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Reducing Readmissions in Bipolar Patients with Discharge Interventions

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Abstract

Purpose: The purpose of this DNP project was to evaluate a discharge protocol with interventions to improve the process of discharge from the in-patient setting and transition the patient into the community.

Methods: This program evaluation centered on evaluating a discharge protocol currently in place and adding revised interventions to strengthen the discharge planning process. De-identified data was viewed on readmission rates and interviews were conducted with stakeholders involved with the discharge process.

Results: There were a total of twelve participants in the evaluation period of pre and post evaluation interviews. Review of the interviews resulted in four themes relating to the discharge protocol; lack of facility resources, lack of insurance, homelessness, and need for discharge planning. Chart reviews of de-identified data of patients admitted with a diagnosis of bipolar disorder revealed that 32.8% of all patients with bipolar disorder were readmitted within 30 days of discharge. Additionally, Bipolar disorder was the second most common diagnosis with readmissions within a 30-day timeframe for this facility.

Conclusion: Readmissions in the psychiatric realm, occur when there are not proper interventions that prevent the patient from re-entering the hospital. A structured discharge protocol with interventions geared towards preventing relapse will help decrease the readmission rate.

Keywords: behavioral health, bipolar disorder, readmissions, interventions, discharge planning

Introduction

Hospital readmissions involving psychiatric disorders are quite common. In fact, nearly a fourth of adults in the United States (U.S.) suffer from a psychiatric illness or mental disorder (Heslin & Weiss, 2015). Of patients that are diagnosed with mental illnesses, many require hospitalizations for the same. Mental health disorders such as, bipolar, depression, and other mood disorders, are among the most common according to Medicare beneficiaries (Heslin & Weiss, 2015). It is said that hospital readmissions that occur within a 30-day timeframe after a patient has been discharged, tend to have adverse outcomes for the patient (Heslin & Weiss, 2015). There are multiple causes of readmissions for psychiatric patients. Some of the most common include little to no access to care in the community and medication non-compliance (Heslin & Weiss, 2015). It is important that psychiatric readmissions to in-patient units are reduced for both the issue of cost, and overall, for the benefit of the patient.

Background

Best practices for implementing interventions to reduce re-hospitalizations of inpatient psychiatric patients include: setting up aftercare plans for each patient prior to discharge and including family/friends in the patient's treatment plan through a treatment team meeting (Hamilton, Passos, Cardoso, Jansen, Allen, Begley, Soares, Kapczinski, 2016). Strategies include setting follow-up appointments for patients while they are still in the hospital. These would include therapists, psychiatrists, and caseworkers. Patients and their supports should be included in the overall treatment plan to assist the patient in follow through of their aftercare plans.

This DNP project was helpful and beneficial to the in-patient unit as readmissions are common on adult psychiatric in-patient units. The project took place on a 20-bed in-patient psychiatric unit. Discharge planning is done, but could be improved upon from the interdisciplinary team's perspective. According to informal interviews of the members of the discharge planning team there is room for improvement. The team consists of doctors, social workers, nurses and mental health counselors. Evaluating current interventions and implementing additional interventions for discharge should improve patient outcomes.

Problem Statement

The risk of readmission among bipolar patients as indicated by amount of in-patient behavioral health readmissions and by a lack of discharge planning for the patient. Patients are being readmitted due to their chronic mental health disorders that leads them to discontinue their prescribed medications, not follow-up with their outpatient providers, and they often lack psycho-education into their illness.

The above problem statement relates directly to adult patients who are diagnosed with bipolar disorder that have or may have multiple admissions to an in-patient psychiatric unit. Behavioral health readmissions are on the rise and the best way to address this issue is to implement evidence-based interventions to prevent hospitalizations through the discharge planning process. The purpose of the DNP project is to evaluate current evidence-based discharge protocols to prevent readmissions for bipolar patients and improve mental health outcomes.

Project Site and Population

The setting for this project was held at a community hospital with a 20-bed adult psychiatric in-patient unit. The patients admitted to this 20-bed unit are adults eighteen to fifty-five years of age, various cultural backgrounds, various spoken languages, gender, and have psychiatric illness and mental disorders. There was a focus on the diagnosis of bipolar disorder for the implementation piece.

The DNP student, who currently works at this facility, other Registered Nurses that work with this patient population and the use of MediTech, which is the program the unit uses for EHR access, facilitated this project. The unit also functions with an interdisciplinary team, which consists of mental health counselors, social workers, nurses and physicians. The interdisciplinary team was vital in conducting interviews related to the discharge planning process and was able to formulate ideas for amendments to the discharge protocol to better serve the patients.

Facilitators and Barriers

Project barriers included, difficulty with receipt of proper discharge plans, homelessness, poor supports, and or lack insurance. Due to the aforementioned factors, some patients will not have optimal discharge plans. Also, it may be difficult to assess if a patient was discharged from the current facility, and or readmitted to another facility.

During the initiation of the updated protocol, paired with evaluating the current protocol, the team discussed potential barriers that may arise during the discharge planning process and items that may affect readmission rates. However, it's important to note that bipolar disorder is listed as the main diagnosis of focus for this project; however, there are different types of bipolar disorder which could affect readmission

rates, as there is type 1, type 2 and mixed bipolar disorder and the hospital data files each diagnosis is filed under one umbrella.

Barriers also include interruption of aftercare plans. As noted above, many members of the interdisciplinary team cited homelessness to be one of the biggest issues they face when discharging a patient. It's important that each patient have a safe discharge disposition so, many patients end up going to a friend's house or a shelter if they are admitted as homeless. It will also affect them getting to their appointments if they do not have means of transportation.

