Implementing a Transitional Care Protocol to Reduce Readmission Rates among patients substance use disorders patients in a managed care organization

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Safe and efficient patient transfers between healthcare facilities require a well-planned and executed transition of care. Due to their complicated care needs and susceptibility to readmission, individuals with substance use disorders (SUDs) present a considerable barrier in this setting. Because of how common substance use problems and co-occurring mental health issues are, effective transitional care protocols are crucial. Substance use disorders (SUDs) have had a devastating impact on the lives of a disproportionate number of adults and youth in the past year, with repercussions felt on individual, community, and healthcare levels (NIDA. 2021). However, current methods typically fall short of adequately preparing these people for productive reintegration into society after therapy has been completed. Hospitals and health insurance companies lose a lot of money due to high readmission rates, which are exacerbated by poor discharge planning and misunderstandings. Therefore, this paper will address the critical need for a comprehensive transitional care protocol for SUD patients, underpinned by national guidelines and patient and family engagement principles, to mitigate readmission rates and enhance patient outcomes.

The importance of transitional care in a healthcare context cannot be overstated. It extends to ongoing healthcare services and includes a series of necessary steps that must be completed promptly and securely. Discharge planning, referrals, follow-up appointments, medication management, and patient self-education are all integral to the services provided. This procedure is essential when patients must be transferred between hospitals (Mays et al., 2021). Substance abuse and mental health problems have become alarmingly common in the previous years, highlighting the importance of efficient transitional care. Statistics show that one in three persons struggled with a mental health or substance use condition in the previous years. Worrying statistics show that over half of all 18- to 25-year-olds struggle with mental illness or substance abuse (Jahan et al., 2023). Long-term substance abuse significantly contributes to these diseases, which can have devastating psychological and physiological effects. The effects are far-reaching, extending to diminished social relationships, school and workplace difficulties, and even adverse health outcomes (Jahan et al., 2023). Medical professionals use a wide range of pharmacological and non-pharmacological modalities to address these complex conditions, allowing for more individualized care.

When you factor in how much money insurance companies have to pay and how much money hospitals and clinics spend on patient care, the price of poor transitional care becomes apparent. The annual toll from substance use disorders is high due to the havoc they wreak on people, groups, and families. Therefore, it becomes crucial to ensure patients leaving therapy have the resources they need to succeed in the real world. Minimal exposure to drugs or alcohol can quickly develop into life-threatening conditions when individuals return to their communities unprepared and without the proper treatment. The core tenet of this discussion is that substance use disorder (SUD) is a severe medical condition that causes compulsive drug or alcohol use despite negative consequences. Those with substance use disorders (SUDs) frequently experience an irresistible compulsion to use drugs, alcohol, or tobacco. Their capacity to go about their regular lives unimpeded suffers due to this single-mindedness. Many people continue to engage in substance abuse despite being well aware of the potential negative consequences. The more severe forms of SUD are sometimes referred to as addictions, lending credence to the idea that SUD is a diagnosable mental condition that may be helped. In essence, addiction radically reshapes a person's brain and behavior, driving them to lose control over their consumption of numerous substances, including legal and illegal drugs like alcohol, stimulants, tobacco, and more (Ramadan et al., 2022). Addiction is the final and most severe stage on the severity spectrum of substance use disorders (SUD).

The transition of care from inpatient facilities to the community is fraught with difficulties in light of the widespread nature of substance use disorders. Misunderstandings between patients, case managers, and healthcare practitioners are common during this pivotal transition in care. The end consequence is a piecemeal strategy that fails to provide adequate support to people at a crucial point in their recovery. Looking deeper at the data, we find that in 2021, an alarming amount of people (12+) used illegal drugs. Statistics show that last year, 21.9 percent of the world's population, or an astounding 61.2 million people, used some form of illegal narcotics. An astonishing 52.5 million people admitted to using marijuana, making it the most popular illicit substance. Because of its legal status in most countries and widespread acceptance of moderate drinking, alcoholism is the most common substance use disorder globally. The cultural norm of early drinking makes the already high prevalence of alcoholism worse (Nawi et al., 2021).

Substance abuse problems are linked to a variety of other medical issues. According to studies, about 16% of people with anorexia nervosa also have a substance use disorder. The disturbing fact that 7% of AN cases involve substance addiction or dependence disorders demonstrates the close relationship between these problems. Seizures, cognitive impairment, brain damage, and respiratory diseases are some ancillary health problems frequently

accompanying individuals struggling with addiction. Memory and focus problems and impaired decision-making are just a few ways substance abuse complicates complex daily routines (Nawi et al., 2021). Substance abuse can also cause physiological changes, such as abnormal growth patterns or impaired core temperature regulation.

Background of the facility

This addiction center is not meeting national criteria, resulting in a frustrating cycle of subpar patient care and readmissions. Patients' unreadiness to return home or to a sober living situation after treatment worsens matters. Case managers frequently run out of time before a patient's scheduled discharge after an extended inpatient stay can be adequately prepared. Because of this, patients may be discharged from the facility without enough support systems, leading to unnecessary readmissions. Even sending a patient's medication to a pharmacy presents difficulties when neither the patient's nor the pharmacist's location is known with certainty. These inefficient changes have significant monetary repercussions. When patients are readmitted to hospitals for treatment multiple times, not only do insurance companies pay a hefty price, but so do the hospitals themselves. Long-term care can last anywhere from six months to a year or more, while short-term stays might last anywhere from three to six weeks. Substance abuse rehabilitation centers can cost anything from \$5,000 to \$80,000, with the higher-end options offering more deluxe amenities. Substance abuse disorders are among the most expensive health concerns in the United States, with the average cost of inpatient addiction treatment hovering at about \$42,500 (Peterson et al., 2021). The cost to society from these illnesses is enormous, yet the costs associated with treatment are only a tiny part of that.

When examined more closely, the financial burden is seen to go beyond the expense of treatment. In 2013, total expenses were an incredible \$78 billion, according to a comprehensive assessment of the costs related to prescription opioid use disorders and overdoses in the United States (Nada et al., 2021). However, only 3.6% of these costs, or about \$2.8 billion, were allocated to treatment. Disheartening statistics on the incidence of drug usage in the United States have been compiled by the National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention (CDC). According to these numbers, over 932,000 people have died from drug overdoses since 1999. In 2020, drug overdoses claimed the lives of more than 91,000 Americans. Overdose fatality rates rose dramatically from 2019 (21.6 per 100,000) to 2020 (28.3 per 100,000), as reported by Ghose et al. (2022). According to the data, overdose rates are lowest among people aged 65 and up (9.4 and 12.0 per 100,000, respectively).

Problem Identification

Substance abuse disorder (SUD) patients' high readmission rates pose a serious problem. Patients with SUDs are more likely to have extended hospital stays and readmissions due to medical complications. These illnesses have far-reaching effects on health, social care, welfare, and the criminal justice systems around the world (Ramanda et al., 2022). The World Health Organization estimates that about three million lives are lost annually due to alcohol-related causes (World Health Organization, 2020). This facility has struggled with persistently high readmission rates for the past half decade. Adherence to national criteria becomes crucial in addressing this enduring challenge. Case managers and care coordinators must comply with the facility's regulations for any solution to work. A significant issue is the lack of a solid discharge model to help patients make a smooth transition out of care. Discharge planning for persons battling addiction poses unique challenges due to the various situations in which they find themselves. Continuity of care, an accurate assessment of the patient's health status and capabilities, a careful review and communication of the patient's medication to the pharmacy, and assistance in choosing a suitable post-discharge environment, such as a sober living facility or a family home, are all essential components of a practical transitional approach. Unfortunately, there are often instances where the facility fails to meet these requirements adequately.

Following the recommendations in the AHRQ Guide to Patient and Family Engagement could be a solution. Trust and cooperation can be fostered by including the patient's loved ones in their treatment (Emes et al., 2018). The cornerstones of this method are open lines of communication and collaborative decision-making among medical staff, patients, and family members. This supportive connection is built on mutual trust and consideration of each person's unique values and beliefs, increasing participation from the patient and their loved ones. Permitting patients to participate in their healthcare decision-making actively translates into measurable gains in safety and overall quality of life, highlighting the inherent benefits of person and family engagement (PFE).

Project Question

Do drug use disorder patients have lower readmission rates if care coordinators and case managers adopt a complete transitional care protocol? The study's overarching research question is as follows: Instructing care coordinators and case managers (P) How does implementing a transitional care protocol using the AHRQ Guide by engaging family, case managers, and care coordinators (I) Will it reduce readmission rates for individuals with substance use disorders leaving the facility without proper transitional care guidance (C) Decrease readmission rates for patients diagnosed with substance use disorders in an inpatient treatment center (O)?

Search Methods

A thorough and systematic literature search was conducted to ensure the inclusion of relevant academic resources in the field of nursing research, with a particular emphasis on clinical decision-making in the context of care transitions and self-care for people with substance use disorder (SUD). The search technique used Google Scholar to access numerous academic databases, including SCOPUS, PubMed, CINAHL, BMC Medical Research Methodology, and Web of Science. Using the PICOT inquiry architecture, a combination of search phrases was developed to compile valuable resources. Boolean "AND" was used to combine these phrases to increase search precision. Search terms used included "case managers transition of care and care quality," "care transition by coordinators," and "self-care, SUD, and SUD self-care." More than 800 hits were returned from the initial search, however, the search was refined by eliminating any results older than 2018. Limiting the study to within the last several years meant only the most up-to-date scientific data relevant to contemporary SUD patients was used.

To further hone the selection process, strict criteria was used to evaluate each publication for inclusion. For inclusion, full-text articles must have been written in English, and narrative reviews, editorials, monographs, abstracts, reports on personal experience, and doctoral dissertations were eliminated. After this screening process, 210 articles met our criteria. Afterward, the studies were examined by their titles, and abstracts were reviewed to see if they were relevant. In addition, the papers' citation lists were examined for might have been missed. As a result, 44 articles with potential relevance were found and marked for critical

examination.

Three of these articles stood out as highly relevant upon further inspection. An in-depth review of these articles revealed their wealth of information regarding SUD and its treatment. These three articles were chosen for inclusion in the literature synthesis. Using a systematic and stringent process, ensured that the most relevant, up-to-date, and high-quality material was incorporated into the succeeding stages of this research project.

Review of Study Methods:

It is critical to comprehend the research methodologies used in the study of transitional care protocols for patients with substance use disorders (SUDs) in order to assess the validity and reliability of the findings. An outline of the typical research techniques used in this area will be provided in this section.

First, to examine the efficacy of transitional care protocols and their effect on lowering readmission rates among SUD patients, the studies chosen used a variety of study approaches. Approaches using quantitative, qualitative, and mixed methods are some of the techniques used, and each one adds a different perspective to the body of knowledge.

In order to measure the results of transitional care treatments, vast datasets have been analyzed with the use of quantitative research. In this instance, statistical analyses have been used by researchers to compare readmission rates before and after the introduction of particular regimens. Furthermore, correlations between factors have undergone in-depth analysis, including those between readmission rates and the standard of discharge planning.

Through an in-depth analysis of the lived experiences and perspectives of numerous stakeholders, including SUD patients, their families, and healthcare professionals, qualitative research approaches have supplemented the quantitative findings. Interviews, focus groups, and content analysis have all been used in qualitative studies to examine the subtleties of the transitional care process. These qualitative observations provide a greater comprehension of the obstacles and enablers encountered throughout the changeover from inpatient to outpatient care.

Additionally, a few studies adopted mixed-methods study designs, which integrated quantitative and qualitative data collection and analysis. Researchers may triangulate their data using this integrated approach, giving a more complete picture of the transitional care process. Mixed-methods studies enrich and deepen the research findings by fusing numerical data with narratives and personal experiences.

It is crucial to remember that thorough literature reviews and meta-analyses have also significantly combined previous studies in this field. These extensive reviews examined a wide range of studies, giving a comprehensive overview of the evidence for SUD patients' transitional care regimens. By compiling and evaluating a wide range of research findings, systematic reviews contribute to the development of best practice standards.

Review Synthesis

Recent research publications (from 2018 to 2023) have been crucial in illuminating cutting-edge approaches to meeting the requirements of people with SUD. These studies have

mostly concentrated on case managers and care coordinators due to their success in raising the standard of at-home care for SUD patients, which has been shown to lower readmission rates and enhance self-care behaviors.

