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# Home Care Factors Associated with Hospital Readmission of Psychiatric Patients

Ashley Renee Payne  
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# Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,  
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Walden University  
2017

Abstract

Home Care Factors Associated with Hospital Readmission of Psychiatric Patients

by

Ashley Renee Payne

MS, Walden University, 2014

BS, University of Houston-Downtown, 2012

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Psychology

Walden University

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## Abstract

There has been inadequate attention to the aftercare of psychiatric patients, resulting in an increase in readmission rates plus longer hospital stays. There is a gap in the aftercare for psychiatric patients; The purpose of this qualitative retrospective study is to explore what may have contributed to readmission for psychiatric patients. The biopsychosocial model was used as the theoretical framework to support the direction of the research. The health belief model and transtheoretical model of change were used to further support for biopsychosocial model. The research questions were created to determine the influences on readmission, psychological well-being, explore the adaptation to aftercare and narrative of aftercare from the caregiver. This study used a content analysis to identify patterns and themes with a total of 10 participants. The data used had been previously collected by the behavioral transition team at Houston Methodist Hospital which consists of case notes, mental health diagnoses, hospital history and reasons for readmission. The findings include reports of psychiatric patients not adhering to their prescribed medication due to its side effects or cost, caregivers feeling overwhelmed, and the importance of psychoeducation. Once adjustments were made to the dosage or a prescription for less expensive medication, adherence improved, regular attendance to therapy sessions occurred, and the increase in the level of frustration from the caregiver. Psychiatric patients can benefit in post-discharge care if there is more focus on the reasons for hospital readmission by developing a treatment plan for the prevention of a relapse. This study may improve patient vulnerability to mental health issues and to assist psychiatric patients in establishing balance in their lives.

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## Dedication

I would like to dedicate this body of work to the inner person who is eager to shine. The inner person with a strong drive, but is afraid and doubtful. Release and allow the universe to expand your gift, and watch how the vibrations coact with the strength of your soul to bring light to your passion.

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## Chapter 1: Introduction to the Study

### **Introduction**

The transition is crucial or the handling of the inpatient to outpatient care for individuals receiving treatment for psychiatric disorders is crucial. Psychiatric patients receive inpatient and outpatient care for various reasons. If there is little support and criticism from family members, the chances of a relapse is high for patients under psychiatric care (Behr, Christie, Soderlund, & Lee, 2015). In one study, within 3 months of discharge, 52% of patients were readmitted due to the unavailability of disability grants and treatment options (Behr et al., 2015). Also, if the level of severity is high for patients with a mental illness such as schizophrenia, early readmission is likely to occur (Behr et al., 2015). The communication between health professionals and the patient can play a role in the transition home and subsequent likelihood of readmission (Nelson & Pulley, 2015). Less than 50% of patients will see their physician after being discharged and 25% are readmitted within 30 days (Nelson & Pulley, 2015).

According to Nelson and Pulley (2015), during transitional care there should be effective communication, patient/family education, and acute discharge care. As part of the transition, a thorough discharge plan, home visits, phone calls, and the appropriate medications should be included. The common factors that are associated with hospital readmission include comorbidities, a history of psychiatric hospitalization, limited healthcare resources, and poor social support (Nelson & Pulley, 2015). Caregivers are essential in the aspects of decision making and should be included when patients are taught self-management which can encourage social support (Nelson & Pulley, 2015).

Both the patient and caregiver should be made aware of the discharge planning and have some input on what can meet the patient's needs to prevent a relapse (Nelson & Pulley, 2015).

This study is necessary to uncover the factors that contribute to readmission and determine if the results are consistent with current literature. One of the main tasks is to explore the variables associated with readmission in both inpatient and outpatient care. It is important to be able to target the barriers that lead to readmission and interfere with the improvement of acute and chronic mental illnesses. The additional interests in this study include knowing if the treatment options were beneficial to patient, factors that resulted in admission, and if experiences in the home lead to readmission. To prevent readmission and improve the patient's quality of life, it is important to explore the reasons for a relapse and draw attention to prevention. A major gap for psychiatric treatment is the lack of attention paid to what can cause readmission. This study may create a social change by increasing the knowledge of health professionals to properly educate patients and caregivers, remove the stigma associated with mental illness, and tackle the known factors that lead to readmission.

### **Background**

According to Cruz and Pico (2014), the relationship between a client and psychiatrist is most effective when there is open communication. Health providers can build a positive rapport with their patient by expressing care, building trust, and being proactive by involving other physicians in treatment (Cruz & Pico, 2014). The care and treatment of psychiatric patients should include the evaluation of symptoms, education about the

illness, and options with other providers (Cruz & Pico, 2014). There are other methods of communication between health professionals and the patient. With the growth of technology, video conferencing is being used more often for therapy sessions and follow-up appointments (Cruz & Pico, 2014).

Discharge planning is one of the key elements that can determine the progress of a patient. The purpose of discharge planning is to allow health professionals to facilitate the process and transition from inpatient to outpatient care for their patients (Noseworthy, Sevigny, Laizner, Houle, & La Riccia, 2014). There are various services to be provided to patients to prevent readmission. Perhaps if there more attention towards an effective discharge plan, there is more knowledge gained by health professionals to be proactive with the treatment that is provided.

Readmission rates usually increase during the transition to outpatient care (Noseworthy et al., 2014). It is recommended for health care providers to build a positive relationship with the patient and their family members to improve the outcome (Noseworthy et al., 2014). Studies show that when patients with a mental illness have social support, they have a better health outcome (Gayer-Anderson & Morgan, 2013). When there is social support and a positive environment, the patient is less likely to relapse or feel isolated (Gayer-Anderson & Morgan, 2013). Caregivers play an important role in social support and decision making (Hamann et al., 2015).

The discharge planning process usually contains steps and instructions that are prepared by health professionals to give to patients and their caregiver. Designated health professionals, such as a psychiatrist or nurse, are the key role players and communicate

discharge planning with the patients (Noseworthy et al., 2014). The first part of the decision making to take place is based on the patients' symptoms, current medications, and other criteria (Noseworthy et al., 2014). It is important to prepare the patient for the transitioning to outpatient by acknowledging any concerns and keeping the family/patient up to date throughout the processes (Noseworthy et al., 2014). Health professionals gather any information such as financial documentation, living arrangements, caregivers, other diagnoses, and triggers for discharge planning (Noseworthy et al., 2014). During the process of transitioning to outpatient care, all parties involved are notified, including the health professionals, to make sure that everyone is comfortable (Noseworthy et al., 2014). Once the patient is in outpatient care, follow-ups such as telephone calls, appointment visits, etc. are made so that the patient's progress can be monitored and improved by health professionals (Noseworthy et al., 2014).

### **Problem Statement**

The care of patients who are discharged from psychiatric hospitals should continue to be monitored (Desplenter, Laekeman, Simoens & GIPPOZ Research Group, 2011). It is important to focus on improving patient quality of life, checking if patients are adhering to medical treatments, and examining what is going on in their lives outside of the hospital. After hospital discharge, studies confirm that at least 19% of psychiatric patients have depression that can lead to an increase in mortality rates and readmission within the first year after hospital discharge (Desplenter, et al., 2011). If there are aspects of the patient's life that would be a negative influence, then it is possible for unhealthy attitudes and behaviors to develop.



Previous researchers have found that when home visits are made by clinical pharmacists and other behavioral staff members, patients showed improvement in taking medication as prescribed and their health improved (Kjeldseon et al., 2013). One of the gaps in research is the lack of attention to behavioral health once the patient is discharged. Poor attention to the aftercare of psychiatric patients is one of the causes of readmissions and longer hospital stays (Reuben & Tinetti, 2014). For the purposes of this study, I explored the factors that led to hospital readmission, identified the patterns in behavior, and inquired about the patient's or caregiver's experiences and emotions.

### **Purpose of the Study**

The purpose of my research was to study the impact of homecare and explore the experiences of psychiatric patients who were discharged and their adaptation to the aftercare received outside of the hospital, focusing on reasons that led to their readmission. The data that was analyzed was strictly secondary. It was important to be able to address the questions that may have not arisen from the previous data that has been collected by researchers. The analysis of secondary data is essential because it can provide a broader perspective than the original study (Rudestam & Newton, 2014). The purpose of utilizing secondary data was to locate a distinctive finding that is specific to my own research interest.

One of my goals for this study was to view the various approaches that could improve the patient quality of life (QOL) and adherence to the instructions/orders from the medical staff. In a hospital, there are 24 hours of care provided 7 days a week. In the home, the care may be limited due to caregivers working or pursuing other activities, and

this may lead to a relapse. As such it is essential to understand the experiences of psychiatric patients once they fall under home care and the problems and the issues faced by the caregivers as well. These findings could lead to reorganizing the support that could be provided in the home to improve the QOL of these vulnerable patients. This may prevent them from being readmitted to the hospitals.

### **Research Questions**

#### **Central Question**

RQ1 - What is the impact of home care on psychiatric patients released from hospital and later readmitted?

#### **Sub Questions**

RQ1a - How do psychiatric patients describe their experiences at home about the home care they received once they were released from hospitals?

RQ1b - How does the home caregiver describe the patient's behavior and adaptation when they were brought home from hospitals?

RQ1c - Have the home caregivers faced any problems and issues when caring for these released psychiatric patients?

### **Theoretical Framework**

The appropriate use of a qualitative method of a grounded approach did stem from the biopsychosocial theory (BPS) in this study. According to the BPS, a person's mental and physical health is dependent upon reciprocal actions between biology, psychology, and social settings (Hatala, 2012). The purpose of using this grounded theory was to understand how psychiatric patients are impacted at home and are possibly readmitted to

the hospital. This was a nonexperimental study that used only secondary data to analyze the factors that contributed to psychiatric hospital readmission for patients who had been discharged. The theoretical frameworks used in this study were the health belief model (HBM) and transtheoretical model of change (TTM). Both models have been used in various interventions that result in behavioral change (Orji, Vassileva, & Mandryk, 2012).

The HBM can assist with health readiness and development through its concepts, perceived susceptibility, severity, benefits, and barriers (Blank & Eisenberg, 2013). This model has been used to help change negative attitudes, behaviors, and perceptions. The TTM consists of different stages that help patients to recognize the areas in their lives that need to be changed, help them deal with emotions, and encourage change (Smith et al., 2013). It is important to determine if long-term results are produced so patients can take care of themselves, and their caregivers can assist without experiencing any primary barriers. There should be preparations made via behavioral health professionals and caregivers to care for the patient, once released.

### **Nature of Study**

The study was conducted within the qualitative framework using the grounded approach. It is important to be able to explore and comprehend the experiences of psychiatric patients who have been discharged and their adaptation. My reason for selecting the grounded theory was that it is consistent with the data collection from two databases that contain information from patients and caregivers. Grounded theory allows for data to be sorted early in order to explain what occurs in the data and compare

findings (Creswell, 2013). With the grounded theory, it is possible to build a new theory. The quantitative method would not be feasible as there is not a testable hypothesis or detectable variables (Creswell, 2013). By using the qualitative research approach the data that was collected brought about relevance to the field of health psychology with providing care to psychiatric patients. The qualitative approach is useful with exploring real-life situations without manipulating the participants, and can help discover new phenomena (Creswell, 2013).

### **Operational Definitions**

*Discharge Planning:* Discharge planning is considered to be a well conducted treatment plan issued to patients by health professionals for outpatient care (Zhang, Harvey, & Andrew, 2011).

*Inpatient:* Inpatient status begins when the patient is admitted or hospitalized under doctor's orders.

*Length of Stay (LOS):* The length of stay refers to the time and duration that a patient is hospitalized per discharge (Zhang, Harvey, & Andrew, 2011).

*Outpatient:* Outpatient is defined as not being admitted to the hospital under the doctor's care but the patient is still receiving treatment.

*Readmission Rate:* Readmission rates are estimated by an unexpected hospitalization after being discharged within 30 days of initial discharge (Medicare, n.d.).

### **Assumptions**

The assumptions made for this study were indicated as being true without being validated:

1. The first assumption is that communication between health professionals such as a nurse practitioner, psychiatrist, or psychologist can have a negative or positive impact on patient motivation. If health professionals educate patients and caregivers about the mental illness, discuss emotions and treatment options, there is an increase in knowledge and behavioral change.
2. It is assumed that patients and caregivers are affected mentally which can interfere with treatment progression.
3. Since the grounded approach is used for this study, it was assumed that the findings and results are applicable to others dealing with a mental illness and comorbidities.

### **Limitations**

The major limitation for this study was that all of the data is secondary. All of the data had been previously collected by other health professionals. There was not any contact with patients or caregivers to monitor additional progress to compare with the past results and findings.

### **Significance**

This research may lead to a program that will assist psychiatric patients as they are discharged to maintain healthy psychological well-being, thereby reducing the likelihood of readmission. On the other hand, if there are other troubles such as family,

employment, and other burdens, the medical/research staff will be available for assistance and motivation. For example, available resources for finding employment would be given along with therapy sessions addressing the mental disorder. Future patients and their families would feel comfortable enough to open up freely to receive outpatient care in their home. Hopefully, the patients will adhere to medication, and disregard harmful thoughts such as suicidal ideation. It is important to improve their quality of life so they can have shorter hospital stays and avoid readmissions.

This study contributes to a positive social change by removing the vulnerability to mental illness and offering a balance in life. It is important to promote a constructive environment that will lead to an improvement in health and lower hospital readmission rates. The purpose of this study was to examine the factors that can influence the possibilities of readmission of psychiatric patients following discharge.

### **Summary**

It is important to be able to narrow down what contributes to hospital readmission. Chapter 2 includes a more extensive and in-depth exploration of the literature concerning the factors that have been proven in past studies that influence inpatient and outpatient care for psychiatric patients.

## Chapter 2: Literature Review

### **Introduction**

The psychological well-being of psychiatric patients who are discharged can either be improved or become worse. It is possible that certain factors after discharge may contribute to psychiatric hospital readmission. There is a need for more attention to psychiatric post discharge care. The treatment options and support may differ between inpatient and outpatient care. The purpose of this chapter is to synthesize the findings regarding factors that contribute to hospital readmission and will be broken down into sections including the benefits of the biopsychosocial model (BPS), health belief model (HBM), and transtheoretical model of change (TTM) when used with interventions, hospital readmission, psychiatric pre-discharge care, psychiatric post-discharge care, and caregivers' experiences.

In this literature review, I focused on research on the aftercare of psychiatric patients who were discharged from the hospital. This literature review includes discussion of discharge planning, current assistance being provided, an impact on caregivers transitioning from inpatient care, psychological well-being, and relevant behavioral change models that can impact readmission. There are factors in the patient's life that may bring about the urge to go back to the hospital that will be discussed. These findings that were synthesized included noticeable patterns with hospital readmission. Also, an analysis of the author's findings to the related material is provided, and necessary future action for research and the field of psychology has been identified.

The purpose of this study was to discover the various factors that contribute to psychiatric hospital readmission. I used the frameworks of the BPS, HBM and TTM to understand and explain why patients do not adhere to medication, and subsequently relapse and are readmitted back into a psychiatric hospital.

