Spring 4-14-2023

Implementation of Purposeful Hourly Rounding to Decrease Fall Rates

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DOI: https://doi.org/10.46409/sr.XRQX4127

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April 14, 2023

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Abstract

Practice Problem: Patient falls can lead to an increased length of stay and potentially reduce the quality of life. In addition to serious injury, the patient and the hospital have a significant financial burden.

PICOT: On a medical-surgical unit, does incorporating purposeful hourly rounding in the patient care routine compared to no purposeful rounding decrease patient fall rates over eight weeks?

Evidence: Of the 35 articles related to fall prevention and PHR, a final selection of eight articles met the criteria and were of high quality and evidence levels.

Intervention: PHR was implemented to decrease falls over a period of eight weeks. Fall rates were then calculated and compared with the previous eight weeks.

Outcome: The calculated fall rate for the baseline phase was 3.64 falls per 1000 patient bed days. The calculated fall rate for the implementation phase was 2.1 falls per 1000 patient bed days**.** The incidence of the fall rate between baseline and implementation was (M=1.95, SD=.07) and implementation phase (M=2.05, SD=.21); t= -.50, p=0.70.

Conclusion: The results of this EBP project did not indicate statistical significance. However, clinical significance was identified through improved clinical practice of the unit staff.

Implementation of Purposeful Hourly Rounding to Decrease Patient Falls

Within healthcare organizations, the prevention of patient falls is a significant concern. According to recent data from the Agency for Healthcare Research and Quality (AHRQ, 2022), there are approximately 700,000 to 1,000,000 hospital falls annually in the United States. Patient falls can lead to an increased length of stay and potentially reduce the quality of life. In addition to serious injury, the patient and the hospital have a significant financial burden. Since 2008 the Centers for Medicare and Medicaid Services will not reimburse facilities for any hospital-acquired conditions that increase the patient's length of stay (Chu, 2017).

Since patient falls are now considered a “never event,” it is even more essential for healthcare facilities to have a robust fall prevention program. Universal fall prevention strategies provided by AHRQ include fall risk assessments and maintaining a clean, clutter-free environment for the patient (Ortelli, 2018). The use of Purposeful Hourly Rounding (PHR) is not consistently included in universal fall prevention strategies. This project aims to implement the practice of hourly rounding, incorporating the 5 P’s, by staff addressing specific patient care needs to determine its effect on the rate of patient falls.

SIGNIFICANCE OF THE PRACTICE PROBLEM

Patient falls are a widespread, serious safety problem for healthcare facilities that contribute to patient morbidity and mortality. The most reported safety incident in hospitalized patients is patient falls, with 30% to 51% of in-hospital falls resulting in injury (Ortelli, 2018). According to the Centers for Disease Control and Prevention

(CDC, 2021), one-third of the patient falls that occur in hospitals are considered preventable.

Hospitalized patients are at increased risk of accidental falls because of unfamiliarity with the environment, physical reactions to new medications, and symptoms of an acute illness. Medications may cause dizziness, so patients should be assisted during ambulation and toileting. Patient fall rates remain high despite implementing fall prevention programs (Joint Commission, 2020).

Fall prevention programs are designed to address these risks through specific interventions. Interventions include familiarizing the patient with the room, increased lighting, clean room, personal belongings, and call light close to the patient. These tasks are referred to as the 5 Ps (See Appendix E) of patient care and are included in the hourly rounding process. Specifically, the 5Ps are pain, potty, position, pumps, and patient education. All of these are addressed with the patient hourly to be proactive with patient care.

POPULATION-LEVEL SIGNIFICANCE

Falls are the leading cause of injury among adults aged ≥65 years. Age is a crucial risk factor for falls due partly to the regular aging changes, such as decreased mobility and altered mentation. Add to that a hospital stay in which the patient is confined to bed and experiences an additional decrease in mobility, further increasing their risk of falling. Falls in the elderly lead to unanticipated tests and treatments increased length of stay, extra costs, and adverse long-term sequelae. They can also have a devastating psychological impact on patients and decrease independence and quality of life (Moreland & Henry, 2020).

FACILITY LEVEL SIGNIFICANCE

An abundance of research has shown the negative impact of falls on the patient; however, falls have profound impacts on the nursing staff and the hospital. Falls are a nursing-sensitive quality indicator, which places the responsibility for patient falls directly on the nurses. This pressure on staff can affect how fall prevention is managed at the bedside. Another impact on healthcare facilities is the financial burden of patient falls. Higher than benchmark fall rates lead to CMS financial penalties (King et al., 2018). The average cost of a fall with injury is roughly $14,000 per patient, adding up to a cost burden in the billions to the healthcare system every year (Florence et al., 2018).

INCIDENCE/PREVALENCE AT LOCAL (SITE)

The local site that will be a part of this project has been unable to make sustainable progress in reducing patient falls throughout the facility. The facility's monthly fall rate for the quarter prior to project implementation was 0.55 falls per 1000 patient days, according to hospital nurse-sensitive indicators data. This is below the national benchmark of 3.9 falls per 1000 patient days. However, the facility identified fall prevention as a hospital initiative needing improvement. The inability to reduce inpatient falls has been attributed to scarce resources, staffing shortages, and high turnover rates. The leadership team is concerned that the current fall prevention program is ineffective, and leadership has put together a committee to look at implementing changes. There are many tool kits available as a resource for hospitals. However, the most effective programs are customized for the individual facility (LeLaurin & Shorr, 2019). PHR will be implemented as part of the fall prevention program using this as a guiding principle.

PICOT QUESTION

The PICOT question guiding this project is, in a medical-surgical unit (P), does incorporating (I) purposeful hourly rounding in the patient care routine, (O) decrease patient fall rates over (T) eight weeks, (C)compared to the previous eight weeks?

Population: The target population for this project includes the staff nurses and the nurse techs (NT) in a medical-surgical unit.

Intervention: The intervention process will focus on the use and compliance of the PHR tool. Currently, most staff are not using PHR, and those that do are not following the process correctly. Staff will attend a brief education session that will include a review of the concept of PHR and the expectation of staff to incorporate the process into daily patient care. Compliance with PHR will be tracked using a peer-validated tool already currently used on the unit. Nurses are expected to complete patient rounds on the even hour, and the NT will complete patient rounds on the odd hour.

Comparison: Data from the 8-week implementation period will be compared to the previous 8-week time period and evaluated for a decrease in patient falls. Compliance will also be compared using the unit PHR tracking tool.

Outcome: A decrease in the number of falls experienced by patients during the 8-week time period following the intervention**.** In addition to a decrease in falls, there should be a concurrent increase in compliance with PHR by staff. Hourly rounding is most successful when it is done consistently, includes all five elements, and involves the patient (Grillo et al.,2019).

Time: The project will be implemented over an eight week time period.