Five major themes have arisen from these research studies, greatly advancing our knowledge of transitional treatment for SUD patients:

1. Care Coordination and Discharge Planning: Current research highlights the

significance of efficient care coordination while patients are moving from the hospital to home care (Heaton, 2022). This includes well-planned procedures for discharge planning to guarantee a smooth transfer of care obligations. Optimizing the function of case managers within managed care organizations has been a major focus since they play a critical role in increasing the quality of at-home treatment for SUD patients and lowering readmission rates.

- 2. Health Education and Patient Empowerment: The literature emphasizes the importance of giving SUD patients proper health education throughout the adjustment period. Promoting healthy post-discharge outcomes requires educating patients and their families about self-care practices and routines. Knowledgeable patients are better able to control their conditions and lower the chance of readmission.
- 3. Access to Comprehensive Healthcare Services: To ensure that SUD patients have access to the required support networks and resources, effective transitional care requires collaboration with a wide range of healthcare services. Comorbidities must be addressed, patients must be connected to community-based services, and communication between patients and healthcare professionals must be made easier.

- 4. Follow-Up and Continuity of Care: An essential component of effective transitional care is maintaining continuity of care long after release. In-depth follow-up treatments are essential to track patients' progress and handle any new problems as they arise, according to Heaton (2022). This continuing assistance is critical for reducing readmission among SUD patients.
- 5. Administrative Obstacles and Healthcare System Integration: Research has explored numerous variables relating to the quality of transitional care, highlighting the need to remove administrative obstacles within managed care organizations. Enhancing coordination and communication between various healthcare services and programs can result in more effective care delivery and better patient experiences.

The literature also reveals a gap in care coordination for SUD patients, notably in terms of community-based post-discharge social services, access to outpatient care, and communication between patients and medical staff (Sturmberg, 2019). Resolving these issues is critical for improving patient outcomes and lowering healthcare expenditures.

Literature Theme Development

It is a crucial healthcare concern to efficiently manage patients with SUDs throughout the change from inpatient to outpatient care. This population has a high readmission rate, which emphasizes the necessity for thorough transitional care protocols that take into account their particular needs (Warchol, 2019). A growing body of research has examined several facets of transitional care in recent years (2018-2023), with the goal of lowering readmission rates and improving patient outcomes. Key issues from this research are explored in this literature review, including efficient transitional care protocols, continuity of treatment and follow-up, the removal

of administrative obstacles, patient empowerment through education, and the wider implications for the healthcare system.

Effective Transitional Care Protocols

Reducing readmission rates for individuals with SUDs starts with effective transitional care strategies. The significance of structured discharge planning strategies has been stressed by research. Systematic and complete discharge plans greatly contribute to successful care transitions, (Pugh et al., 2021, Warchol 2019). These plans include a description of duties for after-discharge, prescription administration, and follow-up appointments.

The application of these standards is crucially dependent on the case managers and care coordinators. A study by Forstner et al. (2019) found that case managers can enhance the standard of at-home care for SUD patients by managing their post-discharge requirements, such as putting them in touch with local services and support networks. A smoother transition from hospitalization to outpatient care is made possible by this collaboration.

Furthermore, it is critical to incorporate self-care instruction into transitional care practices. According to the literature, better self-care practices and patient education about controlling their conditions are linked to lower readmission rates (Timpel, 2020). Patients are more likely to follow prescribed regimens and avoid relapse and readmission if they are aware of their diagnoses and treatment plans.

Another crucial element is efficient cooperation with various healthcare services. Patients with SUDs often have complicated needs, including coexisting mental health conditions. In order to address these complex demands throughout the transition phase, research by Becker et al.

(2021) underlines the importance of seamless coordination between substance use treatment providers, mental health services, and primary care.

Continuity of Care and Follow-Up

Success in transitional care depends on maintaining continuity of care and rigorous follow-up processes. For the duration after release, continuity of care is crucial to avoiding readmission. Patients with chronic diseases like SUDs benefit greatly from continued support and monitoring, Brach & Borsky (2020). This includes access to support networks, management of prescribed medications, and routine follow-up consultations.

A crucial component of follow-up operations is keeping track of patient development. Regular check-ins and assessments can spot early indications of problems or relapse, enabling prompt management, according to recent studies (Brach & amp; Borsky, 2020).). This proactive strategy aids patients in their healing process and reduces readmissions.

The ability to get follow-up assistance is equally crucial. Patients with SUDs frequently need specialized treatments like peer support, therapy, and counseling. It is essential to guarantee that these services are accessible and readily available after discharge. A thorough support network that extends outside the hospitals is essential for facilitating continuous therapy and lowering the risk of relapse, (Timpel, 2020).

Administrative Barriers and System Integration

For transitional care to be successful, administrative obstacles must be removed, and healthcare systems must be integrated. Recent research emphasizes how crucial administrative procedure simplification is for improving care coordination. Warchol (2019) asserts that administrative barriers between various healthcare programs and providers often result in increased readmission rates. To close these gaps, effective communication and information sharing are necessary.

In order to effectively manage SUD patients, healthcare interventions must be integrated. Services for this demographic are largely provided by managed care organizations. According to Heaton & Tadi (2020), these organizations spend a large amount of money treating readmissions brought on by problems with care coordination. Effective service integration can result in cost savings, better resource allocation, and better patient experiences.

Increasing provider communication is essential for lowering readmissions. Brach & Borsky (2020) set out strategies for enhancing the changeover from hospital to community care. These tactics include utilizing community resources to offer holistic support, ensuring that patients and their families are aware of their care plans, and promoting informed decisionmaking through clinical information systems.

Patient Empowerment and Education

Education and patient empowerment are essential elements of transitional care regimens. According to research, educating patients and their families about their health can have a good impact. According to Pugh et al., (2021), knowledgeable patients are better able to control their conditions and practice better self-care habits.

In order to lower readmission rates, patients must be given the tools they need to take charge of their own health, patients are more likely to follow treatment programs when they actively participate in making decisions about their own care and self-care, which lowers the risk of relapse and readmission (Timpel, 2020). For SUD patients, in particular, learning about triggers, coping mechanisms, and medication management is helpful.

Impact on Healthcare System

It is important not to understate the effect that transitional care guidelines have on the healthcare system. Readmissions have a significant financial impact on managed care organizations, totaling \$569 billion annually (Sturmberg, 2019). This financial strain emphasizes how urgently better care coordination and transitional care practices are required.

The Affordable Care Act's Hospital Readmissions Reduction Program, among other legislative initiatives, demonstrates how much the healthcare sector values transitional care in lowering readmissions (Warchol, 2019). To guarantee a smooth transition and minimize readmission rates, these initiatives highlight the necessity of pre-release planning, patient education, care coordination, and post-release monitoring.

Summary

In this extensive literature review, we examined the vital subject of transitional care protocols for patients with substance use disorders (SUDs) and their effect on reducing readmission rates. Our evaluation, which drew on recent research from the years 2018 to 2023, synthesized the main ideas and conclusions from numerous investigations.

In order to successfully transition care for SUD patients, the reviewed literature emphasizes the importance of appropriate discharge planning, care coordination, patient education, continuity of care, and system integration. Numerous studies suggest the significance of organized protocols, case managers, and care coordinators in enhancing the standard of athome care, decreasing readmissions, and promoting healthy self-care practices. An effective transitional care program also requires the removal of administrative obstacles, patient empowerment through education, and integrated healthcare systems. Finally, this review emphasizes the critical need for thorough transitional care protocols and efficient implementation strategies to improve patient outcomes, lessen the financial burden on healthcare systems, and make sure that people with substance use disorders transition from inpatient to outpatient care more smoothly.

Project Aim

The aim of this DNP project is to reduce readmission rates among patients diagnosed with substance use disorders within a managed care organization. The project is rooted in the recognition that readmissions among this patient population not only impose a substantial financial burden but also signify a gap in the continuum of care that must be addressed urgently.

Project Objectives

The objectives of this DNP project are multifaceted and designed to holistically address the challenges faced by patients transitioning from addiction treatment centers to community care. In the timeframe of this project, the following objectives will be met.

Development of a comprehensive transition of care protocol: Formulate and implement an evidence-based transition of care (TOC) protocol tailored to the unique needs of patients diagnosed with substance use disorders who are being discharged from addiction treatment settings to community care.

Provider Education: Educate healthcare providers within the organization to ensure they are well informed about the newly established transition of care protocol.

Enhancing Provider Knowledge and Attitudes: Educate healthcare providers to enhance their knowledge and attitudes, fostering a positive and supportive environment for the transition of care for patients with substance use disorders. **Compliance Evaluation:** Examine whether healthcare professionals used the newly adopted protocol in actual clinical practice within four to five weeks.

Readmission Rate Evaluation: Evaluate and compare readmission rates among patients with substance use disorders before, during, and after the project's implementation. In this case, the evaluation will determine whether the protocol successfully lowers readmission rates by at least 15% and improves patient outcomes within this given period.

Theoretical Framework

Following the success of the transition theory in the clinical setting, this DNP project will apply the same theory in achieving its set aims and objectives. Initially developed by Afaf Meleis, the theory provides a comprehensive framework for understanding and facilitating the process of change and transition experienced by individuals and patients in various healthcare settings (Lindmark et al., 2019). Furthermore, the clinical-based theory serves as the theoretical framework for the DNP project, as it underscores the importance of the process that occurs when patients undergo life changes and the guidance provided by nurses to achieve positive outcomes.

Key Concepts of Transition Theory

According to transition theory, there are many transitions in life, both anticipated and unanticipated. Instead of being a single occurrence, these transitions are a part of a process. Patients undergo various transitions in the healthcare setting, such as going from acute care to rehabilitation or from a hospital to home care. Due to the nature of their condition, transitioning individuals with substance use disorders from addiction treatment facilities to community care can be extremely difficult. There are four transitions that influence an individual's ability to navigate a transition successfully —the nature of the transition, the individual's personal factors, the individual's support system, and the healthcare system's involvement (Lindmark et al., 2019). These conditions are frequently complicated for persons with substance use disorders. The transition's nature includes a shift in the location of the service and a wider environment for addiction recovery and relapse avoidance.

In transition theory, there are normative and non-normative transitions. Normal life events include transitions like childbearing and aging. Contrarily, non-normative transitions are unanticipated and frequently accompanied by stress and uncertainty (Smith et al., 2023). Both normative and non-normative transitions may be experienced by patients with drug use disorders; the transfer between care settings is an example of a normative transition.

Application in Healthcare

In order to improve patient outcomes at crucial phases of care, multiple nursing practitioners have widely recommended and applied the transition theory. The application of transition theory to the DNP project is multifaceted.

The coordination of care: For patients with substance use disorders, smooth transitions are crucially facilitated by care coordinators and case managers. These professionals evaluate the nature of the transition, attend to the requirements of specific patients, activate support networks, and ensure that the healthcare system is effectively included in the transition process.

Individualized Care Plans: The transition theory emphasizes the significance of adjusting care plans to meet the specific requirements of each patient. This entails addressing any

co-occurring mental health conditions for patients with substance use disorders and acknowledging the personalized character of addiction and recovery.

Communication and Patient Education: The transition theory's key tenets include effective communication and patient education. A supportive environment is promoted, and anxiety and uncertainty during the transition process are diminished by ensuring that patients and healthcare professionals are well-informed about the procedure for the transition of care.

Implementation Framework

In addition, the project will use the PDSA model for quality improvement to provide a structure for developing, testing, and implementing the required changes.

Key Concepts of the PDSA Model

The PDSA model has three mandatory steps one should focus on when using the model. The concept has currently transformed the healthcare sector since each new idea must undergo sufficient testing.

The basic questions we consider in this step are: 1) What are we trying to accomplish? 2) How do we test that the change marks an improvement? 3) What changes should be implemented to yield an improvement? (NHS England and NHS Improvement, 2021). With these questions in mind, we focus on concrete goals with measurable outcomes for the project.

This is the step when the cycle should begin. A project may have several cycles running simultaneously or sequentially. Each cycle must have four actionable components (Plan, Do, Study, and Act). Sequential cycles signal that a different approach is required to run the project, while simultaneous cycles notify of complex changes. In this step, we record all the progress of the project to ascertain the improvement journey.

Implementing PDSA Model

As described above, the model has four key components that must be acted upon in a healthcare project.