During the grand rounds there were several recommendations discussed to assist an improving the readmission rates. Both medication reconciliation and the initiation of a deaconate/long-acting injectable were established as helpful interventions to aid in the discharge process. Several of the stakeholders also noted the need for more community resources availability. There is an issue of demand, in this case, as there is a lot of patients who require programs for aftercare and there simply is not enough spaces or availability for the amount of patients in need. Even with the addition of more aftercare programs, many of them often are put on long waitlists, making the readmission rate an increased likelihood.

Review of the Literature

A literature review was conducted to obtain current literature on the DNP project topic to guide its development and synthesize pertinent information. Electronic databases were utilized for the search, which included PubMed of the National Library of Medicine, the Cumulative Index of Nursing and Allied Health Literature (CINAHL), and

Google Scholar. The summary of the literature speaks to search terms, or key words, that include: *behavioral health readmissions, bipolar disorder readmissions, psychiatric discharge planning, and intervention for behavioral health readmissions and in-patient psychiatric readmissions*.

Inclusion criteria included: articles from scholarly and multidisciplinary journals published within the last 5 years and in the English language. The original search yielded hundreds of articles, however, about twenty articles from journals and other scholarly works during the preliminary search that were applicable to this topic and reviewed for relevancy. The articles were then screened for appropriate content related to the topic. Though many of articles were found pertaining to this topic, a methodological screen concluded that eight articles would be used for review for the purpose of this project. The articles included literature review guidelines, experimental studies, retrospective studies and cohort studies. The final eight selected articles were evaluated by the use of the AGREE (Appraisal of Guidelines, Research and Evidence) tool. The six domains outlined in the tool were used to test the strength of the research articles (Brouwers, Kho, Browman, Burger, Cluzeau, Feder, Fervers, Graham, Grimshaw, Hanna, Littlejohns, Makarski, & Zitzelsberger, 2010).

Psychiatric Readmissions Risk Factors

Several reasons contribute to psychiatric readmissions, which can include, but are not limited to the patient's specific diagnosis, which is highly associated with readmission rates, according to Barekatain, Maracy, Hassannejad & Hosseini (2013) whom also stated that all psychiatric disorders had readmissions. However, bipolar disorder had a greater number of readmissions compared to other psychiatric disorders.

Those with multiple psychiatric diagnoses were 21% more likely to be readmitted than those with only one diagnosis at 17.2% (Barekatain et al., 2013). How long the patient's "occurrence" lasted for was not statistically significant for re-hospitalization yet, a long length of stay could complicate the patient's post-discharge plan (Barekatain et al., 2013). Patients who lack social supports, such as family and friends, tend to have high readmission rates as well (Barekatain et al., 2013).

Similarly, a cohort study by Jaramillo-Gonzalez, Sanchez-Pedraza, and Herazo (2014) found that 60% of the 361 patients identified in the study were re-hospitalized for psychiatric disorders within one year of initial hospitalization. The rationale behind this is, re-hospitalization rates are higher for patients that experience relationship issues, had a higher social economic status, and have a long-term hospital level of care stay (Jaramillo-Gonzalez et al, 2014). The study also revealed that diagnosis plays a factor. Patients with bipolar disorder, schizophrenia, depression and substance abuse have been re-hospitalized more than other psychiatric diagnoses (Jaramillo-Gonzalez et al, 2014).

Factors that increase a patient's likelihood of readmission included lack of health insurance, having a history of multiple psychiatric admissions, patients with low functioning, and patients that are declared homeless (Hamilton et al, 2016). Readmissions are likely correlated to the diagnosis, citing patients with bipolar disorder, consisting of a manic episode had higher readmission rates than others admitted for the same (Hamilton et al, 2015).

The retrospective cross-sectional study by Zhang, Harvey and Andrew (2011), explored a psychiatric patient's length of stay and contributing factors as well. Patients with current signs and symptoms of their disorder and those who had a lack of social

supports were more likely to have long length of stays and those with long length of

stays, increased their chances of being readmitted (Zhang et al., 2011). A logistic

regression analysis looked at 10 variables of length of stay. Approximately 46% of

patients of the randomly selected were readmitted due to lack of

disposition/accommodations, lack of community services in place after discharge, and

previous admission history consisting of multiple admissions (Zhang et al., 2011).

The James, Charlemagne, Gilman, Alemi, Smith, Tharayil, and

Freeman, 2011 cohort study also looked at factors of readmission rates. It was found that

patients with past readmissions were likely to continue to be readmitted, especially if they

experienced overt signs and symptoms of their disorder and if the patient was actively or

chronically suicidal.

Discharge Planning

Patients engaged in treatment and had services in the community post-discharge

experienced a reduction in risk of readmission (Zhang et al., 2011). The comprehensive

descriptive study of Zhang et al. (2011) explored factors that influenced risk of

readmission and determined interventions that would likely prevent it.

Suggestions and improvements involving interventions to prevent readmission in

the psychiatric patient is presented in the form of an integrated care model by Vyas

(2016). Proper aftercare and a discharge plan is of upmost importance. This would

include psychiatric outpatient appointments and social supports for the patient both

during and after their hospital stay (Vyas, 2016).

