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Identifying Nursing Strategies to Decrease Re-Hospitalizations Among Mental Health Patients

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2023

Abstract

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Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

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Abstract

Mental health patients continue to be unnecessarily readmitted to hospitals at an alarming rate. As care coordinators, mental health nurses are uniquely positioned to reduce the rapid readmissions to inpatient psychiatric facilities of mental health patients. However, currently, there are no clear evidence-based strategies available for these nurses to address this continuing problem. This project addressed this gap in practice by determining whether a systematic review can identify clear strategies mental health nurses can use to empower their patients to participate in their treatment plan to achieve practical treatment goals. A database search was conducted on Cumulative Index of Nursing and Allied Health, Walden University Library, Medline, PsychINFO, and Google Scholar for peer-reviewed articles published during the last 5 years using the following keywords: *mental health patients, nursing, reducing rehospitalization, and empowerment*. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses was used to conduct the systematic review and identify themes. These central themes were identified: psychiatric readmission triggers, care management intervention, appointment reminders, after-discharge transition interventions, and mental health policy reforms. Though no forthright strategies were identified, findings revealed that mental health nurses can empower their patients and decrease their unnecessary and avoidable rapid rehospitalizations by paying attention to three main strategic points in ensuring that their mental health patients are complete and enjoy their recovery: the inpatient point of care, the discharge point of care, and the follow-up outpatient point of care.

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Dedication

This project is dedicated to all mental professionals, especially to all devoted mental health nurses who work tirelessly to improve the quality care of their patients. Too often, their contributions go unnoticed even by those who benefit from them. It is a calling to work with this special and challenged population. As advocates, nurses strive to ensure that the rights, the safety, the human dignity, and the care of their patients are protected.

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Section 1: Nature of the Project

Introduction

The frequent and unnecessary readmissions of patients to hospitals have been a major concern in U.S. health care system. Readmission in hospitals accounts for $17 billion of Medicare costs annually, which could be classified as avoidable (Warchol et al.,2019). For patients who suffer from mental disorders, the situation is even worse. In a multistate psychiatric hospital study, 8% of the sample (60,254 adults) were readmitted prior to 30 days (Ortiz, 2019, p. 230). Mental health specialists agree that empowering mental health patients through a multifaceted, multilayered approach would alleviate the problem (Habit et al., 2018; Mahone et al., 2016; Moore et al., 2019). However, this approach is not clearly defined or described (Sprah et al., 2017). As a result, the re-hospitalizations of mental health patients continue to remain a challenge for the U.S. health care system (Downey & Zun, 2015; Germack, et al., 2019., Weiss et al., 2021). The gap in practice this project addresses is the absence of clear strategies that mental health nurses can use to empower mental health patients to participate in their treatment plan to achieve effective treatment goals and reduce or minimize re-hospitalizations.

As care coordinators, nurses work cooperatively with a multi-disciplinary health care team with a unified goal to achieve a successful treatment outcome for their patients (Moore, 2018). Mental health nurses can play a great role in reducing the rapid readmissions to inpatient psychiatric facilities of mental health patients. With clear evidence-based strategies, they can effectively empower their patients in following their individualized and coordinated treatment plan and consequently contribute to decreasing

their unnecessary and avoidable readmissions to inpatient psychiatric facilities. This project has the potential benefits to decrease the rapid and preventable re-hospitalizations of mental health patients at the local, state, and national levels, leading to positive social change.

Problem Statement

The National Institute of Mental Health estimates that 51.5 million U.S. individuals aged 18 and above have some type of mental disease, and that lifetime prevalence rates for all mental health disorders are 47.4% (National Institute of Mental Health, 2019). There has been a rise in the number of people seeking help in emergency rooms for psychological issues (Downey & Zun, 2015). Between 2003 and 2011, the rate of rise in hospitalizations for mental disorders was higher than that of any other category of hospitalization (i.e., medical, surgical, accident, maternal/neonatal; Weiss et al., 2021). In 2015, approximately 2.1 million people were hospitalized due to mental concerns, a 20.1% rise from 2005 (Miller et al. 2020). Multiple studies reveal that mental health patients are about 2 times more to be readmitted within 30 days than patients without mental illness (Gaynes et al. 2015, Germack, et al., 2019; Heslin & Weiss, 2021). Between 2009 and 2011, roughly 21.7% of patients with psychiatric comorbidity returned to the hospital within 30 days of release, compared with 15.5% of those without such diagnoses (Ahmedani et al. 2015). Among Medicaid patients, schizophrenia, and mood disorders such as bipolar disorder account for the highest rate of readmissions (Fuller et al., 2016). In my setting, located in a metropolitan area, the psychiatric department sees about 2,800 patients annually and has a readmit average of 18% in less than 30 days. The

value of evidence-based strategies to improve psychiatric nursing care cannot be overemphasized.

The economic burden of readmissions to hospitals is well documented (Fuller et al., 2016; Gaynes et al., 2015; Germack et al., 2019; Kauffman, 2016). Medicare spent $ 27 billion on readmissions for about 2 million patients, with $17 billion of that total being spent on readmissions that could be avoided (Kauffman, 2016). The negative outcomes of readmission are not only reflected in the economy but the patients and their families (Germack et al., 2019, Weiss et al., 2021), and might cause a sense of despair or failure in both the health care team and the individual receiving treatment (Gaynes et al., 2015).

Current strategies to reduce readmissions of mental health patients to inpatient psychiatric facilities are not working (Gaynes et al. 2015 p.1), and the rate of re-hospitalization in less than 30 days continues to increase (Germack et al., 2019; Weiss et al., 2021). Traditionally, people with mental health illness and their families have been excluded from participating in the treatment plan that affects their own lives. Through clear evidence-based strategies, mental health nurses can empower these patients and their families to fully participate in their individualized and coordinated treatment plans.

Purpose Statement

One of the Affordable Care Act's mandates is that hospitals need to reduce their frequent readmissions through Hospital Readmission Reduction Program, (McIlvennan et al., 2015). However, mental health patients continue to seek psychiatric treatment less than 30 days after their discharge. Current approaches with poor communication and lack of care coordination have not made a great difference in preventing them from being

rapidly readmitted to hospitals (Gaynes et al., 2015). No Clear strategies are available to mental health nurses to empower their patients to participate in their treatment plan to achieve effective and long-lasting treatment goals. The practice focus question for this project was "What are the evidence-based strategies that nurses can use to empower their patients/families in the treatment team to manage the discharge plan of care to achieve effective team outcomes and prevent readmissions?" The answer to this question will provide the mental health nurses along with the treatment team including patients/families with clear evidence-based strategies to use in preparing their patients for a successful opportunity to achieve their post-hospitalization treatment plan outcomes. Nurses will be able to empower their mental health patients to effectively participate in their treatment plan, implement it, and achieve positive outcomes. As a result, the goal of this initiative is to raise the standards of care for those receiving mental health services. It will help bring about the kind of beneficial social change that is so essential to Walden.

