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Enhancing Peripartum Care Through Standardized Nurse Knowledge Exchange

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N670 ME-MSN Internship

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Abstract

Problem Inconsistent handoff practices during patient transfers can cause mistakes and adverse outcomes. Hospital A’s peripartum unit has no set policy for Nurse Knowledge Exchange (NKE) during transfers. This project will introduce a standard handoff guide to enhance communication and prevent harmful results after patient transfers. Context The quality improvement project was conducted in a peripartum mesosystem within an urban hospital in Northern California. This specific area of the hospital comprised 21 postpartum rooms and nine laboring rooms.

Intervention The project involved a methodical strategy that encompassed engaging stakeholders, conducting a literature review, and analyzing data to pinpoint areas for enhancing the handoff procedure. Following this evaluation, standardized handoff guides and protocols were created and put into practice. Ensuring staff received training and education guaranteed the consistent and proficient use of the updated handoff procedures. Measures The outcome measure is the comprehensiveness of NKE assessed by a binary coding system. Results The findings show a notable enhancement in the comprehensiveness of handoffs following the implementation of the bedside handoff guide. The proportion of NKE occurring at the bedside surged from 33.5% to 77%, while the overall completeness of NKE increased from 74% to 91%.

Conclusion Implementing standardized handoff protocols has proven effective in enhancing patient safety and care quality during transfers in the peripartum mesosystem. Ongoing monitoring and assessment will be vital for maintaining these improvements.

Keywords: NKE, handoff communication, peripartum, bedside report
Enhancing Peripartum Care Through Standardized Nurse Knowledge Exchange

Ineffective handoff communication presents a significant patient safety concern within healthcare, contributing to approximately 80% of serious medical errors (Lin et al., 2015). Extensive research has shown that bedside shift reports offer considerable benefits to both patients and healthcare providers (Elue et al., 2019). The severity of handoff-related issues prompted the Joint Commission to introduce a national patient safety goal on handoffs, effective since January 2006. This safety goal mandated healthcare organizations to adopt a standardized approach to handoff communications, ensuring an opportunity for questions and responses. In 2010, the requirement became a standard with the requirement that the organization's process for hand-off communication provide the opportunity for discussion between the giver and receiver of patient information. It was noted that such information may include the patient's condition, care, treatment, medications, services, and any recent or anticipated changes to any of these (The Joint Commission, 2017). Despite these efforts, communication gaps persist during handoff processes, posing continued risks to patient safety. According to The Joint Commission (2017), communication failures in U.S. hospitals and medical practices were responsible for at least 30% of all malpractice claims, resulting in 1,744 deaths and $1.7 billion in malpractice costs over five years. Furthermore, research indicates that 69% of clinical learning environments do not have a standardized hand-off process, highlighting the ongoing need for improvement in handoff communication protocols (Wagner et al., 2016).

Problem Description

The project is situated within the peripartum department of a prominent urban teaching hospital in Northern California. The department encompasses a range of facilities, including 11 hybrid antepartum/postpartum rooms on the 3rd floor, 10 postpartum rooms on the 6th floor, 9
labor & delivery rooms, 3 triage rooms, 2 post-anesthesia care unit rooms, and 2 labor & delivery operating rooms. Moreover, there are 5 workstations on wheels (WOW) available on both the 6th and 3rd floor postpartum units. Staffing comprises 1 postpartum (PP) nurse manager, 5 PP nursing assistants, 1 labor & delivery (L&D) nurse manager, and 5 assistant nurse managers dedicated to labor and delivery. In terms of personnel numbers, the department has a total of 107 L&D nurses and 69 postpartum nurses. Among them, 12 PP nurses are employed as needed, 1 is a traveler, and the remainder are part-time employees. On the contrary, 33 L&D nurses are employed as needed, 17 are travelers, and the remaining staff members work part-time shifts.

The peripartum department provides comprehensive acute inpatient care for expectant mothers and their newborns, with a primary focus on ensuring the health and safety of both mother and baby throughout the labor process. The unit is staffed by a multidisciplinary team including registered nurses specializing in labor & delivery (L&D) and postpartum care, obstetricians, pediatricians/neonatologists, anesthesiologists/CRNAs, medical residents, physician assistants, surgeons, and operating room technicians. Additionally, the unit is supported by clinical nurse leaders, nurse managers, patient care assistants/technicians, midwives or doulas, unit secretaries, social workers, security personnel, lactation consultants, chaplains, food services/nutritionists, housekeeping staff, and information technicians to meet the diverse needs of patients and families.

The unit has faced recent challenges due to leadership turnover and cultural differences. A mesosystem assessment uncovered that the PP unit had never designated a nurse manager until recently. This addition has notably improved operations, as the nurse manager now facilitates communication with the L&D nurse manager to stay updated on recent deliveries. In open
discussions with floor nurses, a common issue highlighted was the discrepancy between the information provided during the L&D report and what PP requires. To address this, it was suggested that introducing a guideline would be beneficial, allowing L&D nurses to present information relevant to postpartum nurses’ needs. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey outcomes indicate a nurse communication rating of 3 out of 5 for this institution (HCAHPS, 2024). Initial pre-survey findings of this project reveal that 29% of nurses always conduct Nurse Knowledge Exchange (NKE) at the bedside, while 45% opt for the hallway or nurses' station. As outlined by presurvey data (see Appendix A), although 71% of nurses perceive the existing NKE practices as very comprehensive or superior, baseline data (see Appendix B) reveals that 74% of NKE content is addressed irrespective of the location, with only 34% occurring at the bedside.

Available Knowledge

PICOT Question

To guide the search for evidence-based practice on bedside handoff (BSH) and organize the quality improvement project, the following PICOT (population, intervention(s), comparison, intervention, outcome, time) question was developed: For peripartum registered nurses, does implementing a standardized handoff tool enhance the comprehensiveness of the handoff process during labor and delivery to postpartum patient transfers over four weeks?

Search Methodology

A comprehensive electronic search was conducted in February 2024, reviewing evidence about the impact of BSH implementation on hospital mesosystems, focusing on postpartum units. The databases utilized were CINAHL Ultimate, PubMed, and Scopus. Each database was searched with the keywords: bedside report, bedside handoff, handover, shift reports, maternity,
nursing knowledge, postpartum, communication, and transition of care. Articles were considered for inclusion based on implementing bedside handoff in hospital settings with a preference for obstetric units that included a postpartum population. Only English language studies published from 2014 to 2024 were included, with no limits set on study type.

Ten research articles were examined for evaluation using the Johns Hopkins Nursing Evidence-Based Practice methodology to determine the evidence level and quality presented in Appendix C (Dang & Dearholt, 2021). One notable strength of this synthesis lies in its incorporation of a diverse array of research types, encompassing both qualitative and quantitative studies, case studies, and non-research data. This broad approach facilitates a thorough analysis and description of the identified problem (Dang & Dearholt, 2021). Out of the ten articles integrated into this review, 1 was a randomized controlled trial, 3 were categorized as Level III (qualitative, non-experimental, and mixed-method non-experimental), and 6 were considered Level V (case studies, project improvements, integrative reviews, and expert opinions). This comprehensive literature review offers a robust representation of the available research about bedside handoff, highlighting its depth and scope.

**Literature Review**

This literature review delves into critical themes surrounding peripartum care, focusing on communication in peripartum care, patient safety and outcomes, and healthcare quality and workflow efficiency. These themes are integral to understanding the effectiveness of implementing standardized handoff tools in labor and delivery units, particularly in enhancing the comprehensiveness of the handoff process during patient transfers to postpartum care. Through an exploration of relevant studies and evidence, this review aims to provide insights
into the impact of standardized handoff practices on healthcare delivery and patient outcomes in peripartum settings.

**Communication in Peripartum Care**

Kim, Lee, & Kim (2020) identified factors influencing handoff effectiveness among nurses in South Korea and recommended clear guidelines and educational programs to improve handoff communication. Similarly, Lee et al. (2018) implemented standardized handoff procedures in an urban academic center, resulting in decreased communication delays and enhanced workflow efficiency. Lin et al. (2015) employed human-centered implementation strategies in a quality improvement (QI) project across multiple nursing units, leading to improved nurse communication scores. Robins and Dai (2015) conducted a randomized controlled trial that supported the standardization of handoffs. Utilizing checklists fosters clear and succinct communication by delineating essential information to be communicated during handoffs. This approach minimizes miscommunication and guarantees the exchange of all pertinent details among healthcare providers. Providers utilizing the checklist experienced a reduced need for additional clarification post-handoff, indicating that the checklist enhanced the clarity and comprehensiveness of shared information.

**Patient Safety and Outcomes**

Elue et al. (2019) conducted a retrospective analysis of Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) surveys among postpartum women, revealing that implementing Bedside Shift Reporting (BSR) led to increased leadership visits to patients and enhanced patient satisfaction. Despite constraints like reliance on self-reported data and short study duration, BSR facilitated prompt feedback and adjustments for patient-centered care delivery (Elue et al., 2019). This aligns with findings from a systematic review by Bukoh and
Siah (2020), emphasizing that bedside handoff practices contribute significantly to reducing errors. These practices enable quick identification and resolution of any discrepancies between the patient's observed condition by the nurse and the information provided by the incoming nurse, thus enhancing patient safety and care quality. Additionally, Walsh et al. (2018) and Tobiano et al. (2019) underscored the critical impact of structured handoff protocols on patient outcomes and emphasized the importance of patient engagement during handover processes. Wollenhaup et al. (2017) executed a QI project on bedside handoff in a rural hospital's 13-bed unit, utilizing a modified bedside handoff SBAR tool to enhance patient- and family-centered care. While results showed improved patient and staff satisfaction, limitations such as site selection and convenience sampling may limit the generalizability of findings, suggesting the necessity for further trials in larger hospital settings.

