Dodge the Fall: A Newborn Fall Prevention Initiative

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Dodge the Fall: A Newborn Fall Prevention Initiative

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Abstract

Problem: There has been a rise in In-hospital newborn falls following evidence-based practices such as breastfeeding and rooming that promote mother and baby bonding (Karlsson et al., 2021). U.S. hospitals have approximately 600 to 1,600 newborn falls annually (The Joint Commission [TJC], 2018).

Context: A San Francisco Bay hospital with a postpartum unit experienced three newborn falls as of 2023. The level III neonatal intensive care unit is a high-risk obstetric facility with more than 3,000 births annually. It comprises 21 hospital beds: 10 on the postpartum and 11 on the antepartum floors.

Intervention: Developing and implementing the “Pledge Form for Infant Safety form.” A nursing tool to educate postpartum patients on newborn fall prevention and reinforce commitment to safe sleep practices.

Measures: Qualitative information was gathered using pre-and post “Patient Education Surveys” and pre-implantation staff surveys. Pre- and post-implementation quantitative data derived from newborn chart audits using electronic medical records (EMRs).

Results: This project aimed to increase nurse-to-patient education by 10% and decrease the number of newborn falls. “Patient Education Surveys” demonstrated a 4.6% decrease in newborn fall prevention education compared to an 18.9% increase in EMR-documented nurse-to-patient education. No falls were reported from September to November.

Conclusion: Concluded with inconsistent data between “Patient Education Surveys” and EMR newborn chart audits. The findings present a need to assess a structured teaching approach for postpartum families. It may be beneficial to standardize the educational content and language, making it easier for patients to learn and recall the material.
Keywords: newborn fall prevention, newborn falls, newborn drops, neonatal falls, infant drops, newborn safety, mother-baby unit safety, newborn safety, and postpartum safety intervention.

Dodge the Fall: A Newborn Fall Prevention Initiative

Nationally, hospitals have approximately 600 to 1,600 newborn falls annually (Joint Commission, 2018). A steady uprise in baby-related falls prompted The National Database of Nursing Quality Indicators (NDNQI) 2016 to measure the incidence of these events and develop standardized definitions (NDNQI, 2016). A newborn fall is an unintentional descent to the floor, surface, person, or object, while a newborn drop is when an infant slips from the person (healthcare worker, parent, or person) holding the baby. Newborn drops count regardless of direct contact with a surface or the presence of any related injuries (TJC, 2018).

Newborn falls can have implications for everyone involved. They can result in life-threatening head injuries for newborns, such as fractures and intracranial hemorrhage (Duthie, 2020), prolonged hospitalization, and admission to a neonatal intensive care unit (Whatley et al., 2022). Furthermore, they can trigger emotional distress for parents and healthcare providers (Bittle et al., 2019), leading to legal and financial challenges for hospitals (Lipke et al., 2018).

In the United States, most women (98.4%) give birth within a hospital setting (MacDorman & Declercq, 2019), and nurses provide most of the hands-on birth-related care (National Academies of Sciences Engineering and Medicine [NASEM], 2020). Their increased bedside presence and direct patient engagement make them critical players in patient safety (Phillips et al., 2021). More specifically, improving patient outcomes through quality and safety is front and center of what Clinical Nurse Leaders (CNLs) can achieve within their role. CNLs are embedded within the microsystem to transform diverse healthcare settings and improve patient care experiences (Harris et al., 2018, p. xi).
The postpartum unit at Hospital X, experienced an increase of fall occurrences as of 2023. Before these events, newborn falls were non-existent, prompting patient safety concerns among leadership. To prevent future falls, hospital stakeholders were interested in prioritizing identifying microsystem gaps, eliminating risk factors, and improving patient safety. This quality improvement initiative centers on patient safety by mitigating the occurrence of in-hospital newborn falls through financial stewardship and evidence-based practices.

**Problem Description**

The family-centered postpartum unit is part of the Labor and Delivery department within 247 licensed bed medical center in the San Francisco Bay Area. The level III neonatal intensive care unit is a high-risk obstetric facility with more than 3,000 births annually. Composed of 21 hospital beds: 10 beds located on the postpartum floor and 11 beds on the antepartum floor; collectively, these two floors assist with the postpartum recovery phase. Registered nurses (RNs) are assigned three couplets; a couplet comprises a recovering mother and their newborn until they are ready for discharge. The postpartum unit promotes evidence-based practices such as breastfeeding and rooming, a model encouraging bonding between mother and baby by keeping them in the same room.

As of this year, the mother-baby unit encountered three separate newborn falls, although hospital records only identified one occurrence. With a YTD report of 3,429 births, the unit’s annual newborn fall rate of 8.75 per 10,000 live births is considerably higher than the national average. In reviewing information available for the only case recorded, the newborn did not sustain life threatening injuries but had been referred for diagnostic magnetic resonance imaging (MRI). The fall occurred following the mother falling asleep while holding her newborn resulting in a prolonged three-day hospitalization. Information pertaining to the two other cases
was limited but the nurse manager identified similar factors present across all three cases such as the mother falling asleep and the fall occurring during early morning hours. The recent events uncovered critical vulnerabilities within the postpartum unit such as improper fall reporting practices and a lack of standardized safety measures.

**Available Knowledge**

**PICOT**

In newborns on the postpartum unit (P), will requiring mothers to sign the Pledge Form for Infant Safety (I) compared to current newborn fall prevention methods (C) decrease fall rates (O) within three months (T)?

A comprehensive review was conducted through CINAHL Ultimate, PubMed, EBSCOhost, and Scopus databases. The literature search included keywords such as *newborn fall prevention, newborn falls, neonatal falls, infant drops, and postpartum safety intervention*. Research criteria included articles in English only, peer-reviewed, and published within the last five years. Initial search results presented limited data, which led to the inclusion of articles dating as far back as 2016.

**Search Strategy**

A comprehensive review was conducted through CINAHL Ultimate, PubMed, EBSCOhost, and Scopus databases. The literature search included keywords such as *newborn fall prevention, newborn falls, neonatal falls, infant drops, and postpartum safety intervention*. Research criteria included articles in English only, peer-reviewed, and published within the last five years. Initial search results presented limited data, which led to the inclusion of articles dating as far back as 2016. Literature review is included in Appendix B.

**Literature Review**
A quality and patient safety report published by The Joint Commission (2018) informed on the increased prevalence of newborn falls and identified common risk factors such as cesarean deliveries, medication use, and falls occurring primarily during breastfeeding and midnight or early morning hours. These findings are consistent with what others have reported regarding newborn falls across postpartum units.

A study by Ainsworth et al., (2016) attributed seven falls within their community hospital between December 2011 and July 2012. Out of the seven occurrences, six accounted for cesarean births; six cases took place during the early morning, five mothers received opioid medication within three hours of the fall, five involved the mother holding her baby, and four during breastfeeding sessions. Similarly, Karlsson et al. (2021) reported an association between sleeping mothers and newborn falls. Their study depicts a 40-bed postpartum unit with nine fall incidents between January 2015 and September 2018. A root cause analysis revealed that 78 percent of falls were associated with mom falling asleep during rooming in. In a four-year retrospective study conducted by Kukielka and Wallace (2019), findings show that 22.6 percent of falls occurred during feeding activities, 62.5 percent occurred specifically during breastfeeding, and 52.8 percent after the caregiver fell asleep. They also discovered that 84.6 percent involved mothers during the fall incident, and 56.6 percent occurred between 12:00 and 7:00 a.m.

The literature presents a wide range of contributing factors influencing newborn-related falls and the implementation of a collection of practices into safety bundles to improve postpartum safety outcomes. This approach aligns with recommendations from The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) in optimizing efficiency through safety interventions such as educational materials, visual cues, checklists, intentional rounding, and risk mitigation through process standardization.
This integration concept is used by Ainsworth et al., (2016) in their newborn safety bundle, combining implementations such as crib cards, hourly rounding, maternal rest periods, parental education, a safety pledge contract, and requiring mothers to contact their nurse before and after feedings to enforce raising all four side rails for safety precautions. Karlsson et al. (2021) utilize a similar bundle approach incorporating a signed safe sleep pledge contract, room signage, official quiet time, and staff-patient education. Enforcement of a department-wide rest bundle led to the elimination of newborn falls for up to two years. Additionally, post-implementation surveys revealed that 53 percent of nurses agreed quiet time should remain the same, and 95 percent of mothers found quiet time beneficial. Miner (2019) also utilized a comprehensive model in response to an increased number of falls within a healthcare system of three separate community hospitals. Implementing a newborn safety bundle was attributed to a 36% reduction in fall events across their healthcare system over two years.

**Rationale:**

The development of this quality improvement project was guided by the conceptual framework of Spradley’s Change Theory. This theory outlines change through eight steps described as recognizing symptoms, diagnosing the problem, analyzing alternative solutions, selecting the change, planning the change, implementing the change, evaluating the change, and stabilizing the change (Spradley, 1980).