The component entails noting down a statement of what to do in the testing and covers a small portion of the implementation of the model. In this phase, the project lead must note down the expected outcomes of the project. Finally, the project lead notes the steps to take in the cycle, the population incurred, and the time limit for the project.

The "Do" component means implementing the set plan of the project. It entails keen observation of the project objectives and recording. Here, one compares whether the outcomes reflect the set objectives or need modification.

After setting the project in motion, we keep studying the results to record whether it meets the set goals.

The action phase answers the question of the performed cycle. The project lead records the implementation experiences and whether the project worked or not. This step determines the next cycle of the project.

Significance in Addressing Substance Use Disorder Challenges

The shift from addiction treatment facilities to community care presents a variety of difficulties for people with substance use disorders. These challenges include the possibility of relapsing, societal stigma, dispersed care, and the requirement for ongoing assistance. Transition theory provides insightful solutions and approaches to deal with these problems:

Transition theory's emphasis on evaluating transition conditions and offering specialized care is consistent to keep patients with substance use disorders from relapsing during this crucial time (Smith et al., 2023).

By taking into account the psychological and social dimensions of transitions, transition theory can guide interventions that lessen the stigma connected to substance use disorders, promoting easier transitions and better patient outcomes.

Transition theory highlights the significance of care continuity. By putting transitional care standards into place, patients are guaranteed consistent care as they move from one location to another, lowering the possibility of treatment gaps.

Generally, this theory provides a robust theoretical framework for understanding and addressing the complex process of transitioning from addiction treatment settings to community care for patients with substance use disorders. The application of the theory will enable the DNP project to develop a transitional care protocol that is sensitive to the unique needs and challenges of this patient population. Furthermore, having a thorough understanding of the transition phases and the implementation of supportive interventions, this project aims to reduce readmission rates, improve patient outcomes, and ultimately enhance the quality of care provided to individuals with substance use disorders. Afaf Meleis' transition theory serves as a valuable guide in achieving these goals.

Population of Interest

The success of this project lies behind two different population groups: the immediate stakeholders that participate directly in the project (direct population) and the patients diagnosed with SUDs in the treatment center (indirect population). The indirect population is comprised of adult and youth patients who are residents of the Florida area seeking to be treated at River Oaks Treatment Center. The patient diagnoses encompass a mixed pool of different forms of SUDs, and psychiatric illnesses such as anxiety, depression, bipolar disorder schizophrenia. River Oaks Treatment Center does not accept patients with disruptive behavioral disorders, developmental disabilities, active suicidal ideations (SI), or homicidal ideations. These types of patients will be excluded from the project.

The direct population is made up of healthcare workers who are the necessary element in the project execution. All healthcare professionals who are involved directly in implementing the Transitional Care Protocol will include addiction specialists, psychologists, nurses, case managers, social workers, and administrative staff. More than 100 staff will participate in the project. Non-medical staff who were not on duty during the project implementation period will be excluded.

Project Setting

The project will be conducted in Florida, which is a multicultural, diverse state. The selection of the setting was based on the rich cultural tapestry and bustling urban life, which makes it a reflection of the major American cities characterized by great diversity in culture and a high rate of urban activity. Nonetheless, just like any other city in the country, it has to grapple with problems associated with substance use disorders. The project setting is the River Oaks Treatment Center, which ranks among the best treatment centers for, and a leading provider of, health services for patients struggling with SUDs in the city. River Oaks Treatment Center is multipurpose, providing inpatient addiction treatment units, outpatient clinics, mental health services, substance abuse counseling, and other services.

River Oaks Treatment Center has several departments, including the Division of Addiction Medicine, the Department of Behavioral Health, and the Center for Substance Abuse Treatment. This emphasizes the need for a multi-disciplinary approach in addressing the comprehensive treatment requirement for SUD patients. The organizational staffing patterns range from addiction specialists, psychologists, nurses, and case managers to social workers and administrative personnel. The Center's choice of an all-rounded approach to drug abuse problems is indicated in its staffing patterns, which encompass committed staff willing to aid in the completion of this project.

Stakeholders

There are different stakeholders involved in this project who have different roles in making it work. The identified stakeholders include:

Patients with SUDs: These people are the heart of the project; they must take part in their care processes and be actively involved in the process of recovery. Transitional care protocol improvement and lower instances of readmission and support will directly impact them.

Families and Loved Ones: Family is an extremely important stakeholder in the healing process of SUD people. The beneficiaries include the families of patients who will be involved in a transitional program, which will guide them and equip them with the necessary resources to improve ways of supporting their loved ones.

Healthcare Providers: It is essential to include all healthcare personnel, such as doctors, case managers, nurses, behavioral technicians, and therapists as key stakeholders. They shall implement the new transitional care plans, educate the patients, their families, and friends, and ensure continuity in the delivery of their medical needs (Nordeck et al., 2018).

Case Managers and Care Coordinators: Case managers and care coordinators play key roles in leading patients through the transition of the care process. They will play an active role in designing the transition care protocols and their implementation.

Administrative Staff: The administrative staff will coordinate the project's logistics, including the allocation of resources and a favorable organizing framework for effective transitioning medical care.

Healthcare System Management: The healthcare system management, including policymakers and administrators, will support the project by aligning it under the national guidelines and regulations and offering financial and resource support.

Insurance Companies: Insurance companies represent an important group of stakeholders involved with finance in patient care. Proper discharge protocol can help lowered readmission rates, hence potential cost.

Community Resources: These crucial stakeholders encompass several community resources and include local support groups, sober living houses, and outpatient treatment providers (RHIB, (2023).

Regulatory Bodies: The quality of care offered should be monitored by regulatory bodies, which include the Joint Commission and local health departments. The primary role of the Patient Safety/Joint Commission Manager is to foster a culture of continuous improvement and coordinate the systematic implementation of effective practices designed to reduce error and improve patient outcomes. These people provide vital support and alignment towards their projects. Local health departments work with healthcare and community partners to prevent and target the cause of disease outbreaks and then determine the appropriate response. It is important to identify stakeholders and involve them actively in the project for its success. Working together, these stakeholders will develop and implement an all-encompassing Transitional Care Protocol to Reduce Readmission Rates for Patients with Substance Use Disorder, covering the gaps that currently exist in the process of delivering health care and ultimately improving patient outcomes (Nobel et al., 2013). Collaboration with important stakeholders led to securing permission to carry out the project at River Oaks Treatment Center. The key players who consented included Dr. Abbas Sina. Dr. Sina is a diplomat of the American Board of Internal Medicine, as well as the American Board of Addiction Medicine, and a member of the American Society of Addiction Medicine and the Florida Society of Addiction Medicine. Dr. Sina Abbas is the assistant director at River Oaks Treatment Center. Also, Joanna is the director of nursing (DON) at River Oaks Treatment Center. Dr. Sina Abbas oversees the nursing department and the behavioral health technician department. Since I work at River Oaks Treatment Center affiliation agreement is not needed for the DNP project.

Section 2: Interventions, Tools, and Appendices

Smooth and effective patient transfers between various healthcare delivery units will be successful if transferred care is well planned and performed. Demanding needs for care and a higher risk of readmission make patients with substance use disorders (SUDs) a very considerable obstacle in this environment. Since the co-occurrence of substance abuse issues and mental health issues is so prevalent, effective transitional care protocols are indispensable. The problems of SUDs have had an unimaginable impact on the lives of many adults, youths and communities with devastating consequences on individual, societal and health levels (NIDA).2021). Unfortunately, the existing programs are not as effective as they should be in

preparing these individuals for successful networking within society when therapy has been completed. Hospitals and other health service providers lose a lot of money due to high readmission rates which are worse due to bad discharge planning and lack of understanding. Thus, in this paper, the development of a comprehensive discharge plan for the SUD patients which is consistent with the national guidelines and patient and family engagement principles will be addressed to cope with the high readmission rates and alleviate the patient outcomes.

The value of the transitional care in the healthcare context should not be ignored. It covers the health services provided afterwards and is a series of actions that will have to be carried out immediately and securely. Care coordination, discharge planning, referrals, follow-up appointments, medication management and patient self-education are the components of services. It is one of the critical tasks when patients have to be moved between the hospitals (Mays et al., 2021). The increase in the incidence of substance abuse and mental health problems in recent years calls for the need for effective transition care. Statistical data demonstrated that one in three of the persons was diagnosed with mental health or substance use condition within the last years. Shocking statistics indicate that 50% of the 18-25 age group have struggles with mental illness and substance abuse (Jahan et al., 2023). The long-term substance abuse is a huge cause of these diseases while which can have serious psychological and physiological effects. The consequences are substantial as they can encompass loss of social relations, academic and employment difficulties, and even physical health complications (Jahan et al., 2023). Medical professionals make use of a wide variety of drugs and non-drug therapies in treating these problems that call for a more personalized approach to healthcare.

When we review the amount that medical insurance companies pay out and the amount that hospitals and health clinics spend on patient care, we get the picture of the price of bad transitional care. The damage caused by substance abuse disorders each year is catastrophic since it destroys individuals, couples, and families, and also leaves society in ruins. Hence, it is imperative that the patients discharged from the therapy should be equipped with the required strategies to thrive in the real world. The slightest exposure to drugs or alcohol can develop into a life-threatening condition when individuals come back to their communities with a minimal preparation and treatment. Substance use disorder (SUD) is a grave medical condition with severe consequences. Those with substance use disorders (SUDs) frequently experience an irresistible compulsion to use drugs, alcohol, or tobacco. Their capacity to go about their regular lives unimpeded suffers due to this single-mindedness. Many people continue to engage in substance abuse despite being well aware of the potential negative consequences. The more severe forms of SUD are sometimes referred to as addictions, lending credence to the idea that SUD is a diagnosable mental condition that may be helped. In essence, addiction radically reshapes a person's brain and behavior, driving them to lose control over their consumption of numerous substances, including legal and illegal drugs like alcohol, stimulants, tobacco, and more (Ramadan et al., 2022). Addiction is the final and most severe stage on the severity spectrum of substance use disorders (SUD).

The transition of care from inpatient facilities to the community is fraught with difficulties in light of the widespread nature of substance use disorders. Misunderstandings between patients, case managers, and healthcare practitioners are common during this pivotal transition in care. The end consequence is a piecemeal strategy that fails to provide adequate

support to people at a crucial point in their recovery. Looking deeper at the data, we find that in 2021, an alarming amount of people (12+) used illegal drugs. Statistics show that last year, 21.9 percent of the world's population, or an astounding 61.2 million people, used some form of illegal narcotics. An astonishing 52.5 million people admitted to using marijuana, making it the most popular illicit substance. Because of its legal status in most countries and widespread acceptance of moderate drinking, alcoholism is the most common substance use disorder globally. The cultural norm of early drinking makes the already high prevalence of alcoholism worse (Nawi et al., 2021).

Substance abuse problems are linked to a variety of other medical issues. According to studies, about 16% of people with anorexia nervosa also have a substance use disorder. The disturbing fact that 7% of AN cases involve substance addiction or dependence disorders demonstrates the close relationship between these problems. Seizures, cognitive impairment, brain damage, and respiratory diseases are some ancillary health problems frequently accompanying individuals struggling with addiction. Memory and focus problems and impaired decision-making are just a few ways substance abuse complicates complex daily routines (Nawi et al., 2021). Substance abuse can also cause physiological changes, such as abnormal growth patterns or impaired core temperature regulation.

Background of the facility

This addiction center is not meeting national criteria, resulting in a frustrating cycle of subpar patient care and readmissions. Patients' unreadiness to return home or to a sober living situation after treatment worsens matters. Case managers frequently run out of time before a patient's scheduled discharge after an extended inpatient stay can be adequately prepared.

Because of this, patients may be discharged from the facility without enough support systems, leading to unnecessary readmissions. Even sending a patient's medication to a pharmacy presents difficulties when neither the patient's nor the pharmacist's location is known with certainty. These inefficient changes have significant monetary repercussions. When patients are readmitted to hospitals for treatment multiple times, not only do insurance companies pay a hefty price, but so do the hospitals themselves. Long-term care can last anywhere from six months to a year or more, while short-term stays might last anywhere from three to six weeks. Substance abuse rehabilitation centers can cost anything from \$5,000 to \$80,000, with the higher-end options offering more deluxe amenities. Substance abuse disorders are among the most expensive health concerns in the United States, with the average cost of inpatient addiction treatment hovering at about \$42,500 (Peterson et al., 2021). The cost to society from these illnesses is enormous, yet the costs associated with treatment are only a tiny part of that.

