2009

The effects of immediate follow-up on psychiartric rehospitalization rates

Jennifer Erin McCreight

THE EFFECTS OF IMMEDIATE FOLLOW-UP ON PSYCHIATRIC REHOSPITALIZATION RATES

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

---

by

Jennifer Erin McCreight

June 2009

THE EFFECTS OF IMMEDIATE FOLLOW-UP ON PSYCHIATRIC REHOSPITALIZATION RATES

A Project

Presented to the

Faculty of

California State University,

San Bernardino

---

by

Jennifer Erin McCreight

June 2009

Approved by:

[redacted]

Dr. Ray Liles, Faculty Supervisor
Social Work

06.01.09
Date

[redacted]

Paula Rutten, L.C.S.W.
San Bernardino County
Department of Behavioral Health

[redacted]

Dr. Janet C. Chang,
M.S.W. Research Coordinator

ABSTRACT

Repeat rehospitalization among the mentally ill is a serious social problem affecting both the individual and society. This study examines the effect of an immediate post-hospitalization follow-up intervention on the rehospitalization rates of consumers of public mental health services with a classic experimental design. The intervention involves reinforcing the discharge plan, providing psychoeducation, encouraging medication adherence, and triaging each discharged client for additional needs. The effectiveness of the intervention was measured in terms of its effect on outpatient follow-up compliance, number of rehospitalizations, and total hospital days when rehospitalized. It was found that those who receive the post-hospitalization follow-up intervention are rehospitalized less often and when rehospitalized spend less time in the hospital on subsequent hospitalizations than those who do not receive this follow-up intervention.

ACKNOWLEDGEMENTS

I would like to acknowledge several people for their assistance in completing this project. Paula Rutten has been a very supportive and encouraging supervisor during my two years in the program and she made getting through this program in two years and working full time (among other things) possible and painless. The Department of Behavioral Health has also contributed to the completion of this project through their Institutional Review Board review process and approval of my research within the department. Dr. Liles challenged me to find my own solutions to problems that I encountered in my work on this project, and for that I am thankful.

DEDICATION

I would like to dedicate the completion of this project to Juan and baby Noah.

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

This chapter examines various definitions of mental illness and defines the term for the purposes of this study. This chapter also addresses the history of mental illness, including the major policies that have governed treatment and the public programs that provide services to the mentally ill. In addition, the current public mental health system of care is reviewed, leading to an overview of the purpose of this study and its relevance to the profession of social work.

Problem Statement

Mental illness has been around forever, though it has not always been recognized as so. Throughout history, especially in the United States and Europe, mental illness was thought of as anything from demonic possession to an unstable organism or a punishment by God (Halgin & Whitbourne, 2003). A scientific approach to treating mental illness is a relatively new concept, and with the application of scientific understanding to the

treatment of mental illness, we see a different picture of mental illness and its treatments today.

The simple task of defining mental health and mental illness has been controversial. The medical model of mental health, supported by many practitioners in the medical field, stresses that those who are mentally ill are sick and require treatment by a trained professional to avoid further decompensation. The DSM-IV-TR, the current psychiatric authority on mental illness, espouses the medical model in its definition of "mental disorder":

> a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress or disability or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom" (American Psychiatric Association, 2000, p.xxxi).

The medical model does not inspire hope, but instead paints a bleak picture of the life that someone with mental illness might live.

In contrast to this deficit-based definition of mental illness are recovery-based psychosocial definitions of mental health. The World Health

Organization (WHO) defines mental health as: "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community." (World Health Organization, 2007, p.1).

A fusion of recovery-based and medical definitions of mental illness is presented by the National Alliance on Mental Illness (NAMI), an important advocacy group that serves the mentally ill and their families: "Mental illnesses are medical conditions that disrupt a person's thinking, feeling, mood, ability to relate to others, and daily functioning…however treatment is available and recovery from mental illness is possible" (National Alliance on Mental Illness, 2008, p.1).

This project rejects definitions of mental illness and mental health that focus on faults and weaknesses, and adopts a strengths-based, recovery model definition: mental illness is an often chronic ailment of the mind that challenges a person psychologically, socially, and culturally, and can be treated in a variety of ways building on the strengths that the client possesses.

Public policy has heavily impacted all facets of mental health and the treatment of mental illness in the United States (Popple & Leighninger, 2005). The Poor Laws of the 1600s mandated that the mentally ill were the responsibility of families and the community, and community care was the norm for about 200 years. In the mid-1800s, the responsibility steadily moved away from the local sector and towards the federal government as most of the mentally ill were housed in federal institutions for about 100 years (1850s-1950s).

In the 1950s, psychiatric medication advances, an ideological shift in approaches to mental health to a more liberal paradigm, and financial concerns prompted the beginning deinstitutionalization movement (Markowitz, 2006). The deinstitutionalization movement was the massive transfer of almost all of the institutionalized mentally ill from federal hospitals into community care. The official beginning of deinstitutionalization in the US was when the Mental Retardation Facilities and Community Mental Health Centers Act of 1963 was passed by Congress and signed into law by President Kennedy. Local-level Community Mental Health Clinics were to be the base of support for those who were discharged from

institutions or deinstitutionalized, not large federal asylums.

While this movement appears to have begun with very altruistic and humane ideas and intentions, it unfortunately has not lived up to its promise. The Community Mental Health Clinics were not funded in a way to provide for comprehensive services, and instead of a life full of choices and support in the community, as the legislation intended, many of the people who were deinstitutionalized and the mentally ill living in the community today experience stigmatization and a very serious fragmentation of and lack of services in the community setting.

In November, 2004, Proposition 63, also known as the Mental Health Services Act (MHSA), was passed by 53% of California voters. The text of the MHSA states that it aims especially to reduce several important unintended side effects of deinstitutionalization: suicide, incarcerations, school failure, unemployment, prolonged suffering, and homelessness among the mentally ill (California Department of Mental Health, 2003). The MHSA attempts to rectify the disjointed public mental health system with innovative and evidence-based practices in

which the consumer of mental health services is able to participate in and receive the services needed to achieve recovery from mental illness.

Since the deinstitutionalization movement began, a large rift between inpatient and outpatient mental health services has grown. Inpatient services are generally reserved for emergency situations, while outpatient services are available to help a person to remain stable in the community. As Anthony, Buell, Sharratt, and Althoff (1972) state in their landmark study, the patient is better off psychologically and the community is better off financially when the consumer is outside of the psychiatric institution and in a community where appropriate outpatient services are available. For reasons discussed in the literature review that follows, outpatient and inpatient treatment is seldom an integrated process (Kanter, 1991). Rather, these two systems work almost completely independent of the other, contributing to an already disintegrated system. Often, consumers are left in the middle of this crack, looking for services in two systems that they do not always understand. Rehospitalization rates are high among many consumers of mental health services, and in many

instances it is believed that coordination between inpatient and outpatient services could reduce this rate (Kanter, 1991). One good way to bridge the gap between inpatient and outpatient services is to have a formal agreement to work together for the good of the client. It is important that those who are discharged from psychiatric hospitals follow-up with outpatient mental health service providers in an effort to preserve the progress achieved while hospitalized, and to continue along the path to recovery.

Purpose of the Study

The purpose of this study was to examine the relationship between immediate follow-up with those discharged from inpatient treatment and rehospitalization rates. The literature suggests that continuity of care between outpatient and inpatient treatment in an adequate system that has the capacity to provide quality care would reduce the need for hospitalization and rehospitalization (Cuffel, Held, & Goldman, 2002; Kanter, 1991; Nelson, Maruish, & Axler, 2000).

It is important to study psychiatric rehospitalization, as avoidable rehospitalization is

detrimental to the client who is continually returned to the hospital as well as to society, as hospitalization is a very costly resource that should be used sparingly (Kanter, 1991). The recovery model of mental health espouses a "whatever it takes" attitude in the treatment of mental illness, which would promote strengths-based preventative treatment and maintenance in the community rather than reactive inpatient treatment to resolve avoidable psychiatric crises.

This study was conducted with clients discharged from a public Behavioral Health Unit in San Bernardino County. Clients were contacted an average of 10 days after discharge for the purpose of reinforcing the discharge plan, answering any questions and providing psychoeducation, encouraging medication adherence, and to triage each discharged client for additional needs and risk for decompensation and rehospitalization.

Significance of the Project for Social Work

There are many agencies involved in the provision of services to the mentally ill. Many private health care providers offer psychiatric and psychological assistance

to those with private insurance coverage. Because of the inherent difficulties that the chronically mentally ill face in obtaining and maintaining employment, the public sector provides a bulk of mental health services to the more severely and the persistently mentally ill.

This study was an attempt to assess the impact of the continuity of services between inpatient and outpatient care and it was hypothesized that post-hospitalization follow-up interventions would increase outpatient treatment seeking behavior and reduce unnecessary inpatient rehospitalizations.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter focuses on rehospitalization literature and gives an overview of several different facets of this phenomenon. It begins by reviewing landmark studies that were conducted as deinstitutionalization was beginning, tracing back to the roots of this trend of rehospitalization. Factors that influence rehospitalization as reported in the literature are also be examined. The link between outpatient and inpatient programs is evaluated as well, as this is an important component in this study. Lastly, several theoretical models and their origins are presented in relation to the field of mental health.

