

Fall Prevention: A Purposeful Rounding Quality Improvement Project

Shelly K. Fourhman

Under Supervision of

DeNiece Bennett DNP, MSN-Ed, BSN, RN

Second Reader

Catherine Hood, DNP, FNP-C

A DNP Project Manuscript
Submitted in Partial Fulfillment of the Requirements for the
Doctor of Nursing Practice Degree

University of Maryland School of Nursing
May 2022

Abstract

Problem: Patient falls within the hospital setting continue to be a problem and are associated with increased patient morbidity and mortality. A medical-surgical unit within a community hospital has identified falls as a problem and fall rates have exceeded the unit assigned benchmark. Many healthcare facilities are using the method of rounding addressing the 4P's (possessions, position, pain, and potty). Despite using the 4 P's rounding, there has been an increase in patient falls and miscommunication among staff and patients. **Purpose:** The purpose of this project was to increase utilization of the rounding clock, a complementary tool for purposeful rounding which assesses the 4P's on a medical/surgical unit of a community hospital. **Methods:** The QI project focused on utilizing the rounding clock, which encompasses the 4P's. Through random observation of the nursing assistant and patient interaction, weekly data collection and analysis highlighted purposeful rounding while achieving the goal of 100% reduction in falls by the end of the QI project. Data collection was entered weekly and analyzed by the project leader. Falls knowledge and self-assessment of competency was collected pre-implementation. **Results:** Nursing assistants (81%) received education pre-implementation. Compliance averages for rounding observations increased 16%, rounding clock 18%, and communication board documentation (24%) from September which was used as a baseline to October through December. The unit had 16 falls in calendar year 2020 with a falls rate of 3.16 (falls rate per 1,000 patient days); total falls decreased to 9 in calendar year 2021 with a fall rate of 1.187, which was below the target of 1.86 or less. **Conclusion:** The goal of 0% falls was not met. Though the QI project did not yield the target goal of 0% falls, with the increase in purposeful rounding, despite the multifaceted limitations, the overall patient fall rate decreased by 44% which is supported by the literary reviews. *Keywords:* purposeful rounding, hourly rounding, fall prevention, nurse communication, patient satisfaction, patient outcomes

Fall Prevention: A Purposeful Rounding Quality Improvement Project

The Agency for Healthcare Research and Quality's Patient Safety Net estimates that nearly 700,000 to 1 million hospitalized patients fall each year, and one-third of falls will result in injury (AHRQ, 2019). As a result, falls are associated with increased patient morbidity and mortality and are known as one of the most common adverse events. One quality improvement area for fall prevention is intentional rounding, also known as purposeful rounding. "Purposeful rounding with intent is a work process that structures the time staff spends with the patient by using an actual or mental checklist of procedures meant to promote optimal outcomes in a clean, comfortable, safe environment" (American Nurse, 2015). As a nurse-sensitive indicator and a National Patient Safety Goal, patient fall reduction remains a priority and is recognized for its ongoing need of prevention.

A medical-surgical unit within a community hospital had identified falls to be a problem and the falls rate exceeded the unit assigned benchmark. As of December 2020, the unit encountered an annual fall rate of 16, higher than other units in the same hospital. Many healthcare facilities are using rounding to address the 4P's, potty, position, possessions, and pain. This unit had a purposeful rounding procedure in place that has not had significant outcomes. Consequently, the number of falls coupled with miscommunication between clinical nurses and the ancillary staff has led to the rise in the fall rate for this unit. Literary reviews support the utilization of purposeful rounding; additionally, data illustrates the reduction of falls and improvement in communication between staff is attributable to purposeful rounding.

The project aimed to increase utilization of the rounding clock, a complementary tool for purposeful rounding which assesses the 4P's (possessions, position, pain, and potty) on a medical/surgical unit of a community hospital.

Literature Review

Evidence has shown that intentional rounding is one strategy used for fall prevention. Deliberate rounding initiatives focus on checking on patients at regular intervals and include assessing comfort, toileting needs, skin care, patient positioning, and proximity of personal items.

Jenko et al. (2019) found that using the Plan-Do-Study-Act framework addressing knowledge of intentional rounding and the 4 P's, there was a 44% reduction in fall rates post-implementation. Over ten (10) weeks, Certified Nursing Assistants (CNAs) were educated by obtaining baseline knowledge, followed by a 15-minute training video over 7 days. The training focused on the what, why, and how of intentional rounding and using the 4Ps. Post-implementation showed a dramatic increase from the pretest of 9.4 to the post-test of 91.7. Over 75% of the comments by CNAs were positive, indicating that there was improved customer service, quality outcomes, safety awareness, and improved communication. The study also found to have an 81% reduction in the loss of hospital possessions, such as hearing aids and glasses. The study and evidence indicated that intentional rounding decreased the patient fall rate and produced improved patient outcomes.

Morgan et al. (2016) found that programs based on quality improvement and teamwork can deliver effective change and improvement. The study evaluated specific implementation strategies delivered during intentional rounding and the effect on patient fall rates. This direct-randomized observation design took place in 3 phases with a pre-intervention, intervention, and post-intervention phase over one year. The intervention used the Plan-Do-Study-Act framework, incorporated regular patient visits from their nurse, and checked on specific needs relevant to patient falls. Providing a training video at the start of the initiative, during breaks, specifically lunch, clinical staff had the opportunity to learn about intentional

rounding and the significance. As a result of this intervention, the patient fall rate decreased by 50%, from 44 to 22 post-intervention. The mean patient visits increased from 1.47 to 3.32 post-intervention. The study indicated that a reduction in patient falls is achieved through proper implementation strategies and education, thus improving patient care.

In a study conducted by Goldsach et al. (2015), a 30-day pilot study highlighted two (2) units. Unit one received extensive training before implementation, and unit two received an abbreviated training implementation. Post-implementation, the clinical staff surveys revealed that 94% of the clinical staff found purposeful rounding substantially improved patient care. Additionally, 89% reported that purposeful rounding is an effective fall prevention strategy. Evaluation of rounding pre-implementation and post-implementation was conducted through observation by nurse leaders and staff champions. The rounding procedure centered on the 4P's. The design included an interdisciplinary team and established buy-in by having accountability as a strategy. With staff engagement and leadership presence on unit one, the falls rate dropped from 3.9 falls/1000 days to 1.23 falls. On unit two, where there was less staff presence and little preparation, the falls rate was not significant, with a falls rate of 2.6 to 2.5/1000 days. For best success in implementation, the inclusion of leadership, staff, and unit champions is necessary. Staff buy-in and engagement are essential and addressed through accountability and the presence of the project team. The study suggests that falls can be reduced with leadership support and staff buy-in. These combined studies exemplify the effectiveness of purposeful rounding with meaningful education and staff buy-in to reduce patient falls.

