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Raising the Bar: Optimizing Peripartum Handoff through Standardized Nurse Knowledge Exchange (NKE)

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Abstract

Problem Hospital X’s peripartum microsystem has no policy guiding the Nurse Knowledge Exchange (NKE) process. Variability in handoffs during patient transfers could lead to medical errors and adverse events. This quality improvement (QI) project aims to pilot a standardized handoff guide to improve nurse communication and avoid adverse patient outcomes following patient transfers. Context The setting for this QI project was a peripartum mesosystem at an urban hospital located in Northern California with 21 postpartum rooms and nine labor rooms.

Intervention The project employed a systematic approach that involved engaging stakeholders, analyzing microsystems, reviewing literature, and analyzing data to identify areas for improvement in the handoff process. A standardized handoff guide and education was developed and piloted. Training and educating staff resulted in consistent and efficient utilization of the handoff guide.

Measures The outcome measure is the comprehensiveness of NKE evaluated by a binary grading system. Results After a pilot study, results demonstrate a significant improvement in the comprehensiveness of handoffs after utilizing the bedside handoff guide. The percentage of NKE occurring at the patient’s bedside increased from 33.5% to 77%, and the comprehensiveness of NKE overall rose from 74% to 91%. Conclusion The successful pilot of the standardized handoff guide demonstrates the effectiveness of best practices to improve handoff communication during transfers within the peripartum mesosystem, thus improving patient safety and care quality. Continued monitoring and evaluation will be critical to the project’s sustainability.

Keywords: NKE, handoff communication, peripartum, bedside report, handoff guide
Raising the Bar: Optimizing Peripartum Handoff through Standardized Nurse Knowledge Exchange (NKE)

The handoff process is an essential component of the nursing workflow when transferring the care and responsibility of a patient to a different nurse. It is a crucial safety component in a patient’s care as a potential area for communication breakdown. In 2006, The Joint Commission established a national patient safety goal for healthcare organizations to ensure consistent handoff communication whenever patient care transfer occurred (The Joint Commission, 2017). At this facility, the handoff process is referred to as nurse knowledge exchange (NKE). NKE is the exchange that occurs at the patient’s bedside and involves both nurses and the patient discussing the situation and pertinent background related to the patient’s admission (Lin et al., 2015). NKE includes completing focused patient assessments and discussing the patient’s future goals, plans, and care recommendations (Lin et al., 2015). Conducting NKE at the bedside does not only allow the patient to contribute information, thus becoming involved in their care, but can serve as a safety measure as including the patient and their family in transitions of care can lead to the potential identification of adverse events in the patient’s care (Scott et al., 2017; Tobiano et al., 2018). Involving patients and their loved ones in the NKE process can improve the quality of the handoff report or NKE while developing the relationship between the patient and nurse (Tobiano et al., 2018). Through the standardization of NKE, there can be consistency amongst the handoff reports or NKE done at points of transfer of care, and patient participation in their care can be encouraged.

Problem Description

The introduction of the QI project topic came directly from the postpartum unit manager because of observations that this process was not taking place at the patient’s bedside. Upon
speaking with unit leadership and floor nurses, the quality improvement (QI) group ascertained variability in the location and quality of handoff reports or NKE given by floor nurses when conducting a patient transfer from labor and delivery to the postpartum unit. After speaking with several floor nurses, it was also ascertained that there had been many months of tension between labor and delivery and postpartum nurses regarding the NKE process during patient transfers. This project topic is based on anecdotal evidence; as such, no baseline data or metrics were provided at the initiation of the QI project. Per the microsystem and organizational priorities, the overarching goal of the QI project is to standardize the NKE process at the bedside.

Effective communication between nurses plays a critical role in the patient care experience by promoting patient safety. Variability in the handoff report relates to the locations where the handoff report takes place, such as at the nurse's station or bedside, as well as who is involved in the handoff report like patients, family, and members of the interdisciplinary team (Hada & Coyer, 2021). Handoff report variability is associated with adverse patient outcomes such as sentinel events, medication errors, increased rates of complications, and waste (Taylor, 2015; Hada & Coyer, 2021). The breakdown of communication at the point of transfer of care not only impacts patient safety but also represents financial implications. Communication breakdown is the cause of an estimated 30% of malpractice claims (The Joint Commission, 2017). Bedside handoff benefits patients by promoting their safety and developing the nurse-patient relationship, resulting in patients engaged in their care and adequately informed about their care (Dorvil, 2018). Inconsistencies between handoff reports during the patient transfer from labor and delivery to postpartum provide opportunities for errors or adverse patient outcomes, indicating a problem in the mesosystem.

**Available Knowledge**
**PICOT Question**

Utilizing the Patient, Intervention, Comparison, Outcome, and Time (PICOT) format, the QI group developed a PICOT question to guide the literature review and QI project. The PICOT question is as follows: “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 literature search was conducted utilizing the Cumulated Index to Nursing and Allied Health Literature (CINAHL) database to address the PICOT question. The following search terms: “handoff,” “handoff report,” “report,” “nurse knowledge exchange,” “postpartum,” and “labor and delivery” were applied to gather literature relevant to the QI project. The search was limited to literature published within the previous 11 years and was not limited to within the United States. As literature regarding handoff reports or similar phrasing within the project’s mesosystem of the labor and delivery or postpartum unit was limited, the search was open to similar literature regarding the QI topic but set in similar high-stress units throughout the hospital. Using the Johns Hopkins Evidence Appraisal Tool (Appendix A) by Dang et al. (2022), the 11 articles of literature gathered from the literature search were critically appraised to determine their strength and quality and identify their relevance to the PICOT question. Of the 11 articles, one was a randomized control trial (Level I), one was a quasi-experimental study (Level II), three were non-experimental systematic reviews (Level III), two were non-experimental studies (Level III), two were quality improvement projects (Level V), and three were descriptive/observational studies (Level V). The variety of available literature regarding
handoff reports demonstrates the extensive evidence behind using standardized models to improve handoff reports.

**Literature Review**

**Bedside Report and Patient’s Impact**

In a recent study of 289 postpartum women surveyed six months following discharge, Elue et al. (2019) found that implementing BSR increased patient satisfaction scores and improved the patients’ postpartum experience. While based on self-reported data, the researchers asserted that implementing BSR can be done smoothly without impacting the patient’s satisfaction or experience.

