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# A Staff Education Program for Early Fall Detection and Fall Prevention in a Nursing Home Population

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# Walden University

College of Nursing

This is to certify that the doctoral study by

Andrew Mensah-Sowah

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

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> > Walden University 2023

## Abstract

A Staff Education Program for Early Fall Detection and Fall Prevention in a Nursing

Home Population

by

Andrew Akueteh Mensah-Sowah

MS, Walden University, 2017

BS, Mountain State University, 2010

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2023

Abstract

Residents in nursing homes have a high incidence of falls. Approximately half of the 1.6 million nursing home residents in the United States fall each year, and a 2014 report by the Office of the Inspector General found that nearly 10% of adverse events experienced by Medicare, skilled nursing facility residents were falls resulting in significant injury. Although most falls are benign and injury free, 10% to 25% result in hospital admission and fractures. Recently, a health care nursing facility in the northeastern United States recorded 70 falls, resulting in five surgeries and two fatalities. Of these 70 falls, 75% occurred at night and 25% during the day. Although the staff were using screening tools for fall assessment, the tools have not been effective, and a new method of risk assessment was determined to be necessary. The purpose of this project, therefore, was to plan, develop, and implement an educational program on fall prevention for staff in nursing homes using the analysis, design, development, implementation, and evaluation model. Twenty nursing staff (10 from the day shift and 10 from the night shift) received four hours of instruction on fall risk and prevention and how to use the Johns Hopkins Fall Risk Assessment Tool. The nurses' preintervention knowledge of fall prevention mean was 84.05% (SD = 7.976%) and their postintervention knowledge mean was 93.55% (SD = 1.777%), an increase of 13%. The mean difference of -9.50% (3.546%) was found to be statistically significant at t(19) = -11.979, p < 0.001. Summative program evaluations indicated the program was well received by participants. The educational intervention had a significant impact in improving nurses' knowledge about fall risk assessment and prevention strategies, thus promoting a positive social change.

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#### Dedication

I dedicate this project to my senior brother, Rev. Dr. Thomas Kenneth Kojo Abakah Mensah, who took care of me and my twin brother after the death of our father, Christian Adjei Mensah; I ascribe the same honor to my two beautiful children, Keke and Anyetei Mensah-Sowah, you are the fruit of my struggles, Jehovah Almighty, Elyon-Elohim, bless you as grow to fulfill your destinies. What could I have done more without your presence in my life, you are the joy of my life, seeing you every day accomplishes the vision, Keke, and Anyetei Mensah-Sowah, I love you so very much, God richly bless and keep you incessantly. I also thank my family, your encouragement, your love and all that you contributed to this journey, not forgetting my very own twin-brother, Akwetey Mensah-Sowah, we were born the same day, ninety-nine percent identical, identical gift endowed by our Creator, our struggles, our battles will soon come to end, let's keep the fire burning, "our labor would never be in vain" as the Holy script says-Amen. Praise God from whom all blessings flow, praise Him all creatures here below, Praise Him above ye Heavenly Host, Praise Father, Son, and Holy Ghost-Amen.

#### Acknowledgments

I humbly wish to express my gratitude and thanks to Dr. Pitman, who began the journey with me for her expert advice, criticism, support, patience, meetings, and kind words of encouragement during this challenging project. I am very thankful that you handed the baton to Dr. Cheryl Holly, Dr. Edna B. Hull, and Dr. Tracy D. Andrews, when you began your retirement. I am blessed with an excellent team with Dr. Cheryl Holly as the chair, I appreciate your challenging work, encouragement and scrutiny of this project with the team to complete this project. I cannot thank you enough Dr. Holly and the team for allowing yourselves to be used with your expertise to build this part of my life- this worthy purpose helping me to complete this project. I thank and appreciate Dr. Priscilla Coomson, my mentor, honestly you are the best. To you, Dr. Cheryl Holly; I am incredibly grateful that you received the baton to complete this project with me. I cannot thank you and the team enough; May the Righteous Judge reward all your good works in Jesus' name -Amen.

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#### Section 1: Nature of the Project

#### Introduction

Patient falls and fall-related injuries are serious problems in acute care hospitals, nursing homes, and rehabilitation facilities (Dadgari et al., 2020). According to the Agency for Healthcare Research & Quality (AHRQ; 2019) and the Centers for Disease Control and Prevention (CDC; 2019), between 700,000 and 1,000,000 people fall in health care facilities annually in the United States alone. These falls result in approximately 250,000 injuries and up to 11,000 deaths (AHRQ, 2019; CDC, 2019). About 2% of hospitalized patients fall at least once during their stay, with 1 in 4 of these falls resulting in injury, and about 10% resulting in significant injury (Klinkenberg & Potter, 2017).

The risk of falling is even greater for nursing home patients due to an unfamiliar environment, new medications, and lingering symptoms of acute illness. In general, the number of falls and falls with injury can be reduced with more diligent assessment of patients at risk with initiation of preventive measures (Said et al, 2017). According to the Joint Commission's (TJC; 2015) database, daily falls in the United States are among the most frequently reported safety incidents in hospitals and other health care facilities (Dadgari et al., 2020). Preventing falls in health care facilities can be difficult and complex at times if the facility does not have the necessary tools for assessing risks. Managing difficult patients who are at risk of falling without the availability of fall risk screening tools can be challenging.

Research reports have indicated that approximately 30% of falls can be prevented (Klinkenberg & Potter, 2017). A standardized fall risk tool can be instrumental in identifying high-risk patients and help in the prevention or reduction of falls, especially in in-patient facilities. Fall prevention involves managing a patient's underlying fall risk factors and optimizing a facility's physical design and environment. Effective fall prevention tools, like the Johns Hopkins Fall Risk Assessment Tool (JHFRAT), have been found not only to identify fall risk patients but also to prevent and reduce falls. The JHFRAT was developed as part of an evidence-based fall safety initiative (Florence et al., 2018). According to Poe (2018), the JHFRAT continues to be used in hundreds of hospitals worldwide. The Johns Hopkins Hospital used the JHFRAT to reduce their fall rate by 21% and fall injury rate by 51% (Poe et al., 2018). This tool has been found to reduce falls resulting in injuries and deaths, standardize fall risk assessment, and improve patient safety (Costello & Edelstein, 2008). The purpose of the current project was to plan, develop, and implement an educational program on fall prevention in nursing homes using the analysis, design, development, implementation, and evaluation (ADDIE) model. Nursing staff were also instructed on the use of the JHFRAT as part of the program.