Theoretical Framework

The patient falls practice change utilized the Theory of Planned Behavior (TPB). Icek Ajzen developed the Theory of Planned Behavior in 1985. The TPB is a theory that predicts an individual's intention to engage in a behavior at a specific time and place. Beliefs focusing on behavior, normative, and control are a focus for the TPB. The TPB further highlights attitude, behavioral intention, subjective norms, social norms, perceived power, and perceived behavioral control. Achievement of behaviors often depends on the ability and motivation (Hagger, Cameron, Hamilton, Hankonen, & Lintunen, 2020). In evaluating purposeful rounding and the rationale for its ineffectiveness, the behaviors of nursing technicians will be addressed. Readiness for change is directly related to behavior, intention, and attitudes, affecting the commitment for any practice change (Bakari, Hunjra, & Niazi, 2017). This project evaluated how behavior, beliefs, and power impacted the actions of nursing technicians and demonstrated how purposeful rounding leads to positive patient outcomes.

Behavioral beliefs relate to nursing technicians' attitudes toward the rounding procedure. Subjective norms reference the thoughts on the rounding based on social influence, such as peer pressure and leadership. The ease or difficulty of rounding hourly, updating the communication board and rounding clock, and performance of the 4 P's are directly related to control beliefs that lead to perceived behavioral control. Understanding this theory will allow organizations to predict individuals' intentions to carry out a specific behavior. This quality improvement project provided the necessary education, the "why" behind purposeful rounding and how updating the rounding clock and communication board can decrease patient falls; nursing technicians will make strides in following the desired behavior. If nursing technicians do not believe in the behavior being asked, it is predicted that the behavior will not occur nor change.

Changing the nursing technicians' behavior and creating a positive influence is necessary for a favorable outcome. Adopting buy-in for this practice change is key in reducing the resistance of current practice and creating a shift in behavior.

Methods

The project implementation took place on a 30-bed medical-surgical unit within a community hospital. The medical/surgical unit is diverse in the population it serves, with patients ages 18 and older with various medical diagnoses. There were no patient exclusions. Implementation focused on 18 nurse clinicians that were educated and evaluated on the new practice change. The implementation team included a project lead, unit manager, and quality improvement representative.

The implementation phase occurred over 15-weeks, from August through December of 2021. In the months preceding the project, the project lead mobilized an interdisciplinary team of stakeholders. The practice change included education on fall prevention and established competency of purposeful rounding and utilization of the rounding clock. The clinical staff's competencies were evaluated using an adapted version of the Studer Group Hourly Rounding Competency Checklist (Appendix A), addressing both self and observer evaluation. Baseline patient falls data was collected prior to implementation. The project lead completed the initial competency for all nursing technicians. Additionally, each nursing technician completed a pre-knowledge falls test (Koh, 2009) (Appendix B) and falls prevention education via YouTube and voice-over PowerPoint presentation (Appendix C). Included in the education was the "why" for the project and implementation plan. Before implementation, all observers were oriented on data collection methods and observation techniques (Appendix D). All observers performed random observations of purposeful rounding and collected patient feedback using the Patient Feedback and Observation Checklist (Appendix E). The checklist was used solely for quality improvement.

Integrated within the checklist was a scoring system to determine each nursing technician's strengths and weaknesses for purposeful rounding. Constructive feedback was provided during every round and positive reinforcement was provided those that excelled in rounding and in safety (Appendix E). Data was entered weekly by the project lead into a password-protected excel spreadsheet.

Structure measures incorporated the number of nursing technicians who received education and demonstrated competency post-education. Education completion and direct observation of rounding were documented on a competency checklist (Appendix A). The project lead and unit manager conducted education over a three-week period (Figure 2). Process measures were conducted to evaluate compliance with the rounding procedure as evidenced by random observations and patient and staff interviews. The rounding procedure involved the percentage of nursing technicians that demonstrated the use of the rounding clock and patient rooms with updated communication boards (Figure 3 and Figure 4). The priority outcome measure for this practice change is the percentage of patients who sustained a fall during the implementation phase (Figure 5). The patient falls rates for this unit were disseminated through post-fall huddle documents and a bulletin board available to staff and patients with current falls initiatives.

Several implementation strategies and tactics were demonstrated throughout the project implementation phase. Education was chosen to address how the staff's role in the project and contribution was necessary for best outcomes. Fall prevention strategies and education on purposeful rounding including utilization of the rounding clock was disseminated as a voice-over PowerPoint presentation, incorporating basic fall prevention strategies, the rationale for the project identifying unit and hospital goals, purposeful rounding video, and the timeline for the project. Additionally, direct face-to-face demonstration and return demonstration of the rounding

procedure was completed. For any quality improvement project to be successful in implementation, it is important to establish buy-in. Providing evidence on why the project was selected and addressing patient outcomes in its relationship to falls was key in establishing buy-in. Communication efforts were sustained throughout the project by the weekly presence of the project lead on the hospital unit and use of power-sharing and power building. Emphasis was placed on the importance of nursing technicians recognizing their integral role of the healthcare team and how their efforts help to achieve positive outcomes not only for the project itself but for patients was vital for the practice change. Nursing technicians were observed on the new purposeful rounding procedure through modeling and simulating change. Ongoing clinical supervision and performance feedback was conducted to achieve accountability. Observed data were collected randomly by observers, using an adapted Studer Competency checklist throughout the implementation phase. Continuing evaluation of strategies and tactics were conducted throughout project implementation to enhance project success.

The three documents used for data collection and analysis: a data analysis spreadsheet, an observation checklist, and a code key with demographic information for each of the nursing technicians, remained under strict access to maintain confidentiality and integrity of the project. The documents were only accessible by the project lead and observers and password protected.

Data was collected weekly and entered in an excel spreadsheet accessible only to the project lead (Appendix D). Compliance of rounding procedure was analyzed using run charts. Several run charts are included and incorporate pre-implementation data, including monthly falls rates from December 2020-August 2021, compliance of purposeful rounding using the 4P's method, and rounding clock. There is a positive shift in the data, noting a change has occurred in compliance. For observations of the 4P's, rounding clock, communication board, and basic fall prevention, the trend is positive indicating that staff are improving in the practice of purposeful

hourly rounds. A positive trend downward is shown on the run chart for patient falls. This downward trend indicates that the implementation of education and ongoing feedback on falls prevention, purposeful rounding using the 4Ps, rounding clock and communication board produced a positive change. Through fall prevention efforts, this positive change has improved patient outcomes.