When examined more closely, the financial burden is seen to go beyond the expense of treatment. Total expenses recorded in 2013 were \$78 billion, the result of an exhaustive analysis of the costs associated with prescription opioid use disorders and overdoses in the United States (Nada et al., 2021). Furthermore, only 3.6 percent of the drugs costs, which is about \$2.8 billion, is spent for treatment. The constant data collection by the National Center for Health Statistics (NCHS) to the Centers for Disease Control and Prevention (CDC) about the drug incidents in the United States is frightening. The statistics shows undoubtedly that more than 900,000 people have overdosed and died since 1999. Drugs overdose caused approximately 91,000 deaths in the US in 2020. In the year 2019, overdose death rates leaped from 21.6 to 28.3 per 100,000,

according to the study conducted by Ghose et al. (2022). Data show that overdosing rates decrease with age from 9.4 and 12.0 per 100,000 in age group 65 and over.

Problem Identification

The trend of high readmission rates in substance abuse disorder (SUD) patients is a grave issue. The patients with SUDs are at a higher risk of extended length of stay in hospitals and readmission due to medical problems. They have long-term implications for health, social care, welfare, and the criminal justice systems in many countries (Ramanda et al., 2022). The World Health Organization estimates that more than three million lives are lost globally due to alcoholrelated illnesses (World Health Organization, 2020). This facility has to deal with significantly high readmission rates in the past 5 years. Adherence to the national benchmarks is needed in dealing with this existing challenge. Implementing a solution requires case managers and care coordinators to strictly follow the facility's regulations. One of the challenges is the nonexistence of a strong discharge model to facilitate a comfortable transition from the care onto the patients' homes. Planning for the discharge of those battling addiction is a very daunting task as they find themselves in different conditions. Ensuring continuity of care, accurate health assessment, proper prescription reviews and communication with pharmacies, and helping the patient choose a suitable living environment such as a sober living home or going home are vital components of an actionable transitional plan. As such, there are some cases where the facility does not sufficiently meet these standards.

An implementation of the AHRQ Guide to Patient and Family Engagement could be a part of the solution. Trust and effective collaboration may be attained when the patient's loved ones are incorporated in their treatment (Emes et al., 2018). Effective communication and joint planning of the team of medical staff, patients, and family members are the core of this method. This supportive connection is built on mutual trust and consideration of each person's unique values and beliefs, increasing participation from the patient and their loved ones. Permitting patients to participate in their healthcare decision-making actively translates into measurable gains in safety and overall quality of life, highlighting the inherent benefits of person and family engagement (PFE).

Project Question

Do drug use disorder patients have lower readmission rates if care coordinators and case managers adopt a complete transitional care protocol? The study's overarching research question is as follows: Instructing care coordinators and case managers (P) How does implementing a transitional care protocol using the AHRQ Guide by engaging family, case managers, and care coordinators (I) Will it reduce readmission rates for individuals with substance use disorders leaving the facility without proper transitional care guidance (C) Decrease readmission rates for patients diagnosed with substance use disorders in an inpatient treatment center (O)?

Search Methods

A thorough and systematic literature search was conducted to ensure the inclusion of relevant academic resources in the field of nursing research, with a particular emphasis on clinical decision-making in the context of care transitions and self-care for people with substance use disorder (SUD). The search technique used Google Scholar to access numerous academic databases, including SCOPUS, PubMed, CINAHL, BMC Medical Research Methodology, and Web of Science. Using the PICOT inquiry architecture, a combination of search phrases was developed to compile valuable resources. Boolean "AND" was used to combine these phrases to increase search precision. Search terms used included "case managers transition of care and care quality," "care transition by coordinators," and "self-care, SUD, and SUD self-care." More than 800 hits were returned from the initial search, however, the search was refined by eliminating any results older than 2018. Limiting the study to within the last several years meant only the most up-to-date scientific data relevant to contemporary SUD patients was used.

To further hone the selection process, strict criteria was used to evaluate each publication for inclusion. For inclusion, full-text articles must have been written in English, and narrative reviews, editorials, monographs, abstracts, reports on personal experience, and doctoral dissertations were eliminated. After this screening process, 210 articles met our criteria. Afterward, the studies were examined by their titles, and abstracts were reviewed to see if they were relevant. In addition, the papers' citation lists were examined for might have been missed. Therefore, 44 articles turned up in the search and marked for further analysis.

Among these articles, the three were selected as highly relevant after an inspection. Intensive study of these articles shows their wealth of information about SUD and its therapy. Close analysis of these articles points out their enormous amount of data about SUD and its treatment. These three articles were used for the review of literature. In this section, a precise and well-structured criterion was used to only select the most updated, relevant, and high-quality data which has been later in the stages of this study.

Review of Study Methods:

It is crucial to comprehend the research methodologies adopted in research studies that test transition care protocols for patients with substance use disorders (SUDs) to evaluate the findings for consistency, validity and reliability. In this section, the focus will be on the prominent research methods which are used in this field.

Firstly, a transitional care approach integrated with prevention of readmissions of SUD patients was researched applying different methods to research. Approaches such as quantitative (both qualitative and the combination of the two) and a combination of the aforementioned are the techniques employed, and each adds its own perspective to the knowledge base.

A huge number of datasets were studied by conducting quantitative research with the assistance of the process of experimenting and assessing transitional care strategies. In this situation, statisticians have ensured the readmission rates before and after the internalization of the programs. Contrarily, however, a plethora of other factors has been previously related amongst others which relate to readmission rates to the standard of discharge planning.

Through qualitative research methods and a detailed analysis of experiences and views of different people involved including SUD patients, their families, as well as healthcare providers, the quantitative data has been enriched Interviews, focus groups, and content analysis are all techniques that have been used in qualitative studies to reveal the intricacies in the process of transition. Such qualitative observations provide deeper understanding for the barriers and facilitators that are experienced in the transition from the inpatient to the outpatient care.

Furthermore, some of the studies also adopted mixed-method study designs, which comprise of combining both quantitative and qualitative data collection and analysis. Researchers may use these integrated approaches for triangulating their data that give detailed information on the transitional care process. Mixed-methods studies enrich and deepen the research findings by fusing numerical data with narratives and personal experiences.

It is crucial to remember that thorough literature reviews and meta-analyses have also significantly combined previous studies in this field. These extensive reviews examined a wide range of studies, giving a comprehensive overview of the evidence for SUD patients' transitional care regimens. By compiling and evaluating a wide range of research findings, systematic reviews contribute to the development of best practice standards.

Review Synthesis

Recent research publications (from 2018 to 2023) have been crucial in illuminating cutting-edge approaches to meeting the requirements of people with SUD. These studies have mostly concentrated on case managers and care coordinators due to their success in raising the standard of at-home care for SUD patients, which has been shown to lower readmission rates and enhance self-care behaviors.

Five major themes have arisen from these research studies, greatly advancing our knowledge of transitional treatment for SUD patients:

 Care Coordination and Discharge Planning: Current research highlights the significance of efficient care coordination while patients are moving from the hospital to home care (Heaton, 2022). This includes well-planned procedures for discharge planning to guarantee a smooth transfer of care obligations Optimal functioning of case managers in managed care organizations, whose role is critical in improving the quality of home services for SUD patients, and in reduction of readmission rates has been the focus area since.

- 2. Health Education and Patient Empowerment: The literature stresses that SUD patients must be properly taught health in the entire process of adjustment. The initiation of healthy post-discharge outcomes needs to be done by teaching patients and family members self-care habits and routines. Becoming knowledgeable allows the patients to better manage their conditions and low the risk of readmission.
- 3. Access to Comprehensive Healthcare Services: Therefore, the transition care calls for collaboration between healthcare services to develop adequate support networks and resources for SUD patients. Comorbidity must be managed, patients must be linked to community services, and patients and healthcare professionals must have easier communication.
- 4. Follow-Up and Continuity of Care: A critical element of success in transitional care is continuity of care long after release. Comprehensive follow-up is an indispensable part of the treatment as it involves patient monitoring of progress and dealing with any new issues arising, per Heaton (2022). Continuing support is instrumental in lowering readmission among individuals with SUD.
- 5. Administrative Obstacles and Healthcare System Integration: Research focused on several variables linked with the quality of transitional caremanship, emphasizing the importance of removing administrative barriers within managed care agencies. Promoting
collaboration and collaboration among different healthcare services and programs can lead to more efficient healthcare delivery and better patient experiences.

The literature also shows a shortcoming in SUD patients' care coordination, particularly in the context of post-discharge social services in communities, outpatient care, and communication between patients and medical staff (Sturmberg, 2019). Resolution of these problems is crucial in order to improve patients' outcomes and reduce health care costs

Literature Theme Development

The access to outpatient care for SUDs patients is one of the most significant healthcare challenges. This group is of interest because the readmission rate shows the need to place emphasis on the transitional protocols of care and also evaluate whether they can be able to meet the identified specific needs (Warchol, 2019). Lately, the body of research has gone deeper into looking at the various elements of transitional care that helps in reducing readmissions and outcome of the patient. Such aspects are discussed in the Literature review as the major findings from the research, including implementation of efficient discharge planning protocols, patient accessibility through continuity of treatment and follow-up, overcoming administrative hurdles, patient empowerment through education and various health- care implications.

Effective Transitional Care Protocols

Treatment transitions that reduce the readmission of individuals with SUDs begin with strategies that fit the individuals. The literature emphasizes the effectiveness of the implementation of structured discharge planning strategies. Integrated and comprehensive discharge plans are fundamental for the outcome of continuity of care. These are duties done post-discharge, disbursement of medicines, and follow up care.

Implementation of these standards depends very much on the compassion of the case managers and care coordinators. The research conducted by Forstner et al. (2019) has discovered that case managers can provide a high level of home care to SUD patients by managing their needs after discharges, such as connecting them to the local service and support networks. It assists in a smooth transition of care from hospitalization to outpatient care.

Moreover, the act of self-care must also be incorporated in the process of transition care. In line with the literature, with skilled self-care practices, as well as awareness of how to manage their conditions, residents are less likely to be re-admitted (Timpel, 2020). Patients will have a greater adherence to the medication regimen and will not be readmitted or relapse if they are aware of their diagnoses and treatment plan.

Another important aspect is the smooth coordination with other healthcare services. People with SUDs are multi-problem individuals who tend to have a number of mental health issues. The transitional period is full of many complications as one would have to deal with service providers of substance abuse, mental health, and primary care. This has been pointed out by Becker et al. (2021) as they the researchers emphasized the need to have seamless collaboration of these service providers.

Continuity of Care and Follow-Up

Administrative Barriers and System Integration

Adherence to transitional care requires the upkeep of continuity of care and adherence to the strict procedures of follow-up. Continuity of care is vital during the period following release as well as keeping re-admission at bay. The patients who have SUD's also gain a lot from ongoing care and monitoring, according to Brach & Borsky (2020). This covers access to supportive groups, responsible handling of prescription drugs, and routine outpatient consultations.

Medical follow-up is a routine check on the patient to establish if he/she is improving. To identify signs of relapse which would require immediate management regular evaluation is essential as shown by recent studies. (Brach & Borsky, 2020). This approach supports patients in their healing process to reduce readmission risks SUD patients can obtain additional help via a follow-up opportunity to consult after discharge. Therapy and counseling is commonly used by SUD patients. These patients must be able to access and use these services after discharged. Timpel (2020), suggests that it is essential to develop a strong support system outside the hospitals to mitigate the risk of relapse. It is also imperative to address administrative challenges and integrate healthcare systems for a safe transition of care. The latest research notes that administrative procedure simplification is one of the critical issues for improving care coordination. Warchol (2019) enumerates that administrative barriers among different healthcare programs and providers often lead to higher readmission rates. To do so, an effective communication and information exchange is required.

An effective management of SUD patients could only be achieved through the integration of healthcare interventions. Managed care organizations are the major service providers of this demographic group. Heaton and Tadi (2020) further argue that most of the organizations' money is channeled to the treatment of re-admissions caused by care coordination issues. Such integration can lead to cost savings, better use of resources, and better patient satisfaction. Close provider communication is very important for readmission reduction. Brach & Borsky (2020) proposed means for increasing the adoption of home care from hospital care. The strategies involve applying the local community resources to offer integrated assistance, keeping the patients and their families abreast of their care plans and encouraging informed choice through implementation of clinical information systems.