**Healthcare Quality and Workflow Efficiency**

Williams (2018) conducted a comprehensive systematic review, clarifying the positive impact of BSR implementation on various facets of patient care and staff dynamics. The review highlighted how BSR enhances accountability, patient safety, patient involvement, and staff satisfaction rates, while also fostering mentoring relationships and mutual respect among staff members. Challenges identified by nurses include concerns about the presence of visitors or family members during handover, undisclosed diagnoses or lab values, potential disturbance to resting patients, extended report duration due to inquiries, and Health Insurance Portability and Accountability Act (HIPAA) compliance. With similar results, Walsh et al. (2018) performed a comparative study that found that BSR increased nurse accountability, enhanced practice effectiveness, improved job satisfaction, better communication, and strengthened organizational relationships. A study conducted by Robins and Dai (2015) found that the checklist did not have
a significant impact on the time of anesthesia providers in the post-anesthesia care unit (PACU), suggesting that it did not compromise workflow efficiency.

Drawing from the insights from the studies by Bukoh and Siah (2020), Elue et al. (2019), Kim, Lee, & Kim (2020), Lee et al. (2018), Lin et al. (2015), Robins & Dai, (2015), Tobiano et al. (2019), Walsh et al. (2018), Williams (2018), and Wollenhaup et al. (2017), it becomes evident that implementing standardized communication protocols, such as BSR, and enhancing handoff procedures can significantly enhance patient care, satisfaction, and staff engagement. The studies highlight the importance of structured handoff protocols in improving patient outcomes, teamwork climate, staffing perceptions, and reducing communication breakdowns and burnout among nursing staff. Moreover, they underscore the value of patient-centered care delivery adjustments facilitated by real-time feedback mechanisms inherent in standardized handoff procedures.

**Application of Literature to Project**

Recognizing the diverse factors influencing handoff effectiveness, such as communication techniques and educational programs, this project tailored clear guidelines and standardized nurse knowledge exchange (NKE) procedures to the unique needs of the peripartum unit. Nurse feedback was incorporated to optimize the success of the project. By aligning the project with evidence-based practices identified in these studies, the endeavor is to optimize nursing practices, enhance patient-centered care, and ultimately improve overall outcomes within the peripartum unit.

Bukoh and Siah (2020), Kim, Lee, & Kim (2020), and Williams (2018) highlighted the various handover styles employed by nurses, such as SBAR (Situation, Background, Assessment, Recommendation), ICCCO (Identification, Clinical Risks, Clinical History, Clinical
Status, Care Plan, Outcomes/Goals of Care), patient-centered handovers (PCH), and standardized nursing handoff forms (NHF). These different formats aim to improve the effectiveness of communication during handovers. Based on the systematic review findings, a combination of SBAR and patient-centered handovers were the structured handoff models that align with the needs of the peripartum unit.

Elue et al. (2019) and Kim, Lee, & Kim (2020) highlighted that providing ongoing comprehensive training to nursing staff on how to conduct effective Bedside Shift Reports should include communication skills, patient engagement techniques, and the importance of involving patients in their care. Providing ongoing education and training to staff on the standardized handoff processes maintains quality standards and optimizes workflow efficiency. To address this, ongoing training was designed to include positive nomenclature to use during bedside handoff.

Elue et al. (2019), Lin et al. (2015) and Robins & Dai (2015) suggested continuous evaluation of the effectiveness of Bedside Shift Reports through staff feedback and outcome measures. To address this, a post-survey was made to make informed decisions and make any necessary improvements to the process. Data collected post-implementation was analyzed to assess the effectiveness of the standardized handoff process, identify areas of improvement, and make adjustments to the handoff tool or process as needed to optimize communication, patient safety, and workflow efficiency in the maternity unit.

Lee et al. (2018) suggested engaging frontline staff in the development and implementation of standardized processes to ensure buy-in, collaboration, and sustainability of improvements. To address this, multiple presentations were planned at both L&D and PP councils where project information and progress was disseminated through word-of-mouth,
emails, and newsletters. Wollenhaup et al. (2017) state that staff often prefer learning from colleagues, and champions can play a crucial role in promoting and reinforcing the new handoff model. To ensure sustainability the team identified champion nurses within the unit who can serve as resources for staff, provide ongoing support, and audit compliance with the handoff process.

Lin et al. (2015) suggested piloting the standardized bedside handoff process with a small group to identify any challenges, gather feedback, and make necessary adjustments. To address this, a small pilot including 3-5 nurses from each unit was designed with the goal of observing 10 transfers using the standardized guide. Tobiano et al. (2019) stated that nurses perceive patients as valuable sources of information during handover, but they also face barriers such as concerns about sharing confidential and sensitive information and hesitancy in changing handover methods. To ensure that patient confidentiality is maintained during handoff conversations, training was designed to include asking the patient before proceeding with sharing sensitive information, respecting the privacy and dignity of expectant mothers, and addressing nurse concerns, with the additional support of utilizing computers at the bedside to enhance HIPAA compliance.

Walsh et al. (2018) and Williams (2018) suggest that bedside shift reporting fosters accountability among nursing staff by ensuring that important patient information is accurately communicated and understood during shift changes. Walsh et al. (2018) suggest that standardized bedside shift reporting protocols help streamline the handoff process, improve workflow efficiency, and provide nurses with the necessary information and resources to deliver quality care. This knowledge was used during presentations to stakeholders to secure buy-in and encourage participation in pilot projects.
Rationale/Framework

Theories provide a systematic approach to understanding, implementing, and sustaining positive changes in clinical practice. They enable healthcare professionals to comprehend the dynamics of change, predict possible challenges, and enhance the likelihood of successful implementation for the benefit of the organization (Aliakbari, Parvin, Heidari, & Haghani, 2015). Kotter’s model emphasizes the importance of creating a sense of urgency, forming powerful coalitions, and communicating the vision for change. The strength of this model is its comprehensiveness, providing a step-by-step guide. However, its weakness may be that its approach potentially overlooks the dynamic nature of change in complex healthcare environments (Barrow, Annamaraju, & Toney-Butler, 2022). Its application in this QI Project is as follows:

1. Create urgency: Communicate the need for the standardization of peripartum Nurse Knowledge Exchange (NKE), emphasizing the impact on patient outcomes and safety.
2. Form a powerful coalition: Assemble a multidisciplinary team including nurses, obstetricians, and lactation consultants to ensure diverse perspectives and expertise.
3. Create a vision for change: Develop a clear and compelling vision for the standardization of peripartum NKE, focusing on patient-centered care and evidence-based practices.
4. Communicate the vision: Disseminate the vision widely through various channels, ensuring that all stakeholders are informed and engaged in the change process.
5. Remove obstacles: Identify and address barriers to change, whether they are resource constraints, outdated policies, or resistance from staff.
6. Create short-term wins: Implement small, achievable changes in NKE to demonstrate progress and build momentum for larger transformations.
7. Build on the change: Integrate successful changes into standard practice, reinforcing the new care protocols.

8. Anchor the changes in corporate culture: Ensure that the improvements in postpartum care become ingrained in the organizational culture, sustaining positive changes over the long term.

Change theories provide valuable frameworks for healthcare professionals engaged in QI projects. In applying Kotter's 8-Step Model to this QI project, a systematic approach is established, ensuring that the changes are not only implemented but also sustained, fostering a culture of continuous improvement.

**Ethical Considerations**

This project meets the guidelines for an evidence-based quality improvement project. An IRB review was not required. A statement of non-research determination (SONRD) form was completed to validate this quality improvement initiative (see Appendix D) followed by a review and approval by the University of San Francisco School of Nursing and Health Professions clinical faculty. The project described received no funding and the project group members declared no conflict of interest for the project.

The American Nurses Association code of ethics pertinent to this project is Provision 2, which emphasizes the nurse's primary commitment to the patient, whether it be an individual, family, group, community, or population. This particularly relates to Provision 2.1 Primacy of the Patient’s Interests and Provision 2.3 Collaboration, which emphasize that nurses should provide patients with opportunities to participate in planning and implementing care and encourage collaborative planning to ensure safe, high-quality, patient-centered health care. Collaboration requires mutual trust, recognition, respect, transparency, shared decision-making, and open
communication among all stakeholders responsible for health outcomes (American Nurses Association, 2015). Standardizing Nurse Knowledge Exchange (NKE) in the peripartum system underscores the importance of collaboration and prioritizing the patient's needs.

The University of San Francisco’s Jesuit value that relates to this project is *cura personalis*, care for the whole person. A standardized bedside report process promotes continuity of care, which is a key aspect of holistic care. When information is consistently and comprehensively transferred during handoffs, it reduces the risk of missed details or misunderstandings, leading to smoother transitions and continuity in the care provided to the patient. When patients receive comprehensive, patient-centered care that considers their physical, emotional, and social needs, it can lead to better overall health outcomes, increased patient satisfaction, and improved quality of care. Standardizing bedside reports in the peripartum mesosystem aligns with the principles of holistic care by promoting comprehensive, patient-centered, and continuity-focused care that considers the whole person and empowers patients in their healthcare journey.

**Project AIM**

By the end of April 2024, the project aims to improve the comprehensiveness of Nurse Knowledge Exchange (NKE) for postpartum nurses by 5%, during the labor and delivery (L&D) to postpartum patient transfer through the implementation of a standardized handoff tool. Efforts aimed at enhancing communication and refining the handoff procedure within this mesosystem reflect a distinct endeavor to enhance patient safety and optimize patient outcomes.

**Methods**

**Context**

The mesosystem was assessed using the 5Ps framework, which includes Patients, Providers, Processes, Patterns, and Performance. The setting for this Quality Improvement (QI)
project is an urban teaching hospital in Northern California encompassing labor and delivery and the postpartum unit. This peripartum mesosystem serves a diverse patient population, including pregnant individuals in various stages of labor, neonates, uninsured and insured patients, and their families. It operates within the overarching vision to provide high-quality, affordable healthcare services and improve community health. The mesosystem involves a multidisciplinary team of professionals such as registered nurses, obstetricians, pediatricians, anesthesiologists, clinical leaders, and support staff who collaborate to deliver comprehensive care. Care processes include admission, triage, transfers, pain management, postpartum care, and family education, all tailored to ensure patient safety and well-being. Communication patterns emphasize effective team communication and patient engagement, while patient flow patterns and response protocols ensure efficient and timely care delivery. Understanding postpartum recovery and engaging families in care further enhance the patient experience, reflecting a holistic approach to peripartum care within the mesosystem.