Nature of the Doctoral Project

The Doctor of Nursing Practice (DNP) project was conducted to address avoidable readmissions of mental health patients in less than 30 days post-discharge and the lack of clear strategies for mental health nurses to empower and guide their patients and families through effective discharge planning (see Sprah et al., 2017). Patients admitted to psychiatric hospitals were the primary target group for this project. CINAHL, Medline, PubMed, and Google Scholar were used to search for peer-reviewed articles published during the last 5 years using the following keywords: *mental health patients, nursing, reducing rehospitalization, and empowerment.* Walden's librarian was contacted

for guidance. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) was used to conduct the systematic review. The evidence obtained from this systematic review can be used to decrease the frequent readmissions of patients with mental illness.

Significance

With mental health nurses applying evidence-based strategies to empower their mental health patients, the benefits can be twofold: First, the nurses can implement clear and common strategies and verbalize these evidence-based strategies to the multidisciplinary team. That leads to team coordination and team cohesiveness which is essential to improve the quality of patient care, patient satisfaction, and the effective and efficient use of health care and community resources. Second, having clear strategies in place allows the mental health specialists not only to work with a common tool but to also have the possibility of evaluating the known strategies for their effectiveness and adjusting as needed for the best outcomes for their patients. In addition, the initiatives encourage patient participation, which improves service delivery and governance, raises the standard of care, and benefits both patients and their families (Bombard et al 2018).

The project's goals are consistent with those of Walden University, whose aim is to encourage students to become constructive members of society. DNP graduates are encouraged by the project to be "leaders in advanced clinical practice that can meet the demand for safe, high-quality, and affordable care while creating meaningful change in our nation's healthcare system," which is consistent with the goals of the American Association of Colleges of Nursing (The Unique Contributions of DNP-Prepared Nurse

Practitioners and Other APRNs, 2021, para 3). Stakeholders include providers, patients, and patient's families, payors, and policymakers who have a common tool to work together to empower their patients and decrease their unnecessary rehospitalizations.

Summary

Mental health patients more than any other patient population are readmitted to inpatient psychiatric facilities at a faster rate (Weiss et al., 2021). This is a burden for the patients and their families, the providers, and the health care system (Germack, et al., 2019; Weiss et al., 2021). Current multilayered approaches have not reduced the avoidable readmissions of mental health patients 30 days after their discharge from inpatient psychiatric facilities. As care coordinators, mental health nurses are in a unique position to play an important role in decreasing the rapid and unnecessary readmissions of these patients to hospitals. But they need clear evidence-based strategies to empower these patients so they can effectively participate in their treatment plan and achieve positive outcomes. Section 1 demonstrates how the project's question and approach for conducting the systematic review of the literature were formulated as well as the significance of the project. The following section discusses the frameworks and models that will be used for systematic review as well as the presentation of concepts related to mental health.

Section 2: Background and Context

Introduction

Through the health care system, most mental ill patients must navigate to get help at inpatient psychiatric facilities. The readmission of mental health patients to hospitals continues to be a challenge despite different measures adopted more than a decade after the passing of the Patient Protection and Affordable Care Act (PPACA) of 2010 which, in part, requires hospitals to reduce the number of re-admissions or face penalties (McIlvennan et al., 2015). Roughly 15% of patients with mood disorders and 22% of patients with schizophrenia are readmitted within 30 days, at a cost of about $7,200 for each readmission across the United States (Heslin & Weiss, 2021). This project was created to discover evidence-based strategies that mental health nurses can use to empower mental health patients to participate in their treatment plans to achieve effective treatment goals and reduce or minimize rehospitalizations. The project question was "What are evidence-based strategies that mental health nurses can use to empower their patients/families in the treatment team to manage the discharge plan of care achieve team outcomes and prevent avoidable hospital readmissions?" In this section, the framework supporting the approach selected for this project, the relevant literature, empowerment in the context of mental health patients, alongside the researcher's role as a DNP student in developing and completing the systematic review are discussed.

Concepts, Models, and Theories

A database search was conducted on the CINAHL, Medline, and Google Scholar for peer-reviewed articles published during the last 5 years using the following keywords:

mental health patients, nursing, reducing rehospitalization, empowerment. PRISMA 2018 guidelines were used to conduct the systematic review for this project, appraising studies to deliver a complete summary of primary research in response to the research question. The overall aim of PRISMA is to help ensure the clarity and transparency of reporting of systematic reviews and meta-analyses by reducing the risk of flawed reporting of those reviews (Liberati et al., 2009). Systematic reviews and meta-analyses hold an important place in health care (Gopalakrishnan & Ganeshkumar, 2013; Moher et al., 2015). For this project, the PRISMA flow diagram was used, which illustrates the flow of information through the different phases of the systematic review and provides details of the number of identified records, excluded articles, and included studies (Shamseer et al., 2015).

Relevance to Nursing Practice

Mental disorders are conditions characterized by altered states of emotionality, cognition, or behavior (Parekh, 2018). Mental illness is characterized by dysfunctional thinking, feeling, and/or acting to the point where it severely limits an individual's participation in and contribution to society (Peterson, 2016). According to the Substance Abuse and Mental Health Services Administration (2020), nearly one in five U.S. adults live with a mental illness (51.5 million in 2019), representing 20.6% of the U.S. adult population. There is still an unmet need for mental health treatment among youth and adults and those who seek help in inpatient psychiatric facilities have a greater chance of being readmitted in less than 30 days (Germack et al. 2019; Ortiz, 2019), despite the different efforts and strategies developed by the mental health specialists. Current

strategies used to reduce psychiatric readmissions vary across the United States, overlapping at times, and influenced by location, state, and local policies (Gaynes et al., 2015). Most strategies focus on a fragmented part of the problem. With such an approach, it is difficult to empower and assist mental health patients who are dealing with a complex brain disorder that causes distress or disability in social, work, or family activities and interferes with daily activities.

In 1986, the World Health Organization introduced a public health strategy that involves patients participating in their care (World Health Organization, 1986). Several mental health services and mental professionals have started to shift from an ethic of paternalism toward an ethic of participatory decision-making and patient empowerment has gained traction as an important component of patient-centered health care and patient safety (Rimondini et al., 2019). Most researchers agree that empowering mental health patients requires a well-defined multi-dimensional approach including the individual and family, the different providers, and organizations, the service, and the society (Aggarwal, 2016). For mental health patients to be empowered, the removal of formal or informal barriers and the transformation of power relations between individuals, communities, services, and governments need to improve (Aggarwal, 2016). Empowering lends appropriate support without taking responsibility for the person and allows them to participate in their treatment plan and recovery (Peterson, 2016).

As mandated by Section 3025 of the PPACA, the Hospital Readmissions Reduction Program (HRRP) provides incentives for hospitals to reduce preventable readmissions (McIlvennan et al., 2015). To increase patient and caregiver participation in

discharge planning, this initiative has prioritized enhanced communication and care coordination. However, patients continue to seek treatment less than 30 days post-discharge costing the hospitals approximately $428 million in fines for 2015 (Kaufman, 2016). The Agency for Health Research and Quality (AHRQ) (2015) found out in its report on Management Strategies to Reduce Psychiatric Readmissions that readmissions of mental health patients are not only costly but disruptive to individuals and families. Recurrent avoidable readmissions can leave both patients and healthcare staff feeling demoralized (Gaynes et al, 2015). Identifying clear evidence-based strategies to effectively empower these patients becomes vital.