In a systematic review by Tobiano et al. (2019) of 54 articles, including 21 studies and 25 QI projects focused on the patient’s role in nursing handover, they found that involving patients in BSR empowered patients to participate in their care while developing the nurse-patient relationship. The study also found that modifying BSR to be predictable and understandable for patients led to increased involvement in their care. The study highlights the benefit of standardization in the handoff reports exchanged between nurses as it can allow for patient participation. An additional systematic review by Williams (2018) argues that BSR, aside from exchanging pertinent patient information between nurses, also creates the opportunity for nurses to implement safety checks, which can decrease the risk of potential harm. Both systemic reviews highlight that implementing BSR faces challenges due to nurses’ perceived barriers to participating in BSR. The literature has identified the benefits of BSR for patients while highlighting the potential benefits to nursing practice, which ultimately can aid the standardization of handoff reports.
The use of BSR on transfers between labor and delivery and postpartum can result in increased patient satisfaction. Patients feel included in their care and have input in the care plan for themselves and the newborn. BSR can also serve as an opportunity for a physical safety check between the nurses from both units, primarily in the post-delivery period, when complications for the patient or newborn can present themselves.

**Standardization of Handoff Report**

In an observational study of 77 pregnant people, Lee et al. (2018) found that standardizing the handoff process using script guides and bedside huddles clarified the roles and responsibilities of each care team member. The standardization of the handoff process facilitates closed-loop communication between the team, resulting in a decrease in communication delays and a reduction in delays in initiating care. The study’s compliance data indicates that an intervention developed and personalized by the care team can lead to the longevity of the intervention. In a QI project conducted across 125 nursing units in 14 hospitals, Lin et al. (2015) reinforce that a human-centered implementation (HCI) approach leads to staff ownership of NKE, contributing to a design that meets the unit’s needs. The QI project concluded that the customization phase of implementing NKE is critical to ensure its sustainability.

A prevalent method in the literature to standardize the handoff process has been to utilize a standardized tool or guide to aid in consistency across handoffs between nurses. Robins and Dai (2015) conducted a randomized control trial using a checklist tool to guide half of the handoff reports between anesthesia providers and nurses in a post-anesthesia care unit (PACU). The trial ultimately shows that 100% of the handoff reports that involved the checklist tool were considered adequate. Nurses who received coaching before the trial commenced provided the adequacy rating, which relies on subjective opinion. However, the trial demonstrates that adding
a handoff tool increases the accuracy of the handoff report. Wollenhaup et al. (2017) also implemented a handoff tool in the form of a modified situation, background, assessment, and recommendation (SBAR) tool on a 13-bed postpartum unit. They explain that implementing their tool provided a structured approach to handoff to ensure that all components of handoff are covered. The compliance with tool utilization increased by providing the staff with education about the use of the tool, identifying a project champion, and modifying the tool to fit the unit’s needs. While conducting the QI project in a rural hospital with a workflow that differed from an urban hospital, they highlighted the steps that led to their success, which other settings can replicate in the future. In a systematic review of nine randomized control trials involving a standardized handoff intervention, Bukoh and Siah (2020) found that shifts that utilized a standardized handoff intervention saw fewer patient complications and adverse patient outcomes compared to shifts that did not. In addition to handoff interventions, the systematic review also noted that bedside handoff allowed nurses to efficiently resolve discrepancies due to early visualization of the patient (Bukoh & Siah, 2020). The literature highlights the demonstratable effects of utilizing a standardized handoff intervention to promote patient safety and avoid adverse events.

Using standardized handoff tools or interventions, consistent and accurate handoff reports can be shared between nurses, resulting in the avoidance of adverse patient outcomes. Standardization of the handoff process benefits patient safety but can also improve communication between nurses by allowing discrepancies to be addressed early and reducing communication delays. Involving nurses in developing and implementing a standardized handoff process results in the sustainability of the intervention, an important finding to guide the intervention of this quality improvement project.
Evaluation of Handoff Report

Kim et al. (2021) assert that due to errors occurring during handoff reports and inconsistencies with handoff guidelines, standards are necessary for a standardized handoff system and formal education on standardized handoff methods. In a cross-sectional descriptive study, Yu et al. (2018) found that hospitals with units that cooperate well with each other and promote a culture of patient safety reported fewer medical errors and already had standardized guidelines on handoff. They also determined that hospitals with a handoff structure or guidelines currently in place had handoff evaluation scores five times higher than hospitals without any structure (Yu et al., 2018). Block et al. (2013) utilized the Coordination of Handoff Effectiveness Questionnaire (CHEQ) among 56 labor and delivery nurses in a large university hospital to assess the quality of the handoff process following the implementation of a standardized handoff tool. Block et al. (2013) assert that the CHEQ is a reliable tool for assessing handoff quality as the straightforward and brief questionnaire results in high response rates. Additionally, the measures identified by the CHEQ are broad and can be replicated and used in other units to assess the quality of the handoff report.

Evidence supports using a structured or standardized handoff report, as it provides a consistent format and can promote a culture of patient safety by identifying potential safety issues early on. In addition to implementing a standardized handoff structure, an evaluation component is necessary to ensure consistency across all nurses. If handoff standardization is implemented successfully in the labor and delivery and postpartum units, staff can utilize the CHEQ tool to evaluate the quality of the handoff report.

Rationale/Framework
In the peripartum microsystem, applying Rogers’ Diffusion of Innovation theory is appropriate in optimizing handoff through the standardization of NKE. Utilizing Roger’s theory, the process can begin by observing the unit and identifying instances where the potential change is necessary or may be beneficial. Observations can include handoff reports at the nurse’s station or hallway or learning of handoff reports that did not involve the patient. From there, the process can progress to gathering the thoughts of the floor nurses on NKE and ways they believe it can improve while also gauging their interest in the project. If there is sufficient interest, a plan can be created to pilot a new change that addresses the standardization of NKE on the unit across all shifts (day, evening, night) to ensure uniformity and plan for any issues that may arise.