Historical Perspectives

Rehospitalization was not studied before the dawn of deinstitutionalization, simply because very few patients were ever discharged from the mental institutions where they lived, and therefore were not subsequently rehospitalized. Two especially important landmark

studies were conducted in the 1970s, and these two studies are very important to understanding the development of this revolving door phenomenon.

William Anthony and several colleagues wrote an article examining the value of rehabilitation for the mentally ill less than 10 years after the Mental Retardation Facilities and Community Mental Health Centers Act was passed. Anthony et al. (1972) introduced the idea of "recidivism," as the number of patients who were rehospitalized after discharge from a psychiatric facility. He identified a baseline rate of recidivism: 30-40% of patients who are discharged will return to the hospital in 6 months, 40-50% will return in 1 year, and 65-75% will return in 3-5 years. These numbers appear to be very high, and one might consider that these numbers are out-of-date, as they were measuring returns to institution-like hospitals, not acute care facilities. However, researchers continue to cite Anthony's statistics as realistic today (Montgomery & Kirkpatrick, 2002; Yamada, Korman & Hughes, 2000).

Anthony et al. (1972) also noted that the type of therapy that a patient received both in the hospital and outside of the hospital (ie. individual therapy, group

therapy, medication therapy, electric shock) did not have a significant impact on recidivism rates. This is not to say that the type of inpatient care was not significant in terms of positive results while hospitalized, and it also does not mean that outpatient care itself was not important in reducing recidivism rates; it simply states that the type of treatment didn't appear to make a significant difference in reducing rehospitalization rates for those receiving this care. In fact, normal outpatient treatment was found to reduce recidivism rates to about 20% (down from 40-50%) for 1-year and no more than 37% (down from 65-75%) for 3-5 years after discharge. Intensive outpatient treatment, day treatment, some types of placement, and peer-led interventions were found to be even more effective in reducing these rates.

In contrast to the Anthony et al. (1972) study that found that only some types of placement had an effect on reducing recidivism, and that those effects were not necessarily long-lasting, Byers, Cohen, and Harshbarger (1979) found that a discharged patient's living situation was the most important factor that predicted the patient's later recidivism. Byers et al. (1979) also

challenged Anthony's finding that aftercare reduces recidivism. Byers et al. (1979) found that those who received aftercare in a structured residential setting (similar to a Board and Care) were less likely to be readmitted, and she concluded that this was because the aftercare was consistent and of good quality. Byers et al. (1979) affirmed that this type of aftercare should be the intervention of choice for those caring for the recently discharged, as it was found to have the most significant effect on reducing recidivism and used community resources in the most efficient way. These authors noted that the objective of community-based mental health care that was articulated when deinstitutionalization began would never be achieved without a drastic drop in recidivism.

Factors that Influence Rehospitalization

There are many factors that positively and negatively influence rehospitalization rates for patients who are discharged from a psychiatric hospital. This section gives a comprehensive overview of some of the most important factors that impact rehospitalization. Medication compliance, length of index hospitalization,

voluntary or involuntary status upon admission, client characteristics, and diagnosis are reviewed.

Among those clients who are prescribed medication to treat their mental illness, medication compliance influences the clients' risk of rehospitalization. Weiden, Kozma, Grogg, and Locklear, (2004) found that a client's medication compliance was significantly negatively correlated with the client's rehospitalization rate. This study recognized that compliance is not an all-or-nothing occurrence, and that partial compliance is common, especially among those with a schizophrenia diagnosis. Those who had medication gaps were more likely to be rehospitalized, and as that gap increased, so did the rehospitalization risk. About 6% of those who did not have a gap in medication compliance were rehospitalized, while a 1-10 day gap showed a 12% rehospitalization rate, an 11-30 day gap increased this rate to 16%, and with a 30+ day gap, the rate again increased, this time to 22%. It is important to note that in this study, California Medicaid recipients with a diagnosis of schizophrenia made up their sample; this is similar to the sample that was used in this study. However, the data in this study were computed by pharmacy

claims, and this is not necessarily a valid measure for compliance and does not give any explanation for medication non-compliance.

Another study that cited medication noncompliance as a reason for readmission is the Abas, Vanderpyl, Le Prou, Kydd, Emery, and Foliaki (2003) research report. This study used several instruments to measure why clients were being hospitalized. It appears that about half of the sample was hospitalized for a medication compliance-related issues (reinstatement of medication and non-compliance), and the other half for safety issues (intensive observation for danger to self and/or others). A large proportion of the sample for this research was admitted involuntarily, and common diagnoses were schizophrenia and mood disorders (such as bipolar disorder and depression) (Abas et al., 2003). Again, an important similarity to the sample that was used for this research study is noted. Twenty seven percent of the sample was experiencing their first hospitalization, 19% was experiencing their second hospitalization, and 54% had experienced two or more previous hospitalizations.

In a similar study, Segal, Akutsu, and Watson (2002) studied patients that were involuntary returned to a

psychiatric hospital in a year or less. These researchers blamed the patients' involuntary return on the amount of time that individuals are kept in inpatient treatment, postulating that longer hospitalizations to begin with could reduce recidivism. The researchers fault the crisis-oriented system that mental health has become, and doubt that short hospitalizations really successfully solve the patient's presenting problem. Most of the sample participants were hospitalized between 9 and 16 days, and the sample showed a 29% 1-year recidivism rate and noted that those who had returned to the hospital both during the index admission and the subsequent admission(s) were "more seriously disordered" (Segal et al., 2002, p.596). This recidivism rate is significantly lower than Anthony's et al. (1972) accepted baseline, and this study does not attend to the concern of many other recidivism researchers—some rehospitalization is inevitable and rehospitalization in and of itself is not necessarily always negative. This study does not include those who return voluntarily to the hospital for readmission, as this research project did.

In studying those who seek repeated inpatient treatment, Montgomery and Kirkpatrick (2002) addressed several characteristics that these people have in common in her review. She noted that, although Anthony's et al. (1972) baselines are used frequently, there is no consensus on what is an acceptable number of hospitalizations for any one person. She went on to say that most clients tend to prefer community treatment to inpatient treatment because of the increase in autonomy, privacy, and safety, and because outpatient treatment is less stigmatized. She noted that several client characteristics were predictive of rehospitalization (older age, single status, diagnosis of schizophrenia), but that the number of prior hospitalizations and the length of stay were the best predictor of rehospitalization. This contradicts Segal's et al. (2002) insistence that longer stays would reduce recidivism. Montgomery and Kirkpatrick (2002) recognized that rehospitalization can be based on extraneous factors such as a patient's ability to fulfill gate keeping requirements, a family's (possibly mistaken) expectations of hospitalization, helplessness, and other variables that have not been widely represented in the literature.

The comprehensive Kolbasovsky, Reich, and Futterman (2007) study brought together the information in the previous four studies. Kolbasovsky et al. (2007) reported that Medicare coverage, previous number of days spent in an inpatient psychiatric hospital, the length of stay for the index hospitalization, and the number of outpatient treatment visits are all associated with rehospitalization, while a depression diagnosis was not associated with rehospitalization. Kolbasovsky et al. (2007) used exclusively administrative predictors, ignoring the clinical side of treatment and the severity of the symptoms that the client might have been experiencing. The informed reader should wonder if the factors that influenced rehospitalization might simply be characteristic of more serious disorders, which in turn would be associated with more rehospitalizations. The sample came from an HMO, and the characteristics of those who either are able to gain HMO coverage (through their own employment or their spouse's employment) are believed to be significantly different than the characteristics of those who have Medicaid or no health coverage and are served by the public system.

Yamada et al. (2000) studied a very different group than Kolbasovsky et al. (2007)—the severely mentally ill. They conceptualized the severely and persistently mentally ill as those with a diagnosis of schizophrenia, major depression, bipolar disorder, and other chronic mental illnesses. They studied those discharged from state mental hospitals, as did Anthony et al. (1972), however the community mental health system that her patients were discharged into differed from the 1970s system.

Yamada et al. (2000) learned that with the exception of ethnicity, demographic factors did not influence rehospitalization. They noted that having a lower number of previous hospitalizations predicted lower rates of rehospitalization, while being assigned to a residential program, a high level of severity of symptoms, and a low level of family support predicted higher rates of rehospitalization. Yamada et al. (2000) also noted that their recidivism rates (31% at 6 months, 46% at 1 year, and 62% at 4 years) were consistent with Anthony's baselines (30-40% at 6 months, 40-50% at 1 year, and 65-75% at 3-5 years).

Continuity of Care

The continuity of care between outpatient and inpatient treatment settings can be very influential in regards to rehospitalization rates.