In the first step of the change process, the nursing administration recognized the need for change (recognize symptoms) with falls within the unit. Diagnosing the problem, the theory’s second step, required assessment by collecting data through “Staff Surveys” (Appendix G) and “Patient Education Surveys” (Appendix H), chart audits, and workflow observations. Next, information gathered identified a lack of a standardized newborn fall prevention protocol. In the
fourth step, viable solutions were brainstormed among the project team, considering advantages, disadvantages, and consequences (Spradley, 1980). Solution evaluation considered only those that were low risk, time and cost-effective, and likely to result in staff engagement (Spradley, 1980). The best potential options were presented and reviewed with the unit manager, concluding with a final decision, “Pledge Form for Infant Safety” enforcement (Appendix I). Implementing a single intervention versus a Newborn Safety Bundle (NBSB) was primarily decided based on staff receptivity to multiple changes at once and the limited time for the project.

The next step, planning the change, involved selecting a group of members to lead the project, developing a timeline with outlined activities to achieve specific objectives, designating a budget, identifying anticipated resistance, and establishing strategies to sustain change (Spradley, 1980). Following the plan, the implementation step is executed through a pilot project, producing helpful information on the intervention’s feasibility and modification opportunities. The seventh step in Spradley’s Change Theory focuses on evaluating change by determining the objective achievement and necessary modifications. The last step is stabilizing change by encouraging staff to continue with intervention implementation, mitigating resistance through open communication, and reinforcing desired behavior (Spradley, 1980).

**Specific Project Aim:**

The specific project aim is as follows: From October to November 2023, the postpartum unit will increase nurse-to-patient education by 10 percent and decrease the number of newborn falls.

**Section III: Methodology**

**Context**
The quality improvement project was initiated with an overview of the microsystem. This first step is critical as it thoroughly examines the department's anatomy, uncovering potential gaps in practice and areas for improvement. Completing this process supports the identification and development of the improvement initiative, facilitates its success and supports its sustainability (Harris et al., 2018). Postpartum unit analysis occurred in partnership with department leadership, the director of risk management, the project team, staff, and patients. Using a series of tools, including the 5 P’s, SWOT analysis, fishbone diagram, PDSA chart, Gantt chart, and cost-benefit analysis, led the direction and objectives of this project.

**Microsystem Assessment**

The 5 P’s microsystem assessment was conducted using Dartmouth’s framework referenced in “A Microsystem Action Guide” (Trustees of Dartmouth College et al., 2004). This tool explores five components of the microsystem, represented by each P, including purpose, patients, professionals, process, and patterns (Harris et al., 2018).

**Purpose**

Hospital X’s mission is to advance the health of members in the community by providing affordable, quality healthcare services. The family-centered postpartum unit focuses on recovering mother and baby after delivery by promoting evidence-based practices such as breastfeeding and rooming. This model encourages bonding between mother and newborn by keeping them in the same room until they are ready for discharge.

**Patients**

There is a diverse patient population; the majority are White (39.6%), followed by Asian (35.3%), and Hispanic (15.3%). The birth center serves women between the ages of 33 and 38 years old, the majority being multiparous (54.02% - 55.9%), followed by primigravida (41.5% -
44.34%) and C-section deliveries (25.28 - 28.78%). The average length of stay is between two to four days. Vaginal birth deliveries may require an approximate hospital stay of one to two days, while a cesarean (C-section) procedure may require two to three days.

Professionals

The postpartum unit is made of a multidisciplinary team of a unit assistant (UA), certified nursing assistant (CNA), 54 registered nurses (RNs), 24-hour doctor of obstetrics and gynecology (OB/GYN), 24-hour neonatologists, nurse practitioners (NPs), a pediatrician, and onsite lactation consultants (LC). Microsystem leadership includes a director of nursing, a nurse manager, and an assistant nurse manager (ANM). Nursing schedules on this unit are an 8-hour shift ranging from day, evening, or night. Each shift is equipped with one unit assistant (UA), three registered (RNs), one break nurse, two to three nurse practitioners (NPs), and a lactation consultant (LC). The workforce is ethnically and linguistically diverse, the majority have many years of healthcare experience and have worked on this unit for several years.

Processes

Hospital X is a level III neonatal intensive care unit and a high-risk obstetric facility. Postpartum nurses are assigned three couplets, each consisting of a recovering mother and newborn until ready for discharge. Processes within the mother-baby department include an admission from labor and delivery. C-section deliveries are transported to postpartum with the mom in a hospital bed and the baby inside a portable bassinet. Vaginal deliveries are transported with the mom in a wheelchair holding baby in their arms. Upon every admission, a handoff report occurs between the labor and delivery RN and the receiving postpartum nurse. Each patient receives a folder (Your Journey Home) containing essential newborn care information and an infant safety flyer with fall prevention strategies.
Additional fall prevention processes include an “ABC” crib card used as a visual reminder in every portable bassinet and an “Infant Safety” poster in each postpartum room reinforcing safe sleep guidelines. A three-minute video is also available through the hospital’s educational channel, accessed through the patient’s room television. The video seemed underutilized, perhaps due to a lack of awareness (absent verbal, written, or visual). The introduction of an online staff training module (Preventing Newborn Falls and Drops) was initiated in July 2023, requiring staff completion by October 1, 2023. Despite being mandatory, as of September 2023, only eight nurses out of 54 had completed the educational material. Department protocol requires ongoing nursing assessments to mitigate the risk of falls. Increased rounding and monitoring take place if the mother and or the support person show signs of exhaustion, the mother is receiving opioid pain medications, has a history of substance use, has a history of C-section birth delivery, or has inexperienced breastfeeding. Enforcing patient safety through prevention strategies such as encouraging uninterrupted sleep, the use of lactation education to confirm proper baby holding technique, reminders to ask for help when needed, after breastfeeding sessions, after skin-to-skin contact, when the baby falls asleep or needs transition to the bassinet.

In the event of a fall, the hospital procedure requires the activation of the fall response team and a complete head-to-toe assessment. If a head injury is present, a thorough neurological assessment is required. Intervention implementation is documented, followed by Pediatric and unit supervisor notification. Pediatric physical examination is conducted within 24 hours. A normal neurological exam and absent skull abnormalities would indicate a diagnostic magnetic resonance imaging (MRI). If skull fractures are present and or neurological changes, a computed tomography scan (CT) is performed. Newborn reassessments are completed by the nurse every 4
hours for up to 24 hours unless indicated differently by the physician. Preventative measures are updated on the plan of care, and assessment findings are documented on the patient’s chart.

The fall reporting process requires completing the Debrief Form for newborn falls and an electronic Responsible Reporting Form (eRRF) report. eRRF is accessed through Hospital X’s intranet browser system and completed by the unit manager (UM), assistant nurse manager (ANM), or anyone who witnesses or is in direct contact with a patient who slips, drops, or falls. A completed eRRF report is queued to the risk management department and securely stored in MIDAS Care Management. Within seven days, the unit manager (UM) or the assistant nurse manager (ANM) must complete a root cause analysis (RCA). The risk management department reviews the reports to guide its investigation and stores RCA reports in MIDAS Care Management.

In addition to reporting after a fall occurs, the current protocol requires a department safety brief in which unit management holds a morning meeting to disseminate department information, including fall incidents. A separate huddle occurs between management and involved care providers to debrief and identify potential issues and opportunities. A causal systemic analysis meeting occurs if the fall results in a sentinel event (death or severe injury), followed by a complete investigation and implementation of an action plan monitored by the Medical Executive Committee.

Patterns

Microsystem patterns include the coordination of nurse-couplet assignments before each shift by the unit assistant (UA). Update daily assignments are located near the nurse's station on a visual whiteboard for reference. Team huddles with brief unit updates occur daily at the beginning of each shift (0700, 1500, 2300). Nursing handoff reports occur near the nursing station or in the patient's room right after the team huddle concludes. Monthly unit council
meeting takes place. Hospital X holds monthly unit council to communicate and improve nursing practices across the organization.

**Strengths Weaknesses Opportunities Threats (SWOT) Analysis**

A SWOT analysis was conducted to identify potential strengths, weaknesses, opportunities, and threats to the proposed newborn fall prevention initiative. This tool provides internal and external aspects that impact the success or failure of the improvement plan (Harris et al., 2018). (See Appendix E)

**Strengths**

SWOT analysis identified key strengths as leadership support and urgency to reduce fall rates. The microsystem is a positive work environment with a solid safety culture and multidisciplinary engagement. Staff acknowledge the need to improve patient safety and support the newborn fall intervention. Other identified strengths include integrating current fall prevention practices such as hourly rounding, ongoing assessments when risk factors are present, newborn fall protocol, an “ABC” crib card, an “Infant Safety” poster, and fall prevention content via the hospital’s educational channel.

**Weaknesses**

A prominent microsystem weakness is the lack of standardization across the current fall prevention strategies. While assessments are increased when risks known to contribute to falls are present, nurses do not have a standardized newborn fall risk assessment tool. Inconsistencies in education practices were also present as pre-intervention “Staff Surveys” revealed 86% of nurses report completing newborn fall education; however, EMR patient chart audits indicated only 49% of nurses are doing so. Surveys responses also revealed the utilization of several
teaching strategies. Variability in practice indicates a need to standardize how nurses teach patients through a newborn fall education script.

The post-fall reporting process is another area for improvement, as the number of confirmed falls conflicts with the number of falls recorded. During the initial stages of this project, the unit nurse manager verified three separate newborn falls in 2023; however, a MIDAS database review of fall data reports from 2017 through 2023 only identified documentation of one fall occurrence. Post-fall reporting compliance is an area that can be improved by increasing awareness of the current protocol.

