Implementation of a Patient-Centered Safety Agreement as a Falls Prevention Strategy for Inpatient Psychiatric Patients

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ABSTRACT

Falls are a major public health concern that overutilizes resources in the healthcare system, with up to 1,000,000 inpatient falls occurring annually in the United States (U.S.) and associated medical costs greater than $30 billion. Falls significantly impact morbidity and mortality among psychiatric patients, affecting recovery from illness, increasing length of stay, and increasing healthcare costs. Falls are three to four times greater in psychiatric units as compared to general medical units. Falls in inpatient psychiatric settings have a higher incidence and severity than skilled nursing facilities and medical-surgical units. This capstone project's purpose was to decrease falls on an inpatient psychiatric unit by implementing a provider-to-patient safety agreement, as part of a comprehensive fall prevention program, using a quality improvement (QI) design. While there was no relevant statistical significance evident in the data analysis, there was clinical significance in that patients who experienced a fall event during the intervention period were young adult males. Clinical significance was also evident in that the patients who completed a patient safety agreement did not experience a fall event, which supports the success of the project intervention. Although not statistically significant, this project contributed to literature pertaining to falls in inpatient adult psychiatric patients.

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CHAPTER 1

INTRODUCTION AND STATEMENT OF THE PROBLEM

Introduction

Inpatient falls are a common, yet preventable, patient safety issue. Each year, an estimated 700,000 to 1,000,000 people in the United States (US) fall in the hospital (Agency for Healthcare Research and Quality [AHRQ], 2021). Approximately 2% of hospitalized patients fall at least once during their stay. Approximately 1 in 4 falls result in injury and 10% result in severe injury (LeLaurin & Shorr, 2020). Lu et al. (2018) identified that falling is a serious problem in healthcare services and may lead to injuries of varying severity. Moreover, both fatal and nonfatal fall injuries are associated with increased economic costs.

According to Seeherunwong et al. (2022), falls are three to four times greater in psychiatric units than in general medical units. In addition, when compared with skilled nursing facilities (SNF) and medical-surgical units, inpatient falls in psychiatric settings have both a higher incidence and greater severity. Among all inpatient falls, 30% result in physical injury and 4% result in severe injury. Patients with fall events in psychiatric units are younger than those in medical units. Falls are also generally more common in psychiatric units as compared to other age-matched units. Therefore, fall prevention is a major challenge for psychiatric units (Lu et al., 2018).

The purpose of this capstone project is to decrease the incidence of falls on inpatient psychiatric units by implementing a patient safety agreement, as part of a comprehensive fall prevention program. Psychiatric patients are often not aware of their functional limitations and subsequently may sustain a fall. Sitdhiraksa et al. (2020) found a psychiatric diagnosis is related to a history of injuries, falls, and accidents more than physical diagnoses, which might be

explained by the nature of psychiatric illnesses. Furthermore, psychiatric disorders can affect a person's behavior and judgment, which may cause injuries attributed to, or induced by, the side-effects of psychotropic medications. In addition, mental disorders, psychotropic medications, polypharmacy, and multiple psychotropic drug use have been reported to be associated with accidental death and all-cause mortality (Sitdhiraksa et al., 2020).

Background of the Problem

Patient falls are a preventable issue that overutilizes resources in the healthcare system. Turner et al. (2020) and Bargmann and Brundrett (2020) revealed these events increase health care cost, delay treatment, and prolong length of stay. Seeheruneong et al. (2022) identified falls significantly impact morbidity and mortality among psychiatric patients, affecting recovery from illness, increase length of stay, and increase healthcare costs. Furthermore, severe fall-related injuries result in loss of function, loss of life, and financial burden. Operational costs for those who fall resulting in severe injury are $13,316 more as compared to those without a fall. In addition, length of stay is extended up to 6.3 days (The Joint Commission, 2015; Seeheruneong et al., 2022).

Expansive literature has identified risk factors that contribute to falling. According to the Centers for Disease Control and Prevention [CDC] (2021), risk factors can be modified to help prevent falls, including, but not limited to, difficulties with walking and balance; vision problems; and use of medication (e.g., tranquilizers, sedatives, or antidepressants). Most falls, however, are caused by a combination of risk factors, and the more risk factors a person has, the greater their chance of falling (CDC, 2021; Vonnes & Wolf, 2017).

According to Turner et al., (2020), identifying risk factors and intervening proactively can potentially decrease the rate of patient falls. An estimated 2-3% of hospitalized patients fall

in the US each year, increasing their likelihood of fall-related injuries. For health care systems, fall-related injuries can lead to longer hospital stays, additional health requirements, increased health care costs, and reduced reimbursement. In addition, patients and families experience impaired quality of life through anxiety and distress, fear of falling, and restricted mobility. Certain unit types, such as psychiatric units, may have higher rates because of differing patient risk factors. Bargmann and Brundrett (2020) found that falls are one of the most reported incidences during hospitalizations and, therefore, falls sustained in the acute hospital setting remain a priority for health care organizations. Furthermore, hospitals no longer receive reimbursement for traumatic falls that occur during a hospital stay.

According to Fehlberg et al. (2017), an estimated 1,000,000 inpatient falls occur annually in the United States (U.S.). with associated direct medical costs greater than $30 billion. In 2005, to align financial incentives with improvement in health care quality, the U.S. Congress implemented the process of identifying “preventable” hospital-acquired conditions for which the Centers for Medicare & Medicaid Services (CMS) would no longer pay. After collaborative work with public health and infectious disease experts from the CDC, 13 candidate conditions, including hospital-acquired falls, were selected for further consideration. Fehlberg et al. (2017) further noted the goal of including falls was that inclusion of these events would stimulate more rigorous research into their prevention.

Significance of the Problem

According to the World Health Organization (WHO), falls are a major public health problem globally, with an estimated 684,000 fatal falls occurring each year, making it the second leading cause of unintentional death, after road traffic injuries (2021). Over 80% of fall-related fatalities occur in low- and middle-income countries, while death rates are highest among adults

over the age of 60 years. Moreover, although not fatal, approximately 37.3 million falls are severe enough to require medical attention occur each year. Risk factors include alcohol or substance use; socioeconomic factors including poverty, overcrowded housing, sole parenthood, young maternal age; underlying medical conditions, such as neurological, cardiac, or other disabling conditions; side effects of medication, physical inactivity, and loss of balance, particularly among older people; poor mobility, cognition, and vision (WHO, 2021).

According to the CDC (2021), one in five falls causes a serious injury such as broken bones or a head injury, with falls being the most common cause of traumatic brain injuries (TBI). Over 800,000 patients a year are hospitalized because of a fall injury, most often due to a head injury or hip fracture. More than 95% of hip fractures result from falling. In 2015, the total medical costs for falls totaled more than $50 billion with Medicare and Medicaid shouldering 75% of these costs (CDC, 2021).

Target Population and Location

This capstone project focuses on hospitalized inpatient psychiatric adult clients at an academic psychiatric facility in Westchester County, New York. The campus is about 25 miles north of metropolitan New York City. There are 270 inpatient beds, and extensive outpatient, partial hospital, and day treatment programs allowing for a full continuum of psychiatric care for children, adolescents, adults, and the elderly. Highly specialized services are available for a full range of psychiatric illnesses, including personality disorders, eating disorders, anxiety and mood disorders, and psychotic disorders. The facility comprises 13 inpatient units, designated by the psychiatric conditions treated, and the patient's age. The target unit for this capstone project is a crisis stabilization and affective disorders unit. The patient population consists of male and female adult inpatients aged 18 years or older.

Evidence of Scope of Problem

Health care organizations in the U.S. define falls as an unplanned descent to the floor, which may be with or without an injury (AHRQ, 2013). The National Database of Nursing Quality Indicators (NDNQI) classifies falls with injury with specific levels 1 (none), 2 (minor), 3 (moderate), 4 (major), and 5 (death) (AHRQ, 2013). Fall categories include accidental, anticipated physiologic, unanticipated physiologic, or intentional (Bouldin et al., 2013; Cox et al., 2015; France et al., 2017).

Factors increasing the risk of falls in a psychiatric setting are complex. According to Seeheruneong et al. (2022) individual level, as well as the organization level or system level factors, affect the fall incidence for psychiatric inpatients. Moreover, the complexity behind falls in the psychiatric setting is due to both intrinsic and extrinsic factors, noting intrinsic factors have a physiological origin, while extrinsic factors are those that result from environmental or other hazards.

According to The Joint Commission (2015), a true fall risk assessment goes deeper than a "screening" and guides clinicians in developing prevention strategies specific to identified risk factors. One-to-one education of each patient by trained individuals, in conjunction with continued reassessment of the patient, including medication changes, cognitive and functional status are a key component to falls reduction. Continued reassessment of patients who have fallen, to identify a change in the patient's medical condition that can precipitate a poor patient outcome, is vital. Fall prevention involves managing a patient's underlying fall risk factors and optimizing the hospital's physical design and environment (AHRQ, 2021). Elderly and frail patients with fall risk factors are not the only ones who are vulnerable to falling in health care facilities. Any patient of any age or physical ability can be at risk for a fall due to physiological

changes due to a medical condition, medications, surgery, procedures, or diagnostic testing that can leave them weakened or confused (The Joint Commission, 2015).

The target organization maintains a system wide falls tracker with up-to-date information regarding fall occurrences. The target unit for this project recorded 15 fall events from January-November 2022. Nine falls were accidental, and six were unanticipated physiological falls. Eleven falls occurred in patients aged 19-50, three falls occurred in patients aged 51-65, and one fall in patients aged 66-70. Patient activity at the time of fall event varied. Four falls resulted in a minor injury, while eleven occurred without injury. Most falls occurred between the hours of 20:01- 01:30, with eight falls reported during this period. One third of the reported falls occurred on a Friday. While the fall rate for the target unit decreased by 21% from the previous year with current fall prevention strategies, it remains among the top five units in the hospital with the highest rate of falls.