Resources for patients should be given prior to their discharge so patients may

have a better understanding into their own mental illness and be involved in their plan of

care (Vyas, 2016). An example of resources would include information regarding community clinics, case management services, and after care programs (Vyas, 2016). The care model also noted early intervention of patients who are considered "high-risk" for readmission should performed during initial assessment. Psycho-education for the patient and their families should also be provided in regards to symptoms of relapse of their diagnosed psychiatric disorder (Vyas, 2016). Currently, there is a lack of knowledge among patients and their families about mental illness, following appropriate interventions, and preventing relapse.

Also, James et al., 2011, notes that re-hospitalization, in conjunction with a patient's discharge plan, should be implemented prior to discharge. The researchers examine discharge services that include outpatient therapy and services (James et al., 2011). Patients, who had set-up aftercare plans and were initially screened to be a low-risk for readmissions, had fewer admissions than patients with no aftercare plan. These patients were provided with outpatient therapy services, outpatient providers, and had access to community resources, all of which were in place prior to discharge (James et al., 2011).

Successful discharges began with successful hospital stays, where the patient was encouraged to be engaged in their treatment plan. Vigod, Kurdyak, Dennis, Leszez, Taylor, Blumberger, and Seitz (2016) found that patients with the most success had pre-discharge planning and post-discharge plans. Patients, who received psycho-education and developed proper coping skills during their course of stay, had better outcomes (Vigod et al., 2016). Patients who were educated and compliant on their medication regimen and had scheduled follow-up appointments also had better outcomes, these post-

discharge interventions included discharge follow-ups via telephone and home visits with nurses which made readmission less likely (Vigod et al, 2016). Patients who consistently saw a psychiatric provider after their discharge were less likely to be readmitted as their outpatient provider was managing their care and monitoring their process (Vigod et al, 2016). About 95% of the studies reviewed observed that initial and finalized discharge plans were effective and had a decreased rate of readmission for the individual (Vigod et al 2016).

Bonsack, Golay, Manetti, Gebel, Ferrari, Besse, Favrod, and Morandi (2016) featured a randomized control trial investigated transitional case management patients. Patients that were highly involved during their time of transition from in-patient to out-patient had reduced their risk of readmission (Bonsack et al., 2016). Different diagnoses and patient backgrounds required a different set of interventions from case management such as the amount of readmissions the patient had in the past, patients who were married, employed, or already had housing in place were less likely to be readmitted (Bonsack et al., 2016). Case management benefits the patient as they have someone assessing their needs, setting up aftercare plans, and following-up with their care (Bonsack et al., 2016).

By providing the patient with an initial assessment upon their admission, which identifies their needs, health care personnel can help prevent readmission (Hamilton et al., 2016). Readmissions are also prevented for patients with bipolar disorder, when transitional care initiatives are implemented prior to discharge (Hamilton et al., 2016). Thus, it is important that the clinician assess the patient's risk for psychiatric

readmission, disposition, insurance, and level of functioning so that readmissions of bipolar patients can be decreased.

Psychiatric hospitalizations account for more hospitalizations than any other illness or disorder (Heslin & Weiss, 2015). In the year 2012 alone, there were over 847, 000 hospital stays in the United States (Heslin & Weiss, 2015). In a 30-day time period, over 30 percent of in-patient psychiatric patients were readmitted for mood disorders, including bipolar disorder (Heslin & Weiss, 2015).

Synthesis of the Evidence

Findings from this literature review suggest that patients discharged with interventions in place have better outcomes because they have an interdisciplinary team that sets up outpatient provider appointments, have supports in the community and received education and insight into their illness and medications. Patients with support from the interdisciplinary team and their friends/family, paired with follow-up appointments scheduled, have a better chance of not being readmitted to an in-patient psychiatric unit. The literature is in agreement that the patient with case management, discharge/after care plans, and follow-up appointments experience fewer admissions.

Evidence Based Practice: Verification of Chosen Option

The evidence indicates a comprehensive discharge protocol can prevent readmissions for patients with bipolar disorder if a discharge protocol was in place that included: every patient admitted to an in-patient psychiatric unit began their initial discharge planning meeting the time of their admission, the patient and family is involved in their treatment including medication regimen and psycho-education, and the patient

has an appropriate disposition plan in place at the time of discharge, rates would likely

decrease.

Theoretical Framework/Evidence Based Practice Model

In order for a patient to have higher health outcomes and reduced risk of

readmission, they must first be in an environment conducive to change with resources

available to them. The framework used for this project was Aday's (see *Appendix A*)

Assessing Behavioral Healthcare (1999). The Aday framework recommends that the

patient needs to have structure in their environment, i.e. resources made available to them

during their inpatient stay such as treatment team members, therapeutic groups, and

medications. Further, there needs to be a process in place, i.e. for patient and family

meetings with their treatment team members to discuss hospital course of stay and

disposition plans. After the "process" is complete, there should be a set out of outcomes

and goals for the patient, in order to be successful. The inclusion of patient and family

member meetings with the treatment team supported the plan of this project and this

framework. The Aday framework related to this project because it identifies the patient's

needs and how they should have the right environment and interventions to be successful,

which in this case, was the discharge planning process.

Methods

This DNP Project focused on a program evaluation of the discharge planning

process on an in-patient psychiatric unit. Evidence from the literature was identified and

provided to the participants in order to assist patients with bipolar disorder before, during

and after their discharge. The project evaluated the discharge planning process with the following areas of focus: treatment plan meetings (with a focus on psycho-education, medications regimen and disposition plans) and discharge planning that may consist of: outpatient provider/therapist appointments, step-down programs, medication reconciliation, and support systems in place for the patient.