Results

Random observations were completed a minimum of three times a week by assigned observers. Weekly correspondence between observers occurred to determine the dates and times for observations. Staff education was conducted over four weeks from August to September. Due to staffing constraints, the goal of 100% of nursing technicians that received education was not met; 81% received direct education for the practice change (Figure 2). Additionally, staffing constraints made it difficult to complete observations due to staff being pulled to different units or into a different role. As a result, the observation checklist was altered at the end of September to meet the needs of the unit for obtaining compliance in updating the rounding clock, communication board, and safety observations (See Appendix E). The goal of 100% of nursing technicians who completed documentation on the rounding clock and communication board during hourly rounds was not met; however, compliance of compliance of purposeful rounding using the 4P's method, and rounding clock increased from October 2021 to December 2021. A total of 120 observations were conducted over the 15-week implementation phase. In September 2021, the average observation score was 80%, rounding clock observations were 56%, and communication board updates were 50%. During the months of October to December 2021, several improvements occurred. The overall average full observation score increased with a compliance rate of 96%, rounding clock observations with an average of 84%, and communication board updates averaging 74%. The overall patient fall rate for January 2020 to

January 2021 was 16. There was an improvement in the patient falls rate from January 2021 to January 2022 with a falls rate of 9, which is attributed to the purposeful rounding initiative. The annual patient falls rate for 2020 was 3.16 and for 2021, 1.187 achieving the goal of 1.86 or less.

There were several facilitators and barriers encountered during the project's implementation phase. The main barrier identified for this practice change was implementing a practice change during staffing shortages due to the COVID-19 pandemic. There were times when staff was pulled to work various roles and to other units, making hourly rounds more challenging to complete. Observers discussed the importance of making rounds even more purposeful due to time limits with patients and the possibility of not being able to conduct rounds because of inadequate staffing. Additionally, there was an increase in the number of patients in isolation due to COVID restrictions, making it harder to respond to patients promptly. While there were several barriers noted during project implementation, facilitators were identified to assist in meeting the overall goal. Pre-implementation, many nursing technicians had insufficient knowledge of fall prevention and interventions necessary to protect patients from falling. As a result, the project lead addressed fall prevention with staff education and a pre-knowledge falls test. Instruction on basic fall prevention was provided and interventions were demonstrated and made part of the observation checklist. Some staff was unaware that patient fall rates were a problem and that improvement was needed. The project lead provided background information as part of staff education. Additionally, the involvement of each staff's obligation to participate in quality improvement initiatives was discussed. There were a few instances where the clinical team did not want to be observed. The manager met with nursing technicians to discuss the importance of buy-in to the practice change. Implementation of the rounding clock required nursing techs to have the correct blue marker for documentation, document on the clock with each round, and circle the time to indicate rounding was completed and mark with a (T) for

toileting. The 4P's were not consistent and an ineffective practice based on pre-implementation data. The rounding process was demonstrated and staff were educated on the "why" the marker color was important, why circling the hour of rounding was important, why marking the hour with a (T) was necessary. Teach-back was reinforced throughout project implementation.

Discussion

Adopting tactics and strategies from the literary reviews, the patient falls rates dropped from 2020 to 2021, when comparing pre-intervention to post-intervention, indicating that the project initiative was successful. Medical diagnoses, the unfamiliarity of an environment, and variability in staffing inherent to the dynamics of the inpatient setting countered the project initiative goal of 0% of falls. The project cultivated an improvement in patient outcomes. With education starting in September 2021, the utilization of the rounding clock slowly trended upwards. From October 2021 to December 2021, the clinical nursing technicians increased the rounding clock utilization during patient rounding with positive reinforcement and acknowledgement of their output. Though there were two falls in November 2021 and three in December 2021, a total of five, during the data collection phase of this project, these falls occurred in the presence of the clinical nursing technician; moreover, these falls occurred without injury to the patients.

In December 2021, the unit transitioned to an all COVID-19 patient unit. The clinical nursing technicians were reassigned to other areas of the hospital to function as patient sitters. In an effort to meet the needs of the patient and the community during the height of the pandemic, an influx of agency staff was deployed to the unit, thereby creating a gap in understanding the purpose of the rounding clock in conjunction with the patient rounding. The additional limitations included increased patient isolation and closed room doors, creating a time barrier for responding to patient call lights and bed alarms. Although there was an increase in patient falls for November

and December, the evidence is not conclusive that the falls are related to decreased compliance with rounding. Presence on the unit with ongoing audits, and conversations with the clinical nursing technicians about their role and influence on patient outcomes was a strength for this practice change. The nursing technicians were most receptive to feedback and sought recognition or additional education for improvement. A strategic and valuable system to sustain this project's initiative's endeavors and continued success is the ease of access to mini-dry erase markers. Ideally, these markers are attached to each clinician's badge, promoting real-time documentation on the rounding clock. Lastly, the practice change encountered minimal costs. Costs were related to the printing of audit tools and markers designated for documentation of the rounding clock.

Conclusion

Utilization of the rounding clock and demonstration of effective purposeful rounds can be sustained through many efforts. Ongoing education on falls and how falls affect patient outcomes, the unit, and the overall institution is necessary to gather buy-in for the initiative. Understanding the "why" is an integral part of adopting buy-in. Explanation of rounding duties associated with a nursing technician role and how their role is a significant contributor to achieving positive patient outcomes and improvement of attitude and job satisfaction is key for successful practice change. Once buy-in is met, sustainability is more likely to be attained. While the goal of zero falls was not met, the sustainability of rounding improvements can be achieved with audits. Audits must focus on patient experiences and the use of the rounding clock demonstrated through effective purposeful rounds. There are minimal costs for the practice change, aiding in the efforts for sustainability. Increasing compliance can be achieved by having a champion to assist with education and audits, adding to sustainability efforts. Areas of improvement and audits related to the practice change should be shared with staff monthly.

Quality improvement measures should continue, addressing patient rounding methods, including the 4PS and updating the rounding clock and communication board.

References

- Bakari, H., Hunjra, A., & Niazi, G. (2017). How does authentic leadership influence planned organization of change? The role of employees' perceptions: Integration of theory of planned behavior and Lewin's three step model. *Journal of Change Management*, 17(2), 155-187. <http://dx.doi.org/10.1080/14697017.2017.1299370>
- Goldsack, J., Bergey, M., Mascioli, S., & Cunningham, J. (2015). Hourly Rounding and Patient Falls: What factors boost success? *Nursing*, 25-30.
DOI:10.1097/01.NURSE.0000459798.79840.95
- Hagger, M. S., Cameron, L. D., Hamilton, K., Hankonen, N., & Lintunen, T. (2020). Changing behavior using the theory of planned behavior. In *The handbook of behavior change* (pp. 17–31). Cambridge University Press.
- Jenko, M., Panjwani, Y., & Buck H. (2019). Intentional rounding with certified nursing assistants in long-term care: A pilot project. *Journal of Gerontological Nursing*, 25(6) 15-21. <https://doi-org.proxy-hs.researchport.umd.edu/10.3928/00989134-20190328-01>
- American Nursing Association (2015). The value of purposeful rounding. *American Nurse*, 10(11), 6-7. <https://www.myamericannurse.com/value-purposeful-rounding/>
- Morgan, L., Flynn, L., Robertson, E., New, S., Forde-Johnston, C. & McCulloch. (2016). Intentional rounding: a staff-led quality improvement intervention in the prevention. *Journal of Clinical Nursing*, 26, 115-124. DOI: 10.1111/jocn.13401
- Preventing Falls in Hospitals. (2021). Agency for Healthcare Research and Quality.
<https://www.ahrq.gov/patient-safety/settings/hospital/fall-prevention/toolkit/index.html>
- The Joint Commission (2015). Sentinel alert event: Preventing falls and fall-related injuries in health care facilities. Retrieved from https://www.jointcommission.org/assets/1/6/SEA_55_Falls_4_26_16.pdf