Through observations, interviews, and data collection, the team identified a problem related to the handoff process during transfers from L&D to PP units. A fishbone analysis helped visualize the root causes of this problem, such as suboptimal handoff, communication gaps, and workflow inefficiencies (see Appendix E). Using the AIM (Achievement, Improvement, Measurement) statement, the team set specific goals and objectives for the project. The timeline was structured to implement a standardized handoff tool within two weeks, monitor its effectiveness, and make necessary adjustments within the following two weeks. (see Appendix F). A SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis was conducted to assess internal and external factors influencing the intervention. This analysis highlighted strengths such as dedicated staff engagement and opportunities like technology integration for handoff
tools. Weaknesses such as resistance to change and threats such as time constraints were also identified, guiding the intervention strategies (see Appendix G).

The budget plan for the intervention includes costs associated with developing and implementing the standardized handoff tool, training staff, and evaluating outcomes. It also considers potential savings from improved communication and HIPAA compliance. Allocation of resources for technology acquisition, staff education, and data analysis is essential for the success of the project (see Appendix H).

**Intervention**

The team developed a standardized handoff tool based on SBAR (Situation, Background, Assessment, Recommendation) content, incorporating modifications derived from feedback provided by approximately 40 Labor and Delivery (L&D) nurses and 25 Postpartum (PP) nurses. The tool was tailored to suit the specific needs of each unit, ensuring its relevance and usability for effective handoffs. The handoff guide clearly delineated which nurse was responsible for conveying specific information, promoting clarity and accountability during handoff processes. To facilitate accessibility, the laminated guide was placed on all Workstations on Wheels (WOWs) within the units, encouraging PP nurses to utilize the computer at the bedside (see Appendix I).

To address barriers identified through a pre-survey (see Appendix J), such as transfer interruptions and privacy concerns, unit champions were recruited during bi-monthly unit council meeting presentations (see Appendix K), and impromptu champions were identified by charge nurses. Over a two-week period, nurses were trained on the usage of the guide during their upcoming transfers, emphasizing the importance of standardizing bedside report practices. The training sessions encompassed an explanation of the Nursing Knowledge Exchange (NKE),
its significance, and an overview of the tool, highlighting roles, responsibilities, and accountability (see Appendix L). Additionally, empowering language was provided to encourage effective communication at the bedside (see Appendix M). The training sessions were interactive, allowing time for questions and feedback from participants. Data collection involved observing 10 transfers and documenting completed and incomplete aspects of bedside handoffs. Data was transcribed into an Excel sheet using binary coding (0s and 1s) to calculate percentages of covered content, providing insights into the effectiveness of the intervention.

**Study of the Intervention**

Nurse feedback following implementation assessed comprehensiveness and barriers to implementation during daily meetings as part of the Plan-Do-Study-Act (PDSA) cycles (see Appendix N). To measure the perceptions of the intervention on nurses and its effect on transition outcomes, a survey was administered in the healthcare facility at the end of the quality improvement intervention and compared to the pre-survey collected at the beginning of the project (see Appendix O). The post-survey included closed questions on demographics and the transition materials (comprehensiveness, effectiveness, overall satisfaction, suggestions for improvement, and any barriers encountered ) (see Appendix P). The team also elicited open-ended feedback on the standardized guide and anticipated pushback from nurses not doing bedside NKE due to privacy concerns or perception of patient needs.

The QI group witnessed 10 transfers from L&D to PP. External factors inhibiting bedside reports, such as interruptions, primary nurse break schedule, and unavailability of computers, were noted. Participating in huddles was a strategy used to make everyone aware this pilot was happening and therefore more inclined to participate. PP nurses were resistant to participate in the pilot due to an absence of culture to do handoffs at the bedside. The labor and
delivery nurses were open to participating in the pilot and utilizing the tool during their handoff report to postpartum. Educating both RNs on the guide was essential for a smooth pilot process. Feedback was used to revise the tool or approach of the next PDSA cycle. In preparation for unanticipated challenges, nurse managers were also educated to set the expectations of the nurses and encourage their participation.

**Outcome Measures**

The primary outcome measure for this study was the comprehensiveness of content covered during nurse knowledge exchange (NKE) transfers, as assessed using the NKE guide. This included a detailed list of essential information that should be exchanged during transfers from labor and delivery (L&D) to postpartum (PP) units. Data on the comprehensiveness of the content covered was collected using an Excel sheet that listed all the content elements outlined in the NKE guide. A binary coding system of 0s and 1s was used to indicate whether each element was covered (1) or not covered (0) during the NKE transfer at the bedside. Additionally, another document was used to track content coverage either at the bedside or at the nurses' station, employing the same binary coding method. Participants also completed a post-survey to provide feedback on the comprehensiveness, effectiveness, and overall satisfaction with the NKE guide, and any encountered barriers or suggested modifications.

The NKE guide content was based on established best practices and input from experienced L&D and PP nurses to ensure its validity. The binary coding system used in data collection provided a reliable and standardized method for assessing content coverage during NKE transfers. Data collected from the Excel sheets and survey responses were analyzed using statistical software to calculate percentages of content coverage, overall satisfaction scores, and identify common barriers or suggested modifications. Data collection occurred over a specified
period, starting from the implementation of the NKE guide and extending to the completion of post-survey responses. Participants were informed about the purpose of data collection and their voluntary participation in surveys. Confidentiality of responses was maintained throughout the study. Regular checks were conducted to ensure accurate data entry and consistency in applying the binary coding system across all data collection documents.

Results

Initial findings reveal that 77% of Nurse Knowledge Exchange (NKE) now takes place at the bedside, with 91% of NKE being completed irrespective of location (see Appendix Q). The data from both the pre-implementation and post-implementation phases highlights a substantial improvement across all categories following the quality improvement project. In the pre-implementation stage, the Introduction & Background category scored at 39%, Situation at 35%, Assessment at 52%, Baby Progress at 19%, and Computer Use & Recommendation at 17%. However, after the implementation of the project, there was a remarkable enhancement in performance. The Introduction & Background category surged to 80%, Situation to 80%, Assessment to 80%, Baby Progress to 71%, and Computer Use & Recommendation to 76%. These results demonstrate the effectiveness of the project in enhancing various aspects of the handoff process and signify a notable positive impact on overall performance metrics. Additionally, post-survey data demonstrates an improvement in nurses' perception of transfer comprehensiveness, effectiveness, patient-centered care, and overall satisfaction after implementing the standardized guide (see Appendix R).

Discussion

Summary
The project focuses on improving communication and patient outcomes in a peripartum mesosystem by implementing standardized handoff procedures. The project team engaged stakeholders through a collaborative process to develop and implement these guides, ensuring buy-in and support from all involved parties. Strategies such as training sessions and educational materials were utilized to ensure staff proficiency in the updated handoff procedures. Furthermore, the project's emphasis on ongoing training and education for staff highlights a commitment to continuous improvement and professional development. By providing nurses with the necessary skills and knowledge to conduct effective bedside handoff reports, the project not only enhanced the quality of care but also empowered staff to actively engage in the care process and involve patients in their own care decisions.

The implementation of the bedside handoff guide in the peripartum unit resulted in several key findings and outcomes. Nurses adhering to structured handover reports show an increase in the comprehensiveness of the content covered during patient-centered handoff. The structured handover models established efficient communication channels between nurses and patients, leading to improved work efficiency. The project's success can be attributed to its comprehensive literature review, incorporating diverse research types to provide a robust representation of the available evidence.

Overall, the project's emphasis on standardized handoff procedures in the peripartum mesosystem has demonstrated significant improvements in patient safety, communication, and workflow efficiency. The successful implementation of standardized handoff procedures in the peripartum unit not only improved communication and patient outcomes but also fostered a culture of safety and collaboration among healthcare providers. By enhancing the
comprehensiveness of the handoff process during patient transfers, this initiative has the potential to positively impact peripartum care and ultimately improve outcomes for mothers and babies.

**Limitations**

Limitations of the study include a short duration of the study period, which may have limited the depth of data collection and the ability to observe long-term effects. Additionally, the significant difference in results if both nurses were not educated suggests that education played a critical role in the outcomes, highlighting the importance of ongoing training initiatives. The small sample size and the specific context of a high-volume teaching unit further limit the generalizability of the intervention's results to other settings. However, the underlying principles of standardizing tasks and promoting closed-loop communication are transferable and adaptable across various healthcare environments. Furthermore, the use of convenience sampling with data from only one hospital and one nursing specialty introduces potential biases and limits the broader applicability of the findings. The short period between pre- and post-data collection may have also influenced the results, and the lack of matched participants from pre-implementation to post-implementation adds another layer of complexity to interpreting the outcomes.

**Conclusion**

The successful implementation of standardized handoff protocols demonstrates the effectiveness of best practices in improving patient safety and care quality during transfers within the peripartum unit. Continued monitoring and evaluation will be crucial to sustaining these improvements over time. The positive outcomes observed following the implementation of the bedside handoff guide underscore the importance of standardized communication practices in healthcare settings. By addressing communication gaps and promoting a structured approach to
handoff processes, the project has set a precedent for enhancing patient safety, improving workflow efficiency, and ultimately elevating the quality of care provided in the peripartum unit.
References


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Appendix A

Pre-survey Data

**Process:** How do you give or receive a handoff report during patient transfer from L&D to Postpartum?

- Other: 4%
- At the patient's bedside: 45%
- In person (hallway, nurse's station): 51%

**Patient-Centered Care:** How often do you give or receive a handoff/NKE report at the patient's bedside during a patient transfer?

- Never: 6%
- Occasionally: 29%
- Very frequently: 26%
- Always: 39%
**Comprehensiveness:** How comprehensive do you find the current handoff you give or receive during a patient transfer?

- 19% Slightly comprehensive
- 6% Moderately comprehensive
- 23% Very comprehensive
- 52% Extremely comprehensive

**Effectiveness:** How effective do you find the current handoff you receive in facilitating communication during the patient transfer process?