Goals, Objectives and Expected Outcomes

The purpose of this project was to reduce behavioral health admissions for patients with psychiatric mental health diagnosis through evidence based discharge plans in the form of a protocol. The interventions that have been outlined in this project are aimed to give patients better outcomes.

Some specific goals included:

1. All staff (nurses, social workers, doctors, mental health counselors) will be educated on the discharge protocol changes and the evaluation process.
2. Patients will receive a set of discharge interventions upon admission with the help of the interdisciplinary team as outlined by their social worker and assigned doctor.
3. Readmission rates, within 30-day timeframe, will have decreased due to the amended protocol.

Discharge Planning Process

Discharge planning should begin at the time of the patient's admission, and patients should be a part of the dialogue along with the interdisciplinary team throughout

the discharge planning process at this facility. During the process of discharge planning the patient is encouraged to ask questions and meet regularly with the treatment team and a family/support meeting should be set up, especially for potential difficult cases (i.e. patients who are low functioning and currently have no accommodations). The project began in September 2017 and went through February 2018.

Interdisciplinary Team and Grand Rounds

The interdisciplinary team, which includes physicians, nurses, social workers and mental health counselors, were educated on the discharge protocol via an in-service and once monthly meetings beginning in September and continuing through February. In-services were held during grand rounds, which took place in the morning, Monday through Friday. Additionally, the discharge protocol, along with changes was addressed at the monthly staff meetings, as a means of evaluating the protocol (see *Appendix G*).

Team Interviews

In addition to monthly meetings, interviews were conducted of the interdisciplinary team to assess the effectiveness of discharge interventions (see *Appendix F*). By conducting these interviews, it allowed the project manager to better assess the effectiveness of the current discharge protocol process. Data was also collected at the beginning of the project's timeframe (September 2017) through the beginning of 2018, after the new interventions were added to the discharge planning process. It was observed if readmission rates are decreasing it is as a result of the discharge interventions.

Implementation

The project included an evaluation of the process of the current discharge protocol with updated items added to the current protocol. The plan for the project was to examine patients admitted to an in-patient psychiatric unit and the current protocol associated with their discharge and aftercare planning. Additionally, the patient's readmission history, interventions performed, and follow-up for after- care were included during the evaluation of the current discharge protocol were also reviewed. When viewing the de-identified data, after major depressive disorder, bipolar disorder was the second leading diagnosis with the most re-admissions in a 30-day time frame. For this reason, this project reviewed the diagnosis of bipolar disorder and current readmission rates based upon admitting diagnosis and discharge diagnosis of bipolar disorder. Implementation began with conversations in grand rounds with stakeholders, which led to more formal interviews for this project. Stakeholders, in this case, included registered nurses, social workers and physicians. The interdisciplinary team was educated on discharge protocol through in-services and monthly meetings (see *Appendix F*). The in-services were more of an open-discussion, held during grand rounds, which took place in the mornings, Monday through Friday. There were also monthly staff meetings, in which the project was also addressed and evaluations of the discharge planning process in place occurred. During staff meetings and grand rounds, protocol compliance was also evaluated. At the time of the evaluation process, there was already a protocol for discharge in place, thus its effectiveness was evaluated.

The team was involved in the discharge planning process for each patient case which took place during ground rounds. The meetings in grand rounds discussed current discharge planning interventions including after-care plans. A pre-evaluation was

administered to all stakeholders regarding the current discharge protocol and what could

be improved with patient access to resources (the pre-evaluation questions are located

in *Appendix E*). Specific areas utilized to assess the current protocol via the pre-test

included: efficiency, training, and barriers affecting discharge.

　　　　The stakeholders, per the pre-evaluation, wanted to get the patients involved more

in their own care and to advocate for themselves. When the stakeholders were queried, it

was unanimous that the social workers, physicians and nurses believed that the current

protocol is effective and efficient but they had wished that there were more services in

the community for patient's aftercare. The barriers endorsed by the stakeholders included

lack of community resources and for the patients themselves, homelessness was an issue

the team ran into when placing patients for aftercare. However, stakeholders would not

make any changes to the discharge protocol at the time of post-evaluation.

　　　　It's important to note that in addition to bipolar disorder, many patients also have

other co-occurring psychiatric disorders such as anxiety, substance abuse, and depression,

or even co-morbid medical conditions like diabetes, hypertension, etc. Oftentimes, it can

be seen that a culmination of the patient's admitting diagnosis, with their other potential

diagnosis, is cause for the individual's readmission. In summary, there are a lot of other

factors that can be deduced that can contribute to readmissions, aside from the patient's

admitting diagnosis.

　　　　The current protocol, paired with the updated protocol, reflect interventions

necessary for a successful discharge, in the hopes that readmissions will be reduced for

the individual, specifically, a 30-day timeframe. The main difference between the original

protocol and the updated protocol is the addition of a family/community supports meeting

for each patient, in which the interdisciplinary team includes the patient and their support system in a discharge planning meeting prior to the patient's departure from the hospital. The updated protocol also reflects the importance of discharge interventions as per the current literature, which suggests including the patient and their supports in the discharge planning process. The original discharge protocol was revised as a result of the patient involvement and outside support recommendations for the discharge process made by the interdisciplinary team.

Ethical Considerations/Protection of Human Subjects

To conduct this project, a human subject's determination form was filed with the University of Massachusetts at Amherst International Review Board (IRB). This program evaluation poses no risk to patients or health care providers. There were few chart reviews conducted during the course of the project and all psychiatric readmission rate data was de-identified and secured in a locked cabinet. Additionally, guidelines from the Health Insurance Portability and Accountability Act were maintained and there were no foreseeable risks to patients and clinicians in this educational project.