Patient Empowerment and Education

Education and patient empowerment are key components of an effective transitional care plan. Education of patients and their families has been shown to be very effective, as research indicates. Based on Pugh et al. (2021), informed patients can regulate their condition and practice correct self-care.

So as to cut down readmission rates, patients must be provided with the equipment they need to take charge of and manage their own health, chances are higher that patients will stick to the treatment programs if they actively take part in making decisions about their own care and self-care, which in turn, will reduce the rate of relapse and readmission (Timpel, 2020). Alongside, SUD patients need to know about triggers, coping techniques and medication management.

Impact on Healthcare System

It is essential not to underestimate the impact of transitional care rules on the healthcare system. Managed care organizations also have to shoulder significant financial impact of readmissions which accounts for \$569 billion yearly (Sturmberg, 2019). This shows that the need for better care coordination and transitional care plans is so acute.

The role of transitional care can be observed in a number of legislative pieces, for example, the Hospital Readmissions Reduction Program of the Affordable Care Act (Warchol, 2019). Such interventions emphasize the need for pre-release planning, patient education, care coordination, and post-release monitoring in order to have a transitional process that is free of hiccups to reduce readmission rates.

Summary

This extensive literature review explored the influence of transitional care pathways on SUD patients and their contribution to a decrease in readmission rates. In our evaluation a mix of recent studies of 2018–2023 published findings and opinions was used.

Besides the recommended discharge planning, care coordination, patient education, continuity of care, and system integration that have been reviewed, the necessity of appropriate discharge planning is indicated in the literature. The literatures denote that structured programs, case managers and care coordinators, actually provide improved quality of care at home, reduced readmissions and empower self-health care practices. For a successful transitional care program, there is a need to remove administrative barriers, empower the patients through education, and there should be an integrated healthcare system.

In the last part, this assessment underlines the fact that, good transitional care protocols and effective implementation strategies are crucial to outcome improvement, less financial burden on healthcare system and smoother transition from inpatient to outpatient care.

Project Aim

The goal of this DNP project is to reduce readmission rates among patients with substance use disorders served by our managed care organization. This project is founded on the understanding that the readmissions of these patients not only put a financial strain on the system but are also a sign that service interruption is present along the continuum of care, which must be solved as soon as possible. Project Objectives

The objectives of this DNP project are multifaceted and are meant to comprehensively deal with the issues of the patients passing from the addiction treatment centers to the community care. The project will have the following objectives met within this period:

- Development of a comprehensive transition of care protocol: Develop and implement an individualized cross-setting transition-of-care (TOC) protocol for patients with substance use disorders (SUD) being discharged from addiction treatment facilities to community care.
- Provider Education: Train the health care providers within the organization to ensure they are adequately knowledgeable of the new care transition procedures.
- 3. Enhancing Provider Knowledge and Attitudes: Educate health professionals to improve their knowledge and attitudes, creating a friendly setting where the care transition for patients with substance use disorders can be successful.
- 4. **Compliance Evaluation**: Study, whether the healthcare professionals followed the newly adopted protocol in real clinical practice or not within four to five weeks.
- 5. Readmission Rate Evaluation: Assess and contrast readmission rates of patients with substance use disorders pre-, during-, and post- implementation of the project. Concerning this, the assessment will determine if the protocol was successful in reducing readmission rates by at least 15% and improving the patients' outcomes during this period.

Theoretical Framework

The DNP project will be built on the theory of the transition which has been successful in clinical settings. This theory was first introduced by Afaf Meleis and it acts as a comprehensive model for explaining the phenomenon of change and transition which human beings and patients have to deal with in a variety of healthcare settings (Lindmark et al., 2019). Moreover, this

clinical-based perspective is the theoretical foundation of the DNP project as it emphasizes the process that happens before the patients go through major life changes and the role of nurses in guiding them to achieve favorable outcomes.

Key Concepts of Transition Theory

As per transition theory, there are several transitions in real life, which are both expected and unexpected. Instead of being a cut-off stage, these transitions are part of a process Patients undergo various transitions in the healthcare setting, such as going from acute care to rehabilitation or from a hospital to home care. Due to the nature of their condition, transitioning individuals with substance use disorders from addiction treatment facilities to community care can be extremely difficult.

Four transitions influence an individual's ability to navigate a transition successfully – the nature of the transition, the individual's factors, the individual's support system, and the healthcare system's involvement (Lindmark et al., 2019). These conditions are frequently complicated for persons with substance use disorders. The transition's nature includes a shift in the location of the service and a wider environment for addiction recovery and relapse avoidance.

In transition theory, there are normative and non-normative transitions. Normal life events include transitions like childbearing and aging. Contrarily, non-normative transitions are unanticipated and frequently accompanied by stress and uncertainty (Smith et al., 2023). Both normative and non-normative transitions may be experienced by patients with drug use disorders; the transfer between care settings is an example of a normative transition.

Application in Healthcare

In order to improve patient outcomes at crucial phases of care, multiple nursing practitioners have widely recommended and applied the transition theory. The application of transition theory to the DNP project is multifaceted.

The coordination of care: For patients with substance use disorders, smooth transitions are crucially facilitated by care coordinators and case managers. These professionals evaluate the nature of the transition, attend to the requirements of specific patients, activate support networks, and ensure that the healthcare system is effectively included in the transition process.

Individualized Care Plans: The transition theory emphasizes the significance of adjusting care plans to meet the specific requirements of each patient. This entails addressing any co-occurring mental health conditions for patients with substance use disorders and acknowledging the personalized character of addiction and recovery.

Communication and Patient Education: The transition theory's key tenets include effective communication and patient education. A supportive environment is promoted, and anxiety and uncertainty during the transition process are diminished by ensuring that patients and healthcare professionals are well-informed about the procedure for the transition of care.

Implementation Framework

In addition, the project will use the PDSA model for quality improvement to provide a structure for developing, testing, and implementing the required changes.

Key Concepts of the PDSA Model

The PDSA model has three mandatory steps one should focus on when using the model. The concept has currently transformed the healthcare sector since each new idea must undergo sufficient testing. The basic questions we consider in this step are: 1) What are we trying to accomplish? 2) How do we test that the change marks an improvement? 3) What changes should be implemented to yield an improvement? (NHS England and NHS Improvement, 2021). With these questions in mind, we focus on concrete goals with measurable outcomes for the project.

This is the step when the cycle should begin. A project may have several cycles running simultaneously or sequentially. Each cycle must have four actionable components (Plan, Do, Study, and Act). Sequential cycles signal that a different approach is required to run the project, while simultaneous cycles notify of complex changes. In this step, we record all the progress of the project to ascertain the improvement journey.

Implementing PDSA Model

As described above, the model has four key components that must be acted upon in a healthcare project.

The component entails noting down a statement of what to do in the testing and covers a small portion of the implementation of the model. In this phase, the project lead must note down the expected outcomes of the project. Finally, the project lead notes the steps to take in the cycle, the population incurred, and the time limit for the project.

The "Do" component means implementing the set plan of the project. It entails keen observation of the project objectives and recording. Here, one compares whether the outcomes reflect the set objectives or need modification.

After setting the project in motion, we keep studying the results to record whether it meets the set goals.

The action phase answers the question of the performed cycle. The project lead records the implementation experiences and whether the project worked or not. This step determines the next cycle of the project.

Significance in Addressing Substance Use Disorder Challenges

The transition from addiction treatment to a community care model is associated with several challenges facing those suffering from substance abuse disorders. Some of the obstacles that are faced are relapsing, society stigma, fractured care, and the need for continuous support. Transition theory provides insightful solutions and approaches to deal with these problems.

The theory's focus on assessing transition conditions and offering personalized care is in line with preventing the observance of relapses for patients with substance use disorder (Smith et al., 2023). The framework addresses the psychological and social dimensions of the transitions and therefore the interventions guided by transition theory help reduce the stigma linked to substance use disorder consequently bringing better treatment outcomes and easier transitions.

In most cases, this is a sufficiently strong theoretical basis for the process of transitioning from a drug abuse treatment center to community services for patients with substance use disorders. Using such concepts, the DNP project will create a plan addressing the health issues of this group under situation-specific circumstances. Besides, this project attempts to lower the readmissions by having a good comprehension of the transition phases and the use of supportive interventions, thus improving patient outcomes and the quality of care offered to individuals with substance use disorders. The transition theory by Afaf Meleis proves to be a valuable instrument as we seek to realize these goals.

Population of Interest

The success of this project lies behind two different population groups: the

implementation population consisting of various stakeholders that are direct participants (direct population) and the SUD patients already admitted and receiving treatment in the center (indirect population). The indirect population encompasses adult and youth patients who dwell in the Florida area and who want to receive treatment at the River Oaks Treatment Center. The patient diagnoses encompass a mixed pool of different forms of SUDs, and psychiatric illnesses such as anxiety, depression, bipolar disorder schizophrenia. River Oaks Treatment Center does not accept patients with disruptive behavioral disorders, developmental disabilities, active suicidal ideations (SI), or homicidal ideations. These types of patients will be excluded from the project.

The direct population is made up of healthcare workers who are the necessary element in the project execution. All healthcare professionals who are involved directly in implementing the Transitional Care Protocol will include addiction specialists, psychologists, nurses, case managers, social workers, and administrative staff. More than 100 staff will participate in the project. Non-medical staff who were not on duty during the project implementation period will be excluded.

Project Setting

The project will be conducted in Florida, which is a multicultural, diverse state. The selection of the setting was based on the rich cultural tapestry and bustling urban life, which makes it a reflection of the major American cities characterized by great diversity in culture and a high rate of urban activity. Nonetheless, just like any other city in the country, it has to grapple with problems associated with substance use disorders. The project setting is the River Oaks Treatment Center, which ranks among the best treatment centers for, and a leading provider of,

health services for patients struggling with SUDs in the city. River Oaks Treatment Center is multipurpose, providing inpatient addiction treatment units, outpatient clinics, mental health services, substance abuse counseling, and other services.

River Oaks Treatment Center has several departments, including the Division of Addiction Medicine, the Department of Behavioral Health, and the Center for Substance Abuse Treatment. This emphasizes the need for a multi-disciplinary approach in addressing the comprehensive treatment requirement for SUD patients. The organizational staffing patterns range from addiction specialists, psychologists, nurses, and case managers to social workers and administrative personnel. The Center's choice of an all-rounded approach to drug abuse problems is indicated in its staffing patterns, which encompass committed staff willing to aid in the completion of this project.

Stakeholders

There are different stakeholders involved in this project who have different roles in making it work. The identified stakeholders include:

Patients with SUDs: These people are the heart of the project; they must take part in their care processes and be actively involved in the process of recovery. Transitional care protocol improvement and lower instances of readmission and support will directly impact them.

Families and Loved Ones: Family is an extremely important stakeholder in the healing process of SUD people. The beneficiaries include the families of patients who will be involved in a transitional program, which will guide them and equip them with the necessary resources to improve ways of supporting their loved ones.

Healthcare Providers: It is essential to include all healthcare personnel, such as doctors, case managers, nurses, behavioral technicians, and therapists as key stakeholders. They shall implement the new transitional care plans, educate the patients, their families, and friends, and ensure continuity in the delivery of their medical needs (Nordeck et al., 2018).

Case Managers and Care Coordinators: Case managers and care coordinators play key roles in leading patients through the transition of the care process. They will play an active role in designing the transition care protocols and their implementation.

Administrative Staff: The administrative staff will coordinate the project's logistics, including the allocation of resources and a favorable organizing framework for effective transitioning medical care.

Healthcare System Management: The healthcare system management, including policymakers and administrators, will support the project by aligning it under the national guidelines and regulations and offering financial and resource support.

Insurance Companies: Insurance companies represent an important group of stakeholders involved with finance in patient care. Proper discharge protocol can help lowered readmission rates, hence potential cost.

Community Resources: These crucial stakeholders encompass several community resources and include local support groups, sober living houses, and outpatient treatment providers (RHIB, (2023).

Regulatory Bodies: The quality of care offered should be monitored by regulatory bodies, which include the Joint Commission and local health departments. The primary role of the Patient Safety/Joint Commission Manager is to foster a culture of continuous improvement and coordinate the systematic implementation of effective practices designed to reduce error and improve patient outcomes. These people provide vital support and alignment towards their projects. Local health departments work with healthcare and community partners to prevent and target the cause of disease outbreaks and then determine the appropriate response.