Different states and organizations have implemented some strategies to reduce avoidable readmissions to hospitals with minimal success. Most of the common strategies are: With the Agency for Healthcare Research and Quality-funded Re-Engineered Discharge (RED) Toolkit, hospitals may more easily replicate the discharge process that led to a 30 percent reduction in hospital readmissions and emergency department visits (Martin, 2014). The Boston University Medical Center has developed a new and improved toolkit to help implement the RED for all patients, regardless of their ability to communicate in English or their cultural background (Agency for Healthcare Research and Quality, 2021).

The Wellness Recovery Action Plan (WRAP) was developed in 1997 by a group of people who were searching for ways to overcome their mental issues and move to fulfill their life dreams and goals (Canacott et al., 2019). While some experts conclude that this plan is helpful to some individuals with mental illness (Canacott et al., 2019),

others find no significant effect of WRAP in the reduction of clinical symptomatology and re-hospitalization (Canacott et al., 2019). Like many self-help recovery plans, WRAP requires skills that most mental health patients do not have.

Habit et al (2018)'s initiative to reduce the readmission of patients with mental health issues to IPFs is important. A small decline in 30-day readmission rates was observed after an appointment reminder letter was implemented. Three months before commencement, the average readmission rate was 10%. Three months after discharge, the average readmission rate was 9 percent (Habit et al., 2018). Moore et al. (2019) took part in a study looking for causes of psychiatric inpatients' frequent readmission to a state-run facility in Nevada. Participants included 7,177 adults admitted between May 2012 and April 2014. All admissions were analyzed using logistic regression, and people who were readmitted quickly were compared to those who were not. By focusing on those who have a record of Rapid readmissions (RR) and modifiable factors including social and financial assistance and reliable and secure housing, this study shows that it may be possible to minimize rates of costly RR. Psychiatric patients have a high readmission rate, and our knowledge of risk factors for re-hospitalization is limited, as reported by Sprah et al. (2017).

Long-acting injectable (LAI) antipsychotics were developed to enhance medication adherence. Despite their availability and positive outcomes, the use of the LAI remains low and controversial. In their research, Jann & Penzak (2018) highlighted the barriers to the use of LAIs remain and concluded that the "education of both patients and clinicians on the use of LAI formulations and the continued development of these

agents are important steps in ensuring these medications are available to the patients they would be most likely to benefit." (p.241). According to Correll et al. (2016), there are several barriers to LAI in current practice that affects its implementation in clinical practice. The barriers include negative attitude towards LAI, lack of knowledge about these antipsychotics, and insufficient resources and cost issues (Correll et al., 2016).

Even with these numbers, the studies described above indicate that strategies to reduce readmissions are not complex or expensive. In addition, the management options to lessen psychiatric readmissions differ from one region of the United States to another, and current strategies contain multiple components that overlap at times and often involve little to no patient engagement. The lack of communication and coordination among the stakeholders continues to be a challenge (Gaynes et al., 2015).

Nurses who specialize in mental health can make a significant contribution to the quality of treatment provided, patient satisfaction, and the efficient use of healthcare resources (Moore, 2018). As care coordinators, nurses can implement many of the approaches found in the literature as part of a revised discharge and patient/family teaching process. The key is to help the mental nurses develop a process for their setting that is evidence-based and effective, one that can effectively empower their patients for positive outcomes through efficient coordination, communication, and planning.

Local Background and Context

Rapid readmissions, or those that occur within 30 days of release, are seen as signs of poor psychiatric care and inadequate linkage with community-based care in mental health (Ortiz, 2019). It is not unusual to find some healthcare professionals

simultaneously working in different facilities in a metropolitan area. In psychiatric facilities, this trend is even more common. It is therefore frequent to hear a professional reporting that this patient just came from the other facility where he/she works. At times, these patients are inappropriately identified as “frequent flyers” referring to their rapid multiple re-admissions.

Most mental health issues, such as depression, anxiety, and schizophrenia, are more common in urban settings than in rural ones. This includes increased rates of loneliness, isolation, and stress (Peen et al. 2010). It's possible that factors outside a patient's control, including their employment and housing situation, have a greater impact on their likelihood of being readmitted to the hospital after being treated there (Agency for Healthcare Research and Quality, 2016). In the United States, the prison population includes a disproportionate number of people with mental illness because of delays in readmittance to psychiatric facilities (Fazel et al., 2016).

As an admitting coordinator, I witness firsthand the frequency and impact of readmission of mental health patients. Almost every day, neighboring psychiatric hospitals call requesting beds for their patients. Often, the patient for whom the bed is requested is one of our recently discharged ones. Most of the patients who were discharged were not properly equipped to face the post-discharge phase, they were not empowered to assume their responsibilities. The question this project is addressing is the following:” What are the evidence-based strategies that nurses can use to empower their patients/families in to manage the discharge plan of care to achieve effective team outcomes and prevent unnecessary readmissions to hospitals?”

Role of the DNP Student

As an Intake Nurse Coordinator who has worked in a psychiatric department of a community hospital in a metropolitan area for many years, I have the great privileges to observe the positive outcomes as well as failures of the services provided to our patients and to work with different stakeholders (patients, providers, payors, and policymakers) in trying to find effective solutions. At times, my co-workers and I feel helpless as we do not seem able to help these patients who keep on coming back for help. Far from being a particular case, it is rather the unfortunate experiences of many psychiatric facilities in the United States. Recurrent admissions to a psychiatric institution are a major issue, especially for the most severely mentally ill patients (Moore et al., 2019; Ortiz, 2019; Sprah et al., 2017). I have had the opportunity to review multiple treatment plans. They are all professionally written but unfortunately do not reflect the patient's realities. Patients and their families did not participate in the building of the treatment plans. It has become obvious that I need to find some effective strategies to empower these patients to prevent their unnecessary and avoidable readmissions to hospitals.

Mental health nurses have always been involved in the caring process of their patients from admission to discharge. The DNP graduates are generally expected to become agents of change and initiate, design, and lead various projects that promote organizational development, enhance organizational effectiveness and standards of care, and improve patient outcomes (Riner, 2015). As a DNP graduate who is passionate about mental health, it was thus a great opportunity to seize: Help the mental health nurses

develop a process for their setting that is evidence-based and effective, one that can effectively empower their patients for positive and sustainable results.

Summary

In Section 2, we introduced the frameworks and models that I utilized for this systematic review, the definition of empowerment in the context of mental health, the literature supporting this project question, and my role in this project. The project is trying to address the following important question: "What are the evidence-based strategies that nurses can use to empower their patients/families in the treatment team to manage the discharge plan of care to achieve effective team outcomes and prevent readmissions?" This systematic review was trying to identify clear strategies that mental health nurses can use in their practice to empower their mental health patients to participate in their treatment plan to achieve effective treatment goals. In the next section, I present the practice-focused question of the project and the sources of evidence that I utilize for the project.