### **Literature Search Strategy**

I used the Google Scholar, SAGE Research Methods Online, PubMed, PsycArticles, and PsycINFO databases to search for literature. The majority of the literature reviewed consisted of peer-reviewed articles published within the previous 5 years. Articles that were older than 5 years contained content that is still relevant and useful to the current literature. I collected all of the peer-reviewed articles through the Walden University library.

Included in the search were the key terms: *psychiatric discharge planning, biopsychosocial model, biopsychosocial model and psychiatric admission, health belief model, hbm and psychiatric treatment adherence, social model of change, transtheoretical model of change, psychiatric inpatient care, psychiatric outpatient care, psychiatric hospital readmission, health belief model psychiatry, transtheoretical model of change psychiatry, general hospital admission, readmission statistic's, mental illness and discharge planning, and behavioral interventions with the hbm and ttm.*

### **Theoretical and Conceptual Framework**

#### **Biopsychosocial Model (BPS)**

According to the BPS biological, psychological and social influences play a role in disease and overall well-being (Suls, Krantz, & Williams, 2013). From the biological



standpoint, a person could have a genetic factor that can cause a disturbance in the body (Suls et al., 2013). Psychological wellbeing is negatively affected by certain emotions, and unhealthy behavior may occur due to an illness (Suls et al., 2013). The social factors that can influence health include if the environment is negative, such as emotionally arousing situations which could cause stress (Suls et al., 2013). The BPS states that an individual could be immune to stress, remain healthy in stressful situations, or develop cardiovascular disease that could contribute to deterioration of their mental health. Psychologically, a disease could cause self-esteem issues such as having anorexia nervosa, for example (Suls et al., 2013). If there is an issue with body image, the health condition could become worse. Socially, stress or depression could develop from unexpected life events that can cause a strain on daily functioning (Suls et al., 2013).

According to the BPS, the environment and genetics are key influences on a person's psychological and physical health (Bolton, 2013). The development of a cardiovascular disease or dysfunctions in the brain may occur if the environment is unstable, which may cause a mental illness (Bolston, 2013). Some of the known patterns for deterioration of an individual's physical and psychological well-being are that a negative attitude can have a negative influence on health and the quality of life (Bolston, 2013). It is essential to be able to take charge of biological, psychological, and social factors in life to remain healthy and avoid problems. According to Bolston (2013), brain disorders should be considered as a mental disorder because the behavior of an individual may become abnormal due to a change in neural pathways.

**Health Belief Model (HBM)**

The goal of the HBM is to understand why people avoid certain health behaviors and/or take risks (Orji, Vassileva, & Mandryk, 2012). An individual's perception of an illness or disease is dependent upon the action taken to minimize the harm. There are six concepts that make up the HBM and predict the outcome of an individual's health behavior (Orji, Vassileva, & Mandryk, 2012). Perceived susceptibility is a person's belief that the illness is harmful and will lead to negative consequences. For a person to be motivated to change, the level of the perception of vulnerability to the condition has to be high. An individual with a high perceived susceptibility will more likely begin to demonstrate fewer negative behaviors. Perceived severity alludes to an individual's thought regarding the outcome if the condition worsens. There are more precautions taken to avoid further harm, if there is some form of awareness. There would have to be an advantage to improving health in that an increase in perceived severity could lead to efforts to improve one's health-related behaviors (Orji et al., 2012).

The next concept of the model is perceived benefit. At this phase, the person will weigh the pros and cons of their behavior (Orji et al., 2012). There is more of an action plan executed to lessen the unhealthy behavior. The intention to change is dependent on the expected positive outcome from the changed behavior (Orji et al., 2012). Perceived barrier refers to the obstacles that interfere with an individual changing his or her behavior to avoid negative outcomes (Orji et al., 2012). A barrier is a burden such as financial difficulty, transportation, or any other type of an inconvenience. Cues to action provide reminders or prompts that are necessary for a person to become ready to change

(Orji et al., 2012). External cues are anything that is outside of a person that will increase their motivation to change, such as a family member or media (Orji et al., 2012). An internal cue is similar to self-motivation, and acts as a force for change (Orji et al., 2012). The last concept is self-efficacy, which designates a person's assessment of their ability to change (Orji et al., 2012). For an individual to make a positive change, they must feel capable of doing so. For example, people are reluctant to perform a healthy behavior such as exercising daily or quitting smoking if they are not confident in their ability to do so (Orji et al., 2012).

### **Significance of the HBM**

Behavioral change models are developed by health professionals to cause a shift in a person's actions, perceptions, and attitudes. The HBM was created to make a person aware of the consequences of the decisions made in regard to health (Montanaro & Bryan, 2014). According to the HBM, if an individual is informed of the seriousness of the health risks, they make better choices to prevent harm (Montanaro & Bryan, 2014). If a patient does not adhere to medication, attend follow-up appointments, or comply with the instructions from their psychologist/psychiatrist, this may result in hospital readmission. There could be several reasons why a patient is not in compliance with medical instructions, including not acknowledging the seriousness of their mental illness.

### **Objective of the Health Belief Model**

The purpose of the HBM is to motivate the patient to change (Montanaro & Bryan, 2014). The HBM can be effective for psychiatric patients to improve their behavior and become healthier. With mental illnesses and hospital readmission, perceived

susceptibility would mean that the person would understand the chances of an illness such as schizophrenia becoming more severe. Perceived severity affects whether or not the patient believes their mental illness is serious and whether their behavior will worsen the condition. Perceived benefits refer to a person's ability to become aware of the changes needed and the possible outcome to improve their psychological well-being and gain control of their mental illness. Perceived barriers would indicate a burden is interfering with a patient receiving help. For example, a patient may not comply with medication requirements because of intolerable side effects. Cues to action refer to a final decision being made to take the steps to improve one's mental and psychological well-being. Last, self-efficacy indicates that a person has enough confidence and ability to make the necessary health changes such as medication adherence or attending therapy sessions.

The HBM is well known and used in mental health care to help patients avoid further difficulty with their daily functioning. The HBM is used to help predict the future outcome and intention for a patient to seek help when needed (O'Conner, Martin, Weeks, & Ong, 2014). A high level of perceived susceptibility was indicated as a negative predictor as participants are not as motivated to seek help (O'Conner et al., 2014). According to O'Conner et al. (2014), adolescents are more likely to look for assistance when there is a lack of social support but are aware of the perceived benefits for improving their mental health. As long as there is a positive outcome, the barriers are ultimately overlooked health professionals. If the patient has a negative attitude, this

alone can become a barrier and possibly prevent further treatment (O'Conner et al., 2014).

With the proper utilization of the HBM, it is likely that a psychiatric patient will adjust to positive behavior. When used with other interventions, the HBM is known to be effective in reducing negative outcomes. The Meds-Help intervention is a pharmacy-based intervention used to improve the use of prescribed antipsychotic medication adherence. It includes unit-of-use packaging and notification to clinicians that a patient refill is due (Valenstein et al., 2014). The HBM is efficient in reducing the barriers to care and providing prescription refill reminders and unit-of-use packaging which increase cues to action and improve patient compliance (Valenstein et al., 2014). Meds-Help adopted the constructs of the HBM. As a result, among patients who received this intervention, medication adherence went from 61% to 97% (Valenstein et al., 2014). Psychiatric patients are more than likely to execute the cues to action and can handle the known barriers that have already been identified by the patient, caregiver and health professionals. An improvement in patient care can lead to lower hospital readmission rates (Valenstein et al., 2014). As a result, within a 12-month time frame, there were improvements in symptoms and medication adherence.

### **Readmission and the Health Belief Model**

Studies confirm that, during the first hospital admission, at least 50% of patients reported to be nonadherent to prescribed antipsychotic medication, and 74% ceased taking medication within 18 months after admission (Baloush-Kleinman et al., 2011). Baloush-Kleinman et al. (2011) used four concepts within the HBM to structure their

study for the positioning of adherence. The perceived benefit is to be free from the symptoms of schizophrenia, perceived barriers are getting over the side-effects of medication, perceived susceptibility included the awareness of being readmitted, and the perceived severity was acknowledging the negative outcome for not taking the prescribed medication (Baloush-Kleinman et al., 2011). The patients' attitudes toward medication is a huge barrier and a contributing factor to nonadherence. However, if patients are aware, according to the four constructs used, their behavior is more positive. The perceived severity predicts the likelihood of adherence which is an important aspect of improving symptoms. For patients that were well-informed of the seriousness of their mental illness, the HBM can help predict consistency with medication adherence.

### **Societal Beliefs**

Societal views can vary by generation on the beliefs for those to seek help. The constructs within the HBM are dominant influences on decision making. Perceived barriers, benefits, and severity individually affect whether patients with a mental illness will engage in healthier behaviors (Kim & Zane, 2015). For example, a study was conducted to understand the health beliefs of college students regarding nutrition. When college students are enrolled in health or nutrition courses, there is an increase of knowledge for a healthier diet which leads to healthy behavior (Kim, Ahn, & No, 2012). According to Kim, Ahn and No (2012), the younger generation has more interest to learn about healthy habits and the benefits of nutrition.

Studies found that many chronic illnesses, such as diabetes or cardiovascular disease, are not as common in younger adults as elderly men and women (Kim, Ahn, & No,

2012). When there is knowledge of a positive outcome based on health choices, according to the HBM, a younger generation will have more confidence to be consistent with eating habits. With the HBM, the constructs of susceptibility and severity are heavily acknowledged amongst a younger generation resulting in them engaging in healthy behaviors (Kim, Ahn, & No, 2012).

One of the key elements of the HBM is to assess the connection between a person's belief regarding their current and future health status and behavior. [A transition is required here. It is not clear how the first sentence is related to the remainder of the paragraph. ] Anxiety disorders are common among pregnant women; however, many are unaware of the seriousness and have low perceived susceptibility (Shahnazi, Sabooteh, Sharifirad, Mikarimi, & Hassanzadeh, 2015). If the perceived benefits such as having the support of a spouse are increased, it can help to reduce anxiety symptoms. A way for perceived barriers to be eliminated is by providing education about anxiety and pregnancy which ultimately leads to self-efficacy (Shahnazi et al., 2015). Also, the concept cues to action improve from being educated as there is more of strategic plan in place for pregnant women with an anxiety disorder to be more responsible with social support (Shahnazi et al., 2015).

According to the stance of the HBM, once a person understands they are at risk of further harm to their health, a plan of action will develop for treatment adherence and behavioral change (Barkhof, Meijer, de Sonnevill, Linszen, & de Haan, 2012). Patients with schizophrenia or affective disorder reported having an improved adherence rate of 43% with the assistance of the HBM (Gipson & King, 2012). According to Gipson and

King (2012), one of the essential elements of the HBM is predicting the patient's perceived susceptibility and helping to understand the level of severity of the mental illness. If a patient believes there is a threat of the mental illness to their health, the advice of clinicians is followed, and the perception of a negative outcome will decline (Gipson & King, 2012).

### **Is the Health Belief Model useful to Psychiatric Patients?**

Some factors contribute to patients with schizophrenia not adhering to prescribed antipsychotics. Many patients reported being inconsistent with medication due to a shortfall in being educated about the medicine/mental illness, pessimistic experiences receiving health care, little communication with health care providers, or unexpected changes in the current health care provided (Leutwyler, Fox, & Wallhagen, 2013). When there is poor communication between the patient and clinician, there is difficulty in building a trusting relationship and a positive attitude toward adherence. If a patient is in adherence with medication requirements it is a result of having active communication with the health provider and a conventional plan (Leutwyler et al., 2013). Patients that have an open connection with their health care provider have knowledge of schizophrenia and antipsychotic medication and have more structure to becoming healthy and they more fully understand their disease and the value of medication (Leutwyler et al., 2013).

According to Leutwyler et al. (2013), the symptoms that come along with schizophrenia are considered as a barrier. At times, the symptom of hallucinations can be intractable causing interference with cues to action (Leutwyler et al., 2013). Patients who experience hearing voices become distracted from taking prescribed medication



(Leutwyler et al., 2013). The concept of cues to action is essential in predicting one's health behavior and willingness to make better choices. Cues to action can trigger healthy behavior and improve the level of readiness (Leutwyler et al., 2013). For patients with a mental illness to adhere to medication is a result of open communication with health providers, a structure in the treatment plan, and education on the mental illness (Leutwyler et al., 2013).

The HBM can assist with discovering a patient's belief about schizophrenia, allow comprehension of the mental illness, and provide information on the importance of taking medication as directed (Nitzan et al., 2013). Patients with schizophrenia have difficulty with medication adherence. The variable rebelliousness is used to represent low adherence if the perceived severity of the illness is not acknowledged (Nitzan et al., 2013). There is a negative connection between medication adherence and the stage of rebelliousness. Studies confirmed a pattern of non-adherence if the participant has a negative perception about treatment or taking medication (Nitzen et al., 2013). The pessimistic attitude toward medication is common for those who have been diagnosed with schizophrenia.

Other conditions such as having heart failure may contribute to a patient having psychological health compromised. Moreover, once a mental illness such as depression develops, it is important to utilize the concepts of a behavioral model. Studies show patients that suffered from heart failure and did not adhere to medication experienced depression (Navidian, Yaghoubinia, Ganjali, & Khoshsimae, 2015). Patients who were diagnosed with depression had a negative attitude toward treatment and poor adherence

to medication (Navidian et al., 2015). When depressed, patients with heart failure tend to have irrational thinking and possible visual impairment which in turn, prevent positive behavior according to the HBM (Navidian et al., 2015). Patients that have depression more than likely had poor medication adherence and symptoms of their medical condition remained severe.

According to DiMatteo, Haskard-Zolnierrek, and Martin (2012), if there is a high level of severity, adherence would be improved. According to the World Health Organization, at least 50% of patients in more industrialized countries do not adhere to medication (DiMatteo et al., 2012). When the medication regimen is complicated, patients are less likely to follow instructions. The perceived barrier with miscommunication causes an impact on patients to be unsuccessful and non-adherent with taking their prescribed medication. The population examined reported to have an adherence rate of 20% to 90% for schizophrenics that were prescribed antipsychotics (DiMatteo et al., 2012). According to DiMatteo et al. (2012), for patients to adhere to medication, there has to be a strategy in place to overcome the barriers and obstacles. An example of an effective plan is adjusting the patients' lifestyle including any positive behavior to help change one's perception of taking medication.

### **Transtheoretical Model of Change**

The TTM is a model that helps put a person in position to change behavior based on six stages. The TTM can measure an individual's potential and readiness for change within six months (Cavacuiti & Locke, 2013). In the pre-contemplation stage, the individual is neither ready for behavioral change nor has the intention to change within

the upcoming six months. In the second stage, contemplation occurs if one is taking a behavioral change into consideration. At this point, a person is aware that change is necessary but is not ready to make the move forward. At the action stage, there is a plan; a person is willing to make the necessary modifications in the upcoming six months. A person in the action stage has accepted proposed threats related to their behavior and is prepared to make better decisions. While in the maintenance stage, modifications have been made, and precautions are taken to avoid a relapse. The final stage in the TTM is relapse when it is possible for the person to return to old behavior patterns.