Table 1

Evidence Review Table

Morgan, L., Flynn, L., Robertson, E., New, S., Forde-Johnston, C. & McCulloch. (2016). Intentional rounding: a staff-led quality improvement intervention in the prevention. <i>Journal of Clinical Nursing</i> , 26,115-124. DOI: 10.1111/jocn.13401					
Purpose/ Hypothesis	Design	Sample	Intervention	Outcomes	Results
<p>“To study the use of a specific implementation strategy to deliver a nursing-led intentional rounding intervention to reduce inpatient falls.”</p>	<p>Direct randomized observation</p> <p>Oct 2012-September 2013</p> <p>3 Phases:</p> <ul style="list-style-type: none"> • Preintervention -2 months • Intervention- 8 months • Post- Intervention- 2 months 	<p>Conducted on 75-bed neuroscience wards in tertiary referral center within a university teaching hospital/trauma center.</p> <p>Preintervention: 691 patients Female 330 Male 361 Mean age 53.4</p> <p>Post Intervention 737 Female 347 Male 390 Mean Age 54.4</p>	<p>Intervention: Regular visits to each patient by a designated nurse, during which the nurse checks on specific patient needs relevant to the risk of falls, such as toileting.</p> <p>A log sheet was placed on the patient’s door and stamped each time seeing the patient. This increased the visibility of patient visit intervals and did not increase the workload.</p> <p>The training video was used to educate staff during their breaks.</p> <p>Using a Plan Do Check Act approach, performance using rounding tool was evaluated and performance was guided throughout intervention.</p>	<p>The incidence of falls decreased by 50% from pre- to post-intervention. There were 44 falls preintervention which dropped to 22 in the postintervention period.</p>	<p>Sample was similar in both pre and post intervention.</p> <p>Patients were visited more frequent after introducing intentional rounding than before prior the study. Mean visits were 1.47 before and 3.32 after intervention.</p> <p>Post-intervention rounding was completed 100% of the time. Log sheets were present on the door of 90% of patients observed and documented 50% of the time.</p>

Jenko, M., Panjwani, Y., & Buck H. (2019). Intentional rounding with certified nursing assistants in long-term care: A pilot project. <i>Journal of Gerontological Nursing</i> , 25(6) 15-21. https://doi-org.proxy-hs.researchport.umd.edu/10.3928/00989134-20190328-01					Level I
Purpose/ Hypothesis	Design	Sample	Intervention	Outcomes	Results
The purpose of this study had five aims: (1) to implement intentional rounding and measure uptake, (2) to improve knowledge of the intentional rounding process (4PS), (3) to explore the perception of intentional rounding as a daily clinical practice, (4) decrease patient falls, and (5) reduce the number of lost/damaged patient possessions	<p>Systematic Review- 16 quality improvement studies reported moderate strength evidence that intentional rounding improves patient satisfaction and nursing care</p> <p>Used the Plan-Do-Study-Act framework for the five aims discussed in the purpose.</p> <p>Pre-post intervention design</p> <p>Ten weeks of implementation</p>	<p>Pilot implemented on 60 bed unit of a 120-bed skilled nursing facility</p> <p>Included: CNAs- 26 Full-time employee- all Female 23 Male 3 >5 years' experience 15 <5 years' experience 11</p> <p>Excluded: Flex pool, parttime employees were excluded</p>	<p>Plan: Pilot implemented Intentional rounding training was required; pre-post survey was optional Five CNAs- identified as project champions</p> <p>Do: Collected data from CNAs and stakeholders Obtained baseline knowledge of intentional rounding followed by 15 min training. Taught the 4P's; (2) pre-training survey with fill in the blank questions; (3) after ten weeks, completed same knowledge survey and discussed intentional rounding experience (4& 5) Project evaluated patient falls and lost personal possessions)</p> <p>Confidentiality was maintained through de-identified data</p>	<p>Positive outcomes were achieved for each of the five aims. Practice patterns changed in regard to quality, safety, and satisfaction.</p>	<p>Study: (1) Took four weeks of coaching to reach 90% fidelity for each of the 4Ps.</p> <p>It took ten weeks to reach 100% (2)</p> <p>Pretest knowledge (9.4) Post Test knowledge (91.7)</p> <p>(3)75% positive CNA comments</p> <p>(4) Pre/post implementation per 1000 bed days- 44% reduction between 3-month pre-implementation falls rate to 3-month post-implementation rates.</p>

Goldsack, J., Bergey, M., Mascioli, S., & Cunningham, J. (2015). Hourly Rounding and Patient Falls: What factors boost success? <i>Nursing</i> , 25-30. DOI:10.1097/01.NURSE.0000459798.79840.95					
					Level 2
Purpose/Hypothesis	Design	Sample	Intervention	Outcome	Results
To study the effects of hourly rounding and what factors boost success? The hypothesis is that the more education and buy-in provided, the greater the outcome in falls reduction.	<p>30-day prospective pilot study with pre- and post- implementation evaluation.</p> <p>September 23, 2013- October 20, 2013</p> <p>Used the Lean Six Sigma process (Define, Measure, Analyze, Improve, and Control)</p> <p>Unit 1 received education and project run-in period allowing staff engagement</p> <p>Unit 2 received limited education and asked to buy-in.</p>	<p>Pilot implemented on 907 -bed hospital in Newark, DE. skilled nursing facility.</p> <p>Study units- 35-bed adult medical stroke unit (Unit 1) and a 40-bed inpatient hematology/oncology unit (Unit 2)</p> <p>108 total randomized staff members observations (56= day shift, 40= evening shift, 12= night shift)</p>	<p>The intervention included a multidisciplinary approach (nurse, pharmacist, physician, physical therapist, process improvement expert, researcher, and nurse leaders)</p> <p>Engaged patients as active partners in fall prevention methods</p> <p>Established culture of staff accountability and buy-in</p> <p>Hourly rounding between 0600-2200 and every 2 hours between 2200-0600.</p> <p>Rounding done by patient care technicians (PCTS)(Unit 1) and nurses only (Unit 2)</p> <p>Mandatory education provided for both (PCTS) and nurses</p>	<p>The mean time between rounds did not increase significantly for either unit.</p> <p>Communication of when next round occurred in 67% of completed rounds.</p> <p>Midnight shift showed most significant compliance with completion of rounding 97% (N=12)</p> <p>Attention to patient comfort needs (98%) and access to call bell (97%) were most often performed tasks.</p> <p>Positioning addressed (73%) of patients</p> <p>Anything else I can get for you? Addressed (96%) of rounds</p>	<p>On Unit 1, the falls rate dropped from 3.9 falls/1000 days to 1.23 falls ($P = 0.006$).</p> <p>On Unit 2, the falls rate was not significant, from 2.6 falls to 2.5($P = 0.799$).</p> <p>94% of staff report purposeful rounding as an effective fall prevention strategy.</p> <p>In comparison, Unit two, only (25%) reported a positive effect on patient care, and (50%) reported that purposeful rounding would be effective as a fall prevention strategy.</p>