Kanter (1991) outlined the grounds for integration of outpatient and inpatient treatment. Inpatient and outpatient staff members often work on two parallel but separate systems that occasionally collide. Before deinstitutionalization, all psychiatric services came from one agency system. Today, outpatient case management is the therapeutic intervention of choice for the implementation of the ideals of deinstitutionalization, and hospitalization is utilized in emergency situations only. Despite the fact that both parts of the whole are necessary to form a complete continuum of care, hospital staff often disregard the case manager's information as irrelevant when the patient is hospitalized, and outpatient providers often ignore their client while the client is hospitalized. Effective outpatient treatment can help to prevent hospitalization, encourage mediation adherence, provide psychoeducation and support to the client and caregivers. When their clients are hospitalized, case managers have the ability

to help hospital staff by assisting in discharge planning and encouraging implementation of a discharge plan after discharge. The participation of case managers in inpatient treatment and discharge planning has been shown to reduce rehospitalization rates dramatically from 64% to 22% (Altman, 1982, as cited in Kanter, 1991).

Outpatient follow-up has been shown to be an important factor in rehospitalization rates. Nelson's et al. (2000) study is more applicable to this research study. Nelson suggested that rehospitalization may be related to a failure in discharge planning and outpatient treatment follow-up. On average, those who kept an outpatient appointment showed a rehospitalization rate of 11% while those who did not keep any appointments showed a rate of 22% for up to one year. They also found that the longer the gap between inpatient hospitalization and outpatient treatment, the more likely rehospitalization became. This study suggests that aggressive outreach could be beneficial in reducing rehospitalization rates of the severe and persistently mentally ill.

Although they did not include the average of 40-60% of clients who do not follow-up with an outpatient provider in their study, Cuffel et al. (2002) studied the

difference in rehospitalization rates among those who receive normal, enhanced, and intensive outpatient services. He found no significant differences between the groups, in contrast to the previous study. This sample was made up of private employer health plans, a very different sampling frame from the frame that was used for this study.

Theories Guiding Conceptualization

Ecological systems theory, the recovery model, and crisis theory guide the conceptualization of this project. These theories are popular in the mental health field, especially among social workers who treat the mentally ill, and are abundant in the literature.

The ecological systems theory emphasizes the role that the environment plays in influencing individuals (Payne, 2005). All people are part of at least one system, and each system is complied of subsystems and part of super-systems. These systems have boundaries that differentiate them from one another. More happens within the boundaries of a system than outside of its boundaries, however when information passes a boundary, it is called input. All open systems receive some kind

of input, use it internally, then produce output. Systems must receive input to survive, or entropy happens—systems that don't receive input from outside of the boundary die. Homeostasis is the system's ability to maintain equilibrium, despite the input that is received from outside of the boundaries of the system. The idea of differentiation states that as time passes, systems inherently become more complicated and multifaceted. When one subsystem of a system changes all of the other subsystems must change to accommodate the initial change.

The inpatient system that will be looked at in this study is that of a public mental health hospital in San Bernardino County. The subsystems of this system are numerous—each unit is a subsystem, the line staff is another subsystem, the psychiatrists are another subsystem, and the clients are another subsystem. This hospital is a part of several super-systems: the super-system of mental health hospitals and the super-system of the county of San Bernardino, to name a few. The boundaries of this system in the sense of new clientele are easily permeable; the boundaries in the sense of the input of other mental health professionals are not as porous. When clients are admitted to the hospital, they

come as input to the hospital. Throughout their stay, they are throughput; energy is used within the inpatient system to rehabilitate the patient. As the patient is discharged, he or she is being output into the community, and being sent as input to the outpatient system. The inpatient system survives without incident with this large influx of input, and homeostasis is generally well conserved.

The outpatient system that will be looked at in this study is the Department of Behavioral Health in San Bernardino County. This system is made up of numerous subsystems of community mental health clinics, as well as specialty clinics brought about by differentiation, and this system belongs to the super-system of San Bernardino County. Just as the inpatient system, the boundaries of this outpatient system are easily permeable by new clients, though the input of other mental health professionals is not passed through the boundary as easily. Clients are input into the outpatient system from various other systems: the inpatient system when the clients are discharged, the school system when children are referred for mental health treatment, the prison system when clients are released from incarceration, and

other mental health systems, when people loose their health insurance or arrive from distinct counties to the San Bernardino system. Throughput happens when treatment occurs, and output happens when someone no longer needs treatment, or when someone requires a higher level of care and is referred to the inpatient system.

These two societal systems influence each other in many ways, with varying degrees of positive outcomes. As stated earlier, Kanter (1991) stressed the need for these two systems to be more open to input on the professional level. Clients float between inpatient and outpatient systems, but the inpatient staff does not always understand the throughput and the output of the outpatient system and vise versa. This project serves as a bridge between two systems that can make it easier for clients to more from one system (the hospital) to another system (the clinic) in an effort to reduce the need for rehospitalization.

In regards to the recovery model, its origins are multiple. Harding, Brooks, Ashikaga, Strauss, and Breier (1987), in a longitudinal study, found that over about 30 years, two-thirds of their sample of patients diagnosed with schizophrenia had recovered—manifested very few

residual symptoms or had a significant reduction in symptoms. This landmark study opened the doors to the conceptualization of the recovery model—the idea that people can recover from mental illness and live normal lives with symptoms in remission.

The recovery model, also adopted from the field of substance abuse to fit the field of mental health, describes wellness in terms of health and psychological and social stability (Ralph, 2000). For a person to be in recovery, several elements must be present—a non-judgmental acceptance of the reality that the person has a mental illness, an effort on the part of the person with mental illness to stay away from common obstacles such as substance abuse, active participation on this person's part in recover-based treatment and social support systems, and emotional, interpersonal, and spiritual lifestyle adjustments (Ragins, n.d.).

Recovery from mental illness involves achieving and maintaining psychosocial functions and both external and internal aspects of recovery (Ragins, n.d.; Ralph, 2000). Psychosocial functions can be working or going to school, fostering and sustaining interpersonal relationships, and actively relying on a social support system. External

aspects of recovery are regular activities of daily living such as self-care, safe housing and necessary material possessions that one maintains. Internal aspects of recovery (cognitive, emotional, spiritual, and physical) such as renewed self-esteem, a positive self-identity, and enhanced quality of life are also essential for recovery to be achieved.

The recovery model rejects the idea that mental illness is a debilitating, chronic, hopeless condition. Recovery does not imply, however, that one returns to a pre-illness state; rather that the mental illness is integrated into the person's self-concept and recognized for what it is—a part of the whole person (Ragins, n.d.). Recovery is a logical successor to deinstitutionalization and community services (Anthony, 1993).

The third theory that guides the conceptualization of this project is crisis theory. Crisis theory has evolved since the infamous Coconut Grove fire in Boston; the first crisis that was written about in terms of survivor's psychological reactions (Lindemann, 1944).

Roberts (2005) defines crisis as "a period of psychological disequilibrium, experienced as a result of a hazardous event or situation that constitutes a

significant problem that cannot be remedied by using familiar coping strategies" (p.11). Situational crises are triggered by unanticipated events that begin a chain of reactions that move a person into an active state of crisis (Golan, 1978). While in this crisis, earlier unresolved conflicts and ineffective coping strategies may be reactivated in an effort to reintegrate, and social workers can assist so that crises are resolved in the most effective and healthiest way.

Golan (1978) conceptualized crisis reactions in terms of phases that one passes through to resolve the crisis. The first phase begins with a hazardous event. When a person is unable to deal with this hazardous event, the person then moves into a vulnerable state, in which he or she is exposed and in many cases unable to utilize normal coping methods to deal with the hazardous event. As the person continues in this susceptible state, precipitating events often occur, sending the person into an active crisis state. Crisis intervention should be provided to those in active crisis states, to catalyze a process of reintegration.

Crisis theory is relevant to this study, because most of the clients who are hospitalized are in active

crisis upon admission. The hazardous event that begins the crisis is the onset or reoccurrence of symptoms of mental illness. This puts the client in a vulnerable state, and any precipitating events often lead the client into an active state of crisis. Reintegration should occur during hospitalization, and to maintain this reintegration and avoid the reoccurrence of crisis, outpatient treatment is recommended.

Summary

In this chapter, both landmark studies and current literature on factors that influence rehospitalization were reviewed and appraised. The ever important connection between outpatient and inpatient programs was also examined. The theoretical models that guide this study—ecosystems theory, recovery theory, and crisis theory—were also presented and analyzed within the boundaries of this project.

CHAPTER THREE

METHODS

Introduction

This chapter addresses the methodological underpinnings of this project. The research study design, the sampling procedures, the data collection and procedures, the protection of human subjects and data analysis are discussed.

Study Design

This study explored the relationship between a follow-up intervention for patients discharged from the psychiatric inpatient unit and its effect on rehospitalization rates. The hypothesis was that follow-up contact for the purposes of reinforcing the discharge plan, answering any questions and providing psychoeducation, encouraging medication adherence, and to triage each discharged client for additional needs would result in lower rehospitalization rates as compared to those who do not receive this follow-up.

This study utilized an explanatory classic experimental design using pretest-posttest experimental

and control groups in an effort to measure the effectiveness of the follow-up intervention upon discharge. This design was selected because of it has greater generalizability than other methods. Participants in the study were randomly assigned to either the experimental or control group. Use of an experimental design allows for greater inference of causal relationships between the variables in the study. The two groups are believed to be essentially equal in respect to the covariates.