Problem Statement

The incidence of falls on psychiatric units is more than threefold that of general medical units, representing a crucial challenge in healthcare management.

PICOT

In hospitalized inpatient adult psychiatric clients of an academic psychiatric facility, does the use of a patient-centered safety agreement, as part of a comprehensive fall prevention program, reduce the incidence of falls as compared to current fall prevention protocols, measured over an 8-week period?

Theoretical Framework

Nursing theories are organized, knowledge-based concepts that define the scope of nursing practice. Nursing theories have been used to guide practice in both Eastern and Western

countries, and nursing theories are used to guide research and practice globally. Moreover, the cross-cultural utility of nursing theories makes them invaluable for guiding nursing practice and research across a wide range of cultures and nursing settings (Younas & Quennell, 2019).

Younas and Quennell (2019) define Nursing Theory-Guided Practice (NTGP) as a 'human health service to society based on the discipline-specific knowledge articulated in the nursing frameworks and theories. The discipline-specific knowledge reflects the philosophical perspectives embedded in the ontological, epistemological, and methodological processes that frame nursing's ethical approach to the human-universe-health process. Furthermore, NTGP describes, predicts, and explains nursing phenomena, allowing nurses to recognize the nature of nursing practice and serve as a tool for personal knowing, reflection, reasoning, critical thinking, and effective decision-making (Younas & Quennell, 2019). Thus, nursing theories help define what nurses do with supporting rationale. Theories of caring in nursing, which have developed over decades, are rooted in the ethical principle of respect for human dignity and an expectation of nurse behavior that demonstrates caritas (Wolf & France, 2017).

Jean Watson's Theory of Human Caring brings meaning and focus to nursing as an emerging discipline and distinct health profession with its own unique values, knowledge, practices, ethics, and mission to society (Watson, 2008). Caring Science is a discipline of nursing and body of knowledge, arrived at through intentional research and theory development, focused on the relationship of caring to health, healing, and well-being of the whole person within the context of the family, community, society, and within the global environment (Wolf & France, 2017). Caring Science offers a meaningful philosophical foundation to nursing science, beyond conventional Western science and acknowledges a relational ontology versus a separatist ontology (Watson, 2008).

The changes in health care delivery systems globally have intensified nurses' responsibilities and workloads, thus causing increased patient complexity and acuity. Despite these hardships, nurses must preserve their caring practice and Dr. Jean Watson's Caring Theory can be seen as indispensable to this goal (Cara, 2003). The personal and financial toll of falls is substantial; patients experience post-fall syndrome, anxiety, and depression (Oliver et al., 2004). Fall-related costs to the U.S. healthcare system are expected to exceed $50 billion and continue to increase as the population ages (CDC, 2021; France et al., 2017). The nurse-patient relationship may potentially impact and mitigate these undesired events through nursing interventions related to falls prevention. Being informed by Dr. Watson's Caring Theory allows the nurse to return to their deep professional roots and values, and practice the art of caring, provide compassion, promote healing and dignity, and contribute to the nurse's own actualization (Cara, 2003). This capstone project will be driven by the nurse's desire to lead with the ethical principle of respect for human dignity and an expectation of nurse behaviors that demonstrates caritas.

Definition of Terms

The following terms will be defined both conceptually and operationally: fall, risk factor, contract, psychiatric patient.

Conceptual Definition

Fall- an event which results in a person coming to rest inadvertently on the ground or floor or other lower level (WHO, 2021).

Risk factor- characteristics or medical conditions that increase risk (CDC)

Agreement- mutual assent by two or more persons to another

Psychiatric patient- an individual, under the care of a health care provider, with a focus on the diagnosis, treatment, and prevention of mental, emotional, and behavioral disorders (American Psychiatric Association, 2022)

Operational Definition

Fall- an event where a psychiatric patient comes to rest on a lower surface either intentionally or unintentionally, with or without injury on an inpatient psychiatric unit.

Risk Factor- a characteristic that puts an individual at a higher risk for falls such as depression, psychosis, schizophrenia, psychotropic medications, neurological deficits, and polypharmacy.

Agreement- a verbal interaction between a health care provider and patient and that confirms a patient's understanding of their fall risk and responsibility to utilize recommended precautions to prevent falls, thus engaging them in their care.

Psychiatric patient- an adult psychiatric patient admitted to hospital seeking care for an acute crisis with an affective disorder and moderately aggressive or violent behavior, often with a diagnosis of major depressive disorder, bipolar disorder, or schizoaffective disorder.

CHAPTER 2

CRITICAL APPRAISAL OF THE EVIDENCE

PICOT Overview

As discussed previously, the focus of this capstone project is to evaluate whether the implementation of a patient safety agreement, as part of a comprehensive fall prevention program, reduces the incidence of falls as compared to current fall prevention protocols, measured over an 8-week period.

Search Strategies

A literature review was performed to examine the current evidence supporting the use of patient agreements in healthcare. The search was conducted utilizing search engines including CINAHL, EBSCOhost, PubMed, and Medline. Search terms and phrases included: *patient agreement, patient falls contracting, patient safety agreement, falls contract, contracting and falls, prevent falls psychiatry, fall prevention intervention, psychiatric patient falls.*

Inclusion Criteria

Search criteria included articles published within the past five years from 2017-2022, including scholarly peer reviewed sources, then widened as historical or foundation sources provided robust support. Bibliographic sources facilitated inclusion of primary source information. This search yielded 3044 results.

Exclusion Criteria

Exclusion criteria included articles that did not examine the effects of a patient safety agreement or contract in a healthcare setting or falls and fall safety. Articles that were not available in full text, editorials or opinions, and articles not in the English language text were

also excluded. This search yielded 3006 results, of which 8 articles met inclusion criteria based on the search terms: fall, risk factor, agreement, and psychiatric patient.

Level of Evidence

The articles selected for final retrieval for this scholarly project were analyzed and graded based on the Melnyk & Fineout-Overholt (2019) Levels of Evidence. According to this criteria, selected studies for this literature review belong to level I and level VI. Out of the 8 included studies, 2 were level I (systematic review and meta-analysis) and 6 studies were level VI (descriptive or qualitative study, clinical practice guideline literature review, QI or EBP project). The articles relevant to this project examined the use of an agreement or contract between health care providers and patients in a clinical setting and met inclusion criteria specific to this capstone project (see Appendix A).

Evaluation and Synthesis of Literature

The following themes were identified based on the literature review: patient agreement and contracts; patient centered care and interventions.

Patient Agreements and Contracts

Patient centered interventions, such as a contractual agreement between provider and patient, are a common practice in healthcare systems. Volk et al. (2012) evaluated the effectiveness of contracts in clinical practice. Cochrane review analyzed 30 randomized trials in addiction, weight-control, or medication-adherence settings. Endpoints include processes, adherence to treatment, and targets, such as blood pressure. Results were mixed, with 15 endpoints showing a benefit of contracts compared to usual care, 6 favoring standard care, and 26 endpoints showing no difference. Volk et al. (2012) noted any patient encounter can be viewed as contractual, whereby the patient and physician agree on mutually accepted

responsibilities. However, the term contract becomes problematic in the legal context by turning informal agreements into formal documents, thus emphasizing the consequences of breach, whether explicit or implied. Moreover, because of these implied consequences, contracts risk fundamentally altering the patient-physician relationship, a relationship traditionally founded on unconditional loyalty. Although the aims of contracting may be sound, physicians need to understand the limits of contracts and how they may be misunderstood. Written agreements should be bilateral, tailored to the patient, and presented in a way that signals ongoing commitment. Based on the above findings, it is recommended that the difference between the terms agreement and contract be clear, clarify aims of the patient-provider agreement, treat the contract as part of a therapeutic process, and patients should be given resources and assistance in meeting goals.

Zavotsky et al. (2014) analyzed data from a preexisting falls database. using a retrospective, quantitative, exploratory descriptive study design. Data were analyzed from patients aged 18 years or older and were separated into two groups: 18 to 64 years of age and 65 years of age or older. The sample included 696 patients who fell while hospitalized. The conceptual framework used as a foundation for this study was based on the Robert Wood Johnson University Hospital (RWJUH) Nursing Conceptual Model for Nursing Practice. Overall, there were no statistically significant differences found in any factors that contributed to falls between the two age groups, however, the presence of an RWJUH Fall Safety Agreement demonstrated promise for preventing serious injuries in all hospitalized patients. This is the first study of its kind to explore the relationship between fall injury and the presence of a fall safety agreement in adult patients. The major limitation of this study is that the data were taken from the RWJUH Post Fall Huddle Database gleaned from information entered by frontline staff. This

may have affected some of the accuracy of the data. Thus, suggested implications include a thorough assessment and broad range of strategies tailored to the individual's needs, regardless of age. Furthermore, a fall safety agreement incorporating structured patient and family education may be a useful nursing intervention. This study also suggests that providing structured fall prevention education, and patient contracts, such as the RWJUH Fall Safety Agreement, may help reduce the degree of injury sustained. Moreover, it is critical that nurses continue to research and explore evidence-based strategies and patient-centered care interventions, such as patient contracts or agreements for fall prevention and incorporate them into practice to decrease the incidence of falls and fall-related injuries in hospitalized adults.