Addressing improper reporting of newborn falls through an escalation pathway, a visual tool outlining a step-by-step process. Additional weaknesses also include staffing willing to modify behaviors required to accomplish change.

Opportunities

Reducing the incidence of falls avoids subsequent costs associated with imaging procedures, transfer to NICU, and delayed hospital discharge. Microsystem examination revealed significant benefits in standardizing current fall prevention processes, including improving EMR utilization, consistent chart documentation, and standardized education delivery. These opportunities can collectively strengthen collaboration between patients and staff and improve patient safety, autonomy, and satisfaction scores.

Threats

Lastly, identified threats include a lack of parental awareness of risks related to newborn falls and family cultural values and practices contradicting inpatient safety protocols regarding co-sleeping. Threats related to unit personnel include rapid staff turnover, leading to
inconsistencies in care and training. Moreover, unit safety non-compliance poses potential threats of legal and regulatory implications.

**Fishbone Diagram**

Using a fishbone diagram to examine the microsystem led the quality improvement team to potential factors contributing to postpartum newborn falls. This analysis centered on four categories: procedures-protocols, equipment-environment, education-training, and people. Upon reviewing all factors, the focus of the fall prevention initiative was to address the lack of a post-fall assessment protocol, update the inpatient room safety poster, focus on unit inconsistencies related to terminology and teaching methods used in fall prevention education. (see Appendix F).

**Plan Do Study Act (PDSA) Cycle**

The ‘Plan’ phase involved identifying key stakeholders, outlining the objectives, and conducting a microsystem assessment. Data collection tools were created, including pre-implementation “Staff Surveys”, “Patient Education Surveys”, and chart audits. Supplemental tools to reinforce current fall prevention education were developed, including a “Pledge Form for Infant Safety,” a “Call Dont Fall Poster,” a standardized “Infant Safety Pledge Script”, and a flow chart to create post-fall protocol awareness. These tools were presented to the nurse manager for final approval.

The ‘Do’ phase implemented the intervention. Department enforcement of the pledge requiring patient signature acknowledgment, conducting chart audits in addition to post-implementation “Staff Surveys” and “Patient Education Surveys”.

The ‘Study’ phase involved data analysis and comparing pre- and post-implementation results. Other components in this process include identifying patterns, translating the findings
into visual graphs, determining intervention effectiveness, and reviewing results with department leadership.

The ‘Act’ phase consists of standardizing and establishing the components in the newborn fall prevention initiative if outcomes meet the expected goal. Unmet outcomes require intervention modifications, implementation, and testing until patient and staff satisfaction is accomplished. (See Appendix D)

**The Gantt Chart**

The development of the Gantt chart was utilized to outline a visual timeline referencing an overview of the newborn fall prevention initiative. This tool includes the four phases delineated in the PDSA cycle and their respective detailed tasks and time durations. The dedicated timeline for this improvement project was an allocation of three months, beginning in August 2023 and ending in November 2023. (See Appendix C)

**Cost Benefit Analysis**

In-hospital newborn falls can lead to physical injuries varying in severity depending on the impact location and how the incident occurred. According to the literature, newborn falls rarely result in permanent damage or death but often involve low-degree injuries such as bruising (Karlsson et al., 2021). In severe cases, fall outcomes may include skull fractures and hematomas, requiring admission to the Neonatal Intensive Care Unit (NICU) and delaying hospital discharge (Miner, 2019). The estimated cost of a mild-severity newborn fall at Hospital X can range from $5,700 to $8,500. This estimate includes charges associated with daily postpartum care services ($3,300 per day) and diagnostic MRI($2,400 - $5,200).

Falls resulting in severe injuries approximate a price range of $12,590 to $18,450, involving costs associated with daily postpartum care services ($3,300 per day), a computed
tomography scan (CT) ($390 - $1,050) and daily NICU-related care services varying depending on medical need ($8900 - $14,100). To calculate the overall estimated savings, the minimum cost for a mild case would amount $5700 ($3300 PP + $2,400 MRI) and the maximum cost for a severe case would amount $14,450 (3300 PP + $390 CT + $8900 NICU). Implementing the fall prevention initiative would present with potential savings of $5700 to $14,450.

**Intervention**

The development of this improvement project initially aimed to address newborn falls through a collection of interventions integrated into a NBSB. After careful consideration between management and the QI team, it was decided to move forward with a single intervention, a signed “Pledge Form for Infant Safety” (Appendix I). Before pledge introduction, nurse management presented the new intervention through unit staff meetings. The importance of this quality improvement practice was reinforced by establishing clear nursing expectations and parent form signature requirements.

The “Pledge Form for Infant Safety” aims to support parental education about newborn fall prevention and acknowledge that education was provided. It also provides an opportunity to address learning gaps and strengthen collaboration between patients and staff. “My Journey Home” folders were prepared to include “Pledge Form for Infant Safety” (Appendix I).

The individual interventions initially planned as a NBSB, aimed to standardize postpartum department practices through the use of a signed “Pledge Form for Infant Safety” (Appendix I), a standardized fall prevention “Infant Safety Pledge Script”(Appendix J), an updated “Call Dont Fall” inpatient room poster (Appendix L), and a visual flowchart of the current post-fall protocol (Appendix K).
The standardized fall prevention education “Infant Safety Pledge Script” addresses the variability in nursing teaching methods and ensures staff utilize the same educational terminology (Appendix J).

The newly designed “Call Don’t Fall” poster visually engages patients through its display in each room across the mother-baby unit. It reinforces fall prevention education and provides additional evidence-based information through a QR access code (Appendix L).

The escalation flowchart creates department awareness, reinforces current post-fall protocol, and provides precise reporting requirements by its display near the nurse’s station. This location promotes easy access to any staff member as a quick reference tool (Appendix K).

**Study of the Intervention**

The measurement tools used to study the intervention include “Staff Surveys” and “Patient Education Surveys”, charts, and visual audits. The pre-implementation “Staff Surveys” contain seven questions: three closed-ended, four Likert scale, and a voluntary comment section box. Keeping a completion record avoided the risk of duplicate entries. Personal identifiers were not used, maintaining survey anonymity. (See Appendix G). “Patient Education Surveys” include subjective and objective questions collected in person to provide data on if, how, and by whom they receive fall prevention education. A record of patient completion prevented duplicate entries by using first and last name initials and the last four digits of the medical record number (MRN). Chart audits were conducted by examining EMR nursing documentation of utilized fall prevention education strategies of currently admitted patients. Lastly, visual audits were conducted by observing the admission and discharge process, noting the use of newborn fall prevention education methods, and verifying the presence of the ABC crib card, “Pledge Form for Infant Safety,” and the “Your Journey Home” folder.
Measures

Intervention success evaluation used two measurement methods, including pre-and post-“Patient Education Surveys” and pre- and post-neonatal chart audits using EMRs. Surveys were distributed to patients admitted on postpartum and antepartum floors of the mother-baby department. The “Patient Experience Survey” was used pre- and post-implementation to measure data collected from patient responses. Data collection from patient surveys provided qualitative information on whether newborn fall prevention was given and if the “Pledge Form for Infant Safety” was used as an educational tool.

Pre and post-chart audits were conducted by reviewing several nursing documentation components in EMR. It included documentation verification on newborn fall education completion documentation of the number of safety indicators present (ex, maternal rest, raised side rails, both or none), and documentation indicating the use of the “Pledge Form for Infant Safety”. Data collection from chart audits provided quantitative information to compare pre and post-education completion results.

Ethical Considerations

This project was developed and implemented following the American Nurses Association (2015) Code of Ethics for Nurses. It adheres to ethical standards, principles, and obligations established for the nursing profession. A Newborn Fall Prevention Initiative promotes culture safety as outlined in provision 3.4 by examining contributing factors to errors or near misses. It outlines a responsibility to develop and implement policies that advance the health and safety of patients (ANA, 2015). Additionally, the project aligns with Provision 4, which defines the responsibility and accountability nurses bear to provide optimal health for their patients. Dodge The Fall: A Newborn Fall Prevention Initiative has been approved as it meets the Evidence-
Based Change in Practice Project guidelines. The project does not require Institutional Review Board (IRB) review (see Appendix A).

**Section IV Results**

*Patient Education Surveys*

Qualitative results were derived from pre- and post-“Patient Education Surveys” that contained eight closed-ended questions and five questions with a fill-in-the-blank response if applicable. Data on patient education experience was gathered by asking questions such as, “How would you rate your fatigue/tiredness?”, “How many hours of sleep have you had in the last 24 hours?” “Is your sleep often interrupted by staff?”, “How frequently?” “Have you received any breastfeeding information and/or education?” “Who was it from?” “Have you received SIDS prevention information?”, “Have you received any newborn fall prevention information/education?” “Who was it from?” and the last question, “Did you take any prenatal classes?”. The survey also asked for demographic identifying data such as preferred language, the need for an interpreter, race/ethnicity, maternal age, gravidarum, type of birth delivery, use of epidural, and a fill-in-the-blank response option for support person during hospital stay (See Table 1).