### **Significance of the Transtheoretical Model of Change**

In life, a person can be diagnosed with a chronic illness as a result of unhealthy behaviors. Smoking and alcohol usage are common amongst patients with cancer which can, in turn, affect psychosocial behavior (Choi, Chung, & Park, 2013). A few examples of unhealthy behavior include poor exercise, high alcohol consumption, bad eating habits, and smoking (Choi et al., 2013). Some of the additional factors that can affect well-being include stress and emotional instability (Choi et al., 2013). Social support and the development of self-efficacy can help predict future actions made by an individual with cancer. The TTM is useful in helping to identify what is associated with unhealthy behavior and to promote positive behavior (Choi et al., 2013). Studies confirm that after one month of changing from harmful conduct, the possibility of a relapse back to the maintenance phase exists (Choi et al., 2013). To make proper use of the TTM, there is an assessment of the patients' behavior, the stage of the TTM is identified, and then the appropriate intervention is provided (Choi et al., 2013).

### **Objective of the Transtheoretical Model of Change**

The TTM has been used to help modify physical health behaviors and address body imagery, which is a psychological issue (Johnson, Fallon, & Harris, 2013). According to the TTM, one has to be motivated to progress in its stages (Johnson, Fallon, & Harris, 2013). Within the first stages of the TTM which include precontemplation, contemplation, and preparation, a person may not be motivated to engage in psychical activity (Johnson, Fallon, & Harris, 2013). If there is low body satisfaction, the individual would need encouragement to become physically active to exercise (Johnson, Fallon, & Harris, 2013). There could be barriers that can interfere with body satisfaction during the action and maintenance stages when it comes to physical activity (Johnson, Fallon, & Harris, 2013). When there is a lack of consistency with decision making, a person may not exercise which can deflate self-confidence (Johnson, Fallon, & Harris, 2013). On the other hand, if there is a satisfaction in body image there is a chance of success in the maintenance stage (Johnson, Fallon, & Harris, 2013).

One of the main goals of the TTM is to change a person's lifestyle (Davis, Alpert, & Clevesy, 2016). Once the action stage is reached, it is presumed that progress using the TTM is near completion (Davis, Alpert, & Clevesy, 2016). The TTM is also an educational model that can teach older adults who are in the precontemplation stage about health risks that are associated with unhealthy habits that may contribute to chronic and acute illness (Davis, Alpert, & Clevesy, 2016). Nurse practitioners utilize the TTM by monitoring the health progress of patients and make them more of aware of what is entailed with their illness such as cardiovascular disease and diabetes (Davis, Alpert, &

Clevesy, 2016). Patients are able to benefit from the TTM as it can assess their level of readiness, and assist health professional identify an effective health care plan based on the current stage of change (Davis, Alpert, & Clevesy, 2016). It is important that patients are allocated with the correct stage as it allows health professionals to understand their perception and attention toward health so they may become more intrigued to a healthier lifestyle (Davis, Alpert, & Clevesy, 2016).

### **Readmission and the Transtheoretical Model of Change**

Studies show that non-adherence to psychiatric medication is a reason for relapse and readmissions back to inpatient care for those who were diagnosed with schizophrenia and bipolar disorder (De Nadai et al., 2016). Patients reported that if prescribed medication has to be taken multiple times per day, they feel an increase in side effects which in turn, contributes to non-adherence (De Nadai et al., 2016). For example, it is common for children to have a negative attitude toward taking prescribed psychotic medication and there is a reduction in medication consumption (De Nadai et al., 2016). For children and adolescents, a parental figure takes on the responsibility to ensure they are taking the medication as instructed (De Nadai et al., 2016). As a result, if there is little to no direction from the parent, more than likely the child or adolescent will not adhere to the medication (De Nadai et al., 2016).

Once a patient is discharged from inpatient psychiatric care, there are responsibilities placed on the caregiver and the patient themselves (Basit, Getz, & Chung, 2016). Some of the duties include coping with a diagnosis, at home care and medication adherence (Basit, Getz, & Chung, 2016). Therefore, the transition to outpatient care may be crucial

for both the patient and caregiver resulting in readmission if there is not an effective care plan in place (Basit, Getz, & Chung, 2016). For patients with comorbidities such as cardiovascular disease plus a mental illness, medication adherence is low and there is an 83% chance of readmission. If a patient has comorbidities, the healthcare plan should be designed to comply with the disease to reduce emergency room visits and readmission (Basit, Getz, & Chung, 2016). With the TTM, health professionals are able to assess medication adherence, have a competent plan of care, and produce a motivational blueprint to reduce readmission (Basit, Getz, & Chung, 2016). For example, if a patient has is newly diagnosed with a mental or acute illness, there is a chance of them lingering in the precontemplation stage before a care plan is executed (Basit, Getz, & Chung, 2016). The goal of the TTM for patients with a mental illness is remain in the maintenance stage long-term and not relapse (Basit, Getz, & Chung, 2016).

### **Societal Beliefs**

The TTM is a common behavioral model that is searched by adolescents and adults (Korda, & Itani, 2013). This model has been shown to provide a beneficial message to its target audience (Korda, & Itani, 2013). The TTM is proven to assist with a desire to change promoting self-efficacy for searching online for health knowledge (Korda, & Itani, 2013). Adolescents that are interested in improving unhealthy habits will gear toward the internet searching for behavioral change techniques (Korda, & Itani, 2013). Online learning leads to a positive jump in self-confidence and as a result there are more questions asked to health professionals during a visit (Korda, & Itani, 2013). The use of social media for teaching adolescents about health has increased awareness and

knowledge (Korda, & Itani, 2013). At least 80% adults and adolescents are prone to going online to search the internet for health educational tips (Korda, & Itani, 2013). Searching the internet is cost effective and easily accessible for many, therefore, with a younger generation, the internet is the first place to inquire about a health question (Korda, & Itani, 2013). Studies show that the Center for Disease Control reported that 14% of users downloaded a health podcast between the ages of 18-29 from their website (Korda, & Itani, 2013). There was an interest for knowledge on a disease, medications, and treatment (Korda, & Itani, 2013).

Young adults that actively smoke cigarettes reported to show depressive symptomology (Foster, Khalil, Farris, Bärnighausen, & Prokhorov, 2015). When young adults show signs of depression, their level of readiness to change is poor due to the symptomology (Foster et al., 2015). A history of smoking cigarettes indicates there is a correlation with depression in which an individual has not been successful in quitting (Foster et al., 2015). Studies show that young adults with depressive symptomology have low self-efficacy and feel dismayed due to a history of relapses from trying to quit smoking (Foster et al., 2015). Moreover, if a person with depressive symptoms has a history of relapse, there is a consequence of low perception of health (Foster et al., 2015). The TTM is effective for assessing the relationship with the use of tobacco and depression (Foster et al., 2015). According to the constructs of the TTM, a person can remain in the contemplation stage if there is no intent to discontinue smoking cigarettes (Foster et al., 2015). However, researchers believe that if there has been multiple relapses, there is a chance the individual is ready to change but is in need of guidance

(Foster et al., 2015). In order for a better health outcome, the perception of one's behavior should become positive and focus of previously unsuccessful attempts to quit smoking (Foster et al., 2015).

### **Is the Transtheoretical Model of Change useful to Psychiatric Patients?**

Those who are diagnosed with schizophrenia are known to have an inactive lifestyle and remain idle throughout the day (Bassilios, Judd, Pattison, Nicholas, & Moeller-Saxone, 2013). In turn, the likelihood of a person with schizophrenia exercising is very low (Bassilios et al., 2013). There is a perception of high cost to exercise which is considered as a barrier and a reason for someone with schizophrenia not to exercise (Bassilios et al., 2013). Once the financial barrier is eliminated, it is possible for the transition from the precontemplation to contemplation stage to be successful (Bassilios et al., 2013). The TTM is beneficial by promoting adherence to physical activity once barriers are lifted for those with schizophrenia (Bassilios et al., 2013). Also, there are better health choices made such as a reduction in caffeine intake by 30% when there is an increase in physical activity for a person with schizophrenia (Bassilios et al., 2013). Once there is progress throughout the stages of the TTM, the individual will become motivated to continue with exercising and move forward toward the action phase (Bassilios et al., 2013).

Behavioral change models such as the TTM are used to help treat people with a SMI such as bipolar disorder, schizophrenia, and substance abuse disorder that engage in unhealthy activities including smoking cigarettes and drinking alcohol (Bradizza, Stasiewicz, & Dermen, 2014). Patients with schizophrenia reportedly smoked a total of



15 cigarettes daily (Bradizza et al., 2014). The TTM can be used in counseling sessions to assist increasing self-motivation and taking responsibility for reducing smoking and drinking habits (Bradizza et al., 2014). One of the important aspects of the TTM is to teach patients way to cope with any withdrawal symptoms as there is a decrease of substance abuse (Bradizza et al., 2014). The TTM has proven to boost motivation and significantly reduce smoking (Bradizza et al., 2014).

### **Medication Adherence and Treatment**

For patients diagnosed with an anxiety disorder, the usual prescription medication is an antidepressant such as a serotonin reuptake inhibitor (e.g., paroxetine or clomipramine; Taylor, Abramowitz, & McKay, 2012). Studies show that patients with anxiety disorders including phobias, social anxiety disorder, generalized anxiety disorder, or post-traumatic stress disorder have poor medication adherence and are reluctant to attend therapy sessions e.g. Taylor et al., 2012). Patients are non-adherent with attending therapy sessions due to the remission of anxiety symptoms before any treatment would commence (Taylor et al., 2012). For a patient to discontinue treatment, it may be due to a lack of motivation to change, high emotions, and a more severe level of present symptoms (Taylor et al., 2012). The TTM is useful in predicting the stage in which a patient is non-adherent (NA) or nonresponsive (NR) to treatment options. If a patient with an anxiety disorder is in the pre-contemplation or contemplation stage, there is a higher chance of being NR or NA (Taylor et al., 2012).

It is essential for patients to comply with the recommended psychiatric treatment that is offered. The TTM is focused on the motivation that a patient has to change behavior

(Jochems, Mulder, Duivenvoorden, van der Feltz-Cornelis, & van Dam, 2014). For many, there is legal action taken to become adherent to treatment. It is proposed that patients with a legal mandate to follow treatment experience more external motivation compared to those without a legal mandate (Jochems et al., 2014). If there is pressure or some reward to partake in treatment, there is a sense of motivation. Patients that were motivated to change attended appointments, engaged in treatment, and were not hesitant to ask for help when needed (Jochems et al., 2014). The TTM can be useful in discovering the level of motivation to change which helps with the most appropriate treatment options that patients will most likely participate in.

There are times when patients are not ready to adhere to treatment or therapy. For some patients with HIV, taking medication is not acceptable which leads to the virus becoming progressively worse. Patients that are infected are suggested to participate in Adherence to Antiretroviral Therapy (ART) which helps predict the outcome for patients with HIV in the long run (Genberg, Lee, Rogers, Willey, & Wilson, 2013). ART was designed to improve medication adherence and lower the viral count in the body (Genberg et al., 2013). This will make it more difficult for the virus to be sexually transmitted. Many of the patients in this group dealt with depression which made it difficult to adhere to treatment. The TTM is useful with ART by helping to identify the stage of readiness to change for those who are having trouble with adhering to medicine and help with depression symptoms with behavioral change (Genberg et al., 2013). In this study, 15% of patients were within the first two stages of change, pre-contemplation or contemplation (Genberg et al., 2013).

### **Severe Mental Illness, Acute and Chronic Illnesses**

For any severe mental illness (SMI), it is important to become physically active with the hopes of decreasing barriers and improving motivation to change (Farholm & Sørensen, 2016). Some of the barriers to recovery in general or barriers specifically to becoming physically active for patients with a SMI include non-adherence of medication because of the side effects, symptoms, planning, and low self-esteem (Farholm & Sørensen, 2016). The TTM is useful by helping to acknowledge self-efficacy and enhance a person's ability to change. From the behavioral aspect, it is a process to change, and the patient would have to be open to change. It is also essential for health status and the severity of the mental illness to be acknowledged for change to occur (Farholm & Sørensen, 2016). For example, patients were determined to become healthier once their diet was improved from the awareness of risk factors associated with the symptoms of a SMI and mental functioning (Farholm & Sørensen, 2016). If a patient is moving forward within the stages of the TTM, there is an increase of motivation and a continuance to remain consistent with the changes made (Farholm & Sørensen, 2016).

Studies show that at least 92% of adolescents that experience some form of abuse are diagnosed with a mental illness (Brauers, Kroneman, Otten, Lindauer, & Popma, 2016). Whether it is substance abuse or physical abuse, both may lead to depression, anxiety or other negative emotions (Brauers et al., 2016). The TTM assumes that behavioral change should take place so that treatment can be effective (Brauers et al., 2016). However, there should be more focus on the pre-contemplation and contemplation stages so that patients can comprehend the severity of their mental illness and the associated behaviors. By

recognizing the stages in the TTM, it is presumed that the progression can be observed as well as an improvement of symptoms and mental health (Brauers et al., 2016). Once patients are made aware of the concepts of the TTM and improvement in the overall quality of life, there will be a growth in motivation to adhere to medication and disengage in negative behaviors.

For patients that have experienced kidney failure, it can be difficult to adhere to medication. According to Oberlin, Parente and Pruett (2016), 35 % of patients have a lack of adherence to immunosuppressive medications, resulting in 60% continuing to experience kidney failure. When patients do not take medication as prescribed, their health will decline which will lead to hospital readmission. Patients that do not follow their physician's orders to take medication, and within two years of readmission, 25% of them have kidney graft failure and may die (Oberlin et al., 2016). It is essential for patients to be in compliance with taking the immunosuppressive medications so that a kidney transplant is considered an option. The TTM is helpful in reducing hospital readmissions by motivating patients to set goals for changing behavior, and adhering to medication and other instructions set by the physician (Oberlin et al., 2016).

Smoking cigarettes is a negative habit that can lead to a serious illness such as cancer or heart disease (Schuck et al., 2016). It was reported that 45-60% of patients who smoked and possibly suffered a heart attack were diagnosed with an SMI including unipolar depression or bipolar disorder (Schuck et al., 2016). Studies show that smoking alone can interfere with the success of antipsychotics and may cause low blood levels. Consequently, a higher dosage may be prescribed which is associated with non-adherence

(Schuck et al., 2016). In this study, when applying the concepts of the TTM, most patients were in the pre-contemplation, contemplation, or preparation stage. Many of the patients were in the pre-contemplation stage because there was a low desire to quit smoking within 6 months (Schuck et al., 2016). However, 40% of patients that were in the pre-contemplation stage requested to be a part of an intervention upon discharge (Schuck et al., 2016). Other patients that had an SMI were more eager to participate in recommended interventions after being made aware of the consequences of smoking cigarettes and how it affects their body in regard to mental health (Schuck et al., 2016).

