERVICES IN AN EMERGENCY ROOM SETTING: EXPLORATION OF PATIENT AND PROVIDER NEEDS

A DISSERTATION

SUBMITTED TO THE FACULTY

OF

THE SCHOOL OF PROFESSIONAL PSYCHOLOGY

SPALDING UNIVERSITY

BY

ANGELA G. GREEN

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

DOCTOR OF PSYCHOLOGY

SEPTEMBER 3, 2004

EVALUATION OF THE NEED FOR HEALTH PSYCHOLOGY SERVICES
IN AN EMERGENCY ROOM SETTING:
EXPLORATION OF PATIENT AND PROVIDER NEEDS

A DISSERTATION

SUBMITTED TO THE FACULTY

OF

THE SCHOOL OF PROFESSIONAL PSYCHOLOGY

SPALDING UNIVERSITY

BY

ANGELA G. GREEN

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

DOCTOR OF PSYCHOLOGY

LOUISVILLE, KENTUCKY

APPROVED: _____DATE:_____
Andrew A. Meyer, Ph.D.

_____DATE:_____
Thomas Titus, Ph.D.

_____DATE:_____
Sandy Ringer, BSSW

ACKNOWLEDGEMENTS

A huge thank you to my dissertation committee members for their efforts, creativity, and guidance on this dissertation. A special thanks to Dr. Meyer who worked even on his vacation to ensure that I would have feedback in order to complete this process within my timeframe. I would also like to thank my family who served as a constant reminder as to how I might consider working on my dissertation instead of doing less important things. Finally, I would like to acknowledge all those who have supported me through my doctoral program. Without all of you I would not be where I am today, thank you.

ABSTRACT

A needs assessment was conducted to explore the need for health psychology services in an emergency room setting. Information was to be gathered from healthcare providers in an emergency room setting and patients who presented to the emergency room. Due to unforeseen complications, patient data was not collected. Healthcare provider information was collected through a structured interview format. Interview data was then analyzed for themes and then organized into concepts by using Cross-case and Content analysis. Concepts were interpreted and explained in the context of how health psychology can address the identified needs. Despite limitations of the study, results indicated that health psychology may be utilized in an emergency room setting and patients and providers could benefit from these services. Implications and suggestions for implementation of health psychology services are discussed.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

Overview

This dissertation identified needs from patients and providers and recommend how utilizing health psychological services in the emergency room could increase the benefits to patients, providers, and administrators. It was hypothesized that there is a great need by patients and providers in an emergency room setting that health psychologists are ideally suited to provide. In addition to traditional mental health services, health psychologists could provide valuable services to patients and providers including; consultation, education, liaison, program development and evaluation services.

Providers

Providers may have difficulty responding to emotional and psychological needs of patients facing a medical crisis. Oftentimes, the providers' training does not prepare them to help patients and their families deal with the emotional and psychological impact of disease, illness, and injury, especially if the condition is long-term or chronic in nature. In addition, emergency room (ER) providers rarely follow patients once discharged from the ER. Instead, care transitions to a longer-term provider and there seems to be a lack of care continuity. This can be represented by the quick interaction patients and families have with ER staff and the sudden withdrawal when the patient is stabilized and transferred/transitioned from the ER. A sense of "here one minute, gone the next" may be experienced

by patients and families when interacting with ER staff. Additionally, ER providers may rarely follow a patient beyond the emergency room. ER providers often have to speak with patients and families about difficult issues (i.e., death, serious injury, etc.) and may not have had adequate training in how to discuss these issues with patients and families. In addition, patients and families may respond unexpectedly to ER providers with regards to such news, and providers may not know or understand how to react, manage, and deal with these reactions. Subsequently, patients and families may feel unsupported and not cared for by ER staff. ER staff may also have emotional and psychological reactions to these situations and may not be able to engage in appropriate self-care.

Patients and Families

Patients and families experiencing a medical crisis often look to providers to help them understand and deal with what is happening to them or a loved one. It is during this time that patients and families may feel let down by the system when staff cannot also recognize and attend to the emotional and psychological needs of patients and families. Families and patients may also feel that services and care provided by ER staff are discontinuous with services and care received post-ER. Because of the emotional and psychological impact of the situation that precipitated the ER visit, patients and families may be ill-equipped to integrate information, reactions, and experiences with the medical crisis and, therefore, will result in an increase in anxiety, misunderstanding, sense of helplessness, confusion, and distrust.

Health Psychology and Emergency Medicine

Emergency medicine is “a branch of medicine concerned with an individual’s resuscitation, transportation and care from the point of injury or beginning of illness through the hospital or other emergency treatment facility” (Online Medical Dictionary, 1998). A health psychologist can be an integral member of the emergency response personnel, especially in the emergency room. Aside from traditional psychiatric services, health psychologists can help facilitate and provide communication/relationship enhancement, education, “non-psychiatric” crisis intervention, consultation, coordinator/program management, and be an intervention strategist.

The emergency room setting provides ample opportunity for health psychology to help make a difference in how providers interact with patients and families, take care of themselves, how patients interact with the system and deal with the situation. Health psychologists are ideally suited and trained to help provide medical crisis interventions, liaison services, psycho-educational services, and continuity of care during transitions from ER units to other units of the hospital. Health psychologists possess a knowledge base and training background that distinguishes them from other psychologists and mental health providers. With this knowledge, the health psychologist can provide the patient and family with a sense of continuity between acute crisis and longer-term care, patients and families should experience decreases in: anxiety, misunderstandings, confusion, helplessness, and distrust. The health

psychologist may serve as a stable and identifiable figure for patients and families in medical crises.

In addition, health psychologists can provide intervention services to help address emotional and psychological reactions to diagnoses and treatment. Not only can health psychologists aid patients and families with integrating and coping with the medical crisis, but also aid in compliance and treatment evaluation.

Much of the literature on Health Psychology as a sub-specialty of Clinical Psychology has focused on the broad issues of integrating physical medicine and psychology. The literature seems to focus on the promotion and maintenance of health, prevention and treatment of illness, and how these can be incorporated into primary care settings. However there is little, if any, research or discussion that addresses the role of Health Psychology in perhaps one of the most critical and influential areas of medical service delivery, emergency medicine.

Skills of the Health Psychologist

The aim of this study is to begin to address how a health psychologist would be weaved into the emergency medicine setting and become a key participant in providing services and care to presenting patients.

One of the critical skills all psychologists must possess is the ability to communicate with others. Psychologists are trained specifically in the art and skill of communication. The subspecialty of health psychology is distinct because of its attention to physical health problems (Belar, 1997). Health psychologists understand the relationships between health and behavior and are capable of

working within health care settings with various health disciplines (Belar, 1997). Unfortunately, physicians receive little training in this area and many times feel uncomfortable when trying to speak to patients or their families about difficult diagnoses and treatment. In the emergency department, establishing rapport immediately is of the essence. Patient compliance, desired treatment outcomes, and information exchange hinge on the relationship that is established between doctor and patient (Rosenzweig, 1993). Although few emergency departments offer communication skills training, many recognize a need to implement programs to improve satisfaction (Greenberg, Ochsenschlanger, Cohen, Einhorn, & O'Donnell, 1993).

Gerhart, Koziol-McLain, Lowenstein, and Whiteneck (1994) conducted a study about the knowledge and attitudes of emergency care providers, in regards to quality of life, following spinal cord injury. They found that the knowledge and attitudes of the providers may affect how a family decides on critical treatment decisions and must be aware of the impact these may have on outcomes, well being, and life satisfaction. Similarly, Rosenzweig (1993) emphasized that sudden illness can be a very dehumanizing event and emergency medicine needs to find ways that the emergency room patient can sustain his/her humanity.

At times, the physician may need to notify family or friends about the loss of a loved one. Residents identified feeling least comfortable and most stressed when dealing with the emotional responses of families when making a death notification (Swisher, Nieman, Nilsen, & Spivey, 1993). The emotional reactions

from the surviving families and friends can be very overwhelming and uncomfortable for physicians. However, it is at this time when intervention with the family and friends is most critical in helping to assist them in progressing through a normal grieving process (Dubin & Sarnoff, 1986). With the addition of a health psychologist to the emergency room staff, the physician and health psychologist can perform the task together. The physician would be able to explain to the family his or her role in the treatment of the loved one and the health psychologist could provide support to both the physician and family. The health psychologist could also begin to provide the necessary interventions that the family may need help with during this time of crisis. Because of the knowledge in physical health, a health psychologist can aid the family in understanding and coping with the medical situation.

Gerald Caplan said that we normally exist in a state of equilibrium and that equilibrium is always the goal. When problem-solving techniques and other coping mechanisms cannot sufficiently maintain our equilibrium, we experience crisis. During this time, it is the intervention that we are exposed to that resets our equilibrium and we begin anew (Aguilera & Messick, 1982). However, new equilibriums can be positive or negative, it just depends what the intervention is and whom we come in contact with that helps us through the crisis. Negative interventions, when substantial enough, can have a significant impact on mental health. If emergency personnel and the health psychologist worked together, negative interventions may be minimized.

Some interventions that health psychologists are equipped to provide would include desensitization, relaxation, behavioral modification, deep breathing, guided imagery, and hypnosis to name a few. Temes (1999, p. 61) indicates how hypnosis would be an excellent intervention in an acute trauma situation:

> "In acute trauma, most individuals will focus on the injury and ignore their surroundings and arrive in the emergency room in a "trance-equivalent" state. This state is either good or ominous because there is increased susceptibility to suggestion, both good and bad. Due to the negative tone of the emergency room environment, patients are more likely to assume that random statements are predicting negative outcomes."

If a health psychologist were available to the patient, this trance-like state could be used to encourage a more positive perception and minimize psychological trauma and physical pain.

As would be expected, emergency personnel and patients alike are under enormous amounts of stress in an emergency situation. There is a need for physicians to be aware of a patient's ability to cope with illness and hospitalization and what his or her psychological functioning may be in order to effectively treat and manage the patient (Heiskell & Pasnau, 1991). Defares and Grossman (1988) asserted that the stress response is a "causal agent for disease, behavioral malfunctioning, and mental deficiencies." They also stated that an "optimal health state" depended greatly on a person's stress level. Maier, Watkins, and Fleshner (1994) pointed out in their research that stress has a

tremendous effect on immune functioning, as well. As if the trauma of being a patient in an emergency room was not enough, when communication breaks down between physician and patient stress levels can soar. Stress reactions can even continue long after the patient returns home after the trauma. Talbert, Wagner, Braswell, and Husein (1995) found that some patients continued to experience symptoms of PTSD related to the emergency room event. They compared the patient's symptoms to the degree of perceived communication with the physician. As the perception level of communication decreased, the patient's stress symptoms increased. The health psychologist could provide additional support, education, and information to the patient, family, and friends to help counteract this negative outcome while increasing communication, minimizing and managing anxiety, and maintaining rapport so emergency personnel can continue to treat the patient or loved one effectively.

As our population ages, emergency rooms will no doubt be frequented more and more by the elderly. This changing population base in emergency rooms could introduce new or compound communication problems between emergency personnel and the patient. Emergency personnel will have to become better equipped to deal with emotional issues, such as anxiety and depression. Again, the health psychologist could be an invaluable asset to an emergency medicine department. Psychologists in general are excellent providers of education and information and can provide it such that people understand and feel supported. Health psychologists, in particular, add the health component to help provide additional understanding of the condition. If an

elderly person were to present to an emergency room, a health psychologist could partner with a physician in treating the elderly patient. They may need additional explanation or information on what to expect, his or her illness, and interventions that may be needed (Baraff, Bernstein, Bradley, Franken, Gerson, Hannegan, et al., 1992). Children are another population that would need help with managing anxiety, information, repeated explanation, and reassurance (Harbeck-Weber & Hepps McKee, 1995).

Integration of the Health Psychologist

Ultimately, the question is whether or not health psychologists would even be welcome in an emergency medicine department. The answer seems to be a positive one. There is an increasing awareness in medicine, as well as in psychology, that the mind is not a separate entity from the body. Those physicians that continue to engage in this type of dichotomous thinking, organic versus psychiatric, may find that their initial impressions will lead to a higher percentage of misdiagnosis and inappropriate treatment. There must be a greater understanding and emphasis on examining the physical, as well as, the psychological factors in a patient's illness (Leeman, 1975). In fact, 57% of physicians in a study on physician-counselor liaison practice indicated that they would like the opportunity to be able to consult with a psychologist. Emergency medicine physicians were among the most enthusiastic endorsers of such a partnership (Lareau & Nelson, 1994).

Beyond these issues of communication, intervention, consultant, and educator, health psychologists can play key roles in administration in an

emergency medicine department. Psychologists also have experience in research methods, program design, implementation, and evaluation. This knowledge coupled with the relationship skills could enable a health psychologist to be a program manager or coordinator and help maximize proficiency and efficiency within the emergency room department.

Significance of Dissertation

The significance of this dissertation is that health psychology services are a vital component in the treatment of patients, both for the mind and body. In today's world, patients are demanding a higher quality of care which usually means organizations that provide health care services will need to offer and utilize more integrative and even alternative health services to meet these demands. In the Louisville area, health psychology services are underutilized despite the benefits that many medical providers have identified. This dissertation will be able to contribute not only to the field of health psychology and psychology in general, but also to the Louisville community and beyond. The first step in increasing quality of care, customer service, and cost efficiency is to first identify the needs that exist in the emergency room.

Definition of Terms

To help clarify, the following terms will be used throughout this dissertation as defined by the following:

Health Psychology – As defined by Matarazzo (1980, p. 815) "A clinical health psychologist applies, in professional practice, the specific educational, scientific, and professional contributions of the discipline of psychology to the

promotion and maintenance of health; the prevention, treatment, and rehabilitation of illness, injury, and disability; the identification of etiologic and diagnostic correlates of health, illness, and related dysfunction; and the analysis and improvement of the health care system and health policy formation."

Emergency Services – Services that are made available by hospital providers in an area of a hospital that is designated as an emergency room, emergency service center, etc.

Patient – Any person that receives services from a hospital provider.

Provider – Any hospital personnel that provides services to patients (i.e. physicians, nurses, allied health, staff).

Need for Health Psychology Services – identified through the themes derived from the structured interviews with key providers and through the ratings of patients on the questionnaire.

Summary

In conclusion, the addition of a health psychologist to an interdisciplinary team of emergency medicine professionals would only enhance patient care. Since patient care is a fundamental principle in emergency medicine, health psychology definitely has a place and role in the emergency department. This role goes beyond traditional psychiatric services into the realms of liaison, consultant, intervention, and administrative services. With physicians and health psychologists working together to treat patients, not only will quality of care increase, but patient and physician satisfaction may ultimately increase.

CHAPTER II

LITERATURE REVIEW

This chapter will explore and provide support for the present investigation. The history and discipline of health psychology, communication patterns, culture of medicine and illness, crisis and trauma, overutilization and cost of services, and the practical concerns of realistic implementation will all be delved into to help the reader understand the importance of this dissertation.

History of Health Psychology

Health psychology, relative to the field of psychology, can be described as still being in the initial stages of development. Despite the fact that health psychology as a specialized area has been around for at least 25 years, the ways in which this area of psychology can be utilized are still being explored. Furthermore, recognition of the contributions of this area of knowledge for psychologists has only recently been gaining momentum in the expansion of healthcare due to a number of current consumer trends, research, media, and medical science endeavors. Therefore, it is important to examine the development of health psychology so as to understand how it is applicable to the current marketplace and medical settings.

If we truly look back over history to try and identify the roots of health psychology, we find ourselves in the centuries before Christ and in the age of Hippocrates. It was during these ancient times that the first indications of the importance of the mind and body were first emphasized in Western culture (Belar

& Deardorff, 1996). Throughout history there are indications that people believed that the mind and body were intimately tied and influential on one another. Such medical procedures as bloodletting and leeching, to name a couple, were often used to help relieve hysteria, psychosis, and other psychological disturbances. The ideas behind these procedures were that these medical procedures could help cleanse the physical body so the mind could function better. In addition, medicine recognized the psychological impact that some diseases could have on the mind, such as syphilis and malaria. Psychology, in a sense, did not begin with psychologists, but with physicians (i.e. Freud). However, psychological influences on health and vice versa were not formally recognized until the 1920's when the field of psychosomatic medicine appeared (Belar & Deardorf, 1996).

In 1973 a taskforce was formed by the American Psychological Association (APA) to investigate the possibility of psychology's potential contribution to the study of health research. The taskforce's final report indicated that little research was being conducted by psychologists related to health care at the time. However, the report indicated that the potential impact and contribution psychology could make on this area was evident (Sanderson, 2004). In 1978 the Health Psychology division of APA (Division 38) formed and this subsequently led to the adoption of a definition of health psychology in 1980. The definition, used as the official definition of the APA Division of Health Psychology, reads:

> "Health psychology is the aggregate of the specific educational, scientific, and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, the identification of etiologic and diagnostic correlates of health, illness, and related dysfunction, and the analysis and improvement of the health care system and health policy formation" (Stone, Weiss, Matarazzo, Miller, Rodin, et al., 1987).