- 39% Unsure
- 3% Not effective at all
- 10% Slightly effective
- 3% Moderately effective
- 19% Very effective
- 26% Extremely effective
**Overall Satisfaction:** Overall, how satisfied are you with the report you receive for patient transfers?
Appendix B

Baseline observations

NKE Baseline Observations: Overview

- Bedside ONLY
- Bedside OR Nurses Station

Average Percentage of Completion

NKE Baseline Observations: Categories Averages

- Background
- Situation
- Baby Progress
- Assessment
- Computer Use and Recommendation

Average Category Percentage of Completion
NKE Baseline Observations: Introduction and Background

- Bedside ONLY
- Bedside OR Nurses Station

- On-coming nurse introduction: 90%
- Name(s) **check bands**: 95%
- Age: 75%
- Allergies: 65%
- Pregnancy History: 50%
- Prenatal Labs: 70%
- Medical/Surgical History: 80%

Average Percentage of Completion

NKE Baseline Observations: Situation

- Bedside ONLY
- Bedside OR Nurses Station

- Time & Type of Delivery: 95%
- QBL: 90%
- Laceration/Assess dressing: 60%
- Pain Control method/Type of anesthetic: 85%
- Assistive device/Medication(s) given: 90%
- Complications (Mom + Newborn): 80%

Average Percentage of Completion
NKE Baseline Observations: Baby Progress

- APGAR score
- Weight
- Blood Glucose Check
- Medications
- Feeding plan/last feed
- Breastfeeding Assessment
- Vitals
- Void(s)/Stool

Average Percentage of Completion

NKE Baseline Observations: Assessment

- Inspect wounds/incisions
- IV Sites
- Fundal assessment
- Ambulation
- Diet
- Void/foley catheter

Average Percentage of Completion
NKE Baseline Observations: Computer and Recommendations

- Computer used at bedside
- Orders & care plan
- Upcoming tasks & labs
- Goals for the shift and discharge goals
- Ask for patient input

Average Percentage of Completion

Bedside ONLY vs. Bedside OR Nurses Station
## Appendix C

### Johns Hopkins Evidence Appraisal Table

<table>
<thead>
<tr>
<th>Journal</th>
<th>Citation</th>
<th>Evidence Type</th>
<th>Sample, Sample Size, Setting</th>
<th>How Does Article Address Problem?</th>
<th>Quality of Evidence</th>
<th>Other Highlights from Article (consider including limitations &amp; outcomes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bukoh, M. X., &amp; Siah, C. J. R. (2020). A systematic review on the structured handover interventions between nurses in improving patient safety outcomes. <em>Journal of Nursing Management</em>, 28(3), 744-755. <a href="https://doi.org/10.1111/jonm.12936">https://doi.org/10.1111/jonm.12936</a></td>
<td>Systemic review</td>
<td>Synthesized 9 RCT and quasi-experimental studies across 6 electronic databases published between 2008 and 2017. Involved a total of 1,169 inpatient medical and surgical nurses from multiple disciplines</td>
<td>Nurses adhering to structured handover reports have reported a notable decrease in medical errors and overall adverse events commonly encountered during shifts and particularly led to a reduction in medication errors by ensuring accurate transfer of medication information. Bedside handoff practices contribute to error reduction, as any disparities between the patient’s condition observed by the nurse and the information provided by the incoming nurse can be promptly identified and addressed. Structured handover models establish a well-organized communication channel between nurses and patients and play a crucial role in minimizing redundant tests, treatment delays, and duplicated work, ultimately resulting in reduced hospital stays and fewer potential adverse events.</td>
<td>Level III good quality</td>
<td>The diversity of studies within literature reviews, ranging from cross-sectional to quasi-experimental and qualitative, can introduce potential inaccuracies in the findings. Variations in clinical settings across these studies further complicate the synthesis of results. The structured handovers in each study had varying focuses and outcomes, adding to the complexity and diversity of the pooled studies.</td>
</tr>
<tr>
<td>2</td>
<td>Elue, R., Simonovich, S., Tariman, J., Newkirk, E. A., &amp; Neerhof, M. (2019). Bedside shift report enhances patient satisfaction for hispanic and public insurance patients and improves visibility of leadership in obstetric and postpartum settings. <em>Journal of Nursing Practice Applications &amp; Reviews of Research</em>, <a href="https://doi.org/10.13178/jnparr.2019.09.02.0903">https://doi.org/10.13178/jnparr.2019.09.02.0903</a></td>
<td>Retrospective analysis of longitudinal and cross-sectional HCAHPS survey</td>
<td>289 postpartum women ≥ 18 y/o discharged between October 14, 2017 and April 15, 2018 and completed the HCAHPS survey 260-bed tertiary care facility located in the Chicago metropolitan postpartum unit. Implementation of BSR was associated with increased leadership visits to patients, and improved patient satisfaction. Providing BSR enhanced patients’ perception of nurses and nurse leaders’ visibility and accessibility during their care visit. Using BSR helps maintain a patient-centered approach as nurse leaders would gain opportunities to receive real-time feedback from patients and family and make necessary changes</td>
<td>Level III high quality with transparency &amp; validity reliability</td>
<td>Limited by self-reported data and short duration of the study period (6 months) With the analysis of the study site’s HCAHPS dataset, it is not possible to describe the difference between responders and non-responders.</td>
<td></td>
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<tr>
<td></td>
<td>Author(s)</td>
<td>Study Design</td>
<td>Participants</td>
<td>Results</td>
<td>Level of Evidence</td>
<td>Conclusion</td>
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<td>3</td>
<td>Kim, J. H., Lee, J. L., &amp; Kim, E. M. (2020). Patient safety culture and handoff evaluation of nurses in small and medium-sized hospitals. <em>International Journal of Nursing Sciences</em>, 8(1), 58–64. <a href="https://doi.org/10.1016/j.ijnss.2020.12.007">https://doi.org/10.1016/j.ijnss.2020.12.007</a></td>
<td>Descriptive study</td>
<td>425 nurses who work at small and medium-sized hospitals in South Korea</td>
<td>Several factors influenced the effectiveness of handoff procedures, including educational attainment, work schedules, length of tenure in the hospital, method of handoff, satisfaction levels with the current handoff process, occurrence of errors during handoff transmission and reception, adherence to handoff guidelines, and the adequacy of time allocated for handoff education. To enhance handoff practices, it is recommended to establish clear guidelines and standards informed by these findings, as well as to adapt existing processes accordingly. There is a need for the implementation of a structured educational program focused on improving handoff communication.</td>
<td>Level V with self reflection and transparence</td>
<td>The effect of the handoff method on the handoff evaluation was not investigated. Suggest trials be done at larger hospital</td>
</tr>
<tr>
<td>4</td>
<td>Lee, D. D., Colwill, A. C., Teel, J., &amp; Srinivas, S. K. (2018). Safe passage: Improving the transition of care between triage and labor and delivery. <em>Quality Management in Health Care</em>, 27(4), 223-228. <a href="https://doi.org/10.1097/QMH.0000000000000191">https://doi.org/10.1097/QMH.0000000000000191</a></td>
<td>Quality improvement Prospective observatioinal study</td>
<td>Urban academic tertiary center 17 pregnant people as baseline pre-intervention, 10 pregnant people during implementation phase, 50 pregnant people 6-month post-intervention</td>
<td>A standardized communication script was employed to convey crucial details during patient transfers, and a bedside huddle safety board was installed for RNs and providers to reference during bedside handoffs. Utilizing scripted guides for handoffs can standardize the information exchange process, while visual aids can enhance the accuracy of handoffs, ultimately contributing to faster transfer times and minimizing care delays. The introduction of a standardized handoff procedure and the implementation of a new bedside huddle decrease communication delays and the time taken to initiate care for women transitioning from the triage unit to L&amp;D. This results in enhanced workflow efficiency and better utilization of scarce resources, such as staff and rooms.</td>
<td>Level V high quality</td>
<td>Intervention not generalizable since the unit is a high-volume teaching unit. However, the underlying principles of standardizing tasks and providing opportunities for closed-loop communication are adaptable to any setting. No patient-centered data was obtained, especially regarding the patients perception of safety and quality of care regarding the bedside huddle.</td>
</tr>
<tr>
<td>5</td>
<td>Lin, M., Heisler, S., Fahey, L., McGinnis, J., &amp; Whiffen, T. L. (2015). Nurse knowledge ExchangePlus: Human-centered implementation for spread and sustainability. <em>Joint Commission Journal on Quality and Patient Safety</em>, 41(7), 303-312, AP1- AP5. <a href="https://doi.org/10.1016/s1553-7250(15)41040-2">https://doi.org/10.1016/s1553-7250(15)41040-2</a></td>
<td>QI project</td>
<td>125 nursing units across 14 hospitals:64 medical/surgical units,61 specialty units (ICUs, maternal-child health units, and pediatrics)(KPSC; Pasadena)</td>
<td>Human-centered implementation helped engage frontline staff in the need for change, created staff ownership of NK-Eplus, and changed the organizational culture of professional nursing practice around shift change. By the end of 2012, 100% of the 64 medical/surgical units and 47 (77.0%) of the 61 specialty units in KPSC medical centers had implemented NK-Eplus. Aggregated scores for nursing units within medical centers improved by 0.1 to 7.8 percentage points. The mean KPSC Hospital Consumer Assessment of HCAHPS score for nurse communication improved from 73.1% in 2010 to 76.4% in the first quarter of 2014 (p &lt; .001).</td>
<td>Level V high quality with transparence and self reflection</td>
<td>Units and medical centers that compressed or bypassed the customization phase did not change the culture of professional nursing practice related to shift change. Nurse satisfaction not assessed. Six to eight weeks of testing and education on nursing units were needed for frontline staff to understand the value of NK-Eplus for improving the patient-centeredness, safety, and quality of care</td>
</tr>
<tr>
<td>Page</td>
<td>Reference</td>
<td>Study Design</td>
<td>Findings</td>
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<tr>
<td>6</td>
<td>Robins, H., &amp; Dai, Fa. (2015). Handoffs in the postoperative anesthesia care unit: Use of a checklist for transfer of care. <em>AANA Journal</em>, 83(4), 264-268. <a href="https://www.ncbi.nlm.nih.gov/pubmed/26390744">https://www.ncbi.nlm.nih.gov/pubmed/26390744</a></td>
<td>Randomized control trial (RCT)</td>
<td>60 handoffs, 52 participants finished the study. 26 RNs in the experimental (checklist) group 26 RNs in the control (non-checklist) group. This study looked at implementing a checklist for use during handoff, which includes identifying patient information, medical history, anesthesia, intraop course, and postop. By standardizing this process using a checklist, this study found positive results favoring handoff standardization. Use of a checklist by an anesthesia provider lowered the rate of callbacks for information clarification for RNs by a statistically significant degree, and led to higher adequacy rating of handoff by RNs.</td>
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</table>