Evidence-Based Practice Framework

The Johns Hopkins Evidence-Based Practice Framework (JHEBP) was be used to guide the evidence-based project. This model was developed and designed to bridge the gap between research and practice so that nurses can incorporate the most current evidence in their practice. The JHEBP model uses a problem-solving approach to guide the research process step-by-step. Using the PET process as a guide, staff received and processed education and then used that information to integrate PHR into patient care. Using critical thinking, staff integrated best practices into patient care to achieve optimal patient outcomes. Each step of the proposed practice project was developed by working through the practice questions, looking at the evidence, and then translating the evidence into practice (Dang & Dearholt, 2018).

Change Theory

The selected change theory for this project was the Kotter Change Model. This model will provide a framework for successfully implementing changes essential to the project. In addition, hardwiring the changes to nursing practice will be crucial for the project's long-term success. According to Kotter, for change to be successful, 75% of staff must "buy into" the change. Therefore, change should be planned carefully with a proper foundation. Following Kotter's steps to create a sense of urgency, recruit leaders to assist with change, build the vision, remove obstacles, create wins, and build momentum can help make the proposed change part of the unit culture (Radwan, 2020). To ensure project success, education was used to discuss the importance of implementing this practice change in order to achieve the best outcomes for the patients. During the brief training sessions, perceived barriers were addressed, and a

shared vision was developed. This created the momentum to initiate and then ultimately integrate the change.

Evidence Search Strategy

A search for literature relevant to the project topic was performed using the University of St. Augustine online library portal. The investigation was initiated within CINAHL Complete using the terms “fall prevention, hourly rounding,” “purposeful hourly rounding,” and “intentional rounding” and yielded 29 articles. The following limiters were set to refine the search further: date 2018 to present, source type-academic journals, and age (adults 18 and over). Excluded from the 35 articles was research in non-hospital settings such as nursing homes or other outpatient facilities, leaving eight articles from this search.

Evidence Search Results

A thorough literature search was conducted to support the project proposal and yielded 35 articles related to fall prevention and PHR. Criteria to eliminate articles were no pediatric patients, research that had not been conducted in an acute care setting, and fall prevention strategies that did not include PHR. This significantly reduced the number of articles. Using the Johns Hopkins EBP Model, a review of the articles resulted in a final selection of 8 articles that met the criteria and were of high quality and evidence levels. Details of the literature search are included in the appendix.

The strength of the evidence was evaluated using the Johns Hopkins EBP Model (Dang & Dearholt, 2018); (see Appendix A) Three of the final seven articles selected were level III with high or good quality. The remaining four were level I with high quality.

Originally there were eight selected articles, but one article was eliminated after further review due to low quality and level of evidence (see Figure 1)

Themes with Practice Recommendations

Fall Prevention Practices

The overarching theme that emerged from the literature is that a multidisciplinary, multitask approach drives an improvement in fall prevention rates. Training and education for staff regarding fall prevention and PHR were consistently connected to improved fall prevention outcomes. Fall prevention outcomes were steadily improved at facilities incorporating a fall prevention program or toolkit as part of a fall prevention strategy or program (Ortelli, 2018).

In addition to a multidisciplinary approach, the nurse's role in implementing evidence-based interventions directly contributes to increased patent safety. Fall prevention programs begin with buy-in and the participation of the nursing staff. Patients who are assessed hourly experience less anxiety and feel safer during their hospital stay (Chu, 2017).

Patient Experience

In addition to individualized fall strategies, the use of PHR includes the patient and their family members. Not only does including PHR as a fall prevention strategy decrease fall rates but patients are engaged in their care and have higher satisfaction with their overall hospital experience. A team partnership consisting of staff and the patient was identified as an indicator of preventing falls and fall-related injuries (Dyke et al.,2020).

Timing, Strategy of PHR, and Communication

Additional themes also emerged regarding the timing and strategy of PHR and communication with the patient and staff, especially during report handoffs**.** Hospitals and units vary based on the specific approach to fall prevention. This fact need not be considered detrimental to implementing fall prevention strategies but should be part of individualized strategies for each patient situation. Fall prevention was implemented diversely based on the units and their specific population.

Also contributing to the improvement of falls is a three-step process for fall prevention which entails assessing risk, developing an individualized plan, and following the plan regularly. An essential part of this process is handoff communication between all team members. Approaches to fall prevention may vary, yet when PHR is part of the fall prevention strategy; units experience a consistent decrease in falls (Turner et al.,2022).

Financial Impact

Lastly, there is a financial component to the issue of fall prevention, and PHR is a measure that correlates to cost savings. A fall prevention program that includes PHR can ameliorate the cost of falls and fall-related injuries. The financial impact of falls is two-pronged. First, the hospital must absorb the cost of post-fall injuries, and second, hospitals that do not meet fall benchmarks lose reimbursement and may risk a financial penalty. Decreasing falls and falls with injury will result in cost savings for the patient and the facility (Florence et al., 2018).

Practice Recommendations

The literature review affirmatively answers the PICOT question that incorporating PHR as a regular part of patient care can decrease fall rates in an acute care unit over eight weeks. The recommendations that emerged from the review of the articles in (Appendix A) are as follows:

1. Implementation of PHR is an effective fall prevention measure.
2. PHR is considered the best practice to consistently meet patient needs, maintain patient safety, and address problems before they occur.
3. Fall prevention programs decrease organizational costs and liability
4. PHR should be integrated into routine nursing care
5. PHR, when done correctly, can improve the patient experience.

Setting, Stakeholders, and Systems Change

Setting

The practice site for the EBP project is a 485-bed acute care urban hospital located in Chicago's Illinois Medical District. The project will be implemented in a

medical-surgical unit with a 22-bed capacity, which is one of the busiest units in the facility. The vision, in part, of this healthcare facility includes “providing exemplary care for our patients and advancing the knowledge to do so.” The EBP project aligns with this vision as it seeks to implement a model of improvement to increase the safety and quality of care for all patients.

Stakeholders

The facility's leadership comprises a Chief Nursing Officer (CNO), Assistant Chief Nursing Officers (ACNO), Patient Care Directors, Unit Charge Nurses, staff nurses, and nurse technicians (NTs). In addition, other key stakeholders include the Risk Management team and the Director of Safety and Quality. Both groups will be involved in projects or interventions surrounding fall prevention strategies. They will be instrumental in the project as champions. Additionally, many Safety Committee members are staff nurses and will participate in the project at a bedside level. The participants for the EBP project include the bedside nurses (RNs), nursing assistants, referred to as patient care technicians (PCTs), and unit support staff.

Systems Change

This EBP project aims to facilitate a change within the facility to improve the current system and increase patient safety through fall prevention. Fall prevention is a micro and meso-level change impacting patient care and healthcare organizations (Sawatzky et al., 22021). Implementing purposeful rounding as a fall prevention measure can impact patients through improved outcomes and greater satisfaction with their care. Decreased fall rates and increased patient satisfaction affect the hospital financially by meeting industry benchmarks and standards of care.

Sustainability

Identification of and support for the EBP project was obtained from the Director of Safety and Quality following a discussion regarding concerns about the increasing house-wide fall rates. Fall prevention is an organization-wide initiative with several departments involved, and all staff has a stake in decreasing patient falls. Fall prevention is an issue impacted by many factors, and the sustainability plan is to hardwire purposeful rounding into the staff routine. This will include training, education, and practice, and champions will be identified to monitor the process post-project completion.