Similarly, an evidence-based project by Bargmann & Brundrett (2020) found effective education and adherence with fall prevention measures in both nursing staff and patient populations were a vital component of fall prevention and patient safety. Furthermore, safety agreements and bundled prevention approaches facilitate a dialogue among staff and patients, thus improving the safety of patients. This project's aim was to determine if implementing a patient fall safety agreement, in combination with an existing evidence-based fall prevention bundle, reduced the number of falls. The project was conducted on a 26-bed medical-surgical telemetry unit at a 352-bed Level 1 military trauma center caring for both civilian traumas and military beneficiaries. A multicomponent fall prevention program that emphasized staff and patient education was developed. The program consisted of the following components: assessment of the patient's fall risk using the Johns Hopkins Fall Risk Assessment Tool (JHFRAT); daily patient education on factors contributing to fall risk during the shift assessment; an educational handout on fall risk factors maintained at the bedside; ensuring compliance with implementation of previously existing fall prevention measures; a patient fall

safety agreement. During the first four months, the fall rate decreased by 55% and staff compliance with interventions for high fall risk patients increased to 89%. Based on these interventions, the target unit experienced decreased frequency of falls, less total falls per given time, low fall rate per 1,000 patient days, and a low number of falls with mild harm. The unit started with a rate well below the national average, hence any improvement was difficult to achieve. The unit also experienced 87 and 88 consecutive fall-free days, which were the longest consecutive number of days since May 2015. The unit continued to see a low fall rate well below the national average for medical-surgical units.

Dotson (2018) examined the implementation of evidence-based fall prevention education, including the use of a fall safety agreement, to decrease fall rates. The Iowa Model of Evidence-Based Practice (EBP) served as a guide for this project. Thirty-seven patients participated in the project, all were English speaking, able to read and write, with no cognitive limitations. Females comprised most of the sample participants (68%) and only one participant (2.2%) had less than a high school education. The mean age of the group was 61.97 years old, with ages ranging from 30 to 79 years of age. The project's aim was to decrease fall rates using fall prevention education that included a fall safety agreement during hospitalization for patients who had undergone total joint replacement. The fall prevention education included when to call for help and strategies for hospital staff to use to prevent falls. The strategies included use of non-skid socks; keeping bed in lowest position; conducting bedside nursing shift report; following physical and occupational therapy mobility recommendations; the use of bed/chair alarms; and risk factors associated with falling. Following a 30-minute education session, a fall safety agreement was signed acknowledging that the participants agreed to be engaged in their own safety. The signed agreement was strategically placed in the participant's room as a continual visual cue to remind

the participant about fall prevention strategies in use. No falls were noted among participants. Limitations of the project included a small sample size with a limited time frame. The implementation of falls education and a fall safety agreement have implications for feasibility and sustainability as fall prevention interventions for hospitalized patients.

A case study by Nicolas et al. (2016) examined the impact of The Joint Commission Center for Transforming Healthcare: Preventing Falls Targeted Solutions Tool (TST) in reducing falls at Community Medical Center (CMC). CMC is a 500-bed hospital predominantly serving the senior community in Toms River, New Jersey. CMC's interdisciplinary TST committee used targeted solutions tools for falls on three units, including neuro-telemetry, wound care, and telemetry. One of the targeted solution tools CMC uses to reduce falls was a brochure on patient safety that included a patient, family, and nurse contract. On admission, the patient and family are asked to read and sign a contract, which emphasizes patient risks. By signing the contract, the patient agreed not to get out of a bed or chair alone and the family agreed that when visiting, they would ensure the patient does not ambulate independently. Since joining TST, two units at CMC have consistently trended downward in falls incidence. It is suggested the reduction in falls, then, resulted from multiple fall prevention interventions such as floor mats, color coding, family brochure, hourly rounding, and the use of a contract. These interventions heightened awareness and vigilance about fall prevention.

Vonnes & Wolf (2017) investigated the effects of fall prevention agreements on the incidence of falls and falls with injury in older adults. The project took place in a National Cancer Institutes (NCI) Comprehensive Cancer Center with Magnet Designation, located on the Florida Gulf Coast, providing inpatient and outpatient care to adult oncology patients. This evidence-based project utilized the Plan-Do-Study-Act (PDSA) Rapid Cycle Improvement to

implement the fall prevention agreement. The Morse Fall Scoring system was used to assess a patient's risk for fall, which is the same tool used by the target organization of this capstone project. The information obtained from the screening was communicated on the Fall Risk and Prevention Agreement. Similar to the case study by Nicolas et al. (2016) at CMC, the agreement was presented to participants upon hospital admission and was then placed in each participant's hospital room with a goal to promote patient and family participation in the fall reduction and safety plan. Patients were reassessed for falls risk based on change of status, transfer, or after the occurrence of a fall. The baseline mean fall and injury rate was 3.77 and 2.37, respectively. After implementation of the fall agreement, rates were measured for eight-quarters. Quarterly fall rates ranged from 1.52 to 3.32 which is an 11.8%– 59.6% decrease in falls. The mean fall rate over the last eight quarters was 2.37, representing an overall decrease of 37%. The injury rates ranged from 0.51 to 1.64 which is a 23.9%–76.3% decrease. Implications of this study suggest incorporating patients and families in discussions related to fall risk and prevention increases collaborative communication, while empowering patients and families to become partners in reduction. Motivating patients to engage in individualized interventions may effectively reduce fall related injuries. Furthermore, additional studies, including a multivariate analysis, are needed to determine whether supporting evidence links fall and injury reduction to the presence of a patient and family agreement.

Patient Centered Care and Interventions

Rochon & Salazar (2019) investigated the implementation of a falls program aimed at decreasing falls and improving patient safety by including patients in their care. The project took place at a federal hospital in South Texas comprised of four medical-surgical units. The Plan, Do, Study, Act (PDSA) model was used to frame the implementation and program development

initiative aimed at decreasing the number of falls. The PDSA model is a 4-stage cyclic approach to implement changes aimed at quality improvement. The program involved nurses partnering with the patient to reduce falls. Program interventions included providing staff with a script to enlist the patient's participation in the program, providing patients with an educational card to remind them of their role in falls prevention, and rewarding the patient with a certificate at the time of discharge. The results showed the number of falls decreased throughout program implementation. The number of falls for three consecutive months was previously four. The number of falls ranged between one and two during program implementation and spiked to three in November 2015. Overall, during the falls prevention program, the rate of falls decreased (71%) from 8.06 to 3.18, while the average number of falls decreased from 4 to 1.7. The average length of stay decreased (17%) from 2.84 to 2.39 and this reduction in length of stay potentially produced cost savings for the hospital. The two consecutive months without falls supported the program's positive impact in preventing falls compared to another comparable unit without the program.

A systematic review by Avanecean et al. (2017) found that multidisciplinary, multifactorial interventions focused on the systematic assessment and treatment of identified risk factors may be effective in reducing the incidence of falls in the acute care setting. Furthermore, multiple studies have shown that patient-centered care improves patient satisfaction, quality of care, and health outcomes while reducing healthcare costs and disparities in health care. Though not specific to fall risk prevention, these studies highlighted the importance of patient-centered care on improving patient specific outcomes. Moreover, patient-centered intervention strategies refer to any intervention directed towards a patient's assessed individual risk for falls. These interventions, which are applicable to the inpatient psychiatric setting, include

communication tools such as wall posters that identify a patient's fall risk, person-centered education, physical therapy exercises and assessment of medication list, infection, and the need for ambulatory aids. The evidence presented in this systematic review suggests that patient-centered interventions may have the potential in reducing fall rates in acute care settings when compared to usual care practices, however, it has been a universal challenge to specify best practice in implementing patient-centered interventions. Further research is needed, which could include patient safety agreements to reduce patient falls.

National Practice Guidelines

According to Bargmann & Brundrett (2020*),* The Joint Commission Center for Transforming Healthcare: Preventing Falls Targeted Solutions Tool (TST) highlights the importance of a customizable multifactorial approach to fall prevention that includes the use of safety agreements. The TST is an online evidence-based tool that guides an organization through a step-by-step process to address patient falls with the goal of generating customizable solutions to address identified barriers. TST utilizes the rapid process improvement methodology to measure fall rates, identify contributing factors, and then implement targeted solutions. Furthermore, this methodology is a fact-based, systemic, and data-driven problem-solving methodology that includes elements from Lean Six Sigma and change management methodologies. Moreover, TST supports the use of safety agreements to improve call light use, patient awareness, and patient acknowledgement about their fall risk during hospitalization.

According to Garrard et al. (2016) the National Database of Nursing Quality Indicators (NDNQI) was established in 1998 by American Nurses Association (ANA) to monitor nurse-sensitive quality indicators that are essential for patient safety and quality improvements in hospitals. NDNQI is a quality database that collects and evaluates unit-specific nurse-sensitive

data from over 2,000 U.S. and international hospitals. According to Rochon & Salazar (2019), NDNQI is a repository of data related to benchmarking the quality of care provided by nurses at different organizations and tracks falls and fall rates between different organizations. The number of falls and associated fall rates are considered nursing-sensitive indicators regarding the quality of care provided by a particular organization.

CHAPTER 3

METHODOLOGY

Study Design

This capstone project will be conducted using a quality improvement (QI) research design to evaluate whether the use of a patient-centered safety agreement, as part of a comprehensive fall prevention protocol, for inpatient psychiatric patients is beneficial. This capstone project aims to empower patients to participate in their care, thus increasing their autonomy, with a provider-to-patient verbal agreement to participate in fall prevention strategies throughout their hospitalization.

All patients admitted to the hospital enter through the Evaluation Center (EC), which is comparable to a psychiatric emergency department. Exceptions include those who are profoundly psychiatrically unstable or those who have a communicable disease requiring isolation. These patients are evaluated on their respective units by a NP within 3 days of admission to assess medical stability by completing a comprehensive history and physical exam.

Standard fall risk precautions are enforced for all inpatients and formal education is provided on admission by the registered nurse (RN). Fall prevention education is a core nursing measure whereby the identification and reinforcement of fall risk factors and hospital fall prevention strategies are implemented to ensure positive patient outcomes. Falls precautions most applicable to the target unit include keep floor dry and environment free of barriers/equipment entanglements; review with patient/family their shared responsibility in falls prevention; maintain safe room lighting, use nightlight on bed; use of non-skid socks/shoes, wear clothing of appropriate length, orient to immediate surroundings; all for assistance before getting up; change positions slowly, dangle feet before standing; and proper use of hospital equipment.