Some clients are discharged to locked, higher levels of care, such as Institutes for Mental Diseases (IMDs), and state hospitals. Others are discharged to jail when a crime occurs in conjunction with involuntary admission. Anyone discharged to a higher level of care or locked placement was excluded from the sample, as these people are not at liberty to return to the acute care psychiatric hospital.

Sampling

The elements of this study were clients who were hospitalized for psychiatric reasons at a public mental health hospital in San Bernardino County. All clients

who were discharged from the chosen hospital during the months of December 2008-January 2009 were divided into two groups—an intervention and a control group. Systematic random sampling was utilized, and after the first participant was randomly selected from a complete list of those discharged on the first day, every second person discharged became part of the intervention group. Those who were not randomly assigned to the intervention group were assigned to the control group.

A client response was not required to track rehospitalization over the three month period; data on rehospitalization were collected on each sample participant via the San Bernardino Information Management Online Network (SIMON) was the data source. The data in SIMON are believed to be reliable and valid, as it is used for billing and research purposes for hospitalizations as well as outpatient visits.

The chosen hospital reports an estimated average of 300 patients discharged every month. There were 575 clients discharged during the months of December 2008-Januray 2009. The only selection criterion was that the participant be hospitalized once during the months specified and not be discharged to locked placement. The

sample consisted of adults between 18 and 66 years of age, as this is the criteria for hospitalization in this hospital. Children and older adults were not included, and have unique needs and should be addressed separately for the most useful results for these populations.

Data Collection and Instrument

Data were collected on the number of previous hospitalizations in the last year, the reason for the index hospitalization, the legal status upon admission, the number of days of the index admission, the discharge diagnosis, and demographics on all participants. Data on medication adherence since discharge, living situation, type of residence, previous outpatient treatment, planned outpatient follow-up, peer support, and recommendations upon completion of follow-up contact were collected for the intervention group during the follow-up contact. Data on rehospitalization were collected through analysis of the SIMON system 90 days after each participant's discharge date.

The dependent variable—rehospitalization—was measured in frequency of hospitalizations and duration of hospitalizations within three months of discharge. Also

measured was the client's outpatient follow-up, as this was hypothesized to influence rehospitalization rates.

Hospitalizations and rehospitalizations were measured on a ratio level. Mutually exclusive and mutually exhaustive nominal-level variables such as the reason for the index hospitalization, the legal status upon admission, the discharge diagnosis, demographics (with the exception of age, an ordinal variable), medication adherence since discharge, living situation, type of residence, and previous outpatient treatment were also collected on the participants.

An instrument was created based on an extensive literature review of psychiatric hospitalization and the factors that influence rehospitalization (see Appendix A). This instrument is believed to be reliable, valid, and culturally sensitive based on the research gathered.

Procedures

As described earlier, most data were extracted from the Department of Behavioral Health's SIMON data collection system. Each client who receives mental health services through the county (either outpatient with the Department of Behavioral Health or inpatient

with the hospital) signs a consent for treatment and an acknowledgment of receipt of privacy practices (see Appendices B and C). Participation in this research was not explicitly solicited, as the county's privacy practices allow for disclosure of information for research purposes.

Data collection took place within the Diversion Program, a Department of Behavioral Health-funded liaison with the public mental health hospital in San Bernardino County. Once collected, the data were stored in a locked office belonging to the Diversion Program. The data that were collected for this project were collected by a research team; this writer was not directly involved in data collection and used the data collected as secondary data in her analysis. A training session was conducted before data collection began to explain the purpose of the study to the data collection team and to answer any questions. The data collection team was trained to use the interview guide (see Appendix D) for questions about meanings of variables and mutually exhaustive and mutually exclusive answer options.

Follow-up interventions began on December 4, 2008, and were completed on February 10, 2009 for the purposes

of this research project. Rehospitalization rates were collected and calculated for each participant for three months (90 days) following their index hospitalization during this time frame. All rehospitalization rates were completed by May 3, 2009.

This project was part of a larger performance improvement plan that the Department of Behavioral Health is conducting on hospital recidivism, and is scheduled to continue under the direction of the project manager for several years to come.

Protection of Human Subjects

This writer was not directly involved in data collection for the purposes of this project. All data were collected by a separate data collection team, therefore mitigating the chances of harm to clients on the part of the researcher. The records that were obtained in the course of this study and the larger performance improvement plan were stored in a locked office accessed via key cards. The county's standardized informed consent (see Appendix B) was utilized for this project, under the direction of the Department of Behavioral Health's Research and Evaluation program. As

stated earlier, all clients consent to the Department of Behavioral Health conducting confidential research via case records. When the larger performance improvement project is completed, all paper records will be shredded in compliance with Health Insurance Portability and Accountability Act of 1996 (HIPAA) (45CFR) regulations.

Data Analysis

Quantitative procedures were utilized in the data analysis of this project and the Statistical Package for the Social Sciences (SPSS) program was employed to find significant relationships between the independent and the dependent variables. Frequency distributions and descriptive statistics were calculated to understand the sample's characteristics. Inferential statistics were utilized in an effort to rule out chance occurrences of significant findings (in both associations and differences) among the variables.

Summary

This chapter addressed the methodological foundation of this project in terms of the research study design, the sampling procedures, the data collection and

procedures, the protection of human subjects and data analysis.

CHAPTER FOUR

RESULTS

Introduction

This chapter will present the relevant findings of this study.

Presentation of the Findings

The sample consisted of 144 participants; 73 in the experimental group and 71 in the control group. Data were collected from all participants on legal status, diagnosis, gender, ethnicity, marital status, region of residence, and insurance status. Just over one fourth (25.7%) of the sample was admitted on a voluntary legal status to the hospital, and just under three fourths (74.3%) was admitted involuntarily. Mood disorders made up more than half of the diagnoses, with depressive disorders (27.1%) being most common, followed closely by bipolar disorders (25.0%). The psychotic disorders were reported as follows: schizoaffective disorder (15.3%), schizophrenia (12.5%), and other psychotic disorders (14.6%). The sample was 61.8% male and 38.2% female. In regards to ethnic make-up, 50% of the sample was listed

as Caucasian, 20.1% African American, 18.8% Latino, and 2.8% Asian. Only one participant (.7%) was Native American, and other/unknown accounted for 11 participants, or 7.6%. Regarding marital status, most participants were single (66.7%), followed by married and divorced/separated (each 14.6%), and widowed (4.2%). Most of the participants lived in the East Valley (39.6%) region of the county, with 27.8% living in the Central Valley, 14.6% in the West Valley, and 13.9% in the Mountain/Desert region (see Appendix E). A small number of participants (4.2%) reported living out of the county in which the hospital is located. Most participants were indigent in terms of insurance status (54.9%), while many participants were covered under government programs such as Medicaid (36.1%), Medicaid/Medicare (4.9%), and county Medically Indigent Adult program (3.5%).

The average age of the participants was 39 years-old; ages ranged from 18 to 66, with a standard deviation 12.4. The average number of previous hospitalizations in the last year was 1.6, with a minimum of 0 and a maximum of 26 (standard deviation 3.2). The average number of days spent in the hospital was 6.4, with a minimum of 1 and a maximum of 49 (standard deviation 6.4). The

average number of rehospitalizations in 90 days was .5, with a minimum of 0 and a maximum of 4 (standard deviation 4.5). When rehospitalized, the average total number of days rehospitalized was 1.9, with a minimum of 0 and a maximum of 24 (standard deviation 4.5).

Some data were only collected on the experimental group, as this data were collected during the follow-up intervention. Most participants reported medication adherence since discharge (71.2%), while some reported partial adherence (13.7%) and non-adherence (15.1%). Most participants (87.7%) returned to the same living situation as before their hospitalization, and 12.3% were living in a different place than where they had been living before the index hospitalization. Most participants lived with family (65.8%), while some lived in board and care facilities (15.1%), independently (11%), in room and board arrangements (4.1%), in substance abuse facilities (2.7%), and in shelters (1.4%). Most of the participants had not been seeing a regular outpatient mental health provider before the hospitalization (68.5%), while some had been (31.5%).

The three dependent variables—follow-up at an outpatient clinic for regular mental health treatment,

number of times rehospitalized, and total hospital days if rehospitalized—were tested for significant differences between the experimental and the control groups. An alpha level of .05 was used for all statistical tests unless otherwise noted.

A chi-square test for independence indicated no significant association between the control and the experimental group in regards to follow-up with either new or previous outpatient treatment, $\chi^2(2, n=144)=.08$, $p=.96$, phi=.024. It is concluded that the follow-up intervention did not influence follow-up with an outpatient mental health provider.

A Mann-Whitney *U* test revealed a significant difference in the rehospitalization rates of the experimental (*Md*=.00, *n*=73) and control (*Md*=.00, *n*=71) groups, *U*=2177.5, *z*=-1.999, *p*=.046, *r*=0.2 (small to medium effect). Those who received the follow-up intervention were rehospitalized significantly less than those who did not.