Section 3: Collection and Analysis of Evidence

Introduction

During the last decades, the United States healthcare system has been experiencing a continuous increase in preventable hospital readmissions. The number of people readmitted to hospitals within 30 days of their initial release is incredibly high. Readmission rates were compared among millions of hospitalized patients in a recent study. Only 14% of patients who did not have major mental illness were readmitted after 30 days, compared to 23% of those who did (Germak et al., 2018). Despite multiple attempts to resolve this problem, evidence shows the situation, far from being improved, is getting worse. In this current section, I describe the process used to complete this review as well as the analysis and synthesis of the literature.

Practice-Focused Question

The Practice–focused question formulated is: "What are the evidence-based strategies that mental health nurses can use to empower their patients/families in the treatment team to manage the discharge plan of care to achieve enduring and effective team outcomes and prevent avoidable and unnecessary readmissions?" In general, mental health patients require ongoing and long-term treatment, which requires an effective and coordinated plan (Mahone et al., 2016). But mental health patients are generally kept out of the discussion (Corrigan et al., 2014). To be successful, any strategy aimed at assisting them in following their coordinated treatment plan and preventing their rehospitalizations requires their participation and/or their caregivers/families. Mental health nurses spend more time with their patients than any other professional in the mental health care team.

In addition, they operate as coordinators, instructors, and advisors, collaborating with clients and other professionals to boost treatment outcomes like adherence through the implementation of shared decision-making strategies and tools (Mahone et al., 2016). With clear evidence-based strategies, mental health nurses can empower their patients to effectively participate in their treatment plan, achieve positive outcomes, and improve the quality of their care.

Sources of Evidence

A database search was conducted using the CINAHL, Medline, and Google Scholar for peer-reviewed articles published during the last 5 years using the following keywords: *mental health patients, nursing, reducing rehospitalization, and empowerment*. PRISMA 2018 guidelines helped to conduct the systematic review to identify clear evidence-based strategies that mental health nurses can use to empower their patients/families to prevent avoidable and unnecessary hospital readmissions. While many mental health specialists have focused on strategies to reduce rapid and avoidable readmissions of mental health patients to hospitals, most of them, however, look at one aspect of the problem. Some concentrate their research on medications adherence (Kenreigh & Wagner, 2005; Stentzel et al., 2018), others take up on discharge planning (Nurjannah et al., 2014), and another group values follow-up care and peer social support (Habit et al., 2018; Moore et al., 2019). Few have paid attention to mental health patients and their families and mental health nurses as part of the strategy to resolve this issue of rapid and avoidable readmission to inpatient psychiatric facilities and hospitals.

Analysis and Synthesis

I used a systematic literature review to find evidence-based strategies that mental health nurses can use to empower their patients/families in the treatment team to manage the discharge plan of care to achieve enduring and effective team outcomes and prevent avoidable and unnecessary readmissions. This project did not require the participation of human beings and therefore did not need the approval of the Institutional Review Board; however, they were contacted to ensure that this project research complies with the university's ethical standards as well as U.S. federal regulations. Because this is a systematic review of the literature, no patient data will be used.

Walden University's DNP approval manual for systemic reviews was used as my guide throughout the project. Using the systematic review process model, PRISMA, I established inclusion and exclusion criteria for different evidence-based articles selected. In different phases of the review, the number of sources identified, the number of included and excluded articles, and the final number of selected articles were provided. A detailed examination of the selected articles was done. A literature review matrix table was conducted to document all evidence-based articles selected for the project.

Based on the systematic review, mental health patients are at an increased risk of experiencing a relapse and being readmitted within a short period after being released from the hospital. In contrast, available inpatient psychiatric beds continue to decrease. For example, while in 1955, there were 560,000 beds for an estimated 3.3 million American individuals with serious mental illness and other disabilities, in 2016, there were about 38,000 beds for 8.1 million individuals in the same situation. (Fuller et al., 2016). In

addition, some payors significantly reduce their hospital length of stay or simply refuse to pay for their services requested despite the Mental Health Parity and Addiction Equity Act of 2008 that eliminates differences in insurance coverage for behavioral health, ensures equal coverage of treatment, and ends years of insurance discrimination against people with and mental illness and addiction (Barry et al, 2010). The Hospital Readmissions Reduction Program and the Readmissions Reduction Incentive Program established by Centers for Medicare and Medicaid Services (McIlvennan et al., 2015) have minimal success regarding mental health patients.

Negative attitudes toward those who struggle with mental health can range from subtle to blatant, but any level of stigma or discrimination can increase the risk of self-harm or even death (Borenstein, 2020). Stigma in the forms of stereotypes, prejudice, and discrimination remains widespread in the mental health population (Kenny et al., 2018). When mental health providers perpetuate harmful attitudes and beliefs about people with mental illness, patients might end up suffering much more. This is referred to as health practitioner stigma, which creates barriers not only to access but to quality care as well (Knaak et al., 2017). To address readmissions, mental health practitioners have an obligation to encourage patients' independence in decision-making. They should respect the regaining of independence and control, the fostering of social cohesion and equal citizenship, and the promotion of individual accountability in the face of a chronic health condition (Bonnie & Zelle, 2019). When policymakers and medical practitioners in the field of mental health promote patients' rights and autonomy, the patients in their care become active participants in their recovery.

Summary

In Section 3, I presented the practice-focused question of the project and the sources of evidence. Furthermore, the analysis of the data was discussed. Mental health nurses are uniquely equipped to contribute to reducing the rapid and avoidable hospitalizations of these patients if they are given evidence-based strategies. In Section 4, I discuss the findings and the implications of the project. Recommendations will be offered. Limitations and the strengths of the project are also provided.