SWOT Analysis

A SWOT analysis was performed, and internal and external factors were identified (See Appendix D). The project's greatest strengths are ease of implementation and minimal cost burden to the facility. There is no equipment to purchase or paperwork to print. The director identified the project and has buy-in from the leadership team and staff. Identified concerns center around consistency with staff usage of the rounding tool, the possibility of staff compliance waning, and the return to old habits.

Implementation Plan with Timeline and Budget

Objectives

The first objective of the EBP project is to decrease fall rates by fifteen percent in a medical-surgical unit within eight weeks by integrating PHR into the patient care process. This percentage is based on feedback from the unit director and not on any supporting literature. The concept of PHR and its correct and consistent use will be

reintroduced and reinforced through short training sessions with the unit staff. This project has support from the management team, and while no specific policy change has occurred, using PHR will be an expectation of staff for patient care. Data will be reviewed following the eight weeks using the facility's fall data reporting system. The data will then be compared to the previous eight weeks and analyzed for improvement.

The second project objective is to achieve a seventy-five percent participation rate among staff for education sessions before project implementation. Staff will be asked to sign an attestation (See Appendix F) that they have participated in the education session and agree to implement PHR as part of the patient care routine. Compliance is essential to the desired outcome of a decreased fall rate. Ensuring that staff understands the correct method of PHR will increase buy-in and could seriously impact the project outcomes. Quality monitoring will be achieved through daily/weekly reviews of PHR forms. Compliance and quality will be measured on a daily/weekly basis and at project completion by reviewing the PHR forms currently being developed at the facility.

The third project objective is to achieve a seventy-five percent adherence rate for purposeful rounding. Adhering to purposeful rounding is addressed with the staff education/attestation (See Appendix E) and will be measured using a self-report survey. (See Appendix F) following project completion. This writer will develop and share the survey with colleagues to ascertain face validity. Staff opposition to new ideas is a significant risk to the project's success; education sessions are designed to gain staff buy-in and mitigate opposition. Leadership support for the proposed practice change may be instrumental with compliance and adherence in the

long term, mainly if objective one is obtained. Staff opposition is the only identified risk that might interfere with the project outcomes. Understanding that staff buy-in can be a significant barrier to implementing a practice change, support was obtained by senior leadership for the project. The unit leadership team will be on hand to reinforce the project goals and their expectation for staff compliance.

Implementation Plan

The JHEBP model was the framework for this project, utilizing the PET process's three stages and the Kotter Change Model to guide the project through the planning stages successfully. The first step of the PET process involved identifying the problem, which assisted in developing the practice question, “Does purposeful hourly rounding decrease patient fall rates over a set time period?” Fall rates were reviewed, a specific unit was selected, and stakeholders and team members from the unit were identified.

The evidence was appraised for strength and quality using a quality grading tool during the second step. (Appendix A). Seven articles were selected that applied to the topic and supported an evidence-based practice project for fall prevention using PHR. Grillo, et al.,2019). The last step centered around translation. Support was obtained from the unit leadership to proceed with the project, and a staff training plan was developed. The results were then evaluated and shared with staff members and stakeholders.

The steps of change were interspersed throughout the project as it moved through the planning stages. The Kotter model is ideal for this project because it focuses on organizational leadership and creating a change climate. The project planning steps are as follows:

Step 1: Establishing a Sense of Urgency

Information will be shared with staff regarding fall rates and the impact on the patient, the unit, and the facility. Information regarding benchmarks and how the unit/facility compares to others will be discussed. Additionally, the financial implications and how that affects the facility will be discussed.

Step 2- Creating a Guiding/Powerful Coalition

During this step, leadership will introduce the concept of PR and their expectations for its use. Unit champions will be identified, and partnerships with other groups, such as risk management and the safety committee, will be formed.

Step 3- Developing a Change Vision and Initiative

Unit Champions will be identified through the unit manager and will work with the existing safety/fall committees to develop a vision for the unit. This is currently a monthly committee, but an ad hoc team will meet more frequently to review the project and discuss any concerns that may arise as the project progresses. The leadership team will review and support the idea that the proposed change will be an essential and permanent change moving forward.

Step 4- Communicating the Vision

The vision will be communicated in a variety of ways. First, the change in practice will be disseminated to staff during unit huddles at the change of shift. During safety huddles and staff meetings, leadership will also discuss the vision with the team. Additionally, the topic will be discussed and emphasized during the staff education sessions before implementation.

Step 5- Removing Barriers

Barriers identified using a SWOT analysis (see Appendix D) are compliance and consistency. These barriers will be addressed with the assistance of leadership reviewing expectations for PR related to patient care. Barriers will also be managed through staff involvement with the project and open discussion during shift huddles.

Step 6-Generating Short-Term Wins

During this phase, the focus will be on short-term accomplishments such as completing training and observing staff consistently engaging in PR. Positive feedback and reinforcement will be given by leadership during shift huddles. This time will also be used to openly discuss what is going well with the process and any staff concerns.

Step 7- Sustaining Acceleration

This phase adds to step 6 by consistently offering positive feedback and reinforcement. Leadership will report fall rates weekly and compare them to previous dates to highlight potential improvement.

Step 8- Anchoring Change

This phase will exceed the project timeframe, but measures can be put in place that will assist with making the change permanent. Using purposeful hourly rounding as a standard part of patient care is a practice change. Anchoring this change is a long-term effort that will be built into the department through new hire orientation, unit orientation, and continual reinforcement from the leadership team.

Timeline and Budget

The projected timeline to complete the project will be eight weeks. A project timeline included planning, project implementation, and data collection (See Appendix C). The project budget was developed, and implementation costs are minimal. The only

expense associated with implementing the project relates to printable materials for training sessions (See Table 1).

Results

This EBP project evaluated three objectives. Decreased inpatient fall rates following implementation of PHR, staff participation with training sessions, and staff compliance with carrying out purposeful rounding. Brief training sessions were held at shift huddles and staff meetings on multiple days and included all shifts. Staff was provided opportunities for questions and feedback during and following these sessions. The training focused on PHR as an evidence-based tool and a review of the five Ps of PHR. Additional discussion focused on perceived barriers to PHR and unit expectations for incorporating PHR into the patient care routine. The participation rate for PHR training was eighty percent and can be viewed in Table 6 Data gathered from this project was evaluated and analyzed using the Intellectus Statistic program.

Staff adherence with PHR was evaluated through direct observation and assessment of the rounding log. The unit developed a laminated rounding log posted near the door in each patient room for staff to complete following the round. Registered nurses completed the round for the odd hours, and nurse techs completed the rounds on the even hours. Per unit standards, the minimum rounding frequency is hourly from 0700-2200 and every two hours from 2200-0600. The charge nurses on each shift evaluated the rounding log as part of the unit's safety rounds, and any deficiencies were immediately addressed with the staff.