Results

The project consisted of an evaluation of a 20-bed community in-patient psychiatric unit's current discharge protocol. After review, the protocol was updated with an added intervention that included patient's family/supports to attend a discharge planning meeting prior to the patient's discharge. There were pre-evaluation interviews with the twelve stakeholders (doctors, nurses, mental health counselors, and social workers) conducted regarding the current discharge planning protocol and post-

evaluation interviews with the same twelve stakeholders, regarding the updated protocol, with the inclusion of the new intervention. The timeline of this project began in September 2017 and continued through February 2018, with interviews being conducted and concluding with project results being presented to the stakeholders.

Data Collection Procedures

Data collection included twelve pre-evaluation interviews with the interdisciplinary team prior to the rollout of the amended discharge planning protocol. Afterwards, there were post-evaluation interviews conducted with each of the twelve stakeholders. All statistical data was performed using an Excel spreadsheet of the 30-day readmission rates for the in-patient psychiatric facility, with a focus on the bipolar disorder rates. Additionally, the de-identified statistical data of readmission rates for patients admitted to the in-patient unit was utilized. Qualitative data was collected that consisted of the pre and post evaluation interviews conducted with the interdisciplinary team as well as quantitative data regarding the in-patient unit's 30-day readmission rates for bipolar disorder.

Qualitative Data

The difference between the previous protocol and the updated protocol was the addition of including patients and their family/supports in grand rounds for discharge planning discussions. There were individual interviews performed with each of the twelve stakeholders. The common themes of the interviews consisted of patients requiring more community resources after discharge and there are not enough facilities that patients can go to due to issues around the patient's personal finances, their

insurance, homelessness, and proximity of facilities to the patient's geographical area. All twelve participants were in agreement that there are not enough community resources for aftercare currently available.

Lack of Facilities

The members of the discharge planning team agreed that there were not enough aftercare facilities for patients to go to upon discharge. The biggest issues around this involve insurance not covering certain aftercare programs, the facility is too far from the patient's geographical area, or the medications the patient may be on are not accepted at the facility. It would be helpful if there were more step-down facilities available in the community.

Insurance

The interdisciplinary team also stated that insurance can be an issue for the patient's in-patient length of stay and for their discharge plans. Some insurances will only allow the patient to stay in hospital for a short time, which may not be long enough for the patient to secure after care plans. Also, insurance may not cover the programs or step-down options that are appropriate for the individual. It would be helpful if insurance gave the patient more time in the hospital, if indicated, and if more programs were accepted by general insurances

Homelessness

One of the biggest issues seen by the treatment team is homelessness. The homeless patient usually has difficult with post-discharge disposition. They often do not have a place to go and placing them to a program can be difficult, thus, they are often discharged to a shelter. Though this disposition may be appropriate for some individual

patients, there are often patients that are either vulnerable or too ill to go to a homeless shelter. The team wants to help these individuals however, it does may discharge difficult for them.

Protocol Updates

The twelve participants viewed the current protocol to be "somewhat effective" during pre-evaluation questioning and post-evaluation and felt that the updated protocol (with the addition of grand rounds including the patient and their supports) was "more effective". Family meetings were a part of this and allowing the patient to be more involved in their own care during the discharge planning process. With patients involved in grand rounds, the interdisciplinary team was able to conduct a safe plan for discharge with each patient. Participants also voiced other interventions such as the use of more long-acting injectable medications prior to discharge.

Quantitative Data

Review of the facility's data demonstrated that 18.4% of all in-patient psychiatric admissions were patients with a listed diagnosis of bipolar disorder, making it the third most common diagnosis subsequent to dementia and major depressive disorder respectively. Of patients admitted with a diagnosis of bipolar disorder, 32.8% of all patients were readmitted within 30 days of discharge from the facility. Bipolar disorder was the second most overall common diagnosis with readmissions within a 30-day timeframe, making bipolar disorder diagnosis the second most at risk for re-admission, after depressive disorder (*Appendix G*).

Discussion

The interdisciplinary team whom served as stakeholders involved in this project, all agreed that the discharge planning process could be improved. Additionally, the team agreed that the process was stronger when the patients were more involved in their care and when patient supports were brought in to discuss a disposition plan. Likewise, the team found that when family meetings were added to the patient's treatment plan, per the updated protocol, the discharge process became more efficient and assisted in streamlining the discharge process. To that end, the discharge planning protocol for this facility should be reviewed and updated annually with readmission data continually to be collected.

It's important to further involve the patient in their own care so they have more success after discharge. The patient was more involved, which improved the patient's hospital stay and they had more appropriate discharge plans due to the collateral information provided by the patient's supports during the family meeting. Also, the recommendation of increasing the use of long-acting injectable medications was frequently discussed among the interdisciplinary team during interviews and during grand rounds. Also, the addition of long-acting injectable medications may help prevent readmission for the patient and secure medication compliance.

The results of this project demonstrate that the discharge planning process was improved when patients were more involved in their care with addition of the family/supports meeting with the treatment team. Additionally, statistical data analyzed from the chart reviews were consistent with the literature, validating that bipolar disorder is one of the most common psychiatric admission diagnoses. Furthermore, those admitted with the diagnosis of bipolar disorder are at a higher risk for re-admission. Thus, patients

who are engaged in their own treatment, with services within the community, and have a

discharge plan are at decreased risk for readmission (Zhang et al, 2011).

