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The Effect of Transfer of Care Protocol on the Rehospitalization Rates in Psychiatric Patients

Fernando Guillen MSN, CNP, PMHNP-BC
University of Saint Augustine for Helath Sciences

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Fernando J. Guillen, MSN, CNP, PMHNP-BC

School of Nursing, University of St. Augustine for Health Sciences

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Doctor of Nursing Practice Program and is Approved by:

Faculty Advisor: Dr. Theresa Pape, PhD, MSN, RN, CNOR-E, CNE

Preceptor: Dr. Debra Millett, DNP, MSN, MBA, PMH-BC, NEA-BC

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University of St. Augustine for Health Sciences
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Student Last Name:	First Name:	Middle Initial:
Guillen	Fernando	J

E-mail:
F.Guillen@usa.edu

Title of DNP Project:
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DNP Project Primary Faculty:	Theresa Pape, PhD, MSN, RN, CNOR-E, CNE	7/21/22
DNP Project Preceptor:	Debra Millett, DNP, MSN, MBA, PMH-BC, NEA-BC	7/21/22
DNP Project Preceptor:		

Abstract

Practice Problem: The problem involved the transition of psychiatric care from long psychiatric hospitalizations to community-based psychiatric treatment which has developed into shorter inpatient psychiatric hospitalizations, which in turn has developed into a significantly higher number of individuals being readmitted within one year of inpatient discharge.

PICOT: In adult patients undergoing inpatient acute psychiatric care (P), how does the use of a transfer of care protocol (I), compared to current transfer of care practice (C), affect the rate of readmission within 30 days for inpatient acute psychiatric care (O), in 10 weeks?

Evidence: The evidence from an extensive literature review supported the implementation of the Brief Critical Time Intervention (BCTI) tool to reduce psychiatric patient readmissions.

Intervention: The intervention for this evidence-based practice change project was the implementation of the BCTI tool. The intervention included training of staff to incorporate the BCTI as part of the discharge process.

Outcome: The BCTI tool revealed an effective clinical impact on readmissions as evidenced by a readmission rate of 8%, which was lower than the pre-intervention rate of 8.9%. The result of the two proportions *z*-test was significant ($p = 0.002$), which indicates a significant difference between pre and post intervention readmissions.

Conclusion: The intent of the project was to evaluate the efficacy of using the BCTI tool to reduce the readmission of psychiatric patients and provided clinically significant outcomes by having positive impacts on patient care and outcomes as the patients received improved discharge planning.

The Effect of Transfer of Care Protocol on the Rehospitalization Rates in Psychiatric Patients

The hospital discharge process and the transition from inpatient to outpatient treatment should be carefully planned and monitored. Psychiatric practice is characterized by an ongoing process of reduction of hospital beds and inpatient treatments accompanied by an expansion of outpatient community services (Hengartner et al., 2017). The treatment provided in the inpatient setting for crisis intervention and acute symptoms remission in psychiatric hospitals followed by outpatient treatment in the community has been the state of the art in modern mental health care (Thornicroft & Tansella, 2013). However, the transition of care from inpatient to outpatient care is delicate. It is important to arrange a rigorously planned transition from inpatient to outpatient care. If continuity of care is not established some patients suffer relapse and require rehospitalization weeks after discharge (Hengartner et al., 2017). Research supports the importance of the time immediately after hospital discharge as it is a crucial time for psychiatric patients due to an increased risk of suicide and self-harm (Loch, 2014). Noncompliance with appointments in the outpatient setting after hospital discharge has contributed to high rehospitalization rates (Boyer et al, 2000).

The purpose of this project was to implement a transition of care model that has been demonstrated to be effective in the reduction of rehospitalizations in psychiatric patients within 30 days of index discharge from inpatient psychiatric services.

Significance of the Practice Problem

In recent years, behavioral health care has transitioned from primarily inpatient psychiatric care to primarily community-based treatment for those with serious mental illness. This transition has resulted in shorter inpatient psychiatric hospitalizations, which has resulted in up to 50% of individuals being readmitted within one year of discharge (Loch, 2014). Some people suffer from multiple readmissions, which creates the “revolving door” phenomena (Botha

et al, 2010). Psychiatric rehospitalizations are high due to several factors that include having a dual diagnosis of a mental health disorder and substance abuse disorder, and poor community support (Becker et al., 2017; Hutchison et al., 2019; Regenstein & Andres, 2014).

According to Stensland et al. (2012), national statistics showed that the average cost to deliver care was highest for Medicare patients and lowest for the uninsured with schizophrenia. The average cost of schizophrenia treatment was $8,509 for 11.1 days and $5,707 for 7.4 days. Respectively, the average cost of treatment for those with bipolar disorder was $7,593 for 9.4 days and $4,356 for 5.5 days. The treatment of depression had an average cost of $6,990 for 8.4 days and $3,616 for 4.4 days. Drug use disorder treatment's average cost was $4,591 for 5.2 days and $3,422 for 3.7 days. The treatment for alcohol use disorder had an average cost of $5,908 for 6.2 days and $4,147 for 3.8 days. Regional statistics for New Mexico reported $58.2 million spent in 2017 on mental health hospitalizations (New Mexico Legislature, 2018). Organization statistics on rehospitalization were provided by the Director of Utilization review. The most recent readmission rate for a 10-week period was 8.9%. Additionally, the organization CEO identified poor transitional care between levels of care within the organization's inpatient and outpatient services as a potential risk for acute hospital readmissions (S. Emanuel, personal communication, September 7, 2021).

The most adverse outcome to psychiatric hospitalization is rehospitalization (Loch, 2014). After rehospitalization, the second most negative outcome from psychiatric hospitalization is suicide (Loch, 2014). Suicide risk and suicide attempt are indicators for a need for hospitalization. Although hospitalizations can mitigate the risk of suicide, due to the chronic nature of most psychiatric disorders, patients can relapse from their suicidal ideation while outside of the hospital setting and kill themselves (Loch, 2014). In addition, poor patient outcomes can be mitigated by providing attention to mental health problems, especially drug use disorder, which may help further reduce rates of early readmission for non-behavioral health

conditions (Becker et al., 2017). The family members of psychiatric patients are also impacted by mental health illness. However, family involvement with mental health patients may reduce the incidence of psychiatric rehospitalization (Tomita et al., 2014). Quality of care is improved with aftercare coordination, increased patient satisfaction, compliance with treatment, and diversion of patients at high risk for early rehospitalization (Nourse, 2021). Care management bridging strategies may be more effective for individuals who utilize substance use disorder (SUD) services and others who need help navigating complex systems of care.

The healthcare system can benefit from the use of Brief Critical Time Intervention (BCTI) which has been associated with decreased early readmission rates, suggesting that BCTI is an effective approach to improve continuity of care for this population (Shaffer et al., 2015). Facility and payer administrative data can be used to identify individuals at high risk of continued frequent hospitalizations (Stein et al., 2014). Payers and system administrators could then use such information to authorize special services such as mobile outreach (Stein et al, 2014). The information gathered about individuals can also be used to promote service engagement and prevent rapid rehospitalizations (Stein et al., 2014).