#### **Problem Statement**

The staff at the project site health care nursing facility in the northeastern United States have used screening tools for fall assessment that have not been effective because the staff lacked the knowledge and skills that would have helped facilitate the early detection of risk for anticipated falls in the patients. Recently, this facility, with 150 residents and 10 permanent staff nurses on each shift, recorded 70 falls resulting in five surgeries and two fatalities. Increasing nurses' knowledge regarding fall prevention and enhancing their fall assessment skills using the JHFRAT tool can equip the staff to screen and identify residents at high risk for falling. With the use of the JHFRAT, patients with a high risk of falling in this facility could be identified on the first day of their admission. The management of this facility expressed a keen interest and support for this project because it would provide fall prevention education to their nursing and rehabilitation staff. The fall prevention tool (i.e., the JHFRAT) would be an asset in this facility because it would equip the staff with the needed skills to help facilitate the early detection of risk for anticipated falls among patients. Employing the JHFRAT would not only help identify patients with a high risk of falling but would also prevent and reduce falls in this facility. The gap in nursing practice was the lack of a comprehensive fall-prevention program with screening tools in the project site long-term care facility that had experienced high fall rates among residents.

#### **Purpose Statement**

Given the high fall rate, with and without injury, at the project site, the purpose of this project was to plan, develop and implement an educational program for nursing staff on fall assessment and prevention for the older nursing home residents. I used the ADDIE model and the Walden Staff Education manual to guide the development of the program, which included instructions on the use of the JHFRAT to assess newly admitted residents for risk of falling. Although the staff members at the project site used risk assessment tools, the tools had not been effective because fall rates had risen at the facility.

The gap in nursing practice was the lack of a comprehensive fall-prevention program with screening tools in the project site long-term care facility in the northeastern United States that had experienced high fall rates among residents, some resulting in injury and fatality. Staff nurses have the most significant influence in this nursing home facility's fall prevention and reduction because these nurses offer round-the-clock patient services, medication administration, and general nursing care. Nurses monitor both fall risk and non-fall risk patients in the nursing home, reporting condition changes and interacting with patients' family members in the most consistent manner (King et al., 2018). Successful fall prevention programs become effective in nursing homes when nurses are educated appropriately using an effective and appropriate fall risk assessment tool, including multifactorial and multicomponent intervention strategies, to detect and reduce falls that could be prevented (King et al., 2018). For the purposes of this project, the nursing staff were instructed on the use of the JHFRAT to identify those patients at high risk for falls and to implement appropriate prevention strategies. Patient falls are a nurse-sensitive quality indicator; therefore, the nursing staff assumes responsibility for falls in this facility. King et al. (2018) argued that falls create a sense of guilt, especially when the fall could have been detected and/or prevented if the right fall risk assessment tool was used.

#### **Nature of the Doctoral Project**

This project was a staff development program to increase the staff's knowledge and skills on fall prevention and the use of an evidence-based fall risk assessment tool to detect, reduce, and prevent falls. The implementation and effective application of the JHFRAT to detect and prevent falls in the project site nursing home facility is a safety provision for individualized, person-centered care that can detect, decrease, and prevent falls. Use of this tool, when coupled with an appropriate assessment method and skills, could drastically reduce falls (CDC, 2015). According to the CDC (2019), researchers have reported that using an evidence-based multidimensional approach, such as a fall-prevention program, has helped many health care facilities reduce their fall rates.

I obtained the evidence to develop the program through a search of following databases accessible through the Walden University Library: CINAHL Complete, Cochran Library, EBSCO Information Services, and Medline. The key terms and phrases used for the search included *peer-reviewed fall-prevention in older adults, multifactorial fall-prevention, fall risk factors, fall-prevention in nursing homes, the use of vitamin D supplements in fall-prevention, systematic reviews on fall-prevention, and meta-analysis fall-prevention strategies. I summarized, organized, and presented the evidence from the journals to the project stakeholders, which included the medical director, who is the medical administrator of the facility; the director of nursing; and the nursing staff.* 

#### Significance

Patient falls and fall-related injuries are serious problems in acute care hospitals, nursing, and rehabilitation facilities (Dadgari et al., 2020). Annually, between 700,000 and 1,000,000 people in the United States fall in health care facilities, resulting in about 250,000 injuries and up to 11,000 deaths (AHRQ, 2019; CDC, 2019). About 2% of hospitalized patients fall at least once during their stay (Dadgari et al., 2020). Approximately 1 in 4 falls result in injury, with about 10% resulting in serious injury

(Klinkenberg & Potter, 2017). Preventing falls in health care facilities can be difficult and complex at times if the facility does not have the necessary tools for assessing risks. According to the CDC (2019), between 50% to 75% of nursing home residents fall each year, which is twice the rate at which other older adults fall when living outside of nursing homes. About 1,800 people living in nursing homes die from falls each year, and these residents often fall more than once, averaging about 2.6 falls per person per year (Klinkenberg & Potter, 2017). About 35% of nursing home fall injuries occur in patients who walk with difficulty (Klinkenberg & Potter, 2017). Additionally, 10% to 20% of nursing home falls result in serious injuries. Only 5% of adults over the age of 65 live in nursing homes, but nursing home residents in this age group account for 20% of all deaths from falls (CDC, 2019). Falls are a serious and often recurring issue that can have permanent mental and physical consequences (CDC, 2015).

Researchers have reported that approximately 30% of falls can be prevented (Klinkenberg & Potter, 2017). A standardized fall risk tool can be instrumental in identifying high-risk patients and help in the prevention or reduction of falls, especially in the in-patient facilities. Fall prevention involves managing a patient's underlying fall risk factors and optimizing the hospital's physical design and environment. Effective fall prevention tools, such aso the JHFRAT, have been found not only to identify fall risk patients but also to prevent and reduce falls in acute care.

The staff at project site health care nursing facility have used screening tools that have not been effective because the staff lack the knowledge and skills that would help facilitate use of the tools. With the use of the JHFRAT, patients with a high risk of falling could be identified on the very first day of their admission to the facility. The management of this facility expressed a keen interest and support for this project because it would provide fall prevention education to their nursing and rehabilitation staff. The staff education program on fall prevention and the use of a fall prevention tool (i.e., the JHFRAT) would be an asset in this facility because it would equip the staff with the needed knowledge and skills to facilitate the early detection of risk for anticipated falls in patients. Employing the JHFRAT would not only identify high fall risk patients but would also prevent and reduce falls in this facility.

This project addressed the following practice-focused question: Will a staff education program on early detection and fall prevention including the use of the JHFRAT increase the knowledge and skills of the nursing staff in a long-term care facility regarding assessing patients for prevention of falls? By providing a nursing staff education on using the JHFRAT screening tool to identify patients that are at high risk for falls, I anticipated that falls in the project site would decrease. Though the project site staff has basic knowledge regarding falls, they needed to be equipped with an effective screening tool that helps identify and prevents or reduces falls, thus promoting positive social change.