Participants

Participants included inpatients in an adult Oncology unit. No patients were excluded from the project, and all participants were over the age of eighteen. Staff informed all patients and families about the practice of PHR during the admission process. The rounding log was prominently located in the patient room, and patients were made aware of the procedure for its use. Staff addressed any questions regarding the practice during admission and on an ongoing basis. The leadership team, which included the unit director, educator, and quality officer, collected, and analyzed the data related to staff compliance with the PHR tool.

Data Collection and Analysis

Fall data was gathered from the online occurrence reporting system to evaluate the following information: a) incidence of falls and falls with injuries per 1000 patient days during the project's 8-week time period and was then compared with the incidence of falls and falls with injuries per 1000 patient days during the eight weeks before project implementation. Data was retrieved with the assistance of the QI department and Risk Management to ensure privacy and security. In addition, privacy and security were ensured through hospital privacy policies and HIPAA guidelines. Any information stored independently of the online platforms was housed in a password-protected private computer in a locked office area. Fall incident information was checked against the electronic medical record and the facility’s online event reporting system to prevent missing data.

Fall Rates

The fall rate per 1000 patient bed days was calculated for the baseline phase of November 15, 2022, through January 14, 2023, and the implementation phase of January 15 through March 15, 2023. There were two falls during the implementation phase and 988 patient bed days. There were also two falls during the implementation phase and 958 patient bed days. The calculated fall rate for the baseline phase was 3.64 falls per 1000 patient bed days. The calculated fall rate for the implementation phase was 2.1 falls per 1000 patient bed days (see Table 7).

A two-sample t-test (see Table 2) was performed to compare the mean difference between the baseline and implementation phase fall rates. A p-value was set at < 0.7. The data showed no statistically significant difference in fall rates between the baseline phase (M=1.95, SD=.07) and implementation phase (M=2.05, SD=.21); t= -.50, p=0.70.

Staff Outcomes

Two additional objectives for this project involved staff participation in training sessions and staff adherence to carrying out purposeful rounding. Attendance was recorded at each training session and compared to the unit master roster. The staff participation rate was eighty percent (see Table 6). Staff adherence was measured by observing staff performing PHR, evaluating the charge nurse safety round logs, and through a post-project survey. The results were analyzed within Qualtrics to evaluate the following data: a) the percentage of staff that were satisfied with the process of PR, b) the percentage of staff that used PR consistently, c) the percentage of staff who intend to continue to integrate PR into their practice, and d) identified barriers.

Statistical and Clinical Significance

In addition to finding that the proposed intervention has statistical significance, the clinical significance is equally relevant to fall prevention and developing a safety culture. (Sharma, 2021). According to the Institute of Medicine (IOM), patient safety involves preventing harm from coming to the patient through the delivery of care that actively prevents errors or incidents from happening (Ortelli, 2018). As a practice recommendation, PHR can significantly impact maintaining patient safety and improving the overall patient experience (Chu, 2017).

The results of this EBP project did not indicate statistical significance; a p-value greater than 0.05 is not considered significant. However, clinical significance was identified. This project impacted patient care through improved clinical practice of the unit staff. The clinical significance of the project can be measured through increased adherence to PHR and intent to continue to utilize PHR (See Table 7). Not addressed with this project is the potential for a multipronged approach to fall prevention. Additional projects are in process that may indicate a more significant impact to fall rates when additional interventions are combined with PHR. This EBP project was designed to evaluate outcomes to guide a lasting practice change and was directed by the practice site and the University of St. Augustine for Health Sciences. This is done through a meticulous project approval and review process by the EBP Review Council (EPRC).

Limitations

The limitations of to this project included patient population, low daily census and staffing. The population of the unit was specifically hematology/oncology patients, which has the potential to impact the overall fall risk assigned to patients on admission.

Despite not decreasing fall rates, this EBP project displayed a potential to improve other areas, such as call light usage and patient and staff satisfaction Staff compliance concerns of PHR can be addressed through ongoing monitoring. Superusers can monitor staff participation and compliance if unit staffing permits (See Table 8).

Dissemination Plan

Disseminating the project results is essential to keeping the impetus of purposeful rounding on the project unit and gaining acceptance of the idea from other units. The first step for dissemination is to share the project results with all key stakeholders, executives, directors, managers, and bedside staff. This can be done through a presentation using handouts and open discussion of the EBP project. Additionally, highlight the project's focus on patient safety through fall reduction and the introduction of EBP to improve patient care. The completed DNP Project will also be disseminated through the USA SOAR repository.

The project results can be shared at a nursing conference through a poster presentation to disseminate the findings further. One such forum is through The Council for the Advancement of Nursing Science (CANS) at the State of the Science Congress. Sharing projects nationally is essential to the project because it advances knowledge regarding fall prevention strategies and could ultimately create better patient outcomes. Additionally, the project findings can be shared with an even broader audience through peer-reviewed journals such as the Journal for Healthcare Quality. The JHQ is an official National Association for Healthcare Quality publication that publishes articles focusing on transformation in healthcare practices.

Conclusion

Patient falls are a leading problem in healthcare facilities across the country. As a "never event," falls can devastate the patient and the facility (AHRQ, 2022). This project will determine if the integration of PHR will assist with decreasing patient falls in the medical-surgical unit of a community hospital. The literature supports PHR as a technique to improve patient fall rates in the acute care setting. Successful implementation of PHR must be consistent, include all the rounding elements, and involve the patient (Grillo et al.,2019).

Implementing the practice project will include PHR education sessions to discuss the concept with staff and reinforce its importance to nursing practice. The unit PHR tool will then be used to document PHR frequency. Fall data will be gathered for the eight weeks and compared to the previous eight-week period for any significant changes. Finally, the fall data and the rounding tool will be analyzed for statistical and clinical significance to address the practice problem.

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Radwan, A. (2020). Lead transformational change, minimize resistance with 8-step model. *Dean and Provost, 21*(7), 1. https://doi.org/10.1002/dap.30693

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Sawatzky, R., Kwon, J.-Y., Barclay, R., Chauhan, C., Frank, L., van den Hout, W. B., Nielsen, L. K., Nolte, S., & Sprangers, M. A. G. (2021). Implications of response shift for micro-, meso-, and macro-level healthcare decision-making using results of patient-reported outcome measures. *Quality of Life Research*, *30*(12), 3343–3357. https://doi.org/10.1007/s11136-021-02766-9

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Table 1

Implementation EBP Project Budget

Expenses		Revenue	
Direct		Billing	$0
Supplies and Services (copying)	$200	Supplies/patient	unknown
Indirect		Grants	$0
Overhead	$0		
Total Expenses	$200		

Table 2

Independent Samples t-Test

Fall Rate Baseline Period		Fall Rate Implementation Period				
M	*SD*	*M*	*SD*	*t*	*p*	*d*
1.95	0.07	2.05	0.21	-0.50	.705	0.35