A second Mann-Whitney *U* test also revealed a significant difference in the total number of days spent in the hospital if rehospitalized for the experimental

(*Md*=.00, *n*=73)and control (*Md*=.00, *n*=71) groups, *U*=2117.5, *z*=-2.275, *p*=.023, *r*=0.2 (small to medium effect). Those who received the follow-up intervention, if they returned to the hospital, spent less time hospitalized than those who did not.

A two-way between-groups analysis of variance was conducted to explore the impact of covariates on rehospitalization, and none of the covariates were found to have a significant interaction effect on rehospitalization rates. Gender was found to have equal variance across the groups (Levene's Test of Equality of Error Variances .441; *p*=.292). However, the other covariates did not have equal variances across groups and the significance level for the evaluation of the main and interaction effects was set at .01. No significant interaction effect was found and no main effect for any of these covariates—diagnosis (*F*[2, 132]= .616, *p*=.687), legal status (*F*[2, 140]= 4.774, *p*=.031), ethnicity (*F*[2, 133]= 2.538, *p*=.059), marital status (*F*[2, 136]= .200, *p*=.896), region of residence (*F*[2, 134]= .768, *p*=.548), and insurance status (*F*[2, 136]= .251, *p*=.778)—was found.

A second two-way between-groups analysis of variance was conducted to explore the impact of covariates on

total days of rehospitalization if rehospitalized. None of the covariates were found to have equal variances across groups and the significance level for the evaluation of the main and interaction effects was set at .01. With the exception of diagnosis, none of the covariates—legal status (F[2, 140]= 1.432, p=.233), gender (F[2, 140]= 1.221, p=.271), ethnicity (F[2, 133]= 1.108, p=.348), marital status (F[2, 136]= .632, p=.596), region of residence (F[2, 134]= .264, p=.901), and insurance status (F[2, 136]= .093, p=.911)—were found to have a significant interaction or main effect on total hospital days if rehospitalized.

Diagnosis, however had a significant main effect (F[2, 132]= 1.595, p=.166). A split file one-way analysis of variance was conducted to compare the diagnoses, and no significant difference was found among the mean scores for diagnosis and total days of rehospitalization if rehospitalized (p=.356).

Summary

This chapter addressed all pertinent findings in data analysis. It was found that the intervention group was less frequently rehospitalized and that when

rehospitalized, the participants from the intervention group spent less days in the hospital than their control group counterparts.

CHAPTER FIVE

DISCUSSION

Introduction

A discussion of the findings and the limitations of this project will be covered in this chapter. Implications and recommendations for social work practice, policy, and research will also be presented.

Discussion

The findings support two of the three hypothesis presented earlier. It was found that those in the intervention group were rehospitalized less than those in the control group, and that when those in the intervention group were rehospitalized, they spent less time in the hospital. No significant difference was found in follow-up rates with outpatient care between the intervention and the control group.

Limitations

The most apparent practical methodological limitation of the study has to do with the response rate. The research team was not able to locate all of the

participants to provide the follow-up intervention after discharge; of the 290 participants that were randomly sampled into the intervention group, only 73 were contacted. Several reasons for not contacting the rest of the sample were identified. Eighty-eight of those assigned to the intervention group were unable to be reached because they were either not home or unavailable for follow-up telephone call. Forty-five people had automated voicemail, and HIPAA regulations (45 CFR) prohibited leaving a message for those participants on their voice mail. Twenty-eight of the telephone numbers listed on the social services discharge plan were either wrong numbers or disconnected phone numbers and 23 did not have a number listed on their social services discharge plan. Thirteen participants were discharged to substance abuse facilities, and the facilities were prohibited from releasing information to the research team per federal regulations (Code of Federal Regulations, 2002). Ten participants moved in the approximately 2 weeks after discharge and before the follow-up contact. Seven participants were discharged to locked placement (jail, prison, institute of mental disease, or state hospital), and were not contacted.

Three participants were unable to receive the intervention because of symptom-related difficulties (dementia, acute paranoia, currently in crisis). Because the intervention group ended up being much smaller than anticipated (73 participants), a random sample of 71 participants was drawn from the 285 patients discharged during the study's time frame to make up the control group.

Recommendations for Social Work Practice, Policy and Research

The findings in this project are related to the larger social problem of repeat rehospitalization of the mentally ill. As discussed earlier, both the client and society are better off when the client is able to maintain psychiatric stability in the community, a much less restrictive environment than the acute care psychiatric hospital for the client and a much less expensive option for society.

The results of this study have the potential to provide some evidence useful in developing the rationale for increasing the continuity of care between inpatient services and outpatient services provided by separate

public departments available to public mental health consumers in the County of San Bernardino. Increased follow-up with mental heath consumers after they are discharged from inpatient treatment coupled with increased collaboration between the inpatient and outpatient mental health service systems of care may reduce the need for rehospitalizations and increase the ability of mental health consumers to function in the community. This could reduce the amount of resources directed towards inpatient hospitalization because of decompensation and to redirect those resources towards effective outpatient prevention and treatment. The project has the potential to be adapted as a best practice for the Diversion Unit—a formal liaison between the inpatient and outpatient systems in San Bernardino County—in an effort to improve continuity of care and reduce rehospitalization rates.

It is recommended that this experiment is replicated with a longer time frame to understand if the conclusions made persist over time. Anthony et al. (1972) reported rehospitalization baselines for 6-month, 1-year, and 3-5-year increments. Although the baselines were established many years ago, they continue to be accepted and

considered relevant today. Practical time constraints for this study did not allow for comparison to these baselines.

Conclusions

Ecological systems theory reminds us that the environment can influence the individual in both positive and negative ways. This study has given a concrete example of how two separate systems—the inpatient and the outpatient mental health systems—can effectively work together through the receipt and good use of input from each other to positively influence high rehospitalization rates. Entropy, or the death of a system, is thus avoided and both systems reap the benefits of this collaboration. In addition to the public systems benefiting, the clients who utilize both of these systems themselves benefit from the collaboration through improved continuity of care.

The recovery model also reminds us that people can and do recover from mental illness to live healthy, stabile lives. This project endorsed this view, assisting those who were discharged from inpatient hospitalization to maintain the gains achieved while

hospitalized and to integrate recovery into the person's self-concept as a whole person, not simply a disease.

Also, as crisis theory maintains, social workers should assist in effective, healthy crisis resolution and reintegration for those who find themselves in an active crisis state. This study demonstrated a way to maintain reintegration achieved while hospitalized through follow-up contact with those who were recently discharged.

This pilot project demonstrated that a follow-up intervention after inpatient psychiatric hospitalization reduced the rate of rehospitalization as well as the number of days of hospitalization for those who were subsequently rehospitalized. This establishes an important first step towards better and more effective care for the mentally ill.

APPENDIX A

INSTRUMENT

THE EFFECTS OF IMMEDIATE FOLLOW-UP ON
PSYCHIATRIC REHOSPITALIZATION RATES
FOLLOW-UP TOOL

Date_____ Client SIMON _____ Data Collector_____

Number of previous hospitalizations in the last year _____

Reason for index admission
Suicidal ideation Homicidal ideation Grave disability

Legal Status upon admission W60000 W51500

Hospital days of the index admission _____

Discharge Diagnosis
Axis I _____
Axis II _____
Axis III _____
Axis IV _____
Axis V _____

Demographics
Age _____
Gender Male Female
Ethnicity Caucasian African American Latino
Asian Native American Other Unknown
Marital status Single Married Divorced/Separated
Widowed
Co-occurring disorder Yes No
Employment status Full-time Part-time Unemployed
Not in working force
City of residence _____
Insurance status Medi-cal Medi-Medi MIA none

Medication adherence since discharge
Medication adherent Partially adherent Non-adherent

Living situation Same Different
Type of residence
Board and care Room and board With family
Independent (alone) Substance abuse facility Shelter