Shortly thereafter, in 1982, the publication of the journal of Health Psychology began. This journal promotes the scholarly research of health and illness interactions and cutting edge developments in the field. It is one of the most subscribed to APA journals (Health-Psych, 2004). Health psychology also became the most popular researched area in APA-accredited clinical doctoral psychology programs by 1990 (Newman & Reed, 1996).

Medical Model vs. Biopsychosocial Model

The medical model (a.k.a. biomedical model) assumes a mind-body dualism. The assumption is that illnesses arise in individuals due to physical causes, such as viruses, chemical imbalances, injuries, or bacteria (Engel, 1977). The psychological realm is considered to be completely separate. This model, developed in the 19th and 20th centuries, focuses on illness and disease rather than health (Sanderson, 2004). From this perspective, illness can be cured and/or managed through the use of medication and surgical interventions.

Historically, the use of psychology within the medical model had been limited to the identification and treatment of psychological disorders (Belar & Deardorff, 1995). Engel (1977), a physician, believed that the medical model was too limited and that it did not account for all aspects of a patient's life that could affect the development, progression, and maintenance of disease. He proposed that to fully understand a patient's disease one must consider all the factors that might contribute; hence the proposal of a biopsychosocial model. This model would incorporate not only the biological, but also the psychological and social aspects of a patient's life. Through this model, one would be able to

get a picture of the whole person and how these different aspects influenced each other and created new connections (Patterson, Peek, Heinrich, Bischoff, & Scherger, 2002).

The biopsychosocial model is a conceptual framework that allows for "an integrated systems approach for the assessment of biological, psychological, and social factors that contribute to health and illness" (Van Egeren, Striepe, & Noll in Camic & Knight, 2000). This model is bi-directional, eliminating dualism, in order to promote the best possible health to those individuals that have psychological, as well as, medical illnesses.

In 1999, the Surgeon General of the United States (Department of Health and Human Services, 1999) included in his report that mental health should not continue to be separate and unequal to general health and that our society could no longer view it that way. More and more patients do not ascribe to a medical model (Shapiro & Koocher, 1996). Shapiro and Koocher (1996) noted that many clinicians falsely assume that patients continue to believe in the medical model and the personal meanings patients have are not explored. Not exploring a patient's meanings could result in a less than optimal medical outcome.

Some physicians have recognized the influence of psychological factors on illness, but have been unprepared by their training and ultimately express frustration at not knowing how to address these issues (Alto, 1995). In general, medical training has not addressed these issues and, thus, leaving primary care physicians with little knowledge or background in the contributing correlates of psychological factors on physical health (Longlett & Kruse, 1992). This

knowledge deficit has led to inappropriate treatment and many psychological issues undetected (Higgins, 1994). Among these psychological issues that go undetected are depression and anxiety (Higgins, 1994). Vasquez, Nath, and Murray (1988) found that only about 34% of primary care physicians in West Virginia actually referred their patients for mental health services and of those referrals 71% were to psychologists. According to Callahan, Hui, Nienaber, Musick, and Tierney (1994), even when patients are referred to mental health professionals, 50% usually do not follow through with making the appointment. Although some areas of medicine have begun to move away from a medical model of training to one more considerate of psychosocial aspects, there are still deficits in this area. Baird and Doherty (1990) found that primary care physicians were not being trained in the same type of integrative models as psychologists are, but rather focused on a single theoretical model (i.e. biological psychiatry or family systems).

Health Psychology as a Discipline

In 2001, the American Psychological Association's Practice Directorate stated that the behavioral factors found in 13 of the 15 leading causes of death in the U.S. could benefit from the prevention, rehabilitation, and direct interventions that psychologists provide. Further, that these interventions could dramatically impact the progression of disease (APA, 2001). Knowing this, it seems that a health psychologist would be the logical provider to consult and refer medically ill patients to in order to maximize health.

A health psychologist is distinguished from a traditional psychologist in a number of ways. The major contrast is in regards to the role and focus the psychologist assumes. For a psychologist working in a traditional mental health setting, his or her role is to provide services aimed at mental illness. The focus is then mainly on the conditions of the various mental illnesses and helping the client manage the illness. The psychologist will spend time focusing on psychological evaluations, therapy, managing referrals, and crisis intervention (Patterson, et al., 2002). The client then may also view this care as being "mental health care" and mutually exclusive from any medical or physical care. She or he may be referred by another professional or be self-referred (Patterson, et al., 2002).

A health psychologist may be found working within the medical care system. One role of the health psychologist is to be a member of a health care team to aid in helping the patient achieve an optimal level of functioning. She or he focuses on the total health care of a patient, encompassing medical and psychological aspects (Patterson, et al., 2002). The health psychologist will spend time focusing on the interplay between the psychological and medical realms, psychosocial factors that may influence disease development, progression and maintenance of disease, rehabilitation, chronic illness, adjustment to illness, evaluation and referral, and aid in continuum of patient care (Patterson, et al., 2002). The patient then may also view this care as being "health care" and have an expectation of collaboration among professionals in his or her care (Patterson, et al., 2002). The most distinguishing feature of a health

psychologist is his or her attention to physical health problems (Belar, 1997). Belar (1997, p 412) highlighted some of the issues health psychologists might address: “psychological conditions secondary to illness, somatic presentation of psychological dysfunction, psychophysiological disorders, physical symptoms responsive to behavioral interventions, somatic complications associated with behavioral factors, psychological presentations of organic problems, prevention of physical and psychological complications from stressful medical procedures, behavioral risk factors for disease or disability, and problems of health care providers and health care systems.”

The training and education of a health psychologist is also usually varied from that of other psychologists. Health psychologists are specifically educated about anatomy and physiology, medical illness and disease, psychopathology, medical organizations and systems, and have a working knowledge of the medical arena. Many health psychologists also have practicum and residency training in a medical setting.

Health psychologists can be found in an array of medically based positions. For example, many health psychologists can be found in hospitals, rehabilitation centers, pain management clinics, local community clinics, and in private practice. They are called upon to conduct assessments, brief therapy, intervention and treatment planning, continuum of care, program evaluation, consultation, health care research, health care policy, administration, grantwriting, biofeedback, staff assessment, training and support, teaching, as

well as psychoeducation (VandenBos, Deleon, & Belar, 1991; Belar, 1997; Casciani, 2003; Matarazzo, 1980).

Health psychology as a discipline has also contributed in a number of ways through research. Today, there is a better understanding of how disease and coping are related, in other words, the impact on a patient's recovery. There has also been fascinating research on illness and social support (i.e. influence of social support and the impact on illness outcome). Sanderson (2004) also drew attention to research that has contributed to our understanding of the relationship between pain and illness, medical adherence versus noncompliance, and issues of health-promotion.

Patterson et al. (2002) outlined primary care as any entry point a patient may make into the health care system; including, private homes, nursing homes, office settings, hospital clinics, and emergency rooms. A health psychologist could easily be integrated into any of these settings and benefit the system. In fact, the American Academy of Family Physicians (1994) recognized in their definition of primary care the inclusion of "…health promotion, disease prevention, health maintenance, counseling, patient education, diagnosis and treatment of acute and chronic illnesses in a variety of health care settings…" where a physician utilizes "…other health professionals, consultation and/or referral as appropriate." Many states and insurance companies have also recognized psychologists as *health* providers.

Communication, Collaboration, and Integration

Emergency situations require quick and decisive action. As in any urgent situation, information becomes key. The sender of the information tries to convey the needed details to the receiver so that further action can be taken to hopefully relieve or lessen the crisis event. In the example of emergency medical care, time is of the essence and the quicker a patient can be treated and stabilized the better. Not only is accurate and essential information needed in medical crises, it also is a big factor in the general ebb and flow of an emergency room.

Medical care, in general, has a tendency to leave patients feeling vulnerable and powerless (Liss-Levinson, 1982; Seligman, 1975). Add the frustrations of the emergency room culture, where providers are overworked, patients are triaged and usually have long waits, systemic issues, and the stress of the reason for the ER visit, and one has a stew of potential dilemmas brewing (Shapiro & Koocher, 1996). Shapiro and Koocher (1996) consider patients to have two main problems when attempting to navigate the medical system; communicating with providers and the dehumanization they often feel that occurs in the whole process.

Studies have investigated the patient-provider relationship, particularly communication patterns. Leitzell (1977) found that 75% of physician's diagnosis of a patient is from the information gathered through the patient's history. However, one study found that a patient was interrupted after only 23 seconds of beginning to relay symptomatology to the physician in 72% of interactions (Marvel, Epstein, Flowers & Beckman, 1999). This is very disconcerting because

the provider needs the information to make the best treatment decisions and the patient needs to understand the nature of the illness and be able to comply with treatment recommendations to enhance outcome. The attitudes of the health providers towards the patients and families impact critical treatment decisions (Gerhart, Koziol-McLain, Lowenstein, & Whiteneck, 1994). Furthermore, Dunbar-Jacob, Burke, and Puczynski (1995) found patient compliance rates were related to the quality of the relationship between doctor and patient. Research has revealed that when providers lack communication skills and use technical jargon there is an increase as to the misinterpretation of information by the patient (Hadlow & Pitts, 1991). In addition, patients who are anxious, physically incapacitated, and distracted are not likely to be able to remember medical instructions, information regarding their situation, and have a more difficult time making medical decisions (Charles, Goldsmith, Chambers, & Haynes, 1996; Shapiro & Koocher, 1996). In fact, patients may only recall about 58% of the information relayed to them by the provider during a time of crisis, immediately forgetting about 40% of that (Shapiro, Boggs, Melamed, & Rodrigue, 1992; Sanderson, 2004).

Communication is so vital to the relationship that patient well-being and satisfaction are dependent on it (Yap, 1988; Mentzer & Snyder, 1982). Mentzer & Snyder (1982) found that 86% of patients who thought the provider's communication skills were good indicated satisfaction with their medical care, as opposed to 25% who were not happy with the provider's ability to communicate with them. Engel (1992, p 11) stated "For when expression of human

understanding on the part of the physician is not forth coming and the patient does not feel understood, then trust and confidence may be impaired and with it the patient's capacity and willingness to collaborate – critical if the physician's scientific aims are to be accomplished." Unfortunately this has not always been a primary concern for physicians, despite being encouraged by the American Academy of Family Physicians (1994), "Primary care promotes effective doctor-patient communication and encourages the role of the patient as a partner in health care." Patient compliance, desired treatment outcomes, and information exchange hinge on the relationship that is established between doctor and patient (Rosenzweig, 1993). "Assessment and enhancement of provider-patient communication is one of the most important roles for the psychologist serving on a health care delivery team" (Haley, McDaniel, Bray, Frank, Heldring, Johnson, Lu, Reed, & Wiggins, 1998, p 243).

Due to the nature of the emergency room culture, doctors and nurses are likely to not have the luxury of time to help patients fully understand the impact of the situation. This creates an opportunity for the health psychologist to work with the patient in understanding and processing this important information and to learn "survival skills" in the medical system (Shapiro & Koocher, 1996).

Most physicians are still educated within the medical model framework. Some areas, pediatrics and family practice, have begun to practice from more of a biopsychosocial model. Furthermore, physicians are oftentimes trained to disconnect themselves emotionally from the situation; however, medical students should be encouraged to express their feelings (Angoff, 2001). Appearing more

human (i.e. having emotions) and expressing interest in exploring other biopsychosocial aspects of the client's life and the impact on disease, can facilitate better outcomes. However, in emergency room settings, the interactions between patient and provider are usually brief and very focused, due in part to the limited time available for the interaction. With the addition of a health psychologist, Friedman, Sobel, Myers, Caudill, and Benson (1995) stated "Providing patients with social support, skill building, and accurate information regarding the nature and treatment of disease stimulates and engenders feelings of self-control, empowerment, and self-efficacy, which further enhance clinical outcome." Health psychologists can increase effective communication, which reduces stress levels, and help preserve humanity during a dehumanizing event (Shapiro & Koocher, 1996; Sanderson, 2004; Patterson et al., 2002). Other health providers receive little training in being able to discuss difficult diagnoses and treatments with patients and their families and although few emergency departments offer communication skills training, many recognize the need to implement programs to improve satisfaction (Greenberg, et al., 1993). Additionally, physicians may, in general, feel uncomfortable in providing psychosocial or behavioral medicine interventions.

The public is generally in favor of psychologist and physician collaboration. An APA study in 1995 revealed that 80% of the people surveyed indicated that they would be inclined to work with physicians who collaborated with a psychologist than not. Additionally, the connection between mind and body is evident to the public and they believe that addressing both sides aids in

the ability to cope and recover from disease (APA, 1995). Furthermore, integration of care increases satisfaction among patients because they feel that providers are addressing their problems, they have come to the "right place" for treatment regardless of presenting problem, and satisfaction results in fewer malpractice claims (Jacobson, 2000).

Currently, integration models are being seen in primary care settings. Here the "hallway handoff" seems to occur quite successfully. Levitt (2002) documented a meta-analysis that indicated that interdisciplinary treatment was better than single-disciplinary treatment. In 1995, the PEW Health Professions Commission stated:

> "Health professionals working in collaboration can reach more patients at less cost and with a means of providing "seamless" coordinated care. The team approach allows providers to contribute from their individual areas of expertise, creates an environment of innovative care by bringing together different perspectives and problem-solving skills, and enables each patient to integrate the disparate aspects of his or her health care needs. The care provided to patients is forged by the integration of ideas about patient needs and intervention strategies that would not be possible without the collective insight of an interdisciplinary team. A greater sense of completeness of care, a more stimulating practice, and the shared management of very complex patients all add to a more effective clinical environment."

Sobel (1995) and Haley, et al. (1998) discovered that almost one-third of patients expressed psychological distress through bodily symptoms and that the impact of psychological disorders increased health care utilization, increased disability, and decreased a patient's quality of life. Kroenke and Mangelsdorff (1989) also elucidated that medical disease is not only associated with physical stress, but that it can also induce emotional distress. An integrated care model could address the medical and psychosocial factors of disease and health. Patterson, et al. (2002) further indicated the need for an integration model by highlighting the following facts:

- Primary care physicians are prescribing psychotropics to about 7% of their patients
- Primary care physicians are prescribing about 67% of the psychopharmacological medications
- Of the 10 most common complaints to primary care physicians, 90% have no organic cause
- Primary care physicians provided approximately 50% of mental health care
- Few patients seek mental health treatment from a mental health professional
- Psychosocial concerns comprise 50-70% of primary care visits.

An integration model provides physicians access to a psychologist they know, consultation and feedback are immediate, and patients, families and providers emotional reactions can be handled immediately (APA, 1998; Lareau & Nelson,

1994; Swisher, Nieman, Nilsen, & Spivey, 1993). Furthermore, 57% of providers have indicated that they would like the opportunity to readily consult with a psychologist and emergency personnel were the strongest of endorsers for an integration model (Lareau & Nelson, 1994). As more patients are uninsured, elderly, etc., the more likely the emergency room will be utilized as *the* primary care entry point.

Culture of Illness and Effects of Trauma

Physical illness or states in association with a person's accumulated ways of making meaning about his or her world can exacerbate psychological distress and/or physical illness. Kegan (1982) suggests psychological difficulty can influence physical illness and vice versa. Regardless of the time of illness onset, the combined influence can lead to an increase in the possibility of dysfunction occurring.

Because the influence of the mind and body are inseparable, sudden illness or trauma can be just as overwhelming to the psychological mind as it is for the physical body. Depending on the individual's way of interpreting the medical experience, she or he will need to integrate and adapt to this new experience of illness or trauma. If the individual is resistant or unable to incorporate these things into his or her sense of self, then problems (e.g., depression) may manifest.

Why is this important to know? Over the last 20 years there has been a shift in the culture of illness (i.e., research endeavors and discoveries, managed care, public education, technology, etc). The culture of illness can be thought of

as the general atmosphere and understanding in which a reasonable person conceptualizes his or her health. Generally, most individuals may consider themselves to be fairly healthy unless disease or trauma befalls him or her or his or her family. At which time health providers, medical lingo, interaction with health care systems, absurdities in policy, and strain in relationships become the culture in which one can be consumed. Furthermore, there has been a significant shift in the nature of illnesses.