Individuals involved can be categorized by their eagerness to participate in the change by placing them in categories titled innovators, early adopters, early majority, late majority, and laggards (Dearing, 2009). Throughout the pilot study it can be observed if the change addresses the problem or contributes to creating new issues. If there is insufficient interest or resistance to the change the earlier categorization of individuals can assist by identifying who can influence their peers to adopt the new change (Dearing, 2009). The basis of Rogers’ Diffusion of Innovation theory is reliant on each category of adopters influencing the next with the intention that, eventually, the laggards will adopt the change.

**Ethical Considerations**

Throughout the QI project the influence of the University of San Francisco’s Jesuit value of cura personalis or care for the whole person is evident (University of San Francisco, n.d). Caring for the whole person in this setting entails caring for patients' mind, body, spirit in the peripartum mesosystem. Cura personalis closely ties with the art of nursing as nurses care not only for patients' physical ailments but also for patients through psychosocial problems they may
face. The standardization of NKE impacts patients by allowing them to become familiar with the care they have received and be involved in their future care.

The project addresses the American Nurses Association Code of Ethics Provision 3.4 of Professional Responsibility in Promoting a Culture of Safety by optimizing handoff, an important aspect of the nursing role. This provision encourages nurses to uphold a culture of safety through the creation, implementation, and compliance with policies that promote patient safety (American Nurses Association, 2015). Practicing and promoting NKE at the patient’s bedside is promoting patient safety as it allows the off-going nurse, oncoming nurse, and patient to review important safety details such as allergies, matching bands between the family and newborn, review of any medications taken, and verification of the patient’s care plan in their presence.

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 (Appendix B) followed by a review and approval by University of San Francisco School of Nursing and Health Professions clinical faculty. The project described received no funding and the project group members declare no conflict of interest for the project.

**Project AIM**

This QI project aims to directly improve the comprehensiveness of NKE during the patient’s transfer from the labor and delivery unit to the postpartum unit. Using a standardized handoff guide, the handoff report that postpartum nurses receive will be assessed based on the content shared, resulting in a percentage of comprehensiveness. The standardized handoff guide aims to increase the total percentage of comprehensiveness by 5%, resulting in an improved and
more comprehensive NKE by April. The project’s overarching aim is to standardize NKE at the patient's bedside by contributing to improving handoff report's comprehensiveness.

Methods

Context

The mesosystem includes the labor and delivery and postpartum units within an urban San Francisco Bay Area hospital referred to as “Hospital X”. The postpartum units is comprised of 21 postpartum rooms across two floors and are staffed by one nurse manager, five assistant nurse managers, and 69 postpartum nurses. Of the 69 nurses, 12 are per diem, one is a travel nurse, and the remaining 56 are part-time. The labor and delivery unit comprises nine labor and delivery and recovery rooms, three triage rooms, two operating rooms, and two post-anesthesia care unit rooms. The labor and delivery unit is staffed by one nurse manager, five assistant nurse managers, and 107 labor and delivery nurses. Of the 107 labor and delivery nurses, 33 are per diem, 17 are travel nurses, and the remaining 57 are part-time. The mesosystem provides acute inpatient care to pregnant and postpartum individuals, their newborns, and serves patient’s families.

Utilizing a fishbone analysis (Appendix C) the mesosystem was assessed through the themes of people, materials, environment, methods, equipment, and culture to determine the root cause behind the absence of NKE standardization. The analysis determined that on the mesosystem, there was uncertainty of the roles and responsibilities of the nurses involved in transfers when it pertains to NKE, and it was not a shift standard for there to be a postpartum charge nurse. The analysis found that variability surrounding NKE results in inconsistencies in the handoff reports. It was unclear if there was an existing policy regarding NKE or notifying the postpartum unit of an impending transfer. Across the mesosystem it was assessed that there was
low morale between the units and the culture on the mesosystem is not receptive to adapting bedside handoff.

Upon thorough analysis of the problem within the mesosystem and discussion of a possible intervention, a GANTT chart (Appendix D) was created to display a timeline of the project’s progression through the designated time frame from late January to early May. The timeline displayed was guided by the project aim to increase the comprehensiveness of NKE by early April and allotted sufficient time for the development, implementation, and evaluation of the intervention.

A strengths, weakness, opportunities, and threats (SWOT) analysis (Appendix E) took place to identify the characteristics of the mesosystem that would both aid and potentially hinder the intervention. The mesosystem’s strengths are that there is a clear need on the units for the QI project and strong support from unit leadership to develop this QI project. Each unit’s council is participating in improving the process of NKE during patient transfers. However, the prevalent culture of the mesosystem is resistant to new changes, and it is unknown what the mesosystem’s compliance to NKE is. Opportunities across the macrosystem are that they emphasize and prioritize the promotion of evidence-based practice, a culture of safety, and patient-centered care. The QI project directly addresses these topics. Threats to the implementation and adoption of the intervention are that the macrosystem is slow to adopt change and presence of physical barriers as the unit’s design is not conducive for peripartum care resulting in confined physical space within patient rooms.

After a budget analysis (Appendix F), it was assessed that Hospital X could receive a fine up to $2,067,813 because of HIPAA compliance violations (The HIPAA Journal, n.d.). To determine the cost of a potential fine for a HIPAA violation due to discussing private patient
medical information in an area like the hallway or nurse’s station, the amount of estimated total births at Hospital X was multiplied by the minimum HIPAA violation fine. It is worth noting that there is a maximum penalty cap for HIPAA violations and that figure was used as the true figure exceeded the cap. However, the estimated cost of fully implementing this QI project would be $34,846. The implementation cost was determined through evaluating the cost of producing the intervention, the cost of the clinical nurse leader (CNL) to develop the project and train the staff nurses, and the cost of a one-hour education session for all the nurses in the mesosystem.

Through implementing this project and standardizing the NKE process, Hospital X can have a cost avoidance of $2,032,966.

**Intervention**

At the initiation of the QI project there was no baseline data provided to the QI group as to the current status of NKE on the mesosystem. To remedy this the QI group sought to gather baseline data by participating in informal conversations with floor nurses and distributing a short five question pre-survey (Appendix G) across the microsystem. To learn more about NKE such as its frequency, comprehensiveness, effectiveness, and reasons why it may not take place at the bedside, a pre-survey (Appendix G) was utilized. The pre-survey was distributed and across the mesosystem by displaying colorful pre-survey posters (Appendix H) for three weeks to provide ample time for participants to see and answer the survey.