#### **Summary**

In this section, I introduced the project and described its purpose and significance. There is a gap between the theory and what is practically done in the clinical setting when it comes to early fall detection to prevent falls. According to the Canadian Institute for Health Information (2019), falls are the leading cause of accidental death as well as nonfatal and fatal injuries in the 65-year-old and above population. Falls can be prevented when the appropriate fall prevention tools are put in place. Falls predispose patients to immobility, decreased activities, fear of falling, loss of independence, injuries, and prolonged hospitalizations (Phalen et al., 2015). Falls increase the costs incurred by patients and institutions/organizations (Canadian Institute for Health Information, 2019). Annually, falls and fall-related injuries have been estimated to cost over \$30 billion (Phalen et al., 2015). Falls and related issues continue to be one of the major problems in nursing practice. With the early detection and prevention of falls at stake, nurses at all levels of care should be able to identify, prevent, and manage high fall risk patients. With the education provided in the current project, nurses will be able to effectively use interventions, like early detection of gait disturbances or problems, orthostatic hypotension checks, vision problems, medication reviews to reduce, and control preventable falls. In Section 2, I will describe the theories, concepts, and models used to guide this project; relevance to nursing practice; local context; and the role of the Doctor of Nursing practice (DNP) student and the project team.

#### Section 2: Background and Context

#### Introduction

The focused question that guided this DNP project was: Will a staff education program on early detection and fall prevention including the use of the JHFRAT increase the knowledge and skill of the nursing staff in a long-term care facility regarding assessing patients for prevention of falls? The gap in nursing practice was the lack of a comprehensive fall-prevention program with screening tools in a long-term care facility in the northeastern United States that had experienced high fall rates among residents, some resulting in injury or death. The purpose of this project was to plan, develop, and implement an educational program on fall prevention in nursing homes using the ADDIE model. Nursing staff also received instructions on how to use the JHFRAT as a part of the program.

#### **Concepts, Models, and Theories**

I used the ADDIE model, which stands for analysis, design, development, implementation, and evaluation, to guide the development of the staff education program (see Figure 1). The ADDIE model was initially created for the purpose of education and design by training developers and instructional designers to plan and create effective learning experiences and has been utilized in educational instructions (Technology Enhanced Learning, 2020). The model consists of five steps:

#### Figure 1

ADDIE Model



Reference; Debell, A. (2020). https://waterbearlearning.com/author/andrew-debell/

## Step 1: Analysis (A)

The first step involves an assessment of the gap in practice. Currently, the longterm care facility is reporting a rise in patient falls that have resulted in numerous injuries and two fatalities. Although the staff at the project site use risk assessment tools, they had not been effective because fall rates had risen. Some questions that I had to answer to assess the situation using the model were:

• Who is the audience and what are they like? The audience for this project was nursing staff members, which included individuals who were willing to learn about effective fall prevention strategies.

- What is the problem we are trying to solve? The problem was how to effectively implement fall prevention and reduction strategies to reduce falls in the nursing home population through the use of JHFRAT assessment skills.
- Why are we doing training at all? Training was conducted to address the early identification of those at risk of falls.
- What is the desired outcome of this learning experience? The desired outcome was an increase in fall prevention knowledge and strategies that was anticipated to reduce fall rates.
- What does the audience already know? Staff currently use an ineffective system for fall risk assessment and have some knowledge of fall prevention strategies.
- What tools are best to deliver this type of information? Evidence-based information on fall prevention and strategies, including the use of the JHFRAT screening tool.
- When does this need to be delivered? There was an immediate need for the delivery of this project to strategize how falls can be prevented through assessment.

#### Step 2: Design (D)

The design phase involved developing learning objectives, lesson planning, and assessment tools. The pre- and posttest can be found in Appendix A.

#### Step 3: Development (D)

Step 3 involved the creation of the content and materials used in the program. For this program, I developed a lesson plan, pre- and posttest, and program evaluation form (see Appendix A).

#### Step 4: Implementation (I)

Step 4 involved the actual implementation of the program. The program was delivered in three 1-hour sessions, which included practice using the JHFRAT.

#### **Step 5: Evaluation (E)**

During Step 5, I evaluated the nurses' learning experiences using a pre- and posttest on fall prevention and evaluated whether the program had increased the knowledge of the nurses in the facility who attended the program. The aim of this project was to provide the project site long-term care facility nursing staff members with the knowledge and skills to use a fall risk assessment tool, thereby enabling them to identify patients with a high risk of falling. The specific audience for this project was nursing staff members who were both licensed and unlicensed (i.e., new graduate) nurses.

Table 1 provides a detailed outline of what the nursing staff learned in each 1hour staff session. I presented the JHFRAT presented and allowed the staff to practice using it. The origins of the JHFRAT were also taught in the 1-hour sessions. Table 1 also contains information on the content and policies on falls.

# Table 1

Session	Objectives	Content	Format	Evaluation
1	Pretest and explanation of the risk factors and causes of falls in nursing home residents	Epidemiology of falls in the elderly Incidence Prevalence Risk factors Consequences	1 hour of lecture, discussion, and PowerPoint presentation	Posttest questions
2	Describe the current practice of fall assessment	Current practice and policies	1 hour of lecture, discussion, and PowerPoint presentation	Posttest questions
3	Describe the development and use of the JHFRAT in a long-term care setting as well as how the JHFRAT is used in early detection of those at risk for falling in long-term care facilities	The use of the JHFRAT in long-term care	1 hour of lecture, discussion, and PowerPoint presentation	Posttest questions
4	Practice using the JHFRAT	Practice	1-hour demonstration	Return demonstration

A Staff Program for Early Fall Detection and Prevention

## **Relevance to Nursing Practice**

The role of nurses varies based on staffing configurations and management decisions, but generally, the nursing role in fall prevention includes examining the intrinsic and extrinsic risk factors coupled with precipitating causes of a fall so that falls can be prevented (see Figure 2). Completing and documenting patient fall risk screening and assessment is one of the major interventions and nursing activities leading to fall prevention. Advancing their education and expanding their knowledge helps nurses enhance the skills essential in making better health care decisions. The outcome is that it helps nurses achieve better patient outcomes, optimize operational efficiency, and reduce costs. Enhanced knowledge and skills in fall prevention will make nurses more familiar with items that are not commonly included on fall risk tools, such as vertigo and vestibular dysfunction, vision, foot problems, balance, and cognitive changes. This education will have implications for practice and education to suggest a need to include important factors related to falls in education and interventions. A nurse's role includes documenting patient-specific fall prevention practices and monitoring the patient's medical condition for any changes. Additional roles of the nurse include reporting falls to the physician and obtaining medical orders from the physician as needed. Educating the patient and family on fall prevention and obtaining the necessary supplies (e.g., cane, walker, bed alarm, etc.) are additional roles of the nurse to prevent patient falls.

