Reducing 30-Day Psychiatric Inpatient Hospital Readmission of Mentally Ill Homeless Men with Substance Use Disorder by Using a Discharge Checklist

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Reducing 30-Day Psychiatric Inpatient Hospital Readmission of Mentally Ill Homeless Men with Substance Use Disorder by Using a Discharge Checklist

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NURS 789

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Abstract

**Background:** Psychiatric inpatient readmission of mentally ill homeless men with substance use disorder is greater than that of the non-use population. Substance use disorder co-occurs with high prevalence among patients diagnosed with mental illness. For mentally ill homeless individuals discharged after inpatient treatment, substance use disorder negatively impacts health, behavior, and medication non-compliance, resulting in hospital readmission.

**Problem:** In acute psychiatric facilities in Northern California, the greatest readmission after inpatient hospitalization occurs at 53% in a week and 74.8% within two weeks of discharge. For homeless individuals, substance use disorder exacerbates personal problems and decreases the likelihood of long-term exit from homelessness. As a result, hospital readmission among the homeless population is higher than in the general population. One of the problems faced by the mental health unit in Northern California is frequent readmissions of homeless patients, two to three times every month (24-36 times per year).

**Methods:** Implementing a 14-step homeless discharge checklist aims to ensure that patients are medication compliant immediately after discharge from the inpatient unit and to improve the transition of care between the inpatient setting and other outpatient behavioral clinics within the county. This intervention aims to ensure medication compliance after discharge from the inpatient unit and to keep outpatient appointments to support medication compliance.

**Conclusion:** Evidence from the published literature presented a compelling need to include follow-up care and housing arrangements in homeless discharge planning by following a discharge checklist.
Keywords: discharge planning, homelessness, hospital readmission, nurse navigator, substance use disorder.

Reducing 30-Day Psychiatric Inpatient Hospital Readmission of Mentally Ill Homeless Men with Substance Use Disorder Using a Discharge Checklist

Background

Homelessness can take various forms, from having no home or permanent dwelling place to marginally housed, as in "sofa surfing" or living "rough" on the street, in an encampment, or a temporary shelter or hotel room. Substance use disorders are more prevalent in people experiencing homelessness than in the general population (Stringfellow et al., 2016). Research on mental illness, homelessness, and substance use disorder shows the interconnectedness of these conditions. Hospital readmissions of mentally ill homeless patients are also higher than for the general population (Saab et al. 2016). For mentally ill homeless individuals discharged after inpatient treatment, substance use disorder exacerbates health, behavior, and medication non-compliance issues, often resulting in hospital readmission within 30 days. No adherence to psychiatric treatment is a widespread problem in individuals with a dual diagnosis of mental illness and substance use disorder (Maremmani et al., 2022).

Repeated readmissions have substantial financial implications for hospitals. The Hospital Readmission Reduction Program of the Affordable Care Act requires hospitals to provide services to secure reimbursement from the Centers for Medicare and Medicaid Services (CMS). Hospitals cannot turn people away, so the hospital must provide care if a discharged patient returns. An increase in readmissions for homeless patients after discharge may decreases hospital reimbursement if the readmissions are considered "excessive" (CMS, 2016).
However, homeless individuals with substance use disorders have complicated personal problems that reduce the likelihood of a long-term exit from homelessness (Flanagan & Briggs, 2015). According to Lam et al. (2016), homeless patients presenting with mental health conditions were more likely to return to the ED within 30 days and be readmitted to the hospital. This Quality improvement paper implemented a 14-step homeless discharge checklist to guide nurses in homeless discharge. It proposes educating nurses on the new homeless discharge checklist that will give medication at hand and encourage inter-discipline collaboration between the inpatient discharging unit and outpatient behavioral health clinic case workers to address this healthcare problem of repeated 30-day readmission of homeless men with a dual diagnosis of mental illness and substance use disorder.

**Problem Description and Setting**

The DNP project setting is a 19-bed acute psychiatric inpatient located on the central coast of Northern California. The facility experiences frequent readmissions of homeless patients with diagnosis of mental illness and substance use disorder. Homeless patients with substance use disorder are readmitted two to three times every month. For example, for a homeless patient admitted on a 5150, (i.e., a 3-day psychiatric hold for either danger to others, danger to self, or gravely disabled) the length of stay is usually five to seven days. Upon discharge, patients received paper prescriptions on the paper and a list of homeless shelter addresses.

The patients often do not fill their prescriptions, even when they have specified a desired pharmacy location. When the discharged homeless patients start experiencing hallucinations, delusion, and paranoia, many will turn to illegal substances such as street versions of amphetamines (aka crystal meth), heroin, cocaine, and marijuana, which may lead to overdose or worsen existing mental illness. These homeless patients often return to the ED complaining of
suicidal/homicidal ideation and are readmitted to the mental health unit. The prescription written at discharge is usually still in their belongings, an indicator that the patients are non-compliant with discharge medications and self-medicating with illegal substances, contributing to hospital readmission. Another problem with homeless individuals is insufficient to discharge education.

Specific Aims

Over the next six months, he DNP student planned, developed, implemented, and evaluated a comprehensive discharge program for mentally ill homeless patients. The objectives include a) providing discharge medication instead of written prescriptions for at least 50% of the patients. Furthermore, additional objectives/goals; b) increasing nurses' knowledge and usage of the new discharge checklist; and c) decrease 30-days hospital readmission rates in the mentally ill homeless population by 20%.

Available Knowledge

PICOT Question

The PICOT question that guided the search methodology is: In homeless psychiatric patients recently discharged from the inpatient unit (P), how does discharge checklist (I) compared to no discharge checklist (C) affect medication compliance and hospital readmission rate (O) within three months (T)?

Search Methodology

A literature search was conducted in the Comprehensive Index of Nursing and Allied Health Literature (CINAHL) and PubMed databases to identify evidence-based journal articles relevant to the PICOT question published between 2015 and 2022. The initial terms and Boolean operators used in CINAHL were readmission AND mental illness AND homelessness OR substance abuse. Only the search terms homeless AND readmission with the Boolean operator
AND were used in PubMed. The initial search yielded 493 articles from CINAHL and 160 from PubMed. The selection was narrowed by including only peer-reviewed studies published in English-language medicine and nursing journals. Further inclusion criteria were research design (randomized control trial, qualitative, quantitative, systematic, and meta-analysis), interventions, practice guidelines, subject heading of homelessness and mental illness. With the inclusion criteria applied, 89 articles were candidates for review, of which 43 were duplicates. Seven studies were selected for inclusion in the review based on the significance of the topic and relevance to the PICOT question. The studies were critically appraised with the Johns Hopkins Research and Non-Research Nursing Evidence-Based Practice appraisal tools, which provide criteria for evaluating the strength and quality of evidence (Dang & Dearholt, 2018). (See Appendix B for the Evidence Table).

**Integrated Review of the Literature**

In a randomized control trial, Botha et al. (2018) assessed the readmission rate for patients with severe mental illness in a developing country using a telephone-based intervention. Researchers identified the need for services incorporating a unique approach to support the distinct substance-using mental health services population. These services will help in reducing hospital readmissions.

In a longitudinal randomized controlled trial, Currie et al. (2018) identified economic impediments and social disparity as causes of hospital readmission. Study findings indicated that timely post-discharge care is necessary but insufficient to reduce the risk of readmission among the homeless and mentally ill. Currie et al. (2018) found no association between timely outpatient follow-up and the likelihood of rehospitalization in people experiencing homelessness and mentally sick cohorts. This study indicated a compelling need to address housing as an
integral component of hospital discharge planning. The researchers maintained that providing universal medical services to the homeless population they studied in Vancouver, Canada, would reduce homeless readmissions.