Society is affected by increased readmission risk factors such as medication noncompliance, post discharge care environments, and substance abuse comorbidities which increase the risk of readmission among Medicaid patients (Hutchison et al., 2019; Regenstein & Andres, 2014). When substance use disorders are not treated by the criminal justice system or mental health system, the legal system is affected as rehospitalization and criminal recidivism may result (Schmidt et al., 2018). Thus, the initiation of discharge planning protocol for substance abuse has reduced the rate of 30-day readmission and emergency department visits (Wei et al., 2015). The average total claim cost per patient with schizophrenia is more than four times the average total claim cost for a demographically adjusted population without schizophrenia (Fitch et al., 2014).

PICOT Question

In adult patients undergoing inpatient acute psychiatric care (P), how does the use of a transfer of care protocol (I), compared to current transfer of care practice (C), affect the rate of readmission within 30 days for inpatient acute psychiatric care (O), in 10 weeks?

The population included adult psychiatric patients between the ages of 18 to 65 years who were discharged from inpatient psychiatric hospital services to the community. The intervention was the transfer of care protocol supported by evidence-based practice (EBP). The comparison was the non-protocol transfer of care method currently used in the organization. The outcome was the rate of rehospitalization of the intended population.

Evidence Search Strategy

The search strategy for this project used the following databases from the University of St. Augustine for Health Sciences (USAHS) Library's database: CINAHL Complete, PubMed, APA Psych Info, and APA Psyc Articles. Reference indexing was also used to find EBP sources for support. The keywords used in the four databases were "mental illness OR mental disorder OR psychiatric illness OR psychiatric disorder" AND "transitional care OR transfer of care OR hand-off" AND "rehospitalization OR readmission". Criteria used to refine the search were publication dates between 2011 and 2020, academic journals, English language, and all adults. Inclusion criteria were articles that included adult psychiatric patients, a transfer of care protocol upon discharge and, reports on readmission or rehospitalization. Exclusion criteria removed articles that were duplicates, did not directly correlate to the psychiatric population, did not correlate to the transfer of care intervention, and did not correlate to the readmission or rehospitalization outcome.

Evidence Search Results

Locating studies related to the successful implementation of a discharge protocol to reduce hospital readmissions of adult psychiatric patients proved challenging. Based on the

evidence search strategy, 64 records were identified through database searching. Two additional articles were found through manual search from references from selected articles. After the removal of duplicates, 41 articles remained. Of those, 31 were excluded due to the level of evidence, population age, or lack of the presence of a valuable intervention (See Figure 1 for a PRISMA diagram). Ten articles remained a summary of each that includes their evidence level can be found in the Summary Primary Research Evidence (Appendix A) and Summary of Systematic Reviews (Appendix B).

In the final 10 selected articles, the overall level of evidence based on the JHNEBP (Dang & Dearholt, 2017), was four evidence Level I, five Level II, and one Level III. Three of the articles were meta-analysis and found to be Level I and quality Grade A, have the highest level of quality. Level I, Grade A, is interpreted as consistent, generalizable results, sufficient sample size for the design; adequate control; definitive conclusions, consistent recommendations based on comprehensive literature review that includes references to scientific literature. An additional article is a Level I. Five articles are Level II, and one is Level III. The quality grade of six of the articles was B, which is interpreted as good, reasonably consistent results, adequate sample size and control, and relatively decisive conclusions. One article is grade C which is the lowest quality. The search strategy was limited due to the availability of studies focused on reducing the readmission rate of psychiatric patients by using a specific discharge protocol. The articles had mixed interventions with varied outcomes supporting a diverse set of discharge procedures that may support a reduction in psychiatric patient readmissions. The John Hopkins Evidence Level and Quality Guide is found in Table 1.

Themes with Practice Recommendations

A synthesis of the literature was completed to gain a better understanding on the components of the intervention for the PICOT. The main themes identified in synthesizing these 10 articles were patient needs assessment, peer support, telephone support as interventions

that help reduce the rate of readmission in psychiatric patients as compared to standard practice.

Patient Needs Assessment

Although hospital readmissions may be viewed as a singular issue of the facility, the literature showed that many factors affect readmissions. A needs assessment to determine the needs of a patient in the community after hospital discharge was supported by six articles to reduce readmission as compared to standard of care (Balaban et al., 2020; Kidd et al., 2016; Nurjannah et al., 2014; Rasmussen et al., 2021; Vigod et al., 2013; Wray et al., 2019). Needs assessment interventions included assessment for the need to reschedule appointments, transportation needs, barriers taking medications, medication education, communication with primary care providers or specialty offices, links to community, insurance issues, family education, safety planning, and coping skills (Balaban et al., 2020; Kidd et al., 2016; Nurjannah et al., 2014; Rasmussen et al., 2021; Vigod et al., 2013; Wray et al., 2019).

Peer Support

The applicability of transition of care is a response to the challenge on psychiatric facilities since the beginning of deinstitutionalization (Botha et al., 2018) and as a response to a shift in focus of acute psychiatric admissions from recovery to stabilization of acute symptoms (Vigod et al., 2013). Seven studies reported a reduction in readmission rates after integration of peer support interventions. All the studies supported the use of peer support and transition coaches to reduce rehospitalization (Balaban et al., 2020; Brearly et al., 2020; Lam et al., 2020; Nilsson et al., 2014; Nurjanna et al., 2014; Vigod et al., 2013; Wray et al., 2019). Peer support interventions included the use of peer support, transition coaches, and care facilitators to maximize patient engagement, use of motivational interviewing to help patients define personal goals, coaching patients to independently manage their care, acquainting the patient with the neighborhood they live in, inpatient and outpatient collaboration, and transitional care between

hospital and home (Balaban et al., 2020; Brearly et al., 2020; Lam et al., 2020; Nilsson et al., 2014; Nurjanna et al., 2014; Vigod et al., 2013; Wray et al., 2019).

Telephone Support

Six studies supported the use of telephone communication in various forms to include communication between peer support and patient and between inpatient provider and outpatient provider as an intervention that may reduce the rate of readmission in psychiatric patients recently discharged from the inpatient setting (Balaban et al., 2020; Botha et al., 2018; Nilsson et al., 2014; Nurjannah et al., 2014; Vigod et al., 2013; Wray et al., 2019). Participants in the Balaban, et al., 2020 study received three attempts weekly of telephone outreach and were left voicemail messages if the researcher was unable to reach a live person for a period of 30 days post discharge. Nilsson et al. (2014) provided access to daily telephone contact with the aim to avoid suicides, secure progress, treatment adherence, and to evaluate motivation for further treatment. The participants in Botha et al. (2018) were assigned to a member of the Assertive Community Treatment team; the intervention was primarily a telephone call focused on building a therapeutic relationship, improving engagement, and optimizing adherence to the treatment plan, as well as psychoeducation with regard to psychopathology, medication, and substance abuse. Wray et al. (2019) found support for the use of four phone calls within 7 days of discharge that provided safety planning, coping skills, and triage service for post discharge needs. Both Nurjannah et al. (2014) and Vigod et al. (2013) found support for telephone communication between inpatient and outpatient providers.

Brief Critical Time Intervention

The literature is consistent in supporting BCTI as it provides positive outcomes and reduces the rates of rehospitalizations of the psychiatric patient (Shaffer et al., 2015). Components of BCTI supported by the literature include a patient needs assessment, peer support, and telephone support. Upon completion of the patient needs assessment, peer

support and/or case manager support may continue via telephone or face to face communication. Support can include one or more of the interventions based on the patient needs assessment to include: systems coordination, assistance with engagement in psychiatric services, continuation of substance abuse treatment, medication adherence, family involvement and social support network, life skills training and support, integration of medical care, establishment of community linkages, and practical needs assistance (Dixon et al., 2009). The project intervention provides an evidence-based approach to the practice change to reduce rehospitalization of the psychiatric patient. Each of these recommendations correlates with the PICOT. Table 2 depicts target area, description and goals, and possible activities of the BCTI (Dixon et al., 2009). The author of the tool, Dr. Lisa Dixon, MD, MPH, provided consent via email to use the BCTI intervention tool, called “The nine target areas of a brief critical time intervention to improve continuity of psychiatric care for persons with severe mental illness**”** (Dixon, et al., 2009).