Anesthesia residents were not included in the study; results could have been affected by relative experience of the provider giving the handoff. Adequacy rating of handoff by the RN was subjective.
<table>
<thead>
<tr>
<th>Page</th>
<th>Author(s)</th>
<th>Title</th>
<th>Study Type</th>
<th>Study Design</th>
<th>Evidence Level</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Walsh, J., Messmer, P. R., Hetzler, K., O'Brien, D. J., &amp; Winningham, B. A. (2018).</td>
<td>Standardizing the bedside report to promote nurse accountability and work effectiveness. The Journal of Continuing Education in Nursing. 49(10), 460-466.</td>
<td>Comparativ e study</td>
<td>A convenience sample comprising 104 medical-surgical nurses from a South Florida hospital participated and completed the study's pretest, with only 73 of them completing the posttest.</td>
<td>Single-group pretest-posttest designed to evaluate the impact of an educational program on accountability and structural empowerment during bedside shifts.</td>
<td>Level V high/ good quality</td>
</tr>
<tr>
<td>9</td>
<td>Williams, C. L. (2018).</td>
<td>A comparison of the risks and benefits of nursing bedside shift report vs. traditional shift report: A systematic review of the literature. International Journal of Studies in Nursing. 3(2), 40.</td>
<td>Systematic review</td>
<td>Reviewed scholarly and peer-reviewed journal articles from Google Scholar, CINAHL and Ovid databases published within 2013 to 2018. search terms “bedside shift report,” “traditional shift report,” “risks of shift report,” and “communication” The studies were precisely analyzed, and systematically pieced using the top four tiers of evidence hierarchy.</td>
<td>Performing BSR increases accountability, patient safety, patient involvement as well as, patient and staff satisfaction rates. BSR encourages an environment for mentoring relationships and creates mutual respect among staff. Nurses are able to visualize patients and implement safety checks at the start of the shift, reducing the length of time they spend at the nurses’ station and away from the bedside.</td>
<td>Level V high/ good quality</td>
</tr>
<tr>
<td>Wollenhaup, C. A., Stevenson, E. L., Thompson, J., Gordon, H. A., &amp; Nunn, G. (2017). Implementation of a modified bedside handoff for a postpartum unit. <em>JONA: The Journal of Nursing Administration</em>, 47(6) <a href="https://doi.org/10.1097/NNA.000000000000487">https://doi.org/10.1097/NNA.000000000000487</a></td>
<td>QI project</td>
<td>28 nurses on a 13 bed postpartum unit at a 110 bed rural hospital, plus 50 postpartum patients</td>
<td>Bedside handoff is essential in a clinical environment, particularly as the healthcare model embraces a more patient- and family-centered care approach. Using Lewin's Theory of Change, implementation of a modified bedside handoff SBAR tool was made to ensure that all components of the handoff were covered. The &quot;situation&quot; &amp; &quot;background&quot; was done in private between nurses and the rest of the report was done at the bedside with the patient.</td>
<td>Level V with transparence</td>
<td>The main author chose their own workplace as the project site and selected patients and staff using convenience sampling, which may restrict the project's generalizability due to the socioeconomic and ethnic composition of the patient and nurse population in this setting. There may be some differences in the outcomes due to the atmosphere and workflow of a small hospital environment and should be trialed at a larger hospital.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix D

Statement of Non-Research Determination

Project: Statement of Determination and Non-Research Determination Form

Student Name: Gabriela Ochoa

Title of Project: Enhancing Peripartum Care Through Standardized Nurse Knowledge Exchange

Brief Description of Project

Data that Shows the Need for the Project
The peripartum microsystem currently lacks a clear or standardized policy regarding the Nurse Knowledge Exchange (NKE) process. Initial observations reveal that while handoffs cover 75.8% of the necessary NKE content, only 28.5% of this information is provided bedside. Additionally, a pre-survey indicated that 64% of nurses perceived the NKE as very comprehensive or better. However, informal feedback and survey responses suggest that the NKE handoff process lacks thoroughness and conciseness, prompting staff endorsement of the current project's intervention. Research supports the efficacy of bedside reporting in improving handoff procedures and significantly enhancing patient care, satisfaction, and staff engagement (Wallenhap et al., 2017; Williams, 2018).

Aim Statement
By the end of April 2024, we aim to improve the comprehensiveness of Nurse Knowledge Exchange (NKE) for postpartum nurses by 5% during the labor and delivery (L&D) to postpartum patient transfer through the implementation of a standardized handoff tool.

Description of Intervention(s)
A handoff guide based on best practices was created for nurses to refer to during transfers. It was developed with feedback from floor nurses and leadership on both labor and delivery and postpartum units.

Desired Change in Practice
Standardizing the NKE process with our checklist guide will ensure a thorough and consistent report during patient transfers from labor and delivery to postpartum. This includes utilizing computers (WOWs) during reports and for NKE to occur at the bedside.

Outcome measurement(s)
The present project will measure the comprehensiveness of NKE based on our checklist guide (e.g., increased percentage of NKE completeness) in terms of the number of NKE points completed.
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). Students 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 *

[Image 74x164 to 541x718]

School of Nursing and Health Professions

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

<table>
<thead>
<tr>
<th>Project Title: Standardization of Nurse Knowledge Exchange (NKE) on the Perinatant Microsystem</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></td>
<td>X</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>X</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>X</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>X</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>X</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. The project has NO funding from federal agencies or research-focused organizations and is not receiving funding</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
for implementation research.

| 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. | X |

| 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." | X |

**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 NAMES (Please print):**

Student Name: Gabriela Ochoa  
Student:

**DATE:** 03/08/2024

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

Supervising Faculty Member Name: Scout Hebinck

Signature of Supervising Faculty Member:

**DATE:** 3/8/24
Appendix E

Fishbone Analysis

Nurse Knowledge Exchange (NKE) Standardization

**Fishbone Analysis**

**People**
- Not shift standard to have a postpartum charge
- Notification of a patient transfer varies
- Low morale between units
- Roles/responsibilities unclear of nurses involved in transfer process
- Absence of NKE checklist tool

**Environment**
- Multiple people in patients’ room contributing to a lack of privacy
- Confined physical space
- Highly distracting room
- High stress unit
- L&D nurses don’t float to PP Unit
- Variable NKE requirements around NKE
- Multiple interruptions during NKE
- Unknown processes on policy of NKE and notice of transfer

**Equipment**
- Suboptimal use of Vocera
- Computers in hallway vs. bedside
- Majority slow adopters
- Variable NKE processes
- Transfer of patients NKE not seen as priority
- Low priority to give family centered care

**Material**

**Methods**

**Culture**

NKE IS NOT STANDARDIZED
**Appendix F**

**GANTT Chart**

<table>
<thead>
<tr>
<th>TASK TITLE</th>
<th>DUE DATE</th>
</tr>
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<tbody>
<tr>
<td><strong>Project Planning</strong></td>
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<tr>
<td>Literature Review</td>
<td>3/3/2024</td>
</tr>
<tr>
<td>Evidence Appraisal Table</td>
<td>2/26/2024</td>
</tr>
<tr>
<td>Meeting with NM, OBC</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Develop NKE Checklist &amp; Feedback</td>
<td>2/15/2024</td>
</tr>
<tr>
<td>Finalize NKE Checklist</td>
<td>3/21/2024</td>
</tr>
<tr>
<td>Develop Pre-Survey Questions</td>
<td>2/14/2024</td>
</tr>
<tr>
<td>Finalize Pre-Survey Questions</td>
<td>2/14/2024</td>
</tr>
<tr>
<td>Develop Pre-Survey Flyer</td>
<td>2/14/2024</td>
</tr>
<tr>
<td>Disseminate Pre-Survey Flyer</td>
<td>3/13/2024</td>
</tr>
<tr>
<td>Develop Post-Survey Questions</td>
<td>4/1/2024</td>
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<tr>
<td>Finalize Post-Survey Questions</td>
<td>4/1/2024</td>
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<td><strong>Implementation</strong></td>
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<tr>
<td>Observe Baseline Transitions</td>
<td>3/8/2024</td>
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<tr>
<td>NKE Checklist Staff Education</td>
<td>4/1/2024</td>
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<tr>
<td>Observe Post-Education Transitions</td>
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<tr>
<td>Collect Post Survey Responses</td>
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<tr>
<td>Analyze Pre/Post Survey Responses</td>
<td>4/19/2024</td>
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<tr>
<td><strong>Project Performance</strong></td>
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<tr>
<td>Poster Presentation</td>
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<tr>
<td>Submit Paper to USF Repository</td>
<td>5/13/2024</td>
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<tr>
<td>Final Present to Leadership</td>
<td>5/8/2024</td>
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**GANTT Chart**

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<th>TASK TITLE</th>
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<td>NKE Checklist Staff Education</td>
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<tr>
<td>Final Present to Leadership</td>
<td>5/8/2024</td>
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</table>
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Appendix G

SWOT Analysis

**Strengths**
- Clear objective and need
- Strong support from unit leadership
- Existing handoff covers 74% of necessary content
- Interdisciplinary collaboration
- Engaged unit-based councils
- Commitment to safety

**Weaknesses**
- Resistance to change/current culture
- Physical constraint (confined space to bring WOWs into postpartum rooms
- Suboptimal managerial involvement
  - Staff turnover
  - NKE compliance data unknown
  - Time constraints

**Opportunities**
- Evidence-based
- Promotes culture of safety
- Staff development
- Patient centered
- Medical resident-focused teaching hospital
  - Joint Commission mandated standardized bedside handoff in 2010

**Threats**
- Time constraints
- Slow-moving change
- Limited educational opportunities for new nursing workforce
- Physical/environmental constraints (unit not designed for peripartum)
Appendix H

Budget Analysis

### IMPLEMENTATION OF STANDARDIZED NKE

**Aim:** By the end of April, 2024, the project aims to improve the comprehensiveness of Nurse Knowledge Exchange (NKE) for postpartum nurses by 5%, during the labor and delivery (L&D) to postpartum patient transfer through the implementation of a standardized handoff tool.