In a randomized control trial, Roos et al. (2018) investigated the use of specialized mental healthcare services in relation to cost for patients with serious mental illness in the first 12 months after discharge from a mental health hospital. The study compared community residential aftercare (CRA) to treatment with outpatient care provided by municipal health services. The results showed that total costs for all mental health services for 12 months were 38.5% lower for patients randomized to the CRA (mean differences − 23,071 EUR, 95% CI -45,450 to 3027, p = .057) (Table 6). The result was due to lower inpatient costs with a mean difference of − 17,741 EUR (95% CI -36,824 to 4503, p = .042) in favor of the intervention. The results indicated that transferring patients from a mental hospital to community residential aftercare could reduce total health services and costs. Importantly, although using fewer services, the point estimate for the number of inpatient admissions and readmissions was 18% (− 0.9 entries) and 42% (− 0.8 readmissions) lower in the intervention group, showing at least no significant worsening in the intervention group.

Some healthcare experts from both academia and industry have claimed that reducing hospital readmissions will make the healthcare system a profitable venture. For example, Bring et al. (2020) found that post-hospital medical respite care for homeless people in Denmark led to significant improvement in cost-effectiveness after six to twelve months of collaborative solutions covering health, housing, and social welfare sectors. In addition, the researchers identified housing and shelter as necessary to prevent rehospitalization and meet the needs of those experiencing homelessness.
In a cross-sectional study design, Chen et al. (2018) examined whether the local health department's roles in promoting mental health care were connected to reducing 30-day readmission rates. The researchers used data sets for 2012 and 2013 collected from multiple sources in Maryland. Patients received special preventive care such as screening, case detection, identification and tracking of vulnerable individuals in the study population, and tracking those not following the treatment plan. In addition, the patients were monitored for adverse outcomes after discharge, and the researchers provided treatment-resistant for complex cases. Results showed no significant difference in the relationship between the local health department’s provision of preventing mental health care services and the likelihood of having 30-day readmissions.

In a seven-week pilot study, DeCaporale et al. (2017) incorporated behavioral health that involved an interdisciplinary team that working with 17 patients following their discharge from hospital. Patients' prescribed medication non-compliance was reduced from an average of 15.5, and patient compliance increased to 13 on each team appointment. In addition, the results showed that 15 out of individuals studied avoided hospital visits from 30 to 90-day intervals, reducing polypharmacy.

Wyer et al. (2016), in a quality improvement case study, examined nursing education in knowledge translation for reduced 30-day hospitalizations of patients with heart failure. The setting was a 201-bed community teaching hospital in upper Manhattan, New York City. Hospital staff who cared for heart failure patients attended a three-day innovative capacity-building conference in evidence-based health care from 2009 to 2011. The results showed a 30-day readmission decrease from 23.1% to 16.4% during the year following intervention. The hospital experienced a significant fall in readmission rates for heart failure patients. Overall
readmission rates at the hospital did not vary during the study time interval (10.7% for 2010 and 10.4% for 2011). The result demonstrated that nursing education helped reduce readmission rates.

**Summary/Synthesis of the Evidence**

This paper explored evidence in the literature for reducing 30-day hospital readmission among homeless men with mental illness and substance use disorder. Evidence from the literature reviewed suggested that changes to current standard practice in the post-treatment discharge of this population can reduce hospital readmission rates. For example, Roos et al. (2018) demonstrated the potential of community residential aftercare to partially reduce the total consumption of health services and costs by decreasing readmission rates. Other studies (Botha et al., 2018; Bring et al., 2020; Currie et al., 2018; DeCaporale et al., 2017) produced positive outcomes of appropriate discharge follow-up, post-hospital placement, and exceptional care and services.

All the cited studies pointed toward having good discharge plans and placement services for discharged homeless patients to reduce hospital readmissions. Limitations noted in some of the studies (Botha et al., 2018; Currie et al., 2018; Roos et al., 2018) were small sample sizes, flaws in randomized patients in controlled trials, and short duration of follow-up data collection. In addition, (Currie et al., 2018) noted that current discharge planning did not sufficiently detail the housing needs of patients at discharge.

**Rational**

**Conceptual Framework**

In the execution of this quality improvement project, the Doctor of Nursing Practice (DNP) student focused on Kurt Lewin’s Theory of Planned Change (1947). A prominent social
psychologist, Lewin, structured a three-step change model called the unfreezing, change, and refreezing model (Shirey, 2013). Preparation for change is necessary to implement the first change step unfreezing. In this project, the unfreezing step involves assessing the cause of homeless readmission on the unit. The DNP student analyzed the current state of the team and areas of opportunity and investigated strategies that would improve the unit’s homeless discharge process. Critical stakeholders are identified in the initial stage, which ensures support for the initiative with evidence-based practice research and urgency for change (Shirey, 2013). The anonymous survey results of the majority not feeling as an expert knowledge level revealed room for growth with nurses on the unit. The nurse’s knowledge and confidence to identify and manage the homeless discharge process using the new checklist could be higher, which could help in improving patient outcomes.

The second step in Lewin’s change theory involves creating a detailed action plan and engaging staff toward the intended change (Shirey, 2013). Clear communication and staff engagement are necessary to address any uncertainty and fears accompanying change. It would help individual nurses advance toward the desired target of learning and following the new homeless discharge process, maximizing effectiveness, and minimizing confusion (Shirey, 2013). In this step, the DNP student created a stress-free discharge checklist to guide mental health unit nursing staff during discharge.

Refreezing, Lewin’s final step of change theory, requires integrating the changes to stabilize it (Shirey, 2013). The DNP student measured knowledge differences among nurses with a pre-and post-survey. The new homeless discharge checklist gives access to additional information on what the nurse will do following the discharge order from the psychiatrist. The nurse will call the designated Short-Doyle payment-accepting pharmacies within the city to
deliver prescribed medication to the unit before discharging the homeless patients from the unit. Also, collaborate with other interdisciplinary teams in the outpatient clinic to increase immediate follow-up and monitor medication adherence/compliance, leading to patient stability and reduced hospital readmission. (See Appendix C for conceptual theory).

Methods

Context

Hospital readmission among homeless men diagnosed with mental illness and substance use disorder is common among this population; it is essential to have a standardized discharge checklist to streamline the discharge process for people in the homeless population. Medication noncompliance is one of the factors that lead to frequent returns to the hospital. Without a homeless discharge checklist, some nurses discharge homeless patients the same way as every other patient. As a result, it leads to repeated readmission. Homeless patients do not reap the benefit of the potentially improved outcome that can exist with the new homeless discharge checklist.

Intervention

This project aimed to reduce hospital readmission of homeless men with a dual diagnosis of mental illness and substance use disorder by educating the nursing staff on the newly designed homeless discharge checklist in a hospital psychiatric inpatient mental health unit. Sixteen registered nurses in the inpatient psychiatric unit attended an hour-long presentation covering all the items in a new homeless discharge checklist. The presentation took 40 minutes, with the remaining 20 minutes to administer a 10-question pre-and post-survey. The survey questions were designed to gauge nurses’ overall satisfaction with the new checklist and their confidence in using it to reduce readmission. The meeting was held in a hospital conference room to meet
patient privacy and HIPPA compliance requirements. The presentation was created from the DNP student's years of experience working in the mental health unit and from knowledge acquired from the University of San Francisco curriculum for Psychiatric Mental Health Nurse Practitioner Doctoral level curriculum.

**Gap Analysis**

A gap analysis was conducted to evaluate baseline data for 30-day hospital readmission among mentally ill homeless men with substance use disorder. See Figures 1 and 2.

Figure 1. Indicates the year-end 30-day hospital readmission rate for mentally ill homeless patients with substance use disorder.

Figure 2. Indicates greater than three (3) hospital visits/readmissions within 30 days interval.