**Table 1**

*Pre-“Patient Education Survey” Demographic Data*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Result</th>
<th>Percentage (result/n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal age (n=38)</td>
<td>~31.16 years old</td>
<td></td>
</tr>
<tr>
<td>Gestational age (n=34)</td>
<td>38 weeks, 3 days</td>
<td></td>
</tr>
<tr>
<td>Postpartum day (n=40)</td>
<td>~2.03</td>
<td></td>
</tr>
<tr>
<td>Parity status (n=41)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A total of 41 Pre-“Patient Education Surveys” were collected, of which the majority 85.4% reported English as their preferred language, 4.9% Spanish, 4.9% Portuguese, 2.4% Cantonese, and 2.4% Mandarin. When postpartum mothers were asked to rate their fatigue/tiredness using a range of four possible answers, results revealed 5% of postpartum mothers responded “none”, 42.5% “mild”, 42.5% “moderate”, and 10% “severe”. The pre-“Patient Education Survey” established a baseline on newborn fall prevention education, in which 39% of patients stated they had received education during their stay compared to 61% who said “no” (See Figure 1). When Patients were asked to identify who had provided the education, 62.5% referenced the Pledge Form for Infant Safety, 2.5% referenced the RN, and 25% did not know or could not recall (See Figure 2).

**Figure 1**

*Pre- and Post-Intervention “Patient Education Survey,” Newborn Fall Prevention Education Comparison*
After intervention implementation, the “Patient Education Survey” was used again to obtain the same type of information. The breakdown of the patient demographic is shown in Table 2. Out of the 32 post-surveys collected, 85.4% of respondents selected English as their preferred language, 6.3% selected Spanish, 3.1% selected Cantonese, and 3.1% selected Turkish. Of those surveyed when asked about fatigue/tiredness, 3.1% responded “none”, 21.9% as
“mild”, 50% as “moderate”, and 25% as “severe”. For newborn fall prevention education, 34% of patients reported having received education during their stay compared to 65.6% who said “no” (See Figure 1). When asked to reference who had provided the education, 27.3% responded Pledge Form for Infant Safety, 63.6% referenced the RN, and 9% did not know or could not recall (See Figure 2).

Table 2

Post-“Patient Education Survey” Demographic Data

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Result</th>
<th>Percentage (result/n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal age (n=32)</td>
<td>~35.53 years old</td>
<td></td>
</tr>
<tr>
<td>Gestational age (n=31)</td>
<td>39 weeks, 1 day</td>
<td></td>
</tr>
<tr>
<td>Postpartum day (n=32)</td>
<td>~2.38</td>
<td></td>
</tr>
<tr>
<td>Parity status (n=32)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primiparous</td>
<td>20</td>
<td>62.5%</td>
</tr>
<tr>
<td>Multiparous</td>
<td>12</td>
<td>37.5%</td>
</tr>
<tr>
<td>Support person (n=32)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>28</td>
<td>87.5%</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>12.5%</td>
</tr>
<tr>
<td>Delivery method (n=32)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C-section</td>
<td>12</td>
<td>37.5%</td>
</tr>
<tr>
<td>Vaginal</td>
<td>20</td>
<td>62.5%</td>
</tr>
<tr>
<td>Sleep (last 24 hours) (n=31)</td>
<td>~4.73 hours</td>
<td></td>
</tr>
<tr>
<td>Breastfeeding (n=31)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>23</td>
<td>74.2%</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>25.8%</td>
</tr>
</tbody>
</table>

Qualitative result analysis (pre-and post-surveys) demonstrated a decrease of 4.6% in received education on newborn fall prevention (Figure 1). The number of respondents who
referenced the Pledge Form for Infant Safety as an educational tool showed a downward trend with of 35.2%. On the other hand, those who reported receiving newborn fall education from an RN increased to 51% shown in Figure 2.

**EMR Newborn Chart Audit**

Quantitative results were derived from pre- and post-chart audits, which aimed to gather nursing documentation patterns. A total of 49 charts were audited to confirm newborn fall education completion, the number of documented safety indicators (ex; maternal rest, raised side rails, both, or none), and the use of the infant safety pledge. According to pre-implementation information located in Electronic Medical Record (EMR), 49% of postpartum nurses documented providing newborn fall education compared to 51% who reported not providing education related to newborn falls (See Figure 3). The audit also revealed that 34.7% of nurses charted using zero safety indicators, 24.5% charted using one safety indicator, and 40.8% charted using two safety indicators.

Following intervention implementation, a second audit using the electronic medical record (EMR) was conducted. Of the 28 post-chart audits, 67.9% of nurses documented completing newborn fall education compared to 32.1% of nurses who had not provided documentation (See Figure 3) Additionally, 25% of nurses charted using zero safety indicators, 39.3% charted using one safety indicator, and 35.7% charted using two safety indicators (See Figure 4). Examination of pre and post newborn chart audits results demonstrated an increase of 18.9% in newborn fall education completion. A downward trend of 9.7% was seen in the documentation of zero safety indicators, compared to an increase of 14.8% in the use of one safety indicator, and 5.1% in the use of two safety indicators (See Figure 4).
Pre- and Post-Intervention of Documented Patient Education through EMR Comparison

**Figure 4**

*Pre- and Post-Intervention of Documented Safety Indicators through EMR Comparison*
Staff Surveys

The pre-implementation staff surveys consist of four Likert scale questions and three closed-ended questions. The following questions were included, “Were you given any training on the prevention of newborn Falls?”; “Do you document that you have educated on newborn Falls/safety measures taken?”; “I feel confident in my ability to provide patient education on the prevention of newborn Falls”; “How often do you provide patient education on newborn fall prevention?”; “What methods are you using to provide patient education on newborn Falls?”.

Out of 54 RNs in the postpartum unit, 21 nurses completed the survey, resulting in a 38.9% response rate. Additionally, 90.5% of nurses reported receiving newborn fall prevention training, 85.7% confirmed the documentation of education and safety measures taken, while a close divide was seen on the need for current process improvement with 47.6% of nurses responding “Yes” and 52.4% responding “No” (see Figure 5).

Figure 5

Pre-intervention Staff Survey on Newborn Fall Process
In addition to evaluating newborn fall processes among nurses, the survey obtained data on the frequency of newborn fall prevention education. Results showed 95.2% of nurses responded to providing education “Often” while only 4.8% provide it “Sometimes” (see Figure 6). When asked what methods were utilized to educate patients, 51% referenced education being given “verbally”, 33% referenced using the Pledge Form for Infant Safety, and 15% of nurses used teach back (see Figure 7).

**Figure 6**

*Pre-intervention Staff Survey Fall Prevention Education Frequency*

**Figure 7**

*Pre-intervention Staff Survey Fall Prevention Education Methods*
Using a 5-point Likert scale, nurses were asked to rate their confidence in providing newborn fall prevention, 71.4% responded “Strongly Agree”. When asked to rate their confidence in reporting and responding to newborn falls, 42.9% responded “Strongly Agree” and another 42.9% responded “Agreed” (see Figure 8). Qualitative results on staff surveys demonstrated most postpartum nurses providing newborn fall education and strong confidence levels following a newborn fall.

Figure 8

Pre-intervention Staff Survey Assessing Staff Confidence
**Section V Discussion**

**Summary**

**Key Findings**

Assessment of intervention success utilized two measurement methods, “Patient Education Surveys” and EMR chart audits. Achievement of the project aim is evidenced by an increase of 18.9% in nurse-to-patient education and zero reported falls within the postpartum unit. Results from patient surveys demonstrate a 4.6% decrease in newborn fall prevention education compared to an increase in EMR nursing documentation confirming education completion. Pre- and post-patient surveys also reveal a shift in teaching sources, with a significant decrease of 35.2% in “Pledge Form for Infant Safety” usage compared to a 51.1% increase in nurse-led instruction. The difference in these findings between patients and nurses is crucial as it may indicate the need for standardization. Lastly, demographic analysis shows that most mothers were breastfeeding (92.2%) and, on average, reported sleeping less than five hours
per day postpartum. These results are of significance as research suggests breastfeeding and maternal fatigue are known risk factors associated with newborn falls.

**Lessons Learned**

Solid organizational support was one of the primary drivers of this quality improvement project's success. The newborn fall initiative was a top priority for hospital leadership, establishing a clear purpose of improving patient safety. From the initial stages until the conclusion of this process, management remained invested in working towards a common goal. The unit manager was instrumental in developing our plan by strengthening communication with frontline staff and promoting positive team engagement. Key team members in the postpartum unit were identified to overcome staff resistance proactively.

A valuable takeaway from this process is that communication can become fragmented even with a solid partnership with management, as it did with the early implementation of the Pledge Form for Infant Safety. Leadership failed to communicate the precipitated decision, delaying prompt evaluation. Additionally, roadblocks were encountered in retrieving specific hospital data. For example, the microsystem assessment could have benefitted from access to the root cause analysis report following the 2023 newborn fall. Due to the confidential implications of these records, the team relied heavily on the information disclosed by management and the risk director. Similarly, discrepancies in newborn fall occurrences compared to eRRF reports within the MIDAS Care Management system limited a thorough assessment.