To identify gaps in care and organizational need, the hospital's electronic Patient Falls Dashboard, which is an overall snapshot of the falls rates among all campuses within the organization, will be reviewed. The rate of falls for each unit of the target campus, the age, gender, psychiatric diagnosis, time of fall, day of admission for fall event, and level of injury will be analyzed. A non-geriatric adult population was selected due to pre-existing knowledge and interventions tailored to geriatric falls. This capstone project intends to identify risk and mitigate falls related to psychiatric illness, unrelated to age or other known risk factors.

Objectives and Outcomes

The focus of this capstone project is to evaluate whether the implementation of a patient safety agreement, as part of a comprehensive fall prevention program, reduces the incidence of falls as compared to current fall prevention protocols, measured over an 8-week period. The aim of this capstone project is to investigate the effect of a QI intervention to reduce falls in an inpatient psychiatric setting by utilizing a patient-centered safety agreement. The incidence of falls on psychiatric units is more than that of general medical units.

The immediate short-term goal of this capstone project is to decrease fall events in acutely ill psychiatric patients by educating patients regarding fall risk and prevention strategies. Additional short-term goals include empowering patients and increasing autonomy by engaging patients in their care with a verbal agreement and encouraging them to participate in health promotion and prevention. Accountability is established using a verbal agreement between the provider and patient, thereby fostering a provider-patient partnership with the shared goal of improving patient care and safety outcomes. Long-term goals include a steady decline in fall events for psychiatric inpatients throughout the organization and incorporating the proposed intervention for this capstone project in the fall prevention protocol for all psychiatric patients in the organization.

Project Plan

The project hospital's director of nursing, director of nursing professional development, director of quality and patient safety, manager of workforce health and safety and medical clinic, patient care director of target unit, program director of school affiliations, and medical director consented to this DNP candidate implementing a quality improvement project over an 8-week period on the designated unit. The falls subcommittee of the target campus was apprised of the upcoming project as an adjunct to their ongoing efforts to reduce falls among psychiatric patients. A mentor was secured with the assistance of the program director of school affiliations. The senior director of corporate nursing quality and improvement initiatives agreed to act as mentor for this DNP candidate. Nurses on the target unit and falls subcommittee were interviewed to identify current protocols regarding fall management and prevention. Nurse practitioners were notified of this pending project and their role in providing fall prevention patient education and establishing a patient safety agreement during admission process.

Fall prevention patient education is provided by nursing staff on admission to a designated unit using a patient-centered fall prevention toolkit, Fall TIPS (Tailoring Interventions for Patient Safety). Patients are asked to verbalize their understanding of the fall prevention education provided. The RN evaluates this interaction by documenting the following terms: acceptance, evaluation, and verbalized understanding or needs reinforcement. The Morse Fall Scale is currently used by RN’s twice daily to assess fall risk and identify a change in status. The goal is for each patient to receive fall-related education on admission, and again, as needed, throughout their admission when risks are identified, or if there is a change in the patient’s condition.

The implementation timeline for this project will span approximately 12 weeks. As the project coordinator, this DNP candidate will oversee project implementation, monitor the status of the intervention, complete the intervention, provide support to nurse practitioners, collect data, and provide updates on project progress.

Provider on-boarding for implementation will include a project handout with an outline of the capstone projects aim, identification of the target unit, recommendations to guide fall prevention education, and guidance regarding the use of a patient-centered safety agreement (see Appendix D). Employees in the medical clinic, target unit, and evaluation center will be notified of the details of this capstone project via email and unit huddles. A handout will be provided to staff with the details of the intervention.

The goal for intervention execution is for this to occur during the admission process. When the patient is ready for the NP to complete the history and physical exam (H&P), the EC will notify the NPs via EPIC chat, per current protocol. The NP will identify patients assigned to the target unit upon arrival at the EC. The NP will complete the H&P, as is the current protocol, during the admission process. The intervention, which is an additional step of educating the patient on fall risk factors, fall prevention strategies, and impact of falls on hospital stay will be implemented by the NP while obtaining the H&P. Once this information is reviewed, the patient will be asked to agree to utilize fall prevention strategies as part of a care partnership between the provider (NP) and patient during their hospital stay.

If the intervention cannot be completed, the NP will document this in the H&P note. If the patient's condition prevents them from participating in the standard admission process the NP will attempt to complete the H&P up to three days after date of admission, per protocol. The NP will attempt to complete the intervention with each encounter to complete the H&P.

A communication plan will be implemented to assess the intervention's progress, identify barriers, and allow feedback from the NPs. There is a daily steam huddle with medical NPs, medical clinic manager, and medical director in attendance. This forum will be used for check-ins, informal discussions, and EPIC secure chat communication.

To measure the success of the quality improvement intervention of a patient-centered safety agreement, data will be collected from the organization's Patient Falls Dashboard. The rate of falls prior to the intervention will be compared to the fall rates while the intervention was being piloted for the target unit.

Sample

The human subjects of this research consist of male and female adult inpatients aged 18 years or older. Common admission psychiatric diagnoses within this population include an acute crisis such as affective disorders with aggressive or violent behavior. Thus, a variety of psychiatric diagnoses are treated on this unit, including major depressive disorder, bipolar disorder, and schizoaffective disorder. The sample population for this project will be selected solely based on the predetermined disposition to the target unit, which is based on their psychiatric condition, age, and bed availability, and determined by the access transfer department and EC staff. There are no other considerations such as race, ethnicity, gender, or income in determining sample population. Language barriers will be addressed using the organization's Pacific Interpreters translator account, which is easily accessible via mobile devices provided by the organization. The predicted sample size is 50 participants, based on the typical number of admissions to the target unit.

Organizational Setting

This capstone project will be executed in a 270-bed academic center's psychiatric facility in Westchester County, New York, which provides a variety of inpatient psychiatric care and specialized services for psychiatric illnesses. The facility comprises 13 inpatient units, designated by the psychiatric conditions treated, and the patient's age. The average length of stay is 7-14 days. The organization is Magnet recognized by American Nurses Credentialing Center (ANCC) for nursing excellence and Planetree Certified for excellence in person centered care.

The target unit for this capstone project is a crisis stabilization and affective disorders unit. There are 10 single rooms and 8 double rooms. Two of these rooms are handicap accessible. Two rooms can accommodate a patient requiring continuous positive airway pressure (CPAP), meaning there is a clear plexiglass panel on the door that allows for constant observation by staff, while preventing exposure to aerosolized generating procedures. The unit layout is L-shaped, with a long hallway and a short hallway. Each patient room has a private bathroom. There is seating along the corridors and a living room and dining area. The average census of this unit is 18 patients.

There are three available shifts for staff that overlap: day, evening, and night shifts. The day and evening shifts are ideally staffed with 2 registered nurses (RN) and 3 mental health workers (MHW). The night shift is staffed by one RN and two MHW's. For all shifts, due to varying acuity on the unit, additional staff may be needed for patients requiring a 1:1 watch. This varies day to day, or between shifts.

Data Collection and Privacy

Data collection for this capstone project includes both electronic and manual data extraction. The electronic Patient Falls Dashboard, accessed through the organization's Infonet, provides a detailed analysis of the fall rates for the target campus and unit. This tool was used to assess

trends in falls both pre-and post-intervention. This information is available to all employees within the organization. The Patient Falls Dashboard provides specific parameters for fall events such as age, type of fall, injury level, patient activity, shift, and weekday. Falls are also classified by assisted versus unassisted, year to date, and comparison by unit and campus. Falls are not classified based on psychiatric diagnosis. However, a different electronic tool accessible through the Infonet, the KEEPSAFE medical event reporting system, provides more detail. All fall events are recorded through KEEPSAFE by hospital staff, and specific patient information can be accessed using this tool and through the electronic health record (EHR), such as age, gender, psychiatric diagnosis, medication, and other medical conditions.

Data from the hospitals patient falls tracker, KEEPSAFE medical event reporting system, and patient log will be examined to evaluate the effectiveness of the intervention by comparing rates and details of falls prior to project implementation to fall rates during the 8-week intervention period. The falls dashboard does not include identifiable patient or human subject information; therefore, the privacy and confidentiality of all patients is protected. The record book used for manual data collection is maintained by the NP and medical clinic office, which is locked and only accessible by a specific entry key. Once all pages are used, the record book is sent to a secure paper document storage area in the hospital. No personal identifiers of the participants will be collected during this entire project. Confidentiality was achieved by avoiding collection of personal identifiers of the patients. Instead, each patient will be identified by an assigned number.

Key Personnel

The target population for this capstone project includes inpatient adult psychiatric patients of an academic psychiatric facility typically admitted for crisis stabilization. The key stakeholders for this project will be nurse practitioners and hospital administrators, including the

medical director, director of nursing, manager of the medical clinic, and patient care director of the target unit who were supportive of the initiative to include the nurse practitioner team in falls prevention strategies. The nurse practitioners, whose responsibility includes executing the intervention, will support the project. Other key personnel ensuring the success of this capstone project include DNP faculty mentors from Dominican University, mentor from the target organization hospital, and program director of academic partnerships for the target organization. The expertise, guidance, pragmatism, and encouragement of these individuals in research, implementation, and evaluation will be invaluable for the success of this project.

Internal Review Board (IRB)

The proposal for this capstone project was submitted for IRB exemption to Dominican University and the target organization. As the lead investigator, this DNP candidate submitted the initial Internal Review Board (IRB) application for exemption to Dominican University on September 14th, 2023, after review and approval was obtained by the faculty advisor. The Ethics Training Certification course, assigned by Dominican University, was completed prior to submission of IRB application. An official response to the Exempt IRB application entitled "Implementation of a Patient Safety Agreement to Prevent Falls on an Inpatient Unit", IRB # 2023-0911-01, was received on September 17, 2023, granting this exemption. The exemption was granted based on a review that identified this study does not meet the conditions to be considered Human Subjects Research, but rather a change/evaluation as noted in Dominican IRB exempt criteria 46.104(d)(3) (see Appendix B). An application for approval of this QI project from the target facility was submitted on October 10th, 2023. Approval was granted on February 1st, 2024 (Appendix C).