### **Psychiatric Pre-Discharge Care**

For outpatient care to benefit the patient, a level of preparedness should take place before discharge. Many patients with a mental illness do not adhere to the recommended outpatient care which in turn may lead to a relapse and readmission within a few weeks of initial discharge (Hengartner et al., 2015). Discharge planning should be thoroughly planned and monitored to avoid readmission. One of the most common reasons for rehospitalization is failure to make outpatient appointments (Hengartner et al., 2015). Before discharge, social workers should build the positive rapport with the patient to identify their needs and concerns. Afterward, there are additional agreements made with other health professionals, family, or caregivers to provide social support. A plan of intervention and treatment is set in place so the patient's mental and physical health would improve (Hengartner et al., 2015). After four days have passed since discharge, a home visit is made to begin monitoring the transition to outpatient care (Hengartner et al., 2015). There should be an increase in social support for patients with an SMI for progress

to occur (Hengartner et al., 2015). Usually, weekly visits are made for a duration of 3 months. A well-planned treatment strategy for outpatient care is effective enough to reduce the possibility of a relapse and hospital readmission if the patient is adherent.

### **Mental Health Professionals**

Health professionals play an important role in the transition from inpatient to outpatient care. Pharmacists contribute to the transition by making sure that patients are adhering to medication, and that the patients understand how to take the prescribed medication and the purpose of the medication (Ensing et al., 2015). Interventions that are used during post-discharge are more efficient when other physicians or nurses are involved (Ensing et al., 2015). For example, in a home visit, the nurse is responsible for the monitoring any clinical deterioration in the patient, while the pharmacist will provide medication adherence counseling (Ensing et al., 2015). At the time of the initial admission process, medication reconciliation is useful to avoid a relapse later on (Ensing et al., 2015). Studies show that when there is a list of medications that the patient is taking as well as the dosage and frequency, the transition to outpatient is more effective (Ensing et al., 2015). It is important for such collaborations to occur before and after discharge so that the health professionals involved are aware of the patient's hospital history and life at home (Ensing et al., 2015). With a pharmacist on board, pharmacotherapy is provided to help insure appropriate patient use of the prescribed medication according to the medical condition (Ensing et al., 2015). When pharmacists are involved during the transition, the risk of the patient being readmitted is reduced (Ensing et al., 2015).

## **Psychiatric Admissions**

Compulsory admission is defined as a patient being involuntarily admitted to the hospital (Lay et al., 2015). If a patient is involuntarily admitted to the hospital, the relationship with health professionals is negatively affected, and the treatment is almost useless (Lay et al., 2015). To have a successful inpatient experience, providing psychoeducation may help improve the patient's self-management skills and confidence to become motivated to change (Lay et al., 2015). In spite of being admitted or readmitted, it is essential for the patient to uphold and maintain their independence (Lay et al., 2015). Psychoeducation would be useful in the aspect of assisting the patient by confronting past experiences with their SMI and ways to deal with their mental illness by promoting motivation (Lay et al., 2015). When psychoeducation is provided to patients for 12 months, there is an increase of action taken by the patient in learning how to cope with their SMI (Lay et al., 2015). The purpose of psychoeducation is to provide information that is moderated toward the patient's mental illness (Lay et al., 2015).

Different causes can lead to psychiatric hospital readmission during outpatient care. Many patients that endure a long period of stay tend to have frequent appointments 60 days after being discharged (Lee et al., 2015). Studies show that 13.4% of patients that are taking typical antipsychotics had more visits than those who were taking atypical antipsychotics (Lee et al., 2015). Also, for patients that have comorbidities, the chances of being readmitted are higher if inpatient care is poor (Lee et al., 2015). The relationship between the inpatient physician and patient does have an impact on adherence as there is accountability and a form of trust built (Lee et al., 2015). Patients that were diagnosed

with depression and schizophrenia are more than likely not in compliance with prescribed medication and the suggested treatment during the inpatient stay (Lee et al., 2015).

Ultimately, once discharged, there is a chance for readmission within 60 days (Lee et al., 2015).

Patients with mood disorders can have a difficult time during the hospital stay (Porter et al., 2016). Many of the patients admitted could have bipolar disorder or depression and the goal of inpatient care is to minimize the symptoms (Porter et al., 2016). Studies show that if therapy is completed within inpatient care, there is a low risk for a relapse (Porter et al., 2016). However, the structure in inpatient care should be improved. For example, the psychosocial issues can be addressed more and patient participation in recommended activities could be increased (Porter et al., 2016). On the other hand, a clear diagnosis at the start of hospital admission is essential in the treatment that will be provided so that the symptoms are properly taken care of (Porter et al., 2016).

### **Decision Making**

Medication adherence for adolescent patients has been shown to vary depending on coercion (Timlin, Hakko, Riala, Räsänen, & Kyngäs & 2015). It was reported that 78% of adolescent patients comply with treatment plans during an inpatient stay; however, if the final decision were left up to the teen, medication would not be taken (Timlin et al., 2015). Support from family members, needs being addressed, and teaching about their SMI could improve treatment adherence (Timlin et al., 2015). There are other factors with adolescents that contribute to adherence. For example, family income can be a determinate along with maternal instincts and regular monitoring (Timlin et al., 2015).



Even if the adolescent became old enough to make decisions without an adult present, if there is enough support during inpatient care, more than likely adherence would continue (Timlin et al., 2015). It is important for health professionals to acknowledge adolescents are still experiencing growth with cognitive skills, independence, social skills, and emotions. Therefore, it is important to have a treatment plan in place that is not complicated and is well explained to the adolescent (Timlin et al., 2015).

### **Psychiatric Post-Discharge Care**

Most psychiatric hospital readmissions occur within 30-90 days of discharge (Donisi, Tedeschi, Salazzari, & Amaddeo, 2015). A quicker hospital readmission took place within 30 days of discharge for 26-31% of patients that were diagnosed with schizophrenia or bipolar disorder (Donisi et al., 2015). In this study, 55% of patients received outpatient care and 17% had visits at home after discharge (Donisi et al., 2015). Patients that were recorded to have previous psychiatric hospital history within the past three years were more than likely to be readmitted (Donisi et al., 2015). The life outside of the hospital did have an influence on readmission. For example, patients that lived on their own or in a homeless shelter were readmitted within 7 days of being discharged and had a longer hospital stay (Donisi et al., 2015). It is suggested that the approach toward the care that patients received should be addressed prior to discharge in order to avoid readmission (Donisi et al., 2015). It is hard to minimize both lengths of stay and readmission. It would be useful for psychologists or psychiatrists to access information on past psychiatric admissions to determine those that are more than likely to return to the hospital for acute psychiatric care (Donisi et al., 2015).

### **Progression to Outpatient Care**

The transitioning from inpatient to outpatient care can be a critical process. Hospital readmission can have an adverse impact on the patient's quality of life (Vigod et al., 2013). It has been proposed that the interventions provided during the hospital stay may reduce readmission rate (Vigod et al., 2013). However, the use of interventions while a patient is receiving inpatient care may be limited. Interventions that include or encourage psychoeducation about disease, and adapting and acknowledging the patients' needs may reduce readmission rates (Vigod et al., 2013). For example, educating the patient about medication adherence and the importance of attending appointments is influenced by such interventions. Interventions received during inpatient care may be as effective (Vigod et al., 2013). If the inpatient care is useful to the patient, outpatient care should be productive. It is important to focus on the transition to psychiatric hospital discharge to maintain low readmission rates. If a patient has a SMI or if finances become a barrier, an intervention set in place should improve the associated factors that may interfere with transitioning from inpatient to outpatient care.

Psychiatric units set a standard for patients to be discharged within three months of admission (Nakanishi et al., 2015). In 2012, the length of stay varied from 49 to 79 days in the midst of discharge planning (Nakanishi et al., 2015). The authors suggest that before discharge, the inpatient and outpatient staff should review medication adherence information and the patient's relationship with others at the start of the inpatient care to determine if both coincide with the length of stay (Nakanishi et al., 2015). Community care coordination is a necessary collaboration between the staff to come up with an

effective discharge plan that is patient centered for a better outcome (Nakanishi et al., 2015). When there is clear communication between inpatient and outpatient staff, the discharge planning is effective to reduce the chances of a relapse and subsequent readmission (Nakanishi et al., 2015). Also, if the attention is geared toward the actual psychosis during inpatient care, discharge planning may lead to adherence for outpatient care (Nakanishi et al., 2015).

### **Discharge and Medication**

Antipsychotic medications for mental illness such as schizophrenia may interfere with medication for chronic illnesses such as hypertension or cardiovascular disease (CVD) (Owen-Smith et al., 2016). Statin is a medication that is used to help lower cholesterol which is associated with CVD (Owen-Smith et al., 2016). Patients with schizophrenia do not adhere to medication for the mental illness, but 56% are reported to take medicine for CVD (Owen-Smith et al., 2016). Patients with a mental illness are more aware of the seriousness of a chronic illness which explains the increase in compliance to antipsychotics (Owen-Smith et al., 2016). As a result, it is possible for a relapse to occur and slow progression of improvement in dealing with a mental illness due to a lack of medication adherence (Owen-Smith et al., 2016).

### **Hospital Readmission**

Medicaid is one of the primary payment sources for mental health patients and has paid out \$17 billion in annual costs for more than 2.3 million patients (Shams, Ajorlou, & Yang, 2015). At least 21% of patients have reported not to have their insurance. Therefore, Medicaid is the option used to seek care (Shams et al., 2015). Heart failure,

myocardial infarction, and COPD are a common diagnosis for patients that are readmitted within 30 days with a range from 21% to 63% (Shams et al., 2015). Also, 50% of patients have reported being readmitted up to 4 times in one year since initial discharge (Shams et al., 2015). However, it is difficult to predict that accuracy of readmission, which is why it is important to improve inpatient care (Shams et al., 2015). Many of the patients that are readmitted are elderly with more than two chronic illnesses (Shams et al., 2015).

According to Shams, Ajourlou, and Yang (2015), many of the reported patients were discharged too early, which in turn leads to a higher risk of being readmitted. Having a short length of stay (LOS) with poor inpatient care is one of the key factors for early readmission (Shams et al., 2015).

### **Psychiatric Readmission**

Elderly psychiatric patients have a higher risk of being readmitted due to not having supervision once discharged (Wong, 2015). When patients are not able to follow treatment plans, and have a history of self-harm or psychiatric hospitalization, rehospitalization will likely occur (Wong, 2015). Also, elderly psychiatric patients that have comorbidities are at risk for returning to inpatient care because their physical health is poor (Wong, 2015). A total of 368 elderly patients with a mental illness participated in a study and 77 were readmitted within 6 months of discharge during a two year follow-up period (Wong, 2015). For patients that were 65 and older, one study reported that 37% were diagnosed with a cognitive disorder, 32% had depression, 23% had a psychotic disorder, and 4% had bipolar (Wong, 2015). At least 69% of patients received outpatient care referrals which reduced rehospitalization (Wong, 2015). When there are aftercare

referrals made patients are more likely to be in compliance with treatment and managing their problems (Wong, 2015).

There are many factors that lead to hospital readmission for psychiatric patients (Rylander et al., 2016). On a continuous basis, past studies have found that a history of psychiatric hospital history, poor community aftercare resources, and a lack of follow-up appointments influence likelihood of admission (Rylander et al., 2016). Patients may have depression, anxiety, or other cognitive dysfunctions that can interfere with compliance if an effective treatment plan is not executed prior to discharge (Rylander et al., 2016). If there are other mental illnesses and comorbidities, health professionals should incorporate a medical and psychiatric discharge plan with available aftercare resources (Rylander et al., 2016). Substance abuse and schizophrenia provide strong predictors for readmission within 90 days due to psychiatric instability of the mental illnesses (Rylander et al., 2016).

For patients with bipolar disorder, there are indicators that can predict hospital readmission (Hamilton et al., 2015). The main signs for readmission are when patients do not have medical insurance, have poor living conditions, and do not have a job (Hamilton et al., 2015). It is believed that patients with these indicators do not have access to outpatient resources and will eventually be readmitted for psychiatric inpatient services (Hamilton et al., 2015). Patients with bipolar disorder and are homeless are readmitted within 90 days of initial hospital discharge (Hamilton et al., 2015). Many homeless shelters have a maximum day limit of 30 days for a resident which helps explain the correlation with psychiatric readmissions (Hamilton et al., 2015). Medicare is one of the

leading resources for mental healthcare for inpatient services (Hamilton et al., 2015). As a result, patients with a mental illness are more than likely to be readmitted to another psychiatric facility as Medicare is widely accepted (Hamilton et al., 2015). Studies confirm that 56% of patients with bipolar disorder were readmitted to a different psychiatric hospital and did not have medical insurance (Hamilton et al., 2015). It is important for health professionals to have a good strategy during the transition from inpatient to outpatient care, even if the patient does not have medical insurance (Hamilton et al., 2015).

In the United States, 14% of psychiatric patients are readmitted within 30 days from initial discharge according to the READMIT scoring index (Vigod et al., 2015). The purpose of the READMIT index is to measure the risks that patients will be readmitted for inpatient care in a certain time frame (Vigod et al., 2015). When patients with a mental illness also have comorbidity, it is considered to be a risk for readmission (Vigod et al., 2015). In this study, some of the patients were diagnosed with a personality disorder, bipolar disorder, alcohol/substance abuse disorder, or depression, had previous psychiatric hospital history within the last 2 years, and received psychiatric outpatient care in the last year (Vigod et al., 2015). Studies have suggested that community care during the post-discharge phase is essential for preventing a relapse (Vigod et al., 2015). The READMIT is useful to use to help come up with a plan to try and eliminate patients returning for inpatient care (Vigod et al., 2015). If the READMIT is used while the patient is in the hospital, health professionals can identify the risk factors prior to discharge (Vigod et al., 2015).

Studies confirm that if prior psychiatric hospitalization is recent, readmission will come shortly after (Zilbur, Hornik-Lurie, & Lerner, 2011). An indication of hospital readmission is that the patient does not have social support during outpatient care (Zilbur, Hornik-Lurie, & Lerner, 2011). Psychiatric patients with an extended length of stay between 20 to 60 days are more than likely to be readmitted early (Zilbur, Hornik-Lurie, & Lerner, 2011). A few examples of hospital readmission and length of stay are common amongst patients with schizophrenia and psychosis (Zilbur, Hornik-Lurie, & Lerner, 2011). If a patient with a severe mental illness is admitted and released too early, they are readmitted within 30 days from discharge (Zilbur, Hornik-Lurie, & Lerner, 2011).

### **Readmission Rates**

Patient care and saving costs is a crucial task for hospitals, and there is a focus to reduce the readmission rates (Herrin et al., 2015). Sociodemographics such as employment education, and living status can affect readmission rate (Herrin et al., 2015). This is applicable for patients that are diagnosed with acute myocardial failure, heart failure, and pneumonia (Herrin et al., 2015). Interestingly enough, patients that are discharged from the hospital into a nursing home are at risk to be readmitted (Herrin et al., 2015). Patients sent to nursing homes easily develop pressure sores, and 20% are readmitted (Herrin et al., 2015). Fifty-eight percent of patients received care from a county level hospital and were living in poverty with low income and low education were never married, and had little access to care outside of a county hospital (Herrin et al., 2015). According to Herrin et al. (2015), patients that reside alone, are not employed, and cannot afford healthcare are at risk for being readmitted.