In evaluating data collected from Patient Education Surveys, the team identified difficulties in interpreting some of the results from specific questions. For example, the question, “Are you successfully breastfeeding?” was not always responded with a “yes” or “no” but instead with a specific scenario the mother was experiencing, such as “inverted nipples, “still
struggling with latching”, “still practicing”. In these cases, some of the surveyors rephrased the question to understand if breastfeeding was taking place, while other surveyors were focused on understanding whether breastfeeding occurred without any challenges. The same observation was made with the closed-ended question, “Have you received any information or education on preventing newborn falls?” Respondents, in some cases, seemed confused with the terminology prompting surveyors to give examples such as “putting baby in bassinet” and “what to do when you’re sleepy,” which then resulted in a patient “yes” or “no” response. The structure of these two questions became confusing for patients to understand and for surveyors to interpret. This component implicates the reliability of our collected data limiting an accurate representation of the patient experience.

The team’s most significant challenge was the narrow timeframe to conduct the project. It impacted our ability to gather sufficient data during the pre-and post-implementation phases, resulting in smaller sample sizes than initially anticipated. Furthermore, allowing more than three months would have enabled more data collection and resulted in a more representative sample. The time barrier forced the team to pivot from the initial plan of executing multiple interventions and modifying our strategy. Implementing a bundle model was met with hesitance from management as too much change at once can overwhelm staff, disrupt unit workflow, and limit engagement. Despite these limitations, the team established a strong project foundation with an opportunity to be continued and improved.

**Recommendations**

In evaluating the implementation, the team recommends using the “Pledge Form for Infant Safety” to reinforce four separate components. The first is to require nurses to utilize the pledge as an education tool; this would ensure teaching is taking place with every patient and
would standardize the information patients receive regardless of the nurse. The second component is implementing a nursing documentation requirement that would standardize the information in EMR newborn charts using the term "Pledge Form for Infant Safety tool." Nurses would use EPIC to record education time and if the “Pledge Form for Infant Safety” was used. The third component is to conduct periodic chart audits to assess the use of the “Pledge Form for Infant Safety” This will provide information on whether the changes are being maintained across the unit and confirm the correlation of its use to decrease newborn fall rates. Lastly, requiring patient signatures acknowledging that education was received would be beneficial.

Other recommendations for this project include extending the duration of the implementation period for the next cycle. A longer timeframe would allow more time to monitor and assess the implementation. It would also facilitate the introduction of supplemental interventions requiring additional time to process and implement. The recommended interventions would be implemented as a safety bundle to strengthen newborn fall prevention education. The bundle would include a nursing script, a Call Don’t Fall Poster, implementation of maternal rest periods, and a display of the Post-Newborn Fall Escalation Pathway. The “Infant Safety Pledge Script” is a tool to educate patients on preventing newborn falls by standardized educational content and language, making it easier for patients to recall what they learned regardless of who completed the teaching.

A “Call Don’t Fall Poster” was created to be displayed in all postpartum rooms to increase the availability of safety information in an easy-to-read format. Another recommendation is to incorporate the Post-Newborn Fall Escalation Pathway, a visual tool based on Hospital X’s current fall prevention policy procedure. To be used as a referencing tool on appropriate fall escalation measures to ensure protocol adherence and reduce fall reporting
discrepancies discovered during our microsystem assessment. The last recommendation is the implementation of maternal rest periods to reduce maternal fatigue, which is known to be an associated risk in newborn falls. Maternal rest periods would designate quiet hours in which nurses would avoid interrupting by coming into patients’ rooms unless medically necessary. Considering the implications on nursing care, staff engagement is critical to identify the best period to promote maternal rest collectively. Postpartum women experience exhaustion and may have a more challenging time recalling educational material. For this reason, incorporating the support person as a critical partner in our efforts is highly recommended to improve safety outcomes.

**Conclusion**

**Implications for practice**

Dodge The Fall: A Newborn Fall Prevention Initiative was developed using the best evidence-based information. This quality improvement project was implemented and supported by frontline team members, postpartum nursing management, and hospital leadership. The intervention concluded with zero newborn falls and inconsistent data between “Patient Education Surveys” and EMR newborn chart audits. The findings present a need to assess how a structured approach to educating postpartum families can increase safety and reduce newborn falls. The initiative brought forth key insights that can be utilized to modify and improve current unit processes to improve patient outcomes.
Section VI References


https://www.jointcommission.org/-
/media/tjc/newsletters/quick_safety_issue_40_2018_newborn_falls_drops.pdf.pdf


Section VII: Appendices

Appendix A. Statement of Determination and Non-Research Determination Form

Project: Statement of Determination and Non-Research Determination Form

Student Name: Shirley Varela

Title of Project:
Dodge the Fall: A Newborn Fall Prevention Initiative

Brief Description of Project

A) Data to Support Project Need: This year to date (2023), three newborn fall incidents occurred on the postpartum unit. The hospital’s newborn fall rate, 8.75 per 10,000 live births, is far greater than the national average of 1.61 to 4.1 per 10,000 live births. Thus, newborn falls were identified as a priority concern during initial discussions with nursing leadership pertaining to potential quality improvement projects.

B) Aim Statement: This quality improvement project aims to increase nurse-to-patient education by 10% and decrease the number of newborn falls in the postpartum unit from September to November 2023.

C) Description of Intervention(s): The intervention for this project includes the enforcement of a signed Pledge Form for Infant Safety document, a supplemental standardized script for staff-patient education, Call Don’t Fall wall signage, and a post-falls flowchart.

D) Desired Change in Practice: This project aims to reduce the occurrence of in-hospital newborn falls and increase nurse-to-patient education through various methods. The signed Pledge Form for Infant Safety document establishes a commitment to newborn safety by the patient and nurse. This project aims to standardize newborn fall prevention education provided by staff to patients using a supplemental standardized script for staff-patient education. The post-falls flow sheet provides a guideline for staff to follow in the event of a newborn fall, reducing variance in the post-fall workflow. Equipping each postpartum unit with a “Call Don’t Fall” poster reminds patients and their families to request help in specific situations to ensure newborn safety.

E) Outcome measurement(s): Evaluation of the project’s success will be determined by the number of newborn falls occurring post-intervention. Chart audits will be conducted to assess the percentage of patients receiving newborn falls education as well as the number of safety interventions provided to patients, as documented by the nurse. Patient interview checklist questionnaires will determine the percentage of patients receiving newborn falls education as well as the percentage of education provided using the signed “Pledge Form for Infant Safety” document.
To qualify as an Evidence-based Change in Practice Project rather than a Research Project, the criteria outlined in federal guidelines will be used: (http://answers.hhs.gov/ohrp/categories/1569)

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

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

Comments:

**EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST * **

Instructions: Answer YES or NO to each of the following statements:

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>The specific aim is to improve performance on a specific service or program and is a part of usual care. ALL participants will receive standard of care.</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control. The project does NOT follow a protocol that overrides clinical decision-making.</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.</td>
<td>YES</td>
<td></td>
</tr>
</tbody>
</table>
The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research. **YES**

The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/or patients. **YES**

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

**ANSWER KEY:** If the answer to ALL of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research.

**IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is NO, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

**STUDENT NAME (Please print):**

Shirley B. Varela

**Signature of Student:**

[Signature]

**DATE 11/9/2023**

**SUPERVISING FACULTY MEMBER NAME (Please print):**

Scout Hebinck

**Signature of Supervising Faculty Member**

[Signature]

**DATE 11/9/2023**
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Objective</th>
<th>Design &amp; Sample</th>
<th>Methods</th>
<th>Results</th>
<th>Level of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Comprehensive Initiative to Prevent Falls Among Newborns</td>
<td>Ainswort et al. (2016)</td>
<td>Created an examination committee within Mother/Baby unit, implemented new policy &amp; procedure aimed to reduce newborn falls.</td>
<td>Sample size (n=approx. 4,500) births per year.</td>
<td>Quality Improvement project including the following:</td>
<td>Baseline: 7 NB hosp. falls (21.2 falls per 10,000 births) (Dec 2011-July 2012). 6/7 falls = C-sec. 6/7 falls = am hr occurrence 5/7 = moms rcvd opioid meds w/in 3 hrs of the fall. 5/7 = during feeding time 4/7 = were being breastfed 5/7 = mom holding NB in hosp. bed &amp; NB fell below raised rail</td>
<td>Level III</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Staff led mother/family education on raising all 4 side rails during feedings &amp; how to lower bed rails.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Staff attended mandatory NB falls content class (pt education, documentation requirements, EHR risk assessment scale).</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Completion of debriefing form to standardize information post NB fall.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Created post NB fall assessment protocol</td>
<td></td>
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</tbody>
</table>