Following the gap analysis, discharging of homeless patient with medication at hand, the DNP student implemented staff education and a homeless discharge checklist and to support smooth transition of care and mitigate any perceived healthcare disparity for the homeless population. (See Appendix D for Gap analysis).
The current state of this psychiatric inpatient mental health unit shows a gap between the homeless discharge process and the non-homeless discharge process. One gap was medication non-compliance in the homeless population, with discharge medication; accompanied by self-medication with cocaine, amphetamine, opioids, and other illegal control substances, which led to hospital readmission. A second gap was an inappropriate discharge process with a generic checklist unrelated to homeless discharge. Lam et al. (2016) found that an inappropriate discharge and placement contributed to the higher likelihood of homeless patients presenting to the emergency department within 30 days and being readmitted to the hospital. The third gap was the inability of the hospital pharmacy to dispense medication to patients at discharge. The DNP student identified the patient at risk on admission. Nurses are encouraged to start teaching medication compliance when their patients are ready to learn and understand the teaching.

The DNP student action to close the gap identified was developing a 14-step homeless discharge checklist that will complete all these identified gaps in the unit by filling discharge medication at hand upon discharge and re-training nurses on the new 14-step homeless discharge checklist to guide nurses through homeless discharge processes. (See Appendix E for homeless discharge checklist).

**Stakeholders**

The stakeholders listed according to their power and interest in this project are the chief medical officer, chief nursing officer, chief financial officer, unit manager, unit supervisor, charge nurse, nurses, mental health unit staff, emergency room admission clerk and the homeless patients. The stakeholders with the highest power and interest are the mental health unit director and supervisor as the project, if successful, will reduce operating costs. Furthermore, the stakeholder (i.e., top management) are part of the organizational culture that believes in saving
cost. The operational culture includes the charge nurse, registered nurse, social worker, and caseworker. Engaging all the stakeholders with open communication and conveying the outcome of this project will build support. To introduce the project and obtain permission to carry it out on the unit, the DNP student emailed all the primary stakeholders.

*Gantt Chart*

This quality improvement project began with identifying the unit’s needs and how to implement a project to address these needs in the clinical site where the DNP student is employed. The DNP student conducted a gap analysis and a literature review in December 2022. The project was approved in March 2023. (See Appendix F for the project support letter). The DNP student discussed the project details with Dr. Trinette Radasa, the project chair at the University of San Francisco. An initial meeting with the nursing education director and hospital quality improvement team was held in May 2023 to obtain the hospital readmission baseline data and to seek approval for the new homeless discharge checklist. The DNP student modified the checklist based on the quality improvement team feedback. The actual PowerPoint presentation of the new discharge checklist, training, and administration of pre- and post-survey for the nurses occurred in June 2023. The DNP student collected and compiled the in June 2023. (See Appendix G for Gantt Chart).

*Work Breakdown Structure*

The work breakdown structure for this project allowed for efficient implementation (see Appendix H). The DNP student organized the work breakdown structure into seventeen steps essential to planning, implementation, and evaluation. The initial phase of the planning involved:

1. Obtaining the stakeholder's support.
2. Developing project goals and objectives.
3. Creating the new checklist.

4. Getting official approval from the quality department.

The implementation phase involved the presentation of the project. The final stage was evaluating the project through data collection from pre-and post-surveys and compiling the report.

**Responsibility/Communication Matrix**

The project's initial communication started with a meeting between the DNP student and the clinical site director to discuss the unit's problems and obtain approval to carry out the quality improvement project on the unit. The DNP student also initially meets with her advisor via Zoom to discuss the project in the early stage and as needed throughout this project execution.

Furthermore, all communication exchanges between the key stakeholders and the DNP student occurred in person, email, and Zoom meetings. (See appendix I for communication matrix.).

After the project approval, communication about the new homeless checklist occurred during the bi-monthly unit huddle. The director for mental health services introduced the new project in one of the unit treatment meetings to all the nurses, both day and night shifts. The presentation was in combination with in-person and zoom to accommodate night shift nurses.

**SWOT Analysis**

The DNP student analyzed the project's strengths, weaknesses, opportunities, and threats (SWOT) in an inpatient psychiatric unit. (See Appendix J). The SWOT assists in identifying the external and internal factors within the inpatient psychiatric unit that will facilitate a reduction in 30 days hospital readmission of homeless men with mentally ill patients with substance use disorder. The SWOT analysis identifies the critical area where the new homeless discharge checklist could improve the homeless discharge process in this unit. The strength the DNP
student has is the staff's enthusiasm to change. However, about 80% of staff are clinically qualified with at least 5-8 years of experience working with mentally ill homeless patients, and their willingness to support this project by making suggestions on things added to the new homeless discharge checklist. Another strength is that the project will not incur additional costs in its execution. The weaknesses identified by the DNP student are as follows: lack of acceptance by key stakeholders, who channel the resources to another pet project. Inability to dispense medication by the hospital pharmacy at discharge. Another potential weakness is no collaboration with the outpatient case worker to follow up on the patient's post-discharge process.

**Budget and Financial Analysis**

Implementing this QIP involves some expenses incurred toward the actualization of this project. The financial expenditures include developmental and implementation costs. Developmental cost involves initial expenses accrued during the early stage of this project. They include assessing the unit's needs, researching, and consulting with the project stakeholders. Implementation costs involve meeting with the nurses, training cost of hourly pay for the sixteen nurses that attended, survey materials, the papers, photocopy materials, and refreshment costs. The estimated set-up cost for the presentation /training of the new checklist is about $2,750, and the miscellaneous expenses, which are unbudgeted, are between $600 - $800, excluding office supplies that the mental health unit clerk provided. Training sixteen registered nurses for an hour will cost $1040 at $ 65 per hour. The total expense is $4750. The monthly readmission rate of homeless patients with mental illness and substance use disorder is three times in one month. The daily beds cost in the mental health unit are $2000 a night. An average day of hospitalization is between five to seven days.
The hospital will receive payment for the first visit, which is $14,000 for seven days. Assuming a patient admitted to 5150 dangers to self on the first visit, the hospital will not receive any reimbursement for the same patient for danger to self within the next 30 days. For example, if ten patients out of twenty are readmitted more than twice in one month, the hospital will lose $20,000 monthly and $240,000 annually. The DNP student anticipates a reduction in readmission and an increase in reimbursement after implementing the new checklist. The DNP student predicts a decrease in readmission and an increase in reimbursement after implementing the new 14-step discharge checklist. The estimated potential cost avoidance of ($15,250) monthly and ($183,000) annually. (See Appendix K for budget).

**Study of the Intervention(s)**

This DNP project aimed to create and implement a standardized homeless discharge checklist to streamline homeless discharge. Administered a 10-question survey to 16-unit nurses who participated in the presentation and training immediately before and after the session to determine the effects of the checklist training. The survey administered before the season measured the baseline knowledge, while the post-session survey measured the acquired knowledge gained after the training. The change from pre- to post-session results indicated the degree of knowledge improvement.

**Outcome Measures**

The DNP student used a quantitative measure to assess the effectiveness of the intervention in this project. After training the nurses, the ten quantitative pre-and post-test surveys measured nurses’ compliance with using the new 14-step homeless discharge checklist. Other outcome measures include the number of homeless men not compliant with discharge
medication and hospital readmission rate after 30 days of the initial discharge following the fourteen steps in the new homeless discharge checklist.

**CQI Method and Data Collection Tools**

Qualitative and quantitative data were collected after the training using a pre-evaluation survey to establish baseline knowledge and a post-evaluation survey to assess knowledge acquisition.