Implementation

The implementation period for this project will span approximately 3 months. The medical NPs, who are primarily responsible for carrying out the intervention, will be apprised of the details of the specific details of the intervention approximately 2 weeks prior to the project roll-out with a hand-out (Appendix D). This handout will either be emailed or given in-person, with brief meetings scheduled to discuss the project. Data review and collection will be initiated one week into project implementation, with data recorded in an Excel spreadsheet.

Data collection will occur weekly to biweekly during the project intervention period, and for approximately 2 weeks after the intervention period ends. Barriers to implementation will be identified by contacting the NPs identified as unable to complete the intervention. A communication plan will be implemented to assess the intervention's progress, identify barriers, and allow feedback from the NPs via team huddles, informal discussion, and EPIC secure chat communication. Problem solving for identified barriers will aim to overcome these challenges and ensure this capstone project's success.

Measurement Tools

There were two evaluation instruments used throughout the development and implementation of this capstone project. These tools included an Excel spreadsheet (Appendix E) and the target organization Patient Falls Dashboard. The Patient Falls Dashboard is a hospital owned electronic database used to track all fall occurrences across the enterprise. An Excel spreadsheet will be used to organize data extracted from the patient log, Patient Falls Dashboard, and electronic health record (EHR) through chart reviews.

The Patient Falls Dashboard tracks all fall occurrences and organizes data with specific identifiers such as age, unit, time and day of fall, level of injury, activity during fall event. Fall data from the years 2022-2024 will be used to identify trends in fall rates and assess the success

of the fall agreement intervention on fall prevention. Information extracted from the Patient Falls Tracker will be entered in the Excel sheet and will include the medical record number (MRN) of all patients admitted to the target unit, date and day of admission, age, gender, whether the intervention was implemented successfully, the initials of the NP who completed the H&P on admission, and if any patient had a fall event during their admission.

If a fall event occurs, the Excel spreadsheet will be used to organize data extracted from the EHR and falls data tracker, including date and time of fall, activity during fall, level of injury, day of admission fall occurred, psychiatric diagnosis, nursing shift and date of discharge. Data points to be analyzed include number of admissions during intervention, status of intervention, fall events during intervention and pre-intervention, age, gender, level of injury, day and time of fall event, and day of admission fall occurred.

Data will be collected manually to track all patients admitted to the unit. This data will be recorded by the NP in the existing patient log, which is used to track every patient admitted and evaluated by an NP.

Analysis of Data

To determine whether the use of a patient safety agreement, as part of a comprehensive fall prevention protocol for inpatient psychiatric patients, will decrease fall events, a qualitative design was used for data collection. A qualitative design is appropriate for this capstone project as this project focuses on implementation and evaluation of an intervention from the perspectives of those involved (Tehrani et al., 2015).

Data analysis will be guided by expert statistician Andrea McGlynn, MS. Statistical Package for the Social Sciences (SPSS) data analysis software will be used for management and analysis of data collected from retrospective and prospective chart reviews. Data from the Patient

Falls Dashboard, KEEPSAFE, and patient log will be tracked and analyzed. T-tests were conducted between various groups to analyze age to identify trends between patients who received intervention, completed intervention, and experienced a fall event. This tool was appropriate for this project as it was measuring a continuous variable, such as age, to identify statistical significance.

Risk Benefit Analysis

Risk

As the proposed intervention involves patient education via in person provider-to-patient verbal interaction, the risk to patients is minimal. Patient confidentiality is a top priority, and no human subject data will be used for this project. All records will be kept confidential. There are no foreseeable medical or financial risks to patients receiving the intervention. Patients may have additional concerns or questions once education regarding fall prevention is provided. The NP completing the intervention will address all issues and provide reassurance to the patient, as indicated. Patients will have the option to decline all parts of the intervention. The intervention will be terminated immediately upon patient request.

Benefit

Fall prevention interventions have the potential to decrease fall events, which may have tremendous benefit for psychiatric patients' overall well-being. Fall events cause injury, prolong hospital stay, increase stress, and increase the cost of care. Providing patients will strategies to decrease fall events can mitigate negative outcomes during an inpatient hospital stay. Moreover, increasing autonomy of a vulnerable patient population can benefit the well-being of the patient by engaging them in their care and providing tools to ensure positive outcomes during their hospital stay.

Ethical Implications

The principle of autonomy guided the development of this capstone project and will provide adequate information allowing patients to make decisions based on their beliefs and values (American Association of Nurses, 2015). Engaging patients in their care during a psychiatric hospitalization by providing tools and strategies to participate in their care may allow for increased independence and positive outcomes. Empowering patients to participate in their care with a provider-to-patient verbal agreement to participate in fall prevention strategies throughout their hospitalization increases patient autonomy. Allowing patients the opportunity to participate in their care by utilizing fall prevention strategies may increase self-determination, while preventing fall events.

Evaluation

To assess the success of this capstone project, the number of fall events during the intervention period will be measured and data will be reviewed to assess whether a patient with a fall event successfully received the intervention. Psychiatric diagnosis, medical history, age, gender, time, day, lday of admission, activity, nursing shift, and level of injury will be compared to identify trends in patients experiencing fall events. Fall data from 2022-2024 will be analyzed to identify trends in fall rates and evaluate the intervention's effectiveness. Similarities in trends identified among patients with a fall event will guide further discussion and recommendations for this capstone project.

Nursing Implications and Sustainability

Fall prevention education is a basic premise of inpatient care. Fall events have detrimental effects on a patient's overall health and well-being and hospital stay. Patient education is a mainstay of nursing care at every level. Nurse practitioners are at an advantage to

provide this one-on-one education during routine patient encounters. Fostering a strong rapport with patients, by gaining their trust and respect, may enable patients to engage in self-care activities related to fall prevention while agreeing to participate in fall prevention strategies. Activities to increase patient autonomy are of utmost importance during a psychiatric hospital stay. This vulnerable population is experiencing fall events at an alarming rate. Valid and appropriate fall assessment tools, along with continual education throughout a hospital stay, may potentially avert preventable fall events. If the use of a patient safety agreement between patient and provider is found to positively impact fall events in the target population, a recommendation for the inclusion of the proposed intervention for this capstone project in fall prevention protocols for all psychiatric inpatients in the organization will be considered.

This capstone project's main objectives are to decrease fall events in inpatient psychiatric patients. The interchangeability of this intervention to be completed by various members of the healthcare team increases sustainability. If the intervention is successful, the department of nursing and falls committees can discuss incorporating this capstone project intervention into current fall prevention protocols.

Budget

There were no associated costs incurred with the development and implementation of this capstone project. The organization did not incur any cost. There was no additional staffing requirement for this project's implementation.

CHAPTER 4:

OUTCOMES

This capstone project evaluates whether a patient fall agreement will decrease fall events in an inpatient psychiatric setting. A qualitative study design was used to determine the effectiveness of a patient-provider fall agreement in relation to fall prevention,

Project Overview

The intervention period for this capstone project was 8 weeks. During this period, 52 patients were admitted, and 15 patients completed a fall reduction patient safety agreement. Of note, 2 fall events occurred during the intervention period.

Week three

Since the beginning of the intervention period, 22 patients were admitted and 5 patient fall agreements were completed. The NPs were contacted via EPIC secure chat to discuss barriers to implementation. Documentation of the inability to complete the intervention was not noted in the H&P. A follow-up email was sent to the NP team to provide an update on the project's status, and review project details and timeline. The NPs were asked to contact this DNP candidate to provide feedback on project implementation to assist in identifying potential barriers to implementation.

Week five

Of the 35 patients admitted to the unit, 9 completed the patient fall agreement, which was documented in the H&P. In addition, the intervention was attempted, but was not completed, for one patient whose psychiatric condition was inappropriate to participate. Furthermore, one fall event was reported during week 5. The affected patient was a 25-year-old male with a psychiatric

diagnosis of mood disorder and significant medical history of hypertension, autism, intellectual disability, asthma, sciatica, and chronic back pain.

Week eight

At the completion of the intervention at 8-weeks, 52 patients were admitted, and 15 patients successfully completed a patient safety agreement. The intervention was attempted with one patient whose condition was inappropriate to establish an agreement. Of the 35 patients admitted who did not receive the intervention, documentation did not identify barriers for participation in the project. At the conclusion of the intervention period, an email was sent to the NP team to notify them the intervention period was completed and to acknowledge their participation. A project update was presented by this candidate to the Falls Education subcommittee.

One fall event was reported during week 8 of the intervention period. The affected patient was a 35-year-old male with an admitting diagnosis of bipolar disorder, and medical history of asthma, diabetes type 2, hypertension, hyperlipidemia, mitral valve disease, testicular cancer, hypothyroid, benign prostatic hypertrophy, gastroesophageal reflux disease, alcohol use disorder, obesity, mild intellectual disability, urinary retention, and autism. The patient did not receive the intervention and there was no documentation identifying barriers to implementation.

Results

An analysis of data compared the demographics (age and gender) of all patients admitted to the target unit during the intervention period, as outlined in table 2. The data revealed 51 patients were included in the analysis (n=51), one patient was excluded related to lack of collected data. The participants' age range was 20 to 66 years old, with a mean age of 32 years old. The number of males versus females was not statistically significant. Of those 51

participants, the intervention was attempted with 16 patients (31.4%). Of 16 patients who participated, 15 (93.8%) completed

Table 1: Demographic Data

Age	Mean	32.2
	Range	20-66
Gender	Male	25
	Female	26
Count		**51**

The Kolmogorov-Smirnov test identified Age to be parametric, p=200. Therefore, the t-test was used to compare age groups. The comparison of age between those with a completed intervention was statistically significant, p=.046, although not clinically significant (Table 2). There was no statistical significance in the rate of falls in relation to age as p=0.582, but clinical significance was demonstrated as both patients' status post fall event were young adult males (Table 3).