In behavioral health, percentages of patients with admission diagnosis of bipolar

disorder are readmitted, likely due to their discharge plan, which often lacks access to

care in the community, as well as the risk of medication non-compliance (Heslin &

Weiss, 2015). The information acquired from the interdisciplinary team interviews, notes

that patients do not have proper aftercare plans that prevent readmission. Many patients

that are readmitted to psychiatric units have co- occurring disorders such as hypertension

and diabetes. Also, patients may lack follow-up care or there are not enough resources

available to them in the community at the time of their discharge. The patient may not

have supports in the community or a home to discharge to, which also increases chance

of readmission. The qualitative results can be applied to Aday's assessing behavioral

healthcare framework (*Appendix A*), because the interdisciplinary team has reported that

when the environment of the patient is one of support and when the patient feels their

care is centered on them, they have better outcomes overall.

Future Recommendations

Future considerations include opening the chart review to include more than the

discharge process to assess other potential factors affecting readmission rates. A general

overview of the record may prove to be beneficial in considering all other facilitators

affecting readmission rates. Also, patient outcomes regarding chronic mental health

disorders such as bipolar disorder, may be aided with long term injectable medication.

Long-term injectable medications may be administered prior to discharge to assist with

compliance and relapse prevention. Advantages of these long-term injectable medications

may include: increase in compliance, reduction in relapse rate, and reduction of hospital costs (Ragusa, Patriarca, Stratta, Collazzoni and Rossi, 2015).

Conclusion

This project evaluated a current discharge planning protocol and the addition of the intervention of including the patient and their supports in a grand rounds meeting prior to discharge. Behavioral health readmissions are costly and are detrimental to patients with psychiatric disorders. It's important to look at interventions that are being provided for patients in order to assess causative factors related to multiple readmissions. As a result, if the patient is engaged in their treatment, have supports in their life, proper aftercare plans, and follow-up, they will potentially have better mental health outcomes. Therefore, it is the responsibility of the interdisciplinary team to formulate a discharge planning process that is tailored to each patient. Moreover, if there are resources needed that the interdisciplinary team cannot provide, it imperative that appropriate referrals be made. Accordingly, the more preemptive care planning that can be completed while the patient is on the unit prior to discharge, the likelihood in the decrease of the 30-day readmission rate.

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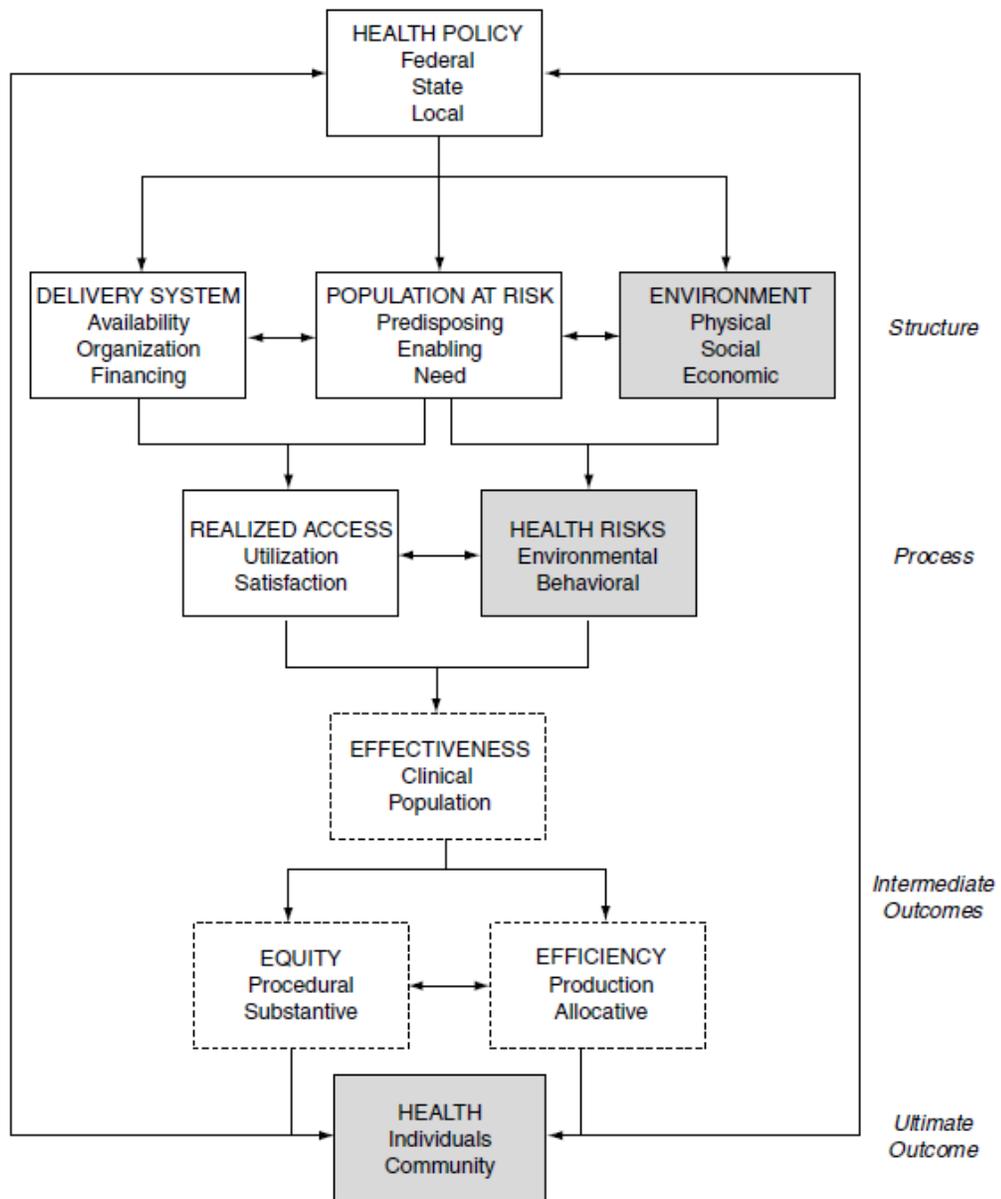
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Appendix

APPENDIX A.