**Analysis**

Data analysis was conducted using Microsoft Excel to nurse’s knowledge levels and satisfaction with the new checklist. Pre- and post-test results were exported to Excel, and the raw data automatically generated into pie chart. (See Appendix L)

**Ethical considerations**

The DNP student followed and maintained HIPAA standards by creating an anonymous survey without participants' personal information. The result of the pre-and post-survey showed great confidence that the new homeless discharge checklist would keep homeless patients from returning to the hospital within 30 days of discharge. The project retained provision 3.1, "protection of rights of privacy and confidentiality," of the American Nurses Association standard (ANA, 2015). Each participant received a random number to protect their identity. In addition, this project promoted the Jesuit value of respecting individuals and caring for the entire person, paying attention to the need of others. The project aligns with the mission and values of the University of San Francisco.

**Results**

The outcome of implementing this new homeless discharge checklist showed essential results in reducing readmission to 90% within the last two months since its inception. According to the DNP student discharge records kept in the unit, out of fifteen patients discharged with the
new 14-step checklist, only two were readmitted after three weeks. The result from the pre-and post-survey question shows 100% reliability and confidence that the new checklist will reduce 30 days of hospital readmission of homeless men with substance use disorder. However, 64% of the nurses that participated in the training feel that the new discharge checklist addresses the needs of homeless patients. (See Appendix M for result).

**Discussion**

Implementing this 14-step homeless discharge checklist will significantly reduce hospital readmissions of homeless patients diagnosed with mental illness and substance use disorder. The DNP student's effort to close the gap was to create this 14-step checklist to mitigate the continuous influx of homeless men with dual diagnoses of mental illness and substance use disorder. Evidence from the literature reviewed suggested that changes to current standard practice in the post-treatment discharge of this population can reduce hospital readmission rates. For example, Roos al. (2018) demonstrated the potential of community residential aftercare to partially reduce total consumption of health services and costs by decreasing readmission rates. Other studies (Botha et al., 2018; Bring et al., 2020; Currie et al., 2018; De Caporale et al., 2017; Saab et al., 2016) produced positive outcomes of appropriate discharge follow-up, post-hospital placement, and special care and services. This checklist will only be effective if nurses can use and follow the fourteen steps judiciously.

**Summary**

This project stresses the need to create a streamlined homeless discharge checklist to guide mental health nurses during homeless discharge. Before introducing this new homeless discharge checklist, nurses used the generic discharge checklist not meant for
the homeless population. With this new 14-step homeless discharge checklist, a novice nurse can adequately discharge a homeless patient with a good outcome.

**Interpretation.**

If the nurses begin to use this 14-step homeless discharge checklist, it will reduce homeless readmission in the mental health unit. The 14-step discharge checklist is a guideline for any nurse to promote medication compliance and continuity of patient care after discharge by collaborating with the outpatient clinic case workers. As a result, it will mitigate frequent hospital readmission and encourage medication compliance and stability of homeless patients in the community.

**Limitations**

Project limitations are constraints on the DNP student's time. The project execution time was short, and the homeless patient's inability to trust anyone outside their community led to a delay in the initial data collection; as a result, the DNP student experienced many setbacks in implementing this project. Firstly, the problems range from unconscious biases among nurses who did not want to spend an hour training and resented having to sit through a presentation and take two surveys. Some nurse volunteers might have been more enthusiastic about the project than others. However, this could have affected their responses. Secondly, the hospital management's lack of support at the project's initial stage and the hospital pharmacy's inability to dispense medication to the patients at discharge. Finally, the sample size was too small to draw a statistical analysis.

**Conclusions**

Hospital readmission of homeless men with dual diagnoses of mental illness and substance use disorder is common in most inpatient mental health units. It continues to
eat deep into healthcare costs. This quality improvement project examined the evidence for reducing hospital readmission of this population by creating a 14-step homeless discharge checklist that incorporates medication at hand and interdisciplinary collaboration that will increase medication compliance by these patients’ post-discharge and follow-up aftercare. The quality improvement project does not add additional cost to the mental health unit. Rather instead, it will increase the return on investment. Further research is needed to use a homeless discharge checklist to improve care and streamline homeless discharge. The evidence for best practice in discharge planning includes discharge follow-up, placement, and special services like the provision of medication at hand to increase compliance post-discharge.

**Funding**

No funds were received by the DNP student or the project hospital for implementation of this DNP project.
References


Appendix: A

IRB and/or Non-Research Approval Documents (Statement of Determination)

Doctor of Nursing Practice
Statement of Non-Research Determination (SOD) Form

The SOD should be completed in NURS 7005 and NURS 701E/P or NURS 749/A/E

General Information

- Last Name: Ugbara
- First Name: Chibuogwu
- CWID Number: 20578756
- Semester/Year: 6th semester, Summer 2021
- Course Name & Number: Population Health Leadership and Teamwork in Project Planning Nursing 7005.01
- Chairperson Name: Dr. Susan Motel
- Advisor Name: Dr. Trinette Radassa

Project Description

1. Title of Project:
Reducing 30 days Hospital Readmission Among Homeless patients with dual Diagnosis of mental illness and substance use disorder.

2. Brief Description of Project (Clearly state the purpose of the project and the problem statement in 250 words or less):
This evidence-based change in practice aims to reduce 30-day hospital readmission among homeless patients with a dual diagnosis of mental illness and substance use by introducing a new standardized checklist that will guide all nurses working in mental health unit on steps to follow when discharging homeless patients to mitigate frequent readmission in the department.

3. AIM Statement: What are you trying to accomplish?
- Provides clear, well-defined, and concise statement regarding the purpose of the project and describes the specific aim in the IHI format: What? How much? For whom? Where? By when? The Aim Statement needs to follow the SMART guidelines: specific, measurable, achievable, realistic, and timely.
- To improve (your process) from (baseline)% to (target)% by (timeframe), among (your specific population)

Complete the AIM statement by answering the following elements:
Over the next six months, I will plan, develop, implement, and evaluate a comprehensive discharge program for mentally ill homeless patients. The objectives include providing discharge medication instead of written prescriptions for at least 50% of the patients. Furthermore, additional objectives/goals will include a) increasing nurses’ knowledge and usage of the new discharge checklist. b) Increase medication compliance by the visiting nurse navigator after discharge to re-enforce medication compliance. c) Decrease 30 days hospital readmission rates in the mentally ill homeless population by 20%.

4. Brief Description of Intervention (150 words):
This project aimed to reduce hospital readmission of homeless men with a dual diagnosis of mental illness and substance use disorder by educating the nursing staff on the newly designed homeless discharge
checklist in a psychiatric inpatient mental health unit in Monterey, California. An hour presentation that covers all the processes listed in the new design checklist provided by the Psychiatric Mental Health Nurse Practitioner Doctoral Student at the site to 12 registered nurses working in the inpatient unit. The meeting was held in the conference room for patient privacy and HIPPA compliance purposes. Forty minutes consisted of the presentation, and the remaining twenty minutes during the session were allotted for a 10-question pre-and post-survey to assess utilization and necessity of the new discharge process by following the 14 steps of the discharge checklist.

4a. How will this intervention be implemented?

- Where will you implement the project?

The DNP student would like to implement this project in an inpatient psychiatric unit in Monterey County. However, if found successful, this project can be replicated in other inpatient psychiatric hospital in the country.

- Attach a letter from the agency with approval of your project.

- Who is the focus of the intervention? (Needs to match population [for whom?] in Aim statement.)

The focus on this intervention will be for mental health administration to make provision of discharge medication given to patient on hand upon discharge. And also for nurses to provide discharge teaching and emphasizing on the importance of medication adherence and this will prevent aggravation of psychiatric symptoms, for example hallucinations (voices reduction/ manic behavior).

- How will you inform stakeholders/participants about the project and the intervention?

I will email all the stakeholders with an attachment of my gnat chart, which will include the timeline and the cost of this projects.

5. Outcome measurements: How will you know that a change is an improvement?

- Measurement over time is essential to QI. Measures can be outcome, process, or balancing measures. Baseline or benchmark data are needed to show improvement.