Table 2

Synthesis Table

Evidence Based Practice Question (PICO): Why was the annual falls rate of 16 on an adult medical surgical unit higher in comparison to other units within a community hospital?			
Level of Evidence	#of Studies	Summary of Findings	Overall Quality
I	I	<p>Jenko, M., Panjwani, Y., & Buck H. (2019) provided a systematic review of 16 quality improvement studies with evidence that intentional rounding improves patient satisfaction and nursing care. As a result, one skilled nursing facility conducted a study using the Plan-Do-Study-Act framework with a pre- and post-intervention design over 10 weeks. The pre- and post-implementation intervention showed a 44% reduction in falls rates and an improvement of intentional rounding knowledge from 9.4 to 91.7.</p>	<p>B- This systematic review offer studies and evidence indicating that intentional rounding produces improved patient outcomes. This study offered limitations that the setting was conducted in a skilled nursing facility in which 2 of the 16 studies in the review targeted this patient population, limiting evidence at this facility. All studies showed a decrease in patient fall rates. Other limitations could be in the difference between workflow and knowledge of personnel in the various organizations in which the studies took place.</p>
2	I	<p>Goldsack, J., Bergey, M., Mascioli, S., & Cunningham, J. (2015) found that staff buy in and accountability with education had an impact on hourly rounding. Evaluation of rounding pre-implementation and post-implementation was conducted through observation by nurse leaders and staff champions. Leadership support, staff buy-in, and accountability are necessary for any patient-centered project. Despite the limitations, findings indicate that hourly rounding can be useful as a method in falls prevention. With staff engagement and leadership presence, the falls rate dropped from 3.9 falls/1000 days to 1.23 falls.</p>	<p>B- This study offered a randomized and sufficient sample. Due to the success of the pilot study, a longer implementation period was allowed for the unit which can assist with result sustainment. The direct correlation between hourly rounding and falls reduction is inconclusive. Hourly rounding is associated with a decrease in call bell usage which has been shown to reduce patient falls. Limitation included a short pilot period of 30 days.</p>

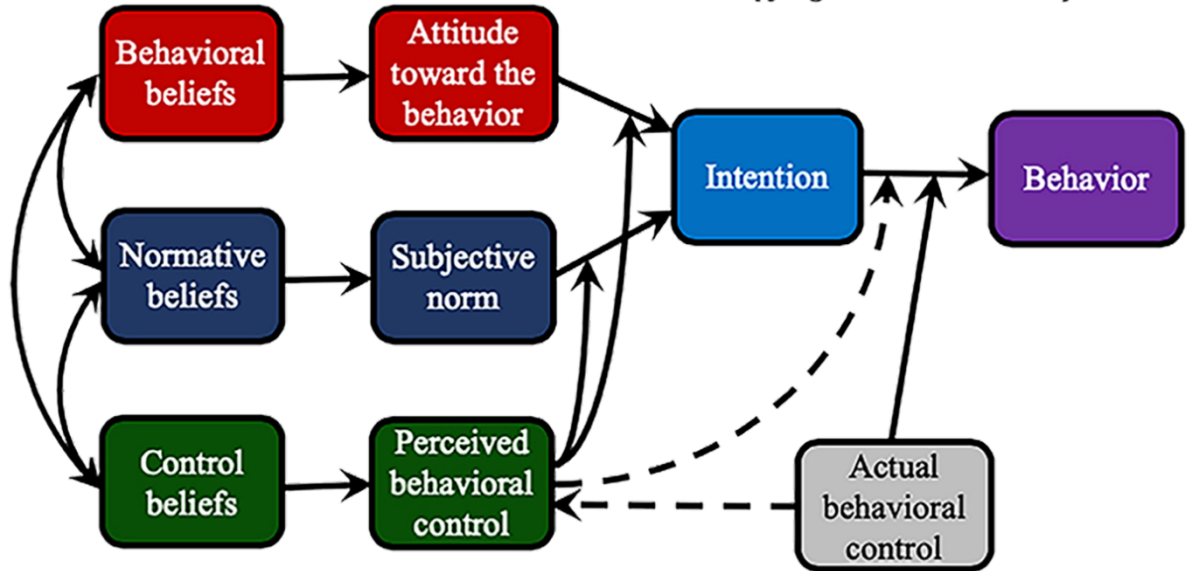
		<p>On unit two, where there was less staff presence and little preparation, the falls rate was not significant, from 2.6 falls to 2.5. Staff survey data reported (94%) that purposeful rounding had a substantial impact on patient care, and (89%) reported that it was an effective fall prevention strategy. In comparison, only (25%) reported a positive impact on patient care in unit two, and (50%) noted that purposeful rounding would be effective as a fall prevention strategy.</p>	
IV	I	<p>Morgan et al. (2016) evaluated the use of specific implementation strategies delivered during intentional rounding and its effects on patient fall rates. This direct-randomized observation design took place in 3 phases with a pre-intervention, intervention, and post-intervention phase over one year. The intervention used the Plan-Do-Study-Act framework incorporating regular patient visits and checking on specific needs relevant to the patient falls. As a result of this intervention, patient falls rate decreased by 50% from a pre-intervention falls rate of 44 to 22 post-intervention. The mean visits increased from 1.47 to 3.32. Intervention and log sheets were present on the door 90% of the time, although only 50% of the time documented.</p>	<p>B- Although the evidence for this study indicates a positive outcome for the intervention of intentional rounding to reduce patient falls, there are some limitations to the study. Documentation of 50% of the time is a limitation. Another limitation is the sample size, and possibly not representative of all patient's needs. Another limitation is the lack of patient satisfaction scores.</p>

Figure 1

The Theory of Planned Behavior (2019)