Theoretical Framework

APPENDIX B.

Project Timeline

Task	September	October	November	December	January	February
Consulting with stakeholders at clinical site	X					
Discussion with interdisciplinary team on discharge planning process	X					
Obtain data on current 30-day readmission rates for bipolar patients	X	X	X	X	X	
Monthly meetings with the interdisciplinary team and staff to discuss protocol implementation		X	X	X		
Share results of program evaluation with stakeholders						X

APPENDIX C.

Current Discharge Protocol

Name of Policy – **DISCHARGE PROTOCOL**

I.   CATEGORY: PATIENT CARE DELIVERY

II.   PURPOSE: To establish guidelines to be followed when discharging a Behavioral Medicine unit patient.

III.   POLICY STATEMENT:.Behavioral Medicine unit patients will be discharged in a systematic manner that takes into account their future treatment, physical and emotional well-being and the integrity of their personal belongings.

IV.   LEVEL OF PERSONNEL: **All Staff**

V.   POLICY NUMBER: 1.11

VI.   PROCEDURE:

1.   Within 24 hours of discharge, a nursing staff member will:
     a.   Ask the patient to complete a unit Program Satisfaction Questionnaire.
     b.   Complete section 2 of the Patient Care Referral form as appropriate.

2.   Within 24 hours of discharge a social worker will:
     a.   Complete the follow-up appointments section of the Discharge Form including telephone and fax numbers of the outpatient treaters.
     b.   Secure Releases of Information as needed for each agency, therapist, psychiatrist, etc. involved in the patient's aftercare.
     c.   Complete section 3 of the Patient Care Referral Form as appropriate.

3.   Within 24 hours of discharge, the psychiatrist will:
     a.   Complete section 1 of the Patient Care Referral form as appropriate.

4.   On the day of discharge, a nursing staff member will:
     a.   Ensure that a physician's discharge order, signed and dated is in place.
     b.   Account for valuables noted on admission.
     c.   The RN reviews the Discharge Instructions with the patient and/or family member or guardian and asks them to verbalize their understanding of the instructions. The patient, family member or guardian is asked to sign the form and is given a copy.
     d.   The RN returns medications brought from home when there is a physician's order stating that the medication can be given to the patient.
     e.   The RN writes a Discharge Progress note that includes:

          1.   Specific condition of patient at discharge.
          2.   Notation that aftercare plan was reviewed with the patient;
          3.   Time of discharge, mode of transportation, and who accompanied the patient.

5.   The unit secretary or Charge Nurse will notify Patient Admitting Services (PAS) that the patient has been discharged.

APPENDIX D.

UPDATED Discharge Protocol

Name of Policy – **DISCHARGE PROTOCOL**

I.   CATEGORY: PATIENT CARE DELIVERY

II.   PURPOSE: To establish guidelines to be followed when discharging a Behavioral Medicine unit patient.

III.   POLICY STATEMENT:.Behavioral Medicine unit patients will be discharged in a systematic manner that takes into account their future treatment, physical and emotional well-being and the integrity of their personal belongings.

IV.   LEVEL OF PERSONNEL: **All Staff**

V.   POLICY NUMBER: 1.11

VI.   PROCEDURE:
1.   At the time of admission, the patient will be included in grand rounds
   a.   The patient will be assigned a physiatrist and social worker for their admission
   b.   The patient will have weekly meetings with the interdisciplinary team regarding their plan for admission and the discharge planning process will begin
      1.   Medication management, aftercare plans, and any other appropriate interventions relevant to the patient will also be discussed
   c.   Family members are invited to join grand rounds with the patient

2.   Within 24 hours of discharge, a nursing staff member will:
   a.   Ask the patient to complete a unit Program Satisfaction Questionnaire.
   b.   Complete section 2 of the Patient Care Referral form as appropriate.

3.   Within 24 hours of discharge a social worker will:
   a.   Complete the follow-up appointments section of the Discharge Form including telephone and fax numbers of the outpatient treaters.
   b.   Secure Releases of Information as needed for each agency, therapist, psychiatrist, etc. involved in the patient's aftercare.
   c.   Complete section 3 of the Patient Care Referral Form as appropriate.

4.   Within 24 hours of discharge, the psychiatrist will:
   a.   Complete section 1 of the Patient Care Referral form as appropriate.

5.   On the day of discharge, a nursing staff member will:
   a.   Ensure that a physician's discharge order, signed and dated is in place.
   b.   Account for valuables noted on admission.
   c.   The RN reviews the Discharge Instructions with the patient and/or family member or guardian and asks them to verbalize their understanding of the instructions. The patient, family member or guardian is asked to sign the form and is given a copy.
   d.   The RN returns medications brought from home when there is a physician's order stating that the medication can be given to the patient.
   e.   The RN writes a Discharge Progress note that includes:

      1.   Specific condition of patient at discharge.
      2.   Notation that aftercare plan was reviewed with the patient;
      3.   Time of discharge, mode of transportation, and who accompanied the patient

APPENDIX E.