In the 20th century, death was usually a result of acute infectious diseases. With the advent of vaccines and technology, 21st century deaths are more the result of chronic conditions (Sanderson, 2004). Remarkably, many of the chronic diseases (i.e., heart disease, cancer, obesity, etc.) have significant psychological and behavioral components (Centers for Disease Control, 2003). As the public's awareness is increased and individuals become more educated about their health risks, a greater demand for information and service will be expected. Gone are the days when all patients only listened to the physician and expected that what the physician said was an absolute. Today patients are asking questions, getting second and third opinions, and taking a more active role in their care.

However, there are some lingering aspects of the culture of illness that have not changed. For instance, upon hearing news of a diagnosis the patient may still feel vulnerable, lost, dehumanized, and look towards experts for answers. Thus the world of health care becomes all encompassing and coping resources are challenged and sometimes overcome by this new world the illness

has seemingly created around the individual. The health system is examined in the hopes of finding meaning, addressing needs, and managing symptoms. Many times a significant health event can dramatically impact a person's development. It is in these moments that a health psychologist may play a vital part in helping the patient restore some equilibrium and understanding to his or her world.

Friedrich and Jaworski (1995) suggest that children with illnesses are likely to be embedded in a family that relies heavily on the medical community to take care and address their symptoms. Therefore it is probable that the caregivers in this family do not model appropriate differentiation or attachment processes (Friedrich & Jaworski, 1995). Kegan (1982) explains this as he discusses the parents' influence on their child's development when they themselves are preoccupied with their own developmental deficiencies. Because of this particular way of responding, the child may not have the opportunity to learn nonsomatic models of coping and be at increased risk for further distress (Friedrich & Jaworski, 1995). Unfortunately, the child's psychological stress may become expressed as overt physical pains and problems. These experiences undoubtedly influence the child's development. The meanings that are made during these times will continue to influence the individual's perception of subsequent challenges by the world, resultant behaviors, and potential changes in ways of making meaning. Unless changes are made in the ways the person makes meaning (e.g., through the use of intervention and/or therapy), then detrimental ways of behaving and making meaning may continue.

Pain, for instance, is not only physical but is psychological as well. Psychological pain can be understood as an individual's resistance to integrating and adapting to the evolution of the self (i.e., instead of accepting death as a natural process of life, a person may develop anxiety to the point she or he can no longer function adaptively in the environment). Similarly, when the body fails to relax and remains instead in a constant flight/fight mode eventually it will experience breakdown or exhaustion contributing perhaps to such conditions as chronic fatigue syndrome and/or fibromyalgia. In cases of anxiety, it is thought that anxiousness is a response to a perceived threat. Thus, the body's self-preserving and protecting mechanisms are activated. The flight/fight response ensues and the "natural" responses (i.e., fight the threat or run away) cannot be expressed or are not appropriate responses to the situation. Instead the individual may experience panic symptoms in these situations. Unless there is some type of intervention with the person's meaning of the experience, this cycle may continue and generalize to other areas of the person's life.

Furthermore, research over the last 30 years continues to strengthen the relationship between health and illness. In fact, the National Guideline Clearinghouse documented several evidence-based clinical practice guidelines relating to such areas as Alzheimer's disease management, cardiac rehabilitation, pulmonary rehabilitation, smoking cessation, diabetes, pain management, and cancer to name a few (California Workgroup on Guidelines for Alzheimer's Disease Management, 2002; Scottish Intercollegiate Guidelines Network, 2002; American Association for Respiratory Care, 2002; Singapore

Ministrey of Health, 2002; Haire-Joshu, Glasgow, & Tibbs, 2003; Singapore Ministrey of Health, 2003; Institute for Clinical Systems Improvement (2002); Kvale, Simoff, & Prakash, 2003). All of these guidelines outline behavioral and psychological interventions as being an essential component to treatment (National Guideline Clearinghouse, 2004).

Recent research in the area of psychoneuroimmunology has reinforced the connection between mind and body. Psychoneuroimmunology addresses the relationship between psychosocial components and the immune, endocrine, nervous, and cardiopulmonary systems (Adler, 2001). Kiecolt-Glaser, Dura, Speicher, Trask, and Glaser (1991) highlighted the effects of spousal care-giving and the negative impact on immune functioning. Their findings suggest the stress incurred from care-giving contributed to a down-regulation of the immune system, thus increasing the risk of infectious diseases.

The top ten leading causes of death according to the Centers for Disease Control (2003) all have factors that are at least in some part preventable because they relate to lifestyle. The top ten causes of death are; cardiovascular disease, cancer, cerebrovascular disease, chronic obstructive pulmonary disease, accidents, flu and pneumonia, diabetes, suicide, nephritis, and chronic liver disease and cirrhosis (CDC, 2003). The American Heart Association (1996a) estimated that some form of cardiovascular disease can be found in one of every four Americans. The Scottish Intercollegiate Guidelines Network (2002) found 29% reduction in myocardial infarction and a 34% reduction in cardiac mortality among patients that participated in a cardiac rehabilitation program. These

cardiac programs had psychological and educational components as key elements of the program. Furthermore, research has shown that panic disorder is the number one cause of non-cardiac presentation in ERs (Rozensky, 1994).

In regards to cancer treatment, psychological interventions can play a key role in treatment, adjustment and well-being of the cancer patient. Meyer and Mark (1995) conducted a meta-analysis on research that had looked at the psychological interventions in cancer care support. Their analysis suggested that psychological interventions helped to reduce symptoms, reduce side effects, and improve emotional and functional adjustment. Furthermore, psychological interventions seem to enhance immune functioning and health outcomes (Speigel, Bloom, Kraemer & Gottheil, 1989; Fawzy, Kemeny, Fawzy, & Elashoff, 1990).

According to the American Thoracic Society's website (2004), Chronic Obstructive Pulmonary Disease (COPD) is expected to become the third leading cause of death by 2020. The major cause of COPD is smoking. There is a steep increase in mortality from COPD after the age of 45 (American Thoracic Society, 2004). It is suggested that in order to maintain stability with COPD, in other words stabilize or decelerate disease progression, patients should engage in pulmonary rehabilitation, smoking cessation, and sleep programs. All of these interventions have significant psychological components in the programs.

Diabetes is another chronic ailment that affects large numbers of Americans. According to the Centers for Disease Control (2002), diabetes affects 18 million Americans, of which 5.2 million are undiagnosed. Diabetes is

becoming a national epidemic as America's obesity statistics rise. It is estimated that diabetes costs $132 billion annually in both direct and indirect costs. Research suggests that lifestyle changes can dramatically reduce risk and/or delay of diabetes onset. Addressing psychological issues in addition to other educational components has resulted in a 58% decrease in diabetes development over a 3 year period (American Diabetes Association, 2004).

Crisis

Shapiro and Koocher (1996, p 109) suggest that "crisis presents a point of no return, that it is either handled advantageously, resulting in maturation, or maladaptively, resulting in stagnation." When problem-solving techniques and other coping mechanisms cannot sufficiently maintain our equilibrium, we experience crisis. A crisis situation can fundamentally change a person and the struggle is to return to a homeostatic state, albeit a new homeostatic state especially for medical crisis patients. Therefore, the goal of crisis intervention is to help the person obtain equilibrium so that they are functional again and have been able to integrate the crisis (Shapiro & Koocher, 1996). However, the patient can have a number of negative traumatic responses that can lead to maladaptive coping.

One common impediment to optimal functioning is that of negative coping mechanisms (i.e., isolating one's self, denial of problems, avoidance, etc.). Furthermore, patients may come to an inaccurate or pessimistic sense of meaning due to the losses incurred from the medical crisis. Bulman and Wortman (1977) found that most people base their meanings on a "just" world.

So the impact of the losses, dependency, fear of death, vague confines of the diagnosis, and medical culture unfamiliarity should not be underestimated (Shapiro & Koocher, 1996). A health psychologist is in a unique position to provide a safe and unconditional environment in which the patient could explore these issues and consider his or her options (Shapiro & Koocher, 1996).

As Shapiro and Koocher (1996, p 114) stated "medical diseases are stressful for everyone." Unsurprisingly an increase in psychological disorders can also result. However, all increases in anxiety or depressed mood should not be considered pathological. Pollin (1995) points out that these reactions are often common in reaction to a medical crisis, and, therefore; should not warrant the same treatment approach unless symptoms can be identified independent of the medical crisis. With that in mind, monitoring of psychological symptoms is of the utmost importance, especially when trying to obtain optimal functioning. The health psychologist would also be mindful that a patient's distress and sense of vulnerability is highest when she or he is an inpatient (Shapiro & Koocher, 1996).

It is also likely that the patient may experience a general decrease in well-being after a medical crisis. Well-being can be considered a subjective valuation of how a patient views himself or herself. If in general a patient feels that she or he is mainly happy and can do most things desired a patient can be considered to have a positive well-being. However in situations such as a medical crisis where health is threatened, there may be a dramatic decrease in perception of well-being. Health, as defined by the World Health Organization (1964), is "a state of complete physical, mental, and social well-being, and not merely the

absence of disease and illness." Thus, any threats to physical well-being can affect overall well-being (Groth-Marnat & Edkins, 1996). In addition, as mentioned previously in regards to psychoimmunology, the impact of stressors on a patient can contribute to a decrease in physical health.

In summary, how a person understands his or her illness can have effects on how the illness will be managed (i.e., compliance issues, adjustment to the illness, etc.), self-perception, and future ways of understanding the world.

Crisis History, Medical Culture and the Psychologist

Throughout the literature, different authors and researchers have found a variety of similar ways to say what constitutes a crisis, only varying the technique and how it is defined. Overall, the main point of each explanation can be easily summed up in a simple definition as defined by Lewis (1994, p 13):

> "Crisis is an interruption from a previously normal state of functioning resulting in turmoil, instability, and significant upheaval in a system. A crisis may be physical as in a disease or maturational stage, emotional as in a mental disorder, social as in a geographic move or loss of a relationship, or professional as in the case of a layoff or termination."

We often joke that our lives are a constant series of crises, and to some extent this is true. However, most people are able to handle their day-to-day crises successfully and require little to no intervention. This would be considered a "normal state of functioning." But it is when the coping resources and defense mechanisms of a person or organization become overwhelmed by a given situation that a "true" crisis arises. It is at this time when outside intervention is

necessary. The person or organization can no longer solve the problem on his or her own and a state of helplessness develops. Crisis intervention provides immediate help and, as its goal, helps to restore homeostasis.

Crisis intervention is a relatively new concept that has only evolved over the last century, more concretely in the last few decades. Many of the significant early physicians recognized that when a person experiences extreme upheaval, it greatly effects his or her well being. Some of the earliest reports by physicians regarding this matter date back to 600 B.C. Hippocrates defined a crisis as being "a sudden state that gravely endangers life." (Roberts, 2000). Unfortunately, it was not until the 20th century that strides were made to conceptualize and implement a coherent theory of crisis intervention. Crisis intervention in rudimentary form emerged in 1906 in New York City. The National Save-A-Life League was established as the first suicide prevention center to help people in crisis (Roberts, 2000). Very little more was done to actively help individuals in crisis until the 1940's and 1950's.

Erich Lindemann and Gerald Caplan were two of the most prominent names in crisis intervention theoretical and practical development. In 1943 Boston experienced one of its worst human disasters on record. A nightclub named the Coconut Grove caught fire and trapped 493 people. All perished in the fire. Lindemann worked with the survivors and relatives of the victims and noticed that some seemed to have more difficulty than others in dealing with the tragedy. From Lindemann's observations, in conjunction with Caplan, the first contemporary theory of crisis intervention emerged.

Crisis intervention was founded on a number of theoretical assumptions about human behavior. No one theory serves as the foundation, as all have contributed to some degree. Among the most prevalent are Freud, Hartmann, Rado, Erickson, Lindemann, and Caplan. From Freud the notion that all human behavior has its roots firmly planted in the soil of personal history and experience, or as he called it, psychic determinism. What he neglected in his analysis was the study of normal or healthy behavior (Aguilera & Messick, 1982). So, much of his hypothesizing was to explain abnormal behavior.

As psychology evolved and Freud's strict Psychoanalytic theory waned, more analysts began to explore the flip side, or normal side, of human behavior. Among them was an ego analyst named Heinz Hartmann. Hartmann was interested in applying psychoanalytic theory to normal behavior. He investigated how a person's adaptation to the environment as an adult was equally as important as when the person was a child. Memory, thinking and language were conceptualized as being "conflict free" and that they could function independently within the ego (Aguilera & Messick, 1982). He saw these "conflict free" ego functions as being free of cultural influences and thus adding stability to the personality.

Out of this hypothesis, Rado developed a principle of motivation and adaptation. He thought that although the developmental past was relevant, the immediate present was where emphasis should be placed. "Primary concern is with failures in adaptation "today," what caused them, and what the patient must do to overcome them." (Aguilera & Messick, 1996).

Not until Erickson were social influences considered an integral component of development. Erickson's conceptualization of stages of psychosocial development, and the crises that arise during these maturational stages did interest increase in normative crises. Erickson's stages of human development paved the way into more modern investigations of situational crises.

After the tragic fire at Coconut Grove, Lindemann noticed that the bereavement reactions among the victims were very different. In particular, he noticed that some individuals seemed to have only brief reactions while others were much more prolonged. From this, he developed a theoretical framework around the concept of emotional crisis and subsequent preventive efforts. He thought this to be a way to help individuals who, by whatever predisposition they may have to a given stressor, may become exceedingly vulnerable and whose usual defenses and coping mechanisms become overtaxed. To implement this theoretical frame of reference, he joined with a man by the name of Caplan to establish a community-wide program called the Wellesley Project.

Caplan went on to further refine this theoretical frame of reference by stating that crisis periods were important for individual and group development (Aguilera & Messick, 1982). He said that we normally exist in a state of equilibrium and that equilibrium is always the goal. When problem-solving techniques and other coping mechanisms cannot sufficiently maintain our equilibrium, we experience crisis. During this time, it is the intervention that we are exposed to that resets our equilibrium and we begin anew. However, new equilibriums can be positive or negative, it just depends what the intervention is

and whom we come in contact with that helps us through the crisis. Negative interventions, when substantial enough, can have a significant impact on mental health.

Caplan and Lindemann continued their work on developing comprehensive frameworks of crisis intervention throughout the 1940's and 1950's. However, it was not until the 1970's that *crisis intervention* was even recognized as a formalized concept (Aguilera & Messick, 1982). Crisis intervention was still viewed as being a part of psychiatry embedded deep within psychoanalytic roots.

During the 1970's there was a flurry of research investigating different aspects of crisis intervention. Lindemann and Caplan's theory and practice of crisis intervention were applied to a variety of settings and situational crises. Their theory and practice of crisis intervention laid the foundations for many of the programs developed in the late 1970's, 80's, and still today. Among them are: telephone counseling, disaster work, family interventions, and rape and incest trauma (Mitchell as cited in Everly, 1995).

Another branch of crisis intervention began to focus on the caretakers; those that dealt with the individuals in crisis. This new branch was called Critical Incident Stress Management. Mitchell developed an education-focused approach of stress management that emergency personnel could use to understand traumatic stress and psychotrauma (Mitchell as cited in Everly, 1995). From this model another, more specific, program emerged – Critical Incident Stress Debriefing. Critical Incident Stress Debriefing was designed to

provide a detailed procedure of how to work with emergency personnel after a significant trauma (i.e. death of a police officer, fireman, etc.). Training models were designed to teach mental health professionals how to debrief personnel through a set of steps and procedures. Critical Incident Stress Management and Debriefing techniques are some of the most common procedures used today. Not only are these techniques still used with emergency personnel today, they have also expanded into a variety of settings and used in very much the same way with other organizations.

Today, crisis intervention takes many different forms. It is no longer just considered as something that is done when an "abnormal" person experiences a "mental breakdown." Although the public may still have this view, in recent times we have learned that a crisis is not confined to inpatient wards. If not from personal experience, as a society we have learned what it means to be in a crisis. School shootings and terrorist acts have reaffirmed that a crisis can occur to anyone, at anytime without warning and that crises do not just happen to "crazy" people. There can be individual, organizational, and societal crises as well. Through an effort put forth by the American Psychological Association and similar organizations, an attempt has been made to address these crises as they develop. Psychologists and crisis counselors, among others are available twenty-four hours a day to respond to crises across the nation and around the world.

Today's views and initiatives are remarkably different than those thirty years ago. It is now commonplace for states to have rapid response teams,

crisis lines, stabilization centers, and wrap-around aides. It's amazing to look back and see that the theme of crisis has been around since ancient times, but only within the last century have steps been taken to manage it. Theories of crisis intervention and outgrowths continue to emerge as the body of research and need continue to expand. One area of outgrowth that seems to be a natural extension would be the service a health psychologist could provide to patients and staff in an emergency room.