Previous outpatient treatment
Open with clinic _____ CHAS ACT/MAPS

Planned outpatient follow-up _____

Peer support _____

Recommendations upon follow-up _____
_____

THE EFFECTS OF IMMEDIATE FOLLOW-UP ON
PSYCHIATRIC REHOSPITALIZATION RATES
FOLLOW-UP TOOL

Date_____ Client SIMON _____ Data Collector_____

Three month (90-day) window dates _____ to _____

Number of hospitalizations in three months (90 days) _____

Individual hospital days _____ _____ _____ _____ _____

Total hospital days _____

ALREADY HAD AN OPEN EPISODE BEFORE INDEX HOSPITALIZATION

Outpatient clinic _____ Opening date _____

Units of Service _____

OPENED NEW EPISODE AFTER INDEX HOSPITALIZATION

Outpatient clinic _____ Opening date _____

Units of Service _____

APPENDIX B

INFORMED CONSENT

SAN BERNARDINO COUNTY
DEPARTMENT OF BEHAVIORAL HEALTH/MENTAL HEALTH PLAN
CONSENT FOR OUTPATIENT TREATMENT

1. Outpatient services may include assessment; diagnosis; crisis intervention; individual, group, or family therapy; medication; day treatment services; training in daily living and social skills; prevocational training; and/or case management services. Qualified professional staff members of the Department/Plan provide outpatient services. (You may also be financially responsible for treatment planning and consultation activities that may take place without you being present.)
2. Outpatient treatment may consist of contacts between qualified professionals and clients, focusing on the presenting problem and associated feelings, possible causes of the problem and previous attempts to cope with it, and possible alternative courses of action and their consequences. You and the treatment staff will plan the frequency and type of treatment. Every effort will be made to provide you with services in the language of your choice.
3. Consent for the use of psychotropic medications, if our staff recommends them will be on another form.
4. You are expected to benefit from treatment, but there is no guarantee that you will. Maximum benefits will occur with regular attendance, but you may feel temporarily worse while in treatment.
5. You will be expected to pay (or authorize payment of) all or some part of the costs of treatment received. The amount you pay is dependent upon your ability to pay based on your income and family size. If legal action is initiated to collect your bill, you will be responsible for paying all reasonable attorney fees and court costs in addition to any judgment rendered against you.
6. Failure to keep your appointments or to follow treatment recommendations may result in your treatment being discontinued. If you cannot keep your appointment, you are expected to notify the clinic.
7. All information and records obtained in the course of treatment shall remain confidential and will not be released without your written consent except under the following conditions:
   a. As specified in the HIPAA Notice of Privacy Practices which you were given;
   b. You are a non-emancipated minor, ward of the court, or an LPS conservatee (in which case another person such as your parent or guardian, the court, or your conservator, can obtain all information about you here);
   c. Summary data about all clients is reported to the California Department of Mental Health, as required by them for research and tracking purposes (which includes your name and identifying information);
   d. Under certain circumstances, as set forth in Welfare and Institutions Code Section 5328 and in Federal HIPAA regulations, which you may read upon request.

   If the HIPAA confidentiality guidelines and State law are different, we will apply the one that provides your protected health information with greater protection.
8. You have the right to accept, refuse, or stop treatment at any time.
9. For the duration of treatment, I authorize San Bernardino County Department of Behavioral Health to apply for and to receive payment of medical benefits from any and all health insurance plans by which I am covered, including Medicare and related public payor programs.
10. This form informs Medi-Cal eligible individuals (including parents or guardians of Medi-Cal eligible children/adolescents) that:

    Acceptance and participation in the mental health system is voluntary and is not a prerequisite for access to other community services. Individuals retain the right to access other Medi-Cal reimbursable services and have the right to request a change of provider, staff person, therapist, coordinator, and/or case manager to the extent permitted by law.

I have read the above, and I agree to accept treatment, and I further agree to all conditions set forth herein. I acknowledge that I have received a copy of this agreement.

Client: (print)_____ (sign)_____ Date:_____

Witness: (print)_____ (sign)_____

Parent/Guardian/
Conservator: (print)_____ (sign)_____

APPENDIX C

PRIVACY PRACTICES

SAN BERNARDINO COUNTY DEPARTMENT OF BEHAVIORAL HEALTH

NOTICE OF PRIVACY PRACTICES

THIS NOTICE DESCRIBES HOW MEDICAL INFORMATION ABOUT YOU MAY BE USED AND DISCLOSED AND HOW YOU CAN GET ACCESS TO THIS INFORMATION. PLEASE REVIEW IT CAREFULLY.

EFFECTIVE APRIL 14, 2003

Your health information is personal and private, and we must protect it. This notice tells you how the law requires or permits us to use and disclose your health information. It also tells you what your rights are and what we must do to use and disclose your health information. All Department of Behavioral Health (DBH) employees, staff, volunteers and others who have access to client health information will follow this notice. This includes other entities that form an Organized Health Care Arrangement (OHCA) and are listed at the end of this notice.

We must by law:

- keep your health information (also known as "protected health information" or "PHI") private
- give you this Notice of our legal duties and privacy practices regarding your PHI
- obey the terms of the current Notice in effect

Changes to this Notice: We have the right to make changes to this Notice and to apply those changes to your PHI. If we make changes, you have the right to receive a copy of them in writing. To obtain a copy, you may ask your service provider or any DBH staff person.

HOW THE LAW PERMITS US TO USE AND DISCLOSE INFORMATION ABOUT YOU

We may use or give out your health information (PHI) for treatment, payment or health care operations. These are some examples:

- **For Treatment:** Health care professionals, such as doctors and therapists working on your case, may talk privately to determine the best care for you. They may look at health care services you had before or may have later on.

- **For Payment:** We need to use and disclose information about you to get paid for services we have given you. For example, insurance companies ask that our bills have descriptions of the treatment and services we gave you to get payment.

- **For Health Care Operations:** We may use and disclose information about you to make sure that the services you get meet certain state and federal regulations. For example, we may use your protected health information to review services you have received to make sure you are getting the right care.

USES AND DISCLOSURES THAT DO NOT NEED YOUR AUTHORIZATION

- **To Other Government Agencies Providing Benefits or Services:** We may give information about you to other government agencies that are giving you benefits or services. The information we release about you must be necessary for you to receive those benefits or services.

- **To Keep You Informed:** We may call or write to let you know about your appointments. We may also send you information about other treatments that may be of interest to you.

- **Research:** We may give your PHI to researchers for a research project that has gone through a special approval process. Researchers must protect the PHI they receive.

- **As Required by Law:** We will give your PHI when required to do so by federal or state law.

- **To Prevent a Serious Threat to Health or Safety:** We may use and give your PHI to prevent a serious threat to your health and safety or to the health and safety of the public or another person.

- **Workers' Compensation:** We may give your PHI for worker's compensation or programs that may give you benefits for work-related injuries or illness.

- **Public Health Activities:** We may give your PHI for public health activities, such as to stop or control disease, stop injury or disability, and report abuse or neglect of children, elders and dependent adults.

- **Health Oversight Activities:** We may give your PHI to a health oversight agency as authorized by law. Oversight is needed to monitor the health care system, government programs and compliance with civil rights laws.

- **Lawsuits and Other Legal Actions:** If you have a lawsuit or legal action, we may give your PHI in response to a court order.

- **Law Enforcement:** We may give your PHI when asked to do so by law enforcement officials:
  - In response to a court order, warrant, or similar process;
  - To find a suspect, fugitive, witness, or missing person;
  - If you are a victim of a crime and unable to agree to give information
  - To report criminal conduct at any of our locations; or
  - To give information about a crime or criminal in emergency circumstances.

- **Coroners and Medical Examiners:** We may release medical information to a coroner or medical examiner. This may be necessary, for example, to identify a deceased person or determine cause of death.

- **National Security and Intelligence Activities:** We may give your PHI to authorized federal officials for intelligence, counterintelligence, and other national security activities authorized by law.

- **Protective Services for the President and Others:** We may give your PHI to authorized federal officials so they may protect the President and other heads of state or do special investigations.

Other uses and disclosures of your PHI, not covered by this Notice or the laws that apply to us, will be made only with your written authorization. If you give us authorization to use or give out your PHI, you can change your mind at any time by letting your service provider know in writing. If you change your mind, we will stop using or disclosing your PHI, but we cannot take back anything already given out. We must keep records of the care that we gave you.

YOUR RIGHTS ABOUT YOUR PROTECTED HEALTH INFORMATION (PHI)

- **Right to See and Copy:** Federal regulations say that you have the right to ask to see and copy your PHI. However, psychiatric and drug and alcohol treatment information is covered by other laws. Because of these laws, your request to see and copy your PHI may be denied. You can get a handout about access to your records by asking your health care provider.

  A DBH therapist will approve or deny your request. If approved, we may charge a fee for the costs of copying and sending out your PHI. We may also ask if a summary, instead of the complete record, may be given to you.

If your request is denied, you may appeal and ask that another therapist review your request.

- **Right to Ask for an Amendment:** If you believe that the information we have about you is incorrect or incomplete, you may request changes be made to your PHI as long as we maintain this information. While we will accept requests for changes, we are not required to agree to the changes.

  We may deny your request to change PHI if it came from another health care provider, if it is part of the PHI that you were not permitted to see and copy, or if your PHI is found to be accurate and complete.

- **Right to Know to Whom We Gave Your PHI:** You have the right to ask us to let you know to whom we may have given your PHI. Under federal guidelines, this is a list of anyone that was given your PHI not used for treatment, payment and health care operations or as required by law mentioned above.

  To get the list, you must ask your service provider in writing for it. You cannot ask for a list during a time period over six years ago or before April 14, 2003. The first list you ask for within a 12-month period will be free. For more lists, we may charge you for the

cost of copying and sending the list. We will let you know the cost, and you may choose to stop or change your request before it costs you anything.

- **Right to Ask Us to Limit PHI:** You have the right to ask us to limit the PHI that the law lets us use or give about you for treatment, payment or health care operations. *We don't have to agree to your request.* If we do agree, we will comply with your request unless the PHI is needed to give you emergency treatment.

  To request limits, you must ask your service provider in writing. You must tell us (1) what PHI you want to limit; (2) whether you want to limit its use, disclosure or both; and (3) to whom you want the limits to apply.