Practice Recommendation

The practice recommendation from the literature to answer the PICOT was to implement a Brief Critical Time Intervention (BCTI). The PICOT question was: In adult patients undergoing inpatient acute psychiatric care, how does the use of a transfer of care protocol, compared to current transfer of care practice, affect the rate of readmission within 30 days for inpatient acute psychiatric care, in 10 weeks? The BCTI tool provided guidance to participating staff in implementing the intervention lists, target areas, description and goal, and possible activities. The tool can be found in Table 2. Brief Critical Time Interventions were supported by the quality and quantity of the evidence.

Setting, Stakeholders, and Systems Change

This evidenced-based practice change project was conducted at a hospital in southwest New Mexico, located near the New Mexico-Texas state line. The hospital mostly serves the

psychiatric population of New Mexico and west Texas and delivers care to adolescent, adult, and geriatric patients with mental health needs. The hospital serves a diverse population that includes all the State of New Mexico and west Texas, including urban, suburban, and rural areas.

The mission of the organization is to provide world class behavioral health care to patients and families. The vision of the hospital is to partner with exceptional staff to become the provider of choice in the community. The vision is accomplished by providing statistically superior evidence-based care, delivering high patient satisfaction and being financially sound to establish a market presence in the community. The culture embraces a caring partnership, community outreach, and care-delivery model of patient and family-centered care based on compassion, attitude, respect, and excellence in service. The organization meets the needs of dynamic community. The organizational structure includes a chief executive officer (CEO), executive team, senior leadership, and a medical director.

After a discussion with the facility's CEO about the facilities needs for change, the decision was made to research interventions that could affect the rate of readmission of adult psychiatric patients discharged from a psychiatric hospital (S. Emanuel, personal communication, September 7, 2021). The organization's desire to implement a discharge plan intervention to decrease readmissions of adult psychiatric patients is supported by a combination of best practices as found in the literature and a desire to decrease readmissions of adult psychiatric patients.

The stakeholders included the CEO, chief nursing officer (CNO), clinical services director, nurse educator, medical director, nurses, therapists, case managers (CMs), preceptor, mentor, and this DNP student as PM. There was strong evidence that supported the use of discharge interventions to decrease the rate of psychiatric readmissions (see Appendix A and Appendix B). Organizational support was established by verbal communication from the CEO

(S. Emanuel, personal communication, September 7, 2021). After the implementation of the intervention, sustainability will be maintained by the CNO and the director of clinical services. Their participation in sustainability will consist of annual staff meetings, training about the intervention during new employee orientation and the development of a policy to include the protocol created for the organization to decrease adult psychiatric readmissions.

The SWOT (strengths, weaknesses, opportunities, and threats) analysis was used to plan organizational change. Strengths are those things that the organization does well. Weaknesses are factors that prevent the organization from achieving the stated goals. Opportunities are positive factors that influence the growth of the organization. Threats are issues that could hinder the development of the organization (Blayney, 2008 & Good, 2020). The strength of the organization includes factors such as sufficient financial and human resources, nice facilities, up-to-date equipment, and effective processes. For this organization, strengths include stakeholder support and the intervention having minimal costs to the organization. Weaknesses include lack of staff participation and difficulty in changing culture as staff is ingrained in current processes and ways of performing tasks. Opportunities include the organization's desire to reduce psychiatric readmissions and the desire to improve patient outcomes. This EBP change project can create the opportunity of improved patient outcomes and improved patient satisfaction. Resistance to change and a short period of time to maintain sustainability are threats to this EBP change project. A SWOT analysis is provided in Appendix C.

The dissemination of system changes within an organization can be classified into three levels: micro, meso and macro (Cerderbom et al., 2020). A micro level change can be identified as only happening in a department, a meso change can be identified when a change is made at a facility and a macro level change may involve implementation of change at multiple facilities owned by the organization. The goal of this EBP change project was to be at the macro level

where the intervention for this project is implemented at multiple facilities. The goal was achieved in gaining support for the intervention in the originating facility and then expanding its use to the remaining facilities owned by the corporation.

Evidence-Based Practice Framework & Change Theory

The Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) Model and Lewin's Change Theory were used as a foundation to guide this project. The JHNEBP model provides a problem-solving approach to clinical decision-making and is designed as a three-step process called PET: practice question, evidence, and translation (Johns Hopkins School of Nursing, 2017). Lewin's Change Theory theorized a three-stage model of change: unfreezing, change, refreezing model to identify and examine the factors and forces that influence a situation. The theory is based on leadership rejecting prior knowledge and the replacing of it with new information (Lewin, 1951).

Johns Hopkins Nursing Evidence-Based Practice Model

The JHNEBP model was incorporated into this project by ensuring that the latest research findings and best practices are quickly and appropriately implemented in the practice setting (Johns Hopkins School of Nursing, 2017). The goal was improved patient care outcomes using a change to affect the readmission rate of psychiatric patients. In using the JHNEBP model, the practice question was based on the problem of readmission rate of psychiatric patients. The literature supported different formats of the use of a needs assessment, protocols for individualized support, and telephone communication. Translation into practice was implemented by the staff members who were charged with using the BCTI tool to assess for patient needs and assist in meeting the identified needs.

Lewin's Change Theory

The unfreeze phase was completed by creating a need for change and teaching nurses, therapists, CMs, and mental health technicians (MHTs) about the BCTI tool (Table 2). The

change phase was completed by establishing telephone communication using the BCTI tool between the patient and outpatient provider prior to discharge. After discharge the patient was contacted by telephone by hospital staff to assist in bridging any needs between inpatient and outpatient services. Staff were continuously encouraged to embrace the change and were educated on how the BCTI can reduce psychiatric patient rehospitalization and improve patient outcomes. The refreeze phase was completed by supporting sustainability by establishing the change as a new protocol which included placing the BCTI tool as the standard practice for the discharge of psychiatric patients from inpatient hospitalization. The information technology (IT) department added the tool to the electronic health record (EHR) as part of the discharge process. The BCTI process will be disseminated at the organization level to other facilities.

Implementation Plan with Timeline and Budget

The project objectives were stated in the specific, measurable, attainable, realistic, and timed (SMART) format.

1. The first objective was to train the participating nurses, therapists, CMs, and MHTs with a goal of 90% by the end of week one.
2. The second objective was to reach a 90% rate of successful completion of the discharge tool for the discharged participants within two weeks of hospital discharge.
3. The third objective was to reduce psychiatric rehospitalizations by 5% from pre-intervention to post-intervention at 30 days from discharge.