#### Figure 2

Intrinsic and Extrinsic Fall Risk Factors



Nursing aides also play a part in preventing patient falls by evaluating the patient's environment for safety during patient care tasks, performing care plan tasks, and reporting when tasks are complete and any changes in a patient's medical condition to the nurse (AHRQ, 2019).

#### Local Background and Context

The staff at the project site health care nursing facility in the northeastern United States have used screening tools that have not been effective because they lacked the skills that would facilitate early detection of risks for anticipated falls in patients. In this private facility of about 150 residents, with 10 permanent staff nurses on each shift, the patient falls must be curtailed because the facility recently recorded 70 falls, resulting in five surgeries and two fatalities. The JHFRAT can help equip the staff with screening education and knowledge about fall prevention to promote safety in this facility. With the use of the JHFRAT, patients with a high risk of falling could be identified on the very first day of their admission to the facility. The management of this facility expressed a keen interest and support for this project because it could provide fall prevention education to their nursing and rehabilitation staff. The JHFRAT would be an asset to this facility because it would equip the staff with the needed skills to help facilitate the early detection of risk for anticipated falls in the patients. Employing the JHFRAT would not only help identify high fall risk patients but would also prevent and reduce falls in this facility. The gap in nursing practice was the lack of a comprehensive fall-prevention program with screening tools in this long-term care facility that has experienced high fall rates among residents.

#### **Role of the DNP Student**

This DNP project, at its core, was a supervised, high-level, problem-solving process. I identified a practice problem; assessed the situation; and used evidence to develop, implement, and evaluate outcomes and processes. Moreover, I served as an educator to the participants who would implement the prevention strategies discussed. DNP students are uniquely poised to impact various aspects of health and health care systems through implementation of their DNP project. DNP graduates lead quality improvement initiatives across systems and report that the experience and skills obtained through their projects lend themselves to collaboration and partnerships beyond the practice setting. Graduates also publish and present the outcomes of their DNP projects to audiences beyond their clinical focus, maximizing the impact across the health care spectrum.

#### **Role of the Project Team**

The project team was comprised of an experienced nursing educator, an administrator, an unit manager, a physical therapist, and a secretary. The aim of the team was to complete a project addressing the following practice-focused question: Will a staff education program on early detection and fall prevention including the use of the JHFRAT increase the knowledge and skill of the nursing staff in a long-term care facility regarding assessing patients for prevention of falls? The nurse educator instructed staff using the format and content of the training. In addition, the nurse educator assisted in the training sessions and coordination of staff attendance to ensure the materials taught aligned with the facility's policies and vision. The influence of the project team contributed to the success of the project. The support for the project at the project site was excellent because of the team's expertise. The administrator took initiative and stayed on top of the affairs to ensure that the project was a success. The administrator advised me on the project design, process, implementation; reviewed the educational materials to determine validity; and provided appropriate consent for the project to be conducted on site. The nurse educator oversaw all educational materials and tools to make sure the goals of the staff education program were met. The unit manager was responsible for the dissemination of information about the class. Brochures were printed for the unit staff to voluntarily participate in the class. The physical therapist was

responsible for assisting in the development of the education project. The therapist provided demonstrations of proper methods for helping patients to avoid falls. For example, the therapist assisted in educating unit staff on the in-patient transfer from a bed to a chair or a bed to a wheelchair.

The DNP project team was responsible for guiding me in the implementation of the DNP project; critiquing the readiness of the project for presentation; mentoring me during the implementation and evaluation phases of the project; and evaluating my performance on the written proposal presentation, final project journal article, and the project poster or slide presentation.

#### Summary

In this section, I discussed the local context and background of the problem and described my role and the roles of the various team members in the project. The various team members involved in the project executed their roles effectively. Every team member played their part in a manner that complemented each other's role, making the work remarkably effective. The thoughtful and deliberate mentorship role of the team members was the key to project success. In fact, projects cannot be completed in isolation or without the support of these mentors and everyone who has been assigned a part of the project. DNP project mentorship benefits everyone by continuously propelling health care and the nursing profession forward.

My progression through the project process was monitored by the project team during scheduled meetings at least once each semester, during the on-campus intensives, and via Zoom for Business or other web conferencing formats as agreed upon by me and the project team leader. I was responsible for scheduling these meetings and advised to document the agenda, actions, and target dates. The project team leaders and I agreed upon a project timeline to reflect the expectations and due dates. The next section includes a discussion of the collection and analysis of data as well as the sources of evidence. Section 3: Collection and Analysis of Evidence

#### Introduction

The purpose of this project was to plan, develop, and implement a staff education program on fall prevention and the use of the JHFRAT for identifying nursing home residents at high risk of falling. I used a pre- and posttest study design in this DNP project. This design was selected to indicate whether the staff education program increased knowledge in fall prevention.

#### **Practice-Focused Question**

The practice-focused question that guided this DNP project was: Will a staff education program on early detection and fall prevention including the use of the JHFRAT increase the knowledge and skills of the nursing staff in a long-term care facility regarding assessing patients for prevention of falls?

According to the National Institute on Aging (2020), a patient fall is described as an unintentional descent to the ground, which can be with or without injury to the patient as well as being fatal or not. Given the high fall rate, both with and without injury, at the project site, the purpose of this project is to plan, develop and implement an educational program for nursing staff on fall assessment and prevention for the elderly nursing home residents. I used the ADDIE model and the Walden Staff Education manual to guide the development of the program. The program included instructions on the use of the JHFRAT to assess newly admitted residents for risk of falling. Although the staff at the project site did use risk assessment tools, they had not been effective because fall rates had risen.

#### **Sources of Evidence**

An initial review of the literature on the topic produced multiple sources of evidence validating the existence of the practice problem and justifying the need for this DNP project. For this project, I reviewed scholarly and professional sources, including professional and multidisciplinary journals, databases, and published manuscripts. Through the Walden University Library, I searched the PubMED and CINHAL databases to find relevant information published within the last 5 years to develop the educational program on fall prevention and safety to be conducted at the practice site.

According to Bamgbade and Dearmon (2016), providing educational training to increase fall risk awareness among staff in organizations is vital to creating a culture of safety that will ultimately produce ongoing, optimal patient health outcomes. The CDC (2019) also asserted that residents in nursing facilities are more prone to fall than those living in the community. Deaths from falls among residents who live in nursing homes and who are residents in long-term care facilities are also more frequent, making this program an important aspect of a culture of safety (CDC, 2019).

In summary, an initial review of the literature showed that the need for identifying and preventing falls in long-term care, like nursing homes, through nursing education is of great importance (see Leverenz & Lape, 2018). The use of multifactorial interventions that are directed at defined risk factors were identified as more effective than single interventions (Leverenz & Lape, 2018). Educating nurses on risk-reducing approaches could help prevent falls in clinical settings. The lack of educating nurses with specific individualized interventions in identifying and preventing fall risk patients and residents, especially in nursing homes, is becoming a challenge to new practitioners and nursing as a profession. The lack of appropriate fall risk assessment tools could lead to worse outcomes in identifying and preventing falls that are preventable in nursing homes.