Baseline data is the rate of readmission in the past, will be measured with the current rate of readmission after the execution of the project. and the result of pre and post survey will show understand of the new discharge checklist. Align your measure with your problem statement and aim.
### DNP Statement of Determination

**Evidence-Based Change of Practice Project Checklist**

The SCD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

#### Project Title:

Reducing 30 days Hospital Readmission Among Homeless patients with dual Diagnosis of mental illness and substance use disorder

<table>
<thead>
<tr>
<th>Mark an “X” under “Yes” or “No” for each of the following statements:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>The aim of the project is to improve the process or delivery of care with established/accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.</td>
<td>X</td>
<td></td>
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<tr>
<td>The specific aim is to improve performance on a specific service or program and is a part of usual care. All participants will receive standard of care.</td>
<td>X</td>
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<tr>
<td>The project is not designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control. The project does not follow a protocol that overrides clinical decision-making.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does not develop paradigms or untested methods or new untested standards.</td>
<td>X</td>
<td></td>
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<tr>
<td>The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does not seek to test an intervention that is beyond current science and experience.</td>
<td>X</td>
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<tr>
<td>The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.</td>
<td>X</td>
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<tr>
<td>The project has no funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.</td>
<td>X</td>
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<tr>
<td>The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/or patients.</td>
<td>X</td>
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</tbody>
</table>

| If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: “This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board.” | X | |

#### Answer Key:

- If the answer to all of these items is “Yes”, the project can be considered an evidence-based activity that does not meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files.
- If the answer to any of these questions is “No”, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.*
To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: [http://answers.hhs.gov/obnp/categories/1569](http://answers.hhs.gov/obnp/categories/1569)

**UNIVERSITY OF SAN FRANCISCO**

**School of Nursing and Health Professions**

**DNP Statement of Determination**

**Evidence-Based Change of Practice Project Checklist Outcome**

The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

☐ This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

☐ This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

<table>
<thead>
<tr>
<th>Student Last Name:</th>
<th>Ugbana</th>
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<tbody>
<tr>
<td>Student First Name:</td>
<td>Chibuogwu</td>
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<tr>
<th>Chairperson Name:</th>
<th>Dr. Trinette Radosa</th>
</tr>
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</table>

| Second Reader Name: | |
|---------------------| |
| Second Reader Signature: | |

| DNP SOD Review Committee Member Name: | |
|----------------------------------------| |
| DNP SOD Review Committee Member Signature: | |

Date: June, 2021
Appendix: B
Evaluation Table

<table>
<thead>
<tr>
<th>Purpose of Article or Review</th>
<th>Design / Method / Conceptual Framework</th>
<th>Sample / Setting</th>
<th>Major Variables Studied (and their Definitions)</th>
<th>Measurement of Major Variables</th>
<th>Data Analysis</th>
<th>Study Findings</th>
<th>Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1). Botha, U. A., Koen, L., Mazinu, M., Jordaan, E., &amp; Niehaus, D. J. H. (2018). Brief Report: A Randomized Control Trial Assessing the Influence of a Telephone-based Intervention on Readmissions for Patients with Severe Mental Illness in a Developing Country. Community Mental Health Journal, 54(2), 197-203.</td>
<td>A Randomized Control Trial</td>
<td>One hundred patients with severe mental illness were randomized to facilitate care Participants (male and female) from 18 to 59, with a well-known diagnosis of schizophrenia, schizoaffective disorder, or bipolar disorder at Stikland Hospital in Cape Town, South Africa.</td>
<td>Facilitated Care Group (FCG) Treatment as Usual Group (TUG). Clinical Global Impression (CGI) care facilitator (CF) Assertive Community Treatment (ACT)</td>
<td>Dependent variable: Drug use and relapse time. Independent variable: psychoeducation pre- and post-discharge, home-visits, phone-call reminders, making use of a transitional manager, and communication with primary care providers.</td>
<td>Data was analyzed for 43 (n = 43) participants in the FCG and 39 (n = 39) participants in the TUG. (p = 0.44) and DIH (p = 0.25) at 12-month follow-up. More than a third (34%) of participants in both groups had readmissions over the 12 months. TUG participants were severely ill at 12-month follow-up (23% compared to With the small sample size, the study was piloted as a single-site study in a high-pressure area and A. The study was not adequately powered. Two hundred twenty participants are needed to achieve a better result. Which was not feasible in the context of the service pressure</td>
<td>Level of Evidence: Level I It is an experimental study. It is a randomized control trial. Strengths and Weaknesses members of the ACT Team provided the intervention itself. As existing caseloads and service limited such, inclusion rates. The sample size is small, implying that any conclusions drawn from the study should be interpreted with caution. In addition, it is conducted in one facility, which may lead to bias. Conclusion The study identifies the need for services that incorporate a unique approach to support the distinct population of substance-using mental health service users. There is no change between the two groups. Therefore, it is essential to include other ways to monitor the length of stay. In addition, our results showed that participants in...</td>
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<tr>
<td>Purpose of Article or Review</td>
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<td>11% of the FCG participants, and fewer were not ill (21% compared to 35% of the FCG participants; ( p &lt; 0.05 )), power analysis confirmed that the study is underpowered, and results should be interpreted as such</td>
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<td>the FCG were more likely to have multiple readmissions. Recommendation additional research is needed, with a focus on cost, readmission.</td>
</tr>
</tbody>
</table>

Definition of abbreviations: Facilitated Care Group (FCG) Treatment as Usual Group (TUG), Clinical Global Impression (CGI), care facilitator (CF), Assertive Community Treatment (ACT), Chronic medical conditions (CMCs), Confidence interval (CL), adjusted pooled odds ratios (aPOR)
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>To assess the effect of post-hospital respite care for homeless people in Denmark.</td>
<td>Randomized controlled trial.</td>
<td>Setting: The study was conducted from April to March 2016 on homeless men between 18 years and above. Ninety-six participants with similar demographic statistics. They are recruited from ten different hospitals in the capital region of Denmark. And were registered in twenty-three municipalities across Denmark, one came from Greenland, and twenty-three had an unknown city of</td>
<td>Health-related quality of life (HRQoL), Quality-adjusted life-years (QALYs).</td>
<td>Independent variable: Costs in the primary analyses included all costs incurred at hospitals, general practitioners, RN and medical specialists, and prescription drugs and expenses related to services delivered in the municipalities and the medical respite care center. Dependent variable: it is the cost of unexpected expenses for Running expenses for healthcare Inpatient outpatient emergency department, day in the psychiatric ward, hospital days after inclusion.</td>
<td>The three months cost for the control group showed an average of €4761 (p = 0.10) higher cost when compared to the intervention group. The is a significant difference when compared to 6 €8515 (p = 0.04) and 12 months €12,603 (p = 0.03) expense. After three months, the costs in the intervention group were on average €4761 lower per person than the costs in the control group. In the sensitivity analysis, in which we adjusted for covariates, the control group still had higher prices than the intervention group, but not significant.</td>
<td>Level of Evidence: Level I It is an experimental study. It is a randomized control trial. Strengths: This study demonstrated that it is possible to perform a pragmatic randomized controlled trial with a low attrition rate in this socially stigmatized population. This leads to new opportunities for creating evidence-based interventions in an area that is driven by experience. Weaknesses: The study time is too short; it is unclear to expect fundamental changes in HRQoL in such a time as three months. Conclusion: This study shows that post-hospital medical respite care for homeless people in a Danish setting leads to significant cost-effectiveness after 6 and 12 months. After three months of follow-up, the differences in health care costs also suggested cost-effectiveness, but did not reach statistical significance. This study informs policymakers</td>
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</table>

residence, including twenty immigrants without a Danish social security number. And costs from nine municipalities equivalent to data from fifty-two individuals.

and prescription drugs.

and health professionals who work with homeless people. The researchers strongly suggest that post-hospital medical respite care should be implemented in similar health care settings. Recommendations: Additional resources are needed, with a focus on building more respite care for the homeless population.