The project was successful in producing a lower rate of psychiatric rehospitalizations using a discharge checklist (Appendix D). Inclusion criteria included adult patients admitted to the Adult Units I, II, and III. Exclusion criteria was any admissions under the age of 18 years old and patients with cognitive impairment or who did not have a telephone for communication after discharge. The objective to continue to reduce psychiatric rehospitalizations was attainable because the organization will continue to support the intervention. Education will be provided to

the stakeholders and interdisciplinary team, including nurses, therapists, CMs, and MHTs for the efficient and continued implementation of the intervention. The objective was realistic as research supports the use of discharge interventions to reduce psychiatric rehospitalizations. The project implementation time was limited to 10-weeks. A timeline was developed for the implementation of this project from the time of approval by the organization and the University of Saint Augustine for Health Sciences Evidence-Based Practice Review Council (EPRC). The timeline is found in Appendix E and Appendix F.

The leadership qualities required to obtain approval for this project, implement the change, and disseminate the findings included effective verbal and written communication, resiliency, determination, and enthusiasm. The role of the PM started by presenting the project to the organization's stakeholders to include the budget for the project implementation. Once the project was approved by the stakeholders, the PM educated the nurses, therapists, CMs, and MHTs on the intervention and its implementation (see Appendix D). The PM maintained open communication with the team and set deadlines, scheduled meetings, and assigned tasks. The PM gathered data, analyzed data, and interpreted the data collected. Once the data was analyzed and interpreted, the PM prepared the final manuscript of the project to present to the stakeholders and organization for dissemination of the findings and organizational implementation.

The budget for the EBP change project implementation is found in Table 3. The total cost for the project implementation was $3,500.00. The budget was incorporated within the staffing plans by the organization as the participating staff which included nurses, therapists, CMs, and IT personnel completed their contributions as part of their role in the organization and no additional budget was involved.

Results

The results of the BCTI intervention were determined by a comparison of psychiatric patient readmissions admitted within 30 days during a 10-week period prior to the initiation of the intervention and readmissions of those admitted during a 30-day period post-intervention. The outcome measure was the rate of readmissions for those patients who received the intervention.

Data Collection

The data was collected from readmission reports both pre and post intervention. Data were verified using the intervention tool for each participant (Appendix G), which included a log for tracking admissions, readmissions, and verification of the BCTI tool implementation. Data were collected by the PM with assistance from the CNO on a weekly or bi-weekly basis, and a high inter-rater reliability of 100% was established for the two data collectors.

To protect participant confidentiality and health information according to HIPPA regulations all data was deidentified by using the first letter of the participant's last name and the last four digits of their medical record number. Aggregate data from the facilities IMedx system included patient gender, ethnicity, age, and diagnosis because the factors may have an influence on the risk of rehospitalization of the psychiatric patient.

Process Measures

Process measures included the record of the percent of nurses, therapists, the CMs, and MHTs on the BCTI training with a goal of having 90% trained achieved. BCTI implementation was subsequently assigned specifically to CMs, which allowed for 100% to be trained on BCTI during week one. Face validity was established with cooperation from the lead case manager, CNO, and Director of Assessment and Referrals who evaluated the tool in terms of feasibility, readability, consistency of style, formatting, and language and deemed it valid.

Outcome Measures

The outcome measures included the rate of successfully completed BCTI tool implementations and the rate of readmissions for patients who received the services provided by the BCTI. The rate of complete intervention implementation was 36.9%, which was lower than the anticipated 90% due to limitations related to staffing issues and challenges brought on by the COVID-19 pandemic.

Sustainability Measures

Sustainability measures are supported by expanding the intervention to the remaining units within the organization system, and will be provided by the CNO, Director of Clinical Services, Nurse Educator, and Director of Admissions and Referrals to nurses, therapists, the CMs, and MHTs within their departments. However, the emphasis remains for the CMs to continue BCTI implementation as part of their discharge planning process. The lead CMs will be responsible for staff education and training for use of the BCTI tool. this plan will allow the organization's 30-day readmission rate to continue to be evaluated to provide for quality discharge planning.

Statistical Analysis

Data were analyzed with the use of Intellectus Statistics software, and the assistance of a statistician. A two proportions *z*-test was conducted to examine whether there was a significant difference between the proportions of pre intervention readmissions and post intervention readmissions. Demographic information was analyzed using descriptive statistics.

The assumption of normality for the z-test was assessed using the Central Limit Theorem (CLT) with normality being found. The result of the two proportions *z*-test was significant based on an alpha value of 0.05, $z = -3.14$, $p = 0.002$, 95.00% CI = [0.12, -0.03], which indicated that there was a significant difference between pre and post intervention

readmissions. The proportion of pre intervention readmissions was significantly lower than the proportion of post intervention readmissions (Table 4).

Most patients were male (*n* = 65, 61.90%), age 35 (*SD* = 9.78, Min = 18.00, Max = 56.00) and Hispanic (*n* = 65, 61.90%). See tables 5 and 6 for the data. As shown in table 7, the most frequent diagnosis was major depressive disorder, recurrent severe, without psychotic features (*n* = 20, 19.05%). Knowing the most frequent admission diagnosis allows the staff implementing the BCTI tool to be better serve this population at time of discharge with available resources, and it allows the facility an opportunity to promote service engagement specific to this diagnosis.

Impact

Implementing the BCTI transfer of care protocol for discharge planning in the acute setting for adult inpatient psychiatric patients definitely impacted the quality of care of those patients identified. When compared to the prior state, discharge planning was minimal, and at times, ineffective. With the implementation of the BCTI transfer of care protocol, the patients received improved discharge planning.

According to Ranganathan et al. (2015), although statistical significance is important when evaluating outcomes identified in the PICOT question, the clinical significance is more critical in EBP project findings because of the impacts that the intervention had on patient care and outcomes. The BCTI tool achieved a readmission rate of 8%, which was lower than the pre-intervention rate of 8.9%. These findings were found to be statistically significant (p=0.002). The EBP project provided clinical significance to those patients who received the intervention, as they were better supported between the time of discharge from the inpatient setting and the time of their first scheduled follow up appointment in the outpatient setting. They were supported by the development of a reliable discharge process and post discharge support that aligned with the facility's goals and values. Future plans include the use of the BCTI transfer of care tool as a

standard part of the discharge process. In addition, the project team and CMs will continue to refine and improve the discharge process for this population.

Several limitations were found during project implementation. One limitation was the sample size (n = 107), which was affected by staff changing positions and staff shortages. A second limitation was the length of the implementation phase. Instead of 10-weeks, a longer implementation period may have ameliorated the limitations. A third limitation was the challenges brought on by the COVID-19 pandemic. The surge in COVID-19 infections and COVID-19 outbreaks affected consistency of implementation of the intervention as some CMs and staff were transferred to different positions or were directly affected by the COVID-19 virus and were unable to work. A final limitation was a medical condition that affected a key stakeholder who had been driving the implementation of the BCTI tool and data collection.

Dissemination

Dissemination included a presentation of the project results to the facility leadership and stakeholders at the facility with the use of a PowerPoint presentation. Due to the Covid-19 pandemic many meetings are virtual meetings via Zoom. Therefore, the results were also presented at the organizational level to the corporate leadership team via a virtual meeting through Zoom with use of a slide presentation. Project results were also presented to USAHS faculty and DNP peers via an oral poster presentation at the Alpha Alpha Alpha Chapter of Sigma Theta Tau.