By: Klana Killian, Kimberly Martinez, Gaby Ochoa, Lillian Quach, Gabby Romana

<table>
<thead>
<tr>
<th>Description</th>
<th>Total expenses</th>
</tr>
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<tr>
<td>Cost of guide ($0.10 per sheet)20 paper + ($0.16 per sheet)20 lamination + ($ 0.08 per sheet) 20 ink</td>
<td>$6.80</td>
</tr>
<tr>
<td>CNL educator cost ($6/hr (average CNL salary) x 1.3 (hrs + benefits) x 200 hr (preparation &amp; training)</td>
<td>$17,680.00</td>
</tr>
<tr>
<td>Nurse education $75/hr (average FTE nurse salary) x 1.3(hours + benefit) x 1 hr (training) x 176 FTE RNs</td>
<td>$17,160.00</td>
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<td><strong>Total</strong></td>
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### Hospital Savings (Cost Avoidance)

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<th>Description</th>
<th>Cost/Year</th>
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</thead>
<tbody>
<tr>
<td>Total births per year 3,000 per year = 3,000 transfer per year</td>
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</tr>
<tr>
<td>Transfers in violation of HIPPA Compliance 85% = 2,550 transfers</td>
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</tr>
<tr>
<td>HIPPA Compliance Violation $1,379,998.928 (Tier 2 violation) → average $35,154</td>
<td></td>
</tr>
<tr>
<td>Cost avoidance 2,550 x $1,379 BUT max is $2,067,813 (based on Tier 2 table)</td>
<td>$2,067,813</td>
</tr>
<tr>
<td><strong>Net Savings</strong> Hospital Savings - Implementation Cost</td>
<td><strong>$2,032,966</strong></td>
</tr>
</tbody>
</table>
# Appendix I

## Standardized NKE Guide

**L&D TO PP NKE GUIDE**

**NKE to be done at the bedside + Utilize a Computer**

- Introduce oncoming nurse to patient
  - "Oncoming nurse writes name on the board"
- **Name(s)**
- **Age**
- **Allergies**
- **Pregnancy History** (GTPAL, GDM, complications, Pre-E)
  - Prenatal Labs (Blood Type, RPR, Rubella, GBS, STIs, etc.)
  - Medical History (pertinent psychosocial history, COVID status)

**SITUATION: Time & Type of Delivery**

<table>
<thead>
<tr>
<th>VAGINAL DELIVERY</th>
<th>C-SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>- QBL</td>
<td>- QBL</td>
</tr>
<tr>
<td>- Laceration</td>
<td>- Pain control method</td>
</tr>
<tr>
<td>- Pain control method</td>
<td>- Other medication(s) given</td>
</tr>
<tr>
<td>- Type of assisted delivery</td>
<td></td>
</tr>
</tbody>
</table>

**Complications/Implants (Mom + Newborn)**

- Retained placental parts? IUD?

- Baby Progress
  - APGAR Scores + Weight
    - BG Check?
  - Meds (Hep B, Vit K, erythromycin)
  - Feeding plan/last feeding
    - Colostrum, hand expressing, latching assessment
  - Vitals
  - Void(s)/Stool (in utero?)

**FOCUSED ASSESSMENT**

- IV sites (**both RNs trace Mg, Pit lines**)  
- Fundal + wound assessment (**both RNs assess for bleeding**)  
- Ambulation & Diet (oral intake)  
- Void/Foley catheter

**COMPUTER**

- Orders & plan of care  
- Upcoming tasks & labs (review labs drawn and schedule for future lab draws)

**RECOMMENDATION**

- Goals for the shift and discharge goal
  - **engage patient and write goals on white board**
- Questions: Ask patients and family if they have any questions or additional information that they would like to add.
Appendix J

Pre-survey Flyer

1. **Take survey**
   - ~2 min long
   - **CONFIDENTIAL!**

   https://usfca.qualtrics.com/jfe/form/SV_0uIXbeARHHu9Ugu

2. **Share it with a coworker**
   - Your feedback will help guide QI initiatives

3. **Grab a treat**
   - Located in the breakroom

Questions? Email us!

USFQIPROJECT@GMAIL.COM
Appendix K

Units Council Presentations

Introduction to Project

**NKEs**
Bedside handoff involving both L&D and PP RNs as well as the patient.

**PICOT Question**
For peripartum RNs, does implementing a standardized handoff tool enhance the comprehensiveness of the handoff process during L&D to PP patient transfers over a 4 week period?

**AIM Statement**
By April 7, 2024, we aim to improve the comprehensiveness of NKE for PP RNs by 5% during the L&D to PP patient transfer through the implementation of a standardized handoff tool.

Our Progress So Far...

**Literature Review**
- Literature suggests bedside handoff improves patient outcomes

**Developed Checklist**
- NKE required components were identified through literature and staff feedback

**Requested Feedback**
- Pre-survey helped to identify current barriers and practices to bedside NKEs
# Literature Review

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Study Design</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lin et al.</td>
<td>2015</td>
<td>111 Kaiser South California nurse units implemented NKEplus, which included report/safety check standardization, unit support for uninterrupted bedside report, and patient collaboration to fill out care boards.</td>
<td>After implementation, aggregate HCAHPS* scores improved by 0.2 to 5.9%. Nurse satisfaction was not assessed. Change was not sustained after project.</td>
</tr>
<tr>
<td>Lee et al.</td>
<td>2018</td>
<td>A quality improvement project implemented practice to define and standardize roles of team members and to include a huddle safety board during handoff between triage and I&amp;D.</td>
<td>Huddle compliance increased from 48% to 84% and, thus, reducing delays in patient care.</td>
</tr>
</tbody>
</table>

*HCAHPS = Hospital Consumer Assessment of Healthcare Providers and Systems, a survey that measures patient perception of their hospital experience.

---

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<tbody>
<tr>
<td>Ong et al.</td>
<td>2011</td>
<td>A systematic review looked at studies of intra-hospital transfers from 1980 to 2011 to characterize why handoffs fail or are ineffective.</td>
<td>A lack of structure and protocol for handoff often results in content omission, uncertainty, and, as a result, adverse patient outcomes.</td>
</tr>
<tr>
<td>Dai &amp; Robins</td>
<td>2015</td>
<td>A randomized control trial studied 60 OR to PACU handoffs where half utilized a standardized handoff checklist and the other half did not.</td>
<td>92% of RNs who used the checklist were able to recall all information provided in the report compared to 54% of RNs who did not use the checklist.</td>
</tr>
</tbody>
</table>
Current Pre-Survey Results

27% Patient Centered Care
Respondents report that they always do NKE at the bedside

43% Process
Respondents report doing NKE in the halfway or nurse’s station

64% Comprehensiveness
Respondents report that NKE is very comprehensive or better

Developed Checklist Tool

[Table and list of items]

- [ ] This
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- [ ] Other

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Preliminary Baseline Observations

76%  
Percent of NKE completeness, regardless of location

28%  
Percent of NKE occurring at bedside

33%  
Goal of bedside NKE completeness by April 7

Barriers

Privacy  
Part of NKE is inviting the patient to participate in the discussion, focusing on language used

Computer at Bedside  
Utilizing a computer at the bedside can facilitate giving report and prevent miscommunication of report

Culture Differences  
Implementing a tool to guide and standardize handoff
Our Project

**PICOT Question:** For peripartum RNs, does implementing a standardized handoff tool enhance the comprehensiveness of the handoff process during L&D to PP patient transfers over a 2 week period?

**Aim Statement:** By the end of April 2024, we aim to improve the comprehensiveness of NKE for PP RNs by 5% during the L&D to PP patient transfer through the implementation of a standardized handoff tool.

---

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<td>Nematollahzadeh et al.</td>
<td>2022</td>
<td>A prospective intervention study observed 62 cardiac OR to cardiac ICU handoffs; half before staff training and half after staff training.</td>
<td>Implementing the standardized handoff protocol reduced the frequency of technical errors and unintentional omission of information as well as the number of disruptions during handoff.</td>
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<td>A randomized control trial studied 60 OR to PACU handoffs where half utilized a standardized handoff checklist and the other half did not.</td>
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### Our Progress So Far...