Table 2: Intervention completed related to Age

	Intervention Completed	**N**	**Mean**	**Std. Deviation**	**T-test P_value**
Age	**N**	**36**	**36.33**	**11.931**	**0.046**
	Y	**15**	**29.53**	**7.396**	

Table 3: Fall event related to Age

	Intervention			**Std. Deviation**	**T-test**

	Completed	N	Mean		P_value
Age	**N**	**49**	**34.51**	**11.318**	**0.582**
	Y	**2**	**30.00**	**7.071**	

Data analysis revealed the mean age of the patients (N=2) who experienced a fall event was 30 years old. Fall events for these patients occurred on a Sunday, within the first 2 weeks of admission. One patient experienced an unwitnessed fall while ambulating without assistance between 8:31 am and 1:30 pm. The patient reported the fall to staff afterwards, stating he tripped over his feet and fell on his left side. A nursing assessment revealed there were no signs of injury, and orthostatic vital signs were normal. No further medical evaluation was requested. The patient did not receive the intervention and documentation identifying barriers to implementation was not completed. The fall occurred on day 5 of admission.

A second patient experienced an unwitnessed fall Sunday between 8:31pm and 1:30am. The patient reported the fall to the staff the following day, stating he fell in the bathroom while changing his clothing by tripping on his pants after an episode of incontinence. He stated he was unable to move his right arm. The patient's right wrist was assessed by the RN and noted to be erythematous and swollen. An x-ray was obtained, which was negative for acute injury. Of note, this patient had a recent fall with injury on prior admission, sustaining a nondisplaced fracture of the right hand. The patient did not receive any intervention and documentation identifying barriers to implementation was not completed. The patient fell on day 12 of his admission.

Actual or Potential Impact

There is a strong clinical impact of falls on patient care outcomes. The burden of patient falls affects the patient's well-being, hospital course, healthcare costs, and safety. Falls are a preventable issue that overutilizes resources in the healthcare system. Patients on psychiatric inpatient units are falling at increased rates as compared to those on medical units and are

younger in age than those in a high-risk fall population. Promoting patient autonomy throughout a psychiatric admission may prove to be valuable to overall care outcomes if patients feel they are a valuable participant in their care decisions. This may further increase compliance with treatment through patient engagement.

A robust fall prevention protocol does not ensure patient or provider participation in all elements to reduce the incidence of falls. Patient fall safety agreements facilitate a dialogue between the provider and patient to encourage patients to participate in their care. These agreements may improve patient safety and create a collaborative environment, ensuring high quality patient care.

Eliminating fall events will allow for uninterrupted psychiatric care, while preventing additional strain on nursing staff, and decreasing the need for medical consultation. Identification of fall risk through meaningful interactions related to fall prevention will allow for adequate patient education and monitoring to reduce falls, while engaging patients in their care. Identifying at risk populations, specific to psychiatry, is an important component of fall reduction protocol development. Fall reduction may potentially impact the hospital enterprise and inpatient psychiatric care in such that decreasing fall events will optimize care outcomes throughout an inpatient psychiatric admission, while ensuring optimal use of hospital resources and reimbursement.

CHAPTER 5

SUMMARY

Fall prevention is a major task for inpatient psychiatric units. According to Seeherunwong et al. (2022), the incidence of falls in psychiatric units is not only increased in comparison to falls on general medical units, but also increased in inpatient falls in psychiatry settings that have both a higher incidence and greater severity than other inpatient settings. Furthermore, falls significantly impact morbidity and mortality among psychiatric patients, affecting recovery from illness, increasing length of hospital stay, and increased healthcare costs. Falls are a major public health concern globally, and the second leading cause of unintentional death (WHO, 2021).

Various risk factors among psychiatric patients negatively impact fall rates. To successfully prevent a fall event, risk factors must be accurately assessed, and prevention strategies must be effectively implemented. Psychiatric conditions such as depression, psychosis, and schizophrenia can increase fall risk, while the use of psychotropic medications has been controversially considered the strongest predictor of falls (Seeheruneong et al., 2022; Turner et at., 2020). Patient education by trained individuals, in conjunction with continued reassessment of the patient, including medication changes, cognitive and functional status are a key component to falls reduction (The Joint Commission, 2015). This project's aim was to decrease fall rates through fall prevention education and a patient safety agreement. This project evaluated the addition of a patient agreement to current falls prevention interventions to further mitigate falls among inpatient psychiatric patients. The results showed a positive correlation between fall events and patient safety agreements.

Limitations

Limitations of the project included a small sample size and a limited timeframe for the project intervention period. NP participation in implementing the intervention was low, as indicated by 16 attempted safety agreements out of 51 patients included in the project. Barriers identified by the NPs for the patients in which the intervention was not attempted were understaffing and inappropriate patient condition. Barriers were only documented for one patient throughout the project intervention period, so this DNP candidate was unable to further analyze specific barriers to implementation. Furthermore, participation was limited by unplanned bed changes in the EC, which prevented patients from being flagged for the target unit on admission to receive the intervention.

Discussion, Implications, and Recommendations

The success of this capstone relied on the participation of the healthcare team. A patient safety agreement can be established by various members of the health care team including NPs, medical doctors (MDs), physician assistants (PAs) and registered nurses (RN's). A more robust volume of patients receiving the intervention could have been accomplished if a patient safety agreement were included in fall prevention education by the RN, considering fall education is already a mainstay of inpatient RN care. Alternatively, a patient-centered safety agreement could be established by the primary team during daily rounds as part of a patient safety initiative. This would allow for the primary team to assess an appropriate time to implement a safety agreement based on psychiatric stability. Moreover, completing the intervention on the unit may circumvent the issue of a missed opportunity for a fall prevention agreement on admission by the medical team.

Fall prevention is a vital component of patient safety protocols. Preventing falls during a psychiatric admission will allow for uninterrupted care, improved patient outcomes, and optimal

health care expense. Increased monitoring during initiation and up titration of medication may be indicated, as supported by data showing 2 patient fall events occurred within the first 2 weeks of admission. This suggests patients may need more rigorous monitoring during their initial hospitalization, which is often when medication is initiated and titrated. Falls in psychiatry are occurring in younger patients, which was also supported by this project, with a mean age of 30 years old for patients who experienced a fall event. Patients who are not considered increased risk for falls, such as young adult males, may be a missed opportunity for closer monitoring. Coincidentally, both patients who fell had a history of autism spectrum disorder (ASD) and intellectual disability, among other comorbidities, which may indicate a need for high fall risk protocol for patients with neurological disorders. Another similarity noted was both patients had a history of hypertension and asthma, which may have clinical significance, and could be evaluated further in the future. A 5-year case-control study by Seeheruneong et al. (2022) identified the presence of an acute medical condition, more medication, and being prescribed anti-hypertensive medication were differences between those who did or did not fall. Although psychotropic medications are essential for treating patient symptoms, controversially such medications were the strongest predictor of falls.

Conclusion

Improving the overall care and safety of psychiatric patients was the main objective of this capstone project. A robust fall prevention protocol does not ensure team participation in all elements to reduce fall events. A patient safety agreement may facilitate accountability of the healthcare team and the patient to complete fall prevention through a mutual agreement, such as a fall prevention agreement. Patients often want to speak with their provider as there is a sense of trust in this relationship. This trusting relationship may facilitate the successful completion of a

fall prevention agreement. A one-on-one meaningful interaction between the provider and patient is an ideal opportunity for education and patient engagement in their care. If there is positive rapport between the patient and provider, the patient may be more willing to participate in their care, thus incidentally increasing their autonomy, and improving health care outcomes.

Engagement with patients and families during the admission process may communicate the need for a collaborative effort for fall prevention during an inpatient psychiatric hospitalization. Further involvement of the primary team may facilitate successful completion of a patient safety agreement. Although this project is limited in data, integrating patients and families into care planning may have a significant impact on fall reduction. Additional studies are needed to determine if a patient safety agreement improves patient care outcomes through fall reduction. More research and novel solutions are needed to identify risk factors contributing to falls in psychiatry and effective strategies to reduce them. Furthermore, increasing patient autonomy by engaging in self-care was an incidental finding, which should be evaluated further as a potential benefit.

Literature Review

Turner et al. (2020) identified psychiatric conditions such as depression, psychosis, and schizophrenia can increase fall risk. Psychotropic medications may increase fall risk as related to dose adjustment and polypharmacy, potentially amplifying the impact of medication on falls. Furthermore, neurological disorders and gait, balance, and visual deficits have been shown to be associated with fall risk among inpatients receiving psychiatric care. The 2 patients included in this project who experienced a fall event had a significant medical history of intellectual disability and ASD, which further supports a potentially elevated risk of falls in this concurrent psychiatric disorder and neurological disorder.

According to Sitdhiraksa et al (2020), psychiatric diagnoses and psychotropic medication prescriptions were significantly associated with increased risks of falls and mortality. Furthermore, the use of psychotropic medication prescriptions, hypnotics-anxiolytics, mood stabilizers, cognitive enhancing agents, antidepressants, and antipsychotics were significantly associated with falls. Despite the risk factors for falls among psychiatric inpatients, few studies have estimated how many falls occur in psychiatric care settings. This capstone project revealed 2 patients fell within the initial 2 weeks of admission, which is often when medication is being administered and titrated. The impact of medication on patient falls needs to be examined closely so fall prevention protocols can consider this as a risk factor and fall prevention strategies can be tailored appropriately in the treatment plan.

Patient centered interventions, such as a contractual agreement between provider and patient, are a widespread practice in healthcare systems. Volk et al. (2012) evaluated the effectiveness of contracts in clinical practice and noted any patient encounter can be viewed as contractual, whereby the patient and physician agree on mutually accepted responsibilities. The patient safety contract proved valuable, being all patients who received the intervention did not fall. Similarly, Avanecean et al. (2017) suggested patient-centered interventions may have the potential in reducing fall rates in acute care settings, which supports the basis of this project to engage patients in their care using a patient-centered safety agreement as a falls reduction strategy.