### **Admission Data with Chronic Illnesses**

A person diagnosed with a chronic illness has a chance of being admitted into hospital care. Diabetes is a disease that can cause other health risks such as CVD which can lead to hospital admission (Comino et al., 2015). As a result, there are poor health decisions made that can impact the overall quality of life (Comino et al., 2015). Studies confirm that 32.8% of patients are hospitalized if there is a diagnosis of diabetes with an average of 8 days (Comino et al., 2015). Many patients with diabetes have reported smoking and consuming alcohol and are not very active (Comino et al., 2015). At least 11% to 17% of patients had reported smoking cigarettes and were obese from poor health (Comino et al., 2015). The location of residence and socioeconomic status does play a role in being hospitalized because there are limited resources and minimal finances for healthcare services in rural areas (Comino et al., 2015).

### **Inferences with Admissions**

After surgical procedures, there are various reasons why patients are readmitted and become a burden on a hospital financially (Merkow et al., 2015). Patients that had procedures such as bariatric surgery, hernia repair, hysterectomy, or a knee arthroplasty were unexpectedly readmitted with a rate of 5.7% post-surgery (Merkow et al., 2015). After being readmitted the length of stay would last up to 14 days (Merkow et al., 2015). The main reason patients who had previous surgeries were rehospitalized was for having a disruption in the gastrointestinal tract (Merkow et al., 2015). Additional reasons included being dehydrated, anemia, and some form of nutrition deficiency (Merkow et al., 2015). The majority of patients are readmitted for other complications from poor



discharge planning which include renal failure, spreading of cancer to other parts of the body, urinary tract infections, heart complications, and the formation of blood clots (Merkow et al., 2015). The authors suggest that there should be a decrease in post-discharge complications and to take precaution to improve pre-discharge planning (Merkow et al., 2015).

A total of 2610 hospitals received fines \$428 million in 2014 by the Medicare Hospital Readmissions Reduction Program (HRRP) (Barnett, Hsu, & McWilliams, 2015). The HRRP makes predictions of patients that would be readmitted based on sex, predisposed conditions, disability, income, medical coverage, and other characteristics (Barnett et al., 2015). Many hospital readmissions occur in patients that are inordinately served with care (Barnett et al., 2015). According to the HRRP, patients that are healthy, high income, or socially advantaged are readmitted when it was not medically necessary (Barnett et al., 2015). Patients with higher readmission usually have comorbidities, lower education, showed signs of depression, poor health, and poor cognitive skills (Barnett et al., 2015). However, many of these characteristics are not included in risk adjustments so that more effective quality of care plans can be executed (Barnett et al., 2015). The authors suggest that the overall care provided in hospitals has an influence on readmission rates, which in turn can create a financial burden (Barnett et al., 2015).

Hospital organizations including its staff members often strive to provide quality care to patients and reduce rehospitalization (Logue, Smucker, & Regan, 2015). There are useful elements that can reduce rates by including psychoeducation, patient-centered care, and follow-up care after being discharged (Logue et al., 2015). It is important to

make sure that medical, physical, and mental needs are acknowledged and addressed for an effective discharge plan (Logue et al., 2015). Also, physicians that are aware of patient medical history and prior hospital stay can use intervention models that may predict the possibility of readmission (Logue et al., 2015). A major predictor found for readmission is when patients reported being sent to a care facility after discharge instead of being released to go home (Logue et al., 2015). There is a sense of vulnerability or dependency when patients cannot go home after discharge (Logue et al., 2015). If there is continued care after discharge, patients felt encouraged to be adherent to treatment resulting in lower admission rate (Logue et al., 2015).

### **Caregivers**

Caregivers are witnesses to what psychiatric patients experience during and after hospital discharge. A caregiver is one to share the responsibility for providing care in the home of the patient. The most common type of caregivers is either parent (56%) or a spouse by (13%), and coercion is not a factor if readmission is voluntary (Ranieri et al., 2015). A part of the role of a caregiver is to ensure that the patient is adhering to the prescribed medication (Ranieri et al., 2015). If the patient does not comply, an involuntary admission is possible. However, caregivers feel that rehospitalization could be a positive occurrence if it is voluntary (Ranieri et al., 2015). At times, caregivers are not aware they are using some form of force. Therefore, readmissions may not be considered an issue if the perception of coercion is not negative (Ranieri et al., 2015). It is important for caregivers to understand if admission is necessary. To avoid a relapse and future readmission, caregivers should be more involved with exactly how admission

works and the elements to look for and make the decision if it is best (Ranieri et al., 2015).

### **Mental Health of Caregivers**

The psychological well-being of caregivers can be negatively impacted while caring for a psychiatric patient (Weller, Faulkner, Doyle, Daniel, & Goldston, 2015). Caregivers can feel bewildered, embarrassed, and alone when caring for a person with a mental illness (Weller et al., 2015). For example, caregivers of patients with bipolar disorder experience a loss of hope for a better outcome (Weller et al., 2015). Parents that had children commit suicide experienced depression, sadness, anxiety, or emotional distress (Weller et al., 2015). There are times when the experiences of caring for someone with a mental illness can take a heavy toll. After three weeks of hospital discharge, 28% of caregivers reported having less free time and 16% of caregivers quit at their place of employment (Weller et al., 2015). Caregivers also experienced changes in eating and sleep schedules (Weller et al., 2015). Other caregivers of patients with bipolar disorder have reported having low energy, and 90% felt that distance from the patient developed (Weller et al., 2015). However, caregivers can experience a positive bond if the patient is open, has acceptance of the nurturing from the caregiver, and if there is open communication (Weller et al., 2015).

Caregivers have to be able to transition alongside the patient from inpatient to outpatient care. Family caregivers assume major responsibility for patients to ensure that their needs are met and they become healthy (Coleman, Roman, Hall, & Min, 2015). In this study, it was reported that 46% of caregivers provide nursing duties such as giving

medicine, 78% deal with managing the medicine, and 53% give patient care coordination (Coleman et al., 2015). As a care coordinator, caregivers help educate the patient about the medications, procedures, treatment, and any other instructions from the health professionals (Coleman et al., 2015). As a part of the transition to hospital discharge, caregivers were taught self-management, better medicine management, skills transfer, ways to handle their needs as well as the patients, handling home visits, and improved communication skills (Coleman et al., 2015). One of the main goals is for caregivers to be able to take care of the patient in different settings and to acknowledge any red flags of health deterioration and to take the proper steps (Coleman et al., 2015).

Caregivers are mentally affected by the experiences that the patients they are caring go through (Kim, Carver, & Cannady, 2015). For example, the quality of life for caregivers of cancer patients can decline and is followed by stress (Kim et al., 2015). Although the diagnosis of cancer may be unexpected, caregivers felt that it is meaningful to take on such a role (Kim et al., 2015). There is an increase in spirituality which has been shown to improve mental wellbeing (Kim et al., 2015). The development of peace and faith is from spirituality which is a factor that improves mental health for caregivers (Kim et al., 2015). In turn, the expectations and needs of the patient are met with the hopes of the betterment of health in the long term (Kim et al., 2015). For the patient to become motivated for positive change, the caregiver should be encouraged to promote behavior that will produce it (Kim et al., 2015). Many caregivers reported a growth with self-determination to acknowledge and take action for the challenges that may be associated with cancer, but to seek peace in everything (Kim et al., 2015).

The mental health of caregivers could have an effect on psychiatric hospital readmission. The transition to outpatient care has fewer risks for readmission when the caregiver is a part of interventions because they receive psychoeducation and have knowledge of the discharge planning (Kripalani, Theobald, Anctil, & Vasilevskis, 2013). Caregivers are able to provide care management and support from being informed of the outpatient transition process with hopes to lessen readmissions (Kripalani et al., 2013). When patients are discharged in the comfort of their home, health professionals are able to develop an effective plan with caregivers for outpatient care (Kripalani et al., 2013).

It is important for caregivers to have a full understanding of patient care to produce a way of handling the issues associated with the mental illness (Sharif et al., 2012). Studies suggest that if caregivers have social support for patients with a mental illness such as schizophrenia, they are able to assist with coping and improve on the role of caregiving leading to a reduction in readmission (Sharif, Shaygan, & Mani, 2012). Caregivers received a total of 10 sessions in a five week time frame that included interventions led by a psychiatrist that focused on information behavior and education of the patient's mental illness (Sharif et al., 2012). Caregivers are provided with different scenarios that are relatable to the patient and ways to address the difficulties of dealing with a person that has a mental illness (Sharif et al., 2012). Psychoeducational interventions that include caregivers can significantly improve the patients' clinical outcome and reduce the chances of readmission (Sharif et al., 2012).

### **Summary and Conclusions**

Ultimately, the HBM is useful in assisting psychiatric patients to recognize the seriousness and possible harm of a mental illness (Orji et al., 2012). The HBM can effectively predict and explain a person's behavioral health. There is a huge focus on perception, conviction, and ways of thinking when it comes to one's health. The core of the HBM rests on the fact that if a person believes that illness is a threat; their behavior will change to prevent an occurrence. Therefore, a positive outlook on behavior would take place with the confidence that more beneficial action on health is taken. The concepts of the HBM are necessary for health professionals and the patient to be made aware of readiness to change. Eventually, there is a belief that actions performed toward positive behavior will be successful. The HBM is helpful with the teaching of preventable health actions, the promotion of health, and how an individual's health can be at risk. It is important for health professionals to know the perceptions the patients have and how they have been responding to the illness, treatment, etc. If the patient believes that the illness is life-threatening, then preventable measures can be taken to improve behavior. However, if the perception is that the illness and behaviors are not life threatening, the HBM can help determine the likelihood of change with treatment.

If patients avoid negative behavior and practice in the positive, the concepts of the HBM are deemed as being effective. For change to occur, a person will have to be motivated for an improvement of health to occur. For example, adherences to treatment to deal with an illness or exercising to minimize the possible health risks are the basis of the concepts of the HBM. Health professionals can address the beliefs of the patient and

develop ways to encourage positive behavior. It is imperative to understand why patients accept unhealthy behaviors and for health professionals to promote the constructs of the HBM. Although the HBM is very useful for health promotion, it is more effective when other interventions or behavioral models are incorporated for positive change.

The TTM is most useful in helping health professionals to determine the stage of readiness that patient is currently in, especially when combined with other interventions (Cavacuti & Locke, 2013). The stages of the TTM can help process the actual intent to change. The HBM has its focus on influences that can effect behavioral change whereas the TTM has the aim to help modify behavior based on the level of readiness. Some tasks take place in a person's life to determine if change will occur within the upcoming months. The stages of the TTM can identify decision making, and confidence to change and monitor progress and the overall prevention of possible relapse. Patients move through the various stages, and their behavior is gradually changed. Changes may take place over time and give health professionals more insight on whether or not the patient can successfully have a permanent change and avoid readmission.

The TTM acknowledges that the changes of behavior take time for the patient to get used to. Patients with negative behaviors are to be open to change in order move forward through the stages. The TTM can assist with setting goals that are realistic enough to continue. Also, the TTM is set to represent an entire population, so it is used as an appealing model for a positive reflection of growth. Unlike the HBM, the TTM does not assume change, but it helps to indicate if the patient has the self-efficacy to change. It is important that needs and concerns of the patient are addressed to get an idea if there is

success. The TTM can identify the specific needs of a person and also coincide with other interventions that can help with behavioral change.

The Biopsychosocial model is interested in the different interactions among an individual's hereditary makeup, mental health, and social well-being (Suls et al., 2013). Some influences are biological that can have an impact on mental health such as susceptibility to illness. Psychological problems can cause health issues from emotions, for example. Last, social influences can impact health such as stress from a person's daily life. Each of these factors plays a role in how the body may respond to an illness and the outcome. This model is essential in understanding how the body works with the environment. Each of the factors interacts with one another and has an effect on the body. The HBM and TTM are somewhat consistent with the BPS since the promotion of health is a key element in understanding the barriers that can get in the way of the improvement of health and behavior.

The care of psychiatric patients can be a crucial process whether it is inpatient or outpatient. The needs of the patient should be discussed as well as prior hospital stays, medication use, and other treatment options. It is imperative that health professionals obtain as much information as possible to come up with a good discharge plan. There should be a collaboration amongst physicians, nurses, social workers, and other staff to collaborate to ensure the patient's mental and physical health is improving. An open form of communication is essential so that a positive rapport can be built between the patient and health professionals. If there is trust built, then the patient would feel comfortable following the instructions set to improve their overall quality of life. If the pre-discharge



and post-discharge care is working in the patient's favor, the chances of hospital readmissions are reduced.

Also, the length of stay does play a role in whether or not there are a relapse and rehospitalization (Shams et al., 2015). It is important for the health staff to discuss any information that applies to the road to recovery to the patient. Follow-up calls, medication adherence, and attending therapy sessions can ensure a good outcome as well as an improvement in the patients' health. Caregivers are a big part of the recovery process for the patient as it can be a family who took on the responsibility to make sure the patient is not readmitted. Past studies have found that a collaboration between health professionals and caregivers ultimately lead to being better outcome for the patient's health (Shams et al., 2015). The mental and physical well-being of the caregiver should be considered as well, so they have motivated themselves and had the energy and heart to help their family member (patient), get better.

An extension of all areas discussed in this literature review can help to make solutions for the gap of identifying what can lead to readmission, any repetitive behavior, and the responses of patients and caregivers. Health professionals can develop better treatment plans during and after a hospital stay that adheres to the patient and caregiver needs. Patients and caregivers both have similar and different experiences that can impact the progress to a healthier and happy life. Behavioral health models have shown to be very useful and can help the staff involved to identify the barriers, perceptions, attitudes, influential factors and beliefs of the patient. It is important that the overall quality of life

is improved by effective treatment plans set forth by health professionals and how patients respond to them.

## Chapter 3: Research Method

### **Introduction**

The purpose of this study was to explore the inpatient and outpatient care experiences of psychiatric patients and their caregivers. When patients are discharged from the hospital following psychiatric care, there should be more focus on the transition from inpatient to outpatient care. Patients and caregivers are affected by the experiences of being in a hospital, and learning to adapt after discharge is vital (Reuben & Tinetti, 2014). Their overall QOL of the patient may decline or increase depending on the circumstances, events, and the response to treatment (Kjeldseon et al., 2013). It is important to ensure that effective discharge planning takes place and that there is a line of open communication between health professionals, patients, and caregivers (Kjeldseon et al., 2013).

The care that a patient receives in a hospital may differ compared to the care provided post-discharge. For example, during the hospital stay, health professionals are readily available and can immediately accommodate the patient's needs. Also, the patient and caregivers can feel at ease due to the availability of staff members and their professional expertise (Kjeldseon et al., 2013). Once the patient is released from the hospital, it is up to the caregiver to ensure that care is continued according to the health professional's orders. Psychiatric patients and their caregivers both experience the transition from inpatient care to outpatient care (Kjeldseon et al., 2013). Both can be affected mentally and physically postdischarge. This chapter has four primary sections, including research design, research approach, the researcher's role, and methodology.