- **Right to Ask for Privacy:** You have the right to ask us to tell you about appointments or other matters related to your treatment in a specific way or at a specific location. For example, you can ask that we contact you at a certain phone number or by mail. To request that certain information be kept private, you must ask your service provider in writing. You must tell us how or where you wish to be contacted.

- **Right to a Paper Copy of This Notice:** You may ask us for a copy of this Notice at any time. Even if you have agreed to receive this Notice by e-mail, we will give you a paper copy of this Notice. You may ask any DBH staff person for a copy.

COMPLAINTS

If you believe your privacy rights have been violated, you may submit a complaint with us or with the Federal Government.

Filing a complaint will not affect your right to further treatment or future treatment.

To file a complaint with the Department of Behavioral Health, contact:	To file a complaint with the County of San Bernardino, contact:
CaSonya Thomas Chief Compliance Officer 268 W. Hospitality Lane, Ste. 400 San Bernardino, CA 92415 Phone # (909) 382-3080 Fax# (909) 382-3105 E-mail: cathomas@dbh.sbcounty.gov	HIPAA Complaints Official 385 N. Arrowhead Ave, 5th Floor San Bernardino, CA 92415 Phone # (909) 387-4500 Fax # (909) 387-8950 E-mail: HIPAAComplaints@cao.sbcounty.gov

To file a complaint with the Federal Government, contact: Secretary of the U.S. Department of Health and Human Services, Office of Civil Rights, Attention: Regional Manager, 50 United Nations Plaza, Room 322, San Francisco, CA 94102

For additional information call (800) 368-1019, (800) 537-7697 (TDD) or (415) 437-8310, (415) 437-8311 (TDD), or fax the U.S. Office of Civil Rights at (415) 437-8329.

LIST OF ENTITIES FORMING THE ORGANIZED HEALTH CARE ARRANGEMENT

Entity	Services Provided
Jatin J. Dalal, M.D., Inc.	Incorporated Psychiatric Services
Inderpal Dhillon, M.D., Inc.	Incorporated Psychiatric Services
Enrique J. Friedman, M.D., Inc.	Incorporated Psychiatric Services
Mehar Gill, M.D., Inc.	Incorporated Psychiatric Services
Myong Won Kim, M.D., Inc.	Incorporated Psychiatric Services
Marilyn Kimura, M.D., Inc.	Incorporated Psychiatric Services
Aleyamma Mathew, M.D., Inc.	Incorporated Psychiatric Services
Lina E. Shuhaibar, M.D., Inc.	Incorporated Psychiatric Services
Eugene Young, D.O., M.D., Inc.	Incorporated Psychiatric Services
Dennis Payne, M.D., Inc.	Incorporated Psychiatric Services

ACKNOWLEDGEMENT OF RECEIPT OF NOTICE OF PRIVACY PRACTICES

I acknowledge receipt of the Notice of Privacy Practices, which explains my rights and the limits on ways in which the County may use or disclose personal health information to provide service.

_____ _____
Client Name (printed) *Client Signature*

Date _____ _____
If signed by other than client, indicate relationship.

Note: ***Parents must have legal custody. Legal guardians and conservators must show proof.***

OFFICE USE ONLY

Client did receive the Notice of Privacy Practices but did not sign this Acknowledgement of Receipt because:

☐ Client left office before Acknowledgement could be signed.
☐ Client does not wish to sign this form.
☐ Client cannot sign this form because: _____

_____

Client did not receive the Notice of Privacy Practices because:

☐ Client required emergency treatment.
☐ Client declined the Notice and signing of this Acknowledgement.
☐ Other: _____

_____

Name: _____
(Print name of provider or provider's representative)

Signed: _____
(Signature of provider or provider's representative)

45 CFR §164.520 Except in an emergency situation, ...make a good faith effort to obtain written acknowledgment of receipt of the Notice.... and if not obtained, document...good faith efforts to obtain such acknowledgment and the reason why...(it)...was not obtained.

ACKNOWLEDGEMENT OF NOPP	NAME:
County of San Bernardino	CHART:
DEPARTMENT OF BEHAVIORAL HEALTH	DOB:
Confidential Patient Information See W & I Code 5328	PROGRAM:

APPENDIX D

INTERVIEW GUIDE

THE EFFECTS OF IMMEDIATE FOLLOW-UP ON
PSYCHIATRIC REHOSPITALIZATION RATES
FOLLOW-UP TOOL

The purpose of this call is

- **Reinforcing the discharge plan**
- **Answering any questions and providing psychoeducation**
- **Encouraging medication adherence**
- **Triage each discharged client for additional case management needs**

Date_____

Date that the follow-up call was made (72 hours after discharge).

Client SIMON _____

Client's SIMON number. If none, leave blank.

Data Collector_____

Caller's initials

Number of previous hospitalizations in the last year _____

Number of times hospitalized at the ARMC BHU (CSU, AES released, and AES admitted only) in the last 365 days before this admission date (AES admitted opening date). Do not count hospitalizations at another hospital, unless transferred from BHU to another hospital (as indicated by AES released).

Reason for index admission

Suicidal ideation Homicidal ideation Grave disability

Reason why client was hospitalized this time; may choose more than one of the options.

Legal Status upon admission W60000 W51500

Voluntary or involuntary admission, per discharge paperwork and/or MHS 140.

Hospital days of the index admission _____

Number of days in the hospital this time, including triage and inpatient time (from AES admitted opening date to INPT closing date).

Discharge Diagnosis

As reported on the discharge paperwork.

Axis I _____
Axis II _____
Axis III _____
Axis IV _____
Axis V _____

Demographics

As reported by client, discharge paperwork, or MHS 140. If discharge paperwork and MHS 140 are not consistent, ask client if appropriate.

Age _____

Gender Male Female

Ethnicity Caucasian African American Latino
Asian Native American Other Unknown

Marital status Single Married Divorced/Separated
Widowed

Co-occurring disorder Yes No

Employment status Full-time Part-time Unemployed
Not in working force

City of residence _____

Insurance status Medi-cal Medi-Medi MIA none

**Medication adherence since discharge

As reported by client during follow-up contact.

Medication adherent means taking the appropriate dose at the appropriate time all of the time.

Partially adherent means less than prescribed, irregular dosing, and/or medication gaps.

Non-adherent means that the client has discontinued medication use since discharge from the hospital.

Medication adherent Partially adherent Non-adherent

**Living situation Same Different

Did the client return to the same place where he or she was living before this hospitalization?

**Type of residence

After discharge from hospital.

Board and care Room and board With family
Independent (alone) Substance abuse facility Shelter

Previous outpatient treatment

Was client receiving mental health services before this admission?

Open with clinic _____ CHAS ACT/MAPS

**Planned outpatient follow-up _____

Where will the client follow-up?

**Peer support _____

Is client involved in any client-run group or service (ie. DBH clubhouses, Peer Family Advocacy, NAMI, etc.)?

Recommendations upon follow-up _____

_____

What did you recommend? Examples: Open a case with DBH clinic, self-refer to ADS, DBH clubhouses, alcohol/drug rehab, CHAS case management, FSP (through ACT or MAPS), homeless program, TAY or Agewise programs, or non-county/non-DBH referrals (IRC, Department of Rehabilitation, Probation or Parole, FFS provider etc.)

APPENDIX E

SERVICE REGIONS

Outpatient Services

Outpatient services are provided in the clinics within the four regions (Central Valley, Desert/Mountain, East Valley, West Valley) of the County of San Bernardino. At these clinics, clients can get behavioral health screening; help with medication and support services. They may receive counseling, group therapy, dual diagnosis or vocational services.

In case of emergency DBH Walk-In Clinics are available. Specialty Behavioral Health Services are obtained through the Access Unit. DBH Extended Hours Clinic

Outpatient Programs

Central Valley Region - Bloomington, Colton, Fontana, Rialto, West San Bernardino

Desert Mountain Region - Apple Valley, Barstow, Big Bear, Crestline, Hesperia, Joshua Tree, Lake Arrowhead, Morongo Basin, Needles, Phelan, Trona, Twenty-nine Palms, Victorville, Yucca Valley

East Valley Region - East San Bernardino, Grand Terrace, Highland, Loma Linda, Redlands, Yucaipa

West Valley Region - Alta Loma, Chino, Montclair, Ontario, Rancho Cucamonga, Upland

http://www.sbcounty.gov/dbh/outpatientservices/outpatientservices.asp#

APPENDIX F

AGENCY APPROVAL

County of San Bernardino

Administration
268 West Hospitality Lane, Suite 400 • San Bernardino, CA 92415-0026 • (909) 382-3133 • Fax (909) 382-3105

ALLAN RAWLAND, MSW, ACSW
Director

March 9, 2009

Jennifer McCreight, M.A.
School of Social Work
5500 University Parkway
San Bernardino, CA 92407-2397

RE: Research Proposal, "The Effect of Immediate Follow-up on Psychiatric Rehospitalization Rates"

Dear Jennifer:

Congratulations! Please find attached approval for your request to explore the relationship between immediate follow-up for clients who are discharged from the hospital and its effect on rehospitalization. This approval is good for one year. Since your project will involve contact with DBH clients, you will need to carefully adhere to the applicable rules regarding human subjects' research, specifically the rules regarding research and the confidentiality of research data.