Zavotsky et al. (2014) found the presence of a fall safety agreement demonstrated promise for preventing serious injuries in all hospitalized patients. Moreover, Dotson (2018) found the implementation of falls education and a fall safety agreement have implications for feasibility and sustainability as fall prevention interventions for hospitalized patients, considering there were no fall events reported for the intervention group. Similar results were revealed in this capstone project, being that patients who received the intervention and completed a patient safety agreement did not experience a fall event.

Bargmann & Brundrett (2020) found effective education and adherence to fall prevention measures in both nursing staff and patient populations were a vital component of fall prevention and patient safety. This supports the dual accountability of a patient safety agreement since both parties are required to participate to establish a successful agreement. Fall prevention protocols are beneficial only if consistently and thoroughly implemented.

Nicolas et al. (2016) identified the benefits of a multi-component fall prevention protocol, with a patient safety contract, to reduce falls. This capstone project, though limited in data, revealed a similar outcome in that the patients who completed a fall contract did not experience a fall event. Patient safety agreements, among other fall prevention strategies, heighten awareness and vigilance about fall prevention. Similarly, Vonnes & Wolf (2017) identified the value in patient safety agreements for fall prevention as evident in decreased fall rates after implementation of the fall agreement. Though fall rates did not decrease throughout this project's intervention period, there were no falls recorded for the intervention group. A longer implementation period, along with increased staff compliance, may prove to be beneficial. Incorporating patients and families in discussions related to fall risk and prevention increases collaborative communication, while empowering patients and families to become partners in reduction, and motivating patients to engage in individualized interventions to effectively reduce falls.

Rochon & Salazar (2019) examined the interaction between nurses and patients to reduce falls by involving patients in their care. The nurses were provided with a script to enlist the patient’s participation in the program, similarly to this capstone project. Alternatively, patients received an education card, in place of the agreement used in this project, to supplement education. Fall rates decreased during the intervention period, and average length of stay

decreased by 17%, which supports the feasibility of involving RNs in the process to execute a fall reduction patient safety agreement. The value of consistent education through scripting may also be beneficial in decreasing fall events.

AACN Essentials of Doctoral Education for Advanced Practice Nursing

The American Association of College of Nursing (AACN) provides a national voice for nursing education through The Essentials of Doctoral Education for Advanced Practice Nursing to ensure the highest standard for DNP educational programs (Carter, 2011). While this capstone project supported several competencies outlined by The Essentials, most notably, this project promoted competencies 2.5j, which focuses on the development of evidence-based interventions to improve patient outcomes and safety, and 2.6g, which focuses on promoting the delivery of care that supports practice at the full scope of education. Patient education is a vital component of high-quality care for all healthcare providers. Involving NPs in fall prevention education allowed for delivery of care at the full scope of education, which was not a routine practice for NPs within the project organization. Moreover, the intervention for this project utilized the limited literature available to guide the development of a patient safety agreement to improve patient safety and care outcomes during an inpatient psychiatric admission.

Role of DNP in Capstone

Doctorally prepared nurses have a responsibility to continue to advance the nursing profession through research, leadership, education, and innovation. Gaps in healthcare must be identified and mitigated to optimize health cane outcomes for our patients. It is our duty to ensure health equity and healthcare access for all. Collaboration is essential to high-quality care and the advancement of medicine and nursing. Quality improvement projects such as this

capstone project lay the foundation for future research and positive changes in healthcare to provide safe, quality care for all patients.

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Appendix A

Table of Evidence

Citation Author/Year	Title	Purpose	Research Design (include tools) and Sample Size Location	Key Findings	Recommendations/Implications	Level of Evidence
Avanecean et al., (2017).	Effectiveness of patient-centered interventions on falls in the acute care setting compared to usual care: a systematic review.	Evaluate effectiveness of patient-centered interventions on falls in the acute care setting.	Systematic Review n=5	5 RCTs 3/5 studies demonstrated statistically significant reductions in fall rates ($p < 0.04$) while two studies showed no difference in fall rates between groups ($p > 0.5$). In 3 studies that demonstrated reduced fall rates, personalized care plans and patient-centered education based on patients' fall risk results were utilized. 3 studies measured secondary outcome of fall-related injuries; however, results demonstrated no difference in fall-related injuries between groups ($p > 0.5$).	Evidence indicates patient-centered interventions in addition to tailored patient education may have potential to reduce falls and fall rates in acute care hospitals. Limited high quality evidence demonstrating effectiveness of patient-centered fall prevention interventions, so novel solutions are urgently needed and warrant more rigorous, larger scale randomized trials for more robust estimates of effect.	I
Bargmann, & Brundrett, (2020).	Implementation of a multicomponent fall prevention program: contracting with patients for fall safety.	Determine if the implementation of a patient fall safety agreement in combination with an existing evidence-based fall prevention	Evidence-based practice project n= 26	During the first 4 months, the fall rate decreased by 55% and staff compliance with interventions for high fall risk patients increased to 89%. To achieve added compliance, the unit implemented an incentive program, which resulted in the	Patient fall safety agreements facilitate a dialogue among staff and patients as well as encourage patients to take ownership of their own care. They improve the safety of patients and create a collaborative environment for	VI

		bundle reduces the number of falls.	Level 1 military trauma center	increased adherence to the fall risk interventions. The unit experienced 87 and 88 consecutive fall-free days, which was the longest consecutive days since May 2015.	nurses to conduct safe, quality patient care.	
Dotson (2018).	The effect of fall prevention education that Includes a fall safety agreement on fall incident rates.	Implement evidence-based fall prevention education that includes the use of a fall safety agreement to decrease fall rates.	Evidence-based practice project *n*=37 180 bed, not-for- profit hospital, which is a satellite facility of a large academic medical center	Results indicate the clinical value of utilizing a fall safety agreement and decreasing incidents of falls.	The implementation of falls education and a fall safety agreement have implications for the feasibility and sustainability as fall prevention interventions for hospitalized patients.	VI
Nicolas et al., (2016).	Fall prevention: A contract with patients and families.	To reduce the falls incidence, we participated as one of the pilot sites for The Joint Commission Center for Transforming Healthcare's (CTH) project called Preventing Falls	Case study *n*= 90 Community Medical Center (CMC) is a 500-bed hospital in Toms River, New Jersey.	Since joining TST two units have consistently trended downward in falls incidence.	We believe our reduction in falls results from the floor mats* and other prevention tools, such as color coding, family brochure, hourly rounding, and contract, which in turn have heightened awareness and vigilance about fall prevention**.**	VI

		Targeted Solutions Tool (TST).				
Rochon & Salazar, (2019)	Partnering with the Patient to reduce falls in a medical-surgical Unit	Describes process of implementing and developing a falls prevention program aimed at decreasing falls and improving patient safety by including patients in their care. A falls prevention program was designed and evaluated for effectiveness using the plan, do, study, act (PDSA) model. The program involved nurses partnering with the patient to reduce falls.	Study *n*=23 Federal hospital in South Texas	The results of the intervention revealed that the falls rate decreased 71% from 8.06 to 3.18, the average number of falls decreased from 4 to 1.7, and the average length of stay decreased 17% from 2.84 to 2.39.	Authors concluded 2 consecutive months without falls supports the positive impact of the program in preventing falls when compared to another comparable unit without the program.	VI
Volk et al., (2012)	Contracts with patients in clinical practice	The effectiveness of contracts in general is uncertain. A Cochrane review analyzed 30 randomized trials of contracts used in addiction, weight-control,	Systematic review *n*= 30	The results were mixed; 15 endpoints showed a benefit from contracts compared with usual care, six favored standard care, and 26 showed no difference between the groups.	Clarify terminology-written patient-physician agreements generally do not fit the usual definition of a contract. Clarify aims-for example, if the main aim is to state non-negotiable terms it would be franker to label the document an acknowledgment of clinical policies. Treat the contract as part of a therapeutic process, a standard form	I

		and medication-adherence settings. Endpoints included processes, such as adherence to treatment, and targets, such as blood pressure.			contract is one thing, and helping patients set and meet goals is another. This is the fundamental principle behind motivational interviewing, a technique with strong empirical support. Patients should be given resources and assistance to meet their goals.	
Vonnes & Wolf, (2017).	Fall risk and prevention agreement: Engaging patients and families with a partnership for patient safety.	Explore if initiation of a Fall Prevention Agreement between the nursing team and older adults being admitted to medical oncology units would reduce the incidence of falls and the incidence of falls with injury.	Evidence-based project *n*=23 NCI Comprehensive Cancer Center with Magnet Designation, located on the Florida Gulf Coast	Fall and fall injuries rates were compared 2 quarters prior to implementation of the fall agreement and 8 quarters post implementation. Falls and fall injuries on the medical oncology unit had an overall reduction of 37% and 58.6%, respectively.	A robust fall prevention standard does not ensure care team participation in all elements to reduce fall occurrence. Incorporating patients and families in discussions related to fall risk and prevention is consistent with collaborative communication. The Joint Commission and the Centers for Medicare and Medicaid Services in 2002 encouraged patients and family participation in the acute care experience to promote safety. Engagement with patients and families during the admission process will hopefully communicate the need for a collaborative effort for fall prevention during the hospitalization. Integrating patients and families into care planning may have a significant impact in reducing falls in the 'moderate' risk patient.	VI

Zavotsky et al., (2014).	Fall safety agreement. A new twist on education in the hospitalized older adult.	Further explore falls that occur in the elderly individuals (965 years) in an academic medical center. This was done through secondary analysis of a preexisting falls database.	Retrospective, quantitative, exploratory descriptive study *n*=696 Academically affiliated, 4-time American Nurses Credentialing Center Magnet-recognized, and level 1 trauma center located in an urban setting.	Overall, results showed very little statistically significant differences in falls between the 2 age groups, although there was a statistically significant relationship between the presence of a fall safety agreement and fall injury severity.	This study suggests that providing appropriate structured fall education, in the form of a safety agreement, regardless of age, may reduce the degree of injury sustained.	VI

Appendix B

IRB Application and Approval

DOMINICAN UNIVERSITY
INSTITUTIONAL REVIEW BOARD
Exempt Application

Instructions:

- Researchers are encouraged to review the full exempt qualifications here at the HHS: Exemptions (2018 Requirements) | HHS.gov
- A full set of instructions accompanying this form is available online at this site Institutional Review Board - Dominican University (duny.edu)
- Mark as many corresponding boxes as necessary next to the criteria that reflects the principles that exempt your research from IRB review.
- Complete, **print & sign this form,** along with the Ethics Training Certificate (see link at IRB website above), then forward this form with your training certificate and any relevant other documents to the IRB. An electronic copy may be sent provided it has an original signature (i.e., scan your signed document & email it). Otherwise forward 2 hard copies to the chair (see full instructions mentioned above for IRB address).