## Research Design

Using the qualitative method allows researchers to assess the needs, emotions, and opinions of the participants without making assumptions or being biased (Fassinger & Morrow, 2013). Qualitative research can open the gateway between the patient and researcher to build enough rapport for values, experiences, goals, etc. to be discussed (Fassinger & Morrow, 2013). The qualitative method is also useful in that it permits researchers to interpret the data that is collected (Fassinger & Morrow, 2013). It is important to be able to understand the causal factors that led to certain events such as hospital admission and readmission. I used the grounded theory approach to develop thoughts on patterns and processes to discover possible interrelationships. The importance of the grounded theory is that it can be used to explain how various experiences may be affected in a community (Creswell, 2013).

All of the findings that were gathered in this study are archival data. Existing data that was previously collected allows researchers to actively pursue research questions that are distinctive from the original study (Johnston, 2014). Secondary archival data further allows understanding of the previous research content (Johnston, 2014). With secondary data and the approach of the grounded theory, a large amount data to collected helps determine what will be included in an analysis (Johnston, 2014). According to Johnston (2014), there are more datasets available to researchers and validity with secondary data. As a result, the sample from a secondary analysis represents a mass population.

## Research Questions

### Central question

RQ1 - What is the impact of home care on psychiatric patients released from hospital and later readmitted?

### Sub Questions

RQ1a - How do psychiatric patients describe their experiences at home about the home care they received once they were released from hospitals?

RQ1b - How does the home caregiver describe the patient's behavior and adaptation when they were brought home from hospitals?

RQ1c - How are caregivers faced with problems and issues when caring for these released psychiatric patients?

The grounded approach can be used to discern noticeable patterns and make comparisons between data (Creswell, 2013). Inductive reasoning is a part of the grounded theory and allows a shift from observations to generating coded data to develop a theory or an idea (Creswell, 2013). According to Creswell (2013), the collection of qualitative data represents the experiences of a participant that stem from external perceptions. The experiences that psychiatric patients and caregivers have make them knowledgeable regarding coping or factors contributing to a relapse during the outpatient processes.

A qualitative approach is necessary to capture the processes, experiences, occurrences and circumstances (Creswell, 2013). Research is needed to understand how and why caregivers and patients respond the way that they do while transitioning from inpatient care to outpatient care. It is important to explore if the assigned treatment

methods are beneficial for predischarge and postdischarge. It is essential for researchers to be able to recognize the barriers, influences, and conditions that led to hospital admission and readmission.

My goal for this study was to explore the experiences of psychiatric patients and their caregivers regarding their transitioning to outpatient care. By using the qualitative method, the accomplishment of exploring the phenomena between the patient, caregiver(s,) and health professionals can be reached for my study. What is significant about qualitative research is that the data collected can represent a large population and reveal behavioral patterns in various settings (Creswell, 2013).

It is important to close the gap in research regarding the transitioning of psychiatric patients and the monitoring of the care provided. There should be enough research conducted in the future that will assist health professionals in providing quality care to their patients and giving educational tools to caregivers. The qualitative data obtained for my research study is from the patient feedback of their experiences that had been previously collected constitutes the secondary data for this study.

### **Grounded Theory**

For qualitative studies, the grounded approach is efficient from observations made by researchers (Creswell, 2013). In the grounded theory, the researcher performs fieldwork by collecting data from patient observations to do a proper analysis (Creswell, 2013). Precise questions that are used are open-ended to direct the research which is built on past experiences and interests (Creswell, 2013). The purpose of the grounded theory is to explore the previous knowledge and to potentially discover new phenomena (Creswell,

2013). After the data collection process and analysis, it is possible for the development of a new theory that is in line with the questions that were asked (Creswell, 2013). The use of the grounded theory can assist the researcher with the best way to sample for the study, which is known as theoretical sampling (Creswell, 2013). An example of theoretical sampling for this study includes the time frame of psychiatric admission. The grounded theory approach is necessary in order to gather data on the life experiences of psychiatric patients.

### **Biopsychosocial Theory**

The BPS is used to assess aspects of a person's biological, psychological, and social elements that can influence their health and well-being (Hatala, 2012). It is important for researchers to understand what factors can lead to an acute, chronic, or mental illness. What is experienced in life can lead to vulnerabilities to the patient and caregiver. According to the BPS, psychological factors that may cause a person to become vulnerable could be their emotions or perceptions. Biological factors that can cause vulnerabilities may include genetics; social factors are interactions within the environment (Hatala, 2012). Each of the components of the BPS can have an effect on the others and cause deterioration to health (Hatala, 2012).

### **Health Belief Model**

The use of the HBM can be beneficial when a person has awareness of the seriousness of a disease (Wong et al., 2013). For example, a group of women in one study agreed there are ways to prevent colorectal cancer (Wong et al., 2013). The level of perceived severity was higher for women than men, which resulted in adherence for

screenings that would detect cancer (Wong et al., 2013). In regard to cues to action, participants went a step further to educate themselves by reading printouts discussing colorectal cancer and continued to feel motivated for getting screenings in the future (Wong et al., 2013). The knowledge gained from reading was that the disease is harmful and could be painful (Wong et al., 2013). The HBM states that if a disease is perceived as having an adverse effect on the body, healthier actions are taken for prevention and control (Wong et al., 2013). Also, their psychological well-being improved by not feeling discouraged or afraid to have recommended screenings by health professionals (Wong et al., 2013).

### **Transtheoretical Model of Change**

The TTM was designed to address many health risk behaviors in moderation (Prochaska et al., 2014). The TTM has a successful history of changing behaviors for those with a mental illness and unhealthy behaviors (Prochaska et al., 2014). One study concluded that the TTM helped individuals improve the prevention of depression, deal with stress, and decrease their use of opiates (Prochaska et al., 2014). The process of the TTM is most useful because it has a goal to produce permanent change from unhealthy behaviors (Prochaska et al., 2014). There is an increase of motivation that is built throughout the different stages and gives a person more confidence (Prochaska et al., 2014). Also, the steps are completed in moderation so both the patient and health professionals can monitor behavioral change (Prochaska et al., 2014).



### **Role of the Researcher**

As the researcher, my duties consisted of collecting all secondary data and performing a data analysis through coding. Other duties included selecting the sample, entering data, and writing. Since this is a qualitative study, the focus was on the response of a small sample with attention on their experiences in a thematic fashion. I am employed with Houston Methodist Hospital, and I have observed the behavioral care team with patients that have an acute or chronic mental illness. I used the data that the team previously collected from the patients or caregivers. I have been able to monitor and observe how the care team entered in the patient/caregiver responses into the hospital databases that were used for this study. I do not have any personal relationship with the patients or caregivers in this study.

I did not have any direct contact with caregivers or patients for this study. Therefore, there was no influence or manipulation to change their opinion, feelings, or thoughts. The behavioral care team already had a set of questions to ask the patients and caregivers. The interpretation made from the data that was collected is based solely based on their feedback to avoid biases and not my opinion. The main way biases were avoided was that the study is based on the responses of the patients and caregivers. The data collected from the databases was handled with care to ensure patient confidentiality. The feedback from the patients has been displayed, and is not based on my beliefs or opinions. I have experience with data entry and the management of record keeping. Therefore, all information was kept private throughout the time frame of data collection.

## **Methodology**

### **Sample**

The participants for this study were previously recruited by past researchers. The sample for this study was based on the following inclusion criteria: (a) patients that volunteered to be a part of the behavioral transition program, (b) the diagnosis of a mental illness, (c) the diagnosis of comorbidities, (d) prior hospital history in the past 5 years, (e) possibly has a caregiver. The exclusion criteria would apply if the patient did not meet any of the inclusion criteria. The sampling for this study consisted of 10 patients that received psychiatric care from Houston Methodist Hospital: The Bridge Group. The Bridge Group provided assessments to the patients to make sure they were following their discharge orders. There are a total of 3,471 records available for patients that were voluntarily in the program. The patients selected for this study were a part of the program within the last 3 years. The sampling number is appropriate enough to get data on their experiences based on the inclusion criteria. The participants in this study were diagnosed with a mental illness such as dementia, schizophrenia, PTSD, and bipolar disorder. Also, some of the participants may have an acute or chronic disease including heart illness or cancer.

### **Data Collection**

The archival data that was collected and used for this study is confidential. The documented transcripts are put away in locked file cabinet that only I have access to. As far as the transcripts kept, the behavioral care team had access for review. To make sure that their identity was not revealed, the patients were deidentified by the use of an

alphabet instead of demographics. The data used for this study came from the responses that patients and caregivers provided to the behavioral care team from the previous three years. The sampling size for qualitative data was in line with the principles of the grounded theory.

To collect the secondary data, I utilized two hospital databases for the Houston Methodist Hospital. In the system Epic, there are a total of 2,478 cases clinically documented and saved by the behavioral care team. This database is used to house pre-discharge information. For example, there are summaries of the interactions between the patient, psychiatrist, pharmacist, nurse practitioner, and social worker. In Epic, there is a large amount of data provided to help with treatment plans. For example, all of the patient's ordered laboratory tests and results are available. Also, any complaints from the patient are visible along with health information and medications. Before the patient is discharged, the behavioral care team would reach out to see if the patient would like to be a part of the program. If so, the patient would be contacted once discharged and different interventions provided.

REDCap is an electronic database that researchers use to build surveys and export data (Harris, Taylor, Thielke, Payne, Gonzalez, & Conde, 2009). Currently, REDCap houses 3,471 patient records that include patient intake information, discharge information, diagnoses, past and present medication activity. Also, REDCap is used to document post-discharge activity from the patient and caregiver. To help assess the patients' health status the behavioral care team utilized the Morisky Medication Adherence Scale and the Patient Health Questionnaire-9. Both surveys ask probing

questions such as the acknowledgment of barriers that may influence poor health behavior, medication adherence/non-adherence, and feedback from the patient/caregiver. The Morisky scale is a guide for the behavioral care team to understand the patients' psychological well-being. For example, there are questions asked about feeling hopeless or depressed.

### **Data Analysis**

A secondary analysis of qualitative data was performed to compare the original research with present findings (Long-Sutehall, Sque, & Addington-Hall, 2010). Secondary data should be precise, detailed, and transparent (Long-Sutehall, Sque, & Addington-Hall, 2010). For this study, a secondary analysis was appropriate so that historical quality and behavioral patterns could be discussed (Long-Sutehall, Sque, & Addington-Hall, 2010). The process of the emergence of themes from the data is done through inductive reasoning (Vaismoradi, Turunen, & Bondas, 2013). The analysis that was performed came from the feedback of the questions that were asked by the behavioral care team in the form of themes and patterns. The data analysis for this study with the grounded theory thrived from collaborations between the data, the theory, and the coding done by the researcher (Creswell, 2013).

As the researcher, it was important to be familiar with the original data for a secondary analysis (Creswell, 2013). For example, if there were any behavioral trends from the patients, recognizing if there were consistencies or changes was a huge part of the analysis. To start the data analysis, the first step was to review both Epic and REDCap. The data reviewed included the questions asked to patients/caregivers during

inpatient and outpatient care about their feelings, emotions, finances, living arrangements, health status, social support, medication adherence, hospital history stay, reasons for admission, discharge information, and an additional clinical documentation. After many reviews and becoming familiar with the secondary data, everything was documented and saved in a file in Excel to track the patterns for the theme. The responses about patient/caregiver experiences were saved in Microsoft word, from a historical perspective. Since this was all secondary data, the patients and caregivers were not contacted for any revisions.

The strategy for this study was a content analysis. For a content analysis, data is collected through a documentary analysis and include coding, categorizing, and indexing (Vaismoradi, Turunen, & Bondas, 2013). The content analysis made it possible for to summarize raw data into themes from interpretations made (Vaismoradi et al., 2013). The questions that were asked to the patients and caregivers by the behavioral care team have been reflected from the various experiences during pre-discharge and post-discharge. Documenting the responses led to the extraction of the development of themes. Afterward, the transcription of the data was performed in a thematic sense by searching for keywords for behavioral patterns.

The data that was analyzed was then sorted and coded to notice any repetitive and consistent themes. The grounded theory came into play to categorize the data (Creswell, 2013). The software that was used for this study was Coding Analysis Toolkit (CAT) for sorting, coding, analyzing and managing the data (Shulman, 2014). With the grounded theory, it was useful for comparing the themes that were found in the data which is

known as open coding (Creswell, 2013). Open coding became necessary for allowing the research to be examined and make interpretations to categorize the data (Creswell, 2013). The goal of categorizing words and experiences helped support the framework that was set for this study. The data used was then analyzed continuously through coding by searching for words that were equal to the theme in the study. The data saved from Excel and Microsoft word was uploaded to CAT, which was password protected. After the upload, the file became codable and was further analyzed.

### **Verification of Trustworthiness**

It was important as the researcher, for me to convince the reader that the study is viable and true. The results of a study should produce consistent results and apply to the population of interest (Creswell, 2013). This will ensure that the study conducted achieved reliability. External validity means that the results are generalized and are fit for the population in the study (Creswell, 2013). Since all of the data collected is secondary, there were not any patients or caregivers to be manipulated or controlled.

### **Ethical Procedures**

Before the data collection process could begin, communication with the Houston Methodist Hospital Research Institute Credentialing department had to be made. The credentialing process consisted of completing an intensive training through the Methodist Online Research Technology Initiative (MORTI). The training involved a series of modules for data/sampling analysis, chart reviews, and behavioral research for human subjects that are non-interventional. The credentialing process was a requirement in order to collect secondary data. Once the training was completed, an approval letter was issued

for data collection. The approval letter is attached in the appendix A indicating the usage of data. The identity of the patient and caregiver is protected by masking their identity of this study by using an alphabet in place of their name.

### **Summary**

The approach for this study presented the potential to locate the factors that led to hospital readmission whether it was a lack of medication adherence or trouble in their home. The use of the qualitative method helped to uncover themes and patterns that were useful to researcher for an effective discharge plan. Chapter 4 gives a complete description of the study that was conducted as well as the diagnoses, medications, data collection, data analysis, and the study results.

## Chapter 4: Results

### **Introduction**

The purpose of this qualitative study was to explore the experiences of psychiatric patients during their transition from inpatient care to outpatient care. The grounded theory is the systematic methodology applied in this study with a perspective to the utilization of the biopsychosocial model. According to the BPS, a person's mental and physical health is dependent upon reciprocal actions between biology, psychology and social settings (Hatala, 2012). The participants that were selected for this study are patients that were discharged from Houston Methodist Hospital and volunteered to be a part of the Psychiatric Transition Bridge Program. The research questions used to direct this study were:

#### **Central Question**

RQ1 - What is the impact of home care on psychiatric patients released from hospital and later readmitted?

#### **Sub Questions**

RQ1a - How do psychiatric patients describe their experiences at home about the home care they received once they were released from hospital?

RQ1b - How does the home caregiver describe the patient's behavior and adaptation when they were brought home from hospitals?

RQ1c - Have the home caregivers faced any problems and issues when caring for these released psychiatric patients?