The emergency room culture is one of fast-pacedness and immediacy with the goal of medical stabilization. The focus is on the patient in medical crisis. Those that present to the ER and do not have an imminent life-threatening situation are triaged and attended to as service becomes available. In this area, results are expected rapidly, the focus is problem-oriented and action-oriented, information is conveyed in a succinct manner, and requests need to be specific (APA, 1998). These expectations may be contrary to what many general psychologists are accustomed to meeting. However, a health psychologist proceeds into the medical milieu with an understanding of the relationship between work and time.

The health psychologist must also understand that perhaps the most ingrained and status quo of operating systems in the medical setting is the medical model. As mentioned previously, the medical model focuses on biological processes and disease as the result of these processes. As such, there may be an underlying belief that patients ascribe to this model too. However, very few patients actually do and most tend to try to make some

meaning out of their experience (Shapiro & Koocher, 1996). Most medical settings are steeped in this tradition and may miss important patient information that can lead to a more positive and productive outcome. Having a health psychologist as part of this team can ensure a more holistic approach to treatment.

Holistic approaches are not just for the benefit of the patient's welfare, but the health provider's quality of occupational life is also important. Maslach and Jackson (1982) found that physicians actually experience very high levels of stress that can be caused by numerous factors. One factor is the unavoidability of failing on a regular basis (Maslach & Jackson, 1982). Failure can be conceptualized as not being able to relieve a patient's pain and suffering and death, especially when they have expended a lot of effort into the care of the patient. Another aspect that tends to increase physician stress is that of lack of control over the environment (Maslach & Jackson, 1982). Due to the high intensity and time-pressured work demands of the medical environment, physicians may rarely get to set their own schedules, choose which patients they treat, and inevitability of interacting with health insurance companies. Unfortunately, these factors all contribute to a higher rate of burnout among our health providers (Sanderson, 2004).

Depression, heart disease, substance abuse, and other psychological and physical problems are common side effects of the job for medical personnel (Sanderson, 2004). Clark and Zeldow (1988) found that at least 12% of medical students had depressive symptoms with an increase within the first two years of

medical school. In particular, burnout rates for nurses increased by 23% when there were too many patients at one time to care for (Aiken, Clarke, Sloan, Sochalski, & Silber, 2002). Aiken, et al. (2002) found that this level of burnout was also correlated with a 7% increase in patient death. Sadly this contributes to the depersonalization that many medical personnel use in order to emotionally distance themselves from the emotional impact of patients. Ultimately, provider and patient well-being is negatively affected in addition to job performance, communication, satisfaction, and care.

Taylor (1990) highlighted the importance of individuals being able to feel like they were able to exert some control over what happens to him or her. Taylor (1990) stated that those who are able to have some control ultimately adjust better to whatever the stressful event is. This can apply equally to patients and health providers and also elucidates yet another area where a health psychologist could contribute immensely. More specifically towards the aims of this dissertation, a health psychologist located in the emergency room can quickly be available to assist in care of patients and staff during a crisis.

In regards to caring for patients in medical crises, Shapiro and Koocher (1996) outlined four basic assumptions: 1. Responses are rarely pathological, 2. There is a continuum of biomedical, social, and occupational functioning, 3. Responses cannot be understood without context, and 4. Depending on the person and disease, the length of the crisis will vary. For the health psychologist, the goal then becomes to minimize barriers to the patient's optimal level of functioning.

Concerning medical personnel in the ER, there are times when certain traumas can devastate the moral of the staff. Traumas such as burns, abuse and rape, trauma to other emergency responders, and pediatric emergencies, to name a few, are some of the most stressful traumas on ER staff. It is during these times that a health psychologist can also provide support to the staff. Support may include, but is not limited to, critical incident stress debriefing, educational intervention, and as a referral source for providers seeking additional support. Enright (1985) emphasized the growing demand of psychological consultation occurring from the delivery room to the emergency room.

Overutilization

As mentioned earlier, primary care is the main entry point into the health care system for most patients (Patterson, et al., 2002). Even when patients know that psychological issues are affecting their health, they still look toward their primary care physician to treat the problem (Bray & Rogers, 1997). According to Sobel (1995), nearly 33% of patients that visit a doctor report physical symptoms that are more related to psychological distress than to an actual physical ailment. Cummings (1996) also highlighted the connection between mind and body by stating that many psychological symptoms can imitate a physical illness and even intensify existing illness. Most psychological disorders first present in a primary care setting. In fact, depression is almost as common as other medical conditions combined (Katon & Schulberg, 1992)! Shapiro, et al. (1984) found that primary care physicians were actually the major providers of mental health services, which consisted of at least 25% of health care visits. In addition,

Bowers (1993) found that 52% of the highest utilizers of primary care services had a psychological disorder. This being the case, it is no surprise that depression that was not treated resulted in patients visiting their physicians more often, had more medical tests, and presented with more physical complaints than non-depressed patients (Wells, 1994; Katon; 2001). Those physicians that repeat medical tests to reassure a patient, contribute to the overutilization of services and reinforce the patient's belief of the existence of a physical problem (Cummings, 1996). Vasquez et al. (1988) surveyed physicians in West Virginia and found that 81% of respondents managed various forms of psychological problems on a daily basis and at least 30% of those physicians were spending at least 2 hours a day on managing mental health issues. Primary care patients that have underlying psychological problems tend to consume more health services, have increased physical impairment, and report a reduction in quality of life (Kroenke & Mangelsdorff, 1989; Callahan et al. 1994; Spitzer, Kroenke, Linzer, Hahn, Williams, deGruy, Brody, & Davies, 1995). Furthermore, those depressed patients that are being seen by their primary care doctor may not be receiving effective treatment (Coyne, Thompson, Klinkman, & Nease, 2002).

Elixhauser, Yu, Steiner, and Bierman (2000) reported the following in their report (based on data collected in 1997) prepared for the Agency for Healthcare Research and Quality's (AHRQ) Healthcare Cost and Utilization Project:

- 40% of personal health care expenditures in the United States go towards hospital care, making it the most expensive component of the health care sector (p 1).

- People age 65 and older make up about 13% of the U.S. population but account for about 36 percent of all hospital stays (p 2).
- Over 1/3 (36.6%) of all hospital admissions are through the Emergency Department (ED) (p 2).
- Five of the top 10 conditions for which people are admitted through the ED are heart problems, like heart attack (p 2).
- Three of the top 10 conditions are related to respiratory problems (p 8).
- Two of the top 10 conditions are infections: pneumonia and blood infection (septicemia) (p 2).
- Nearly 55% of hospital stays for the very old (80 years and older) start in the ED, compared with 45% for younger age groups (p 2).
- Excluding pregnancy-related conditions, 4 of the top 10 conditions among people ages 18-44 are related to mental illness or substance abuse (p 2).
- Drug abuse, psychoses and depression are present as top 10 comorbidities for adolescents and adults up to age 44 (p 3).
- Alcohol abuse is a top 10 comorbidity for adults ages 18-64 (p 3).
- Two of the top 10 most expensive conditions are traumas: spinal cord injury ($53,000) and burns ($34,000) (p 3).

- About 13 percent of the U.S. population is over 65, but about 35 percent of all hospital stays are paid by Medicare, the most common insurer for the elderly (p 4).
- About 17 percent of the U.S. population is uninsured, and about 5 percent of all hospital patients are uninsured (p 4).
- Among uninsured patients, 3 of the top 10 conditions are for substance abuse or mental health. It is not possible to determine if this is because insurance does not pay for these conditions or if these conditions occur more frequently among uninsured patients (p 4).
- Nearly 20 percent of hospital stays for alcohol-related mental disorders and 23 percent of stays for substance abuse are uninsured (p 4).
- Over 40 percent of all children's hospitalizations begin in the emergency department (p 8).
- Over half of admissions for people age 80 and over begin in the ED (comprising over 2.6 million admissions), compared with 45 percent for people ages 65-79 years (p 8).

Hunkeler, Spector, & Fireman (2003) reported anxiety and depression to impair function that lead to a rise in possibility of hospital admission and emergency room usage. Compared to individuals that did not exhibit functional impairment, those who did have impairment in social, work and family functioning had a 62% rise in hospital usage and a 50% increase in emergency room usage (Hunkeler, et al., 2003).

McCaig and Burt (2003) conducted a report for the National Center for Health Statistics and found a number of interesting trends that have affected emergency rooms from 1992 to 2001. Their report revealed that ER usage was up by 20% (89.8 million visits to 107.5 million visits), but the number of ERs providing service decreased by 15% (McCaig & Burt, 2003). Regrettably, this decrease in available ERs has resulted in overcrowding and longer wait times (approximately 3 hours) for patients. The ER continues to serve as a "safety net" for those who are uninsured, use Medicaid, and are minorities. McCaig and Burt (2003) found ERs to account for 10% of U.S. ambulatory care services. Burt and McCaig (2001) found that going to the emergency room for care depended on factors such as access to health care, health insurance, and seriousness of condition. According to Nadel (1991) 40% of the patients treated in the ER lacked a consistent source of care. From 1992 – 1999, there was a 51% increase in the number of patient visits that resulted in no further follow up (Burt & McCaig, 2001). In 1992, the daily average of patients treated in an ER was about 42.8. In 1999, the daily average of patients was about 47.9 resulting in 35,000 more patients needing service nationwide per day (Burt & McCaig, 2001)! Without a doubt we will continue to see this trend grow as more individuals will be needing health care services and have the ER as their only choice. Populations that will likely matriculate into the ER will be those who live in poverty, are uninsured, mentally ill, and elderly. As our population ages, those individuals living with chronic illnesses are also likely to increase. With chronic illness there always comes the possibility of noncompliance with treatment. For

many physicians (93%), it is difficult to understand why patients are noncompliant (Taylor, 1990). Dunbar-Jacob et al. (1995) stated nonadherence substantially increases costs to individuals, as well as, society. Noncompliant patients with hypertension are four times more likely to be hospitalized or die as compared to compliant hypertensive patients (Psaty, Koepsell, Wagner, LoGerfo, & Inui, 1990). Diabetes, for example, is often associated with increased hospitalization and noncompliance rates. Jiang, Stryer, Friedman, and Andrews (2003) found hospitalization rates to be higher for minorities, patients using Medicare and Medicaid, and those from low-income areas. They suggested that there needs to be both policy and clinical interventions developed that would address these groups (i.e. diabetes is only one chronic illness to be considered here) of high utilizing patients in order to decrease hospitalizations (Jiang et al., 2003). Implementing such interventions could increase the likelihood of preventable admissions, thus reducing the burden on the health care system and cost. With this in mind, health care systems need to prepare by finding ways that will minimize overutilization. One way is to incorporate psychological services as part of the overall approach to health. The APA Practice Directorate (2001) found when psychological services were provided to overutilizers of Medicaid, there was a 40% reduction in their Medicaid usage.

Cost

According to the CDC (2003), Americans spend $1,300 billion on health care. This represents approximately 13% of the gross domestic product (GDP). This is a substantial increase as compared to 1960 when health care was only

about 5.1% of the GDP. Bingamon, Frank, and Billy (1993) found that even though U.S. health care costs were 40% more than other countries, there was no indication that Americans were healthier as measured by infant mortality and life expectancy. Patashnik and Zelizer (2001) described the U.S. as exerting the most dollars compared to other countries who do not spend more than 10% to pay for their public health programs like Medicare.

Bill Wagner, executive director of Family Health Centers in Louisville, stated

> "…the number of uninsured continues to grow at alarming rates across the nation, with no solutions in sight. Care systems for the uninsured in many communities are disorganized, unable to promote prevention and early intervention, coordinate care, or monitor quality of care. The result is episodic care, often delivered in emergency rooms, where it is most expensive" (Wagner, 2000).

Understanding that the usage of emergency rooms as "the" entry point into the health care systems will likely continue to grow, it is important to begin to devise ways to be able to provide services, yet control costs. One idea is to begin to incorporate psychological services, which can be done by a health psychologist. Lechnyr (1992) conducted a large study consisting of federal employees and Medicaid patients. He found that chronically medically ill patients who received targeted psychological services reduced their medical expenditures by 18-31%. Hunkeler et al. (2003) found that untreated anxiety and depression and the impact on patient functioning alone increased costs by about 50%.

Egede, Deyi, Zheng, and Simpson (2002) found that those individuals that had diabetes and depression had 4.5 times higher total health care expenditures ($247 million) as compared to diabetics without depression ($55 million). The APA Practice Organization (2001) documented that primary care clinics utilizing a psychologist reduced hospital admissions and bed days by 27%. Levitt (2002) also summarized research that suggested psychologists could directly impact overall health care costs because they could help improve health in underserved areas and reduce patient needs to see a physician just by being a part of an interdisciplinary health care team.

Friedman et al. (1995) distinguished six "pathways" in which patients decide when and where to seek medical services. They also recognized successful programs as defined by utilization rates and cost savings. In a program designed to address Friedman et al.'s (1995) information and decision-support pathway, the program was able to save $2.50 in medical costs for every $1 that was spent on patient education. In addressing the psychophysiological pathway, programs that provided psychosocial support, skill building, and health information were able to demonstrate a $10 savings for every $1 spent on this patient education (Friedman, et al., 1995).

Positive lifestyle and lifestyle change has also been shown to have significant benefits. An example of the behavior change pathway is a study conducted by Fries, Koop, Beadle, Cooper, England, Greaves, et al. (1995) that looked at programs for senior citizens that supported healthier lifestyles. The results showed that there was a 20% decrease in overall health risk scores (as

compared to baseline scores), improvements in a variety of life-style behaviors, and health care expenses were reduced by 10-20% (Friedman, et al., 1995). This program cost approximately $30 per participant per year with an overall reduction in health expenditures as compared to a control group that actually increased expenditures by $15 (Friedman et al., 1995).

The social support pathway research has illuminated the importance of patients having individuals that they can trust and feel safe with to help them cope with whatever the medical event. Research examining the presence of a doula to help a woman give birth found a significant reduction in the need for medication, surgical and anesthesia interventions (Friedman et al., 1995). Friedman et al. (1995) noted that the cost to train and provide a doula to a woman in labor was around $200 and was much less when compared to other medical interventions.

The next pathway identified by Friedman, et al. (1995) was the undiagnosed psychiatric problem pathway. This pathway refers to psychiatric problems, such as anxiety or depression, which may mimic or exacerbate physical symptoms (i.e., heart attack). Pre-surgical screening is a good example of how psychology has played a role in helping with medical outcomes by identifying underlying psychiatric problems that may influence a patient's outcome. Research cited in Friedman et al. (1995) illustrated the cost savings from an institutional perspective. According to this research's findings, the hospital in the study was able to save $1,300 per patient. Even though the cost

of the psychological service was around $40,000, the cost of medical interventions was reduced by $270,000 (Friedman et al., 1995)!

Finally, the somatization pathway. Many times patients express psychological distress through physical symptoms. This becomes problematic when patients are seen by doctors, who are trained to medically address symptoms. However, when the origin of physical illness is psychological distress, the physician may find the patient frustrating and returning over and over to the office to address the same symptoms. Once again, a health psychologist may be beneficial to help the physician address the whole person by working with the patient to address any psychological stressors that may be contributing to illness. When the psychological aspect of illness is left unaddressed, patients become high utilizers of medical services, thus increasing costs. In a study cited in Friedman et al. (1995), researchers demonstrated cost savings to an HMO of $85 per patient after interventions with specific psychosocial components were introduced into the treatment regimen. Patients also reported less discomfort psychologically, as well as, physically (Friedman et al., 1995).

Overall, Friedman et al. (1995) was able to cite a number of articles in which cost savings were shown to benefit patients, providers, and institutions (i.e., hospitals, HMOs, etc.). They also emphasized the benefit of collaboration among experts (i.e., doctors, psychologists, etc.) and how ultimately everyone can win by providing excellent patient care and medical cost savings. As

Cummings (1994) stated, only when the delivery and research systems are totally integrated will the greatest medical offset take place.

Customer Satisfaction and Public Demand

Davies and Ware (1988) underscored the increasing focus on patient satisfaction as an important outcome measure for medical services. As more and more medical services are being reviewed for cost analysis and future funding, customer satisfaction contributes to the decision-making process. A health psychologist as part of an interdisciplinary team could contribute to increasing patient satisfaction with particular programs, thus potentially helping to ensure viability of a program and future funding. Furthermore, patients are in support of physicians working with psychologists and also express a higher level of satisfaction when this collaboration is in place. According to a survey of 1,087 adults conducted by the Practice Directorate of the American Psychological Association in 1995, 63% responded that they would like to use a physician who works with a psychologist, and therefore, have greater access to psychological services. Ninety percent of respondents also indicated that psychological health was related to physical health. In addition, 94% that had received mental health treatment indicated that psychological health plays a role in maintaining good physical health and 88% of those who had not received mental health services also agreed (APA, 1995).