#### **Evidence Generated for the Doctorate Project**

In the following subsections, I discuss the evidence and data generated for this DNP project regarding the participants involved in the project, procedures that were used to implement the staff education program, and the protection of the participants and the host organization. More precisely, using the ADDIE model as a guide, I describe the steps for conducting this DNP project in the Procedure subsection, including the planning, implementation, and evaluation of the education program.

#### **Participants**

Individuals contributing evidence to address the practice-focused question for this project included nurses and staff members of the host organization. I selected the employees of the long-term care facility as participants because they are direct caregivers of the residents admitted to the facility. As caregivers, these individuals participate in the admission of residents, assessing residents for falls, and implementing measures to prevent falls.

#### **Procedures**

I collected pre- and postintervention data to determine any increase in the nurses' knowledge and skills. The posttest was conducted after the lecture to show whether the participants understood what was taught.

Participants were given an evaluation survey following completion of the program to determine its success. The questions had yes and no answers to determine whether participants understood and benefitted from the program comprehension. During the educational presentation, RNs and CNAs/GNAs from each 12-hour shift period who had firsthand experience or knowledge with patient falls were asked to share their experiences with the use of fall risk identification tools that did not work previously and why as a means of learning for the rest of the group. All information was treated confidentially for educational purposes to address the practice-focused question.

I conducted anonymous chart reviews for fall risk patients during the past 6 months. Facility fall risk data were also reviewed for educational purposes to address the focused question. De-identified information collected included patient age, mobility status, circumstances of the fall, and any injuries sustained. This information provided discussion points for the identification and safety of those who may be vulnerable to falling. Evidence-based practice (EBP) tools and the application of the JHFRAT were used to modify or replace those tools which had not worked.

#### Protections

This was a low-risk staff education project because there was no patient involvement. Walden University's Institutional Review Board (IRB) and the practice site approved the project prior to beginning data collection. I followed the processes for the facility and Walden University IRB for authorization as described by the IRB guidelines. Walden University's ethical guidelines for staff education, confidentiality, and data collection, which includes maintaining a file to keep all correspondence that pertains to this project, was followed. The information from the participants was anonymously collected and reported, and no names will be used.

#### Analysis and Synthesis

I analyzed the data obtained from the study participants using descriptive statistics to summarize the basic features of the results. A posttest was used to show whether the nursing education program resulted in a significant increase in participants' knowledge. I used a *p* value of 0.05 to determine significance. Demographic data were collected at the beginning of the project and used to describe the participants. Findings were displayed in an aggregate format using appropriate tables and charts.

#### Summary

In this section, I discussed the design and procedures of the project. Before implementation of this project, I obtained approval from the facility and the Walden University IRB. This was a low-risk educational program for nursing staff because there was no patient involvement. The project's target participants were the nursing staff at the project site, including unlicensed, new graduate staff. The program was conducted over 4 hours in 1-hour intervals. A certificate of completion was issued to all participant nurses. The participants' knowledge of nursing home fall prevention was measured before the beginning of the project and compared with their posttest results at the end of the project. Findings generated from the project will be reported in both narrative and descriptive format in the following section. Section 4: Findings and Recommendations

#### Introduction

The project site facility is located in the state of Maryland and has a group home, nursing home, and rehabilitation treatment facility that serves an average population of 150 residents. When the facility is at full capacity, it can serve up to 200 residents. The nursing home has approximately 100 residents with a ratio of 1 woman to every 3 men. In the nursing home, 45% of the residents are between 20 and 50 years old, and 55% of the residents are 65 years of age or older. In the nursing home, there is approximately 1 nurse for every 10 patients during each shift. Within the group home, which serves mainly young, male adults, approximately half of the residents are physically and/or mentally challenged.

Throughout this project's duration, management staff members were supportive of my desire to educate the facility nurses about fall prevention methods. According to the nurses I spoke with, they were unaware of the JHFRAT and its benefits. The tool was introduced during the third session of this DNP project to aid in reducing the average number of patient falls. Before this project was conducted, approximately 70 falls had occurred during the previous years, thereby reinforcing this project's importance and need.

Before the implementation of this project, the facility utilized the Falls Prevention Self-Assessment Worksheet, which was created by the AHRQ. The worksheet was used to identify high fall risk patients, using information from multiple sources (e.g., general fall assessment) to aid in preventing falls. According to the nursing staff, the Falls Prevention Self-Assessment Worksheet did not help to prevent or reduce falls.

Before the implementation of this DNP project, management staff members conducted several educational training sessions about falls and the importance of using fall assessment tools, which did not result in fall reduction. Before this project, nursing staff members and rehabilitation staff were unaware of clinical best practice guidelines related to fall prevention and fall risk identification. During an interview with several licensed nursing staff at the project site, I found that the facility was not following the latest evidence-based fall prevention guidelines. It is important to note that the facility had not been using an electronic medical record for falls prevention previously, which was rectified during this project.

#### **Findings and Implications**

I found the project site was not utilizing a current, EBP instrument to identify high fall risk patients and prevent falls. Over a period of 3–5 years, nursing staff members recorded an average of 25 falls per year. The purpose of this DNP project was to bridge this gap in nursing practice by educating nursing staff about the JHFRAT and addressing early detection through assessment at the time of admission. The purpose of the educational training session was to improve the practical knowledge of project site participants and ensure that a timely, current, evidence-based instrument was used to aid in fall identification and prevention.

This DNP project was guided by the following practice-focused question: Will a staff education program using the JHFRAT for early detection and fall prevention

increase the knowledge of the nursing staff in this facility regarding assessing patients for prevention of falls? To address the project question, nursing staff members were educated about the use of the JHFRAT and how it could assist providers in identifying patients who are at a high risk for falls. Before this project was implemented, the nursing staff team, comprised of both licensed and unlicensed, had basic fall-related knowledge. The nursing staff members needed to be equipped with a current, effective, evidence-based screening tool that could aid them in identifying and preventing falls. To assess the fall knowledge of nursing staff members, I employed a pre- and posttest study design to determine the knowledge levels among nursing staff members regarding falls and fall prevention before and after the training was conducted. Overall, the participants well received the program.

Twenty participants took part in this project, all of whom identified as female (N = 20, 100.0%). There were five (25.0%) participants who had less than 5 years of work experience and 15 (75.0%) participants who had more than 10 years of work experience. There were 10 (50.0%) participants who worked the day shift and 10 (50.0%) participants who worked the night shift. For falls, 75.0% of recorded falls happened at night and 25.0% happened during the day.