Table 3

Evidence Level	Types of Evidence	Quality Level	Definition
Level 1	• Experimental study, randomized controlled trial (RCT) • Systematic review of RCTs,	A High	• Expertise is clearly evident • Draws definitive conclusions • Provides scientific rationale
Level 2	• Quasi-experimental study • Explanatory mixed methods design	B Good	• Expertise appears to be credible • Draws definitive conclusions • Provides logical argument

Level 3	• Nonexperimental study • Qualitative study • Systematic review of qualitative studies	C Low	• Expertise is not discernable or is dubious • Conclusions cannot be drawn

Table 4

Inpatient fall rates

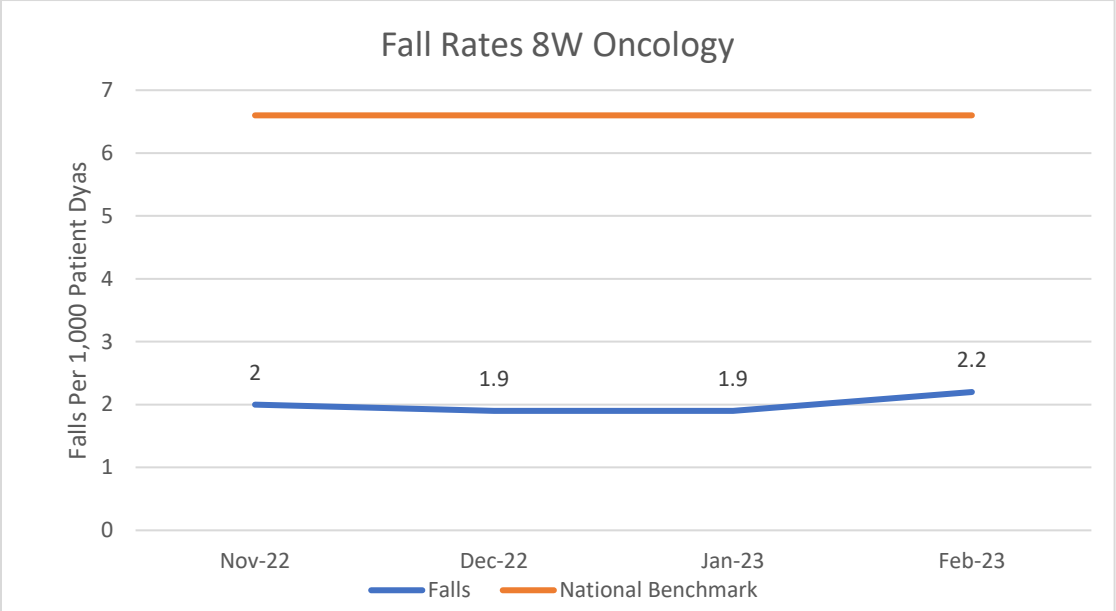


Table 5

Falls per 1000 Patient Bed Days

Date	Falls	Falls with Injury	Patient Days	Fall Rate
November 2022	1	0	487	2.0
December 2022	1	0	501	1.9
January 2023	1	0	518	1.9
February 2023	1	0	440	2.2