In regards to interaction styles, those physicians who displayed a patient-centered focus were rated higher by their patients and overall patient satisfaction was also higher (Flocke, Miller, & Crabtree, 2002). These physicians also

seemed to be the ones that integrated a more psychosocial perspective. Having a health psychologist to help address such issues can help in increasing that level of satisfaction. Those physicians that tended to be in a more doctor-centered focus were rated lower on communication, coordination for care, and accumulated knowledge (Flocke, et al.; 2002). Furthermore, patient satisfaction has also been linked to malpractice rates (Stewart, 1984; Vaccarino, 1977).

Beyond patient satisfaction, physician satisfaction is also very important. Research suggests that patient psychosocial well-being and satisfaction with care is associated with physician satisfaction (Dunbar-Jacob, 1993). Garman, Corrigan and Morris' (2002) research identifies burnout, specifically emotional exhaustion of medical staff, to be highly associated to patient satisfaction. As staff were more emotionally exhausted, the lower the rates of satisfaction among patients under their care. As mentioned previously, nurses who had higher patient loads were more likely to experience burnout and have an increase in patient deaths (Aiken et al.; 2002). So, it would also be beneficial for health care systems to pay close attention to their own staff, especially if they are wanting to increase patient satisfaction (Garman, et al.; 2002). One way to do so would be to have a health psychologist present to help with burnout prevention. Garman et al. (2002) suggested focusing on development of additional coping skills, fostering leadership abilities, and examining the work environment for possible improvements. This is particularly important since many in the current health care system are predicting growing levels of dissatisfaction as costs escalate,

prescription drug issues continue, and the increase in uninsured become more apparent (Stanton, 2002).

Practical Matters

Before actually incorporating a health psychologist into the system, an examination of the current health care organization, barriers, billing issues, and ethical considerations must first be conducted. The overall health care organization is a very complex system that is generally governed by business principles. Without sound business practice, the business will usually fail. For health care entities, cost is tempered with how to operate the organization to provide services and what care is needed. Patterson et al. (2002) described these realms as clinical, operational, and financial. Each realm has its own principles to guide it. The clinical world is guided by ethics, science, and healing (Patterson, et al., 2002). The operational world is guided by the principles of process and system improvement (Patterson, et al., 2002). Finally, the financial world is shaped by business and financial return (Patterson, et al., 2002). Particularly in health care, we find these worlds often colliding with one another and a constant state of tension existing. For health psychologists, being able to understand and effectively work within these worlds is imperative.

Over the last 25 years, psychology has continued to expand practice into the hospital and medical setting. However, the challenges that psychologists face are both external and internal (Enright, Welch, Newman, & Perry, 1990b). Psychology traditionally has not been seen as having an institutional home within the hospital. Unlike physicians where the hospital is home, and for lawyers

where the courthouse is home; psychology has been thought to be more academic and therefore residing in academic settings (Enright, Resnick, DeLeon, Sciara, & Tanney, 1990a). In addition, the biomedical approach to disease and illness is the model most commonly used in Western medicine settings (Miller & Schwartz, 1990). With that in mind, it is easy to discover and anticipate some of the barriers health psychologists may face in a medical setting.

Roberts (2000) stated that she saw at least four barriers to collaboration in the health care setting. Tradition, the first of these four, hampers collaboration because it is about maintaining the status quo. Practitioners are most comfortable in doing what they have always known the profession to be (Roberts, 2000). The second barrier is excessive self-interest. Excessive self-interest relates to the level of respect different disciplines have for one another. Personal interests may get in the way and the knowledge and skills of other professionals are not adequately utilized (Roberts, 2000). Roberts (2000) suggested that lack of knowledge was another barrier to collaboration. Knowing how to collaborate and understand what other professionals actually do contributes to this barrier. Furthermore, there is an underlying assumption that there is only one right answer and that each discipline has that one right answer (Roberts, 2000). Finally, Roberts (2000) points to the inadequacy of personal and social systems. Systems that are flawed do not foster an atmosphere of collaboration. The amount of time, energy, and lack of incentives by systems to allow providers to engage in collaboration is far from adequate (Roberts, 2000).

Friedman et al. (1995) also highlighted some barriers to the integration of health psychology into medicine. They suggested that patients may be resistant because of the stigmatization of receiving psychology services. Along with this, insurers, patients, and policy makers are misinformed about the nature of health psychology interventions and still view it as multi-session psychotherapy (Friedman, et al., 1995). The issue of mental health parity and insurance carve-outs continue to be barriers. As Friedman, et al. (1995) stated, "Trying to convince the latter to spend money so that the former would save money is problematic at best." The last barriers to integration that Friedman, et al. (1995) mentions, are those regarding cost-offset and universality of interventions to all illnesses. Many programs proclaim success and cost savings; however, outcome data is not as prevalent. Outcome data is what is needed to help illustrate and justify the use of psychological interventions.

Research conducted by Kainz (2002) found the following to be barriers for referring patients to psychologists:

1. Lack of availability of psychologist for quick referrals.
2. Difficulty with the referral process.
3. Insurance issues.
4. Communication problems.
5. Patient and physician attitudes about therapy.
6. Lack of knowledge about what psychologists do and how they are distinct from psychiatrists.

Furthermore, the research by Kainz (2002) also reported items that promoted referral to a psychologist from a physician. They were:

1. Rapport with the consulting psychologist.
2. The consulting psychologist's reputation.
3. Psychologist's ability to be clinically competent.
4. Quick turn around time and information provided back to the referring physician.
5. Physician's familiarity with the consulting psychologist's approach.
6. The ability to establish rapport with patients.
7. Having specific psychologists to refer to.
8. Integration of a psychologist into the multidisciplinary team.

Although there are significant barriers to having a health psychologist as part of the multidisciplinary team, none of the barriers are so great that ways to overcome them could not be devised.

One of the biggest concerns that psychologists, physicians, and medical systems may have is the issues of billing and reimbursement. Reimbursement in and of itself has come to be less of an issue with the new CPT (Current Procedural Terminology) codes that became effective in 2002. The new codes allow psychologists to be reimbursed for health and behavior interventions that are reimbursed from medical benefits instead of mental health benefits. As such, the patient's diagnosis is considered a medical/surgical condition using the ICD-9 CM. According to the APA Monitor (2003), psychologists are beginning to see improvements in reimbursement rates as individual Medicare carriers are

revising coverage. However, advocates encourage psychologists to continue to be consistent in using the CPT codes as this is one of the only ways to help increase reimbursement (Holloway, 2003).

Perhaps the actual issue is that of billing. How hospitals bill should be understood, discussed, and negotiated with the hospital prior to providing services. There are a number of ways to bill. Billing may involve services being provided on a contractual or consulting basis. The psychologist may be employed as an agent of the hospital and services are billed as part of the general hospital bill. Or the psychologist may negotiate services under an umbrella mechanism that allows for the billing as part of a service (i.e., often in conjunction with physicians) provided to the hospital. In any case, the services provided by a health psychologist are billable and reimbursable.

The last practical matter to address would be that of ethics. Although the ethical obligations psychologists have to their patients also apply to the medical setting, there are some that may be more salient and unique to this setting. The first to consider is confidentiality. Psychological interventions and diagnoses may need a separate signature because it may not be covered under the universal release of information form. The health psychologist may also need to clarify his or her role to the patient so that she or he is not confused about who is providing the medical services. Another issue is the provision of services. It may be that a patient or family is receiving services from other mental health providers. It is also imperative that the patient and families give informed consent and are aware of the risks and benefits of treatment. Lastly, especially operating in a medical

setting, third party requests for information may be prevalent. Therefore, it is important to obtain a release of information from the patient and/or family members so information can be shared with other health providers.

Why Hasn't This Been Done Yet?

This chapter has attempted to provide the reader with a clearer understanding of the benefits of health psychological services by exploring the history and discipline of health psychology, importance of communication in crisis, effects of crisis and trauma, patient and staff benefits, overutilization and cost data, and addressed the practical concerns of implementation of such a service. Given this information and evidence of the benefits for having a health psychologist on an interdisciplinary team and the feasibility of having one located in an emergency room setting, the logical question to ask is why hasn't this been done? There at least four reasons why. The first has to do with the resistance that is inherent in the system. As mentioned in the discussion of barriers, the medical setting is steeped in tradition and the biomedical model. As with any system, there is a tendency to try to maintain homeostasis in order to preserve the system. Introducing a new piece to the system upsets the status quo and causes a reorganization of the system. This may be the last situation that an already chaotic system needs. Furthermore, there are also political forces at play. For instance, psychiatrists argue that psychologists are encroaching on their scope of practice. Efforts have been underway by the medical community to limit psychology's scope of practice for the last several years. These efforts

contribute to the uphill battle psychologists have when trying to work in new and innovative settings.

The idea of having psychologists collaborating in an ER is not a totally radical idea, either. There are some emergency rooms already integrating psychologists into their service delivery. One such program is the professional training program at the Memphis VA Medical Center. One of the rotations allows students to participate in the consultation/liaison program that is provided to one of the local hospitals. Services are provided to the trauma center, burn center, and other areas of the hospital. This program has been demonstrated to be a worthy and beneficial program to patients and staff.

Another factor could also be the level of awareness patients have about health psychology's services and benefits in enhancing positive outcomes. The public needs to be educated and exposed to the services and their impact on their health. As previously mentioned, patients understand the mind-body connection. They also comprehend the influence the mind and body have on each other. However, there may be a large gap in their understanding of how psychological interventions can assist in enhancing wellness, educating them about their health and lifestyle, and helping patients begin to implement change to improve overall health.

Finally, the proposed implementation of a health psychologist in an emergency room will only happen if the hospital and emergency room are ambitious enough to begin to make change in the current system. Doing so would upset the apple cart of tradition and the biomedical way of thinking about

health care and service delivery. Only those who are willing to take the risk will be able to reap the rewards.

CHAPTER III

METHODOLOGY

Participants

Number

Twelve health care providers involved in the provision of services and decision-making for the emergency room were interviewed.

Approximately 100 patients that used the emergency room and then were transitioned to another area of the hospital for longer term care were anticipated.

Characteristics

The essential characteristic of the health care providers was that they provided health care services to patients. They must have had contact with patients and included a variety of personnel (i.e., physicians, nurses, allied health, administrators, support staff, etc.). Health care providers differed in regards to such demographic variables as SES, gender, race, education, etc.

The important characteristic of patients was anticipated to be that they were provided direct health care services by emergency room providers. Patients would have also differed in regards to such demographic variables as SES, gender, race, education, reason for visit, etc.

Source

Qualitative data was gathered from a variety of emergency room providers from the Louisville area. The quantitative data was to be gathered from the

emergency room at a suburban hospital in Louisville, Kentucky. The emergency room was similar to a level 2 trauma center.

Method of selection

Key hospital informants were identified in accordance with their duties as related to the emergency room and availability to be interviewed. A structured interview was then conducted to gather qualitative information related to this dissertation.

Patients who received longer-term care following their ER visit were to be identified by the hospital. Those patient names would have then been provided to the researcher by the hospital so questionnaires could have been mailed.

Confidentiality

Structured interviews with key personnel were conducted by the researcher and names and positions of interviewees were not identified. After completing the questionnaires, patient participants would have returned them to the hospital personnel responsible for collecting this data. No names or identifying information would have been attached to this data. This data would have been forwarded to the author of this study by hospital personnel. The qualitative and quantitative information derived from the questionnaires and surveys would have been reported in aggregate form ensuring another level of confidentiality.

Evaluation Design

The evaluation design was a needs assessment. Need was assessed through two methods. The first method provided thematic information through

the use of a structured interview with key informants. The second method used to assess need would have been through the use of a questionnaire. The structured interview and the questionnaire were designed to gather information related to health psychology services and their implementation and/or availability in the emergency room. Refer to the attached copies of the structured interview questions and the patient questionnaire in appendices B and D for further clarification.

Procedure for Data Collection

Key informants were identified and then a structured interview was completed. The structured interview provided the qualitative data for this dissertation.

Had data collection gone as planned, patients that would have presented to the ER for services and then were transferred/transitioned to longer-term care units would have been identified through hospital records by hospital personnel assisting the researcher with data collection. Those names were to be forwarded to the researcher who then planned to mail out the questionnaire. The patient questionnaire would have been mailed to all qualifying patients during a three-month period. This researcher planned to collect this data over a six-month period. Had actual questionnaires been returned to the hospital and then forwarded to the researcher, the quantitative data would have then been added to a database and analyzed using SPSS.

Data Analysis

Data was analyzed first by recognizing whether it was qualitative or quantitative. Quantitative data had been anticipated by gathering information from patients through the questionnaire. Descriptive statistics (i.e., means and standard deviations) would have been reported for the quantitative data. Quantitative data would have been analyzed using a statistical software package (SPSS).

Qualitative data was derived from the structured interview of key hospital informants (i.e., criterion sampling). This research used Content and Cross-case Analysis in order to determine similar themes across participants. Interviews were transcribed and then distributed to two other individuals, assisting with this research, for theme identification. After the research assistants had completed their theme identification, the primary researcher met with the research assistants to discuss identified themes. Data was summarized into brief phrases prior to being categorized. These phrases were then grouped according to the main domains of the research question (i.e., general role of the health psychologist in providing services to patients, role applicability to emergency room, communication, barriers to service, resolution of barriers to service, personal desire for services in emergency room, culture shift, valuation of service). Finally, the categories were summarized and integrated. This summarization and integration is revealed in Chapter 4 of this dissertation.

CHAPTER IV

RESULTS

Description

Due to unforeseen complications in gathering the quantitative data, this portion of the study was not conducted. Factors which influenced the researcher's decision will be more fully discussed in Chapter 5.

Cross-case analysis is a process by which qualitative data is obtained from multiple individuals and then compared against each other for common themes. This approach to analysis allows not only for the comparison of themes, but also allows the researcher to be able to describe variations in derived themes among individuals (Barker, Pistrang, & Elliot, 2002). Content analysis then allows for the researcher to go through the process of theme identification, extrapolate to concepts, and then eventually leading to propositions (Patton, 1980; Barker, et al., 2002).

Analysis

Twelve interviews were transcribed and then given to two research assistants. The two research assistants and this researcher then read through each transcribed interview and identified themes individually. After completing this process, all came together to compare and discuss the data. Themes were organized into predetermined concepts. The predetermined concepts were generated from the questions used in the structured interview.

Refer to Table 1 for organization of themes into concept headings.

Table 1

Derived Themes from Interviews Organized into Conceptual Headings

Concept	Themes
Role applicability to emergency room	"Would do a better job of evaluating mental illness." "Health psychologist would have a better understanding of patients and staff roles because of health background." Health psychologist could be "pathway to follow up care," and address other problems that are not a primary concern in the ER. Address guilt, grief and sudden loss issues. Help with managing and assisting the families of patients. "Provide support to staff and it would give physicians someone to talk to." Address patients' and families' fear and anxiety. Address those patients that are in ER,

	not because of an emergency, but because of primary care reasons or psychosocial issues. "Health psychologist would blend in excellently because of knowledge of mental health and health background." Address patients that are considered overutilizers of services. "What is it that keeps bringing them back?" Help with health policy changes. Help with patient flow issues.
Communication	"Could definitely help with communication. Patients have a tendency to just nod their heads and when you check with them their understanding is inconsistent." Would help decrease anxiety. "Would help patients understand staff's motivation for particular things." "Definitely help patients because its an unplanned event and emotional aspects aren't number one."

	"Would definitely increase communication between health provider and patient and/or family members. It could also ready them to ask their doctor."
	"A psychologist may be perceived as less threatening, so patients would ask more questions."
	"ER staff often try to not get emotionally attached, which is for logical reasons; however, patients don't feel understood."
	Patients do not ask questions of doctors because of perception of being too busy.
Barriers to service	Budget and program cost.
	Availability of health psychologist.
	Insurance issues.
	Education level of patient.
	Cost of having a health psychologist.
	Implementation of something different.
	May depend on doctors' receptiveness

	to psychological interventions, physician “buy-in”.
	Time, “getting patients in and moving them out.”
	Staff understanding of health psychologist role.
	Increased anxiety among providers initially because of not knowing how the consumption of resources would work.
	HIPAA.
	Laws, particularly because physicians are mandated to stabilize patients before discharging them.
	Threat of malpractice insurance increasing.
Resolution of barriers to service	“Go to the physicians and help them understand what this service can do for them and how it will make their jobs easier.”
	Contracting for services and billing separately may be easiest way to get

	reimbursed. Have a specific definition of health psychologist's role in the ER to avoid conflicts. Use a "team approach." Educate staff. Use an informal approach to see patients, not referral system. Produce data to justify service to administration (i.e., outcomes, cost-benefits, etc.). "Sell it" to doctors. Administration likely to support physicians recommendations about a service.
Personal desire for services in emergency room	"I would like to have a clinic in the ER. A combination of mental and physical health, especially in the evening." "I would want someone to keep me informed of what is happening and someone I could ask questions to." "Information! Someone to help bridge the gap."