PRE/POST EVALUATION

Interview Prompts

PRE-EVALUATION QUESTIONS

1. Is the current discharge protocol effective?

2. Did you feel you were properly trained on the discharge planning protocol?

3. Would you say the current discharge protocol is efficient?

4. What changes would you make to the discharge planning protocol?

5. What, if any, barriers are there currently with the discharge protocol?

POST-EVALUATION QUESTIONS

1. Is the updated discharge protocol effective?

2. Did you feel you were properly trained on the updated discharge planning
   protocol?

3. Do you feel the amount of readmissions has decreased?

4. What changes would you make from here on out, regarding the discharge
   process?

APPENDIX F.

Educational Presenation/Hand-out
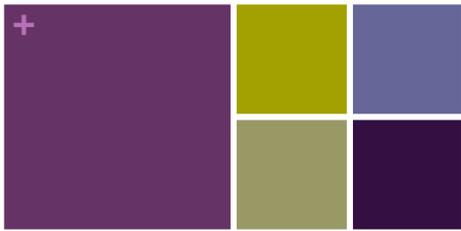
The Discharge Planning Process –
Preventing Readmissions

Readmission Prevention

- Psychiatric readmissions are among the most common hospital admissions
- Nearly a fourth of adults in the U.S. suffer from a psychiatric-related illness
- Patients with an admission within 30 days after discharge have poor outcomes
- Common risk factors for readmission:
  - Medication non-compliance
  - Lack of access to care in the community
- If readmissions are reduced it will benefit the hospital and the patient, as readmissions are often costly to the facility
  - (Heslin & Weiss, 2015)

Current Discharge Protocol

Updated Discharge Protocol

Amendments

- The suggested discharge protocol policy updates are slight
- At the time of admissions the patient will be included in grand rounds
  - Each patient will be assigned a physiatrist and social worked
  - Each patient will have weekly meetings with the interdisciplinary team
    - Meetings will include the treatment team's plan
- Discharge planning will begin in treatment team meetings

Amendments

- Treatment Team Planning Meetings include:
  - Medication management
  - Aftercare plans
  - Other appropriate interventions for the patient
- Family, friends, and/or other supports for the patients are encouraged to be involved in the meetings

Benefits of Updating Current Policy

- Evidence suggests that patients who are engaged in their own treatment and had services in the community post-discharge reduced their risk for readmission
  - (Zhang et al, 2011)
- Interventions that involve an integrated care model had improved outcomes
  - This includes the interdisciplinary team and after care planning
    - (Vyas, 2016)
- Patients discharge with disposition plans and community supports are considered "low risk" for readmission
  - (James et al, 2011)

Participation

- Seamless transition from current to updated protocol with pre and post-evaluation questions

PRE-EVALUATION QUESTIONS

1. Is the current discharge protocol effective?
2. Did you feel you were properly trained on the discharge planning protocol?
3. Would you say the current discharge protocol is efficient?
4. What changes would you make to the discharge planning protocol?
5. What, if any, barriers are there currently with the discharge protocol?

POST-EVALUATION QUESTIONS

1. Is the updated discharge protocol effective?
2. Did you feel you were properly trained on the updated discharge planning protocol?
3. Do you feel the amount of readmissions has decreased?
4. What changes would you make from here on out, regarding the discharge process?

Plan

- Conduct pre-evaluation
- Begin implementing treatment team meetings with patient and their supports
- Continue discussing protocol and discharge planning during daily grand rounds
- Conduct post-evaluation
- Share and discuss results, when available.

Thank you!

- Any input would be greatly appreciated
- Let's start the dialogue on preventing readmissions!

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APPENDIX G.
Data Tables Results

PRE-EVALUATION DATA

	MDs	MSWs	RNs	MHCs
Effectiveness of Current Discharge Protocol	"somewhat effective"	"somewhat effective"	"somewhat effective"	"effective"
Proper training on discharge protocol performed	Trained	Trained	Trained	Trained
Efficiency of current discharge protocol	"usually efficient"	"usually efficient"	"usually efficient"	"usually efficient"
Appropriate changes to discharge planning protocol	"more community resources"	"more community resources, more usage of long-acting medications, more options for insurances"	"more community resources, more usage of long-acting medications"	"more organization of discharge process"
Current barriers to discharge protocol	"community resources, follow-up appointments"	"community resources, follow-up appointments, insurance issues"	"follow-up appointments and aftercare plans"	"not always organized, patients lack consistent plans"

POST EVALUATION DATA

	MDs	MSWs	RNs	MHCs
Effectiveness of Updated Discharge Protocol	"more effective"	"more effective"	"more effective"	"more effective"
Proper training on discharge protocol performed	Trained	Trained	Trained	Trained
Readmissions decreased?	Yes	Yes	Yes	Yes
Appropriate changes to discharge planning protocol for the future	"continue regular family meetings, keeping patients longer, if indicated, to find better aftercare plans"	"continue regular family meetings, keeping patients longer, if indicated, to find better aftercare plans"	"continue regular family meetings, increase usage of long-acting medications to prevent readmissions, more resources for patients"	"continue regular family meetings, more resources preventing patients from the ER"

Discharge Diagnosis Index

Discharge Diagnosis	Percent of all Admissions	Percent Readmitted within 30 days	Percent readmitted with same diagnosis
Bipolar Disorder	18.4%	32.8%	13.2 %

Diagnosis on Readmission

Readmission Diagnosis	Facility Count	Percent of Readmissions
Bipolar Disorder	40	15.3%