To continue gathering stakeholder buy-in, the QI group presented during the obstetrics unit council meeting that postpartum nurses lead. During the unit council meeting, council members were able to learn about the purpose of the QI project, current progress on the project, and future steps through the utilization of presentation slides (Appendix I). After the meeting,
council members were encouraged to take the pre-survey and encourage coworkers to take the pre-survey.

After the three weeks, the pre-survey data (Appendix J) showed a gap in perceived comprehensiveness of the NKE as 25% of respondents found NKE to be slightly or moderately comprehensive. The pre-survey data (Appendix J) also showed variability in the location of NKE as 45% of respondents reported doing NKE at the nurse’s station or in the hospital hallways. When asking about frequency of NKE, 35% of respondents reported only occasionally or never doing NKE at the patient’s bedside. The self-reported pre-survey data demonstrates an existing need for improvement to be done to the NKE process.

To get a better understanding of NKE during the patient transfer process, the QI group sought to observe 20 patient transfers from labor and delivery to postpartum throughout the course of three weeks. The purpose of the observations was to determine what percentage of necessary content was being exchanged during NKE and of this content shared, where it was taking place (i.e. at the patient’s bedside or the nurse’s station). The NKE was “graded” utilizing a binary grading system with a “1” indicating that the content was covered and a “0” indicating that it was not covered. At the conclusion of the observation period the averages of all 20 observations were graphed to identify trends.

To better understand NKE during the patient transfer process, the QI group sought to observe 20 patient transfers from labor and delivery to postpartum throughout three weeks. The observations aimed to determine what percentage of necessary content was being exchanged during NKE and of this content shared, where it was taking place (i.e. at the patient’s bedside or the nurse’s station). The NKE was “graded” utilizing a binary grading system with a “1”
indicating that the content was covered and a “0” indicating that it was not covered. After the observation period, the QI group graphed the averages of all 20 observations to identify trends. The NKE baseline observation graphs (Appendix K) showed that 74% of the necessary content is covered during NKE. However, only 33.5% is covered at the patient’s bedside. The data also revealed that 19.3% of the baby’s progress content was being discussed at the patient’s bedside during NKE compared to 74% at the bedside or nurse’s station. An additional finding was the low utilization of a computer or discussion of recommendations regardless of the location of NKE. Given this gap, the QI group created an L&D to PP NKE Guide (Appendix L), a standardized tool to guide a nurse’s NKE in a standardized fashion by organizing content logically with clear responsibilities outlined for both labor and delivery and postpartum nurses. Feedback about concerns discussing medical information in front of the patient and their loved ones led to developing a suggested phrases worksheet (Appendix M) to facilitate and promote using empowering language when discussing a patient’s pregnancy history and labor.

**Study of the Intervention**

Before a full-scale implementation of the L&D to PP NKE Guide (Appendix L), the QI group wanted to ascertain if the standardized tool would produce an improvement in the comprehensiveness of NKE. To get an idea if this intervention would be successful, the QI group determined they would pilot the intervention by witnessing ten patient transfers and recruiting impromptu project champions to utilize this guide at the time of a patient transfer and have the transfer process observed by a member of the QI group. In pursuit of obtaining buy-in and participation from labor and delivery nurses in the pilot study, the QI group presented the progress of the QI project during the monthly labor and delivery unit council meeting. Council members learned through presentation slides (Appendix N) about the QI groups’ baseline data
collection, the development of the L&D to PP NKE Guide (Appendix L), and the details of the proposed pilot study. The labor and delivery council members recommended recruiting participants, which led to modifying the pilot study. The pilot study was then planned and evaluated utilizing a PDSA cycle (Appendix O).

In the “Plan” stage, it was predicted that common reasons why nurses may object to doing bedside NKE using the L&D to PP NKE Guide (Appendix L) would be privacy concerns or their perception of the patient’s needs. The plan for collecting data during the pilot study was identical to how the baseline observation data was gathered by assigning a “0” or “1” if content or topics were discussed during the NKE at the bedside. The impromptu project champions would be educated on the spot on how to utilize the guide and the reasoning behind doing NKE at the bedside by utilizing the impromptu champion education (Appendix P) that was developed. Following the NKE process between the nurses, they would be given a post-survey (Appendix Q) to complete to gather further insight regarding their experiences with the tool’s utilization and elicit feedback.

In the “Do” stage, labor and delivery nurses were receptive to utilizing the guide during their NKE during the patient transfer observations. In contrast, postpartum nurses were resistant to participating in the pilot study. However, an unanticipated detail was that presenting about the pilot study and the NKE guide during shift huddles increased awareness of the project and increased nurses’ participation.

Key findings were gathered upon the pilot study’s conclusion or the “Study” stage. In the pilot study, it was noticed that educating both nurses who would participate in the transfer process resulted in a smoother transfer process. It was also assessed that the unit culture of resisting change regarding NKE at the bedside persisted, including resistance to utilizing a
computer during NKE. Early findings from the pilot study were then presented through presentation slides (Appendix R) in a follow-up obstetrics unit council meeting to share the intervention outcomes and discuss the barriers that the group encountered.

Following the pilot study evaluation or the “Act” stage, the QI group took the initiative to make necessary modifications to prepare for the next PDSA cycle and develop helpful tips. These changes were not arbitrary but were based on valuable feedback from the nurses. This feedback further modified the L&D to PP NKE Guide (Appendix L). The importance of early leadership involvement in the pilot study to establish expectations was also underscored, particularly in light of the resistance faced when educating postpartum nurses on the intervention.

**Outcome Measures**

The QI project’s primary objective was to improve the comprehensiveness of NKE during the transfer process from the labor and delivery unit to the postpartum unit. A binary grading system evaluated NKE comprehension, producing a comprehension percentage. Two different grades were produced based on the location of where the NKE took place (i.e., patient bedside or nurse’s station/hallway). In addition to obtaining measures from observations, outcome measures were also gathered from a post-survey (Appendix Q) distributed following the handoff utilizing the L&D to PP NKE Guide (Appendix L). The outcome measures obtained from a post-survey completed by pilot study participants were nurse perceived comprehensiveness, effectiveness, satisfaction, and the likelihood of providing patient-centered care (i.e., participating in bedside reports).