	Assistance in care planning. Address emotional aspects of what is happening. “The grief counseling aspect would be invaluable.” “I don’t want to have to wait forever before my concerns are addressed.” Getting the right diagnosis. “Fresh coffee. It’s the little things.” “I’d want to know the staff cared.” Health psychologist could provide on the spot crisis intervention, especially in reaction to a physical trauma.
Culture shift	“The whole system would need to be addressed, from administration to other care providers because of turf issues. Particularly attitudes would need to change and people educated about service and role.” Realization of value of psychosocial support. Deemphasizing patient turnover.

Reorganizing physical space and redesigning patient flow.

Change the outlook of emergency care toward treating the whole person.

Ability of patients to gain access to services.

Be available to staff also. As relationship increases so will acceptance.

Incorporate staff input into program development.

Doctors would likely accept program if they saw benefits to patients and staff.

Interpretation

The purpose of this dissertation was to assess the need for a health psychologist in the emergency room setting. Themes were generated from the data and then placed into conceptual headings. The conceptual headings were taken from the structured interview that was conducted with each of the participants. Referring to table one, the reader can see how the themes were organized under the conceptual headings. The following is a summary of each of the conceptual headings.

General role of the health psychologist in providing services to patients

In response to this category, many themes either addressed the role of the health psychologist as it pertained to the setting or as it pertained to patients. In regards to the setting issues, informants identified particular duties the health psychologist could perform within the medical setting. These duties included; various forms of program evaluation, staff wellness, and administrative issues. Ultimately, these duties indirectly affect the patients. The themes pertaining to patients included assisting in risk identification, coping, and aid in addressing depression. Other themes also suggested the health knowledge and the mind-body integration approach a health psychologist takes would be beneficial to staff and patients alike. This data suggests that in the opinion of these healthcare providers, a health psychologist could address a wide range of issues by meeting the needs of both patients and staff.

Role applicability to emergency room

This category asked the informants to focus their ideas and vision of a health psychologist's role and apply it to the emergency room setting only. The two major themes that seemed to emerge from this data were supportive care to patients, families and providers and service delivery and utilization concerns. The desire for supportive care is evidenced in the responses that cite evaluating mental health needs of patients, debriefing and support to staff, addressing psychosocial needs, and caring for patient's families. Delivery and utilization was identified through comments that specifically pertained to health policy change, patient flow issues, and addressing overutilization of services. The data suggests the health psychologist could be an untapped resource and if placed in the ER could contribute to a number of different areas, including but not limited to: administrative positions, consultant to medical staff regarding patients, liaison between staff and patient, and support to patients and families.

Communication

Informants were asked about the importance and impact a health psychologist (i.e., especially since psychologists are trained listeners and experts in communication) may have in an ER in aiding with general communication patterns amongst staff-staff and staff-patients. Most responses referred to communication patterns between staff and patients. There seemed to be a concern expressed by informants that patients may not feel that communication is adequate with the ER staff and that they have a tendency to not make misunderstandings or questions known due to their perceptions of staff. These

results suggest that a health psychologist could serve as an extra layer of support and information to patients, as well as providers. Ultimately this could lead to better overall communication and patient satisfaction.

Barriers to service

One of the main themes that emerged in this category was that of cost. Many providers seemed to be supportive of having health psychology services available to them and the patients; however, many felt that the ER was already operating on "shoe-string" budgets and more "essential" personnel, such as nurses, were not able to be hired because of lack of funds. There also seemed to be an emerging concern regarding the staff's understanding and utilization of a health psychologist in an ER setting. Informants cited such things as doctor receptiveness, consumption of resources, and availability as concerns about the integration of a health psychologist. Other comments suggested questions about legal and insurance issues.

Resolution of barriers to service

Informants suggested that some of the barriers mentioned previously could be addressed by educating staff about the role of health psychologists and the referral process and targeting doctors and highlighting the value of services. In addition, the most cited suggestion from informants was the "selling" of the program through data that justified the services provided by a health psychologist. Repeatedly informants emphasized the value of outcome data and its importance when presenting these services to administrators.

Personal desire for services in emergency room

Informants were asked to consider what services, other than medical, that they would want for themselves or their family if they were to come to an emergency room. The main themes seemed to be the desire for information and emotional support. Informants recognized that information is something that is not usually provided as quickly or as in-depth for patients and families that possibly should be in order to lower anxiety levels. Furthermore, they suggested that the ER is not conducive to addressing emotional needs of patients and families, although in a crisis situation it is very important.

Culture shift

In light of the current milieu of an ER and the state of finances, informants were asked what would need to change in order to implement health psychology services in an emergency room. Many informants cited the need for an attitude shift. This shift would have to include the valuation of health psychology services, integration of mind-body connection, and defining role and responsibilities of the health psychologist. Patient access was also highlighted (i.e., patient flow and physical space).

Valuation of service

Informants were asked, in their opinion, what it would take for health psychology to be viewed as a valuable service. The overriding theme was that of patient outcome. If the service could contribute to increasing positive patient outcome and the results demonstrated to staff and administration, then the

service would be valued. Furthermore, informants related staff benefits to positive patient outcomes citing such factors as possibly saving time and money.

Summary

Overall, informants were seemingly consistent and similar in opinion with regards to each of the questions posed to them. This analysis suggests that these findings could be generalizable to other emergency rooms and that similar staff opinions would be obtained. Results suggest health psychology services could be implemented in an emergency room considering the barriers and concerns expressed by these informants.

CHAPTER V

DISCUSSION & CONCLUSIONS

This final chapter will focus on discussing the problems encountered, applicability of research results, barriers to this research, suggestions for implementation, general contribution of this research, and the researcher's conclusions about this project. The hypothesis will be examined and also answered in this section.

Problems with Patient Data Collection

The purpose of this research was two-fold. It was planned that this assessment would examine the need for health psychology services from the perspectives of health providers and patients. Information from the healthcare providers was successfully collected from the providers through the use of structured interviews. However, patient data was hindered due to one major factor – implementation of HIPAA (i.e., Health Insurance Portability Authorization Act). This researcher had received approval from Spalding University's institutional review board to approach the participating hospital's administration about this proposed research. A member of the hospital's ethics review board was approached and this person agreed to forward the research proposal to the board. It was also agreed that this person would then help this researcher gain access to the proposed population upon approval of the research proposal by the hospital's review board. The hospital's review board met and approved the proposal "as is" and granted permission to this researcher to begin the study and

data collection procedure. This approval was granted in late 2002. When this researcher was ready to begin the patient data collection piece in April of 2003, the hospital lawyer contacted the researcher and stated that the research could no longer be conducted at this particular hospital due to the implementation of HIPAA. This researcher attempted to gain access to other hospitals, but was met with similar concerns from other hospitals. The main concern was the release of patient data without prior specific authorization from the patient. One administrator stated that HIPPA was so new and confusing, legal departments were very hesitant to allow anything to be done with patient information, including research.

After facing this roadblock, this researcher began to examine existing data from other studies to try and find relevant information that could be extrapolated into this research. However, the originality of this research and desired information sought was not available in the limited existent literature. Therefore, inferences from other data collected from various research literature was used to draw some conclusions regarding patient need and opinion about psychological services.

Meaning of Results

The meaning of the research results presented in chapter four of this dissertation will be discussed as related to health psychology. Specific discussion will be on how health psychology can help achieve the identified themes.

General role of health psychologist in providing services to patients

A health psychologist is uniquely trained in combining general psychological principles with health knowledge and medical milieu understanding. This allows a health psychologist to take his or her skills in areas such as program evaluation, consultation, and education and appropriately apply them to the health care setting. Understanding the special circumstances and hardships that a medical crisis can create on patients and their families sets health psychologists a part from other mental health professionals. The health psychologist focuses on the correlates of health and integration of mind and body, thus allowing for interventions to occur as preventive, rehabilitative, and/or direct depending on each patient's situation.

Role applicability to emergency room

Being able to address patient and family needs, whether they are needing assistance with finding resources, coping, or just needing extra support, are fundamental skills that psychologists use when approaching and working with individuals. In the emergency room setting a distinctive twist to providing these basic skills to individuals is encountered. The psychologist must be able to understand and incorporate the medical aspect of the patient and be able to work effectively with providers in this setting. Since health psychologists are trained from the beginning to be aware and develop skills in working with medically ill patients and work within a medical setting, they are uniquely poised to immediately work with medical patients within a health care setting.

Communication

A general characteristic of a psychologist is to be a trained listener and successful communicator. These skills, when applied to the health care setting by a health psychologist, could be invaluable in an emergency room since information and relationship is key to optimal outcome. As indicated by interviewed providers, there seems to be concern regarding patients feeling like they can communicate with their providers due to perceptions of inconveniencing the provider or just not knowing what to ask. Because of the knowledge about the health care setting and understanding of medical issues, a health psychologist could spend more time with the patient and family insuring that they understand, have adequate information, and support they may need during this difficult time. Related to this is communication among staff. A health psychologist would be able to assist in seminars, staff education, debriefings, and trainings all designed to aid in enhancing communication and understanding. When staff communicate better with one another, staff communicate better with patients, thus leading to greater satisfaction among staff and patients.

Barriers and resolution of barriers to service

Cost was cited as one of the primary concerns in implementing health psychology services into the emergency room. This is a very understandable concern, especially when there is a need for nursing in many ERs. Associated with general cost, there are also the issues of physical space and role description. Regarding role description, this can be addressed by working with existing staff in understanding what a health psychologist does, how the referral

process works, and what can be expected when the health psychologist works with patients (i.e., consultation, referrals, coordination of care, etc.). Physical space can also be addressed prior to implementation of services. Ideally the health psychologist would be located in the emergency room so s/he is easily accessible to providers and patients. If physical space within the ER is unavailable, the health psychologist should be located as closely as possible to the ER. If the health psychologist is contracted with the hospital as an outside agent, the health psychologist may be able to share space with other providers if s/he maintains an office outside of the hospital.

The issue of cost is certainly a major concern. As mentioned in the literature review, cost containment and cost efficiency are benefits of having health psychology services as part of the health care system. Part of the cost savings generated from providing health psychology services could go toward paying the health psychologist. A health psychologist could also assist in implementing, evaluating, and designing efficient programs and services in the emergency room that could lead to even greater cost savings. Further, if an emergency room was willing to collaborate with a health psychologist in writing a grant for these services, funding may be obtained from outside sources leaving current hospital funding structures in place.

Overall the availability or continuation of health psychology services in an emergency room will have to come from tangible evidence. This evidence will need to be demonstrated through outcome data. It will be essential that when services are proposed and implemented that program evaluation be a core part

of service delivery. These results will be able to provide support of the program and demonstrate its efficacy to hospital administration and funders.

Personal desire for services in the emergency room

Overwhelmingly the providers interviewed agreed that information would be the most important need, other than medical, that they would like fulfilled when using emergency services. Having information to make decisions, lower anxiety, and being able to cope with the situation were highly valued. However, many recognized that this was a rare commodity in the emergency room and oftentimes emotional needs are not addressed. With the incorporation of a health psychologist, more time could be spent with the patient and family to help provide information and support. In addition, emotional needs could be attended to immediately and appropriately addressed. The immediacy of addressing these needs would increase patient satisfaction, reduce stress on providers, and minimize the negative affects of the crisis situation.

Culture shift and valuation of service

Perhaps more than any other area of a hospital, the emergency room is entrenched in the medical model. The philosophy of an ER is to stabilize patients and refer or discharge them as appropriate. This model highlights the heavy emphasis on the body and little to no focus on the psychological aspects. With the increasing incidences of patients having physical ailments coinciding with psychological issues (i.e., elderly, chronically ill, etc.), psychological services are needed to address these issues. Time and time again some patients return to the ER for the same complaints or medical crises (i.e., referred to as “frequent

flyers"). Underlying psychological issues could be addressed and behavioral interventions used to reduce the frequency of visits and contain costs. The health psychologist's knowledge of medical issues would be used to address these issues relative to the patient's medical or physical complaints. The addition of a health psychologist to the emergency room would be able to bring the biopsychosocial model to patients and providers, which would enhance totality of care and increase satisfaction.

By demonstrating effectiveness and satisfaction with health psychology services through positive patient outcome, current providers and administration would begin to value the service.

Conclusions Relative to Data

Evidence in the literature and in the results of this study suggest that health psychology services are needed and desired in the emergency room. A health psychologist can contribute significantly to patient care by addressing compliance issues, increasing awareness through education and support, increase patient satisfaction by enhancing communication and service delivery, and reduce cost for patients by addressing underlying psychological concerns the first time a patient presents to the ER. Similarly, provider concerns and needs can also be addressed by the health psychologist through offering services that will enhance positive patient outcome, decrease cost, improve service delivery, onsite consulting, provide "whole-person" interventions, support staff, provide education and debriefing services, build better communication

between staff-staff and staff-patient interactions, and administrative services if needed.

This research has demonstrated that the benefits of health psychology services can have a very positive effect on patient care, service delivery, communication, and provider relationships. Barriers that have been highlighted in this study are issues to address prior to service implementation; however, none are so insurmountable that they should negate the consideration of implementing health psychology services in an emergency room setting.

Barriers to this Research

The biggest barrier to this research was the enactment of HIPAA in April 2003. Due to the newness and untested policies, hospitals were not willing to "risk it" with this research. Understandably the release of patient information is of paramount concern. However, this researcher had proposed options that would not have allowed this researcher to any identifiable patient information. Hospital legal departments were not willing to work with this researcher in obtaining any form of patient information, identifiable or not. Therefore, patient data specific to this research was unobtainable. Future studies might approach teaching hospitals who routinely use patient data for research and consult with the legal departments as to how data can be obtained and still be in compliance with HIPAA. It may also be beneficial to construct a release of information form specific to the research question to be handed out and voluntarily signed at the time of a patient's ER admission. This would allow for direct informed consent

and access to the patients by the researcher without having to go through hospital records and admission departments.

This study has proposed an interesting question and has obtained preliminary results that suggest health psychology does have a place in the ER. Future studies should try to obtain a broader sample of providers that include health psychologists with hospital experience, more physicians, and possibly outside funders. The patient data should also be collected in order to corroborate the patient data used in this research. Other questions that linger are whether or not these results would be similar in different types of hospitals (i.e., teaching vs. private), with different patient populations (i.e., indigent vs. middleclass or urban vs. rural), and with different levels of trauma units (i.e., Level 1 vs. Level 2). It is hopeful that this research has created a starting place for future studies and implementation plans of health psychology services.

Suggestions for Implementation

The following sections are suggestions on how a health psychology service might be proposed and implemented in an emergency room setting. These sections discuss six program components, program evaluation, the health psychologist's business plan, and finally ethical and legal considerations.

Program components

1. *Referral:* Health providers will directly refer patients and/or families who will likely benefit from health psychology services. Examples of issues that would benefit from a health psychologist working collaboratively with

health providers would include, but are not limited to; death/bereavement, emergency amputation, trauma involving a child, burn victims, etc.

2. *Screening:* Health providers will initially screen patients and families for health psychological referral or consultation. The health psychologist will then screen for appropriateness of referral and assess desire of intervention services by patients and/or families.
3. *Assessment:* Health psychologists will conduct ongoing informal assessment of the patient and/or family during the crisis of the trauma.
4. *Treatment Planning & Consultation/Liaison Services:* Consultation and liaison services provided by the health psychologist will involve an interdisciplinary approach. Consultation between the health psychologist and health providers will be ongoing and treatment plans will be collaborative in nature.
5. *Crisis Intervention:* The health psychologist will provide crisis intervention services as needed to patients, families, and/or health providers.
6. *Education:* Additional educational interventions will be provided as needed by patients and/or their families as it relates to the trauma.

Evaluation of program success

The program will be evaluated in order to determine the extent to which the program has been implemented and the mission accomplished. Data collection will be aimed at objectively and clearly demonstrating the impact of program interventions on expected outcomes and will be used to guide further program development.

Specifically:

1. There will be monthly assessment for quality management conducted as part of the ongoing monthly department meeting
2. Assessment of patient satisfaction
3. Assessment of health provider satisfaction
4. Assessment of treatment outcome as rated by patients and/or families

Business plan

It is envisioned that health psychologists working collaboratively with health providers in the emergency room will ensure that each patient and family member will receive integrative services that address needs that exist both in the body and mind during times of crises such as those that arise in an emergency situation.