<https://people.umass.edu/aizen/tpb.diag.html>

Copyright © 2019 Icek Ajzen



<https://people.umass.edu/aizen/tpb.diag.html>

Figure 2. Percentage of Technicians that Received Education on Falls Project Run Chart

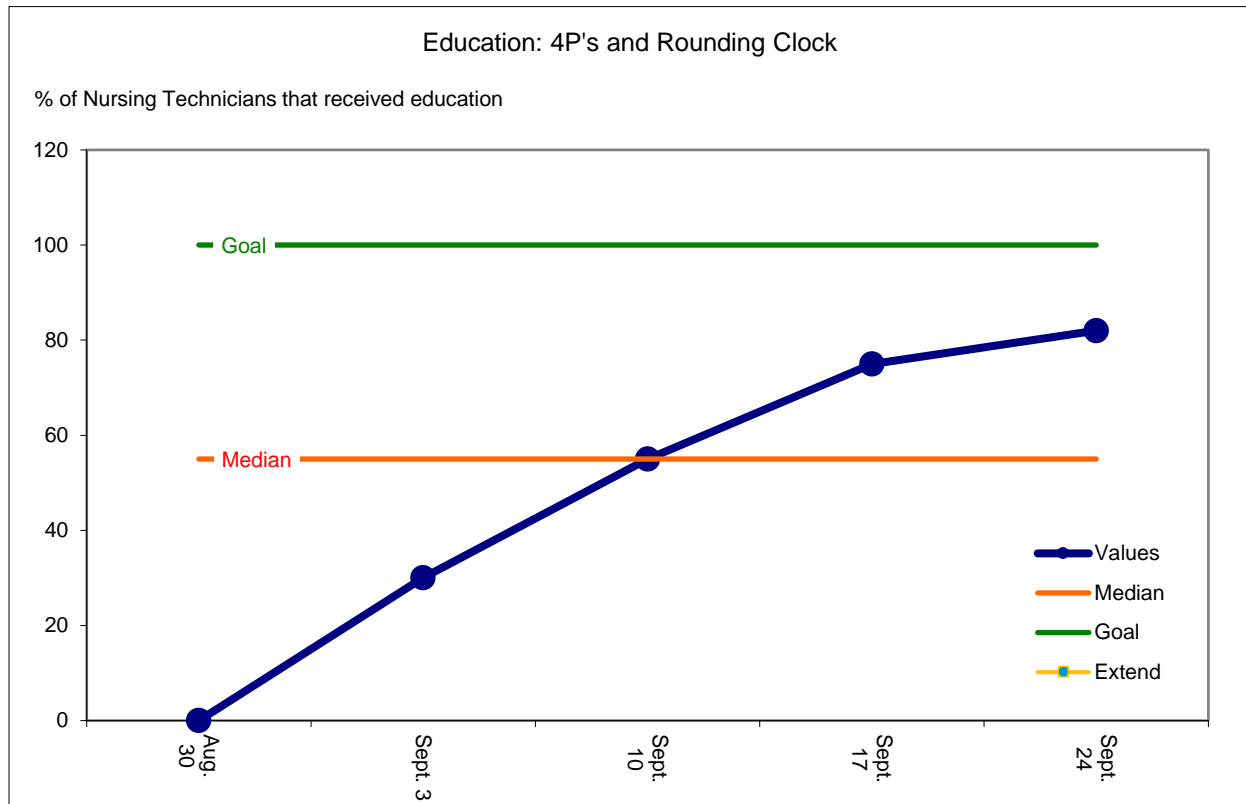


Figure 3. Full Observation of Project Run Chart

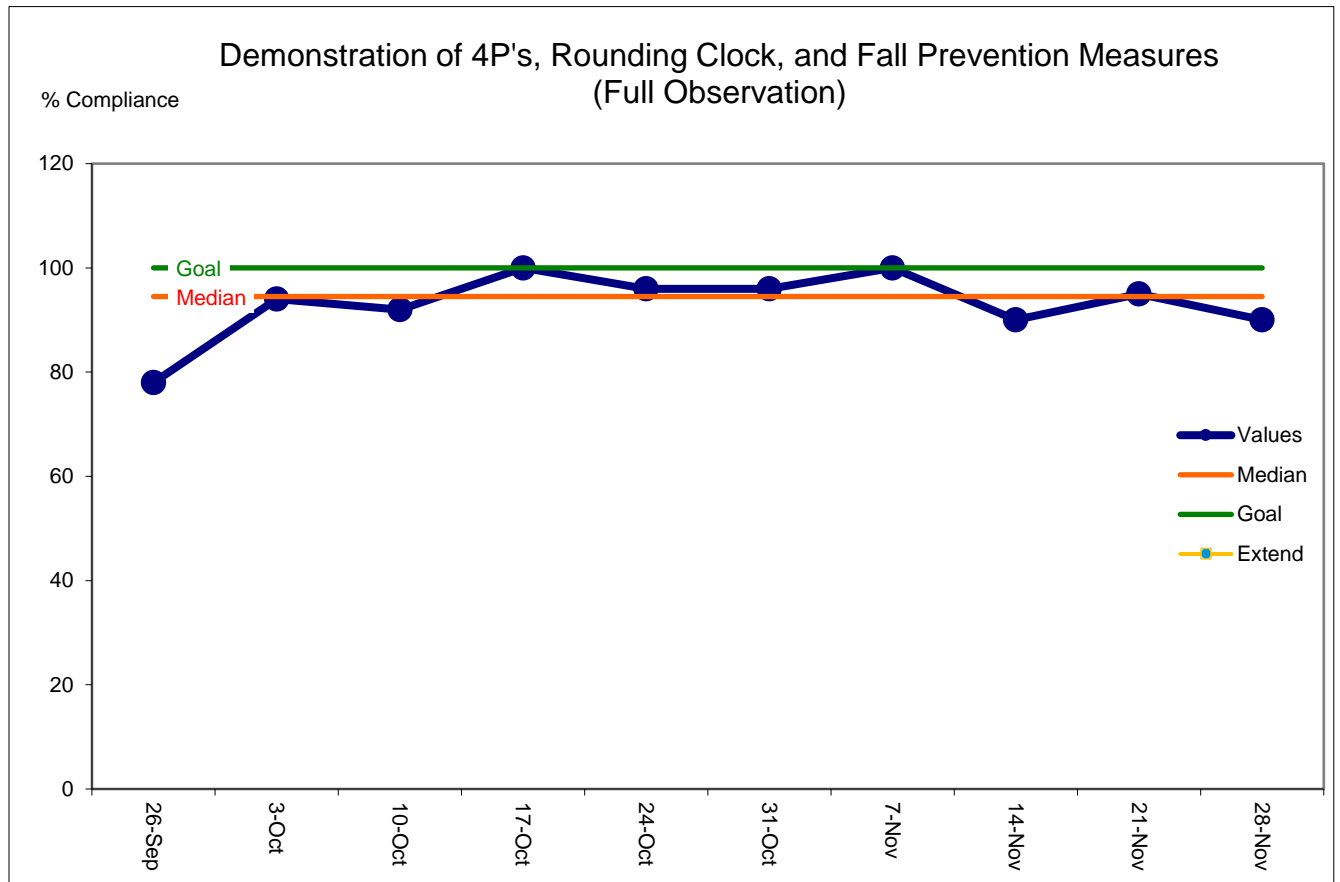
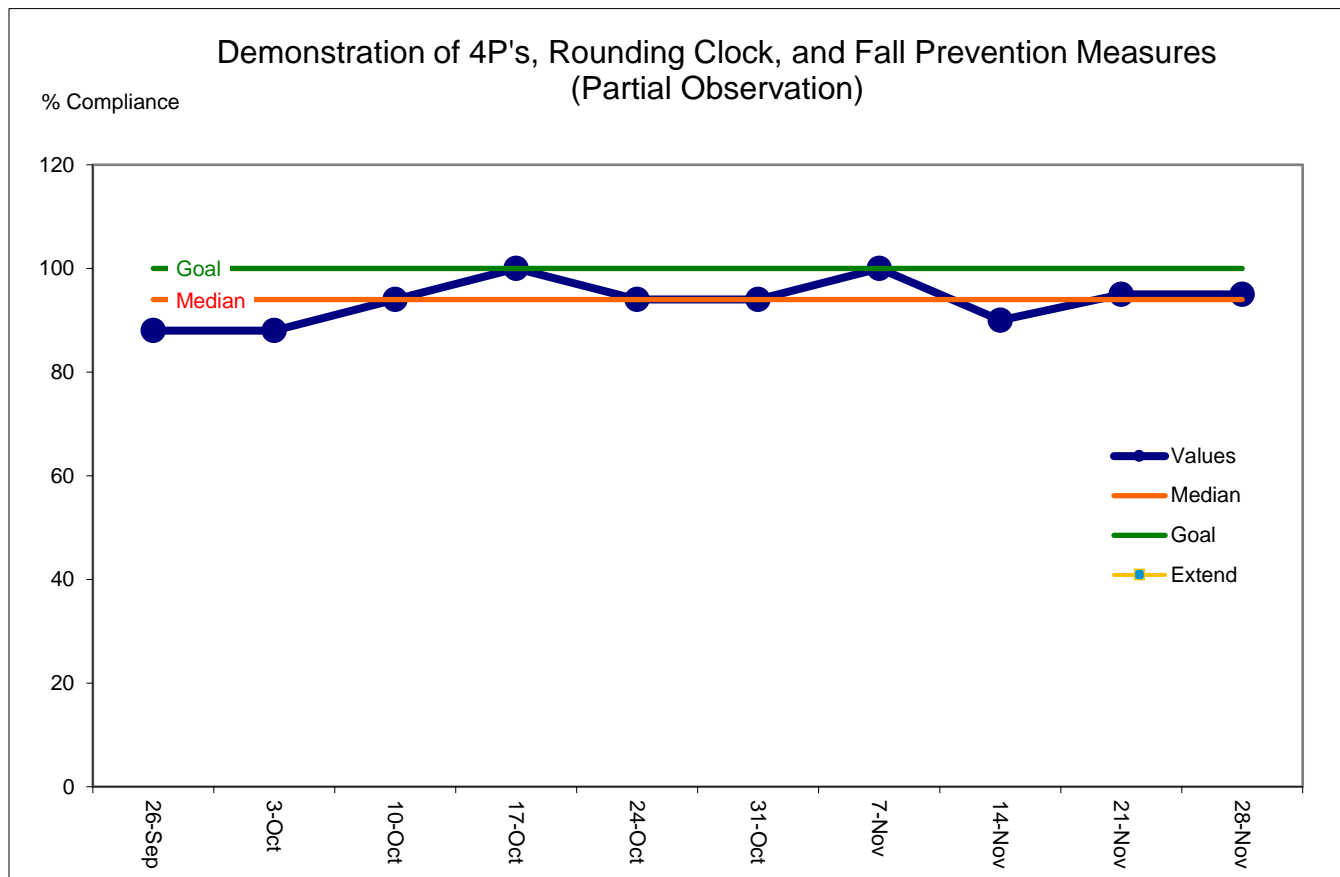


Figure 4. Partial Observation of Project Run Chart

Appendix A:**Hourly Competency Checklist**

HOURLY ROUNDING COMPETENCY CHECKLIST

DATE:					
TECH ID:		OBSERVER ID:			
DEPARTMENT					
Evaluator	Self-Assess		Evaluator		Comments
	Yes	No	Yes	No	
INTRODUCTIONS					
Knock on door prior to entering- ask permission					
Introduce self					
Use good eye contact					
Explain the purpose of hourly rounding (initial visit)					
EXPLAIN HOURLY ROUNDING UPON ADMISSION					
Discuss the rounding schedule (q1 hr 6am-10 pm) (q 2hr 10pm- 6am)					
SAFETY OBSERVATIONS					
Call bell within reach					
Room is clutter free					
Bed is in lowest position					
Side rails are up					
Bed alarm is intact if applicable					
COMMUNICATION BOARD					
Place name on white board					
Update goals at the beginning of shift					
Utilize the rounding clock for when patient goes to bathroom					
ADDRESS 4 P's (PAIN, POTTY, POSSESSIONS, POSITION)					
How is your pain?					
Are you comfortable?					
Do you need to go to the bathroom?					
Can I get anything for you? Make sure that personal items are within reach					
CLOSING					
We will round again in an hour					
Is there anything else that I can do for you? I have the time					
Document your rounding on rounding log					

Appendix B:

Falls Knowledge Test

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*?
 - a. Falls have multifactorial etiology, so fall prevention programs should comprise multifaceted interventions.
 - b. Regular review of medication can help to prevent patient falls.
 - c. The risk of falling will be lessened when a patient's toileting needs are met.
 - d. The use of antipsychotic medications is associated with an increased risk of falls in older adults.

2. A multifaceted intervention program should include:
 - a. Individually-tailored fall prevention strategies
 - b. Education to patient/family and health care workers
 - c. Environmental safety
 - d. Safe patient handling

3. Risk factors for falls in the acute hospital include all of the following *except*:
 - a. Dizziness/vertigo
 - b. Previous fall history
 - c. Antibiotic usage
 - d. Impaired mobility from stroke disease

4. Which of the following statements is *true*?
 - a. The cause of a fall is often an interaction between patient's risk, the environment, and patient risk behavior.
 - b. 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 review of history of falls, mobility problems, medications, mental status, continence, and other patient risks.