The project results are planned to be submitted for review and presentation to the New Mexico Association of Nurse Practitioners for presentation at the next annual conference. The abstract was also submitted to the New Mexico Board of Nursing for publication consideration in their quarterly publication, *New Mexico Nursing News & Views.*

The abstract is planned to be submitted to *The Journal of American Psychiatric Nurses Association* for publication. The journal is a peer-reviewed journal and the largest resource for

psychiatric-mental health and preventive nursing. The evidence-based project results will be discoverable and available publicly to inform other researchers through the Scholarship and Open Access Repository website at the University of Saint Augustine for Health Sciences (SOAR@USA) to which the project has been submitted to.

Conclusion

The intent of this project was to implement a transition of care model that has been demonstrated to be effective in the reduction of rehospitalizations in psychiatric patients within 30 days of index discharge from inpatient psychiatric services. In recent years, behavioral health care has transitioned from primarily inpatient psychiatric care to primarily community-based treatment. The most adverse outcome of psychiatric hospitalization is rehospitalization (Loch, 2014).

Research supports the use of BCTI to decrease early readmissions rates (Shaffer et al., 2015). By using JHNEBP and Lewin's Change Theory, a transfer of care protocol was implemented in the facility to affect the readmission rates within 30 days of inpatient acute psychiatric care. The transfer of care protocol was implemented for a period of ten weeks and started by providing education to the stakeholders, nurses, therapists, CMs and MHTs on the intervention and the evidence that supports the intervention. The intervention used was the BCTI tool, which consists of three components: a patient's needs assessment, peer/CMs support and, telephone support from the time of admission to inpatient services to the time of first appointment with an outpatient provider. The total time for the project implementation was 10-weeks. After the 10-weeks, the data was analyzed, presented to the stakeholders, and disseminated regionally and nationally. The result of the two proportions *z*-test ($p = 0.002$) demonstrated a significant difference between pre and post intervention readmissions.

Sustainability is being ensured by the CNO, Director of Clinical Services, Nurse Educator, and Director of Admissions and Referrals as they have agreed to sustain the use of

the BCTI tool by providing the necessary training about the use of BCTI as the discharge protocol to nurses, therapists, CMs, and MHTs within their departments.

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Table 1

John Hopkins Evidence Level and Quality Guide

Evidence Levels	Quality Guides
Level I Experimental study, randomized controlled trial (RCT) Systematic review of RCTs, with or without meta-analysis	**A High quality:** Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence **B Good quality:** Reasonably consistent results; sufficient sample size for the study design; some control, fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence **C Low quality or major flaws:** Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn
Level II Quasi-experimental study Systematic review of a combination of RCTs and quasi experimental, or quasi-experimental studies only, with or without meta-analysis	
Level III Non-experimental study Systematic review of a combination of RCTs, quasi-experimental and non-experimental studies, or non-experimental studies only, with or without meta-analysis Qualitative study or systematic review with or without a meta synthesis	

Level IV Opinion of respected authorities and/or nationally recognized expert committees/consensus panels based on scientific evidence Includes: · Clinical practice guidelines · Consensus panels	**A High quality:** Material officially sponsored by a professional, public, private organization, or government agency; documentation of a systematic literature search strategy; consistent results with sufficient numbers of well-designed studies, criteria-based evaluation of overall scientific strength and quality of included studies and definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years **B Good quality:** Material officially sponsored by a professional, public, private organization, or government agency; reasonably thorough and appropriate systematic literature search strategy; reasonably consistent results, sufficient numbers of well-designed studies; evaluation of strengths and limitations of included studies with fairly definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years **C Low quality or major flaws:** Material not sponsored by an official organization or agency; undefined, poorly defined, or limited literature search strategy; no evaluation of strengths and limitations of included studies, insufficient evidence with inconsistent results, conclusions cannot be drawn; not revised within the last 5 years

Level V Based on experiential and non-research evidence Includes: · Literature reviews · Quality improvement, program, or financial evaluation · Case reports · Opinion of nationally recognized experts(s) based on experiential evidence	**Organizational Experience:** **A High quality:** Clear aims and objectives; consistent results across multiple settings, formal quality improvement, financial or program evaluation methods used; definitive conclusions; consistent recommendations with thorough reference to scientific evidence **B Good quality:** Clear aims and objectives; consistent results in a single setting; formal quality improvement or financial or program evaluation methods used; reasonably consistent recommendations with some reference to scientific evidence **C Low quality or major flaws:** Unclear or missing aims and objectives; inconsistent results; poorly defined quality improvement, financial or program evaluation methods; recommendations cannot be made **Literature Review, Expert Opinion, Case Report, Community Standard, Clinician Experience, Consumer Preference:** **A High quality:** Expertise is clearly evident; draws definitive conclusions; provides scientific rationale; thought leader(s) in the field **B Good quality:** Expertise appears to be credible; draws fairly definitive conclusions; provides logical argument for opinions **C Low quality or major flaws:** Expertise is not discernable or is dubious; conclusions cannot be drawn

Note. (Johns Hopkins School of Nursing, 2017)

Table 2

Brief Critical Time Intervention

Target areas to improve continuity of care for psychiatric patients.

Target area	Description and goal	Possible activities
Systems coordination	Coordinate referrals and work with patient to identify long-term treatment goals	Accompany the patient to appointments; develop a system for keeping track of appointments
Engagement in psychiatric services	Assist the patient in managing symptoms and felling more empowered in making active use of psychiatric services	Help the patient optimize relationships with treatment providers; talk with providers regarding the in vivo observed strengths and vulnerabilities of the patient
Continuation of substance abuse treatment	Help the patient address any substance-related treatment needs and emphasize engagement in ongoing treatment	Conduct motivational interviews; provide psychoeducation regarding substance abuse
Medication adherence	Work with patient to support medication adherence and develop self-management strategies	Provide education about benefits and side effects of medications; teach strategies such as the use of pills boxes and calendars
Family involvement and social support network	Collaborate with the patient to engage family and other social network members	Provide education to friends and family members; help patient medicate conflict with loved ones
Life skills training and support	Help the patient to improve their adaptive functioning in various life skill areas	Conduct a home assessment to identify potential challenges or hazards; assist the patient in managing finances
Integration of medical care	Help the patient to access and utilize medical care services	Accompany the patient to medical appointments help the patient to establish and maintain pro-health finances
Establishment of community linkages	Help the patient establish connections with nonpsychiatric services	Refer the patient to a vocational rehabilitation program; discuss the possibility of connecting with faith-based organization
Practical needs assessment	Assist the patient in meeting his or her everyday needs and provide practical assistance	Teach the patient how to use public transportation; help the patient access services to help with legal issues, benefits, or childcare

Note. Adapted from Dixon, L., Goldberg, R., Iannone, V., Lucksted, A., Brown, C., Kreyenbuhl, J., Fang, L., & Potts, W. (2009). Use of a critical time intervention to promote continuity of care after psychiatric inpatient hospitalization. *Psychiatric Services*, *60*(4), 451–458

Table 3

Budget

EXPENSES		REVENUE	
Direct		Billing	0
Salary and benefits: Education of RNs and therapists; ½ hour each x 30 RN's and therapists at $40.00 per hour	$600	Grants	0
Salary and benefits: Case manager education for telephone communication and implementation post discharge; 1 hour per day for 70 days at $30.00 per hour	$2,100		
Supplies: copies of implementation tools, tracking sheets and records of post discharge calls	$300	Institutional budget support	0
Statistician: Data analysis, 10 hours at $50/hour	$500		
Total Expenses	$3,500	Total Revenue	0
Net Balance: Total cost			$3,500

Table 4

Two Proportions z-Test for the Difference Between Pretest Readmissions and Posttest Readmissions

Samples	Responses	*n*	Proportion	*SD*	*SE*
Pretest Readmissions	17	300	.06	0.23	0.01
Posttest Readmissions	42	325	.13	0.34	0.02

Note. z = -3.14, p = .002, 95.00% CI: [-.12, -.03]

Table 5

Frequency Table for Nominal Variables: Gender and Ethnicity

Variable	*n*	*%*
Gender		
M	65	61.90
F	40	38.10
Missing	0	0.00
Ethnicity		
Hispanic	65	61.90
Native	5	4.76
White	35	33.33
Missing	0	0.00

Note. Due to rounding errors, percentages may not equal 100%.