☐§46.104(d) (1)
Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. Examples include:

a. teaching techniques
b. curricula
c. classroom management

☐§46.104(d)(2)
Research using educational tests (cognitive, diagnostic, aptitude, achievement), surveys, interviews or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

(i) The information obtained is recorded by the investigator in a way the identity of the subjects cannot be ascertained.
(ii) Any disclosure of the human subjects' responses outside the research would not place the subjects at risk of criminal or civil liability or could be damaging to the subjects' financial standing, employability, educational advancement or reputation; or
(iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

■§46.104(d)(3)
(i) Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection and at least one of the following criteria is met:
(A) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot be readily ascertained;
(B) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to their financial standing, employability, educational advancement or reputation; or

Exempt App 11-13-2021 Protected.docx

Implementation of a Patient-Centered Safety Agreement as a Falls Prevention Strategy for Inpatient Psychiatric Patients

Study Title

Megan Schmidt, RN, FNP-BC		9-14-23
Researcher's Name, Title	Signature	Date
Dr. Polowczyk	Barbara Polowczyk	9/14/23
Faculty Advisor Name, Title	Signature	Date

845-499-9719

Researcher's Phone Number

megs0108@gmail.com

Researcher's Email and/or Mailing Address

BRIEF DESCRIPTION OF RESEARCH SUPPORTING EXEMPT CLAIM (250 words or less)

The aim of this capstone project is to assess the effect of a patient-centered safety agreement on fall prevention in an inpatient psychiatric population. Patient falls are the most common adverse events reported in hospitals, resulting in approximately 250,000 injuries and up to 11,000 deaths each year. The incidence of falls on psychiatric units is more than threefold that of general medical units. Falls in psychiatric inpatients is a crucial problem that is preventable.

Patients will be empowered to participate in their care, thus supporting their autonomy, with one-to-one nurse to patient education regarding fall risk factors specific to individuals with psychiatric illness and strategies that may prevent fall events. Patients will be asked to verbally agree to participation in fall prevention strategies during the admission process. Fall prevention patient education is currently provided by nursing staff on admission using the Fall TIPS Toolkit, and as needed, if there is a change in status or if a fall event occurs. Patients are asked to verbalize their understanding of the fall prevention education provided. The MORSE fall risk assessment tool is used by RN's twice daily to assess fall risk and identify a change in status.

Data will be collected from the organizations Patient Falls Dashboard, which does not include identifiable patient or human subject information. The data is an overall snapshot of the falls rates among all campuses within the organization.

This box for IRB use ONLY.

Exempt ☐ Not Exempt ☐

Reviewer's Signature and Date

Exempt App 11-13-2021 Protected.docx

Fwd: IRB Application 2023-0911-01

MS Megan Schmidt1
To: Megan Schmidt <mes9048@nyp.org>

Sent from my iPhone

Begin forwarded message:

From: Institutional Review Board <IRB@duny.edu>
Date: September 17, 2023 at 8:04:48 PM EDT
To: Megan Schmidt1 <Megan.Schmidt1@dc.edu>
Cc: Lisa Connolly <Lisa.Connolly@duny.edu>, Barbara Polowczyk <Barbara.Polowczyk@duny.edu>
Subject: IRB Application 2023-0911-01

Hi Megan,

Please view this email as an official response to your Exempt IRB application entitled "Implementation of a Patient Safety Agreement to Prevent Falls on an Inpatient Unit", our IRB # 2023-0911-01.

After review, we have decided this study does not meet the conditions to be considered Human Subjects Research. It would appear to be a program change/evaluation.

Feel free to contact us if you have any further questions.

Regards,
Dr. Kelly Johnson

Kelly M. Johnson, Ph.D.
Associate Professor & Coordinator of Psychology
Division of Social Sciences
Subject Pool Coordinator
IRB Chair

Casey Hall, Room 18
470 Western Highway
Orangeburg, NY 10962
(845) 848-4074

DOMINICAN UNIVERSITY NEW YORK

Appendix C

Approval for Quality Improvement Project

NewYork-Presbyterian
Department of Nursing

Mary E. Quinn, DNP, RN
Senior Director
Nursing Quality and Improvement Initiatives

NewYork-Presbyterian Hospital
Institute of Nursing Excellence and Innovation
466 Lexington Avenue
11th floor Box 4P
New York, New York 10017
Meq9001@nyp.org

Date: February 1, 2024

To whom it may concern,

Megan Schmidt's DNP Scholarly Project Application to conduct a quality improvement project on "Implementation of a Patient-Centered Safety Agreement as a Falls Prevention Strategy for Inpatient Psychiatric Patients" has been reviewed and approved. NYP IRB approval is not required for this QI project. She is permitted to conduct the QI project at NYP/Westchester Behavioral Health Center – inpatient psychiatric unit.

Please note any plans to present or publish this QI work (poster, podium or abstract submission for publication) requires review and approval by the Department of Nursing – Institute of Nursing Excellence and Innovation. Specific hospital name or unit references are not permitted.
Please feel free to contact me should you need additional information.

Sincerely,

Mary E. Quinn, DNP, RN
Senior Director
Nursing Quality and Improvement Initiatives
Institute of Nursing Excellence and Innovation
NewYork-Presbyterian Hospital

Appendix D

Project summary handout

DNP CAPSTONE PROJECT-
FALL PREVENTION PATIENT AGREEMENT – 6N (7N)

Purpose:	The purpose of this capstone project is to determine whether engaging patients in a patient safety agreement, as part of a comprehensive fall prevention program, will reduce falls in an inpatient psychiatric unit.
Intervention:	NP's will educate patients on fall risk factors, fall prevention strategies, and impact of falls on hospital stay, during the admission process. The NP will ask the patient to verbally agree to utilize fall prevention strategies during their hospital stay, thus empowering the patient to participate in their care.
Date:	March 19, 2024 - May 14, 2024 (8-week period)

DETAILS

I. BACKGROUND

- The incidence of falls is three to four times greater in psychiatric units as compared to falls in general medical units.
- Falling patients in psychiatric units are younger than those in medical units.
- Falls significantly impact morbidity and mortality among psychiatric patients, affecting recovery from illness and increasing length of hospital stay and healthcare costs.
- Patient falls are the most common adverse events reported in hospitals with up to 1 million patient falls occurring each year in the US, resulting in approximately 250,000 injuries and up to 11,000 deaths.
- Operational costs for individuals who fall with serious injury are $13,316 more as compared to those without a fall. In addition, length of stay is prolonged up to 6.3 days.
- Among all inpatient falls, 30% result in physical injury
- 1 in 5 falls causes a serious injury such as broken bones or a head injury, with falls being the most common cause of traumatic brain injuries (TBI). More than 95% of hip fractures result from falling.
- Patient education by trained individuals, in conjunction with continued reassessment of the patient, including medication changes and cognitive and functional status, are a key component to fall reduction.
- Falls are preventable.

INTERVENTION

1. The Evaluation Center (EC) will notify the NP via EPIC chat when the patient is ready to be evaluated by the NP, per current protocol,
2. The NP will identify patients being admitted to target unit 6N (7N) who will receive intervention. All patients will receive intervention, regardless of level of fall risk.
3. The NP will complete the H&P, as is currently done during the admission process.

4. The intervention, which is an additional step of educating the patient on fall risk factors, fall prevention strategies, and impact of falls on hospital stay will be implemented by the NP, while completing the H&P.
5. The patient will be asked to agree to utilize fall prevention strategies as part of a care partnership during their hospital stay.
6. The NP will document the falls education and status of patient agreement in the H&P note. If a patient refuses the intervention, or it cannot be completed for other reasons, this will be documented in the H&P.
7. If the patient is too psychiatrically unstable to participate in the admission process and bypassing the EC admission process or is a direct admit to the unit for other reasons, the NP will attempt to complete the H&P for up to three days, as is current practice. The NP will attempt to complete the fall prevention intervention with each encounter to complete the H&P.
8. Once admitted to the designated unit, the RN will employ fall prevention protocols.

EDUCATION AND AGREEMENT SAMPLE AND DOCUMENTATION

- "During your hospitalization, our goal is to provide a safe environment and prevent falls. Fall risk factors may include a change in environment, mental illness, medication side effects, and dehydration. A fall can cause an injury requiring an emergency room visit or may prolong hospitalization. You can help prevent falls by:
  - Change positions slowly; dangle feet before standing
  - Stay well hydrated
  - Wear proper footwear and appropriately sized clothes,
  - Call for help if you feel dizzy and lower yourself to the ground, if possible.

  We ask that you **agree to participate in fall prevention strategies** during your hospital stay."
- Smart phrase (**MSFALLED**) (optional):
  - "**Education**

    Falls education provided. Fall risk factors, impact of falls on hospital stays, and fall prevention strategies reviewed. Patient agrees/refuses*** to participate in falls prevention strategies during this hospitalization.

    Unable to provide fall prevention education and prevention strategies due to*** (insert reason)."

CONTACT

- This capstone project is led by: Megan Schmidt, DNPc, FNP-BC, IBCLC