As seen in Table 3, the participants' preintervention knowledge of fall prevention mean was 84.05% (SD = 7.976%) and their postintervention knowledge of fall prevention mean was 93.55% (SD = 1.777%), an increase in knowledge of 13%. The mean difference of -9.50% (3.546%) was found to be statistically significant at t (19) = -11.979, p < 0.001 (see Table 4). This mean difference finding confirms that the intervention had a significant impact in raising the participants' mean scores postintervention (Figure 3). Table 5 depicts the positive review of the program by the 20 participants. All participants rated the program very highly.

# Table 2

Paired Sample Statistics for Knowledge of Fall Prevention

	М	Ν	SD
Preintervention knowledge of fall	84.05%	20	7.967%
prevention			
Postintervention knowledge of fall	93.55%	20	1.777%
prevention			

## Table 3

Paired Samples t Test for Knowledge of Fall Prevention

	М	SD	t	df	р
Knowledge of fall prevention	-9.50%	3.546%	-11.979	19	< 0.001

# Figure 3

Pre- and Post knowledge of Fall Prevention in Mean Percent Correct



# Table 4

Summative	Program	Eval	luation
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Question	Yes		No
1. Was the learning objective and	20		0
outcome adequately presented?			
2. Was the learning outcome met?	20		0
3. Was the delivery method effective?	20		0
Are there aspects that could have been done differently?	0		20
4. Which element of the presentation		18-JHFRAT	
did you like the most?		2-General program	
5. Were you satisfied with the quality	20		0
of the content?			
6. Please indicate your satisfaction with		20-Satisfied	
the presenter/speaker.			
7. How did you feel about the content		20-Excellent	
being presented? Was it relevant to		20-Relevant	
patient fall prevention?			

The findings of this project informed the recommendations that I made at the project site to reduce falls and improve fall prevention strategies. To aid in the long-term implementation of this project, it may be necessary for nursing staff members to engage in additional training and coaching opportunities related to fall prevention identification and improve their fall prevention understanding. Leadership at the project site should consider implementing preventative measures and ensuring accountability by providing continuous education on falls and strictly inculcating this education in their annual staff training and orientation as well as new nursing orientation. It is important for leadership to evaluate if the current strategies are working, which can be done by comparing the current and previous years' fall numbers. The insights gathered from both short- and long-term project-related analysis can assist this project site and may guide similar sites in achieving enhanced fall prevention (see Campanini et al., 2018; Canadian Institute for Health Information, 2019).

#### Recommendations

I recommend that continuous training and education is provided to nursing staff members of the project site annually and upon hiring as a part of orientation. Specifically, nurses should be reminded about the importance of using the JHFRAT because this fall risk assessment tool can improve patient-related health outcomes. According to Poe (2018), using the initial assessment to detect and prevent falls in both high-risk patients and severely ill nursing home patients can result in the reduction of fall and fall prevention. The JHFRAT can improve patient care outcomes by aiding in the prevention of patient falls and the early detection of falls and can be used to prevent falls among high-risk patients (Poe et al, 2018). The JHFRAT evaluates six main areas that indicate fall risks: (a) the patient's age, (b) the patient's fall history, (c) the patient's medication use, (d) care equipment (e.g., patient alarms, side rails, gait belts, hip protectors, nonslip socks, grab rails, and fall prevention mats), (e) the patient's mobility, and (f) the patient's level of cognition. When a patient receives a score of 6 to 13, that denotes that the patient is a high fall risk. Classifying patients can enable nursing staff members to implement multifactorial interventions, which can be used to detect, reduce, and prevent falls (Campanini et al, 2018).

In addition to the use of the JHFRAT, various additional methods can be used to minimize patient falls at the project site. Increased nursing staff ratios and increased hourly rounding, by both RNs and CNAs/GNAs, can prevent and reduce falls. In fact, according to Costello and Edelstein (2018), when there are increased nursing staff-to-patient ratios, patient falls are caught before they occur. Furthermore, the use of the JHFRAT can aid nursing staff members in identifying high-risk patients and can help them to understand the patient's specific needs (e.g., previous fall, extrinsic and intrinsic factors). Therefore, when nursing staff members recognize patient needs by identifying patient patterns and history, fall rates can decrease (Costello et al, 2018). Nursing staff members can also offer strength- and gait-enhancing exercises, which have been found to be beneficial because exercises strengthen feeble body parts (Costello et al, 2018).

There are many benefits associated with increasing nursing staff-to-patient ratios (Costello & Edelstein 2018). When nursing staff members can take the time to see patients and assess their rooms/living conditions, they can aid in decluttering unnecessary

room content, removing obstacles/barriers, and relocating items that the patient will need to a reachable location (Costello & Edelstein 2018). Consequently, patients' history of falls is pertinent documentation during initial assessment during admission.

In addition to the benefits associated with improved nurse-to-patient ratios, the project site might consider enhancing various environmental factors within the facility. For example, in areas in which lighting is inadequate, Campanini et al. (2018) found that falls increased by 20%. When areas are fully lit, it helps patients with poor vision, thereby decreasing falls. Unfortunately, not all patients who have walking aids use them and not all patients who need walking aids have been identified. Therefore, I recommend that ambulatory assessments should be done to determine if a patient needs a walking aid or uses their prescribed walking aid.

I also recommend behavioral and attitudinal changes among nursing staff be encouraged by the leadership at the project site. According to Thapa et al. (2022), knowledge of patient falls is positively correlated with the experiences of nurses regarding in-patient falls, implying that continuous education would improve the knowledge of nurses and decrease falls as they apply the knowledge acquired. Furthermore, the continuous education of nursing staff members regarding falls would significantly influence their knowledge on fall prevention (Thapa et al., 2022). Therefore, it is important to help nursing staff members recognize that many types of falls are preventable. Additionally, it is critical to improve the knowledge of nursing staff members about fall risk assessment methods and predictions, which result in early patient fall detection. Nursing staff members should be continuously trained and educated about evidence-based fall risk assessment tools, like the JHFRAT, and should understand how the psychometric properties (e.g., sensitivity, specificity, positive predictive, and negative predictive values) of the fall risk assessment tool influence the early detection of falls before a fall occurs.

#### **Contribution of the Doctoral Project Team**

Nursing staff members at the project site were provided with evidence-based fall prevention clinical practice guidelines that aided them in critically appraising fall risks. I used the JHFRAT because it is an evidence-based instrument that has high levels of reliability and validity and has been cited by Poe (2018) as a quality fall prevention tool. According to Diener et al. (2022), nurses should use their acquired knowledge to deliver high-quality health care to sick and/or older patients. Using the JHFRAT also likely helped nursing staff members to recognize the positive impact of fall detection and prevention, thereby resulting in enhanced patient-related outcomes.