Section 4: Findings and Recommendations

Introduction

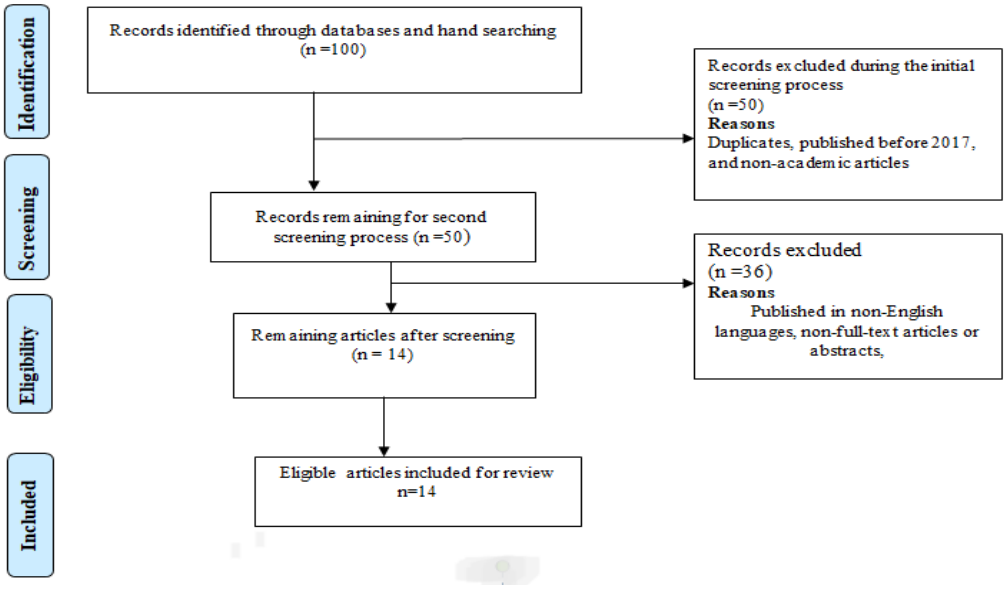
Psychiatric readmissions have been associated with profound interruptions to a person's life, which interferes with patients' quality of life (Ådnanes et al., 2018). Other than the distress in the patients and families, psychiatric readmissions negatively affect the nation's economy, healthcare providers' morale, and the reputation of inpatient psychiatric facilities (Ådnanes et al., 2018). Despite the different efforts implemented by healthcare organizations, the rate of mental health patients' readmission continues to rise, which calls for urgent implementation of effective nursing strategies to combat the crisis (Ådnanes et al., 2018). However, there is an absence of straightforward strategies that mental health nurses can use to empower mental health patients to participate in their treatment plans to achieve effective treatment goals. The practice-focused question for the project was "What evidence-based strategies can nurses use to empower their patients/families in the treatment team to manage the discharge plan of care to achieve effective team outcomes and prevent readmissions?" The project was conducted to improve mental health patients' quality of care in inpatient psychiatric facilities and contribute to positive social change in the mental health sector.

The sources of evidence to address the formulated practice-focused question were scholarly peer-reviewed articles published in reputable databases such as CINAHL, Medline, and Google Scholar. The evidence was achieved using strict inclusion and exclusion criteria that were guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses. The inclusion criteria included peer-reviewed articles

written in English and published over the last 5 years and articles involved were strictly addressing mental health readmission in psychiatric facilities. The exclusion criteria included studies that addressed hospital readmissions in healthcare departments other than psychiatric units. The four stages in the PRISMA flow diagram: identification, screening, eligibility, and inclusion, were utilized to find the relevant articles for the project. In the identification phase, 100 records were identified through database search and hand searching. Fifty records were excluded during the screening phase because they were published before 2017 and were not peer-reviewed. Of the 50 articles remaining for the second screening phase, 36 articles were excluded for they were published in a language other than English and contained incomplete abstracts and non-full texts. The remaining articles after screening were 14, as demonstrated in Figure 1.

Figure 1

PRISMA Flow Diagram for Articles in Review



All 14 articles were eligible for the study and were included in the systematic review. All the articles included were full texts and contained sufficient information to address the practice-focused question. Thematic analysis was also used to identify, assess, and report dominant themes that meet the project objectives. The main themes identified from the suitable articles include *psychiatric readmission triggers, care management intervention, appointment reminders, after-discharge transition interventions, and mental health policy reforms.*

Findings and Implications

Psychiatric Readmission Triggers

The theme of psychiatric readmission triggers focused on factors contributing to the high rate of mental health patients' readmission in hospitals. The theme was supported by five peer-reviewed articles. For example, Barkhuizen et al. (2020) conducted a comparative study investigating the association between community treatment orders and readmission rates in South London and found that community treatment orders were key determinants for readmission in psychiatric hospitals in South London. Böckmann et al. (2019) argued that factors associated with high readmission rates are heterogeneous and need to be identified for better allocation of resources to combat the crisis, which in their study included patients who were not married, those who were unemployed, and those living alone. Similar research found that those more at risk were White, non-Hispanic, not married, and had an extended length of stay in hospitals, had a high risk of readmissions (Ortiz, 2019). High readmission risks were also evident in older respondents, single females, and from mixed ethnic groups (Osborn et al., 2021).

Patients with comorbid disorders and increased severity of psychiatric symptoms at discharge also had a higher readmission rate (Böckmann et al., 2019). Patients who have experienced unplanned admissions are also more likely to be readmitted within a period of 30 days compared to the planned admission cases (Lassemo et al., 2021).

The reviewed literature implies that demographic characteristics (age, gender, marital status, and ethnicity), the length of stay in hospitals, and history of readmissions were significant contributing factors to psychiatric hospital readmissions (Ortiz, 2019). Moreover, patients with serious mental illnesses were also at a higher risk. Therefore, health care providers and nursing strategy developers focused on reducing the rate of psychotic readmissions need to consider various factors. Incorporating demographic characteristics of diverse communities and other psychiatric readmission triggers when developing nursing strategies can result in the reduction of psychiatric readmission rates (Ortiz, 2019).

Care Management Intervention

The theme of care management intervention as an effective strategy to reduce the psychiatric readmission rate was supported by two articles. Hutchison et al. (2019) sought to determine if a care management strategy applied by a behavioral health organization was successful in lowering rates of readmission and drug abuse among patients in psychiatric hospitals. They reported lower readmissions in the intervention group compared to the control group. Case management strategies were also regarded as effective coping strategies for psychiatric patients. Lim et al. (2022) similarly revealed that case management interventions significantly positively impact an individual's mental

health, quality of life, and length of stay in inpatient psychiatric facilities. Case management interventions include patient education, effective care planning, efficient care team management, and strategic coping skills (Lim et al., 2022). Nurse practitioners with effective case management also display active problem-solving skills and self-efficacy skills, which contribute to a high quality of care (Lim et al., 2022). Through mastering effective case management intervention practices, nurse practitioners and patients can address factors contributing to readmissions, thus enhancing the quality of care and patient outcomes.

Appointment Reminders

The theme of appointment reminders was regarded as having a positive impact on reducing readmission rates in psychiatric hospitals. According to a study conducted over 3 months on appointment reminders sent through the mail, the 30-day readmission rate was somewhat reduced due to the use of appointment reminders (Habit et al., 2018). The study implies that using reminder prompts via telephone communications, text messages, or emails may help reduce the rate of readmissions in psychiatric centers saving time and resources. Similar research has been conducted on the effectiveness of innovative, supportive programs such as peer and text message support in reducing the readmission rate (Eboreime et al., 2022). With a sample of 10,000 respondents from nine acute care institutions, despite the contextual barriers associated with automated supportive text messages and mental health support interventions, the interventions helped reduce the readmission rate in psychiatric institutions (Eboreime et al., 2022).