Table 6

Summary Statistics Table for Interval and Ratio Variables: Age

Variable	*M*	*SD*	*n*	Min	Max
Age	35.05	9.78	105	18.00	56.00

Table 7

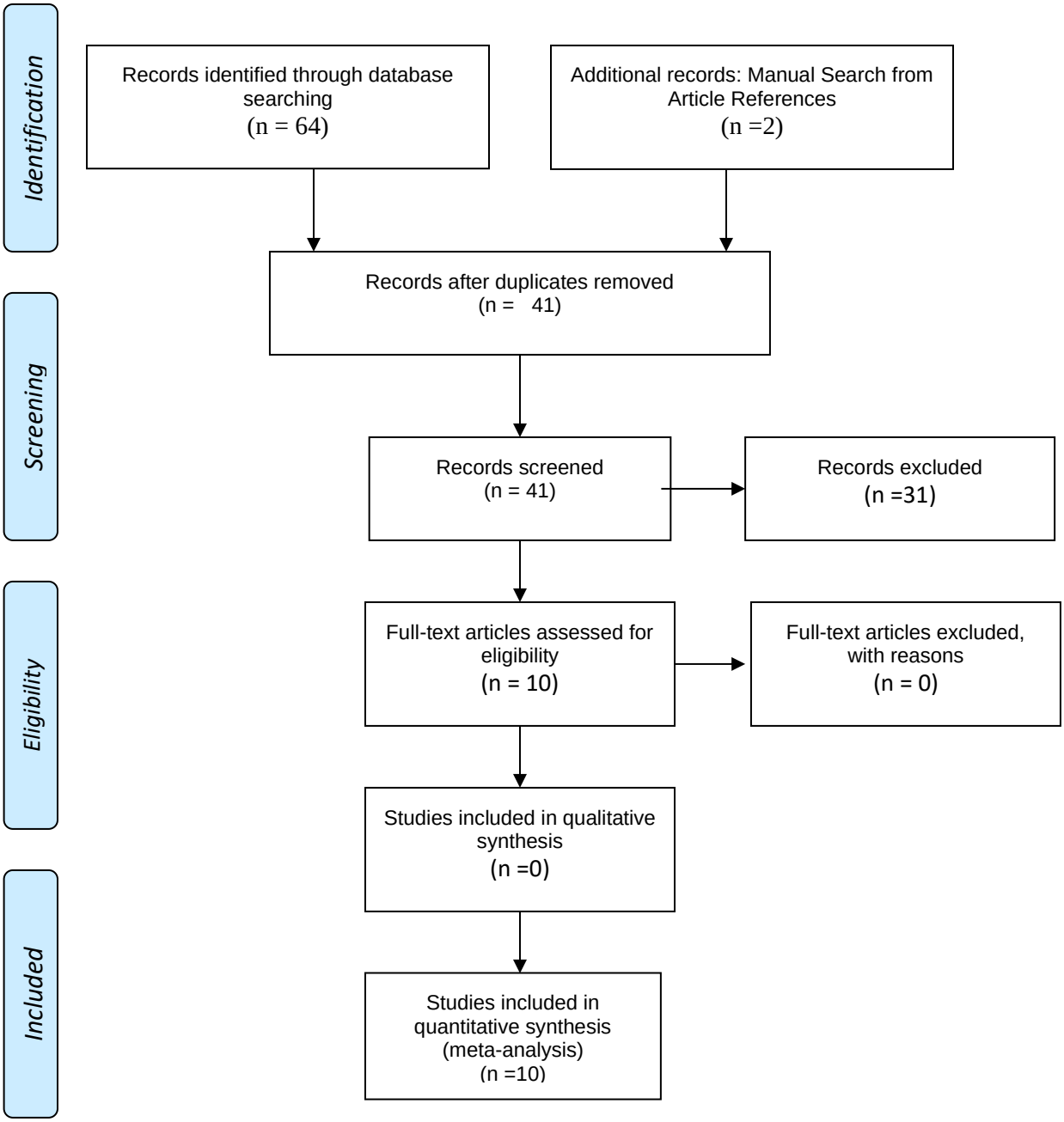
Frequency Table for Nominal Variables: Diagnosis

Variable	*n*	*%*
Diagnosis		
F11.23: Opioid dependence with withdrawal	1	0.95
F32.2: Major depressive disorder, single episode severe without psychotic features	5	4.76
F25.0: Schizoaffective disorder, bipolar type	5	4.76
F25.1: Schizoaffective disorder, depressive type	5	4.76
F29.0: Unspecified psychosis not due to a substance or known physiological condition	13	12.38
F20.0: Paranoid schizophrenia	7	6.67
F31.9: Bipolar disorder, unspecified	6	5.71
F33.2: Major depressive disorder, recurrent severe without psychotic features	20	19.05
F20.9: Schizophrenia unspecified	3	2.86
F39: Unspecified mood	2	1.90
F25.9: Schizoaffective disorder unspecified	6	5.71
F32.9: Major depressive disorder, single episode, unspecified	4	3.81
n/a	4	3.81
F31.3: Bipolar disorder, current episode depressed, mild or moderate severity	1	0.95
F31.5: Bipolar disorder, current episode depressed, severe with psychotic features	7	6.67
F39.0: Unspecified mood (affective) disorder	2	1.90
F33.3: Major depressive disorder, recurrent, severe with psychotic features	8	7.62
F31.13: Bipolar disorder, current episode manic without psychotic features	1	0.95
F31.4: Bipolar disorder, current episode depressed, severe without psychotic features	3	2.86
F33.0: Major depressive disorder, recurrent, mild	1	0.95
F31.2: Bipolar disorder, current episode manic severe with psychotic features	1	0.95
Missing	0	0.00

Note. Due to rounding errors, percentages may not equal 100%.