**Results**
Following the completion of the pilot study the data collected from the ten observations and post-survey were analyzed. The evaluation of the NKE pilot study observation graphs (Appendix S) found that following use of the L&D to PP NKE Guide (Appendix L), comprehensives of NKE at the bedside or nurse’s station was 91.25% compared to 77.79% observed during baseline data collection. Comprehensiveness of NKE completed solely at the bedside also saw a sharp increase following the use of the L&D to PP NKE Guide (Appendix L), from 33.48% during baseline observations to 77.45% during the pilot study. This figure far exceeded the modest goal of raising comprehensiveness by 5% in the project aim.

Post-surveys that pilot study participants completed after completing a handoff report demonstrated increased nurse perceived comprehensiveness of NKE. Post survey results (Appendix T) showed that 100% of the pilot study participants found NKE to be very or extremely comprehensive after using the NKE guide, compared to 71% of pre-survey respondents. The post-survey also assessed for nurse perceived effectiveness of facilitating communication during the patient transfer process after utilizing the NKE guide. The post survey found that 100% of the pilot study participants believed the guide was very or extremely effective at facilitating the communication between nurses during the transfer process compared to the 51% of pre-survey respondents who believed the handoff they received was moderately effective or worse at facilitating communication between nurses.

**Discussion**

**Summary**

The QI project demonstrated the potential of implementing best practices to improve the NKE process during patient transfers within the peripartum mesosystem. Using Rogers’ Diffusion of Innovation theory, the QI group was able to leverage the eagerness of the innovators
and early adopters to encourage their coworkers who can be perceived as the late majority or laggards to participate in comprehensive bedside NKE. Buy in from stakeholders was critical in developing and progressing the QI project and required various methods such as attending unit-based council meetings, engaging in informal conversation with nurses, and briefly discussing the project’s intentions at shift huddle. Interest and support from both unit-based councils also proved to be valuable as they were able to provide insight and perspective to the QI project’s topic.

Through the pilot of the L&D to PP NKE Guide (Appendix L), the comprehensiveness of NKE completed at the bedside increased from 33.48% to 77.45%, which exceeded the QI group’s project aim of increasing comprehensiveness by 5%. While the NKE guide did not mandate that nurses change their existing methods of giving handoff report, for some it was able to serve as a direct guide that nurse utilized to give their report and for others it served as a second safety check to verify that all necessary content had been shared. After the pilot study, both methods ultimately increased nurse perceived effectiveness and satisfaction of NKE. Increased comprehensiveness of handoff reports has the potential to avert adverse patient outcomes.

Limitations

Some limitations identified were the short study duration which did not allow for a full implementation of the intervention but resulted in a pilot study. Due to the time constraints, a small sample size was used throughout the baseline data collection and the pilot study. As a result of the unpredictability of when patient transfers may occur in the peripartum mesosystem, convenience sampling was utilized to recruit pilot study participants, this practice can limit the QI project’s applicability in other similar settings. Consequently, the recruitment of nurses was
impromptu, a complete education of how to utilize the L&D to PP NKE Guide (Appendix L) was not always a possibility, it was noted that the degree of education the nurses received on the intervention impacted results. The impromptu recruitment also did not allow consistent “matching” of individuals who participated in the pre-survey to participate in the pilot study and subsequent post-survey.

**Conclusion**

Despite the QI project not being fully implemented on the mesosystem within the established time frame, the pilot study delivered powerful results, indicating the potential future success of the L&D to PP NKE Guide (Appendix L). It is recommended that the obstetrics and labor and delivery unit-based councils continue the quality improvement project in the interim before the next cohort of QI students can assume responsibility. The project’s continuation will be facilitated by sharing the materials that the QI group created throughout this project. Nurse education on the intervention should be conducted through formal group sessions, enabling nurses from both units to engage in role-play scenarios and practice giving handoff reports to each other using the L&D to PP NKE Guide (Appendix L). The surveys conducted throughout the QI project collected meaningful feedback for mesosystem leadership to address the factors or barriers that could hinder the future project’s success, such as the tension between units. The importance of the QI project’s findings cannot be overstated, as they demonstrate the effectiveness of utilizing a standardized handoff tool to guide handoff reports and can be replicated in similar microsystems where handoff reports between different units take place.
References


https://doi.org/10.13178/jnparr.2019.09.02.0903

The HIPAA Journal. (n.d.). *What are the penalties for HIPAA violations?*  
https://www.hipaajournal.com/what-are-the-penalties-for-hipaa-violations-7096/