The goal of this study was to examine how experiences in homecare may have influenced patient hospital readmission. Chapter 4 includes a secondary data analysis from two hospital databases called Epic and REDCap. The data included is from patients that were discharged from a hospital after receiving mental health care within the previous 3 years. This section includes the data collection and analysis and an assessment of the trustworthiness of the data.

### **Setting**

The data collected by the transition team originated within the Houston Methodist Hospital System via telephone, teleconference, and in the patient's home with their consent. Because the data were archival, I did not have any direct contact with the participants. Therefore, there were no influences on the interpretations made in this study.

### **Demographics**

The participants in this study had been recently discharged from the hospital and were diagnosed with an acute or chronic mental illness. To protect the privacy of the patients, they are deidentified by an alphabet. For example, Participant A is identified as participant 1. All participants in this study have previous psychiatric hospital history and have been readmitted within 30 days of a previous hospital stay. For the purpose of this study, the participant's psychiatric symptomology was the primary focus due to being a contributing factor to hospital readmission. The hospital history category was used as a part of the mental health assessment provided by a psychiatrist at HMM from reviewing previous hospital history records of the patient. The mental health category described

what was diagnosed by the psychiatrist after current readmission. The demographics used in this study are indicated below in Table 1.

Table 1

*Population Demographics*

<b>Participants</b>	<b>Mental health diagnosis</b>	<b>Hospital history</b>	<b>Reason(s) for readmission</b>
Participant A	Major Depression with Psychotic Features	Depression and nausea	Realizing responsibilities, poor eating, unable to find psychiatric care that accepts current insurance, overtaking pain killer medication
Participant B	Major Depressive Disorder, Borderline Personality Disorder	Suicidal ideation	Panic attacks
Participant C	Depression, Substance Abuse Disorder	Suicidal attempt, depression, seizures, substance abuse	Substance abuse, stress
Participant D	Depression	Suicidal ideation, Major Depressive Disorder, drug overdose	Depression, passive suicidal ideations

Participant E	Post-traumatic Stress Disorder, Depression,	Suicide attempts	Fear of suicide attempts and paranoia
Participant F	Anxiety Schizoaffective Disorder, Depression, Severe Anxiety, Substance Abuse Disorder, Bipolar Disorder	Suicide attempts, increased depression and anxiety symptoms	Hallucinations
Participant G	Major Depressive Disorder, Schizophrenia, Bipolar Disorder	Suicide attempts, substance abuse	Cognitive dysfunction, insomnia, weight loss
Participant H	Schizoaffective Disorder, Depression, Anxiety	Non-adherence to medication	Hallucinations. Substance abuse
Participant I	Chronic Depression, Major Depressive Disorder, Anxiety	Severe suicidal ideations, paranoia	Ingestion of chronic medication, paranoia
Participant J	Substance abuse, Psychosis	Non-adherence to prescribed medication increasing symptoms	Psychosis symptomology becoming worse

Participant A was treated at Houston Methodist Hospital and was diagnosed with major depression with psychotic features. Participant A had previous psychiatric hospitalization due to depression and nausea. The reason for their hospital readmission was the realization of responsibilities, poor eating, inability to find psychiatric care that accepts current insurance, and overtaking pain killer medication.

Participant B was treated at Houston Methodist Hospital and was diagnosed with major depressive disorder and borderline personality disorder. Participant B had previous psychiatric hospitalization due to suicidal ideation. The reason for their hospital readmission was panic attacks.

Participant C was treated at Houston Methodist Hospital and was diagnosed with depression and substance abuse disorder. Participant C had previous psychiatric hospitalization due to a suicide attempt, depression, seizures, and substance abuse. Their hospital readmission was due to substance abuse and stress.

Participant D was treated at Houston Methodist Hospital and was diagnosed with depression. Participant D had previous psychiatric hospitalization due to suicidal ideation, major depressive disorder, and drug overdose. The reason for current hospital readmission was due to depression and passive suicidal ideations.

Participant E was treated at Houston Methodist Hospital and was diagnosed with post-traumatic stress disorder, depression, and anxiety. Participant E had previous psychiatric hospitalization due to suicide attempts. The reason for current hospital readmission was due to fear of suicide attempts and paranoia.

Participant F was treated at Houston Methodist Hospital and was diagnosed with schizoaffective disorder, depression, severe anxiety, substance abuse disorder and bipolar disorder. Participant F had previous psychiatric hospitalization due to suicide attempts, increased depression and anxiety symptoms. Current hospital readmission was due to hallucinations.

Participant G was treated at Houston Methodist Hospital and was diagnosed with major depressive disorder, schizophrenia, and bipolar disorder. Participant G had previous psychiatric hospitalization due to suicide attempts and substance abuse. The reason for current hospital readmission was due to cognitive dysfunction, insomnia, and weight loss.

Participant H was treated at Houston Methodist Hospital and was diagnosed with schizoaffective disorder, depression, and anxiety. Participant H had previous psychiatric hospitalization due to non-adherence to medication. Current hospital readmission was due to hallucinations and substance abuse.

Participant I was treated at Houston Methodist Hospital and was diagnosed with chronic depression, major depressive disorder, and anxiety. Participant I had previous psychiatric hospitalization due to severe suicidal ideations and paranoia. The reason for current hospital readmission was due to ingestion of chronic medication and paranoia.

Participant J was treated at Houston Methodist Hospital and was diagnosed with substance abuse and psychosis. Participant J had previous psychiatric hospitalization due to non-adherence to prescribed medication increasing psychosis symptoms. Current hospital readmission was due to symptomology becoming worse.

## Data Collection

There were a total of 10 participants in this study. After the approval from the hospital IRB on February 7, 2017, I was approved to conduct a noninterventional human subject study. The archival data was collected from patients and their caregivers who voluntarily agreed to be a part of the psychiatric transition program at Houston Methodist Hospital. The data selection began and ended in March 2017. The archival data was searched through daily averaging up to 6 hours a day. The reason that the gathering of the data took 1 month is that it is all archival from previously collected by the behavioral team and was readily available to analyze. There were not any alterations from the strategy that was described in Chapter 3. Also, there was no conflict of interests during the data gathering process such as research bias.

All data was collected and stored within two hospital databases by the psychiatric transition team that included psychiatrists, psychologists, pharmacists, nurse practitioners, chemical dependency counselors, and social workers. The first database is known as Epic which is an electronic software that stores health records (Houston Methodist Hospital, n.d.). The data that is housed in Epic is solely used during inpatient care and includes such information as the feedback from members of the behavioral transition team, reason for admission, past hospital history, social history, psychiatric plan of care, and mental health diagnosis and assessment. The second database used is known as REDCap and is necessary for outpatient care (Harris, Taylor, Thielke, Payne, Gonzalez, & Conde, 2009). REDCap currently houses medical surveys, home self-care assessing the patient's independence, readmission information, prescribed medication

adherence, and patient/caregiver feedback. The data for this study was documented and saved in an excel spreadsheet on a shared drive protected by Houston Methodist Hospital.

The psychologist on staff assisted in my review the data. It was important to ensure that the gathered data was interpreted properly based on the psychiatric transition team's original data collection. The time frame of the data that were gathered was within the previous 3 years.

### **Data Analysis**

For the study, the reporting process includes inductive coding from a repetitive reading of the data to identify and divide the sections that contain units by creating labels for each category. The analysis completion is by the Coding Analysis Toolkit (CAT), which helps to speed up the coding and provides reliability. I used CAT to avoid bias in the study; therefore, all of the data were entered into CAT once gathered. There is a preparation of raw data files through data cleaning by making sure that irrelevant text is removed such as health insurance coverage and lab test results, or modifications were made if necessary. The content is reviewed multiple times for me to become familiar with the findings and comprehension of themes.

The participants are assigned with alphabets instead of their name. I then analyzed the data to search for themes to emerge. To have a useful analysis, I used open coding which helped form the units. Categories are created for low-level coding with CAT. This specialist software was useful by helping speed up the coding and validation. It was important to ensure there were no overlaps with the coding; however, an ample amount

of data was included in more than one category. At the end of the coding process, each category included revisions to identify the meanings. Afterward, I was able to identify patterns and make interpretations to answer the research questions.

According to Vaismoradi, Turunen, and Bondas (2013), a content analysis is utilized to produce a thematic format for coding and categorizing. The content analysis method in qualitative research allows the researcher to make a connection between cause and effect of various experiences. The use of a content analysis can help researchers to be able to quantify and examine the meanings and relationships of individual words and to make an interpretation (Vaismoradi, et al., 2013). The data is gathered from two different databases resulting in categories and themes to fit each system.

Throughout the analysis, it is apparent for some themes to correspond with another in Epic and REDCap. For example, medication adherence is identified and determined that the patient did not take their medication as prescribed due to the unwanted side effects. On the other hand, some patients are okay with taking their medication once adjustments were made to the dosage or they are prescribed a less expensive brand. Another theme that did coincide in both databases is social support. For the most part, the patient has social support whether it is from the caregiver, family, friends, support groups or therapy. Having social support may have an influence on the progression of the patient taking their medication as prescribed.



## **Evidence of Trustworthiness**

### **Credibility**

The results of a study should produce consistent results and apply to the population of interest (Creswell, 2013). This will ensure that the study conducted achieved reliability. External validity means that the results are generalized and are fit for the population in the study (Creswell, 2013). Since all of the data collected is secondary, any of the patients or caregivers are manipulated or controlled. The research process can help expose the involvement of the researchers in regards to gathering the data, analyzing the data, ensuring reliability and validity, and efficiently making interpretations without bias.

### **Transferability**

Bias and influence on the results are avoided as I did not have any contact with the participants. I have spent years gaining knowledge about the topic and population of interest, including professional experience at my place of employment. Before proceeding to the data collection phase, my dissertation committee and the IRB at Houston Methodist Hospital requested specific information of what would be reviewed and disseminated for this study, which has been approved. Following the hospital IRB approval, the IRB at Walden University released an approval to proceed to the final study stage.

### **Dependability**

For the data collection process and interpreting the data, it is important to refrain from opinion and bias. If bias took place, the results would not be accurate which would

defeat the purpose of the research. From the data that was collected for this study, the experiences of the patient's inpatient and outpatient care were documented. Upon the identification of the categories, the coding is done to identify themes. The psychologist from the behavioral transition team will review the accuracy of the data to make sure there is an avoidance of bias from me, and to also assist with the interpretation of the findings.

### **Confirmability**

According to Tong (2016), confirmability is necessary for the findings and interpretations to represent the perceptions of the participants in an accurate way without influence from the researcher. The findings are conclusive to the neutrality from me as well as the experiences of the patients and caregivers. Confirmability will make it possible to align the research questions, and the data gathered the assurance needed to fit the purpose of the study without bias. A second reviewer of the data is available to assist with coding and the accuracy of interpretations. All research proceedings will be followed as stated in previous chapters during the entire phase of this study.

### **Results**

The results are developed by using a secondary content analysis of archival data which had been previously collected by past researchers in a hospital that is a part of the Psychiatric Transition Team in Houston, TX. The purpose of this section is to present the results that were gathered from the two hospital databases Epic and REDCap. During the data collection phase, I did not have any direct contact with the participants as all data had been previously collected by the behavioral transition team at Houston Methodist

Hospital. The research questions are developed based on patient and caregiver perceptions and experiences in both inpatient and outpatient care. All of the data in this study are used to answer the research questions. All research procedures are followed as mentioned earlier in the previous chapter for this study.

### **Central Question**

#### **RQ1 - Qualitative: What is the impact of home care on psychiatric patients released from hospital and later readmitted?**

There are a total of ten participants in this study. From the information gathered, the majority of the participants are independent with self-care once discharged, meaning bathing, feeding, taking medication, and cleaning after themselves could be managed without help. However, more than half of the participants are not adherent to the home instructions provided to them by the psychiatric transition team such as being adherent with prescribed medication. One participant was able to have a nurse to come into their home to provide health care needs. Two participants received outpatient care at a psychiatric facility and at a psychological care and healing center to avoid readmission. Two participants are dependent on their caregivers for self-care including medication management. One of the caregivers agreed to a “welcome home from the hospital” for the patient and administer the medication. If there is a lack of social support or a caregiver available, a member of the behavioral transition team such as the nurse practitioner or psychologist will encourage engaging in group therapy for support and the improvement of depressive symptomology.

## **Sub Questions**

### **RQ1a - Qualitative: How do psychiatric patients describe their experiences at home about the home care they received once they were released from hospitals?**

Participant D has depression related to loss of spouse. The patient does have adult children, but they do not assist with home care. The participant stated ‘I am not a crier but I feel depressed’. The same participant also said, "I don't know that there is anything that will help." The nurse practitioner can make suggestions for the participant to get involved in senior activities. The patient reported that "I'm not much into senior activities...I hang out with younger people." Another participant reported self-care but relies on parents for meals. Another participant made the description of "struggling with depression...crying... [having] anxiety." Other participants were independent in providing their self-care but did require supervision of medication management. One participant mentioned having trouble concentrating and experienced insomnia.

### **RQ1b - Qualitative: How does the home caregiver describe the patient's behavior and adaptation when they were brought home from hospitals?**

One of the participant's father is the caregiver and is responsible for medication management. According to the caregiver, “spouse does not want to assist with home care of the patient” which leaves all duties to the patients father. Another caregiver felt that the participant “could not make their decisions”, as far as handling the discharge planning. For another participant, the caregiver did not agree with home care instructions until adjustments were made with prescribed medication. The majority of the caregivers agree with the advice provided by the nurse practitioner for providing home care for the

participant. Caregivers reported “improvement in behavior”, once there was a change in prescription medication as far as a decrease in side effects. There are concerns from caregivers who took care of patients that were depressed and also had suicidal ideations. Caregivers mentioned how some of the participants “would not eat at times due to stress”.

**RQ1c - Qualitative: Have the home caregivers faced any problems and issues when caring for these released psychiatric patients?**

The main issue with caregivers is non-adherence of medication. Some of the participants also have other chronic illnesses and did not want to take multiple medications. One caregiver felt “overwhelmed with the medication management”. Two of the caregivers gave an ultimatum to the participant to follow the home instructions provided. For example, for the participant to remain living in the caregiver’s home, they had to become adherent to their medication and attend assigned follow-up appointments.

The categories that emerged this study consist of hospital history, mental health diagnosis, and reasons for readmission for the Epic database which is for inpatient documenting. Keywords are quite frequent and based on reoccurring experiences of the participant: depression, rehospitalization due to chronic illness, suicidal ideation, poor appetite, health insurance, poor-decision making, guilt, worthlessness, hopeless, insomnia, non-adherent to medication, psychological stressors, current substance abuse, worry, stress, fear, cognitive dysfunctioning, suicide attempts, lack of social support, non-adherence to discharge planning, low motivation.

From the REDCap database, categories are identified as autonomy, adherence, and social support. Keywords are quite frequent and were based on reoccurring experiences of the participant and caregiver: readmission, follow-up visits, medication adherence, symptomology, fear, hopeless, adherence, non-adherence, insomnia, grieving, social support, help, improvement, overwhelming, cost, guilt, improvement, side effects, harm, independence, dependence, irritable, anger, memory and safety. Each theme includes perceptions and emotions that represent the categories of this study. Also, the themes represent an aid in helping me to interpret the data in a narrative form.