Table 6

Staff Outcomes

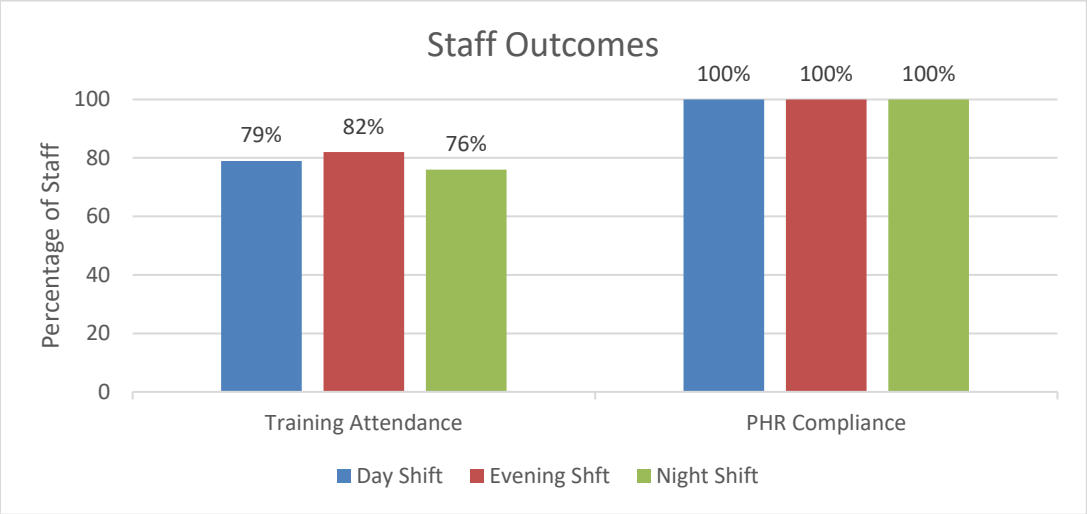


Table 7
Post Project Survey

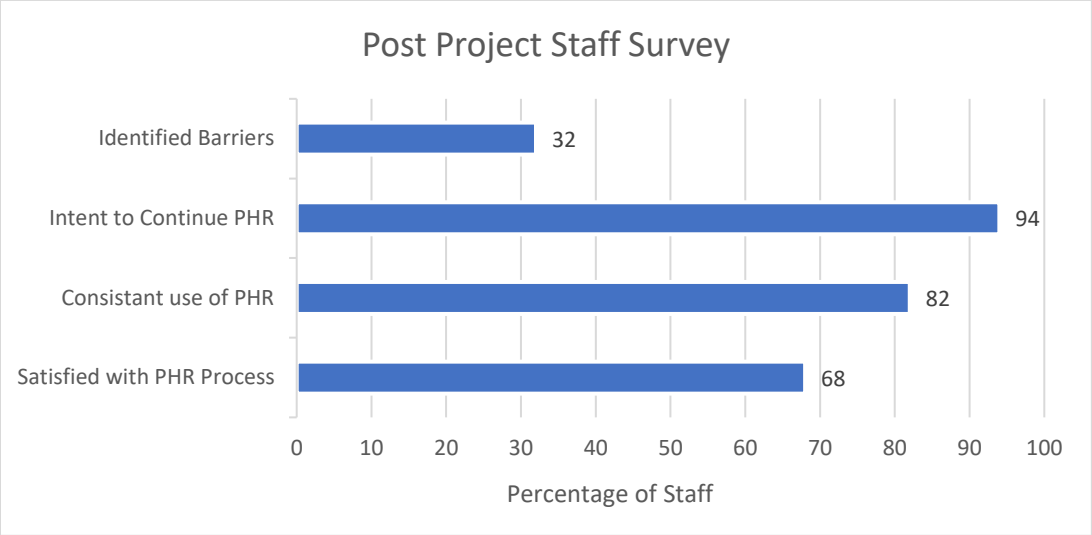
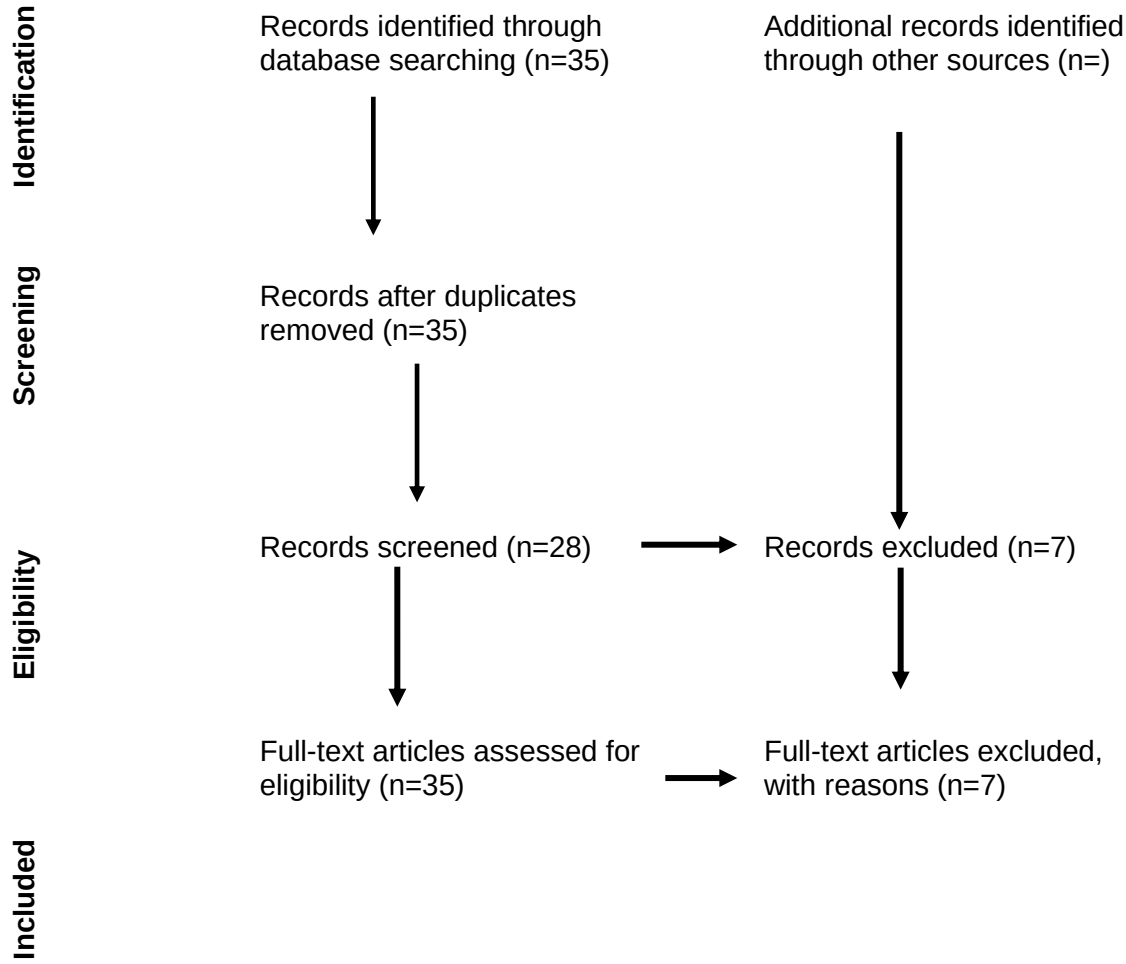


Table 8
Variable Table

Measure	Variable
Outcome	Decreased Fall Rates
Process	Hourly Rounding
Balancing	Staff Participation
Financial	Materials Costs
Stability	Staffing

Figure 1
PRISMA Flowchart



Note. Prisma flow chart diagram from “Preferred Reporting Items for Systematic Reviews and Meta-analyses: The PRISMA Statement,” by D. Moher, A. Liberati, J. Tetzlaff, & D.G. Altman, 2009*, Annals of Internal Medicine, 151*(4), p.267 (http://dx.doi.org/10.7326/0003-4819-151-4-200908180-00135). Copyright 2009 by The American College of Physicians.

Appendix A

Summary of Primary Research Evidence

Citation	Design, Level Quality Grade	Sample Sample size	Intervention Comparison	Theoretical Foundation	Outcome Definition	Usefulness Results Key Findings
Dykes, P. C., Burns, Z., Adelman, J., Benneyan, J., Bogaisky, M., Carter, E., Ergai, A., Lindros, M. E., Lipsitz, S. R., Scanlan, M., Shaykevich, S., & Bates, D. W. (2020). Evaluation of a patient-centered fall-prevention tool kit to reduce falls and injuries: A nonrandomized controlled trial. *JAMA Network Open*, *3*(11), e2025889. https://doi.org/10.1001/jamanetworkopen.2020.25889	Nonrandomized Controlled Trial Level 3 A High quality	All adult inpatients hospitalized in 14 medical units. 37 231 patients were evaluated	Fall-prevention tool kit linking evidence-based preventive interventions to patient-specific fall risk factors		Rate of patient falls per 1000 patient-days in targeted units The rate of falls with injury per 1000 patient-days.	Overall adjusted 15% reduction in falls after implementation of the fall-prevention tool kit. Implementation of a fall-prevention tool kit was associated with a significant reduction in falls and related injuries. A patient–care team partnership appears to be beneficial for prevention of falls and fall-related injuries.
~~Fridman, V. (2019). Redesigning a fall prevention program in acute care: building on evidence. *Clinics in Geriatric Medicine*, *35*(2), 265–271. https://doi.org/10.1016/j.cger.2019.01.006~~						After further review I eliminated this study because it was a quality improvement article.

Gliner, Melissa, Dorris, Joe, Aiyelawo, Kimberley, Morris, Erica, Hurdle-Rabb, Danielle & Frazier, Chantell. (2022). Patient falls, nurse communication, and nurse hourly rounding in acute care: Linking patient experience and outcomes. *Journal of Public Health Management & Practice, 28,* E467-E470. https://doi.org/10.1097/PHH.0000000000001387	RCT Level III A High quality	31 military treatment facilities comprehensively over a 2-year period	Compared link between nurse rounding frequency and patient fall rates	None identified	Fall reduction	Hourly nurse rounding reduced fall rates 21% Poor nurse communication increased patient fall rates
Jung, Hyesil, PhD, RN, Park, Hyeoun-Ae, PhD, RN, FAAN, FACMI, Lee, Ho-Young, et al. (2022). Comparisons of fall prevention activities using electronic nursing records: A case-control study. *Journal of Patient Safety, 18*, 145-151. https://doi.org/10.1097/PTS.0000000000000930	Case-Control Study Level 1 A High quality	Patients older than 18 years admitted to the neurology, neurosurgery, hematology, and oncology units	Compare current nursing practices with evidence-based fall prevention guidelines. sources used for this study were nurses' progress notes, fall risk assessment sheets, initial nursing assessment sheets, doctors' progress notes, and patient acuity assessment sheets	None	Nurses documented more fall prevention practices for patients at a high risk of falling and non-fallers than for patients at a low risk of falling and fallers	Findings emphasize that individual risk-specific nursing interventions in addition to universal precautions are crucial for preventing falls among patient
Nuckols, T. K., Needleman, J., Grogan, T. R., Liang, L.-J., Worobel-Luk, P., Anderson, L., Coles, C., Czypinski, L., & Walsh, C. M. (2017). Clinical effectiveness and cost of a hospital-based fall prevention intervention: The importance of time nurses spend on the front line of implementation. *JONA: The Journal of Nursing Administration, 47*(11), 571–580. https://doi.org/10.1097/NNA.0000000000000545	Uncontrolled before-after design Level III B Good quality	Step-down, medical unit, and surgical unit.	Adding fall prevention to and purposeful rounding to nurse routine. Observation was done using a tool from the Institute for	None identified	Falls declined	Incorporating fall prevention into hourly rounds might improve value. Interventions that promote hourly nursing rounds, incorporate fall prevention into