Post intervention Results:
12 mo = 0 NB falls
2 years = 5 NB falls
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Objective</th>
<th>Sample</th>
<th>Design &amp; Methods</th>
<th>Results</th>
<th>Level of Evidence</th>
</tr>
</thead>
</table>
| Implementing a Maternal Rest Bundle to Prevent Newborn Falls        | Karlsson et al. (2021)         | Implement maternal rest bundle and decrease newborn fall to zero within three months. | Mother-baby 40 bed postpartum unit 72 nursing staff (n= 62 RN, n=10 CNA).                                                                      | Quality improvement bundle consisted of mandatory staff education and patient education.  
Patient required signed agreement of safe pledge contract.  
Implementation of maternal rest time/quiet time (no visitors) between 2:00-4:00am & 2:00-4:00 pm.  
Safe NB handling signage in unit & each room. | Baseline: 9 NB hosp. falls w/in 3.5 years. (Jan 2015 – Sep 2018).  
(3.8 falls per 10,000 1/9 = resulted in major injury 5/9 = males 6/9 White 6/9 = Breastmilk fed 6/9 = Fell off bed  
Post intervention Results: Oct 2018 – Dec 2020 = 0 NB falls 0 falls per 10,000  
Staff Eval 53% (24/45): quiet time should remain the same & daily tasks were reported as a barrier to quiet time.  
95% (912/960) of moms found benefits to quiet time | Level III
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Objective</th>
<th>Sample</th>
<th>Design &amp; Methods</th>
<th>Results</th>
<th>Level of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Hospital Newborn Falls Associated with a Sleeping Parent: The Case for a New Paradigm</td>
<td>Duthie, et al. (2020)</td>
<td>Meta analysis article Highlights sleep cycle experienced by parents during the postpartum period as the root cause for NB falls reoccurrence after NB safety bundle implementation.</td>
<td>It analyzes 9 different U.S postpartum units during their pre-implementation &amp; post implementation periods.</td>
<td>Included units with NB reported falls and implemented a safety bundle that included staff &amp; patient education, safe pledge contract, frequent rounding, debriefs, maternal risk assessments, &amp; maternal rest</td>
<td>0 incidence of NB fall post bundle implementation followed by future reoccurrence.</td>
<td>Level V</td>
</tr>
</tbody>
</table>

Pre-implementation
Collective Baseline:
Slips = 45
Falls = 30
Unspecified = 4

Post-implementation
Collective Baseline:
Slips = 1
Falls = 15
Unspecified = 9
Unreported sites = 1
No falls/slips = 4
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Objective</th>
<th>Sample</th>
<th>Design &amp; Methods</th>
<th>Results</th>
<th>Level of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention of Newborn Falls/ Drops in the Hospital: AWHONN Practice Brief Number 9</td>
<td>AWHONN (2020)</td>
<td>Propose series of safety strategies to help reduce NB falls.</td>
<td>N/A</td>
<td>Evaluated common risk factors &amp; synthesized key focus areas for improvement aim to reduce falls across hospitals.</td>
<td>N/A *Standardization of practice</td>
<td>Level VII</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Objective</td>
<td>Sample</td>
<td>Design &amp; Methods</td>
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<tr>
<td>A System-Wide Approach to Prevention of In-Hospital Newborn Falls</td>
<td>Carr et al. (2019)</td>
<td>Reduce NB hospital falls by the implementation of</td>
<td>(N=5) family birth centers [n = 2 high risk perinatal centers, n = 3 community hospitals] (N = 8,000-8,700) annual births</td>
<td>Quality Improvement project including the following: Policy &amp; procedural review, frequent intentional rounding, patient education on NB fall prevention, postpartum &amp; postoperative medication order sets review, HER documentation review &amp; amendment, 4 bed rail use, debriefing after fall incident.</td>
<td>Jan 2013- Dec 2017 -Downward fall trend 2016 -2017 Falls occurred while baby was held by mom in bed, 7pm-7am. Post-implementation: Falls decreased but NOT eliminated</td>
<td>Level of Evidence</td>
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<tr>
<td>Title</td>
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<td>Design &amp; Sample</td>
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<tr>
<td>Maternal Sleepiness and Risk of Infant Drops in the Postpartum Period</td>
<td>Bittle et al. (2019)</td>
<td>Determine how much mothers slept during postpartum period and evaluate how that impacted newborn drops.</td>
<td>Academic magnet hospital N = 789 beds, 4,200 beds annually N = total 4,550 observations N = 101 Postpartum moms-infants</td>
<td>Descriptive Study. Utilization of Stanford Sleepiness Scale (SSS) to conduct hourly assessments.</td>
<td>0 = Infant drops 50 participants required at least one intervention or corrective action. Out of 1,718 observations, 35 instances mothers were observed falling asleep while holding their baby, 20.8% (n=21) were asleep holding baby Moms on average slept T=3.7 hrs daily, 9.9% (n=9) slept 7-8hr daily, 15.8% slept the minimum acceptable of 6hrs, were in bed 93.9%, low position beds, bed rails up 94.8%. 49.5% of moms had at least one unsafe environment indicator per Environment Safety Survey.</td>
<td>Level IV</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Objective</td>
<td>Design &amp; Sample</td>
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<tr>
<td>Preventing Newborn Falls and drops</td>
<td>The Joint Commission (2018)</td>
<td>Provide insight to risk factors influencing NB falls &amp; recommend a series of strategies geared to increase baby safety.</td>
<td>Clinical Safety Awareness</td>
<td>Risk assessment tool, parent education, hourly rounding, crib and room signage, standardized reporting, and debriefing tools.</td>
<td>N/A</td>
<td>Level VII</td>
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<tr>
<td>Title</td>
<td>Authors</td>
<td>Objective</td>
<td>Design &amp; Sample</td>
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<tr>
<td>Implementation of a Comprehensive Safety Bundle to Support Newborn Fall/Drop Event Prevention and Response</td>
<td>Miner J. (2019)</td>
<td>Reduce newborn fall through a safety bundle across 8-hospital health system.</td>
<td>Health care system = 8 hospitals: n = 1 tertiary n = 3 community hospitals n = critical access hospitals n = 7,500 annual births</td>
<td>Multidisciplinary Task force developed, gap analysis, causative factors identified, patient-family education, patient room signage, use of Boppy pillow during feedings,</td>
<td>Newborn fall/drop reduction = 36% (1 year period) [6.66 to 4.06 events per 10,000 births].</td>
<td>Level IV</td>
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<tr>
<td>Title</td>
<td>Authors</td>
<td>Objective</td>
<td>Design &amp; Sample</td>
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<tr>
<td>Newborn Falls in Pennsylvania: An Analysis of Recent Events and a Review of Prevention Strategies</td>
<td>Kukielka, E., &amp; Wallace, S. (2019)</td>
<td>To reduce the newborn falls through the implementation of various hospital interventions such increasing rounding, provide parental support and rest periods.</td>
<td>Retrospective Analysis (n =318 falls, n =14 near misses).</td>
<td>Newborn fall reports (from Jan 2014- Dec 2018) from the Pennsylvania Patient Safety Reporting System were analyzed. Strategies to prevent newborn falls in the hospital include focusing efforts on providing support for exhausted parents during the critical time after birth, offering periods of rest for new parents when they are tired, increasing the frequency of rounding during breastfeeding and promoting midday break in visiting hours.</td>
<td>Annual rates of newborn falls ranged from 3.7 to 5.9 falls per 10,000 live births (2014-2018). Average annual rate 4.8 falls per 10,000 live births over 5-year study period. 168 events or (52.8%) = commonly associated with a caregiver falling asleep 72 events or (22.6%) = related with newborn feeding [ 45= breastfeeding, 72 = burping ]. 263 events or (84.6%) = involved the mom 181 falls (56.6%) occurred between 12:00 - 7:00 am.</td>
<td>Level IV</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Objective</td>
<td>Design &amp; Sample</td>
<td>Methods</td>
<td>Results</td>
<td>Level of Evidence</td>
</tr>
<tr>
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</tr>
<tr>
<td>A Longitudinal Study of a Multifaceted Intervention to Reduce Newborn Falls While Preserving Rooming-In on a Mother-Baby Unit</td>
<td>Whatley, et al. (2022)</td>
<td>Reduce the newborn falls within unit without interrupting mother-baby rooming-in practices and achieve 0 falls within 365 days.</td>
<td>3-year study in a 396 bed academic tertiary care center.</td>
<td>Conducted root cause analysis (RCA) and 10 in-depth cart reviews.</td>
<td>Baseline: 2016-2017: n = 3 NB fall occurrence (2-month period) Post intervention Results: NB Fall decrease = 71.8 to 15.5 per 10,000 births High fall incidence due to sleeping caregiver post vaginal deliveries &amp; maternal trips post c-section. Days between falls increased from 9 days to 467 days N = 0 injuries (since 2017)</td>
<td>3</td>
</tr>
</tbody>
</table>
## Literature Synthesis Table