It is important to identify stakeholders and involve them actively in the project for its success. Working together, these stakeholders will develop and implement an all-encompassing Transitional Care Protocol to Reduce Readmission Rates for Patients with Substance Use Disorder, covering the gaps that currently exist in the process of delivering health care and ultimately improving patient outcomes (Nobel et al., 2013). Collaboration with important stakeholders led to securing permission to carry out the project at River Oaks Treatment Center. The key players who consented included Dr. Abbas Sina. Dr. Sina is a diplomat of the American Board of Internal Medicine, as well as the American Board of Addiction Medicine, and a member of the American Society of Addiction Medicine and the Florida Society of Addiction Medicine. Dr. Sina Abbas is the assistant director at River Oaks Treatment Center. Also, Joanna is the director of nursing (DON) at River Oaks Treatment Center. Dr. Sina Abbas oversees the nursing department and the behavioral health technician department. Since I work at River Oaks Treatment Center affiliation agreement is not needed for the DNP project.

Interventions

A quality improvement intervention process will be adopted to meet the project's objectives. The process will include the following steps:

Step 1: Formation of Intervention Team

As the project lead, I will identify and form an intervention team that will include key stakeholders like case managers, healthcare providers, an administrator from the treatment center, addiction specialists, patients with substance use disorder, and community care providers. We will conduct online meetings to develop and ensure the effective implementation of a comprehensive transition of care protocol. The team will also monitor and evaluate the protocol's performance and make the necessary adjustments to ensure that it promotes the safe transition of SUD patients from hospital care to community care reducing readmissions.

Role of Team Members

Being the team leader, I will coordinate all the team activities and work together with the rest of the team members to facilitate the development and implementation of an advanced TOC protocol for SUD patients at River Oaks Treatment Center. Case managers will be responsible for the coordination of the care transition process. They will implement the protocol by collaborating with nurses and community care providers to help SUD patients transition safely from hospital to basic care. Healthcare providers including nurses, therapists, and physicians will participate in the development and adoption of the comprehensive TOC protocol. They will design the discharge plans as per the protocol and educate patients about their discharge medications.

The head of administration at River Oaks Treatment Center will support the implementation process by ensuring the timely provision of required resources. They will also confirm the adherence of the implementation process to the institutional guidelines and is alignment with the center's mission and values. Community Care Providers who include social

workers and community nurses, will perform community care duties as per the protocol to ensure a smooth transition of care for patients with SUDs to community care. This will include assisting in providing follow-up care and support for the patients in the community. Patients with SUDs will help the team to develop a patient-focused protocol that effectively promotes safe transition by giving feedback and insights on their needs and experiences during the transitioning process. Addiction Specialists will help the team to develop staff education materials and help case managers to address complex cases during the implementation process. They will facilitate the development of evidence based protocol by sharing expertise and knowledge to the team.

Step 2: Development of a Comprehensive Transition of Care Protocol

The team will use literature as the basis for developing a new, advanced transition of care protocol which will guarantee effective professional cooperation, drug reconciliation, discharge planning, patient education, and follow-up care. It will provide information on the appropriate steps during staff meetings for the center's approval and modification. Standardization of discharge planning, patient education, medication management and coordination with community care providers to follow up patient progress after discharge are the steps of protocol procedures. The new protocol will also look into the social determinants of health that influence safe transition.

Step 3: Distribution of the developed protocol and Staff Education

All healthcare personnel at the River Oaks Treatment Center will be given the protocol and they will also be educated through several sessions to ensure they have a good grasp of it and how to use it in their practice. This will be a 20-minute session conducted during the 45-minute break via a PowerPoint presentation. Educating the staff is very necessary to ensure that healthcare providers have the appropriate knowledge and skills to handle substance abuse disorders and also facilitate the safe transfer of patients from the hospitals to the community care therefore reducing the chance of readmissions.

Step 4: Implementation of the Protocol

At River Oaks Treatment Center, our health-care professionals will utilize the newly developed protocol for patients with substance use disorders who are in a transition from acute care to basic care. This will entail designing the patient discharge protocols and procedures to monitor the patient, manage medications and follow up care clinic visits. The staff will detect and overcome any possible difficulties and cooperate with the administration to integrate the protocol in the general workflow of the institution.

Step 5: Evaluation of Protocol Implementation

The team will examine and appraise the implementation of the protocol and its ability to aid professionals in discharging of patients with SUDs. The assessment will be done after 5 weeks and will include both chart audits and observation of interactions between patients and professionals with the aim to get information on provider satisfaction and adherence to the protocol. The team will test how the readmission rates of patients change before and after implementation of protocol to see whether the protocol helps to bring down the readmissions.

Resources

The outcome of this project will depend on the existence of physical infrastructure, financial capital, and human resources. These will be made up of the time and senior management support for planning, publicizing, implementing, and reporting of the protocol. Financial support will be required for carrying-out protocol meetings, education meetings and evaluation processes respectively. On the other hand, they need to be supported by technology so that they can organize online meetings and prepare digital handouts. Health services professionals including hospital staff and addiction specialists will be needed for the plan implementation.

Tools

The DNP project will involve use of various AHRQ tools with the purpose of executing its interventions and achieving its goals. These are products of evidence from the studies and are used in several procedures in different clinical trials with the main focus of improving patient outcomes.

TeamSTEPPS

AHRQ (Agency for Healthcare Research and Quality) and DoD (Department of Defense) cooperated to develop Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) that would assist healthcare practice teams collaborate effectively and improve the practice effectiveness, quality, and safety of the patients (King et al., 2008). The developmental team underwent long-term research about teamwork, team member training, and culture change, and the tool was named as the national standard in team education in healthcare in 2006. Different healthcare systems have used the tool since it is a public health domain resource as King et al., (2008), suggest.

To minimize readmissions, the project team will apply the TeamSTEPPS guidelines in improving professional collaboration during the transition of care for patients with substance use disorders. It will form a clear team structure and allocate members with roles so that each member knows what to do. This will enable them to work together and co-operate on one goal of decreasing readmissions of individuals with SUD. This tool will assist in the communication, collaboration, and coordination of care among team members for the protocol to be effective. This would increase the team performance as a result of enhanced team culture which would facilitate proper implementation of the protocol.

The team will set and monitor team objectives in line with TeamSTEPPS' guidelines and the progress toward outcomes will be periodically reviewed. They will use the guidelines as criteria to assess the protocol efficiency in reducing the readmissions of patients with SUD. Measuring readmission rates, patient satisfaction, and provider satisfaction the team will identify points of improvement and adjust accordingly.

The IDEAL Discharge Planning Framework

The IDEAL (Include, Discuss, Educate, Assess, Listen) discharge model is an existing tool developed by AHRQ to inform discharge planning processes. Many healthcare centers have effectively used the tool in discharge planning since it is a free tool (Topham et al., 2022).

The IDEAL discharge model emphasizes allowing the caregiver and the patient to participate in the discharge process and recognizing and including the patient's informal

networks. The tool requires providers to identify a person who will consistently and competently care for the patient after discharge. They are then supposed to discuss the post-discharge medication, discharge expectations, possible side effects, test results, and follow-up appointments. The care team educates the patient and their home caregivers about the diagnosis, discharge process and recommendations during the hospital stay. They then assess their understanding of the education using methods like teach-back to ensure that they get the details. The healthcare providers then listen to the patient and the caregivers' concerns, preferences, goals, and observations and address them.

A standard discharge plan is essential for supporting a safe transition of patients from the hospital back to their home or a lower level of care. We will utilize the IDEAL model to establish a plan that provides a structured approach for effective care transitions. The tool will help the project team to determine the particular needs of each patient, to formulate a patient-centered care plan, to make the patients the true owners of their health, to follow up appropriately, and to seek patient feedback for continuous improvement of the protocol. Patient readmissions can be substantially reduced and patients' outcomes greatly improved by addressing and overcoming any challenges or barriers while providing patient-centered care during the transition period.

Medications at Transitions and Clinical Handoffs (MATCH) Toolkit

MATCH (Medications at Transitions and Clinical Hand-Over's Toolkit) was developed by the ARHQ to aid the reconciliation of drugs and ensure patient safety in the transfer of care (Jarret et al., 2020). It is a free instrument based on scientific data which focuses on procedural medical reconciliation in healthcare. Studies indicate that the employment of the MATCH strategy considerably reduces medication reconciliation and decreases the probability of medication errors.

We will consult addiction experts and other experts in the field to make sure our utilization of the toolkit matches current best practices in medication management. It will then integrate the MATCH Toolkit into the protocol, by specifying distinct processes of medication management for care transitions. This shall entail the development of standard processes for medication reconciliation, patient education on facility management of medications as well as the collaboration with community care providers to promote continuity of medication management. In line with the toolkit, the team will produce educative material for the patients to enhance their knowledge of their medications and remind them of the importance of sticking to the prescribed regimen.

Chart Audit Tool

Chart audit tool is a pre-existing AHRQ tool, commonly used to track intervention success by most hospitals and utilizes the available patients' records. The tool is validated through its use in various medical spheres to monitor and assess the effectiveness of strategies that are being implemented to enhance patient outcomes. The team will pick up the charts of SUD patients being handled in River Oaks Treatment Center and apply the Chart Audit Tool. The patient demographics, discharge diagnosis, readmission date, follow-up services, and the cause of readmission will be outlined here.

The sanctioning of this instrument will be governed by the management of the River Oaks Treatment Center so as to make sure that its use is in accordance with the center's policies

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and procedures for dealing with patients' information. The team will handle the data locked properly and compliance with HIPAA regulations and client privacy rights, as the tool application incorporate obtaining patient-related data which requires their consent.

By using this tool, the team will assess the process of implementation and find out how implementation influences the readmission rates. This instrument will help us keep track of admission and re-admission rates as well as follow-up care. Chart audit data collected will be used to identify the issues for improvement and monitor the growth over time. Based on this data, the team will give recommendations on consequent amendments required to meet the goals of preventing the readmissions of people with SUDs.

Data Collection Plan

The project will use observations and retrospective chart review to collect the data generated by interventions. The team will conduct observations once every week for five weeks to observe staff in the transition process to see if they are completing all the IDEAL tool checklist components. The observation will include monitoring discharge planning processes to determine if they are comprehensive and customized according to patient needs as per the IDEAL tool checklist.

The project will obtain readmission rates among SUD patients before and after implementing the comprehensive transition of care protocol to evaluate the project's impact on reducing readmissions. The team will access hospital records to review 10 patient charts once a week for five weeks to track pre and post readmission rates for 5 weeks before and 5 weeks after implementing the advanced TOC protocol.

Participant Privacy

The project team will follow all relevant policies to collect, store, and share information obtained for the project. The data collection process for this project will follow the required guidelines to protect participant's information. The team will obtain participant's consent before conducting observations to ensure that they voluntarily participate. It will also declare the participant's right to withdraw from the study at any time without consequences. The team will not record identifying information like names or staff identification numbers to ensure confidentiality and privacy in data and results. The team will merge individual data points to create a large data set that does not identify a specific participant. Domingo-Ferrer et al (2022) recommend using aggregated data to prevent the disclosure of participant identifying information during data collection and result dissemination. The team will refer to aggregated trends and patterns when presenting results for this project in publications.

Data Storage

Data collected from participants will be electronically stored following the HIPAA guidelines for keeping electronic data records in projects. The team will use password-enabled computers that only authorized members can access to securely store data. Data collected in hard copies, for instance, signed consent forms will be locked in the organizations safe to protect them from unauthorized access. This will assure participants of confidentiality and data privacy making them more comfortable and reliable as they will feel safe to participate in the project. The project team will store the gathered information for 5 years after which the data will be

disposed of securely by permanently erasing all electronic records and shredding hard copies. The data will be reported or published using aggregated values to protect participant privacy.

Ethics/Human Subjects Protection

Participants Recruitment Methods

The main participants involved in data collection for this project will be the staff implementing the advanced transition of care protocol at River Oaks Treatment Center. The project team will use convenience sampling to approach and inform the potential participants at the treatment center about the project scope and their potential role in it. It will also explain the benefits and the risks associated with participation in the project and then obtain participants' permission before proceeding with observations.

Risks/Benefits and Compensation

The data collected for this project will only be used to evaluate the implementation of the comprehensive transition of care protocol. Therefore, the potential risks associated with participating in this project are minimal. The disadvantages to the staff will include extra workload and time constraints. The team will ensure that these risks are minimized by involving the providers in the development of the protocol and providing adequate support and resources for its implementation.