5. Patients with impaired mobility should be:
 - a. Confined to bed
 - b. Encouraged to mobilize with assistance
 - c. Assisted with transfers
 - d. Referred for exercise program or prescription of walking aids as appropriate

6. The management of the acutely confused patient should include all of 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 statements 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 for falling.
 - c. A patient who is taking psychotropic medication is at higher risk for falling.
 - d. Testing or treatment for osteoporosis should be considered in patients who are at high risk for falls and fractures.

8. In hospital settings, intervention programs should include:
 - a. Staff education on fall precautions
 - b. Provision and maintenance of mobility aids
 - c. Postfall analysis and problem-solving strategy
 - d. Bed alarms for all patients, regardless of risk

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 hospital as it is all standardized.

10. Risk factors for falls include:
 - a. Parkinson's disease
 - b. Incontinence
 - c. Previous history of falls
 - d. Delirium

11. Exercise programs for ambulatory older adults should:
 - a. Be very aggressive
 - b. Be unsupervised
 - c. Be ongoing
 - d. Include individualized strength and balance training

12. Which of the following statements on education in fall prevention is *false*?
- a. Education programs should target primarily health care providers, patients, and caregivers.
 - b. Education programs for staff should include the importance of fall prevention, risk factors for falls, strategies to reduce falls, and transfer techniques.
 - c. Instruction on safe mobility, with emphasis on high-risk patients, should be provided to both patients and families.
 - d. Education should only be given at the start of the fall prevention program.
13. Which of the following is recommended to improve patient safety?
- a. Locking wheeled furniture when it is stationary.
 - b. Having nonslip flooring.
 - c. Placing frequently used items (including call bell, telephone, and remote control) within reach of the patient
 - d. Rounding hourly to address patient needs

Appendix C:

Education and Lesson Plan

Name of Organization: Saint Agnes Hospital				
Educational Program: Fall Prevention: A Purposeful Rounding Quality Improvement Project				
Program Goal: To provide education on falls prevention, addressing purposeful rounding using the 4P's and the importance of staff communication through utilization of the rounding clock. Providing education to nursing technicians and establishing competency will enable nursing technicians to provide effective and quality patient care with efforts in reducing patient fall rates.				
Learning Objectives	Content Outline	Method of Instruction	Time Spent	Method of Evaluation
<ul style="list-style-type: none"> To gather pre-knowledge on falls prevention and purposeful rounding prior to implementation of project. 	Purposeful Rounding and Basic Fall Prevention Assessment	Falls Assessment Quiz	10 min	Pre-assessment Quiz
<ul style="list-style-type: none"> Explain the rationale for Purposeful Rounding project Verbalize the impact on patient outcomes and meeting hospital strategic goals. 	Why? Importance of project <ul style="list-style-type: none"> Benchmarks Unit/hospital goals Role Buy-in 	PowerPoint		Knowledge Post-test
<ul style="list-style-type: none"> Discuss the importance of purposeful rounding and how using the 4Ps will help in the prevention of patient falls. Verbalize the role of the nursing technician for purposeful rounding. Discuss the importance of communication between staff and how utilizing the rounding 	Introduction of Purposeful Rounding <ul style="list-style-type: none"> 4P's (pain, potty, possessions, and position) Role of the tech Updating communication board Update of Rounding clock 	YouTube Hourly Rounding Video https://youtu.be/i18LbQnnT2s Self-Directed Learning Module <ul style="list-style-type: none"> Voice Over PowerPoint Handouts correlate with PPT Face to Face Demonstration	5 min 15 min 15 min	Knowledge Post-test Return demonstration of Competency Competency checklist Ongoing observer evaluation

<p>clock contributes to this improvement.</p> <ul style="list-style-type: none"> • Acknowledge the importance of updating the communication board at the beginning and throughout the shift. 	<ul style="list-style-type: none"> • Importance of communication between nursing technician and nurse 			
	<p>Patient Safety and Falls Basic fall prevention</p> <ul style="list-style-type: none"> • Call light, clutter, bedside table within reach, non-slip socks, bed in lowest position, side rails up 	<p>Self-Directed Learning Module</p> <ul style="list-style-type: none"> • Voice Over PowerPoint Presentation • Handouts correlate with PPT 	10 min	<ul style="list-style-type: none"> • Post-test

Appendix D:

Training Guide

Observations

- It is my goal to have 15-25 observations per week and every tech will be evaluated
- Observation time will be flexible and random based on observer availability

Patient Feedback Form and Observation Checklist

- Each of you have the patient feedback form and observation checklist (**email attachment**)
- 50 copies have been supplied
- Patient rounds will be evaluated using this form
- Make sure to use tech and observer code when filling out form (no information for patient or tech should be on form)
- Completed forms will be placed in a large envelope which will stay in Clinical Site Representative's mailbox (I will be able to then collect the forms, sort, and add to data analysis form)
- Goal: To make sure every tech is evaluated multiple times and that there is improvement in the scores. If scores are low or there is concern, feedback to tech should be given. If overall, scores remain low or there is no improvement, all techs will receive feedback as needed

Competency Checklist

- Competency for demonstration of education may take longer than initially planned. Goal is for demonstration to be completed by 9/30.
- Although demonstration competency may take longer due to staff available on shift and student availability, self-assessment and education will be completed early, allowing for the start of observations.
- All techs will complete self-assessment portion of competency checklist during education and form will be collected by Jackie. Forms will be placed in Jackie's mailbox for pick up by 9/15.

Code Key

- Code key with observer ID and tech ID is password protected and attached in email. A code has been created for each observer and tech.

Data Analysis Form

- Data will be entered weekly by DNP student

Appendix E:

Patient Feedback and Observation Checklist

Date/ Day of Week: _____ Name: _____ Role: _____ Tech Code: _____

Observation Checklist					
Assessment of 4'Ps	✓ Strengths	X Weakness	Score (complete observation)	Score (Room observation)	Feedback Provided
Pain assessment (How is your pain?)					
Positioning (Are you comfortable?)					
Potty (Do you need to go to the bathroom?)					
Possessions (Do you need anything before I leave?)					
Conducts rounds every (2) hours (Techs)					
Introduction					
Demonstrates respectful behavior upon entering room					
Introduces self and uses names and title					
Communication Board					
Updates rounding clock during rounds (last time patient was taken to bathroom is updated)					
Documentation is current					
Safety Observations					
Call Bell in Reach					
Floor is clutter free					
Side rails are up					
Bed in lowest position					
Bed alarm? Activated?					
Total Score			/ 14	/7	
Patient Feedback					Comments
We always want to be responsive to your needs. What have you had to use the call light for in the past 24 hours?					
Has your pain been controlled?					
Have the staff addressed your comfort level frequently?					
Do you have everything you need at your bedside?					
Have your potty needs been assessed with bedside rounding? Have you had to wait for someone to help you to the bathroom?					
Is there anyone who has made a difference for your care in the last 24 hours?					