- **Baseline Observations**: Observed 20 patient transfers over the course of 3 weeks.
- **Requested Feedback**: Pre-survey helped to identify current barriers and practices to bedside NKEs.
- **Pilot Project**: In the beginning stages of implementing our handoff guide intervention.
Our Evaluation Tool

Baseline Observations

74%
Percent of NKE completeness, regardless of location

33.5%
Percent of NKE occurring at bedside

38.5%
Goal of bedside NKE completeness by the end of April
Baseline Observation Trends

**Never occurred**
Computer used at bedside

**Always occurred**
At Bedside: Name(s) **check bands**

**Always covered**
At Bedside OR Nurses station: Introductions, Pregnancy History, Time/Type of Delivery, Pain control method

Important Content

**Background**
Bedside vs. Bedside+NS
- 29% vs. 82.5%

**Situation**
Baby Progress
- 36% vs. 95%

**Complications (Abbreviations - Mentions)**
- SUP+ Shock
- WOB
-gef
- SWOB
- DMH
- NS
- NSH
- 29 Infusion
- Pedestal
- Premedicated
- Prenatal visit
- PMH
- 39
- 39 Week
- OR
- 11 C-Section
- L&D
- 2
- 25°
- 29°
- Raza
- Pat
- 0
- VAS
- 11 C-Section

**REFERENCES**
- 29 Infusion
- WOB
- PMH

**DISCUSSION**
- 29 Infusion
- OR
- L&D
- PMH

**OUR TOOL**
Will be laminated and placed on each PP WOW

---

**L&D TO PP NKE GUIDE**

**SHOCK**
- 29 Infusion
- WOB
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- NS
- NSH
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**OUR TOOL**
Will be laminated and placed on each PP WOW
### Suggested Phrases

<table>
<thead>
<tr>
<th>Replacing exclamatory or didactic language with plain language that she can understand</th>
<th>Example of exclamatory language</th>
<th>Example of plain language</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;OMG!&quot; &quot;Your waters have broken!&quot; &quot;What?!&quot; &quot;She's bleeding after childbirth!&quot;</td>
<td>&quot;Your waters have broken.&quot; &quot;Bleeding during pregnancy.&quot;</td>
<td>&quot;Your waters have broken!&quot; &quot;Bleeding during pregnancy!&quot;</td>
</tr>
<tr>
<td>&quot;C-section!&quot; &quot;Terminating pregnancy&quot; &quot;ABORTION!&quot; &quot;Ethical birth after caesarean birth!&quot;</td>
<td>&quot;C-section!&quot; &quot;Terminating pregnancy&quot; &quot;ABORTION!&quot; &quot;Ethical birth after caesarean birth!&quot;</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Avoid discouraging or insensitive language</th>
<th>&quot;Shaken baby syndrome&quot; &quot;Uncontrollable fetal movement&quot;</th>
<th>&quot;Poor maternal effort&quot; &quot;Not finding it easy...&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Believe to progress&quot; &quot;Good progress&quot;</td>
<td>&quot;Believe to progress&quot; &quot;Good progress&quot;</td>
<td>&quot;Believe to progress&quot; &quot;Good progress&quot;</td>
</tr>
<tr>
<td>&quot;Practise prolife&quot; &quot;Termination is a moral right&quot;</td>
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<td>&quot;Practise prolife&quot; &quot;Termination is a moral right&quot;</td>
</tr>
<tr>
<td>&quot;Poor obstetric history&quot; &quot;High risk&quot;</td>
<td>&quot;Poor obstetric history&quot; &quot;High risk&quot;</td>
<td>&quot;Poor obstetric history&quot; &quot;High risk&quot;</td>
</tr>
<tr>
<td>&quot;Gentle contractions&quot; &quot;Strong contractions&quot;</td>
<td>&quot;Gentle contractions&quot; &quot;Strong contractions&quot;</td>
<td>&quot;Gentle contractions&quot; &quot;Strong contractions&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Avoiding phrases that are anxiety-provoking, over-dramatic, or violent.</th>
<th>Example of poor language</th>
<th>Example of alternative language</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Fetal distress&quot; &quot;Changes in the baby's heart rate pattern&quot;</td>
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</tr>
<tr>
<td>&quot;Labour ward&quot; &quot;Shaking built&quot;</td>
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<td>&quot;Labour ward&quot; &quot;Shaking built&quot;</td>
</tr>
<tr>
<td>&quot;Rupture the membranes&quot; &quot;Release the waters&quot;</td>
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</tr>
<tr>
<td>&quot;Bloody show&quot;</td>
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<td>&quot;Bloody show&quot;</td>
</tr>
<tr>
<td>&quot;Kilo baby&quot;</td>
<td>&quot;Healthy baby&quot;</td>
<td>&quot;Healthy baby&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respecting women as autonomous adults:</th>
<th>&quot;My woman&quot; for the woman giving birth</th>
<th>Use the name, or say &quot;the woman I am caring for&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Girl&quot; (for small infants)</td>
<td>&quot;Girl&quot; (for small infants)</td>
<td>&quot;Girl&quot; (for small infants)</td>
</tr>
<tr>
<td>&quot;Good girl!&quot; (during labour)</td>
<td>&quot;You're doing really well!&quot;</td>
<td>&quot;You're doing really well!&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respecting women as individuals (rather than simply a container and mechanism for producing a baby)</th>
<th>&quot;Coloured&quot; &quot;The primigravida in room 12&quot;</th>
<th>Use the name (best) or say &quot;the woman in room 12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;I'll be and consent her&quot;</td>
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<td>&quot;I'll be and consent her&quot;</td>
</tr>
<tr>
<td>&quot;She&quot; (when present in the room)</td>
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<td>&quot;She&quot; (when present in the room)</td>
</tr>
<tr>
<td>&quot;She's 7cm&quot;</td>
<td>&quot;Woman's name&quot; or &quot;7cm&quot;</td>
<td>&quot;Woman's name&quot; or &quot;7cm&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respecting the woman's autonomy as a decision-maker</th>
<th>&quot;You must have/need [a caesarian section] (or any other option)&quot; (or you're not allowed to...)</th>
<th>&quot;I would recommend / suggest / advise caesarean birth because...&quot; (give benefits, risks, and alternatives for any recommendations, of course)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Patient refused&quot;</td>
<td>&quot;She declined&quot;</td>
<td>&quot;She declined&quot;</td>
</tr>
</tbody>
</table>

### Pilot Project

1. Identify unit champions
2. Briefly educate champions on use of the tool
3. Observe tool in use in ~10 NKEs
   a. ~1-2 NKEs per champion
4. Collect post-surveys and feedback from champions
5. Prepare for the next PDSA cycle
Education

1. Introductions
2. What is NKE
3. Why is it important
4. Overview of the tool components
5. Responsibility & Accountability
6. Questions
**Pilot Project**

1. Identifying both unit and impromptu champions
2. Briefly educating champions on use of the tool
3. Observing tool in use in ~10 NKEs (10/10 completed)
4. Collecting post-surveys and feedback from champions
5. Will prepare for the next PDSA cycle

---

**Education**

1. Introductions
2. What is NKE
3. Why is it important
4. Overview of the tool components
5. Responsibility & Accountability
6. Questions
Preliminary Results

38.5%
Goal of bedside NKE completeness by end of April

77%
Percent of NKE occurring at bedside (w/use of guide)

91%
Percent of NKE completeness, regardless of location (w/use of guide)

Suggested Phrases

PROMOTING EMPOWERING LANGUAGE AT THE BEDSIDE

<table>
<thead>
<tr>
<th>EXAMPLE OF POOR LANGUAGE</th>
<th>SUGGESTED ALTERNATIVE LANGUAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;GET DOWN TO BUSINESS&quot;</td>
<td>&quot;HELP THE PLAN TO PROCEED&quot;</td>
</tr>
<tr>
<td>&quot;INSTRUCTIVE&quot;</td>
<td>&quot;HELP THE PLAN TO PROCEED&quot;</td>
</tr>
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<td>&quot;INSTRUCTIVE&quot;</td>
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<tr>
<td>&quot;POLICY NUMBERS&quot;</td>
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<td>&quot;HELP THE PLAN TO PROCEED&quot;</td>
</tr>
<tr>
<td>&quot;I DON'T UNDERSTAND&quot;</td>
<td>&quot;HELP THE PLAN TO PROCEED&quot;</td>
</tr>
<tr>
<td>&quot;I DON'T UNDERSTAND&quot;</td>
<td>&quot;HELP THE PLAN TO PROCEED&quot;</td>
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The Future of the Project

Future PDSA Cycles
- Shared Google Drive with UBC over the summer
- Students hopefully returning in the Fall to resume the project

Future Education
- Group session
- Scenarios (role playing)
- Leadership support
# Appendix L

## Impromptu Education

<table>
<thead>
<tr>
<th><strong>IMPROMPTU CHAMPION EDUCATION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Check in with charge nurse about impromptu training for nurses involved in transfers</em></td>
</tr>
</tbody>
</table>

## COMMUNICATION TO CHARGE NURSE

I wanted to touch base regarding impromptu training we’re planning for nurses who will be involved in patient transfers from Labor & Delivery to Postpartum. The goal of this training is to ensure a smooth handoff process and optimize patient care during these transitions. Could you please point us to the nurses who will be involved in transfers today? Thank you for your support in improving our patient care processes.

## COMMUNICATION TO NURSE CHAMPION

**Trainer:** Hey there! Today, I wanted to go over this patient-centered tool we’ve developed with your help for smooth patient bedside handoffs from Labor & Delivery to Postpartum. It’s all about making sure we don’t miss any important detail and maintaining patient safety, you know? Literature suggests bedside handoff improves patient outcomes. 80% of serious medical errors are due to ineffective handoff communication (Wollenhaup et al., 2017). Bedside handoff between nurses has become essential in a clinical environment, particularly as the healthcare model embraces a more patient- and family-centered care approach (Lin et al., 2015). Our goal with this new process is to improve patient safety, continuity of care, and communication among the healthcare team and our patients.

*Holding a laminated sheet or tablet with the tool*

**Trainer:** Let’s break it down real quick. This is our bedside handoff tool. It’s like a cheat sheet to help us cover everything we need to during the handoff.

*Pointing to each section on the tool*

**Trainer:** Here’s how it works. First off, we introduce ourselves at the bedside and pull up the computer for quick access to records. Then, we dive into the background like allergies, pregnancy history, medical history, labs, and information about the delivery.

*Moving down the tool*

**Trainer:** Next up, we check on the patient’s progress. How’s the baby doing? Any complications with mom? We’ll also peek at IV sites and wound care.

*Pointing at the computer section*

**Trainer:** Don’t forget to hop on the computer too. Check out the care plan, any orders, and set some goals for the shift and discharge.

*Wrap up + Have updated student checklist handy for observations*

**Trainer:** Lastly, we open the floor for questions and make sure the patient and family are all good to go. Simple, right? I will be in the room observing and being a resource if any questions arise.