The potential benefit of this project to the staff at River Oaks Treatment Center is that it will allow them to learn about and implement a comprehensive transition of care protocol for patients with SUDs. This will enhance their knowledge and skills related to caring for this patient population. There will be no monetary compensation for participants. Providers will be awarded certificates for professional development and continuing education credits.

Ethics/IRB Process

Since QI projects are meant to improve performance, Touro University Nevada does not require IRB approval for this project. The team will adhere to ethical guidelines to ensure human subject protection during its implementation and data collection. It already obtains the required permission from River Oaks Treatment Center's IRB before collecting data from patient records and adhere to any additional safety guidelines from the institution.

Data Analysis Plan

This project will analyze the collected data using qualitative and quantitative methods. Using descriptive statistics, the team will summarize data from observations and chart reviews. It will calculate percentages, mean, median, mode and use bar graph illustrations to summarize the collected data and identify any trends or patterns. The project will calculate the proportion of readmission rate before and after implementation to compare the intervention's effectiveness in reducing readmissions. The computed mean, mode and median are measures of central tendency that will be used to compute the average typical value of readmissions that will help us identify trend and significant changes in the readmission rates. Bar graphs are appropriate illustrations that will clearly show the comparison of readmission rates before and after the implementation of the project.

To determine if there is a significant difference in readmission rates before and after implementation of the protocol the project team will compare pre and post readmission rates. It will use an unpaired t-test using an alpha value of 0.05 to analyze the mean weekly readmission rates for five weeks before and after project implementation. This test assumes that the groups compared are independent, the data is numeric, the group variances are homogenous and the sample means are normally distributed to (Mishra et al., 2019). The team plans to use Microsoft Excel for data entry and analysis and does not plan to involve a statistician in the analysis process since the project is a relatively simple QI project with a small sample size.

Appendices

Project Site	River Oaks Treatment Center					
Implementation Timeline						
Week 1	• Formation of intervention team					
March 28- April 4	• Defining roles for team members					
•	Setting team goals					
Week 2	• Research and development of the comprehensive TOC Protocol					
April 5- 12	• Protocol dissemination and staff education about the protocol					
Week 3	Pilot Testing and refinement of the protocol					
April 13- 20	• Integration of the protocol to the institution's operations					
Week 4	• Data collection for monitoring and evaluation of the protocol's					
April 21- 28	performance					
Week 5	• Data analysis and results					
April 29- May 6						

Appendix 1: Intervention implementation timeline

Appendix 2: Permission to Conduct Project at the Site

Dear Lovany Pierre

I confirm approval of your project, "Implementing a Transitional Care Protocol to Reduce Readmission Rates among Patients with Substance Use Disorders in a Managed Care Organization" by the River Oak Treatment Centre administration.

We are confident that your project will benefit both River Oak Treatment Centre and its patients. We appreciate your efforts in complying with all IRB requirements and guidelines throughout the project. Please remember you are still responsible for complying with all organizational policies and procedures throughout the project. Feel free to contact us if you have any questions or concerns.

We wish you the best of luck with your project.

Sincerely,

Dr. Sina, Joanna Johnson

River Oak Treatment Centre Administrator.

Appendix 3: IRB Determination Form for Touro University Nevada

DNP Project Team Determination

Quality Improvement or Evidence-Based Practice Project or Research

All DNP Projects, regardless of methodology, must uphold the highest standards of ethical practice including confidentiality and privacy as described in the ANA Code of Ethics. Accordingly, basic principles of ethics, confidentiality, and privacy must be addressed and maintained in each phase of the DNP Project implementation. Methods for maintaining such should be described in full detail within the body of the DNP Project Paper.

If the determination is made that the DNP Project is a "Quality Improvement or Evidence-Based Practice Project," then the project should be referred to as such in all future communications– both written and verbal. Quality Improvement or Evidence-Based Practice projects should not be referred to as research or research projects and are not subject to any form of IRB review. Additionally, the student should not make any claims in writing or verbally of IRB exemption status, acceptance, or review in such projects.

Sections A and B should be completed and submitted by <u>the student</u>. Section C should be completed by <u>the faculty</u>.

SECTION A

Student Name: Lovany Pierre

DNP Project Title: Implementing a Transitional Care Protocol to Reduce Readmission Rates

among patients substance use disorders patients in a managed care organization

DNP Project Instructor: Julie Astrella

DNP Project Mentor: Dr. Jacklyn Bellassol

Quality Improvement or Research Worksheet

ITEM	Issue and Guidance	Rating
1	Are participants randomized into different intervention groups to	YES
	enhance confidence in differences that might be obscured by	
	nonrandom selection? Randomization done to achieve equitable	x_NO
	allocation of a scarce resource need not be considered and would not	
	result in a "yes" here.	
2	Does the project seek to test issues that are beyond current science and	YES
	experience, such as new treatments (i.e., is there much controversy	
	about whether the intervention will be beneficial to actual patients - or	_xNO
	is it designed simply to move existing evidence into practice?). If the	
	project is performed to implement existing knowledge to improve care	
	- rather than to develop new knowledge - answer "no".	
3	Are there any potential conflicts of interest (financial or otherwise)	YES
	among any researchers involved in the project? If so, please attach a	
	description of such in an attachment to this form.	xNO

Rachel Nosowsky, Esq.

4	Is the p	YES				
	time p					
	measurement, and even the goal over time as experience accumulates,					
	the ans	the answer is more likely "no."				
5	Will da	YES				
	bias? If so, is there any potential for data skewing from this process?					
			x_NO			
6	Is the project funded by an outside organization with a commercial		YES			
	interest in the use of the results? If the answer to this question is "Yes"					
	please also answer question 6a and 6b. If the project is funded by third-					
	party payors through clinical reimbursement incentives, or through					
	internal clinical/operations funds vs. research funds, the answer to this					
	question is more likely to be "no."					
6a Is the sponsor a manufacturer with an interest in the outcome of		YES				
		the project relevant to its products?				
			_xNO			
6b		Is it a non-profit foundation that typically funds research, or	YES			
		internal research accounts?				
			x_NO			

Adapted from Hastings Center, "The Ethics of Using Quality Improvement Methods to Improve Health Care Quality and Safety" (June 2006) If the weight of the answers tends toward "yes" overall, the project should be considered "research" and approved by an IRB prior to implementation. If the weight of the answers tends toward "no," the project is not "research" and is not subject to IRB oversight unless local institutional policies differ. Answering "yes" to sequence #1 or #2 – even if all other answers are "no" – typically will result in a finding that the project constitutes research. It is important to consult with your local IRB if you are unsure how they would handle a particular case, as the analysis of the above issues cannot always be entirely objective and IRB policies and approaches vary significantly.

Obtained from: Quality Improvement or Research Worksheet

SECTION B

All projects, including student QI or EBP projects, are required to be registered with the Department of Research at TUN. Please register your project via this <u>Qualtrics survey</u>. Provide your information as the PI for your project.

_x_Yes, I registered my project with the Department of Research at TUN via the link above _____No, I did not register my project with the Department of Research at TUN. Please provide

rationale.

SECTION C

Project Classification Decision:

The project instructor will select one of the three classifications listed below.

_____ This DNP Project is a quality improvement or evidence based practice project. Do not submit to IRB for review.

_____ This DNP Project contains research methodology, and an IRB application should be submitted to the TUN IRB committee for exemption determination and/or full IRB review.

_____ This DNP Project is not clearly delineated as quality improvement or research of discovery. Additional consultation will be obtained from the IRB committee by the project team. The advice of the IRB committee regarding the need for review will be noted in writing and the student will be informed of such (Please attach any pertinent documentation from IRB review as an Appendix to this document.)

By signing below, the project instructor indicates that they agree with the above selection.

Printed Name of Project Instructor: Dr. Julie Astrella

Electronic Signature of Project Instructor:

Appendix 4: PDSA Framework:

This is a visual representation of the PDSA model used in the project. This diagram helps in comprehending the systemic approach to implementing and evaluating the Transitional Care Protocol.



Appendix 5: TeamSTEPPS Tool

The project implementation team will use the TeamSTEPPS to define the team structure, set goals, and ensure effective communication and collaboration within the team to improve patient outcomes.



Appendix 6: The IDEAL Discharge Planning Checklist

The project will use the checklist below

First Nursing	Before discharge	During Discharge	At Discharge
Assessment	Planning Meeting	Planning Meeting	

- Identify patient close network and caregiver
- Tell patient and family about white board
- Inquire patient and family goals for hospital stay
- Inform patient and family about steps to discharge

Disseminate and explain discharge checklist to patient and their network/caregiver

٠

- Schedule a meeting for discharge planning
- Discuss patient and caregiver concerns
- Review discharge requirements for the patient

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- Use teach back to evaluate patient and family understanding of discharge instructions
- Schedule follow-up appointment
- medication list Review the list with patient and family and apply teach back to ensure they understand Make any necessary homecare

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•

Develop a

reconciled

- plans
- Record appointments in writing and give the record to patient and family
 Give follow

information to

up contact


Appendix 7: Medications at Transitions and Clinical Handoffs (MATCH) Toolkit

Appendix 8: Chart Audit Tool to Track Re-admission Rate

The chart audit to track readmission will use River Oaks Treatment Center records to track the number of times a SUD patient is readmitted to the hospital. It will indicate patient demographics, discharge diagnosis, follow up services provided, readmission date and reason.

Nam	Age	Gender	Discha	Discharg	Follow	Readmissi	Readmissio	Readmissio
e			rge	e Date	up	on Date	n Reason	n Risk
			Diagno		services			Factors
			sis					

Appendix 9: Staff Education PowerPoint Presentation





CHOT | CHOT INSIGHTS | Systems approach based interventions can reduce hospital readmission rate ADM IMPROVE TRANSITIONS OF CAR ● 🖯 → REDESIGN THE DISCHARGE PROCESS 2 **\$**\$[©] A. Patient centered ap B. Simple discharge pro C. Clear instructions or D. Usage of IT to comm 0 **3** ENHANCE FOLLOW-UP CARE STRATEGIES q Q Wan, H., Zhang, L., Witz, S., Musselman, K. J., Yi, P., Mullen, C. J., Martinez, D. A. (2018). A lite the Readmissions Reduction Act. III Transactions on Healthcare Systems Engineering. $d(t^{10})$ 9

Analysis of Results

Compliance

As shown in Table 1, 10 cases were observed weekly. The number of cases that were compliant to the protocol was recorded against the number of non-compliant cases for each week and the average and percentage of adherence calculated. The average number of weekly cases that adhered to the protocol was 9 indicating a mean adherence of 90% to the IDEAL discharge plan checklist.

Table 1

Week	Compliant	Not Compliant
1	8	2
2	10	0
3	10	0
4	9	1
5	8	2
Totals	45	5
Mean	9	1
Percentage	90%	10%

Protocol Adherence Compliance Results

Week	1	2	3	4	5	Mean	Percentage
------	---	---	---	---	---	------	------------

Weekly	8	10	10	9	8	9	90%
Count of							
compliant							
cases							

Readmission Rates

To measure the implementation outcome, a total of 50 patient charts were reviewed, 25 charts for before implementation of the intervention (baseline data) and 25 charts after implementation, as shown in Table 1. 15 of 25 (60%) SUD patients discharged five weeks before the protocol was implemented were readmitted to the hospital 20 days after discharge. 3 out of 25 (12%) SUD patients discharged after the protocol was implemented were readmitted to the hospital within 20 days. Figure 1 illustrates the comparison of readmission rates before and after the implementation of the comprehensive transition of care protocol.

Figure 1



To determine any significant difference between mean readmission rates before and after the intervention, an unpaired t-test was done at a 95% confidence level. The mean weekly readmission rate was 0.6 before 0.12 before and after implementation respectively. The results showed a significant reduction in readmission rates after implementation. Standard deviations were 0.71 and 0.55 for pre and post intervention groups respectively. The confidence interval at 95% confidence level was CI [0.6801, 0.8780].

From the tables, we are 95% confident that the difference between mean readmission rates for before and after intervention lies between 0.6801 and 0.8780 and the difference is statistically significant according to unpaired t-test results. The high t-statistic (6) suggests a substantial difference in mean readmission risk between the pre and post-intervention groups. The very low p-values (both one-tailed and two-tailed) indicate that this observed difference is highly unlikely to be due to chance. Since the p-value is lower than the chosen significance level (0.05), we reject the null hypothesis of no difference in readmission risk. Tables 2–4 present the descriptive statistics and unpaired t-test analysis of the

readmission rates for both pre and post intervention groups.