Upon the completion of this project, nursing professionals had an enhanced understanding of fall risk factors. By attending the training and enhancing their fall knowledge, these individuals can likely aid interprofessional teams in understanding fallrelated risks and prevention methods. In health care, it is common for silos between providers and departments to exist, which limits the transfer of knowledge, thereby impacting the patient's experience. By breaking down these silos and enhancing interprofessional communication, fall prevention strategies can be used and enhanced patient care outcomes can be achieved. Rehabilitation nurses may want to consider using the translational approach to identify gaps in their context-specific environment to improve in-patient rehabilitation facilities like nursing and group homes (Campanini et al., 2018).

#### **Strengths and Limitations of the Project**

There were various strengths and limitations that were identified during this project. One strength of importance was the delivery of the fall training program, which was supported by the facility leadership. Furthermore, the use of the JHFRAT resulted in an increase in knowledge, and learning of a new tool to address falls as compared to the previous strategy which was used before this project was implemented. The tool standardizes assessment of fall risk, improves inpatient outcomes and patient safety. It is adaptable to fit the specific needs and guidelines of individual patient needs or setting.

This project was conducted at a nursing home facility, which is in Maryland. Therefore, although the findings of this project add to the available literature about falls among patients in nursing homes, this single project site is not reflective of all project sites located in the state. Furthermore, since only 20 participants engaged in this project, which was an unanticipated limitation, the transferability of the results is small. At the selected project site, there are a total of about 45 nurses which comprises of both parttime and permanent nursing staff members, therefore the total sample size for this project was only reflective of about 50% of the nursing population at the project site. Both the location of the project and the small sample size significantly reduces this project's generalizability and transferability.

It is important to note that the small sample size, as stated above, was due to the business of the nursing staff members. While the initial intention was to accommodate the schedules of nursing staff members, this accommodation became too difficult given the project's allotted period. It is unfortunate that more nursing staff members did not engage in this project specifically considering that the training consisted of only one hour four sessions and the questionnaires, pretest and posttests, took less than 15 minutes to complete. Another unexpected limitation was the dropout rate of about 25 part-time night nurses who initially agreed to partake in this project. Some nurses attended a few of the educational training sessions and then expressed their unwillingness or inability to commit more time to this project due to fatigue after the night shift. So, continuing after the night shift was a big problem for them, since their concentration level after the shift would make them sleepy. If these 20 or 25 individuals did not drop out of the project, then the sample size would have included about 45 participants, which is reflective of 100% of the total nursing population at the project site. It is important to note that the data obtained from these 20-night nurses were eliminated from the data analysis.

Another project-related limitation is the fact that fall rates assessment after the implementation of the training program and the utilization of the JHFRAT was beyond the scope of this project. Furthermore, the DNP student was unable to explore if the JHFRAT was being properly utilized by nursing staff members and/or if any changes needed to be made to the JHFRAT utilization process, as based upon nursing staff member feedback, the organization's needs, and patient-related needs.

It is recommended that further research be conducted to explore the impact of not applying the knowledge acquired from fall-related training programs, across various types of facilities (e.g., nursing homes, group homes, and other inpatient facilities). By understanding what needs to be known about falls and about lacking knowledge application about falls can make a lot of difference. Also recommended is periodic (annual or more frequent) fall-related training be mandated by nursing and group home facilities to enhance participant knowledge about fall behaviors and associated fall risks. Furthermore, the use of compulsory pretest and posttests should be added to ensure that the training delivered truly enhanced staff knowledge. According to Campanini et al, (2018), continuous nursing education is a necessity, because nurses play a pivotal role in fall prevention. Thus, education is necessary in improving patient-related outcomes.

#### Section 5: Dissemination Plan

Falls and their ramifications are a major concerns in health care because falls impact both individuals (e.g., the patients themselves and health care staff) and health care organizations. According to the Canadian Institute for Health Information (2019), the cost of a patient falls is in millions of dollars annually. In long-term care facilities, falls are one of the most common adverse events (Canadian Institute for Health Information, 2019). Due to the prevalence of falls, it is critical for organizations to develop and implement fall prevention strategies (Campanini et al. 2018; Nunan et al, 2018).

According to Campanini et al. (2018), in-patient rehabilitation facilities often report higher fall rates as compared to acute care hospitals, specifically because in-patient rehabilitation facility patients are often admitted with mobility issues and myopathies that affect gait stability. In Canada, from 2017 to 2018, more than 137,500 patients aged 65 years and older were hospitalized for injuries, with 80% of injuries caused by falls (Campanini et al. 2018). Falls are also the top injury among patients aged 65 years and older who visit the emergency room and account for 60% of all reported emergency room visits among this age group. Of the patients who visit the emergency room due to falls, approximately 20% of these patients are admitted to the hospital (Canadian Institute for Health Information, 2019).

Employing evidence-based fall prevention strategies is critical to ensuring patient safety (Nunan et al, 2018). It is important to educate nursing staff members about fall prevention policies that can be implemented to decrease falls in acute care settings and

assist in keeping patients safe. I will provide the findings, results, and a summary of this project to organizational leaders, specifically those who assist in implementing practice change initiatives that can be used to improve patient care. A one-page overview of the findings, results, and summary of the project and an invitation to attend a presentation about the project will be sent to the organizational leaders, nurse managers, and nursing staff. I will deliver a 30-minute PowerPoint presentation addressing the JHFRAT application and strategy to these stakeholders. After the delivery of the presentation, I will encourage an open discussion about the project's findings and implications. The purpose of this discussion is to show comprehension of the JHFRAT application, thereby resulting in the JHFRAT's long-term implementation. According to the Canadian Institute for Health Information (2019), nurses and leadership should use EBP findings to support the implementation of nursing practice initiatives.

All participants will also be presented with an executive summary of the project's highlights and results. I will deliver a 1-hour presentation during each shift's scheduled staff meeting. In this presentation, I will offer details about the pre- and posttest fall prevention knowledge results, the critical importance of fall prevention EBP initiatives, and comprehension, thereby reinforcing how important fall prevention is regarding health care and patient safety outcomes.

#### **Analysis of Self**

This DNP project helped me to further understand the critical importance of fall prevention techniques in long-term care, acute environments. One of my main desires in conducting this project was to ensure that nurses understood EBP techniques and processes that could be used to reduce and prevent falls. Fall prevention is crucial to health care and patient safety and, thus, should be a topic of timely discussion and training.

During this project, I learned about the importance of effective communication and how communication can contribute to patient safety. To ensure the effective implementation of this project, I consistently and accurately communicated with project team members. I learned that a clearly stated objective and outcome are essential for planning, implementing, and evaluating a project. Furthermore, I learned that effective time management skills are necessary to ensure deadlines are met. My project would not have been as successful as it was if I was not aided by the project participants and supporters; therefore, I also learned the importance of a team working together toward a common goal in this project.