The integration of health psychology services into the emergency room will improve the treatment and care of patients and their families through the use of psychological and behavioral health interventions. In addition, overall satisfaction by patients, families, and health providers will be enhanced.

The health psychologist will not be legally part of the hospital corporation, but will be fully integrated into the emergency room. The health psychologist will maintain independent status and billing complications will be avoided. Billing will be conducted and collected by the hospital and the health psychologist will pay a mutually determined percentage to the hospital for overhead costs.

The health psychologist will apply for membership on all providers' panels to which the physicians currently belong in order to receive all physician referrals.

Brochures will be developed in conjunction with the hospital and emergency department announcing the addition of this service. This brochure will be distributed to health insurance companies, hospital employees, contracted agencies, community and governmental agencies, and past and present patients.

Ethical and Legal Consideration

1. *Confidentiality:* Psychological interventions and/or diagnoses may not be covered by a generic signature for release of information
2. *Role Clarification:* Health psychologists must help patients understand the role of the health psychologist and that it differs from that of a medical provider
3. *Provision of Services:* Patient and/or family may be receiving mental health services from other mental health professionals
4. *Informed Consent:* Must be obtained from all patients and/or family outlining the risks and benefits of treatment
5. *Third Party Requests:* Obtaining a Release of Information from the patient and/or family to share information with other health professionals

General Contribution of this Research

The general contribution of this research to the literature was highlighting the concerns of providers and problems likely to be encountered when trying to implement a health psychology service in an emergency room. Ideas and solutions to these concerns and problems have been discussed and addressed

in this dissertation as well. The suggestions made here are practical solutions and usable. The findings are taken from real-world data and discussed in the context of today's health care environment. As such, information generated by this research should be helpful in laying the groundwork for future studies of this nature and creating and implementing similar programs. However, psychology as a profession will need to continue to educate other health care providers in order to increase the valuation of psychological services. Furthermore, psychologists will also need to continue to advocate for appropriate CPT codes, reimbursement rates, hospital privileges, eligibility on provider panels, and increase patient awareness of the benefits of psychology related to overall health.

Conclusion

The need for integration of psychological and medical services is evidenced by the data obtained in this study. The rationale for a health psychology service in the ER is supported by the following:

1. *Enhancement of communication.*
    - Establishing a working relationship between health provider and the patient and/or family is key to treatment
    - Health psychologists have the knowledge and understanding of the relationships between health and behavior
    - Health psychologists have the knowledge, understanding, and capability of working within the various health disciplines

- Communication and consultation are immediate: reduces complaints from health providers that the provision of feedback regarding a patient is lacking and/or untimely
- Health providers are limited in the time they have to spend with patients and families
- Easy access to psychologists both for patients and health providers
- Psychologists provide assistance to patients and families struggling with the emotional impact of trauma
- Reduction of fears and/or phobias of procedures through psychoeducational interventions
- Health psychologists are excellent providers of education and information
- Health providers receive little training in being able to discuss difficult diagnoses and treatments with patients and their families
- Although few emergency departments offer communication skills training, many recognize need to implement programs to improve satisfaction
- Attitudes of health providers towards patients and families impact critical treatment decisions
- Preservation of humanity during a dehumanizing event
- Effective communication reduces stress levels

2. *Patients and families want and are satisfied with integrative services.*
    - Patients said they would be more inclined to see a physician who was affiliated with a psychologist
    - Patients and families feel heard and cared for and that their problems are being addressed
    - Patients and families feel that they have come to the "right place" for treatment, regardless of the presenting problem
    - Increased patient and family satisfaction results in decreased risk of malpractice claims
    - Patients and families are more likely to present to a physical health care setting vs. mental health setting
    - Reduction of fears and/or phobias of procedures through opportunities to directly address behavioral impacts on health
    - Health psychologist can begin to help the patient and/or family identify resources to cope with the trauma
3. *Health providers are able to utilize the expertise of a health psychologist when providing psychosocial or behavioral medicine interventions.*
    - Health providers may feel uncomfortable in providing psychosocial or behavioral medicine interventions
    - Health providers can refer to a psychologist they know and trust
    - Communication and consultation are immediate
    - Preservation of humanity during a dehumanizing event

- Health psychologists can help patients, families, and health providers in the handling of emotional reactions
- Reduction of negative interventions

4. *Acceptance of health psychology services in an emergency room.*
    - Increasing awareness among health providers of the mind/body connection
    - Health providers indicated they would like to be able to consult with a psychologist (emergency medicine physicians were among the most enthusiastic endorsers of such a partnership)
    - Enhancement of patient outcome and satisfaction are important to emergency care providers and facilities

In conclusion, it just makes sense to treat the whole person when addressing health issues. To do that, a hospital should utilize not only medical expertise, but the expertise of a health psychologist as well.

REFERENCES

Adler, R. (2001). Psychoneuroimmunology. *Current Directions in Psychological Science, 10,* 94-98.

Aguilera, D.C. & Messick, J.M. (1982). *Crisis intervention: Theory and methodology.* (Fourth Edition). St. Louis: C.V. Mosby Company.

Aiken, L.H., Clarke, S.P., Sloane, D.M., Sochalski, J., & Silber, J.H. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association, 288,* 1987-1993.

Alto, W.A. (1995). Prevention in practice. *Primary Care, 22,* 543-554.

American Academy of Family Physicians. (1994). *American academy of family physicians official definitions related to primary care* (Report No. 302). Kansas City, MO: Author.

American Association for Respiratory Care. (2002). *AARC clinical practice guideline: Pulmonary rehabilitation.* Dallas, TX: American Association for Respiratory Care.

American Diabetes Association. (2004). *Vital Statistics.* Retreived June 20, 2004, from http://www.diabetes.org

American Heart Association. (1996a). *1997 Heart and stroke statistical update.* Dallas: Author.

American Psychological Association. (1995). *Practitioner Update.* Washington, D.C.: Author.

American Psychological Association. (1998). *Practice Pointer.* Washington, D.C.: Author.

American Psychological Association. (2001). *Psychology: Promoting health and well-being through high quality, cost-effective treatment.* Washington D.C.: APA Practice Organization.

American Psychological Association Health Psychology, Division 38. (2004). *What a health psychologist does and how to become one.* Retrieved June 21, 2004, from http://www.health-psych.org/whatis/html

American Thoracic Society. (2004). *Epidemiology, risk factors, and natural history.* Retrieved June 21, 2004, from http://www.thoracic.org/COPD/2/epidemiology_mortality.asp

Angoff, N.R. (2001). Crying in the curriculum. *Journal of the American Medical Association, 286,* 1017-1018.

Baird, M.A., & Doherty, W.J. (1990). Risks and benefits of a family systems approach to medical care. *Family Medicine, 22,* 396-403.

Baraff, L.J., Bernstein, E., Bradley, K., Franken, C., Gerson, L.W., Hannegan, S.R., Kober, K.S., Lee, S., Marotta, M., & Wolfson, A.B. (1992). Perceptions of emergency care by the elderly: Results of multicenter focus group interviews. *Annals of Emergency Medicine, 21 (7),* 814-818.

Barker, C., Pistrang, N., & Elliot, R. (2002). *Research methods in clinical and counseling psychology.* Oxford, England: John Wiley & Sons.

Belar, C.D. (1997). Clinical health psychology: A specialty for the 21st century. *Health Psychology, 16,* 411-416.

Belar, C.D. & Deardorff, W.W. (1995). *Clinical health psychology in medical settings: A practitioner's guidebook.* (Revised Edition). Washington, D.C.: American Psychological Association.

Bingamon, J., Frank, R.G., & Billy, C.L. (1993). Combining a global health budget with a market driven delivery system: Can it be done? *American Psychologist, 48,* 270-276.

Bowers, B.J. (1993). Selections from current literature: Psychiatric disorders in primary care. *Family Practice, 10 (2),* 231-237.

Bray, J.H. & Rogers, J.C. (1995). Linking psychologists and family physicians for collaborative practice. *Professional Psychology: Research & Practice, 26 (2),* 132-138.

Bulman, J.R., & Wortman, C.B. (1977). Attributions of blame and coping in the "real world": Severe accident victims react to their lot. *Journal of Personality and Social Psychology, 35,* 351-363.

Burt, C.W., & McCaig, L.F. (2001). Trends in hospital emergency department utilization: United States, 1992-99. *Vital Health Statistics, 13 (150)*. Hyattsville, MD: National Center for Health Statistics.

California Workgroup on Guidelines for Alzheimer's Disease Management. (2002). *Guidelines for alzheimer's disease management.* Los Angeles, CA: Alzheimer's Association of Los Angeles, Riverside and San Bernardino Counties.

Callahan, C.M., Hui, S.L., Nienaber, N.A., Musick, B.S., & Tierney, W.M. (1994). Longitudinal study of depression and health services use among elderly primary care patients. *Journal of the American Geriatrics Society, 42,* 833-838.

Casciani, J.M. (2003). *The metrics of care and cost in long term care facility operations relative to psychological health of residents.* San Diego, CA: Vericare.

Centers for Disease Control and Prevention. (2002). *National Hospital Ambulatory Medical Care Survey: 2000 Emergency Department Summary.* Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, Advance Data from Vital and Health Statistics.

Centers for Disease Control and Prevention. (2003). *National Hospital Ambulatory Medical Care Survey: 2001 Emergency Department Summary.* Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, Advance Data from Vital and Health Statistics.

Charles, C., Goldsmith, L.J., Chambers, L., & Haynes, R.B. (1996). Provider-patient communication among elderly and non-elderly patients in Canadian hospitals: A national survey. *Health Communication, 8,* 281-302.

Clark, D.C., & Zeldow, P.B. (1988). Vicissitudes of depressed mood during four years of medical school. *Journal of the American Medical Association, 260,* 2521-2528.

Coyne, J.C., Thompson, R., Klinkman, M.S., & Nease, D.E. (2002). Emotional disorders in primary care. *Journal of Consulting and Clinical Psychology, 70 (3),* 798-809.

Cummings, N.A. (1994). The successful application of medical offset in medical programming and clinical delivery. *Managed Care Quarterly, 2 (2),* 1-6.

Cummings, N.A. (1996). The new structure of health care and a role for psychology. In R.J. Resnick & R.H. Rozensky (Eds.), *Health psychology through the lifespan: Practice and research opportunities,* (pp 27-38). Washington, D.C.: American Psychological Association.

Davies, A.R., & Ware, J.E. (1988). Involving consumers in quality of care assessment. *Health Affairs, 7,* 33-48.

Defares,P.B. & Grossman, P. (1988). Hyperventilation, stress, and health-risk behavior. In S. Maes & C.D. Spielberger (Ed.),*Topics in health psychology.* (pp. 141-156). New York, New York: John Wiley & Sons.

Dubin, W.R. & Sarnoff, J.R. (1986). Sudden unexpected death: Intervention with the survivors. *Annals of Emergency Medicine, 15* (1), 54-57.

Dunbar-Jacob, J. (1993). Contributions to patient adherence: Is it time to share the blame? *Health Psychology, 12 (2),* 91-92.

Dunbar-Jacob, J., Burke, L.E., & Puczynski, S. (1995). Clinical assessment and management of adherence to medical regimens. In P.M. Nicassio & T.M. Smith (Eds.), *Managing chronic illness: A biopsychosocial perspective* (pp 313-349). Washington, D.C.: American Psychological Association.

Egede, L.E., Deyi, Z., & Simpson, K. (2002). Comorbid depression is associated with increased health care use and expenditures in individuals with diabetes. *Diabetes Care, 25 (3),* 464-470.

Elixhauser, A., Yu, K., Steiner, C., & Bierman, A.S. (2000). Hospitalization in the United States, 1997. Rockville, MD: Agency for Healthcare Research and Quality. Retrieved July 2, 2004, from http://www.ahrq.gov/data/hcup/factbk1/index.html

Engel, G.L. (1977). The need for a new medical model: A challenge for biomedicine. *Science, 196*, 129-136.

Engel, G.L. (1992). How much longer must medicine's science be bound by a seventeenth century worldview? *Psychother Psychosom, 57,* 3-16.

Enright, M.F. (1985). The psychologist in medical arts practice and small hospitals. *Psychotherapy in Private Practice, 3,* 9-21.

Enright, M.F., Resnick, R., DeLeon, P., Sciara, A.D., & Tanney, F. (1990a). The practice of psychology in hospital settings. *American Psychologist, 45,* 1059-1065.

Enright, M.F., Welch, B.L., Newman, R., & Perry, B.M. (1990b). The hospital: Psychology's challenge in the 1990s. *American Psychologist, 45 (9),* 1057-1058.

Everly, G.S. (1995). *Innovations in disaster and trauma psychology: Vol. 1. Applications in emergency services and disaster response.* Ellicott City, Maryland: Chevron Publishing Corporation.

Ewin, D. (1999). Hypnosis in the emergency room. In R. Temes (Ed.), *Medical Hypnosis: An introduction and clinical guide. Medical guides to complementary and alternative medicine.* (pp. 59-64). New York, New York: Churchill Livingstone, Inc.

Fawzy, F.I., Kemeny, M.E., Fawzy, N.W., Elashoff, R. (1990). A structured psychiatric intervention for cancer patients: II. Changes over time in immunological measures. *Archives of General Psychiatry, 47,* 729-735.

Flocke, S.A., Miller, W.L., & Crabtree, B.F. (2002). Relationships between physician practice style, patient satisfaction, and attributes of primary care. *Journal of Family Practice,* 1-10.

Friedman, R., Sobel, D., Myers, P., Caudill, M, & Benson, (1995). Behavioral medicine, clinical health psychology, and cost offset. *Health Psychology, 14 (6),* 509-518.

Friedrich, W.N. & Jaworski, T.M. (1995). Pediatric abdominal disorders: Inflammatory bowel disease, rumination/vomiting, and recurrent abdominal pain. In M.C. Roberts (Ed.), *Handbook of pediatric psychology.* (pp. 479-497). New York: The Guilford Press.

Fries, J.F., Koop, C.E., Beadle, C.E., Cooper, P.P., England, M.J., Greaves, R.F., Sokolov, J.J., & Wright, D. (1993). Reducing health care costs by reducing the need and demand for medical services. *The New England Journal of Medicine, 329,* 321-325.

Garman, A.N., Corrigan, P.W., & Morris, S. (2002). Staff burnout and patient satisfaction evidence of relationships at the care unit level. *Journal of Occupational Health Psychology, 7 (3),* 235-241.

Gerhart, K.A., Koziol-McLain, J., Lowenstein, S.R., & Whiteneck, G.G. (1994). Quality of life following spinal cord injury: Knowledge and attitudes of emergency care providers. *Annals of Emergency Medicine, 23 (4),* 807-812.

Greenberg, L.W., Ochsenschlanger, D., Cohen, G.J., Einhorn, A.H., & O'Donnell, R. (1993). Counseling parents of a child dead on arrival: A survey of emergency departments. *The American Journal of Emergency Medicine, 11 (3)*, 225-229.

Groth-Marnat, G., & Edkins, G. (1996). Professional psychologists in general health care settings: A review of the financial efficacy of direct treatment interventions. *Professional Psychology: Research & Practice, 27,* 161-174.

Hadlow, J., & Pitts, M., (1991). The understanding of common health terms by doctors, nurses, and patients. *Social Science and Medicine, 32,* 193-196.

Haire-Joshu, D., Glasgow, R.E., & Tibbs, T.L. (2003). Smoking and diabetes. *Diabetes Care, 26 (1),* 89-90.

Haley, W.E., McDaniel, S.H., Bray, J.H., Frank, R.G., Heldring, M., Johnson, S.B., Lu, E.G., Reed, G.M., & Wiggins, J.G. (1998). Psychological practice in primary care settings: Practical tips for clinicians. *Professional Psychology: Research & Practice, 29, (3),* 237-244.

Harbeck-Weber, C., & Hepps McKee, D. (1995). Prevention of emotional and behavioral distress in children experiencing hospitalization and chronic illness. In M.C. Roberts (Ed.), (pp 167-184). *Handbook of pediatric psychology.* New York, NY: Guilford Press.

Heiskell, L.E. & Pasnau, R.O. (1991). Psychological reaction to hospitalization and illness in the emergency department. *Emergency Medicine Clinics of North America, 9 (1),* 207-218.

Higgins, E.S. (1994). A review of unrecognized mental illness in primary care. *Archives of Family Medicine, 3,* 908-917.

Holloway, J.D. (2003). Getting paid under medicare. *Monitor on Psychology, 34 (5),* 76.

Hunkeler, E.M., Spector, W.D., & Fireman, B. (2003). Psychiatric symptoms, impaired function, and medical care costs in an HMO setting. *General Hospital Psychiatry, 25,* 178-184.