There are common themes identified throughout the analysis from both databases. For example, in Epic, those themes are guilty, worthless, hopeless, suicidal ideation, medication adherence, having social support, substance abuse, and depression. All of these themes play a role in the patient being admitted to the hospital to receive inpatient psychiatric care. In REDCap, the common themes also include medication adherence, social support, follow-up visits, side effects, and independence. One of the caregivers mentioned “the patient refuses to eat every three weeks”, but would still provide social support. Another caregiver stated providing assistance by getting the patient to “drive alone to the follow-up appointments”. The themes from REDCap are established during post-discharge for the patient. Alongside the most common themes, there are some less common and may not have contributed to hospital admission as much but are acknowledged during the analysis. In EPIC, the less common themes are stress, suicide attempts, energy, memory and poor social support. In REDCap, the less common themes are dependence, forgetful of taking medication, struggle, fear and denial.

During the analysis of the data, there are a few themes that did contribute to hospital readmission. Most of the patients have prior hospitalization from a chronic illness that in turn led to the development of depression. For some of the patients, substance abuse and depression would result in hospital readmission. A few of the patients would engage in suicidal attempts or thought of committing suicide and would result in the fear of self-harm and readmission. If a patient did not attend follow-up visits as instructed, there is a feeling of continued hopelessness or low energy because the proper professional help is not provided, which would result in hospital readmission.

### **Summary**

In chapter four, there is an establishment of results from the data gathered for this qualitative study that entail the experiences and psychological well-being of patients once they are discharged from inpatient hospital care. The participants in this study volunteered to be a part of the Houston Methodist Hospital (HMH) Behavioral Health Transition of Care Program. Throughout this chapter, I have reiterated the study's purpose more in depth by the research questions, participant demographics, retrospective data collecting, and data analysis with the assistance of CAT, evidence of trustworthiness, and the final results which were gathered from two databases used at HMH. The following chapter will include my interpretation of the research findings, any study limitations, recommendations, and future implications that would apply to social change.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

The purpose of this study was assessing the home care of psychiatric patients and how they adapted to outpatient care once discharged. I used a qualitative method to examine the experiences, perceptions, and emotions of caregivers and psychiatric patients. There was a need for this type of exploration due to the minimal attention to outpatient care provided to psychiatric patients and the reasons for hospital readmission. The depiction of the data analysis acknowledged how the patients and caregivers were able to become accustomed to the care received post-discharge, what led to rehospitalization, as well as their psychological well-being. It is important to prevent readmission by identifying what contributes to the reoccurrences. One of the main factors for hospital readmission of psychiatric patients was low social support and length of stay in the hospital (Donisi, Tedeschi, Wahlbeck, Haaramo, & Amaddeo, 2016).

A significant gap in research is a lesser focus on behavioral health. It is essential for a gain of strength on mental health to occur to avoid hospital readmission. I used a retrospective strategy to investigate the causes for hospital readmission. The data used for this study were collected by past researchers. The qualitative method allows for the researcher to open the pathway of assessing experiences, values, emotions, and opinions without bias (Fassinger & Morrow, 2013). By using the qualitative method, the researcher can effectively interpret the data that was retrieved (Fassinger & Morrow, 2013). It was imperative for me to be able to analyze the causable factors that led to hospital admission and readmission. The main conclusions were discovered by gathering



archival data from previous researchers, and creating themes and categories to reveal the inpatient and outpatient care experiences documented from patients and caregivers.

### **Interpretations of the Findings**

#### **Central Question**

RQ1 - What is the impact of home care on psychiatric patients released from hospital and later readmitted?

#### **Sub Questions**

RQ1a - How do psychiatric patients describe their experiences at home about the home care they received once they were released from hospitals?

RQ1b - How does the home caregiver describe the patient's behavior and adaptation when they were brought home from hospitals?

RQ1c - Have the home caregivers faced any problems and issues when caring for these released psychiatric patients?

The first research question is developed to examine the possible influences on hospital readmission for psychiatric patients. Previous studies confirmed that 50% of patients are admitted for their first hospital stay due to nonadherence of antipsychotic medication (Baloush-Kleinman et al., 2011). The findings of my study confirmed that patients were readmitted to the hospital for not following the home instructions provided by health professionals, such as adhering to their prescribed medication. Patients and their caregivers are provided with instructions for home care before hospital discharge. Some of the patients did not like the side effects from the medication, which resulted in nonadherence and ultimately hospital readmission. Another confirmation of the findings

with the previous literature is that patients with an anxiety disorder exhibited poor adherence to medication and did not attend therapy sessions. It was discovered that the patients in this study who had a phobia, anxiety disorder, or PTSD were nonadherent to medication and did not make their follow-up appointments as required. Another cause for readmission, founded in my study is if the patient has comorbidity and is having to take multiple medications. Taking more than one medication daily led to nonadherence from increased side effects.

Previous researchers stated that patients express independence through the psychoeducation provided by health professionals. In this study, eight out of the 10 patients were able to take care of themselves in regard to bathing, cleaning, eating, and taking medication on their own, with the home care instructions given to them. Psychoeducation was provided to the participants in this study by the behavioral transition team during home visits to monitor the progression to outpatient care and avoid readmission. There were also suggestions for interventions that included developing coping skills, attending group therapy and social settings.

The second research question was used to investigate how the patients perceive the care received at home postdischarge. Most of the participants had assistance with home care from their caregiver, if applicable, and all had constant interactions with the behavioral care team such as the nurse practitioner and staff psychologist. Many of the participants were experiencing the symptomology of depression and struggled with taking their medication, being motivated to engage in social activities or be independent with self-care. Other participants were independent with self-care but still required the

caregiver to manage their medication. Previous researchers that I examined in the literature review discussed the beliefs of a psychiatric patient and the seriousness of their mental illness. There were perceived barriers that did interfere with medication adherence such as the dislike of side effects or the cost of medication. However, once adjustments were made to the medication, including a lower dosage or a less expensive brand, participants became adherent. On the other hand, cue to action indicates that participants are reminded by their caregiver to take their medication as directed or are supervised taking the medication.

I used the third research question to investigate how the caregivers adapted to helping the patient during outpatient care after being discharged from the hospital. The caregivers mentioned the feeling of being overwhelmed from medication management and caring for the patient throughout the day. One caregiver was responsible for decision making for home care instructions. However, when caregivers noticed a positive behavioral change in the patient, including medication adherence, the caregivers became happy. According to the literature, 28% of caregivers do not have much free time to themselves, have emotional distress, or are bewildered when caring for a psychiatric patient (Weller et al., 2015). At least 78% of caregivers are responsible for monitoring medication daily (Coleman et al., 2015). If the patient is adherent to the discharge planning, that insinuates the openness to positive change and healthy psychological well-being for the patient and caregiver (Weller et al., 2015).

I used the last research question to examine if caregivers had experienced any challenges while caring for the patient during outpatient care. The top concern faced by

caregivers was the patient being adherent to their medication. Out of the 10 caregivers, two offered an ultimatum to the patient for following the home care instructions. To continue living with the caregiver, the participant had to comply with the home care instructions provided by the behavioral care team. One caregiver did mention being frustrated with the patient's nonadherence to the discharge plan. The caregivers also had to transition to outpatient care with the patient as they were assumed to take on responsibility for the patient's progression of health (Coleman et al., 2015).

### **Limitations of the Study**

The first limitation in this study is that all data used was archival. Being that this is a retrospective study, all of the data had been previously collected by researchers on the behavioral transition team before IRB approval. The second limitation was that there were only two reviewers of the data to ensure accuracy. Perhaps if there were more than two reviewers, having a third person to agree with the data would break the tie of confirmation of the consistency in the data. The third limitation was that I did not have direct contact with any of the participants or caregivers during the data gathering process. The fourth limitation was having a small sample size of 10 participants.

### **Recommendations**

For research conducted in the future, there should be an expansion of the definition of psychological well-being of patients and caregivers postdischarge. It is essential to identify the triggers that could possibly lead to hospital readmission. Additionally, it is important for researchers to inquire about the transition from inpatient to outpatient care for caregivers and the patient. There are clearly experiences that can impact hospital

readmission. Before discharge, it could be helpful to ensure the caregiver and patient understand the home care instructions provided. Although it is possible that the home care instructions may be a trial and error run, open communication between the caregiver, patient, and health providers is necessary for an improvement in mental health.

The literature that I explored in Chapter 2 indicated that transition from inpatient to outpatient care can be difficult for patients and caregivers. The treatment plan for discharge planning includes a proper diagnosis, review of symptoms, and the education of the mental illness (Cruz & Pico, 2014). Effective discharge planning is useful because it allows health professionals to be proactive in the treatment plan and monitor the progression of the patient after they have been discharged. The concerns of the caregiver and patient should be addressed before the patient is discharged and should be included in home care instructions designated by health care professionals. Active communication among all parties involved is important for good mental health. Not only does the patient need to trust the health provider, but also trust their caregiver with responsibilities such as medication management and assistance with other care needs. Adhering to medication, attending follow-up visits, and following other outpatient care instructions would result in a decline of readmissions.

### **Implications**

This study may incite positive social change by removing vulnerability of patients to readmission and offering patients a balanced life. There should be more comparison created in research studies for retrospective and current studies to notice any interchangeable patterns with factors that contribute to psychiatric admission and

readmission. It is important to understand exactly how the lives of the patient and caregiver are effected after repetitive cycles of rehospitalization.

In this study, I focused on how readmissions within 30 days are considered to be negative for psychiatric patients. In this study, there were mentions of nonadherence to medication due to the side effects and cost of medication as being some of the contributing factors for readmission. Perhaps it would be helpful for future researchers to focus solely on ways to reduce cost by making antipsychotic medication affordable for psychiatric patients. Being that those with a mental illness are part of a vulnerable population, targeting specific factors for readmission per study could be beneficial to patients, caregivers, and health providers. Another angle would be to focus on the caregivers as they take on the responsibility of outpatient care for the patient. The psychological well-being for the caregiver is just as important as the patient to help reduce readmission.

The use of this study should be useful for health providers of psychiatric patients to continue to collaborate with caregivers and patients for an almost promising discharge plan to prevent readmission. Health providers may find it adequate for support services to the caregiver to monitor their progress during the transition to outpatient care. Hopefully, these suggestions would lead to a shorter hospital stay and lower admission rates. With multiple rehospitalizations, how can the patient and caregiver improve psychologically? This is why it is paramount for a collaboration of health providers, caregivers, and the patient to see what will work for improving their mental health and be proactive with maintenance.

## Conclusion

The aftercare of psychiatric patients is a crucial process that requires much attention from health providers and the caregivers. There has not been much focus geared toward the transition from inpatient to outpatient care and lead to hospital readmission. Pre-discharge and post-discharge should include thorough care planning as well as psychoeducation for all who are involved in the road to the progression of mental health.

In chapter 5, my interpretation of all findings, study limitations, and any recommendations for future implications have been provided. The data for this study was gathered from the behavioral transition team at the Houston Methodist Hospital. The sole purpose of my research was to explore how the patient and caregivers are impacted once the patient is discharged. With the archival data that has been gathered from the behavioral transition team, new studies could emerge to identify the various discrepancies with hospital admission and readmission for psychiatric patients. The take-home message from this study is for society to understand that mental health is an important aspect of our lives and coincides with one's psychical health. A healthy mind is a powerful mind to bring about change and happy living. Mental health does not discriminate, and neither should society. Let us all help and contribute to those with a mental illness. After all, collaborating to improve a person's mental health is a positive social change.

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## Appendix A: Houston Methodist Hospital Institutional Review Board Approval Letter

8/10/2017

<https://morfi.tmhhs.org/Morfi/Doc/0/9NE6AQ298LPKV8VKAS3DR8TJ1D/fromString.html>

## HMRI IRB 1

### NOTIFICATION OF INITIAL APPROVAL TO BEGIN RESEARCH (EXPEDITED)

Date: February 16, 2017

Study ID: [Pro00016169](#)

Title: Home Care Factors Associated with Hospital Readmission of Psychiatric Patients

The Institutional Review Board reviewed your Request for Expedited Review and the above named project is determined to qualify for Expedited status according to 45 CFR 46.110. The study is approved from through.

**PROVISIONS:** Unless otherwise noted, this approval relates to the research to be conducted under the above referenced title and/or to any associated materials considered by expedited review, e.g. study documents, etc.

**CATEGORY #5:** Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for non-research purposes (such as medical treatment or diagnosis). (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.110 (4). This listing refers only to research that is not exempt.)

**CATEGORY #7:** Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.110 (2) and (b)(3). This listing refers only to research that is not exempt.)

#### Waiver of Authorization to Use and Disclose Protected Health Information

The IRB has determined all the specified criteria for a waiver or an alteration were met in accordance with 45 CRF 164.512(i). Under this approval, the following data elements may be used/accessed in connection with this study:

HIPAA waiver to review charts for questionnaires or interviews, mental health records, data previously collected for research purposes and dates.

<https://morfi.tmhhs.org/Morfi/Doc/0/9NE6AQ298LPKV8VKAS3DR8TJ1D/fromString.html>

1/3

8/10/2017

<https://morti.tmhs.org/Morti/Doc/09NE6AQ298LPKV8VKAS3DR8TJ1D/fromString.html>

Please note that prior to accessing these data elements, you should provide this letter of IRB approval to the applicable medical records personnel. Any changes to this Waiver of

Authorization request must be approved by the IRB before the changes can take place.

Waiver of Written or Signed Consent : 45 CFR 46.116 (d): Waiver of Informed Consent for Minimal Risk Research

**CHANGES:** Should you choose to make any changes to the protocol that would involve the inclusion of human subjects or identified data from humans, please submit the change via MORTI to the Committee for the Protection of Human Subjects for review. Please note that prior to starting any experiments, it is your responsibility to give a copy of this document to all research personnel involved in the project and to discuss the project with each employee. Please ensure that only the most current IRB approved consent may be used during the study. Any changes to the protocol or consent must be approved by the IRB before the changes can take place.

To post information on this clinical trial to the HMRI web site, the study must be listed on ClinicalTrials.gov. Please enter the ClinicalTrials.gov Identifier (i.e., the NCT number) and the Brief Summary from that listing for this trial by clicking on the Submit Web Info activity button in the left navigation list on the study page in the MORTI IRB Module.

If you have any questions or comments, please contact the Office of Research Protection at 713-441-5848 or 713-441- 5837 or come to MGJ3-014, 1130 John Freeman Blvd, Houston, TX 77030. The HMRI IRB is organized, operates, and is registered with the United States Office for Human Research Protections according to the regulations codified in the United States Code of Federal Regulations at 45 CFR 46 and 21 CFR 56. The HMRI IRB operates under the HMRI Federal Wide Assurance No. FWA00000438, as well as those of hospitals and institutions affiliated with the Institute.

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If you are logging into MORTI from outside the Houston Methodist system, the above link may not work. Please log into MORTI directly at <http://morti.tmhs.org> and then navigate to the above referenced project.

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