			Healthcare Improvement.			those rounds, and encourage critical thinking about evolving fall risk might reduce inpatient falls
Turner, K. , Staggs, V. , Potter, C. , Cramer, E. , Shorr, R. & Mion, L. (2022). Fall prevention practices and implementation strategies: examining consistency across hospital units. *Journal of Patient Safety, 18* (1), e236-e242. doi: 10.1097/PTS.0000000000000758.	Cross-sectional, descriptive study Level I A High quality	60 general adult hospital units	Survey measuring 5 domains of fall prevention practices	None found	Resource-intensive are less consistently used than less resource-intensive practices and that interdisciplinary approaches to fall prevention are limited.	Study found that fall prevention was implemented in diverse ways. Study also found variation in units' implementation strategies for educating staff on fall prevention and restructuring resources to support fall prevention efforts
Vechter, T., & Drach-Zahavy, A. (2021). Effect of nurses' resilience on fall prevention in acute-care hospital: A mixed-methods qualitative study. *JOURNAL OF NURSING MANAGEMENT*, *29*(7), 2199–2207. https://doi.org/10.1111/jonm.13373	Descriptive mixed-methods design Level 1 A High quality	24 nurses from internal units of a medium-size hospital, registered nurses that provide care for patients	Observations during the completion of the Morse Fall Scale. Structured interviews using cognitive task analysis (CTA).	None found	Understand the experience and use of cognitive and behavioral strategies of nurses aiming to prevent patients' falls.	Maintain routine to taking control over patients' falls

Legend:

Appendix B

Summary of Systematic Reviews (SR)

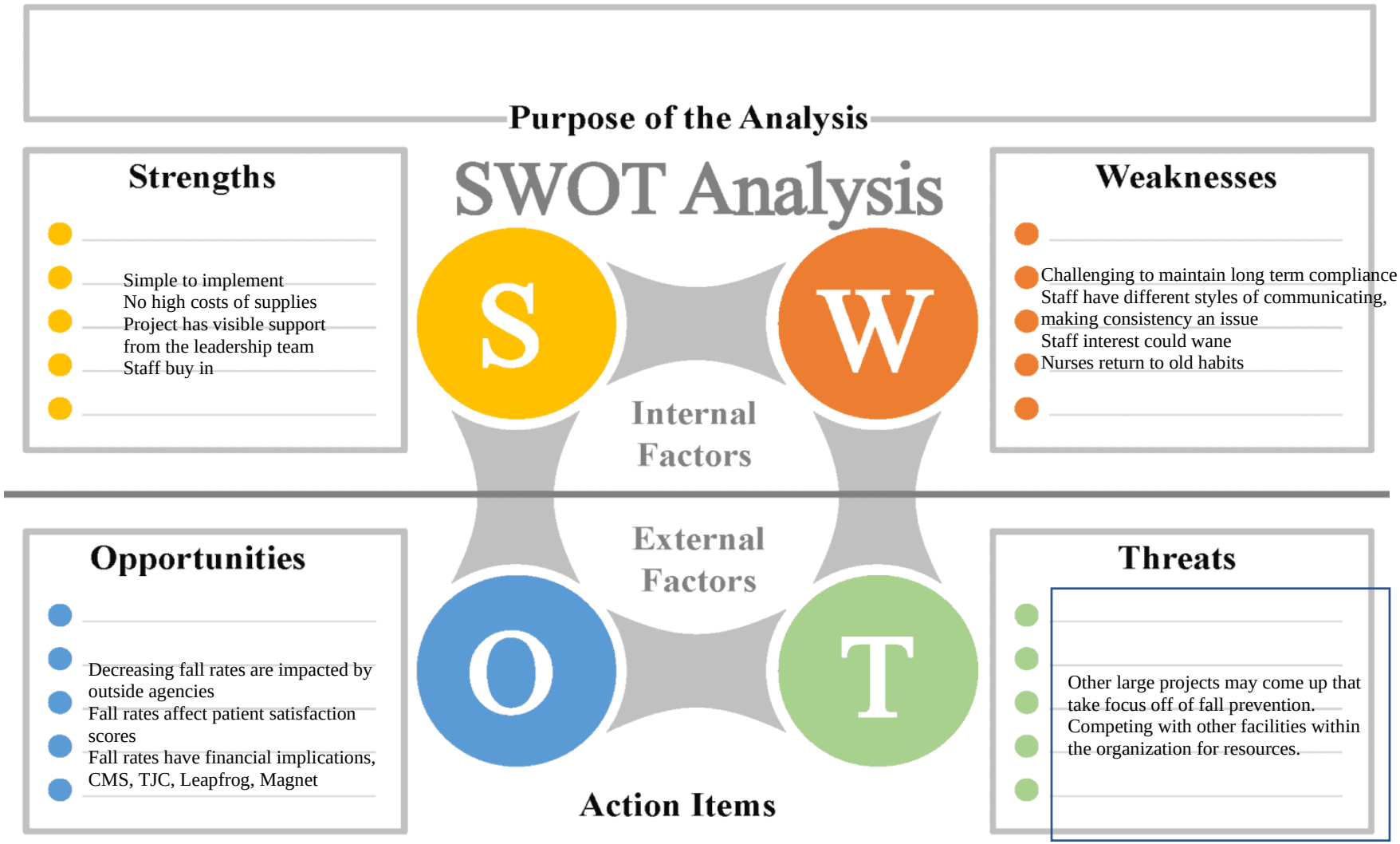
Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/ Implications
Avanecean, D., Calliste, D., Contreras, T., Lim, Y. & Fitzpatrick, A. (2017). Effectiveness of patient-centered interventions on falls in the acute care setting compared to usual care: a systematic review. *JBI Database of Systematic Reviews and Implementation Reports, 15* (12), 3006-3048. doi: 10.11124/JBISRIR-2016-003331.	Systematic review Level 1 A High quality	Does patient centered intervention have an impact on fall rates	Published and unpublished quantitative English language studies	All adult patients admitted to medical or surgical acute care units for any condition or illness.	Quantitative data extracted from papers included in the review using the standardized data extraction form from the Joanna Briggs Institute.	Patient-centered interventions in addition to tailored patient education may have the potential to be effective in reducing falls and fall rates in acute care hospitals	Useful in supporting the PICOT statement