Institute for Clinical Systems Improvement. (2002). *Assessment and management of acute pain.* Bloomington, MN: Institute for Clinical Systems Improvement.

Jacobson, J.L. (2000). *Proposal and business plan: An integrated approach to practice in primary care.* Paper presented at Spalding University, Louisville, KY.

Jiang, H.J., Stryer, D., Friedman, B., & Andrews, R (2003). Multiple hospitalizations for patients with diabetes. *Diabetes Care, 26 (5),* 1421-1426.

Kainz, K. (2002). Barriers and enhancements to physician-psychologist collaboration. *Professional Psychology: Research & Practice, 33,* 169-175.

Katon, W.J. (2001). The depressed patient with comorbid illness. *Program and Abstracts of the 154th Annual Meeting of the American Psychiatric Association.* New Orleans, LA.

Katon, W., & Schulberg, H. (1992). Epidemiology of depression in primary care. *General Hospital Psychiatry, 14,* 237-247.

Kegan, R.G. (1982). *The evolving self: Problem and process in human development.* Cambridge, Massachusetts: Harvard University Press.

Kiecolt-Glaser, J.K., Dura, J.R., Speicher, C.E., Trask, O.J., & Glaser, R. (1991). Spousal caregivers of dementia victims: Longitudinal changes in immunity and health. *Psychosomatic Medicine, 53,* 345-362.

Kroenke, K., & Mangelsdorff, D. (1989). Common symptoms in ambulatory care: Incidence, evaluation, therapy, and outcome. *American Journal of Medicine, 86,* 262-266.

Kvale, P.A., Simoff, M., & Prakash, U.B. (2003). Lung cancer. Palliative care.

Chest, 123 (1), 284-311.

Lareau, M.W. & Nelson, E.S. (1994). The physician and licensed mental health professional team: Prevalence and feasibility. *Family Systems Medicine, 12 (1)*, 37-45.

Lechnyr, R. (1992). The cost savings of mental health services. *EAP Digest,* 22.

Leeman, C.P. (1975). Diagnostic errors in emergency room medicine: Physical illness in patients labeled "psychiatric" and vice versa. *International Journal of Psychiatry in Medicine, 6 (4),* 533-540.

Leitzell, J.D. (1977). Patient and physician: Is either objective? *New England Journal of Medicine, 296,* 1070.

Levitt, N.G. (2002). *Health service psychologists play a vital role in health care.* Washington, D.C.: American Psychological Association.

Lewis, G.W. (1994). *Critical incident stress and trauma in the workplace: Recognition, response, recovery.* Levittown, Pennsylvania: Accelerated Development.

Liss-Levinson, W.S. (1982). Clinical observations on the emotional responses of males to cancer. *Psychotherapy: Theory, research and practice, 19,* 325-330.

Longlett, S., & Kruse, J. (1992). Behavioral science education in family medicine: A survey of behavioral science educators and family physicians. *Family Medicine, 24,* 28-45.

Maier, S.F., Watkins, L.R., & Fleshner, M. (1994). Psychoneuroimmunolgy: The

interface between behavior, brain, and immunity. *American Psychologist, 49 (12)*, 1004-1017.

Marvel, M.K., Epstein, R.M., Flowers, K., & Beckman, H.B. (1999). Soliciting the patient's agenda: Have we improved? *Journal of the American Medical Association, 281,* 283-287.

Maslach, C., & Jackson, S.E. (1982). Burnout in health professions: A social psychological analysis. In G.S. Sanders & J. Suls (Eds.), *Social psychology in health and illness* (pp 227-251). Hillsdale, NJ: Erlbaum.

Matarazzo, J.D. (1980). Behavioral health and behavioral medicine. *American Psychologist, 35,* 807-817.

McCaig, L.F., & Burt, C.W. (2003). National hospital ambulatory medical care survey: 2001 emergency department summary. *Advance Data from Vital and Health Statistics, 335.* Hyattsville, Maryland: National Center for Health Statistics.

Mentzer, S.J., & Snyder, M.L. (1982). The doctor and the patient: A psychological perspective. In G.S. Sanders & J. Suls (Eds.), *Social psychology of health and illness* (pp 161-181). Hillsdale, NJ: Erlbaum.

Meyer, T.J., & Mark, M.M. (1995). Effects of psychosocial interventions with adult cancer patients. *Health Psychology, 14,* 101-108.

Miller, T. & Schwartz, L. (1990). Clinical psychology in general hospital settings: Issues in interpersonal relationships. *Professional Psychology: Research & Practice, 21 (1), 48-53.*

Mitchell, J.T. (1995). Essentials of critical incident stress management. In G.S. Everly (Ed.), *Innovations in disaster and trauma psychology: Vol. 1. Applications in emergency services and disaster response.* (pp. 68-71). Ellicott City, Maryland: Chevron Publishing Corporation.

Nadel, M.V. (1991). *Trauma care: Lifesaving system threatened by unreimbursed costs and other factors.* Washington, D.C.: General Accounting Office.

National Guideline Clearinghouse. (2004*). National guideline clearinghouse*. Retrieved June 20, 2004, from http://www.guideline.gov/

Newman, R., & Reed, G.M. (1996). Psychology as a health care profession: Its evolution and future directions. In R.J. Resnick & R.H. Rozensky (Eds.), *Health psychology through the lifespan: Practice and research opportunities*, (pp 11-26). Washington, D.C.: American Psychological Association.

Online Medical Dictionary (1998). September, 21, 2001, from http://www.online-medical-dictionary.org

Patashnik, E., & Zelizer, J. (2001). Paying for medicare: Benefits, budgets, and Wilbur Mills's policy legacy. *Journal of Health Politics, Policy, and Law, 26,* 7-36.

Patterson, J., Peek, C.J., Heinrich, R.L., Bischoff, R.J., & Scherger, J. (2002). *Mental health professionals in medical settings: A primer.* New York, New York: W.W. Norton & Company, Inc.

Patton, M.Q. (1980). *Qualitative evaluation methods.* Beverly Hills, CA: Sage.

Pollin, I. (1995). *Medical crisis counseling: Short-term therapy for long-term illness.* New York: Norton.

Psaty, B.M., Koepsell, T.D., Wagner, E.H., LoGerfo, J.P., & Inui, T.S. (1990). Beta blockers and the primary prevention of nonfatal myocardial infarction in patients with high blood pressure. *American Journal of Cardiology, 66,* 12G-14G.

Roberts, A. R. (2000). *Crisis intervention handbook: Assessment, treatment, and research.* New York, New York: Oxford University Press.

Roberts, M.C. (1995). *Handbook of pediatric psychology.* New York, New York: The Guilford Press.

Rosenzweig, S. (1993). "Emergency rapport". *The Journal of Emergency Medicine, 11 (6),* 775-778.

Rosenzweig, S. (1993). Humanism in emergency medicine. *The American Journal of Emergency Medicine, 11* (5), 556-559.

Rozensky, R.H. (1994). Clinical psychology in medical settings: Psychology's role in health care. *Journal of Clinical Psychology in Medical Settings, 1 (1),* 1-5.

Sanderson, C.A. (2004). *Health Psychology.* Hoboken, New Jersey: John Wiley & Sons, Inc.

Scottish Intercollegiate Guidelines Network. (2002). *Cardiac rehabilitation. A national clinical guideline.* Edinburgh, Scotland: Scottish Intercollegiate Guidelines Network.

Seligman, M.E. (1975). *Helplessness: On depression, development, and death.* San Francisco: Freeman.

Shapiro, D.E., Boggs, S.R., Melamed, B., & Rodrigue, J.R. (1992). The effect of varied physician affect on patient recall, anxiety, and perceptions in women at risk for breast cancer: An analogue study. *Health Psychology, 11,* 61-66.

Shapiro, D.E., & Koocher, G.P. (1996). Goals and practical considerations in outpatient medical crises intervention. *Professional Psychology: Research & Practice, 27 (2),* 109-120.

Singapore Ministrey of Health. (2002). *Smoking Cessation.* Singapore: Singapore Ministry of Health.

Singapore Ministrey of Health. (2003). *Cancer Pain.* Singapore: Singapore Ministry of Health.

Sobel, D.S. (1995). Rethinking medicine: Improving health outcomes with cost-effective psychosocial interventions. *Psychosomatic Medicine, 57,* 234-244.

Spiegel, D., Bloom, J.R., Kraemer, H.C., & Gottheil, E. (1989). Effect of psychosocial treatment on survival of patients with metastatic breast cancer. *Lancet, 2,* 888-891.

Spitzer, R.L., Kroenke, K., Linzer, M., Hahn, S.R., Williams, J.B., deGruy, F.V., Brody, D., & Davies, M. (1995). Health related quality of life in primary care patients with mental disorders: Results from the PRIME-MD 1000 study. *Journal of the American Medical Association, 274,* 1511-1517.

Stanton, M.W. (2002). *Research in Action.* Rockville, MD: Agency for Healthcare Research and Quality.

Stewart, M.A. (1984). What is a successful doctor-patient interview? A study of interactions and outcomes. *Social Science Medicine, 19,* 167-175.

Stone, G.E., Weiss, S.N., Matarazzo, J.D., Miller, N.E., Rodin, J., Belar, C.D., Follick, M.J., & Singer, J.E. (Eds.) (1987). *Health psychology: A discipline and a profession.* Chicago: University of Chicago Press.

Swisher, L.A., Nieman, L.Z., Nilsen, G.J., & Spivey, W.H. (1993). Death notification in the emergency department: A survey of residents and attending physicians. *Annals of Emergency Medicine, 22 (8),* 1319-1323.

Talbert, F.S., Wagner, P.J., Braswell, L.C., & Husein, S. (1995). Analysis of long-term stress reactions in emergency room patients: An initial study. *Journal of Clinical Psychology in Medical Settings,2 (2),* 133-148.

Taylor, S.E. (1990). Health psychology: The science and the field. *American Psychologist, 45 (1),* 40-50.

U.S. Department of Health and Human Services. (1999). *Mental health: A report of the surgeon general.* Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.

Vaccarino, J.M. (1977). Malpractice: The problem in perspective. *Journal of the American Medical Association, 238,* 861-863.

VandenBos, G.R., Deleon, P.H., & Belar, C.D. (1991). How many psychologists are needed? It's too early to know! *Professional Psychology: Research & Practice, 22,* 441-448.

Van Egeren, L.M., Striepe, M.I., & Noll, S. (2000). Women veterans' mental health needs in a primary care setting. In P. Camic and S. Knight (Eds.), *Clinical handbook of health psychology.* (p 37). Seattle, WA: Hogrefe & Huber Publishers.

Vasquez, A., Nath, C., & Murray, S. (1988). Counseling by family physicians: Report of a survey and curriculum modification in West Virginia. *Family Systems Medicine, 6,* 463-466.

Wagner, W (2000*). Family Health Center, Inc. annual report*. Louisville, KY: Family Health Center, Inc.

Wells, K.B. (1994). Depression in general medical settings. *Psychosomatics, 35,* 279-296.

World Health Organization. (1964). *Basic documents* (15th ed., p.1). Geneva, Switzerland: Author.

Yap, J.N. (1988). A critical review of pediatric preoperative preparation procedures: Processes, outcomes, and future directions. *Journal of Developmental Psychology, 9,* 359-389.

Appendix A

Informed Consent Form

This research is being conducted by Angela Green, M.S. The supervising professor and chair of this dissertation is Dr. Andy Meyer. The purpose of this research is to further the understanding of how services of a Health Psychologist can best be utilized in an emergency room setting.

Each participant will be asked questions by the researcher in the form of a structured interview. The interview will take approximately 45 minutes.

The known risks for participation are minimal, but could potentially involve an increase in emotional and/or somatic symptoms. Upon completion of data collection, if there are any questions or complications, the researcher will be available for consultation. Furthermore, a phone number to contact the investigator will be provided to participants if there are any complications following the administration. I understand that there is no direct benefit for my participation in this study.

Participation in this research is voluntary. I understand that I may refuse to participate in this research at any time for any reason without penalty. All the information provided by me will be completely confidential and my name will not be associated with any of the information that will be collected today.

If I have any concerns or further questions, I may contact the primary researcher, Angela Green, M.S., or the supervising professor, Dr. Andy Meyer, at (502) 585-7127.

I have been told of the risks and benefits to me for participating in this study. I have had all my questions answered by the researcher and understand my rights as a research participant. By signing this consent form, I acknowledge that Angela Green has fully explained to me the risks involved. I also understand that I may withdraw from participation at any time without penalty and can ask any questions concerning the procedures to be followed throughout my participation in the interview. I also understand that I will be given a copy of this consent form. I freely and voluntarily consent to participation in the research project.

Participant's Signature:_____
Date:_____

Researcher's Signature:_____
Date:_____

Appendix B

Structured Interview for Providers

A clinical health psychologist applies, in professional practice, the specific educational, scientific, and professional contributions of the discipline of psychology to the promotion and maintenance of health; the prevention, treatment, and rehabilitation of illness, injury, and disability; the identification of etiologic and diagnostic correlates of health, illness, and related dysfunction; and the analysis and improvement of the health care system and health policy formation.

In other words, a clinical health psychologists possess a knowledge base and training background that distinguishes them from other psychologists and mental health providers. More specifically, health psychologists have background and training in work with medically ill patients; well-trained in medical terminology, anatomy and physiology, and psychopharmacology; crisis intervention; mental health triage; program evaluation and outcomes; helping families and patients cope with trauma, illness, and bereavement; stress management and relaxation; and, application of behavioral interventions

1. Given this statement about what health psychology is, what role do you believe a health psychologist can play in providing health services to patients in a hospital?

2. How might these roles be applicable to the emergency room?

3. Do you believe that having these services available to patients and/or their families in the emergency room would decrease anxiety? Increase understanding? Increase communication between health provider and patient/family?

4. What do you see as the major barriers to providing this service in an emergency room setting?

5. What ideas do you have in resolving the issue of (billing for service, acceptance of service, provision of service, etc.)?

6. In an ideal world, what types of services would you like to be provided to you or your family if you need care in an emergency room?

7. To be able to provide health psychological services to patients/families in the emergency room, what would need to change? How do you envision that change taking place?

8. Do you think these services would be valued by (physicians, nurses, other allied services, administration, patients)?

Appendix C

Patient Cover Letter

July 12, 2005

Dear Patient,

Recently you received services in the emergency room at XXX Medical Center. In order to continue to provide you and your family high quality services, XXX is working with Spalding University in order to better understand the needs of our customers. Attached you will find a quick, anonymous survey asking you about your stay with us. This survey is part of a research study being conducted by a doctoral student at Spalding University. By completing this survey and returning it in the postage paid envelope to XXX Health Services, you are indicating your willingness to be a part of the study. Remember, this form is to be returned without your name or any other identifying information on it. If at any time prior to returning this survey to XXX Health Services you decide you do not want to participate, you can withdraw by not completing and returning this survey. The survey should only take about 5 minutes of your time and will help us better understand how to serve you.

Thank you.

XXX Health Services & Spalding University

Appendix D

Patient Questionnaire

Please Circle One for Each Question.

How would you rate your experience with the emergency services provided at XXX Medical Center?

Excellent Good Fair Not Good

How much did you know about the medical condition that led to you being brought to the emergency room?

A lot Some A little Nothing

Was this an emotional experience for you and/or your family?

Yes No Not Sure

Would you have liked to have had the opportunity to speak with someone about your illness/injury and how you will begin to recover emotionally from the emergency?

Yes No Not Sure

Did you feel that your questions were adequately answered by the hospital professionals (doctors and nurses)?

Yes No Not Sure

Would you have liked to have had someone from the emergency room follow you to the other units of the hospital to assist you and your family in understanding what was happening?

Yes No Not Sure

Would you have liked to have had someone to provide emotional support to you and your family during this time of crisis?

Yes No Not Sure

If you were provided with information regarding your injury/illness do you think you might be less likely to return to the emergency room with the same problem?

Yes No Not Sure

Would you have liked to have been able to receive support from a person trained to address concerns such as fear, confusion, anxiety, depression, or other emotional concerns?

Yes **No** **Not Sure**

How likely are you to pursue counseling to assist in dealing with your condition/injury that led to you going to the ER?

Very Likely **Maybe** **Unlikely** **Not At All**

Appendix E

Research Ethics Committee Approval Letter

(see next page for copy of letter)

BIOGRAPHY

Angela Green was awarded her undergraduate degree in rehabilitation psychology at Central Missouri State University, where she graduated *cum laude* in 1997. In 1999 she also earned her Master's degree in clinical psychology at Central Missouri State University.

In 1999, Dr. Green began her work toward a doctorate at Spalding University. This dissertation is the culmination of her work, and reflects her interest in expanding health psychology into new areas. Dr. Green plans to continue to pursue her interests in health psychology, consultation, and administration.