*Handing over the tool + Have QR code handy*

**Trainer:** Here’s a copy of the tool for you to keep handy. Give it a try during your next handoff, and let’s chat afterward to see how it went. I also have a post-survey for you to fill out after you are done!

## PHRASES FOR PUSH BACK

*We will never use computers at bedside*

- The Joint Commission checks for computer use during handoff

*We already do this*

- If you are, that’s great! You are one step ahead but not all nurses on the unit are, and this guide will help them make transfers go smoother/faster for you.

- We are not asking you to change the way you give handoff report. This is just a guide to make sure nothing is left out and aims to improve patient outcomes. 80% of serious medical errors are due to ineffective handoff communication and we want to make sure we are doing everything we can to improve that number.
### Appendix M

**Suggested Language**

#### Suggested Phrases

**PROMOTING EMPOWERING LANGUAGE AT THE BEDSIDE**

<table>
<thead>
<tr>
<th>AVOID PHRASES THAT ARE ANXIETY INDUCING</th>
<th>EXAMPLE OF POOR LANGUAGE</th>
<th>SUGGESTED ALTERNATIVE LANGUAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;FETAL DISTRESS&quot;</td>
<td>&quot;CHANGES IN THE BABY'S HEART RATE&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;TRIAL OF FORCEPS&quot;</td>
<td>&quot;HELP THE BABY WITH FORCEPS&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;LABOUR WARD&quot;</td>
<td>&quot;BIRTHING SUITE&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;RUPTURE OF MEMBRANES&quot;</td>
<td>&quot;RELEASE THE WATERS&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;BLOODY SHOW&quot;</td>
<td>&quot;SHOW WITH SOME BLOOD&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;BIG BABY&quot;</td>
<td>&quot;HEALTHY BABY&quot;</td>
</tr>
</tbody>
</table>

| RESPECTING WOMEN AS INDIVIDUAL          | "DELIVERED"              | "GAVE BIRTH"                   |
|                                         | "THE PRIMAGRAVIDA IN ROOM 12" | "THE WOMAN IN ROOM 12"       |
|                                         | "ILL GO CONSENT HER"      | "DISCUSS INFORMED CONSENT"    |
|                                         | "SHE"                     | USE HER NAME OR SPEAK TO HER |
|                                         | "SHE'S 7CM"               | RATHER THEN ABOUT HER         |
|                                         | "YOU MUST GET A CAESAREAN"| "I WOULD SUGGEST A CAESAREAN |
|                                         | "PATIENT REFUSED"         | BECAUSE [GIVE BENEFITS, RISKS AND |
|                                         |                          | ALTERNATIVES"                  |
|                                         |                          | "SHE DECLINED"                 |

| REPLACING CODIFIED LANGUAGE WITH PLAIN LANGUAGE | "SROM" | "EXTRA BLEEDING AFTER CHILDBIRTH" |
|                                                | "PPH"  | "BLEEDING DURING PREGNANCY"        |
|                                                | "APH"  | "VAGINAL BIRTH AFTER CAESAREAN BIRTH" |
|                                                | "VBAC" |                                |

| AVOID DISCOURAGING LANGUAGE | "FAILED VBAC/INDUCTION" | "UNSUCCEFUL VBAC/INDUCTION" |
|                            | "POOR MATERNAL EFFORT" | "NOT FINDING IT EASY..."    |
|                            | "FAILURE TO PROGRESS"  | "SLOW LABOUR"               |
|                            | "TERMINATE PREGNANCY"  | "COMPASSIONATE INDUCTION"   |
|                            | "HIGH RISK"            | "MEDICALLY COMPLEX"         |
|                            | "POOR OBSTETRIC HISTORY" | "STRONG CONTRACTIONS"  |
|                            | "PAINFUL CONTRACTIONS" |                               |
Appendix N

PDSA Worksheet

**Plan**

We anticipate push back from nurses not doing bedside NKE due to privacy concerns or perception of patient needs.

Who, What, Where, When:
The QI group will witness 10 transfers from L&D to PP. Unit champions will be identified and educated on the NKE guide. The champions will then utilize the handoff guide during their shifts whenever they are involved in a patient transfer.

Plan for Collecting Data:
A group member will follow a unit champion when they are doing NKE and evaluate the comprehensiveness of the NKE by assigning a "0" or "1" if an item or topic was discussed during handoff at the bedside.

**Act**

We saw 10 transfers from L&D to PP and successfully recruited the nurses to utilize the NKE Guide during their handoff.

Post-survey was conducted to obtain feedback on use of handoff guide.

We saw use of break nurses during handoff, and found participating in huddle makes everyone aware this pilot is happening and thus more inclined to participate

PP nurses were resistant to participate in the pilot project.

**Study**

Absence of culture to do handoff at bedside and to utilize a computer during handoff

Educating both RNs on guide is essential for smooth pilot process

Post-survey results were analyzed to assess the effectiveness of the intervention

**Do**

Summary & Reflection:
The L&D nurses are open to participating in the pilot and utilizing the tool during their handoff report to PP.

Absence of culture to do handoff at bedside and to utilize a computer during handoff

Educating both RNs on guide is essential for smooth pilot process

Post-survey results were analyzed to assess the effectiveness of the intervention

**PDSA Cycle**

Appendix N

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**PDSA Cycle**
Appendix O

Pre-Survey

QI: Pre-Survey

Hello, we are the University of San Francisco ME-MSN nursing students conducting a quality improvement (QI) project on your microsystem focused on NKE during patient transfers from L&D to Postpartum. Thank you for taking the time to complete our pre-survey.

Please answer every question. Remember this is an anonymous survey and will only be used to aid in measuring the impact of our intervention [checklist tool]. Please refrain from including any staff names or patient identifying information.

Department/Unit:

☐ Postpartum
☐ L&D

Years of nursing experience:

__________________________________________________________

Process: How do you give or receive a handoff report during patient transfer from L&D to Postpartum?

☐ Over the phone
☐ In person (hallway, nurse's station)
☐ At the patient's bedside
☐ Other ____________________________________________________
Patient-Centered Care: How often do you give or receive a handoff/NKE report at the patient's bedside during a patient transfer?

- Always
- Very frequently
- Occasionally
- Rarely
- Never

If a handoff/NKE report is not done at the patient's bedside, what are some common reasons why?

Comprehensiveness: How comprehensive do you find the current handoff you give or receive during a patient transfer?

- Extremely comprehensive
- Very comprehensive
- Moderately comprehensive
- Slightly comprehensive
- Not comprehensive
Effectiveness: How effective do you find the current handoff you receive in facilitating communication during the patient transfer process?

- Extremely effective
- Very effective
- Moderately effective
- Slightly effective
- Not effective at all
- Unsure

Overall Satisfaction: Overall, how satisfied are you with the report you receive for patient transfers?

- Very satisfied
- Somewhat satisfied
- Neither satisfied nor dissatisfied
- Somewhat dissatisfied
- Extremely dissatisfied

Suggestions for improvement: Please provide any additional comments or suggestions for improving the report checklist.

Thank you for taking the time to complete this survey. Your feedback will help us identify areas for improvement and enhance the effectiveness of our nursing practices. If you have any questions or concerns, please contact usfqproject@gmail.com
Appendix P
Post-Survey

QI: Post-Survey

Hello, we are the University of San Francisco ME-MSN nursing students conducting a quality improvement (QI) project on your microsystem focused on NKE during patient transfers from L&D to Postpartum. Thank you for taking the time to complete our post-survey after utilizing our NKE guide.

Please answer every question. Remember this survey will only be used to aid in measuring the impact of our intervention [NKE guide].

Name:
(This will only be used to follow up on any feedback if necessary)

Department/Unit:

○ Postpartum
○ L&D

Comprehensiveness: How comprehensive did you find the handoff you gave or received during a patient transfer after utilizing the NKE guide?

○ Extremely comprehensive
○ Very comprehensive
○ Moderately comprehensive
○ Slightly comprehensive
○ Not comprehensive
Effectiveness: How effective did you find the handoff you gave or received in facilitating communication during the patient transfer process after utilizing the NKE guide?

- Extremely effective
- Very effective
- Moderately effective
- Slightly effective
- Not effective at all
- Unsure

Patient-Centered Care: After utilizing the handoff guide, how likely are you to give or receive NKE at the patient's bedside during a patient transfer?

- Extremely likely
- Somewhat likely
- Neither likely nor unlikely
- Somewhat unlikely
- Extremely unlikely

After utilizing the NKE guide, do you foresee a time when you may be unable to use it? If so, what are some reasons why?

________________________________________________________________________
Overall Satisfaction: How satisfied are you with the report you gave or received during a patient transfer after utilizing the NKE guide?

- Very satisfied
- Somewhat satisfied
- Neither satisfied nor dissatisfied
- Somewhat dissatisfied
- Extremely dissatisfied

Suggestions for Improvement: Please provide any additional comments or suggestions for improving the report checklist.

__________________________________
Appendix Q

Results

NKE Post-Intervention Observation: Overview

Bedside ONLY

Bedside OR Nurses Station

Average Percentage of Completion

NKE Post-Intervention: Categories Averages

Introductions and Background

Situation

Baby Progress

Assessment

Computer Use and Recommendations

Average Percentage of Completion
Appendix R

Post-Survey data

**Comprehensiveness:** How comprehensive did you find the handoff you gave or received during a patient transfer after utilizing the NKE guide?

- Very comprehensive: 70%
- Extremely comprehensive: 30%

**Effectiveness:** How effective did you find the handoff you gave or received in facilitating communication during the patient transfer process after utilizing the NKE guide?

- Very effective: 60%
- Extremely effective: 40%
**Patient-Centered Care:** After utilizing the handoff guide, how likely are you to give or receive NKE at the patient’s bedside during a patient transfer?

![Pie chart](chart1.png)

- 10% Neither likely nor unlikely
- 50% Somewhat likely
- 40% Extremely likely

**Overall Satisfaction:** How satisfied are you with the report you gave or received during a patient transfer after utilizing the NKE guide?

![Pie chart](chart2.png)

- 60% Neither satisfied nor dissatisfied
- 30% Somewhat satisfied
- 10% Very satisfied