When I applied for this DNP program, my initial goal was to obtain my degree. While I am excited about graduating from this program, I also recognize that obtaining my degree will be a secondary benefit of this journey. During this project, I was able to obtain new qualifications and skills as well as enhance my existing ones, thereby improving my leadership abilities and change agent expertise. Completing this project made me reflect on the roles of being a health care professional, project manager, and educator to instruct fellow colleagues on fall prevention strategies.

This DNP journey and project allowed me to converse with fellow doctoral students and build strong bonds with them based upon our shared experiences, challenges, and successes. Continuous interactions with my DNP colleagues helped me to

stay focused, patient, motivated, and steadfast while completing this voyage. I am thankful that I was able to advance my education despite the challenges and issues encountered along the way. Despite these challenges and obstacles encountered, I remained committed and steadfast. In summary, this journey provided me with personal and professional growth opportunities. I have been truly blessed to have created a positive (and hopefully long-lasting) change at the project site.

#### Summary

Various researchers and governmental organizations have noted that falls are a major health concern that can cause injuries and result in death (AHRQ, 2019; CDC, 2019). Falls are more common among individuals aged 65 years and older as compared to younger individuals; however, falls can impact people of all ages (AHRQ, 2019). Among older individuals, it is common for falls to result in hospitalization, disability, and death (Canadian Institute for Health Information, 2019). Each year, in hospital settings, approximately 7,000 patients fall, and of those 7,000 patient falls, 30% to 50% result in injuries (AHRQ, 2019; CDC, 2019). In the United States alone, between 700,000 and 1,000,000 people fall in health care facilities annually, of which, approximately 250,000 result in injuries and 11,000 result in death (AHRQ, 2019; CDC, 2019).

Health care professionals, and specifically nursing professionals (e.g., RNs), are trained to provide care for diverse patient populations in hopes of achieving positive patient care outcomes and enhanced patient safety. During their educational journeys and workplace experiences, nursing staff are trained to use a proactive approach to ensure safe patient care (AHRQ, 2019; CDC, 2019). At the project site, nursing staff members should receive annual updates about fall prevention policies and practices that are aligned with the organization's mission as patient advocates.

To date, a great deal of scholarly literature has been published about fall prevention methods (National Institute on Aging, 2020). Researchers have noted that to effectively implement these fall prevention methods, it is critical that the methods are aligned with the selected organization's mission, vision, and values (National Institute on Aging, 2020). Stakeholders must continuously reinforce that fall prevention is an ongoing process requiring consistent effort and focus (National Institute on Aging, 2020).

It is important that further studies are conducted to determine if the implementation of a similar project could result in fall reduction. In the current project, no fall reduction comparison (i.e., pre- and post-training) data were collected or analyzed, thus reinforcing the need for additional research. As noted by Florence et al. (2018), there are various benefits associated with using evidence-based fall safety initiatives, thereby reinforcing the importance of continuous training at the project site.

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#### Appendix A: Pre- and Posttest

# Test Questions: Each question may have more than one option as the correct answer. Please circle the letters that correspond to the correct answers.

1. Which of the following statements is correct about falls?

a. Fall prevention programs should be comprised of multifaceted interventions, since falls have multifactorial etiology.

b. Falls can be prevented from a constant review of medication usage.

- c. So far as a patient's toileting needs are met fall risk will be reduced.
- d. The use of antipsychotic medications can increase the risk of falls in older adults.

2. A multifaceted intervention program should include (select all that apply):

- a. Individually tailored fall prevention strategies.
- b. Education of patient/family and health care workers.
- c. Environmental safety.
- d. Safe patient handling.
- 3. Risk factors for falls in the acute hospital include all the following except:
- a. Dizziness/vertigo
- b. Previous fall history
- c. Antibiotic usage
- d. Impaired mobility from stroke disease

4. Which of the following statement (s) is true about falls prevention?

a. The cause of a fall is often an interaction between the patient's risk, the environment, and patient risk behavior.

b. An increase in hazardous environments increases the risk of falls.

c. The use of a patient identifier (e.g., identification bracelet) helps to highlight to staff those patients at risk for falls.

d. A fall risk assessment should include a review of the history of falls, mobility problems, medications, mental status, continence, and other patient risks.

5. Which of these actions should the nurse take for patients with impaired mobility? Select all that apply:

a. Confine them to bed.

b. Encourage people to mobilize with assistance.

c. Assist with transfers.

d. Initiate a referral for an exercise program or prescription for walking aids as appropriate.

6. The management of the acutely confused patient should include all the following except:

a. Moving patients away from the nursing station.

b. Involving family members to sit with the patient.

c. Orienting patients to the hospital environment.

d. Reinforcing activity limits to patients and their families.

7. Which of the following statement(s) is false?

a. Fall prevention efforts are solely the nurses' responsibility.

b. A patient who is taking four or more oral medications is at risk of falling.

c. A patient who is prescribed psychotropic medication is at higher risk of falling.

d. Testing or treatment for osteoporosis should be considered in patients who are at high risk for falls and fractures.

- 8. In any inpatient facility, intervention programs should include (select all that apply):
- a. Staff education on fall precautions.
- b. Provision and maintenance of mobility aids.
- c. Post fall analysis and problem-solving strategy.
- d. Bed alarms for all patients, regardless of risk.
- e. Daily or routine assessment of fall risk patients.

9. When assessing patients, which of the following statements is false?

a. All patients should be assessed for fall risk factors at admission, at a change in status, after a fall, and at regular intervals.

- b. Medication review should be included in the assessment.
- c. All patients should have their activities of daily living and mobility assessed.

d. Environmental assessment is not important in the long-term facility, it is all standardized.

10. Risk factors for falls include (select all that apply):

- a. Parkinson's Disease
- b. Incontinence
- c. Previous history of falls
- d. Delirium

Appendix B: Summative Evaluation Tool – Staff Educational Program on the Prevention

# of Resident Falls

1. Was the learning objective and outcome adequately presented?

Yes\_\_\_\_No\_\_\_\_

2. Was the learning outcome met?

Yes\_\_\_\_No\_\_\_\_

3. Was the delivery method effective? Are there aspects that could have been done differently?

4. Which element of the presentation did you like the most?

5. Were you satisfied with the quality of the content?

Yes\_\_\_\_No\_\_\_\_

6. Please indicate your satisfaction with the presenter/speaker.

Very satisfied \_\_\_\_\_ Neither Satisfied nor Dissatisfied \_\_\_\_\_

7. How did you feel about the content being presented? Was it relevant to patient fall prevention?

Yes\_\_\_\_No\_\_\_\_

8. Did the staff education program meet your expectation?

Yes\_\_\_\_No\_\_\_\_

9. Do you feel the staff education program met its goals?

Yes\_\_\_\_No\_\_\_\_

10. Do you believe this staff education program had a direct impact on the facility?