During the course of your research project you are required to provide the IRB committee with regular updates of your findings. Please provide updates on a monthly basis starting today until your research project is complete and final.

Once your research project is completed you will need to submit your findings in writing no later than one month after the finalization of your project.

Please note that any changes that may be needed during the life of this project will require review by our Institutional Review Board.

We look forward to learning of the progress of this effort.

Sincerely,

ALLAN RAWLAND, MSW
Director

AR:KH:lb

Attachment
cc: Paula Rutten, Clinic Supervisor
Ralph Ortiz, Deputy Director

DBH Research Application
Review and Approval Tracking Form

Project Title: The Effect of Immediate Follow-up on Psychiatric Rehospitalization Rates

Researcher: Jennifer McCreight	Tracking No:

Brief Description:

The purpose of this research project is to explore the relationship between immediate follow-up for clients who are discharged from the hospital and its effect on rehospitalization rates. Clients will be contacted shortly after discharge for the purpose of reinforcing the discharge plan, answering questions and providing psychoeducation, encouraging, medication adherence, and to triage each discharged client for additional needs. It is hypothesized that this follow-up will result in lower rehospitalization rates as compared to those who do not receive this follow-up. Should this strategy prove successful, the project has the potential to be adapted as a best practice for the Diversion Unit in an effort to improve continuity of care and reduce rehospitalization rates.

Research Review Committee Findings

Chair	*Date*	*Signature*	*Recommendation*	
Keith S. Harris, Ph.D.	2-23-2009	Keith S. Harris	☒ Approval	☐ Disapproval

COMMITTEE FINDINGS AND COMMENTS:

We considered proposal and clarified issues.

The IRB Committee recommends approval of this proposal.

Regional Manager	*Date*	*Signature*	*Recommendations*	
Paula Rutten, MSW	2-26-09	Paula Rutten (cow)	☒ Approval	☐ Disapproval
			☐ Approval	☐ Disapproval
			☐ Approval	☐ Disapproval
			☐ Approval	☐ Disapproval

Deputy	*Date*	*Signature*	*Recommendations*	
Ralph Ortiz, Ph.D.			☐ Approval	☐ Disapproval
			☐ Approval	☐ Disapproval

Authorization to perform the research specified in Research Application

Approving Authority	*Date*	*Signature*	*Determination*	
Allan Rawland, MSW Director	3/10/09		☒ Approved	☐ Disapproved

REFERENCES

Abas, M., Vanderpyl, J., Le Prou, T., Kydd, R., Emery, B., & Foliaki, S. A. (2003). Psychiatric hospitalization: Reasons for admission and alternatives to admission in South Auckland, New Zealand. *Australian and New Zealand Journal of Psychiatry, 37,* 620-625. Retrieved August 15, 2008 from Academic Search Premier Database.

American Psyiatric Association (2000). *Disgnostic and Statistical Manual of Mental Disorders.* (4th ed. Text revision). Washington, DC: American Psychiatric Association.

Anthony, W. A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal, 16*(4), 11-23. Retrieved December 6, 2008 from Academic Search Premier Database.

Anthony, W. A., Buell, G. J., Sharratt, S., & Althoff, M. E. (1972). Efficacy of psychiatric rehabilitation. *Psychological Bulletin, 78,* 447-456. Retrieved June 5, 2008 from Academic Search Premier Database.

Byers, E. S., Cohen, S. H. & Harshbarger, D. (1979). The quantity and quality of aftercare services: Relationship with recidivism in mental hospital patients. *Canadian Journal of Behavioral Sciences, 11*(1), 11-20. Retrieved June 7, 2008 from Academic Search Premier Database.

California Department of Mental Health (2003). Mental Health Services Act.

Code of Federal Regulations, 42 CFR § 2.13 *et seq.* (Government Printing Office, 2002).

Code of Federal Regulations, 45 CFR § 160 *et seq.* (Government Printing Office, 1996).

Cuffel, B., Held, M., & Goldman, W. (2002). Predictive models and the effectiveness of strategies for

improving outpatient follow-up under managed care. *Psychiatric Services; 53*(11): 1438-1443. Retrieved August 27, 2008 from: http://ps.psychiatryonline.org/cgi/reprint/53/11/1438?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=Predictive+models+and+the+effectiveness+of+strategies+for+improving+outpatient+f&searchid=1&FIRSTINDEX=0&sortspec=relevance&resourcetype=HWCIT

Golan, N. (1978). *Treatment in crisis situations.* New York: Free Press.

Halgin, R. P., & Whitbourne, S. K. (2003). *Abnormal psychology: Clinical perspectives on psychological disorders* (4th ed.). New York: McGraw-Hill.

Harding, C. M., Brooks, G. W., Ashikaga, T, Strauss, J. S., & Breier, A. (1987). The Vermont longitudinal study of persons with severe mental illness: I. Methodology, study sample, and overall status 32 years later. *American Journal of Psychiatry, 144*(6), 718-726. Retrieved December 6, 2008 from LexisNexis Database.

Kanter, J. S. (1991). Integrating case management and psychiatric hospitalization. *Health & Social Work, 16*(1), 34-42. Retrieved on December 6, 2008 from Academic Search Premier Database.

Kolbasovsky, A., Reich, L. & Futterman, R. (2007). Predicting future hospital utilization for mental health conditions. *The Journal of Behavioral Health Services & Research, 34*(1), 34-42. Retrieved May 26, 2008 from: Academic Search Premier Database.

Lindemann, E. (1944). Symptomatology and management of acute grief. *American Journal of Psychiatry,* 101, 141-148.

Markowitz, F. E. (2006). Psychiatric hospital capacity, homelessness, and crime and arrest rates. *Criminology, 44*(1), p.45-72. Retrieved December 6, 2008 from Academic Search Premier Database.

Montgomery, P. & Kirkpatrick, H. (2002). Understanding those who seek frequent psychiatric hospitalizations. *Archives of Psychiatric Nursing, 16*(1), 16-24. Retrieved June 5, 2008 from Academic Search Premier Database.

National Alliance on Mental Illness (2008). What is mental illness: Mental illness facts. Retrieved December 3, 2008 from http://www.nami.org/Content/NavigationMenu/Inform Yourself/About Mental Illness/About Mental Illness.htm

National Association of Social Workers (2008). Code of Ethics of the National Association of Social Workers. Retrieved May 7, 2009 from http://www.naswdc.org/pubs/code/code.asp

Nelson, E. A., Maruish, M. E., & Axler, J. L. (2000). Effects of discharge planning and compliance with outpatient appointments on readmission rates. *Psychiatric Services, 52*(7), 885-889. Retrieved August 17, 2008 from http://ps.psychiatryonline.org/cgi/reprint/51/7/885?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=effects+of+discharge+planning+and+compliance&searchid=1&FIRSTINDEX=0&sortspec=relevance&resourcetype=HWCIT

Payne, M. (2005). *Modern social work theory* (3rd ed.). Chicago: Lyceum Books.

Popple P. R. & Leighninger, L. (2005). *Social work, social welfare, and American society* (6th ed.). Boston: Pearson.

Ragins, M. (n.d.). *Recovery with severe mental illness: Changing from a medical model to a psychosocial rehabilitation model.* Retrieved May 15, 2009 from The Village Integrative Service Agency Web site: http://www.village-isa.org/Ragin's%20Papers/recov.%20with%20severe%20MI.htm

Ralph, R. O. (2000). Review of recovery literature: A synthesis of a sample of recovery literature. National Association of State Mental Health Program

Directors/National Technical Assistance Center for State Mental Health Planning. Retrieved October 11, 2008 from http://www.nasmhpd.org/general files/publications/ntac pubs/reports/ralphrecovweb.pdf

Roberts, A. R. (2005). Bridging the past and present to the future of crisis intervention and crisis management. In A. R. Roberts (Ed.) *Crisis intervention handbook: Assessment, treatment, and research* (3rd ed., pp.3-33). New York: Oxford University Press.

Segal, S. P., Akutsu, P. D., & Watson, M. A. (2002). Involuntary return to a psychiatric emergency service within twelve months. *Social Work in Health Care, 35*(½), 591-603. Retrieved June 5, 2008 from Academic Search Premier Database.

Weiden, P. J., Kozma, C., Grogg, M., & Locklear, J. (2004). Partial compliance and risk of rehospitalization among California Medicaid patients with schizophrenia. *Psychiatric Services, 55*(8), 886-891. Retrieved August 17, 2008 from: http://ps.psychiatryonline.org/cgi/reprint/55/8/886?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=partial+compliance+and+risk+of+rehospitalization&searchid=1&FIRSTINDEX=0&sortspec=relevance&resourcetype=HWCIT

World Health Organization (2007). Mental Health: a state of well-being. Retrieved December 3, 2008 from http://www.who.int/features/factfiles/mental health/en/index.html

Yamada, M. M., Korman, M., & Hughes, C. W. (2000). Predicting rehospitalization of persons with severe mental illness. *Journal of Rehabilitation, 66*(2), 32-39. Retrieved August 19, 2008 from Wilson Web Database.