Appendix C

Project Schedule

	NUR7801								NUR7802								NUR7803							
Activity	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15
Meet with preceptor	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Prepare project proposal	X	X	X	X	X	X	X	X																
Prepare project materials									X															
Meet with safety committee									X															
Meet with Risk management									X															
Meet with unit champions									X															
Organize staff training									X	X														
Coordinate ongoing assessment											X	X	X	X	X	X								
Collection of data											X	X	X	X	X	X								
Analysis of data																	X	X	X					
Project Evaluation																				X				
Dissemination																					X	X		
Project Completion																						X	X	

Appendix D


Purpose of the Analysis
SWOT Analysis
Strengths
Simple to implement
No high costs of supplies
Project has visible support from the leadership team
Staff buy in
Weaknesses
Challenging to maintain long term compliance
Staff have different styles of communicating, making consistency an issue
Staff interest could wane
Nurses return to old habits
S
W
Internal Factors
External Factors
O
T
Opportunities
Decreasing fall rates are impacted by outside agencies
Fall rates affect patient satisfaction scores
Fall rates have financial implications, CMS, TJC, Leapfrog, Magnet
Threats
Other large projects may come up that take focus off of fall prevention.
Competing with other facilities within the organization for resources.
Action Items

Appendix E

Education Materials

HOURLY ROUNDING IN NURSING

- We will be focusing on hourly rounding as a component of improving the patient experience.

- Hourly rounding is a structured means of promoting patient-centered communication between staff, patients, and their loved ones.

- Ensures the best outcomes.

BENEFITS OF HOURLY ROUNDING

When consistently and effectively applied, Hourly Rounding will:

- Reduce patient falls
- Reduce call lights for increased nurse efficiency and satisfaction
- Reduce skin breakdown
- Improve patient perceptions of their care
- Improve patient experience scores
- Give nurses more time for patient care tasks – by being proactive rather than reactive.

Hourly Rounding is a commitment to patient centered excellence.

- Prepare patients and their loved ones to expect hourly rounding as our commitment to excellent care
- Agree upon a convenient time for hourly rounding with the patients
- Follow up as appropriate and always ensure the patient has what is needed

Education Handout

Purposeful Hourly Rounding			
	Goals: to reduce call lights, patient falls, skin breakdown, patient anxiety		
	5Ps	**8 Behaviors**	**Actions- Purposeful Rounding**
By proactively addressing the 5Ps …	**Potty** **Pain** **Position** **Pumps** **Patient Education**	**1.** Acknowledge the Patient	Knock on the door prior to entering ask permission. (AIDET)
		2. Deliver Scheduled Interventions	Administer scheduled medication, complete treatments and/or procedures. Include 2 patient identifiers.
		3. Address the 5 Ps	**1. Potty:** provide toileting assistance **2.** Assess Level of comfort **pain** (0-10 rating)), Provide comfort measures & notify RN. **3.** Assist the patient in **re-positioning** help with mobility, provide help to the chair. **4. Patient/family education**- reinforce education on care & medications. **5. Pumps:** check for volumes, integrity & labeling of lines. Check ICD usage
		4. Assess & meet additional comfort needs.	Blankets, water, ice etc…
		5. Conduct and environmental safety check.	Check the room to make sure it is safe and free from clutter Check the bathroom to ensure cleanliness. Move items within reach (table, call light, phone, water). Activate the bed or chair alarm.
		6. Offer additional assistance	Ask, "is there anything else I can do for you? **I have the time"**
		7. Inform the patient of your return time	Tell the patient when you will be back.
		8. Document the Round	Chart the round on the checklist before leaving the room.

Education Attestation

Attestation: By signing this form:

- I acknowledge that I have received education on the following:
  - The correct process of PHR
  - 5 Ps of PHR
  - Benefits of PHR
- I attest that I will safely and appropriately incorporate PHR into my nursing practice.
- I commit to adherence to integrating PHR as outlined in this education session.
- I understand the information provided; I have had an opportunity to ask questions and have had those questions answered to my satisfaction. I accept responsibility for consistent, safe patient care and will reach out to unit leadership for additional questions or concerns.

Signature: _____
Date: _____
Role: _____

Appendix F

Post Project Survey

Purposeful Rounding to Decrease Patient falls

Overall, how satisfied are you with the process of purposeful rounding?

- ○ Very satisfied
- ○ Satisfied
- ○ Neutral
- ○ Unsatisfied
- ○ Very unsatisfied
- ○ N/A

Was the training you received in preparation for the use of purposeful rounding effective?

- ○ Yes
- ◉ No
- ○ Other

Please explain:

Type here...

Was the content of the training you received in preparation for implementation of purposeful rounding useful?

- ○ Yes
- ◉ No
- ○ Other

Please explain if checked other:

Type here...

I consistently used purposeful rounding on all of my patients?

- Yes
- No
- Other

I have included purposeful rounding as part of my patient care routine

- Yes
- No
- Other

Please explain if checked other:

Type here...

I will continue to always use purposeful rounding as part my patient care

- Yes
- No
- Other

Submit

Appendix G

Steps of Purposeful Hourly Rounding (The 5 Ps)

1. Introduce yourself to the patient
2. Complete your scheduled nursing care
3. As part of your care, ask the patient the following questions.
    a. **P**ain- Do you have any pain?
    b. **P**ersonal Hygiene- Do you need to use the bathroom?
    c. **P**osition- Do you need to be positioned?
    d. **P**eriphery- conduct an environmental safety check
    e. **P**umps- Ensure that all pumps are plugged in and working properly
4. Address each “P” as needed based on the patient’s response.
5. Before you leave the room…
    a. Ask if there is anything else you can do while you’re there.
    b. Assure them that you have the time to attend to their needs.
    c. Take a moment to focus on the patient and how they might be feeling.

Appendix H

Minimal Rounding frequency
From 2200 to 0600 q 2hrs.
From 0700 to 2200 q 1 hr.

HOURLY ROUNDING LOG

Week of: _____ **Room #** _____ **Bed #** _____

Initial upon completion of the round, indicating your completion of the 8 behaviors
S = sleeping
O = off the unit
V= vacant bed

Time Rounding	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	5P's	8 Key Behaviors
0000-0200								POTTY PAIN POSITIONING PUMPS – IV & ICD PATIENT EDUCATION	1. Acknowledge the Patient (AIDET) 2. Complete 2 Pt. identifiers. Deliver scheduled interventions 3. Address the 5P's. 4. Assess & meet additional comfort needs. 5. Conduct and environmental safety check. 6. Offer additional assistance. 7. Inform the patient of your return time. 8. Document the round.
0200-0400									
0400-0600									
0700-0800									
0800-0900									
0900-1000									
1000-1100									
1100-1200									
1200-1300									
1300-1400									
1400-1500									
1500-1600									
1600-1700									
1700-1800									
1800-1900									
1900-2000									
2000-2100									
2100-2200									
2200-2400									

UI Health | UIC