### Definition of abbreviations:
- **HRQoL**: Health-related quality of life
- **QALY**: Quality adjusted life years
- **RN**: Registered nurse

### Table

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<tbody>
<tr>
<td>To find out if continuity of care and community follow-up reduces rehospitalization among people experiencing homelessness and mental illness.</td>
<td>Longitudinal randomized controlled trials</td>
<td>The study recruited four hundred ninety-seven participants to the Vancouver at Home based on a-priori criteria for homelessness and mental illness.</td>
<td>Provincial Medical Services Plan [MSP]: were records of all outpatient physician encounter and laboratory services in the province. The Vancouver at Home (VAH): is study recruited participants. Confidence interval (CL), Adjusted odd ratio (AOR)</td>
<td>Dependent variables: morbidity and mortality, rate of readmission within 30 days post-discharge. Independent variables: Clinical best practices timely outpatient follow-up posthospital discharge</td>
<td>The model indicates that neither outpatient medical services nor laboratory services within one week following discharge were associated with reduced likelihoods of hospital readmissions within two months (AOR = 1.17 [CI = 0.94, 1.46]) and six months (AOR = 1.00 [CI = 0.82, 1.23]). However, a marginally significant finding at 12 months (AOR = 1.24 [CI = 1.02, 1.52]) indicates that</td>
<td>Study findings show that a timely post-discharge plan is necessary but not enough to reduce the risk of readmission in this population.</td>
<td>Level of Evidence: Level I It is an experimental study. It is a longitudinal randomized control trial. Feasibility: The universal provision of medical services in the province reduces the role that economic disincentives may play in delivering care to patients who live in poverty. Strengths: The administrative data offered comprehensive medical records of both inpatient and community health care encounters during the five years before recruitment for most participants. Study participants are rigorously selected. Weaknesses: Data were available for only those that participated in the study. Most of the sample participants are white and male, with no female participants. The current discharge planning fails to sufficiently detail the housing needs of patients leaving the hospital without directly addressing housing needs. There are insufficient resources to achieve recovery. Conclusion:</td>
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<tr>
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<td>Collaborative solutions spanning health, housing, and social welfare sectors are indicated to prevent rehospitalization. Recommendation: The findings presented in this study indicate a compelling need to address housing as an integral component of hospital discharge planning.</td>
</tr>
</tbody>
</table>

participants were more likely to be rehospitalized if they received outpatient medical care within one week of discharge.

Definition of abbreviations: Medical Services Plan (MSP), The Vancouver at Home (VAH), Confidence interval (CL), Adjusted odd ratio (AOR)
<table>
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<tbody>
<tr>
<td>To examine whether local health departments (LHDs) active roles in promoting mental health are associated with reductions in 30-day all-cause readmission rates.</td>
<td>Cross sectional design</td>
<td>Multiple data sets were collected from numerous sources, from the year 2012 to the year 2013. These are from Maryland State Inpatient, the National Association of County and City Health Officials Profiles Survey, the Area Health Resource File, and US Census data,</td>
<td>Local health departments' (LHDs), International Classification of Disease (ICD), Healthcare Cost and Utilization Project (HCUP), Odd ratio (OR)</td>
<td>Dependent variable Rate of hospital readmission. Independent variables. -Preventive care screening -case detection, identifying, and tracking patient that is at high risk of those at high risk for deteriorating and those not sticking to the treatment plan -structuring follow-up, monitoring outcomes, providing targeted services for treatment-resistant or more complex cases</td>
<td>The results showed that LHDs' direct provision of mental health preventive care, services, and adults 65 and above (OR=0.61, P&lt;0.001; OR=0.63, P&lt;0.001; and OR=1.04, not significant). (ORs range, 0.69-0.74, P&lt;0.001 for adults 18-64; and 0.57-0.59 for adults 65 and above). ORs of LHD activities were for adults 18-64 with substance use disorders (ORs range,</td>
<td>The researchers found that hospitalized patients who reside in the communities where the local health department provides direct preventive mental health services are notably less likely to the hospital within 30 days of discharge. When compared to those in a community or city where they did not receive help or assistant from their local</td>
<td>Level of Evidence: Level I1 It is non-experimental study. Strengths and Weaknesses Maryland state data were used, the findings may not generalize to other states in the United States. Conclusion The results suggest that Maryland LHDs that engage in mental health prevention, promotion, and coordination activities are expected to create benefits for residents and the health care system at large. Recommendation Additional research is needed to determine if these results are generalizable to other states. The extent to which LHD resources are used may reduce racial and ethnic health disparities in Medicaid.</td>
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<tr>
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<td>0.69-0.74, P&lt;0.001) and adults 65 and above (ORs range, 0.66-0.67, P&lt;0.05).</td>
<td></td>
<td>county health department.</td>
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Definition of abbreviations: Local health departments' (LHDs), International Classification of Disease (ICD), Healthcare Cost and Utilization Project (HCUP), Odd ratio (OR)
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<tbody>
<tr>
<td>To provide patients with biopsychosocial care following hospital discharge to reduce hospital readmission.</td>
<td>Pilot study</td>
<td>Team of doctors, case managers, and psychiatrist followed seventeen patients after discharge in a pilot study. Rochester, New York, population.</td>
<td>Nurse care managers (CMs) medical assistant (MA) primary care providers (PCPs) Montreal Cognitive Assessment (MoCA)</td>
<td>Dependent variable Medication and readmission. psychosocial factors Independent variable Care provided by pharmacist, Doctors and case manager. Medication reduction. biopsychosocial therapeutic duplications and simplifying the medication regimen.</td>
<td>The average reduction of 2.4 medications per patient reflects a significant difference, t (16) = 3.2060, p ≤ .01.</td>
<td>The results showed that fifteen out seventeen individuals studied avoided readmission at 30 and 90-day intervals, and this study reduced polypharmacy.</td>
<td>Level of Evidence: Level III non-experimental studies only, It is based on pilot study non research. Strengths ability to effectively deliver post-discharge care. the study was cost-effective. Weaknesses small sample size and nature of the data collected result in limitations to the findings. the study was conducted with only Caucasians. More research needs to be undertaken on a large population. Recommendation The initial success of this model and accompanying result make the researcher confident to recommend that other sites consider the adoption of similar protocols for their patients and staff.</td>
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Definition of abbreviations: Nurse care managers (CMs), medical assistant (MA), primary care providers (PCPs), Montreal Cognitive Assessment (MoCA)
To investigate the use of (special mental care services) for SMI in the first 12 months of discharge to the community

Randomized controlled trial.

Setting:
In the City of Trondheim (190,000 inhabitants), in central Norway.

The MHH has eighty-one beds, half for acute admissions and half for long-stay patients.

Total of forty-one participants

community residential aftercare (CRA)
mental health hospital (MHH), severe mental illness (SMI)

Independent variable: follow-up services after discharge. Psychiatric nurse in home support and weekly consultation by general practitioner.

Dependent variable Cost and hospital readmission

The expense of mental health services for one year is 38.5% less than the randomized group. The mean difference is 95% confidence interval, p=0.57 due to low cost from inpatient hospitalization. In the intervention group, p =0.42

Residential aftercare without organized in-house activities can reduce total consumption of health services and costs without increased hospital admissions.

Level of Evidence: Level I It is an experimental study. It is a randomized control trial. The strength provided complete data on all participants.

Weaknesses:
Data The sample size was smaller than what was pre-planned. The alternative explanation of baseline difference is flawed in the randomization and allocation process.

Conclusion:
The study came from a good source. Those transferring patients ready for discharge from a mental hospital to community residential aftercare without organized in-house activities can reduce total consumption of health services and costs without increased hospital admissions. Recommendations: more research is needed to conduct on a large population.