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Objective</th>
<th>Design &amp; Sample</th>
<th>Methods</th>
<th>Results</th>
<th>Level of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newborn Safety Bundle to Prevent Falls and Promote Safe Sleep</td>
<td>Lipke et al. (2017)</td>
<td>Implement newborn infant safety bundle to reduce unsafe sleep conditions and prevent infant falls.</td>
<td>Observational descriptive safety study ($n=832$ births). Approx 2,000 annual births per year.</td>
<td>Report &amp; complete risk to fall evaluation forms. Sleeping bundle included parent safety agreements, safety interventions: crib cards, frequent rounding, post fall reporting and debriefing.</td>
<td><strong>Baseline:</strong> (Mar 2015) $n=23$ NB exposed to risk-to-fall situations. (n = 169 total births for March 2015, over half of this number were found to involve a sleeping mother with NB in arms. <strong>Post intervention Results:</strong> (May 2015 – July 2016): Unsafe sleep reports drastically declined (n =11, n=13, n=4, &amp; n=7). N = 0 NB falls reported through May 2017</td>
<td>Level III</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Objective</td>
<td>Design &amp; Sample</td>
<td>Methods</td>
<td>Results</td>
<td>Level of Evidence</td>
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| Identification of Temporal Variables Surrounding Infant Falls in the Postpartum Unit | Scherba et al. (2020)    | Identify and quantify factors influencing newborn falls within postpartum unit.                                                                 | Retrospective review at Academic Medical Center (2 postpartum units)                                      | Identification new postpartum of falls via safe reporting system (SRS).                                                                 | Jan 2014 – Dec 2018: n = 19 NB fall occurrence (2-month period)  
47.4% (9/19) = falls from NB born via vaginal birth  
10.5% (2/19) = falls from NB born via four steps assisted vaginal birth  
42.1% (8/19) = falls from NB born via C-section  
36.9% (7/19) = falls during breastfeeding  
(3/19) = falls dad fell asleep w/baby  
26% = falls within 3hrs of opioid administration.  
63.2% (12/19) = falls 10pm -7am  
47.4% (9/19) = falls 10pm -4am.                                                                                   | Level III                 |
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Objective</th>
<th>Design &amp; Sample</th>
<th>Methods</th>
<th>Results</th>
<th>Level of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Objective</td>
<td>Design &amp; Sample</td>
<td>Methods</td>
<td>Results</td>
<td>Level of Evidence</td>
</tr>
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<td>---------------------------------------------------------------------------</td>
<td>-----------------</td>
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<tr>
<td>A New Scale for Evaluating the Risks for In-Hospital Falls of Newborn Infants: A Failure Modes and Effects Analysis Study</td>
<td>Abike et al. (2010)</td>
<td>Determine risks for in hospital newborn falls and develop a new scale assessment to utilize from admission to discharge.</td>
<td>Analysis study</td>
<td>Multi-disciplinary team led quality improvement project.</td>
<td>(RPN: 250 point) = = moms that received epidural anesthesia (highest score)</td>
<td>Level III</td>
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<tr>
<td></td>
<td></td>
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<td></td>
<td>Risks and preventive measures determined using Risk Priority Numbers (RPN) we calculated by multiplication of the scores of severity, probability of occurrence, and probability of detection.</td>
<td>(RPN: 240 point) = holding the baby at the moment of delivery</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>(RPN:240)= transportation of baby right after delivery</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RPNs were reduced after preventive measures were applied.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Determined 15 risk factors influencing newborn falls</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Objective</td>
<td>Design &amp; Sample</td>
<td>Methods</td>
<td>Results</td>
<td>Level of Evidence</td>
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<td>-------------------</td>
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<tr>
<td>Newborn Falls: In Hospitals</td>
<td>Caldwell et al. (2017)</td>
<td>Provide insight to risk factors influencing NB falls, outcomes, create awareness of interventions and how nursing role can reduce incidence.</td>
<td>Clinical Report Guide</td>
<td>Parent education, frequent rounding, maternal rest, crib and room signage, standardize, and clustering care.</td>
<td>N/A</td>
<td>Level VII</td>
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</table>
## Appendix C. Gantt Chart

### Dodge the Fall: A Newborn Fall Prevention Initiative

<table>
<thead>
<tr>
<th>TASKS</th>
<th>START DATE</th>
<th>DUE DATE</th>
<th>DURATION (hours)</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
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<tr>
<td>Project Initiation</td>
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<td>Project Initiation Team Meeting</td>
<td>8/28/23</td>
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<td>1</td>
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<tr>
<td>Meet with Unit Leaders</td>
<td>9/1/23</td>
<td></td>
<td>2</td>
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<tr>
<td>Literature Review and Research</td>
<td>9/7/23</td>
<td>9/25/23</td>
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<tr>
<td>Meeting with Risk Management Director</td>
<td>8/28/23</td>
<td></td>
<td>1</td>
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</tr>
<tr>
<td>Project Planning</td>
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<tr>
<td>Creation of Newborn Safety Pledge</td>
<td>9/2/23</td>
<td>9/10/23</td>
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<tr>
<td>Staff Survey and Patient Questionnaire</td>
<td>9/13/23</td>
<td>9/19/23</td>
<td>8</td>
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<td></td>
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<tr>
<td>Develop chart audit tracking list and staff survey</td>
<td>9/14/23</td>
<td>9/19/23</td>
<td>8</td>
<td></td>
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<tr>
<td>Micosystem Assessment</td>
<td>9/20/23</td>
<td>10/3/23</td>
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<td>Project Implementation</td>
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<td>Implement Newborn Safety Pledge</td>
<td>9/18/23</td>
<td>Present</td>
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<tr>
<td>Conduct Patient Questionnaire</td>
<td>9/20/23</td>
<td>10/3/23</td>
<td>42</td>
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<tr>
<td>Conduct Pre-Survey to Staff</td>
<td>9/20/23</td>
<td>10/3/23</td>
<td>42</td>
<td></td>
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</tr>
<tr>
<td>Collect Patient Chart Audits</td>
<td>9/20/23</td>
<td>10/3/23</td>
<td>42</td>
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<td>Project Evaluation</td>
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<td></td>
</tr>
<tr>
<td>Administer Post-Survey to Patients</td>
<td>11/13/23</td>
<td>11/24/23</td>
<td>24</td>
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<td></td>
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<tr>
<td>Collect Patient Chart Audits</td>
<td>11/14/23</td>
<td>11/25/23</td>
<td>24</td>
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<tr>
<td>Data Evaluation and Analysis</td>
<td>11/17/23</td>
<td>11/30/23</td>
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<tr>
<td>Present Results to Unit Staff and CNL</td>
<td>12/1/23</td>
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### Appendix D. Plan-Do-Study-Act Cycle

<table>
<thead>
<tr>
<th>PLAN</th>
<th>DO</th>
<th>STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify key stakeholders</td>
<td>Implement signed Pledge Form for</td>
<td>Analyze data collected from the Patient</td>
</tr>
<tr>
<td>Develop and administer</td>
<td>Infant Safety on unit</td>
<td>Education Survey and chart audits</td>
</tr>
<tr>
<td>pre-intervention surveys</td>
<td>Administer post-intervention</td>
<td>Compare post-intervention data with</td>
</tr>
<tr>
<td>including the Staff Survey,</td>
<td>surveys, including the Patient</td>
<td>pre-intervention data</td>
</tr>
<tr>
<td>Patient Education Survey,</td>
<td>Education Survey and chart audits</td>
<td>• Discuss common themes identified in the</td>
</tr>
<tr>
<td>and chart audits</td>
<td></td>
<td>informal, qualitative interviews with staff</td>
</tr>
<tr>
<td>Conduct microsystem</td>
<td></td>
<td>• Share data with the nurse manager</td>
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<tr>
<td>assessment</td>
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</tr>
<tr>
<td>Develop Call Don’t Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>poster</td>
<td></td>
<td></td>
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<tr>
<td>Develop signed pledge form,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and supplemental script</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop post-falls flowchart</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adapt Call Don’t Fall poster and</td>
<td>• Make changes to post-falls</td>
</tr>
<tr>
<td></td>
<td>standardized script, depending on</td>
<td>flowchart, depending on feedback and the</td>
</tr>
<tr>
<td></td>
<td>feedback from patients and staff</td>
<td>nurse manager</td>
</tr>
<tr>
<td></td>
<td>Make changes to post-falls</td>
<td>• Continue testing the new tools</td>
</tr>
<tr>
<td></td>
<td>flowchart, depending on feedback</td>
<td>• Once staff and patient satisfaction is</td>
</tr>
<tr>
<td></td>
<td>and the nurse manager</td>
<td>achieved, adopt the changes and maintain them</td>
</tr>
<tr>
<td></td>
<td>Continue testing the new tools</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Once staff and patient satisfaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>achieved, adopt the changes and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>maintain them</td>
<td></td>
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</tbody>
</table>
Appendix E. SWOT Analysis

**STRENGTHS**
- Hourly rounding
- Safety culture
- Use of ABC crib card and Infant safety poster
- Preventing Infant Falls on newborn channel
- Staff trained in newborn fall prevention
- Leadership support and commitment to reduce fall rates
- Staff acknowledge the need for intervention
- Newborn fall protocol

**WEAKNESSES**
- No standardized risk assessment tool for newborn falls
- No standardized education script specific to newborn falls
- Inconsistent documentation of fall education in EMR
- Inconsistent post-fall data reporting
- Staff resistance to change
- Staffing issues

**OPPORTUNITIES**
- Fall incidence reduction
- Increase patient education
- Improved patient safety
- Improved patient satisfaction scores
- Increase patient autonomy
- Standardization of unit processes
- Improved EMR utilization
- Documentation consistency
- Collaboration between patients and staff
- Cost reduction

**THREATS**
- Rapid staff turnover (inconsistencies in care and training)
- Legal and regulatory implications of safety non-compliance
- Lack of parental awareness in newborn fall prevention
- Language barriers (communication failure)
- Cultural values and practices that contradict inpatient safety protocols (co-sleeping)
Appendix F. Fishbone Diagram
STAFF SURVEY