After Discharge, Transition Interventions

The theme for after-discharge transition interventions was recorded in three eligible articles: Hegedüs et al. (2020), Gillard et al. (2022), and Summers & Atav (2020). Successful transition from psychiatric facilities to the community is often hindered by challenges contributing to the increasing readmission rate. After discharge transition intervention theme focuses on how effective strategies to enhance continuity of care can prevent readmissions in psychiatric hospitals. Hegedüs et al. (2020) conducted a systematic review of randomized, non-randomized, and group study designs to assess the effectiveness of transition interventions in reducing readmissions and improving the quality of care in psychiatric facilities. A randomized meta-analysis of randomized control trials focused on readmission rates was performed to address the study objective. Sixteen studies comprised ten randomized control trials, three cohort studies, and three quasi-experiment studies. The study findings revealed that service users prefer transition interventions with bridging components compared to regular discharge strategies (Hegedüs et al., 2020).

Gallard et al. (2022) conducted research investigating the effectiveness of peer support in reducing readmission in post-discharge psychiatric institutions. A sample size of 590 patients was recruited in the study, where 294 respondents were subjected to peer support intervention, and 296 participants received the usual treatment. The study finding revealed no statistical difference in the mean of readmission between participants who received one-on-one peer support and those who received regular care. Gillard et al. (2022) added that there was uncertainty in implementing peer support as an intervention to reduce the readmission rate. Therefore, peer support should not be implemented as an

intervention to reduce the readmission rate among patients at high risk of readmission (Gillard et al., 2022).

Similar research by Summers & Atav (2020) sought to identify hospital programs, organization characteristics, and strategies for reducing hospital readmission. Ninety-four hospitals in Upstate New York were used for the study. The study findings identified various organization-based programs that help reduce the readmission rate of patients, including the implementation of advanced practice nurses on care management, telehealth, certified home health agencies, and house calls (Summers & Atav, 2020). The reviewed study reveals that healthcare organizations need to encourage and support case management interventions related to psychiatry by increasing access and utilization of telehealth, house calls, and certified home health agencies. Incorporating advanced practice nurses in the care team also helps reduce readmission rates (Summers & Atav, 2020). The study also reveals that support from government and hospital institutions may help to empower people with psychiatric disorders.

Mental Health Policy Reforms

The mental health policy reform's theme sought to elaborate on how various implementations of mental health policy reforms and government support can empower mental health patients to decrease unnecessary rehospitalization. According to the Center for Medicare and Medicaid Services, the Hospital Readmission reduction program was formulated to support the national goal of improving health care for Americans. Based on the program, better patient's assessment and care provider's participation in discharge plans require improved hospital communication and care coordination. An evidence-

based study by Shashikumar et al. (2022) sought to investigate the effectiveness of the Medicare hospital readmissions reduction program by penalizing hospitals with high readmissions. The study findings revealed that other than implementing mental health reforms, the stratification mandate is vital to achieving equity within the programs.

According to mental health America, individuals and families should have access to mental health services that align with their needs (MHA, 2021). Achieving personalized care, wellness, and recovery among mental health patients requires the provision of government initiatives to guide and provide resources. For instance, the patient protection and affordable care act provides health insurance coverage that helps mental health patients access care (MHA, 2021). The ACA reforms based on enhancing the well-being of mental health patients contribute to the provision of significant resources such as rehabilitation services that help reduce hospital readmissions. The advantage of mental health reform systems in promoting care in psychiatric centers is they make treatment knowledge accessible to care providers and patients, thus achieving optimal shared decision-making treatment. The Mental Health Parity and Addiction Equity Act of 2008 which eliminates differences in insurance coverage for behavioral health remains a landmark in our healthcare policy (Barry et al., 2010).

An unanticipated limitation of the research is a change of the research protocol initiated by the investigator due to a newly identified risk or direction of research. This limitation would significantly change the research, for it would demand conducting a new synthesis of literature and thematic analysis based on the identified risks or areas related

to the research (Rossi et al., 2021). This limitation would also render the study results insufficient, hindering the generalization of results to the target population.

Positive Social Change

These findings lead to numerous potential implications for positive social change. Nurses are also able to personalize care based on patients' backgrounds which optimizes the quality of care and patient outcomes in psychiatric hospitals. Implementing effective case management strategies has significant positive social change, for they equip nurse practitioners with guidelines to address the psychiatric readmission crisis effectively. Incorporating effective care management also offers active coping strategies for psychiatric patients, guaranteeing positive patient outcomes (Hutchison et al., 2019). The implementation of case management can enhance the quality of life for both patients and healthcare practitioners, improving the quality of care, healthcare job satisfaction, and patient outcome. Appointment reminders via telephone communications, text messages, or emails help patients to abide by appointments or prescriptions actively, thus promoting the overall patient outcome (Habit et al., 2018; Eboreime et al., 2022).

The after-discharge transition interventions theme implies that incorporating transition interventions would guarantee continuous patient care, thus reducing the readmission rate. This implication has a potentially positive social impact for discharge psychiatric patients who are able to be monitored and cared for when adjusting to the new environment (Summers & Atav, 2020). Transition interventions such as enrolling in group therapy can also help patients manage their psychiatric conditions and concentrate on getting better, which in return reduces the readmission rate and improves patients'

outcomes. The implementation of mental health reforms implies a positive social impact for the proponents penalize facilities with high readmission rates while providing incentives to those with low ones, support the use of technology which may help provide quality care and achieve optimal patient outcomes, thus reducing hospital readmissions (Shashikumar et al., 2022). Inter-professional collaboration and patient participation to develop individualized treatment plans and achieve a positive and effective outcome is encouraged and promoted.

Recommendations

The systematic review featured five themes: Psychiatric readmission triggers, care management intervention, appointment reminders, after-discharge transition interventions, and mental health policy reform. The themes presented vital elements that must be considered in the delivery of psychiatric care to reduce the readmission rate. For instance, understanding the triggers or factors contributing to high readmission would help healthcare providers concentrate on minimizing the cases. Patients with an extended stay in hospitals, patients with SMI and other psychiatric disorders, and unmarried male patients are more likely to be readmitted. The availability of such information helps health professionals observe and contrite patients that need extra attention to avoid readmission.

Other than understanding patients' characteristics and how they relate to readmission rates, health professionals can also be enlightened on care management strategies to enhance their skills and expertise when dealing with psychiatric patients. Empowering health professionals helps derive innovative practices and motivation that

improve the quality of care. A major theme that was identified is the need for after-discharge transition intervention. This reveals a need for a combination of strategies such as patient education, case management interventions, and collaboration between the government, healthcare institutions, health professionals, and patients in combating the readmission crisis.

The reviewed literature also stresses the potential of mental health policy reforms in enhancing the quality of psychiatric care. Therefore, to reduce readmission rates in psychiatric centers in America, organizations can strive to collaborate with government agencies and mental health institutions to develop effective strategies to curb the high rate of readmissions among mental health patients. The diversity of policies by different states and different realities in different states helps provide comprehensive and in-depth solutions that give room for the delivery of quality research and enhance patient outcomes. Effective reforms may also help meet mental health patients' needs by providing adequate care structure, the productivity of mental health sciences, and personal resource allocation, which might reduce the readmission rate in patients. Future research on mental health institutions should strive to implement diverse and effective mental health policy reforms.