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<th>Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s)</th>
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<tbody>
<tr>
<td>To train clinical staff in knowledge translation with quality improvement. On how to reduce readmissions within 30 days in a community hospital</td>
<td>No research designs. It is an evidenced based quality improvement journal</td>
<td>In Allen Hospital, a 201-bed community teaching hospital in Northern Manhattan, New York City,</td>
<td>Evidence-based practice (EBP), Knowledge translation (KT), Teaching Evidence Assimilation for Collaborative Health Care (TEACH), the knowledge-to-action (K2A) is a model of evidence-based practice, the electronic medical record (EMR), patients-interventions-comparisons-outcomes (PICO), The heart failure nurse coordinator (HFNC) is the person in charge of patient training at discharge. Heart failure (HF)</td>
<td>Dependent variables: readmission rate, heart failure and death.</td>
<td>Thirty-day HF readmissions reduced from 23.1% to 16.4% (adjusted OR = 0.64, 95% CI = 0.42–0.97) during the year following implementation. Equivalent rates in another hospital serving the same population but not part of the program was 22.3% and 20.2% (adjusted OR = 0.87, 95% CI = 0.71–1.08). Observance to given HF quality measures improved</td>
<td>A significant intervention decreases in hospital readmission rates for heart failure patients than those at the nearby university hospital has a minimal effect. Significantly. Readmission rates at the Allen Hospital did not vary during the same time interval (10.7% for 2010 and 10.4% for 2011).</td>
<td>Level of Evidence: Level V It is a quality improvement journal. It is based on experimental non research. Strengths They use an interdisciplinary group approach in the study, and it was evidence-based research that is replicable in other hospitals. Weaknesses The training program is based on the importance of enhancement projects to practice EBP learning and skill acquisition. There is limited statistical methodology. The data is not complete. Conclusion The hospital made some changes that led to a reduction in 30 days of hospital readmission, but it was not significant. There was no indication of a trade-off between averting readmission and mortality.</td>
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</table>

Definition of abbrev. Evidence-based practice (EBP), Knowledge translation (KT), Teaching Evidence Assimilation for Collaborative Health Care (TEACH), the knowledge-to-action (K2A) the electronic medical record (EMR), patients-interventions-comparisons-outcomes (PICO), Heart failure nurse coordinator (HFNC) is the person in charge of patient training at discharge. Heart failure (HF)
Appendix: C

Lewin’s Change Theory

Note: The figure displays Kurt Lewin change theory
### Appendix: D

**Gap Analysis.**

<table>
<thead>
<tr>
<th>Gap Analysis</th>
<th>Current State</th>
<th>Future State</th>
<th>Gap</th>
<th>Action to Close Gap</th>
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<tbody>
<tr>
<td></td>
<td>Non-compliance with discharge medication</td>
<td>Identifying patients at risk and starting early medication education as soon they are clear and coherent to understand the teaching before discharge.</td>
<td>Non-compliant with discharge medication patient returning to the unit with unfilled prescription paper.</td>
<td>Filling discharge medication at hand upon D/C</td>
</tr>
<tr>
<td></td>
<td>Self-medication with cocaine, amphetamine, opioids, and other illegal control substances leads to hospital readmission.</td>
<td>No homeless discharge checklist. Nurses using a generic discharge checklist for a homeless patient.</td>
<td></td>
<td>Filling discharge medication at hand upon D/C</td>
</tr>
<tr>
<td></td>
<td>Hospital pharmacy not dispensing medication to patients at discharge.</td>
<td>Lack of appropriate training among staff to properly perform homeless discharge teaching and assessment.</td>
<td></td>
<td>Training of nurses on the new 14-step homeless discharge checklist to guide nurses through homeless patients’ discharge process.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Provide follow-up care through collaboration between the discharging inpatient mental health unit and outpatient behavioral health clinics, successive follow-up visits 2-3 times post-discharge.</td>
</tr>
</tbody>
</table>

*Note: The figure displays gap analysis*
Appendix: E

Homeless Discharge Checklist

MHU HOMELESS DISCHARGE CHECKLIST:
Please make sure that all items on discharge checklist are done.

Patient Sticker

(Check off items when completed. Leave blank on any that is not done)

Discharge Process:

- ______ Discharge Order entered by MD.
- ______ Call and fax patient discharge medication with the face sheet to Alsal Pharmacy
- ______ Communicate with SW to make sure that documentation, and follow-up appointments are completed.
- ______ Call the pharmacy where MD electronically sent prescriptions to verify that meds were received and request for drop off on the unit.
- ______ Discharge Education on medication adherence and compliance.
- ______ Print Patient Discharge Instructions
- ______ get patient contact number ____________ and case worker contact number
- ______ Have patient sign Understanding of Discharge Instructions, Belongings/inventory form and Firearms Prohibition form.
- ______ Ensure patient is given ALL Discharge documents, including medication at hand and list of homeless shelters.
- ______ Complete a Discharge Note
- ______ Close patient care plan
- ______ Place patient label on Admission/Discharge Log (on the back of Daily Sheet); document the time and where patient was discharged to.
- ______ Discharge patient from MHU in Meditech
- ______ Charge Nurse / MUC call Patient after one day for follow up.

Note: The figure displays the 14-step homeless discharge checklist.
Appendix: F

Letter of Support

March 6, 2020
Amy Yang
University of San Francisco
2130 Fulton Avenue
San Francisco, CA 94117

Dear Ms. Yang,

Greetings! This is a letter of support for Chinmoyee E. Lijahama to implement her DNP Comprehensive Project at Natividad Medical Center’s Mental Health Unit.

If there is anything else I can assist with, please feel free to contact me at (831) 783-2851 or via email morganfh@natividad.com.

Thank you.

Sincerely,

Lourdes Maria Escolla, MSN, RN, CNS, CMSRN, CNN
Director of Nursing Education
Natividad Medical Center
1441 Constitution Blvd, Salinas, CA 93906
Office: (831) 783-2851

Note: The figure displays letter of approval to carry out this QIP in this hospital
Note: The Gantt chart displays a timeline for the quality improvement project, staff training, discharge checklist design and implementation.
Appendix: H

Work Breakdown Structure

Note: The figure displays a work breakdown structure for staff training and nurse navigator project design and implementation.
**Appendix I.**

**Responsibility and Communication Matrix**

<table>
<thead>
<tr>
<th>Communication</th>
<th>Purpose</th>
<th>Medium</th>
<th>Frequency</th>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting school advisor</td>
<td>Introduce project and review objectives and goals; ensure it aligns with university goals</td>
<td>Via zoom</td>
<td>Twice</td>
<td>school advisor and project chair Dr. T. Radasa</td>
</tr>
<tr>
<td>Stakeholder meeting</td>
<td>Introduce project and review objectives and goals;</td>
<td>Via Zoom</td>
<td>Twice</td>
<td>Director mental health unit, director nursing education, director Emergency department.</td>
</tr>
<tr>
<td>Introduction to of the project to the unit nurses</td>
<td>Build trust and initial fostering of relationship</td>
<td>In person</td>
<td>Twice during unit monthly meeting</td>
<td>Mental health unit nurses</td>
</tr>
<tr>
<td>Project Educational Presentation</td>
<td>Completion of project; pre and post tests</td>
<td>In person /zoom to accommodate night shift nurses</td>
<td>Once, during weekly company meeting</td>
<td>Psychologists and non-prescribing clinical team</td>
</tr>
<tr>
<td>Project Findings, Data and Feedback</td>
<td>Results of project; pre and posttests. Through poster presentation</td>
<td>In person</td>
<td>Once</td>
<td>All stakeholders and nursing staff.</td>
</tr>
</tbody>
</table>