Figure 1

PRISMA Literature Search Strategy Diagram



Note. Adapted from Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLOS Medicine*, *6*(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097

Appendix A
Summary of Primary Research Evidence

Citation	Design Level Quality Grade	Sample Sample size	Intervention Comparison	Theoretical Foundation	Outcome Definition	Usefulness Results Key Findings
Balaban, R., Batalden, M., Ross-Degnan, D., & Cook, B. L. (2020). Using a social worker transition coach to improve hospital-to-home transitions for high-risk nonelderly patients. *Journal for Healthcare Quality: Promoting Excellence in Healthcare*, *42*(6), 315–325. https://doi.org/10.1097/JHQ.0000000000000219	Level I Grade B	N= 240 High risk for readmission adult medical patients with lower socioeconomic, 2/3 with behavioral health diagnosis	I: hospital visits, post discharge phone calls, home visits and social work skills. All received phone calls, visits only to those willing to receive one C: usual care		Reduction in readmission	U: The RTC targeted patients with high readmission rates characteristics. R: BH patients are more than twice likely to seek care in ED, their likelihood of readmission increases. K: Transitional care program that attended to both personal and medical needs demonstrated a trend over 90 days in readmission reduction.
Botha, U. A., Coetzee, M., Koen, L., & Niehaus, D. J. H. (2018). An attempt to stem the tide: Exploring the effect of a 90-day transitional care intervention on readmissions to an acute male psychiatric unit in South Africa. *Archives of Psychiatric Nursing*, *32*(3), 384–389. https://doi.org/10.1016/j.apnu.2017.12.002	Level II Grade B	N = 60 Males between 18-59 years old, early psychiatric discharge patients in South Africa.	I: Four phone calls and one home visit focusing on maintaining adherence, appointment reminders and psychoeducation C: Matched control group receiving standard care		Reduction in readmissions	U: Counterproductive effect of premature discharge, reduces efficacy of post discharge efforts R: No significant decrease in readmission K: Intervention group appeared

						less ill at 12 months
Brearly, T. W., Goodman, C. S., Haynes, C., McDermott, K., & Rowland, J. A. (2020). Improvement of post inpatient psychiatric follow-up for veterans using telehealth. *American Journal of Health-System Pharmacy*, *77*(4), 288–294. https://doi.org/10.1093/ajhp/zxz314	Level II Grade B	N = 20 Veterans discharged from an inpatient Department of Veterans' Affairs Unit	I: Providing medication management appointments through clinical video telehealth C: Conventional on-site appointments Tool: Allied Transitional Telehealth Encounters post Inpatient Discharge (ATTEND)		Outcomes were measured through readmission rates, wait times and, self-report measures.	U: prompt visits through telehealth as a transition to outpatient R: readmission rates were lower with intervention vs. standard care (5% vs. 19%) K: post I interviews indicated high levels of acceptance, reported decline in psychiatric symptoms
Kidd, S. A., Virdee, G., Mihalakakos, G., McKinney, C., Feingold, L., Collins, A., Davidson, L., Weingarten, R., Maples, N., & Velligan, D. (2016). The welcome basket revisited: Testing the feasibility of a brief peer support intervention to facilitate transition from hospital to community. *Psychiatric Rehabilitation Journal*, *39*(4), 335–342. https://doi.org/10.1037/prj0000235	Level II Grade C	N=23 Adults with severe mental illness recruited from a large psychiatric hospital in Toronto, Canada	I: meeting prior to discharge, weekly contact x4, Welcome Basket C: Standard Care Too: Welcome Basket and Cognitive adaptation training (CAT)		Outcomes: hospital readmissions, quality of life, symptomology using Brief Symptom Inventory	U: adds to the base of evidence for peer support R: No significant difference was observed at 1 month nor at 6 months K: Unclear impact on rehospitalizations suggest combination intervention with other approaches to impact rehospitalization
Lam, M., Li, L., Anderson, K. K., Shariff, S. Z., & Forchuk, C. (2020). Evaluation of the transitional discharge model on use of psychiatric health services: An interrupted time series analysis. *Journal of Psychiatric and*	Level II Grade B	N = 20,279 Use of health administrative databases, 3 years prior to 2 years after	I: Transitional Discharge Model based on interpersonal relations and strategies to	Peplau's theory of interpersonal relations	Significant level decrease in 30-day readmission for TDM recipients as	U: TDM facilitates community reintegration through development of therapeutic

Mental Health Nursing, *27*(2), 172–184. https://doi.org/10.1111/jpm.12562		intervention in Canada for patients 18+ years old discharged from psychiatric unit.	include continued health support from hospital until therapeutic relationship is established with community provider and peer support C: No Transitional Discharge Model Tool: Transitional Discharge Model		compared with no TDM.	relationships with community providers and peer support. R: A slight increase before a decrease in readmission rates for acute care units K: Needs from different unit types should be considered when implementing TDM, therapeutic relationships are essential
Nilsson, M., Mir, S., Larsen, J. K., & Arnfred, S. (2014). Fewer re-admissions and bed days following an intensive transitional post discharge aftercare program for a mixed diagnostic group of patients. *Nordic Journal of Psychiatry*, *68*(7), 500–506. https://doi.org/10.3109/08039488.2013.877073	Level III Grade B	N = 239 Adult non-psychotic psychiatric patients discharged from a psychiatric center in Denmark.	I: Transitional post discharge aftercare program,14 visits (1 with psychiatrist, five individual therapy and 8 group therapy and, daily telephone contact C: Less intensive outpatient aftercare		Intervention was statistically significant at 6-12 months in reducing hospital readmissions	U: The right kind of aftercare provided at the right time could be of critical importance R: rehospitalization decreased at 6-12 months post index discharge K: Intervention decreases number of bed days on readmission. Day treatment programs are superior to outpatient care Intervention is improved alternative to low intensity aftercare

						in vulnerable period right after discharge.
Wray, A. M., Hoyt, T., Welch, S., Civetti, S., Anthony, N., Ballester, E., & Tandon, R. (2019). Veterans engaged in treatment, skills, and transitions for enhancing psychiatric safety (VETSTEPS). Psychiatric Rehabilitation Journal, 42(3), 277–283. https://doi.org/10.1037/prj0000360	Level II Grade B	N=219 Retrospective data from military veterans	I: inpatient-outpatient care collaboration; 4 phone calls within 7 days of discharge; 4-week evidence-based intervention that provided safety planning, coping skills and triage services for post discharge needs C: Did not follow with intervention Tool: VETSTEPS		Hospital readmission	U: Innovative bridging between inpatient-outpatient in critical time can improve continuity of care. R: Lower rates of readmission at 12 months K: Phone calls and exploratory analysis improved follow up rate from 55% to 79%. Post discharge contacts improve outcomes.

Legend: Intervention (I); Comparison (C); Usefulness (U), Results (R); Key findings (K); Transitional Discharge Model (TDM); Randomized Control Trial (RTC).

Appendix B
Summary of Systematic Reviews (SR)

Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/ Implications
Rasmussen, L. F., Grode, L. B., Lange, J., Barat, I., & Gregersen, M. (2021). Impact of transitional care interventions on hospital readmissions in older medical patients: A systematic review. *BMJ Open*, *11*(1). https://doi.org/10.1136/bmjopen-2020-040057	Level I Grade A	What is the impact of transitional care interventions with both pre discharge and post discharge elements on readmission rates in older adult medical patients?	PubMed, The Cochrane Library, EMBASE, CINAHL, Web of Science, January 2008-August 2019	Inclusion: medical patients >= 65 years or mean age >= 75 years with transitional care interventions between hospital and home with both predischarge and post discharge components. Exclusion: other patients other than medical patients, only one diagnosis, or psychiatric disorders	5 RTCs, 4 non-randomized controlled trials, and two pre-post cohort studies. Data extraction by two authors, Narrative synthesis performed, and effect sizes were estimated.	Transitional care interventions reduce readmission rates amount older medical patients although the impact varies at different times of outcome assessment.	High quality studies examining the impact of interventions are needed, by process evaluation to improve future interventions. Methodological quality was generally poor.
Vigod, S. N., Kurdyak, P. A., Dennis, C. L., Leszcz, T., Taylor, V. H., Blumberger, D. M., & Seitz, D. P. (2013). Transitional interventions to reduce early psychiatric readmissions in adults:	Level I Grade A	What interventions applied during the transition from in-patient to out-patient care in prevent early psychiatric readmission?	Medline, CINAHL, EMBASE, PsycINFO and the Cochrane Library. From inception until January 2012 using medical subject heading and keywords: Hospitalization, Recurrence, post discharge, Post discharge, rehospitali*,	Inclusion: Interventions whose goals were to assist in the transition from in-patient to out-patient care for adult in-patients on psychiatric units. Eligible interventions could have components delivered prior to discharge (pre-	Data on the study populations, study design, intervention description, outcome description, timing of measurement(s) and outcome rates in the intervention and comparison groups were extracted from each included study. Data analysis was completed by	Psychoeducation interventions targeting disease Management, living skills, and a structured assessment of patient's discharge needs reduce readmission rates. Effective components identified within	Decreasing early readmission rates in patients with psychiatric illness is an attainable goal. Psychoeducation, needs assessments and communication between providers are standard components of best practice and

Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/ Implications
systematic review. *The British journal of psychiatry: the journal of mental science*, *202*(3), 187–194. https://doi.org/10.1192/bjp.bp.112.115030			readmit*, discharge planning, continuity of patient care, co-ordination, coordination, outpatient-care, ambulatory-care, transitional-care, aftercare, in *combination with* mental, psychiatry*, mental disorders, mentally ill persons, mental health services AND intervention*, therapy.	discharge), shortly after discharge (post-discharge) or could span both the pre- and post-discharge time periods (bridging). Exclusion: Interventions not related to adult mental health interventions conducted exclusively in populations with substance use disorders and interventions that were involuntary in nature (for example, involuntary treatment orders, legal or forensic interventions), and interventions directed at treating specific psychiatric disorders.	study design, chronological, intervention.	the context of multicomponent interventions were pre-discharge medication education/ reconciliation; post-discharge telephone follow-up, efforts to ensure timely follow-up appointments, home visits, peer support, the bridging components of transition manager and timely communication by in-patient staff with an out-patient care during the transition.	optimal quality of care, with resultant reduction in readmission risk.
Nurjannah, I., Mills, J., Usher, K., & Park, T. (2014). Discharge planning in mental health	Level I Grade A	Can the efficiency of discharge planning for consumers living with a mental health	CINHAL and PSYCHINFO over a 21-year period with hand search of reference lists.	Peer reviewed journals.	By authors. No specific method is included.	Research findings about discharge planning for people living with a mental health issue identify the importance of	Comprehensive discharge planning can result in reduced readmissions to mental health services. The

Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/ Implications
care: An integrative review of the literature. *Journal of Clinical Nursing (John Wiley & Sons, Inc.)*, *23*(9–10), 1175–1185. https://doi.org/10.1111/jocn.12297		issue influence both the number of future readmissions to acute-care facilities and their quality of life at home?				communication between health professionals, consumers, and their families	impact of effective communication on the outcomes of discharge planning is an important step in promoting success.

Legend: Cumulative Index to Nursing & Allied Health (CINAHL); Excerpta Medica database (EMBASE); Randomized Control Trial (RTC)

Appendix C

SWOT Analysis Factor

Strength	Explanation
Stakeholder support	Stakeholders understand the need for the project.
Minimal costs to the facility	Facility costs are limited to the training and coordination time for the project.
Weakness	
Staff participation	Some staff members may be reluctant to participate in new process.
Change in culture	Some employees tend to become ingrained in the current processes and ways of performing tasks.
Opportunities	
Improve patient outcomes	Decreasing hospital readmissions.
Improve patient satisfaction	Patients are dissatisfied with delays in care.
Threats	
Staff resistance to change	Some staff prefers are set in their old ways.
Short timeline	Creates need to expedite changes during the project.

Appendix D

Discharge Checklist

	YES	NO
Was needs assessment completed on admission?	_____	_____
Was peer or case manager support established prior to discharge?	_____	_____
Was telephonic communication established between patient and outpatient provider prior to discharge?	_____	_____
Was the patient contacted by a hospital case manager? to bridge any gaps between time of discharge from hospital and outpatient appointment?	_____	_____

Appendix E

Project Implementation Timeline

Steps	Time	Course
Develop intervention format with CNO and Director of Clinical Services.	January 2022	NURS 7802
Plan and create a process for outcome measures.	January 2022	NURS 7802
Plan and create a process to identify and track participants.	January 2022	NURS 7802
Create demographic data sheet.	January 2022	NURS 7802
Plan and create intervention educational sessions.	January 2022	NURS 7802
Submit to USAHS EPRC and organizational for approval.	January 2022	NURS 7802
Complete any revisions.	January 2022	NURS 7802
Finalize budget and obtain funding.	February 2022	NURS 7802
Print project materials (Intervention tool)	February 2022	NURS 7802
Create tracking tool for intervention objectives.	February 2022	NURS 7802
Begin and complete intervention.	March- April 2022	NURS 7802
Collect process data/evaluate for process measures.	March-April 2022	NURS 7802
Collect outcomes data/evaluate for outcome measures.	May 2022	NURS 7803
Complete data collection and analysis with contract statistician.	May 2022	NURS 7803
Prepare project manuscript in its entirety.	June 2022	NURS 7803
Disseminate findings to stakeholders and the organization.	July 2022	NURS 7803
Make any adjustments to intervention and prepare for organization wide implementation.	Aug 2022	NURS 7803

Appendix F

Project Schedule

						NUR7801							NUR7802								NURS 7803							
Activity	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15
Meet with preceptor	x	x	x	x	x	x	x	x	x	x	x	X	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Develop PICOT question		x																										
Develop significance of the problem			x																									
EBP Framework & Change Theory				x																								
Evidence search strategy					x																							
Evidence Table						x																						
Evidence search results							x																					
Themes with practice recommendations								x																				
Setting, stakeholders, and systems change (SWOT analysis)									x																			
Implementation plan with timeline and budget										x																		
Evaluation plan & dissemination plan											x																	
Completed proposal												X																

Meet with key stakeholders					x								X															
Present draft operating procedure for discussion													x															
Finalize operating procedures and gain approval														x														
Educate staff on new tool														x														
Evaluate for process measures														x														
Begin tool implementation															x	x	x	x	x									
Data collection															x	x	x	x	x									
Obtain staff feedback															x	x	x	x	x									
Analyze data																				x	x							
Process data																				x	x							
Discuss findings with Preceptor																		x	x	x	x							
Evaluate for outcome measures																		x	x	x	x							
Prepare and present findings to staff and key stakeholders																						x	x					
Prepare and present presentation for the facility and leadership																							x	x				
Prepare findings for dissemination																								x	x			

Submit findings for publication & dissemination																									x	x		
Implement sustainability measures																										x	x	x

Appendix G

Admissions and Discharges Data

Table G1

Admissions and Discharges Pre intervention

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Number of admissions	**24**	**32**	**27**	**27**	**20**	**41**	**42**	**25**	**29**	**33**
Number of readmissions	**2**	**1**	**0**	**3**	**0**	**0**	**3**	**1**	**3**	**4**

Table G2

Admissions and Discharges Post intervention

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Number of admissions	**25**	**32**	**34**	**32**	**32**	**41**	**33**	**23**	**37**	**36**
Number of readmissions	**3**	**4**	**3**	**2**	**4**	**5**	**6**	**3**	**6**	**6**
Was intervention tool fully completed? Yes/No	**23**	**30**	**6**	**7**	**7**	**4**	**7**	**6**	**7**	**10**