https://doi.org/10.1111/nhs.12825


https://doi.org/10.1016/j.ijnss.2020.12.007

https://doi.org/10.1097/QMH.0000000000000191


## Appendix A

### Johns Hopkins Evidence Appraisal Table

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<tr>
<td>1</td>
<td>Block, M., Ehrenworth, J. F., Cuce, V. M., Ng'Ang'A, N., Weinbach, J., Saber, S., Milic, M., Urgo, J. A., Sokoli, D., Schlesinger, M. D., &amp; Sexton, J. B. (2013). Measuring handoff quality in labor and delivery: Development, validation, and application of the coordination of handoff effectiveness questionnaire (CHEQ). <em>Joint Commission Journal on Quality and Patient Safety, 39</em>(5), 213-220. <a href="https://doi.org/10.1016/s1553-7250(13)39028-x">https://doi.org/10.1016/s1553-7250(13)39028-x</a></td>
<td>A prospective, nonblinded intervention</td>
<td>56 eligible L&amp;D nurses in a 775-bed, university-affiliated tertiary care hospital located in northeast New Jersey</td>
<td>The CHEQ (Coordination of Handoff Effectiveness Questionnaire) was used to assess both the quality of the information transfer and interaction process during a handoff report following the implementation of a tangible handoff tool. The CHEQ is a reliable tool to assess the quality of handoff report as the items within the questionnaire are depersonalized, straightforward, easy to complete, and brief. The brief structure of the CHEQ facilitated conversations and productivity in work group discussions allowing for the clear identification and prioritization of issues related to handoff report.</td>
<td>Level III A – high quality, transparent and insightful interpretation</td>
<td>Limitations: Limited resources did not allow for extensive real time audits on the quality of handoffs resulting in random weekly audits. Outcomes: The measures identified by the CHEQ are broad enough for the CHEQ to be replicated and applied to other clinical units to assess handoff quality. The CHEQ is practical to administer, achieves high response rates, and can be utilized for statistical analysis.</td>
</tr>
<tr>
<td></td>
<td>Author(s)</td>
<td>Type of Study</td>
<td>Description</td>
<td>Level</td>
<td>Limitations</td>
<td>Outcomes</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>2</td>
<td>Bukoh, M. X., &amp; Siah, C. R. (2020).</td>
<td>Systematic review</td>
<td>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>Level III, A/B High quality, transparent, self-reflective, and insightful interpretation</td>
<td>The articles included in the review come from different origins and there was a difference in formats of the structured handoffs.</td>
<td>As a result of structured handoff there was an improvement in the content that nurses relayed in handoff and a drop in documentation errors was observed after the implementation of the structured handoff.</td>
</tr>
<tr>
<td>3</td>
<td>Elue, R., Simonovich, S., Tariman, J., Newkirk, E. A., &amp; Neerhof, M.</td>
<td>Quasi-experimental study</td>
<td>Nursing communication is found to be the single element of the “Hospital Consumer”</td>
<td>Level II A/B Good quality</td>
<td>The study is based on self-reported data.</td>
<td></td>
</tr>
</tbody>
</table>

- Shifts with a structured handoff model resulted in a decrease of patient complications, medication errors, and adverse events compared to shifts that did not utilize a structured handoff.
- In specialty areas, there was a reduction of medication errors following the implementation of structured handoffs.
- Bedside handoff resulted in nurses resolving any discrepancies with the off-going nurses as a result of early visualization of the patient.
|   | (2019). Bedside shift report enhances patient satisfaction for Hispanic and public insurance patients and improves visibility of leadership in obstetric and postpartum settings. *Journal of Nursing Practice Applications & Reviews of Research*, 9(2), 4-11. [https://doi.org/10.13178/jnparr.2019.09.02.0903](https://doi.org/10.13178/jnparr.2019.09.02.0903) | 18 y/o responded to the study survey after discharge within a 6-month period. Obstetric and postpartum setting: Tertiary care facility located in the Chicago metropolitan area with a 26-bed postpartum unit. Assessment of Healthcare Providers and Systems (HCAHPS)” that directly correlates with patient satisfaction and overall hospital experience. Following the implementation of bedside shift report (BSR) the HCAHPS saw an increase in patient satisfaction scores amongst Hispanic women and women with public insurance. Implementation of BSR can be done smoothly without negatively impacting patient satisfaction or care experiences. with transparan-cy and insightful interpretat-ion | Outcomes: Following the implementation of BSR a greater number of respondents reported having interactions with nurse leaders which affirmed previously studies that found that rounding by leadership improved the patient’s experience and patient satisfaction scores. |
| 4 | Kim, J. H., Lee, J. L., & Kim, E. M. (2021). Patient safety culture and handoff evaluation of nurses in small and medium-sized hospitals. *International Journal of Nursing Sciences*, 8(1), 58-225. | Descriptive study | 425 nurses who work at small and medium-sized (150-400 beds) hospitals in South Korea. Factors that significantly impacted handoff evaluation were level of education, work patterns, duration of hospital employment, handoff method, degree of satisfaction with the current handoff method, errors occurring at the time of giving the handoff, errors occurring at the time of | Level V A – High quality, consistent across multiple settings with definitive conclusion and |

Limitations: The subjects of the study included those at small and medium hospitals, but the effect of the hospital size on the results were not studied. Outcomes:
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prospective observational study</strong></td>
<td>17 pregnant people as baseline pre-intervention, 10 pregnant people during implementation phase, 50 pregnant people 6-month post-intervention at an urban academic tertiary center</td>
</tr>
<tr>
<td><strong>The implementation of standardized roles and processes amongst the care team facilitates closed loop communication and decreases delays in communication and initiation of care.</strong></td>
<td><strong>Level V</strong> <strong>B – Good quality, clear aim, and objective with consistent recommendations</strong></td>
</tr>
<tr>
<td><strong>The bedside huddle allows patient to be a participant in their care and allows them to witness collaborative teamwork that promotes patient safety.</strong></td>
<td><strong>Limitations:</strong> This study was conducted at a high-volume teaching unit, which means its findings may not be generalizable. Additionally, no patient-centered data was obtained, especially regarding the patients experience during bedside handoff.</td>
</tr>
<tr>
<td><strong>Standardizing the handoff process through script guides and implementing bedside huddle gave clarity to the care team on the roles and expected tasks of each team member.</strong></td>
<td><strong>Outcomes:</strong> Compliance data showed that an intervention developed by a multidisciplinary team can indicate...</td>
</tr>
<tr>
<td></td>
<td>Lin, M., Heisler, S., Fahey, L., McGinnis, J., &amp; Whiffen, T. L. (2015). Nurse knowledge exchange plus: Human-centered implementation for spread and sustainability. Joint Commission Journal on Quality and Patient Safety, 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>
</tr>
<tr>
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</tr>
<tr>
<td>7</td>
<td>Robins, H., &amp; Dai, F. (2015). Handoffs in the postoperative anesthesia care unit: Use of a Randomized control trial</td>
</tr>
<tr>
<td>8</td>
<td>Tobiano, G., Bucknall, T., Sladdin, I., Whitty, J. A., &amp; Chaboyer, W. (2019). Reprint of: Patient participation in nursing bedside handover: A systematic mixed-methods review. <em>International Journal of Nursing Studies</em>, 97, 63-77.</td>
</tr>
<tr>
<td>#</td>
<td>Author</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>9</td>
<td>Williams, C. L. (2018). A comparison of the risks and benefits of nursing bedside shift report vs. traditional shift report: A systematic review of the literature. <em>International Journal of Studies in Nursing</em>, 3(2), 40. <a href="https://doi.org/10.20849/ijsn.v3i2.382">https://doi.org/10.20849/ijsn.v3i2.382</a></td>
</tr>
<tr>
<td>10</td>
<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, 47</em>(6) <a href="https://journals.lww.com/jonajournal/fulltext/2017/06000/implementation_of_a_modified_bedside_ha">https://journals.lww.com/jonajournal/fulltext/2017/06000/implementation_of_a_modified_bedside_ha</a> ndoff_for_a.6.aspx</td>
</tr>
<tr>
<td></td>
<td>Yu, M., Lee, H. Y., Sherwood, G., &amp; Kim, E. (2018). Nurses' handoff and patient safety culture in perinatal care units: Nurses' handoff evaluation and perception of patient safety culture at delivery room and neonatal unit in South Korea. <em>Journal of Clinical Nursing</em>, 27(7-8), e1442-e1450. <a href="https://doi.org/10.1111/jocn.14260">https://doi.org/10.1111/jocn.14260</a></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