Moreover, the reviewed literature recommends integrating flexible and integrative psychiatric care in healthcare centers. Therefore, the mental health of primary care centers with mental health patients should strive to implement procedures such as outreach homecare, therapeutic sessions across all settings, and multi-professional cooperation. These components provide quality care after discharge and focus on

enhancing individuals' quality of life, which may significantly reduce hospital readmission rates.

Strengths and Limitations of the Project

The project's strength is that the themes were derived from high evidence-level research, which enhances the validity and effectiveness of the results. The project also recommends significant strategies and practices, such as the importance of diversity of policies by different states and different realities in different states that help enhance the quality of care and patient outcomes, reducing readmission rates in primary care settings. Moreover, the studies are supported by scholarly reviewed evidence from studies with statistical evidence to determine the effectiveness of the nursing strategies in reducing readmission rates among mental health patients. On the other hand, the limitation of the project is the studies are based on a different nursing initiative to address the readmission rate crisis. The nursing initiatives do not have supporting research, which limits the external validity of each initiative discussed in the study. An unanticipated limitation of the research is a change of the research protocol initiated by the investigator due to a newly identified risk or direction of research. This limitation would significantly change the research, for it would demand conducting a new synthesis of literature and thematic analysis based on the identified risks or areas related to the research (Rossi et al., 2021). This limitation would also render the study results insufficient, hindering the generalization of results to the target population.

Despite the advanced stress associated with psychiatric readmission in health care institutions, limited research is still focused on potential remedies to eradicate the crisis.

Therefore, future research projects should strive to examine the impact of strategies such as case management and appointment reminders in reducing the readmission rate in psychiatric hospitals. Moreover, researchers can also explore how after-discharge transition intervention and mental health reforms influence psychiatric patients' recovery after discharge.

Section 5: Dissemination Plan

Disseminating my DNP project is an essential and central part of my research project. The communication of findings into practice is essential to safe, transparent, effective, and efficient health care provision as expected by patients, families, and society (Curtis et al., 2017). The intended audience for the dissemination of this systematic review includes mental health nurses, psychiatrists, social workers, mental health technicians, psychotherapists, policymakers, insurers, and adult mental health patients/families. At the organizational level, I will disseminate these findings to significant mental health organizations, such as the National Alliance for Mental Illness, the American Psychiatric Association, the American Psychiatric Nursing Association, the American Nurses Association, and the Substance Abuse and Mental Health Services Administration. At the individual level, I will create a booklet with different resources available to patients and family members to consider. Another venue to disseminate the results of this research is through nursing journals and different websites of psychiatric facilities. Presentations can be done as well in presenting conferences and workshops. Posters and PowerPoint presentations offer the advantage of having a live wide audience with the possibility of interactions. In this section, I provide a comprehensive overview of the dissemination of the systematic review findings and the analysis of self in different professional roles.

Analysis of Self

As an admitting coordinator at a Behaviour Health Centre in a metropolitan city for more than 15 years, I have witnessed first-hand the rapid and unnecessary

readmissions of mental health patients. This project has given me the opportunity to see the different and complex aspects of this ongoing problem. Today, I have a broader insight into this ongoing issue. As a project manager, I was able to develop realistic goals according to the resources that were available to me. At times, I had to review and modify previous plans due to the Covid-19 pandemic, leading me completing this project later than anticipated. As a nurse educator and scholar, I have learned the complexity of this issue and have acquired knowledge to be an effective advocate for better participation of mental health patients in their treatment plans and for effective strategies that mental health nurses can use to empower their patients. With these tools now available to me, I am unequivocally a better advocate for my patients, and my leadership skills enhanced. Moreover, as a nurse Educator, I will pass these tools to my learners, as I teach them the importance and the benefits of them for better-quality care for their mental health patients. I am also thinking of a better contribution to my community: Becoming a police citizen and educating local police officers on dealing with mental health patients.

Summary

In the United States, the rapid and unnecessary readmissions to hospitals of mental health patients less than 30 days after being discharged continue to increase. As care coordinators, mental health nurses provided with clear evidence-based strategies can empower their patients and their families and decrease rehospitalizations. This systematic review found three main strategic points mental health nurses need to focus on to empower their patients: the inpatient point of care, the discharge point of care, and the follow-up outpatient point of care. Working with patients and families and other

stakeholders at each of these three points, mental health nurses can play an important role in reducing the rapid and unnecessary re-hospitalizations of mental health patients to inpatient psychiatric facilities. More studies can address this complex issue that continues to be a burden for the U.S. health care system.

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Appendix A: Evidence Matrix Table

Citation	Purpose of Study/Research question	Independent Variables (IVs)	Dependent Variable (DVs)	Study Design	Sample Size	Findings
Barkhuizen et al. (2020)	Examination of whether community treatment orders affect mortality and readmission rate in a psychiatric hospital.	Community treatment orders	Readmission rate to a psychiatric hospital	Observational study	N= 830	Patents under community treatment orders spend longer in hospitals and have low mortality and readmission rate.
Böckmann et al. (2019)	The purpose was to examine risk factors for inpatient readmission	Demographic, social and economic data	Inpatient readmission	Retrospective study	N= 554	The results reveal that patients with higher symptom load at discharge are prone to be readmitted within 12 months. Odds for readmission were higher for patients that were not married, were

						living alone, and were unemployed.
Eboreime et al. (2022)	To propose implementation and evaluation of an innovative program for mental health peer support.	Daily supportive text messages. Mental health peer support intervention	Readmission rates	A pragmatic steppe-wedge cluster-randomized trial.	N=10,000	Supportive text messages and mental health peer support have a significant impact on the readmission rate.
Gillard et al. (2022)	Evaluation of the effectiveness of peer support for discharge from reducing readmission in care settings	Peer support	Readmission rate	Randomized control trial	N=590 Intervention group = 294 Control = 296	Peer support is not effective in high-need groups.
Habit et al. (2018)	To reduce the 30-day readmission rate in inpatient psychiatric hospitals	Scheduled outpatient psychiatric appointments.	Readmission rate	Quantitative study	N= 50	Reminder prompts via telephone communication or text enhance patient outcomes.
Hegedüs et al. (2020)	To evaluate the effectiveness of	Transitional interventions	Readmission rates	Systematic review	16 studies	Transition interventions

	transitional interventions with predischarge and postdischarge components in reducing readmissions and improving health-related outcomes.				(10 RCTs, three quasi-experimental, and 3 cohort studies) and 9 RCTs	with bridging components are preferred by users and could be used as alternative strategies for care.
Hutchison et al. (2019)	Assessing the effectiveness of care management bridging strategy in reducing the readmission rate in the mental health population	Care management strategies	Readmission rate	Randomized control trial	1724 individuals with a psychiatric history. Intervention group = 1243, control group = 481	Care management strategies reduce the readmission rate in psychiatric healthcare facilities.
Lassemo et al. (2021)	Examining the role of various task divisions in a multi-level health care system.	Type and place of treatment, travel time.	Readmission risk	Population-based cohort study	N=16,185	The type of admission has a significant impact on the readmission rate.