1. Were you given any training on the prevention of newborn falls?
   ○ Yes   ○ No

2. Do you document that you have educated on newborn falls/safety measures taken?
   ○ Yes   ○ No

3. I feel confident in my ability to provide patient education on the prevention of newborn falls.
<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>
   Rating

4. How often do you provide patient education on newborn fall prevention?
<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
</table>
   Rating

5. What methods are you using to provide patient education on newborn falls?
   ○ Verbal   ○ Teach-back   ○ Infant Safety Pledge/Hand-out   ○ Other: __________

6. In the event of a fall, I am confident in reporting procedures and next steps.
<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>
   Rating

7. Do you feel there is a need for improvement in the current processes regarding newborn fall prevention?
   ○ Yes   ○ No

Comments:

Thank you for your time!
Appendix H. Pre- and Post-Intervention Patient Education Survey

<table>
<thead>
<tr>
<th>Patient Education Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hi, CONGRATULATIONS on your new baby!</td>
</tr>
<tr>
<td>My name is ______________ &amp; I am a student nurse, working on a quality improvement project to improve future mom’s experiences and safety on the unit. Would you mind answering a few questions about your experience here so far? It should only take about 5 minutes of your time.</td>
</tr>
</tbody>
</table>

- **Preferred Language** __________
  - Interpreter offered? ______

- **Race/Ethnicity** __________

- **How would you rate your fatigue/tiredness?**
  - None
  - Mild
  - Moderate
  - Severe

- **How many hours of sleep have you had in the last 24 hours?** ______

- **Is your sleep often interrupted by staff?**
  - Y ______
  - N ______
  - How frequently? ______

- **Have you received any breastfeeding information and/or education?**
  - Y ______
  - N ______
  - Who was it from? ______

- **Are you successfully breastfeeding?**
  - Y ______
  - N ______

- **Have you received SIDS prevention information?**
  - Y ______
  - N ______
  - Who was it from? ______

- **Have you received any newborn fall prevention information/education?**
  - Y ______
  - N ______
  - Who was it from? ______

- **Did you take any prenatal classes?**
  - Y ______
  - N ______

- **Postpartum Day______**
- **Maternal Age______**
- **Gestational Age______**
- **Gravidarum:**
  - Primipara______
  - Multipara______
- **Delivery:**
  - C-section______
  - Vaginal______
- **Epidural:**
  - Y ______
  - N ______
- **Pain Meds:**
  - ________________
  - ________________
- **Who is present:**
  - Support person______
- **What is the time:** __________
Appendix I. Pledge Form for Infant Safety

Pledge Form for Infant Safety

Your baby’s safety is a top priority. Parents, hospital personnel, and visitors all play an important role in keeping your baby safe.

Accidental infant falls increase when someone holding a baby falls asleep with the baby in his or her arms. Unfamiliar surroundings and the side effects of medication (drowsiness, sleepiness) can also contribute.

Please help keep your baby safe by:

- Not sleeping with your baby in your bed or while relaxing on the couch or chair.
- When you feel sleepy or plan on sleeping, place the baby in the bassinet.
- If you should fall asleep with your baby in your arms, your nurse will move the baby to the bassinet.

I have read and understand the above information.

______________
Parent
Appendix J. Infant Safety Pledge Script

Infant Safety Pledge Script

Safety is a priority at this facility and especially on this floor and we have some safety protocols to help ensure your new baby’s safety:

1. Newborn falls can occur, and we want to do everything in our power to prevent them.

2. Research shows newborn falls are associated with:
   a. Falling asleep while nursing/holding baby
   b. Caregiver fatigue
   c. Slipping/tripping

3. Co-sleeping is a personal decision; however, we ask that during your stay, you always place the baby in the bassinet after nursing and if you feel sleepy.

4. Please call if you are sleepy, do not sleep with the baby on the bed, couch or chair.

5. Please always push the baby in the bassinet while in the hallways, do not carry your baby.

6. We are here to support you while you heal, and partner with you to encourage safety in preparation for your journey home.
Appendix K. Post-Newborn Fall Escalation Pathway

NEWBORN FALLS / DROPS STEPS

Activate Fall Response Team

Head-to-Toe Physical Assessment
- Lesions, bumps, bleeding, bruises, other breaks in skin integrity and/or deformities.
- Palpate for tenderness to include skull, spine, and hips.
- Range of motion in all extremities as compared to before the fall, unless obvious injury/deformity.
- Assess for pain during motion.
- Neurological assessment, including any change in orientation/mental status or level of consciousness.
- If monitored, cardiac rhythm.
- Complete vital sign assessment, including blood pressure.

Neurological Assessment:
- Head injury
- Had an unwitnessed fall
- On anticoagulation therapy
- Have a bleeding tendency due to an existing medical condition

Reassessment
- Every 4 hours X 24 hours (per physician order)
- Focused or Neuro (per both depending on severity)

Interventions
- Implement and document individualized interventions to maintain patient safety
- Notify family immediately for falls if applicable

Notification
- The Pediatric Provider and supervisor will be notified of all patient falls.
- Provided physical exam within 24 hours of fall (unless nursing assessment determines emergent need).
- Notification Requirements (RN - Physician):
  - Physical findings, including whether patient hit head (if applicable)
  - If patient is on anticoagulation therapy
  - Has an existing medical condition leading to bleeding tendency

Update:
- Update Plan of Care if appropriate to the department setting
- Specifically review and revise the plan of care to add preventative measures to ensure another fall does not occur

Documentation
- Complete the "apparent fall this shift" row on the shift assessment and a narrative note, including:
  - Circumstances surrounding the fall
  - Symptoms, patient activity
- Assessment findings including lesions, bumps, bleeding, bruises, other breaks in skin integrity and/or deformities and changes in full body assessment
- Pain, including interventions and response:
  - Vital signs, including blood pressure changes
  - Neurological status

- Complete DebriefForm for Newborn/Infant Falls (Baby/child Drops).
- Complete: An electronic Reporting Form (eRFF) should be submitted for all falls.
CALL DON’T FALL

In the United States, 600 to 1,600 newborn falls occur in the hospital annually.

Newborn falls are associated with caregiver fatigue and falling asleep while breastfeeding.

Please CALL staff for help if you:

- Feel weak or unsteady
- Feel sleepy when breastfeeding
- Need help placing your baby in the bassinet

Scan the QR code for more information:
Appendix M
N653 Project Final Paper Grading Rubric

<table>
<thead>
<tr>
<th>Criteria for Assignment</th>
<th>Possible Pts.</th>
<th>Actual Pts.</th>
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<tbody>
<tr>
<td><strong>Section I. Title</strong></td>
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<td>5</td>
</tr>
<tr>
<td>Abstract (a summary of key information from your final paper)</td>
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<td>10</td>
</tr>
<tr>
<td>o Problem</td>
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<td></td>
</tr>
<tr>
<td>o Context (microsystem/setting and target population)</td>
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<td></td>
</tr>
<tr>
<td>o Interventions</td>
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<tr>
<td>o Measures</td>
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<tr>
<td>o Results</td>
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<tr>
<td>o Conclusions</td>
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<tr>
<td><strong>Section II Introduction (Why did you start?) (4pts each)</strong></td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>Introduction</strong> (Why this improvement topic; impact for patients, system; link to organizational/microsystem priorities)</td>
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<tr>
<td><strong>Problem description</strong> (Describe the setting; summarize current knowledge about the problem as it relates to the setting; metrics that matter, benchmark data, baseline data and current performance)</td>
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<tr>
<td><strong>Available knowledge/Literature Review</strong> (PICO question and keywords; synthesis of existing literature and evaluation table that supports this project, six to ten articles)</td>
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<tr>
<td><strong>Rationale</strong> (conceptual framework, or change or leadership theory used to guide the project)</td>
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<td><strong>Specific project aim</strong></td>
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<tr>
<td><strong>Section III Methods (What did you do?) (5pts each)</strong></td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>Context</strong> (microsystem assessment, IHI culture assessment, FEMA, SWOT analysis, budget plan/return on investment, communication plan, timeline/Gantt with stakeholders-do not use names)</td>
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<tr>
<td><strong>Intervention</strong> (Description of changes to test; actions/approaches to improve performance)</td>
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</table>

Appendix M. Project Final Paper Grading Rubric

Student Name: Shirley B. Varela

N653 - Syllabus | Page 1
| Study of the intervention (Measurement strategy and tools used) | 
| Measures (list of measures collected during your study of the intervention) | 
| Section IV Results (What happened?) | 10 10 | 
| Results (details of outcome measure results; unintended consequences; effect of improvement on organization/clients/staff) | 
| Section V Discussion | 20 20 | 
| Summary (Key findings, relevance to the project rationale and specific aim; lessons learned from methods employed/interventions; what contributed to the successful change/strengths of the project) | 
| Conclusions (Usefulness of the work, sustainability, potential for spread, implications for practice, recommendations) | 
| Section VI References | 5 5 | 
| Section VII Appendices | 5 5 | 
| o Statement of Determination | o IRB Non-research determination form | o Timeline, recommend adding in stakeholders | o QIPI Tools: Process map; FEMA, SWOT analysis, Fishbone, Run charts, timeline, etc. | o Budget/Cost benefit Analysis | o All materials used for implementation and evaluation tools | 
| APA Format | 5 5 | 
| TOTAL | 100 pts= | 100 |