**Abbreviations:**
- NKE: Nurse Knowledge Exchange
- CHEQ: Coordination of Handoff Effectiveness Questionnaire
- HCAHPS: Hospital Consumer Assessment of Healthcare Providers and Systems
- BSR: Bedside Shift Report
- HCI: Human-Centered Implementation
- SBAR: Situation, Background, Assessment, Recommendation
Appendix B

Statement of Non-Research Determination

Project: Statement of Determination and Non-Research Determination Form

Student Name: Kimberly Martinez

<table>
<thead>
<tr>
<th>Title of Project: Standardization of Nurse Knowledge Exchange (NKE) on the Peripartum Mesosystem</th>
<th>Brief Description of Project</th>
</tr>
</thead>
</table>

Data that Shows the Need for the Project
Currently, within the peripartum mesosystem, there is no transparent or standardized policy on the NKE process. Initial observation data shows that during handoff, nurses cover 75.8% of the necessary content of NKEs; however, they only provide 28.5% of the information at the patient's bedside. A pre-survey found that 64% of nurses reported that the NKE they gave or received was very comprehensive or better. However, informal feedback and survey responses indicated that the NKE handoff process could have been more thorough and concise, leading the nurses to support the current project's intervention.

Aim Statement
By April 7, 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. The guide was developed by gathering feedback from nurses and leadership on both labor and delivery and postpartum units.

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

Outcome measurement(s)
The project will measure the comprehensiveness of NKE by using a point system to reflect the percentage of completeness after implementing a checklist guide.

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 *

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 Peripartum Mesosystem</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>X</td>
<td></td>
</tr>
<tr>
<td>The specific aim is to improve performance on a specific service or program and is a part of usual care. ALL participants will receive standard of care.</td>
<td>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.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>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.”</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

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. Holmman, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.
STUDENT NAME (Please print):
Student Name: Kimberly Martinez
Signature of Student: [Signature]
Date: 03/06/2024

SUPERVISING FACULTY MEMBER NAME (Please print):
Supervising Faculty Member Name: Scout Hebinck
Signature of Supervising Faculty Member: [Signature]
Date: 03/26/2024
Appendix C

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

MATERIAL
- Variable NKE requirements around NKE
- Multiple interruptions during NKE
- Unknown processes on policy of NKE and notice of transfer

METHODS

EQUIPMENT
- Suboptimal use of Vocera
- Computers in hallway versus bedside

CULTURE
- Majority slow adopters
- Variable NKE processes
- Transfer of patients NKE not seen as priority
- Low priority to give family centered care

NKE IS NOT STANDARDIZED
Appendix D

GANTT Chart
Appendix E

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 F

### 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:** Kiana Killian, Kimberly Martinez, Gaby Ochoa, Lillian Quach, Gabby Romana

<table>
<thead>
<tr>
<th>Description</th>
<th>Total expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost of guide</strong></td>
<td>$6.80</td>
</tr>
<tr>
<td>($0.10 per sheet) x 20 paper + ($0.16 per sheet) x 20 lamination + ($0.08 per sheet) x 20 ink</td>
<td></td>
</tr>
<tr>
<td><strong>CNL educator cost</strong></td>
<td>$17,680.00</td>
</tr>
<tr>
<td>$68/hr (average CNL salary) x 1.3 (hrs + benefits) x 200 hr (preparation &amp; training)</td>
<td></td>
</tr>
<tr>
<td><strong>Nurse education</strong></td>
<td>$17,160.00</td>
</tr>
<tr>
<td>$75/hr (average FTE nurse salary) x 1.3 (hours + benefits) x 1 hr (training) x 176 FTE RNs</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$34,846.80</td>
</tr>
</tbody>
</table>

#### Hospital Savings (Cost Avoidance)

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost/year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total births per year</strong></td>
<td>3,000 per year</td>
</tr>
<tr>
<td>3,000 per year = 3,000 transfer per year</td>
<td></td>
</tr>
<tr>
<td><strong>Transfers in violation of HIPPA Compliance</strong></td>
<td>$1,379.920 (Tier 2 violation) --&gt; average: $35,154</td>
</tr>
<tr>
<td><strong>HIPPA Compliance Violation</strong></td>
<td>$2,067,813</td>
</tr>
<tr>
<td><strong>Cost avoidance</strong></td>
<td>$2,067,813</td>
</tr>
<tr>
<td>2,550 x $1,379 BUT max $2,067,813 (based on Tier 2 table)</td>
<td></td>
</tr>
<tr>
<td><strong>Net Savings</strong></td>
<td>$2,032,966</td>
</tr>
<tr>
<td>Hospital Savings - Implementation Cost</td>
<td></td>
</tr>
</tbody>
</table>
Appendix G

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 usfoiproject@msail.com
Appendix H

Pre-Survey Flyer

L&D TO PP HANDOFF
PRE-SURVEY
CAPSTONE QUALITY IMPROVEMENT PROJECT
USF GRADUATE NURSING STUDENTS
WE NEED YOUR HELP!