*Note:* The figure displays Responsibility and Communication Matrix between the DNP student, the school advisor and all the stakeholders.
## Appendix: J

### SWOT Analysis

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Staff willingness to change about 80% of staff are clinically qualified with at least 5-8 years experience in working with mental ill homeless patients.</td>
<td></td>
</tr>
<tr>
<td>• Staff willing to support and volunteer as navigators.</td>
<td></td>
</tr>
<tr>
<td>• Building trust with homeless population and communities</td>
<td></td>
</tr>
<tr>
<td>• More savings / income for the hospital</td>
<td></td>
</tr>
<tr>
<td>• Reduce hospital readmission.</td>
<td></td>
</tr>
<tr>
<td>• Improve patient outcome.</td>
<td></td>
</tr>
<tr>
<td>• Standardize patient discharge checklist.</td>
<td></td>
</tr>
<tr>
<td>• Improve medication compliance</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEAKNESSES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Non-acceptance by some key stakeholders</td>
<td></td>
</tr>
<tr>
<td>• Lack of standardize discharge teaching.</td>
<td></td>
</tr>
<tr>
<td>• Potential patient non-compliant with discharge medication.</td>
<td></td>
</tr>
<tr>
<td>• Inability to dispense medication by the hospital pharmacy at discharge.</td>
<td></td>
</tr>
<tr>
<td>• Delay in project approval by the key stakeholder</td>
<td></td>
</tr>
<tr>
<td>• Funding for the project</td>
<td></td>
</tr>
</tbody>
</table>

*Note: The figure displays the SWOT analysis.*
Appendix: K

Budget

Project Budget

<table>
<thead>
<tr>
<th>Budget Items</th>
<th>Description</th>
<th>Estimated cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checklist production</td>
<td>Checklist research and production</td>
<td>$2750</td>
</tr>
<tr>
<td>One hour Training of 16 Registered Nurses on the new checklist</td>
<td>$65 per hour x 16 = 1040</td>
<td>$1040.00</td>
</tr>
<tr>
<td>Office Supplies and resources</td>
<td>free</td>
<td>-</td>
</tr>
<tr>
<td>Cost of making the pre and post survey</td>
<td>free</td>
<td>-</td>
</tr>
<tr>
<td>Refreshment/Entertainment</td>
<td>Lunch for 20 @ $8 a plate = $160</td>
<td>$160.</td>
</tr>
<tr>
<td>Miscellaneous expenses</td>
<td>$800.00</td>
<td>$800.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$4750</strong></td>
</tr>
</tbody>
</table>

*Note: The figure displays the budget*
Post-Training Survey Questionnaire. Having been trained on the New Homeless Men Discharge Checklist.
**Post-Training Survey Question**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Responses</th>
<th>Settings</th>
</tr>
</thead>
</table>

Do you feel the new discharge checklist is sufficient for homeless discharge in this mental health unit?

- Very reliable
- Reliable
- Sometimes reliable
- Not reliable

How would you rate the overall satisfaction of the new homeless men discharge process in this unit

- Very reliable
- Reliable
- Sometimes reliable
- Not reliable
3. What were the biggest concerns of homeless men patients about leaving the hospital?

- Managing their substance use disorder
- Getting the treatment they need.
- Connecting with the sustainable resources
- Getting back to work
- Other (please specify).

4. Do you feel the new homeless discharge checklist addresses the likelihood of homeless men's 30-day readmission?

- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
5. How likely is the homeless patient to relapse to substance use after they leave the hospital?

- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely
- Other

6. Would a new checklist enhance collaboration between the discharging inpatient psychiatric unit and the outpatient behavioral health clinic?

- Very likely
- Likely
7. How comfortable are you carrying out the homeless men's discharge processes with the new checklist in this unit?

- Very comfortable
- Comfortable
- Uncomfortable
- Very uncomfortable
8. Have you used any tools or checklists in your homeless discharge?

- [ ] Always use tool
- [ ] Sometimes
- [ ] Hard to follow through
- [ ] Unusable

9. Do you feel your current homeless discharge checklist addresses the medication at discharge?

- [ ] Fully addresses
- [ ] Partially addresses
- [ ] Really address
- [ ] Never
10. How confident are you using the current homeless discharge checklist? *

- Very confident
- Sometimes confident
- Neither and nor
- Not confident

11. Comment

Long answer text
Appendix: L

The result of the survey/Pie chart

17 responses

Summary
Question
Individual

1. Do you feel the new discharge checklist is sufficient for homeless discharge in this mental health unit?

Very reliable 17
Reliable 0
Sometimes reliable 0
Not reliable 0
2. How would you rate the overall satisfaction of the new homeless men discharge process in this unit?

- Very reliable: 10
- Reliable: 7
- Sometimes reliable: 0
- Not reliable: 0

3. What were the biggest concerns of homeless men patients about leaving the hospital?

- Managing their substance use disorder: 10
- Getting the treatment they need: 6
- Connecting with the sustainable resources: 1
- Getting back to work: 0
- Other (please specify): 0
4. Do you feel the new homeless discharge checklist addresses the likelihood of homeless men's 30-day readmission?

17 responses

- Very likely: 11
- Likely: 6
- Neither likely nor unlikely: 0
- Unlikely: 0
- Very unlikely: 0
- Other: 0

5. How likely is the homeless patient to relapse to substance use after they leave the hospital?

17 responses

- Very likely: 58.8%
- Likely: 17.6%
- Neither likely nor unlikely: 17.6%
- Unlikely: 17.6%
- Very unlikely: 0
- Other: 0

Very likely: 11
Likely: 6
Neither likely nor unlikely: 0
Unlikely: 0
Very unlikely: 0
Other: 0

Very likely: 0
Likely: 0
Neither likely nor unlikely: 0
Unlikely: 0
Very unlikely: 0
Other: 0
Likely 3
Neither likely nor unlikely 3
unlikely 10
Very unlikely 1
Other 0

6. Would a new checklist enhance collaboration between the discharging inpatient psychiatric unit and the outpatient behavioral health clinic?

17 responses

- Very likely 13
- Likely 4
- Neither likely nor unlikely 0
- Unlikely 0
- Very unlikely 0
- Other 0

Copy

Very likely 23.5%
Likely 76.5%
Neither likely nor unlikely 23.5%
Very unlikely 76.5%
Other 23.5%
7. How comfortable are you carrying out the homeless men's discharge processes with the new checklist in this unit?
17 responses

- Very comfortable: 10 (58.8%)
- Comfortable: 7
- Uncomfortable: 0
- Very uncomfortable: 0

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8. Have you used any tools or checklists in your homeless discharge?
17 responses

- Always use tool: 12 (70.6%)
- Sometimes: 4
- Hard to follow through: 1
- Unusable: 0

Copy

Very comfortable Uncomfortable Very uncomfortable 41.2% 58.8%
9. Do you feel your current homeless discharge checklist addresses the need for medication at discharge?

<table>
<thead>
<tr>
<th>Fully addresses</th>
<th>Partially addresses</th>
<th>Really addresses</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.6%</td>
<td>58.8%</td>
<td>23.5%</td>
<td>0</td>
</tr>
</tbody>
</table>

10. How confident are you using the current homeless discharge checklist?

<table>
<thead>
<tr>
<th>Very confident</th>
<th>Sometimes confident</th>
<th>Neither and nor</th>
<th>Not confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.5%</td>
<td>70.6%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

11. Comment
17 responses
Thanks
great training
This is wonderful
Thank you Chibby
good training
This is good, thanks for addressing all these needs.
NONE
Perfect
Good resources
thank you
Appendix: M

The result of after intervention

The Figure: indicates no inpatient readmissions within 7-days and 72 hours after intervention using the checklist.
The Figure: indicates reduce inpatient readmissions within 14-days and 30-days after intervention using the checklist.