Table 2

	Week	Pre- intervention Readmissions	Post- intervention Readmissions
	1	2	0
	2	3	1
	3	4	1
	4	3	0
	5	3	1
Total		15/25 (60%)	3/25 (12%)

Pre and Post-Intervention Readmission Data

Table 3

Pre and Post-Intervention Readmission Rates

	Pre- intervention	Post- intervention
Mean	3	0.6
Standard Error	0.32	0.24
Median	3	1
Mode	3	1
Standard Deviation	0.71	0.55
Sample Variance	0.5	0.3
Sum	15	3
Count	5	5

Confidence Level (95.0%)	0.8780	0.6801
-----------------------------	--------	--------

Table 4

t-Test: Two-Sample Assuming Unequal Variances

	Pre- intervention	Post- intervention
Mean	3	0.6
Variance	0.5	0.3
Observations	5	5
Hypothesized Mean Difference	0	
Df	8	
t Stat	6	
P(T<=t) one-tail	0.000162	
t Critical one-tail	1.859548	
P(T<=t) two-tail	0.000323	
t Critical two-tail	2.306004	

Assumptions

The study made various assumptions related to the unpaired t-test data from the pre and post intervention groups. One of the assumptions included that pre and post intervention groups were independent. This meant that the outcomes for the pre-intervention group do not affect or depend on the post intervention group outcomes and vice-versa. Another assumption made was that the data in the two groups was numerical and normally distributed. This means that the data was expressed as numbers and followed a normal distribution with a mean (Mu) and variance. The data used to derive descriptive statistics was also assumed to be normally distributed and numeric.

Statistical Violations Resolved

For accurate and reliable results in an unpaired t-test, the assumption of uniform variance allows for similar levels of variation of data in the two groups. The assumption of uniform variance in the two groups was violated as the group variances were slightly different. However, since the sample was small, the difference in variation was small and the violation could not affect results. If the sample size was larger, the violation of this assumption could have a greater impact on the results. As the sample size increases, even small differences in the variances of the two groups can lead to significant differences in the results of the t-test. Therefore, a small sample size was maintained to achieve reliable results of a t-test.

Timeline Modification

To accommodate ongoing weekly chart review and observation of staff's implementation of the protocol, the implementation timeline had to be adjusted from five to nine weeks. Four more weeks were included in the project timeline to allow for data collection of the readmission rates after intervention implementation and observation of provider adherence to the IDEAL discharge checklists in care transitioning within five weeks.

Missing Data

There is no missing data as the project used a small sample size and was able to obtain complete information from all 10 patient charts reviewed weekly and observations made.

Enough time was also allocated for data collection to ensure that all the necessary information was gathered for reliable results.

Findings Summary and Interpretation of Results

The results of this study implied an effective reduction of readmission rates among SUD patients at River Oaks Treatment Center. Implementing the advanced transition of care protocol resulted in a significant decrease in average weekly readmission rates for SUD patients at the treatment center. The advanced transition of care protocol that included strict adherence to the IDEAL discharge checklist facilitated improved medication reconciliation, collaboration for care coordination, and patient and caregiver education on post discharge care, and follow up care for SUD patients, therefore reducing their need for readmission. Therefore, adopting a comprehensive transition of care that involves caregivers, patients, and healthcare staff per AHRQ guidelines can significantly reduce readmission rates among SUD patients treated in an inpatient treatment setting.

As per the results, the advanced transition of care protocol was also easy to understand and implement in hospital settings. After short training and minimal guidance, a large percentage (90%) of the staff at the project site could easily and effectively integrate the protocol in their practice to improve patient outcomes. This implies that the protocol is applicable and easy to use to improve SUD patient outcomes in mental health facilities.

According to the results, this project reached its main objectives to create a detailed TOC guideline, educate the providers, evaluate their knowledge and their attitudes, ensure their adherence with the guideline, and research the guidelines' effectiveness in reducing readmission risks. A comprehensive protocol that reduced readmission rates was developed and the staff was

educated on the protocol. Their attitudes and knowledge were evaluated by observing compliance to the protocol and analyzing the compliance results.

Strengths of the Project

This project had various strengths that support its applicability. It comprehensively evaluated the advanced TOC protocol through qualitative and quantitative analysis. The project used descriptive statistics and unpaired t-test to analyze the collected data which made it easy to interpret the project findings. It also adhered to ethical guidelines for protection of participant data and human subjects. The data collected was only used for the agreed purpose and was securely stored to avoid malicious and unauthorized access. Another strength included that the project was implemented in a real-world setting and involved staff from River Oaks Treatment Center, making it applicable and relevant to different mental health treatment centers similar to the project site. The project's use of convenience sampling method made it easier to recruit participants and obtain data.

Alignment with Previous Studies

This project aligns with previous literature that has indicated the effectiveness of comprehensive transition of care processes in reducing readmission rates among SUD patients. The project confirms reduction of readmission rates through effective coordination of transition of care processes. Forstner et al. (2019), suggest that proper discharge management during transition of care leads to improved patient outcomes. This is attributed to effective medication reconciliation at discharge, patient education on post-discharge self-care, and effective follow up care. A study by Timpel (2020), showed that discharge planning that includes post-discharge self-

care education effectively reduces the readmission risk in SUD patients transitioning from hospital to home care settings.

The IDEAL discharge checklist emphasizes collaborative discharge planning that involves the patient, their caregiver, and a healthcare professional. The project implementation results indicated 90% adherence to the IDEAL discharge checklist items during transition of care which led to reduction in weekly readmission rates from 60% to 12%. This supports Timpel's (2020) findings as the reduction is attributed to adherence to proper discharge planning as per the IDEAL checklist. Becker et al. (2021) assert that effective collaboration and coordination of care promotes effective transitioning and hence reduces readmission risk. The results support these findings as the IDEAL checklist requirements for implementation of the advanced TOC protocol included collaborative discharge planning involving patient, medical staff, and caregivers.

Project Impact

The project positively impacted the staff, the organization, and the entire healthcare system in various ways. It facilitated skill enhancement for staff through comprehensive training on collaborative discharge planning. The staff involved in the project implementation acquired and improved their discharge planning skills which could enhance their practice giving them a sense of satisfaction in their work and motivating them to work harder towards improving patient outcomes.

The organization also achieved an overall improvement in the system of care for SUD patients through evidence-based practices and protocols. They can now confidently admit and take care of SUD patients with minimal readmission risks. The protocol also helped them save on the costs associated with patient readmissions including time, money, and human resources.

Therefore, future research can focus on implementing the advanced TOC protocol in other treatment centers and hospitals to determine its effectiveness in reducing readmission rates among SUD patients. A larger sample size and a control group can be used in future studies to strengthen the validity and generalizability of the results.

Association between the Intervention and the Outcomes

The study expected implementing a transitional care protocol using the AHRQ guide by engaging family, case managers, and care coordinators to reduce readmission rates for individuals with substance use disorders leaving the facility. Data analysis demonstrated the association between the advanced TOC protocol and the decreased readmission. There was a significant decrease in average weekly readmission rates after the advanced TOC protocol implementation. The protocol was also expected to be easy to integrate to practice after short education and with minimal supervision. This expectation was met as most of the staff could independently apply the advanced protocol after short training. Therefore, the project met its expectations and achieved its intended goal in improving the transition of care for SUD patients. A comprehensive protocol that reduced readmission rates was developed and the staff was educated on the protocol. Their attitudes and knowledge were evaluated by observing compliance to the protocol and analyzing the compliance results

Costs and Strategic Trade-offs

The costs of this project are reasonable compared to the impact it made. The main costs included time and human resources which were also the opportunity costs. The organization had to dedicate its staff, time, and funds that could be spent on other activities to ensure successful implementation of the advanced transition of care protocol. The benefits of implementing the

advanced TOC protocol, such as improved patient outcomes, skill advancement for staff, reduced readmission rates, and improved organizational performance outweighed the costs and trade-offs hence validating the project.

Limitations

This project had a few limitations, which are outlined below. At the beginning of the project, the project site was short of staff in all departments. It wasn't easy to schedule meetings and get permission to review information on readmission. I had to find and engage the staff during their short breaks to obtain the needed information. At the project site, the policy of readmission has changed so many times. It was hard to keep up with the updated information about considering readmission after seven days instead of the initial twenty days. A few days after the project implementation, the project site started taking readmissions a week (7days) after the patient's discharge from the center unlike the normal two to three weeks (20 days). However, this did not affect the project timeline or processes significantly, but the validity of the results was affected since the data collected did not consider patients readmitted after the seventh day. Lastly, the project was carried out at a single center, which may be different from other centers in terms of resources and infrastructure. This makes it difficult to generalize the project results and recommendations. However, the impact of these limitations is nominal since the protocol is easy to understand and implement in inpatient care settings with minimal training and supervision. Also, the project was implemented in a real-world setting and involved staff from River Oaks Treatment Center, making it applicable and relevant to different mental health treatment centers similar to the project site.

Conclusion

As the project findings indicate, implementing an advanced transition of care protocol for SUD patients admitted at River Oak Treatment Center significantly reduced the facility's readmission rates. Utilizing the AHRO guidelines and implementing a protocol that emphasizes strict adherence to the IDEAL discharge checklist ensured effective collaborative care coordination in discharge planning, medication reconciliation, patient education, and follow up care, therefore preventing relapse and readmission of SUD patients. The project results conform to the previous literature that focused on how care coordination, discharge planning, medication reconciliation and follow-up are capable of decreasing the risks of re-hospitalization. Hence, the project findings can be utilized as guidelines to ensure proper practice in SUD care management, which will help avoid readmissions. The implementation cost was just right, taking into consideration the immense benefits that it brought the organization, providers, and patients. Further research can concentrate on applying this TOC protocol in other treatment centers and hospitals as a way of examining its feasibility in different settings in reducing readmission among SUD patients. Such studies can enhance the confidence in the validity and generalizability of the results with the use of a larger sample size and a control group.

Abstract

Problem

The number of SUD patients repeatedly being admitted back into treatment is a great concern that needs active intervention to help River Oak Treatment Center bring down the costs of readmittance and meet the national guidelines for caring for SUD patients.

Background

The number of SUD patients repeatedly being admitted back into treatment is a great concern that needs active intervention to help River Oak Treatment Center bring down the costs of readmittance and meet the national guidelines for caring for SUD patients. This facility has experienced significantly high readmission rates in the past 5 years, most of the incidences being attributed to poor coordination of care when transitioning from hospital to home care.

Methods

This project aimed to find out the impact of implementing a TOC protocol on the SUD patient readmission statistics. A detailed TOC guideline was created, the providers were educated, and their knowledge, attitudes, and adherence to guideline implementation were evaluated, along with readmission rates before and after protocol implementation.

Intervention

Using AHRQ guidelines, an advanced protocol of transitional care was developed and implemented for clients with substance abuse problems admitted to the River Oak Treatment Center. The plan included the double-checking of the IDEAL discharge checklist as part of the coordination efforts in planning discharge, medication reconciliation, patient education, and follow up care after discharge.

Results

Convenience sampling, using direct observations and reviewing graphs, was used for data collection. Descriptive statistics were used to draw inferences based on the trends that were found. Unpaired t-tests were applied to check for a significant difference in readmission pre- and post-advanced TOC protocol implementation. The readmission rate went down from 30% pre-implementation to 6% after introducing the advanced protocol. In addition, there was a 90%

adherence efficiency which meant that the protocol was simple for healthcare staff to understand and follow.

Conclusions

The protocol was effective at lowering readmission risk as it facilitated best practices in discharge planning, medication reconciliation, patient education, and follow up care in SUD patients discharged at River Oak Treatment Center. The project had limitations. It utilized a small sample size, which limits its generalizability, and did not have a control group, which would aid in differentiating the effect of the protocol on readmission rate from other factors influencing the rates. This project recommends that mental healthcare centers introduce the advanced model of transition of care to enhance SUD patient outcome. Future projects should have a bigger sample size and a control group. The researchers should try the TOC protocol with other hospitals and treatment facilities to determine whether the protocol reduces the readmission rate for people with SUD in other in-patient settings (Harvey et al, 2024).

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