Lim et al. (2022)	To investigate the impact of care management on clinical outcomes, acute care utilization, cost, and satisfaction among mental health patients	Care management	Clinical outcome	A systematic review and meta-analysis	34 articles	Care management enhances the quality of life and reduces psychiatric symptoms in performs with serious mental illness.
Ortiz (2019)	Assessing the association between demographic, clinical, and continuous care with rapid readmission rate.	Demographic, clinical, and continuous care characteristics	Readmission rate	Cross-sectional study	60,254patients data	Factors associated with readmission rates include white, non-Hispanic, not married, voluntarily admitted, length of stay, psychiatric disorders, and personality disorders.
Osborn et al. (2021).	To investigate readmission predictors from mental health institutions	Readmission predictors	Readmission rate	Cohort study	231 998 individuals discharged from	Readmission variations were associated with individual patient-level

	following discharge in England.				mental healthcare	factors other than providers' trust level. Females, older, single, from mixed ethnic groups, and from deprived areas were at high risk of readmission.
Summers & Atav (2020)	To assess the contribution of hospital programs, organization characteristics, and nurse involvement in reducing readmission rates in healthcare centers	Hospital programs, Organizational characteristics, level of nursing involvement	Readmission rate	Ex post facto design	N=94	Telehealth, house calls, advanced practice nurses on care management interdisciplinary discharge teams, certified home health agencies, and an increasing number of hospital readmission reduction programs reduce

						readmission rates.

Appendix B: Summary of Individual Studies

Table 1. *Summary of Individual Studies*

Authors, year, country	Design	Research focus	Sample size and description	Outcomes and Conclusions
Psychiatric readmission triggers				
Barkhuizen, Cullen, Shetty, Pritchard, Stewart, McGuire, and Patel (2020), England	Observational study	The impacts of community treatment orders on mortality and readmission rates in a psychiatric ward	Observation of de-identified EHR of 830 patients on a community treatment order discharged using the Clinical Record Interactive Search system.	Patents under community treatment orders spend longer in hospitals and have low mortality and readmission rate.
Böckmann, La	Retrospective study	Risk factors for inpatient readmission	Retrospective analysis of inpatient readmission risks of 554 patients from the department of addictive disorders in 2016.	The results reveal that patients with higher symptom load at discharge are prone to be readmitted within 12 months. The odds for readmission were higher for unmarried patients living alone and unemployed.

y, Seifritz, Kawohl, Roser and Habermeyer (2019), Switzerland				
Ortiz (2019), USA	Cross-sectional study	Assesses the association between demographic, clinical, and continuous care with rapid readmission rate.	Cross-sectional analysis of 60,254 patients' data among those discharged from state-level psychiatric hospitals. The relationship between readmission predictors was explored through logistic regression.	Factors associated with readmission rates include white, non-Hispanic, not married, voluntarily admitted, length of stay, psychiatric disorders, and personality disorders.
Osborn, Favarato, Lamb, Harper, Johnson, Lloyd-Evans, Marston, Pinfold, Smith, Kirbride, and Weich (2021), England.	Cohort study	To investigate readmission predictors from mental health institutions following discharge in England.	231 998 individuals discharged from mental healthcare	Readmission variations were associated with individual patient-level factors other than providers' trust level. Females who were older, single, from mixed ethnic groups, and living in deprived areas were at a high risk of readmission.
Lassemo, Mykelbust, Salazzari and Kalseth (2021), Norway.	Population-based cohort study	Examine the role of various task divisions in a multi-level health care system.	Psychiatric readmission rates of 16185 were assessed based on travel time	The type of admission was found to have a significant impact on the readmission rate.

			to DPC or health facility and treatment place and time.	
Care management interventions				
Hutchison, Falanagan, Karpov, Elliot, Holsinger, Edwards, and Loveland (2019), USA	Randomized controlled study	Assessing the effectiveness of care management bridging strategy in reducing the readmission rate in the mental health population	1724 individuals with a psychiatric history. Intervention group = 1243, control group = 481 The intervention group received usual care and care management bridging, while the control only got usual care.	Care management strategies reduce the readmission rate in psychiatric healthcare facilities.
Lim, Caan, Kim, Chow, Leff, and Tepper (2022), country N/A	Systematic review and meta-analysis	To investigate the impact of care management on clinical outcomes, acute care utilization, cost, and satisfaction among mental health patients.	N/A	Care management enhances the quality of life and reduces psychiatric symptoms in performs with serious mental illness.
Appointment reminders				

Habit, Jonson, Edlund (2018), USA.	Quantitative study	To reduce the 30-day readmission rate in inpatient psychiatric hospitals.	Post-reminder letters were implemented in an inpatient psychiatric health facility with 50 beds, and readmission rates pre ad post-interventions were evaluated.	Reminder prompts via telephone communication or text enhance patient outcomes.
Eboreime, Shalaby, Mao, Owusu, Vuong, Surood, Bales, MacMaster, McNeil, Rittenbach, Ohinmaa, Bremault-Phillips, Hilario, Greiner, Knox, Chafe, Coulombe, Xin-Min, McLean….and Agyapong (2022), Canada.	A pragmatic steppe-wedge cluster-randomized trial.	To propose implementation and evaluation of an innovative program for mental health peer support.	Readmission rate of 10000 patients discharged from 9 psychiatric care services that provided daily supportive messages via text and psychological health support 30 days post-discharge.	Supportive text messages and mental health peer support have a significant impact on the readmission rate.
After discharge, transition interventions				
Hegedüs, Kozel, Richter, and Behrens (2020), various countries	Systematic review	To evaluate the effectiveness of transitional interventions with predischarge and postdischarge components in	N/A	Transition interventions with bridging components are preferred by users and could be used as alternative strategies for care.

		reducing readmissions and improving health-related outcomes.		
Gillard, Bremner, Patel, Goldsmith, Marks, Foster, Morshead, White, Gibson, Healey, Lucock, Patel, Repper, Rinaldi, Simpson, Ussher, Worner, and Priebe, (2022), England	Randomized controlled trial	Evaluation of the effectiveness of peer support for discharge from reducing readmission in care settings	N=590 Intervention group = 294 Control = 296 Patients were randomly assigned to the intervention involving peer support and usual care, while those in the control group received the usual care.	Peer support is not effective in high-need groups.
Summers and Atav (2020), USA	Ex post facto design	To assess the contribution of hospital programs, organization characteristics, and nurse involvement in reducing readmission rates in healthcare centers.	A sample of 94 hospitals. All the hospitals were located in upstate New York.	Telehealth, house calls, advanced practice nurses on care management interdisciplinary discharge teams, certified home health agencies, and an increasing number of hospital readmission reduction programs reduce readmission rates.
Mental health policy reforms				

Shashikumar, Waken, Aggaral, Wadhera, and Maadox (2022), USA.	Survey	The average annual penalty percentage change for safety-net hospitals, rural hospitals, and hospitals.	Stratification of hospitals with a higher share of Latino, Black, and Hispanic patients	Results revealed that higher stratification decreased penalties. The results are attributed to penalty reductions in healthcare facilities. Stratification was thus shown as a modest approach toward eliminating health inequities.