1. Take survey
   • ~2 min long
   • CONFIDENTIAL!
   
   https://usfca.qualtrics.com/jfe/form/SV_0ulXbeARHHu9Ugu

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

Scan here!
Appendix I

Obstetrics Unit Council Meeting Presentation Slides #1

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 NICEplus, 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 L&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.*

---

### Literature Review

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Study Design</th>
<th>Findings</th>
</tr>
</thead>
<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 hallway or nurse's station

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

Developed Checklist Tool

<table>
<thead>
<tr>
<th>Section</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-Section</td>
<td>Orthostatic Hypotension</td>
<td>Orthostatic hypotension is a fainting spell that occurs when a person stands up from a seated or lying position.</td>
</tr>
</tbody>
</table>
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
Appendix J

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: 39%
- Always: 26%
**Comprehensiveness:** How comprehensive do you find the current handoff you give or receive during a patient transfer?

- 52% Very comprehensive
- 23% Moderately comprehensive
- 19% Slightly comprehensive
- 6% Extremely comprehensive
- 3% Unsure

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

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

- Somewhat dissatisfied: 10%
- Neither satisfied nor dissatisfied: 19%
- Somewhat satisfied: 19%
- Very satisfied: 52%
Appendix K

NKE Baseline Observation Graphs

NKE Baseline Observations: Overview

Average Percentage of Completion

Bedside ONLY

Bedside OR Nurses Station

NKE Baseline Observations: Categories Averages

Average Category Percentage of Completion

Background
Situation
Baby Progress
Assessment
Computer Use and Recommendation

Bedside ONLY  Bedside OR Nurses Station
### NKE Baseline Observations: Baby Progress

<table>
<thead>
<tr>
<th>Task</th>
<th>Bedside ONLY</th>
<th>Bedside OR Nurses Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>APGAR score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood Glucose Check</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeding plan/last feed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breastfeeding Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Void(s)/Stool</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NKE Baseline Observations: Assessment

<table>
<thead>
<tr>
<th>Task</th>
<th>Bedside ONLY</th>
<th>Bedside OR Nurses Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspect wounds/incisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV Sites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fundal assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Void/foley catheter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NKE Baseline Observations: Computer and Recommendations

<table>
<thead>
<tr>
<th>Task</th>
<th>Bedside ONLY</th>
<th>Bedside OR Nurses Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer used at bedside</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orders &amp; care plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upcoming tasks &amp; labs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goals for the shift and discharge goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ask for patient input</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix L

L&D to PP NKE Guide

<table>
<thead>
<tr>
<th>L&amp;D TO PP NKE GUIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>L&amp;D</strong></td>
</tr>
</tbody>
</table>
| Introduce oncoming nurse to patient
  "oncoming nurse writes name on the board"
| **Name(s)**, check bands
| 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)
| **PREGNANCY HISTORY** |

| **SITUATION: Time & Type of Delivery** |
| **VAGINAL DELIVERY** |
| OBL |
| Laceration |
| Pain control method |
| Type of assisted delivery |
| **C-SECTION** |
| OBL |
| Pain control method |
| Other medication(s) given |

| **L&D** |
| 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 M

### Suggested Phrases Worksheet

**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><strong>AVOID PHRASES THAT ARE ANXIETY INDUCING</strong></td>
<td></td>
</tr>
<tr>
<td>“FETAL DISTRESS”</td>
<td>“CHANGES IN THE BABY’S HEART RATE”</td>
</tr>
<tr>
<td>“TRIAL OF FORCEPS”</td>
<td>“HELP THE BABY WITH FORCEPS”</td>
</tr>
<tr>
<td>“LABOUR WARD”</td>
<td>“BIRTHING SUITE”</td>
</tr>
<tr>
<td>“RUPTURE OF MEMBRANES”</td>
<td>“RELEASE THE WATERS”</td>
</tr>
<tr>
<td>“BLOODY SHOW”</td>
<td>“SHOW WITH SOME BLOOD”</td>
</tr>
<tr>
<td>“BIG BABY”</td>
<td>“HEALTHY BABY”</td>
</tr>
<tr>
<td><strong>RESPECTING WOMEN AS INDIVIDUAL</strong></td>
<td></td>
</tr>
<tr>
<td>“DELIVERED”</td>
<td>“GAVE BIRTH”</td>
</tr>
<tr>
<td>“THE PRIMAGRAVIDA IN ROOM 12”</td>
<td>“THE WOMAN IN ROOM 12”</td>
</tr>
<tr>
<td>“I’LL GO CONSENT HER”</td>
<td>“DISCUSS INFORMED CONSENT”</td>
</tr>
<tr>
<td>“SHE”</td>
<td>USE HER NAME OR SPEAK TO HER RATHER THAN ABOUT HER</td>
</tr>
<tr>
<td>“SHE’S 7CM”</td>
<td>“[INSERT NAME] IS 7CM”</td>
</tr>
<tr>
<td><strong>RESPECTING WOMEN’S AUTONOMY</strong></td>
<td></td>
</tr>
<tr>
<td>“YOU MUST GET A CESAREAN”</td>
<td>“I WOULD SUGGEST A CESAREAN BECAUSE [GIVE BENEFITS, RISKS AND ALTERNATIVES]”</td>
</tr>
<tr>
<td>“PATIENT REFUSED”</td>
<td>“SHE DECLINED”</td>
</tr>
<tr>
<td><strong>REPLACING CODIFIED LANGUAGE WITH Plain LANGUAGE</strong></td>
<td></td>
</tr>
<tr>
<td>“SROM”</td>
<td>“YOUR WATERS HAVE BROKEN”</td>
</tr>
<tr>
<td>“PPH”</td>
<td>“EXTRA BLEEDING AFTER CHILDBIRTH”</td>
</tr>
<tr>
<td>“APH”</td>
<td>“BLEEDING DURING PREGNANCY”</td>
</tr>
<tr>
<td>“VBAC”</td>
<td>“VAGINAL BIRTH AFTER CESAREAN BIRTH”</td>
</tr>
<tr>
<td><strong>AVOID DISCOURAGING LANGUAGE</strong></td>
<td></td>
</tr>
<tr>
<td>“FAILED VBAC/INDUCTION”</td>
<td>“UNSUCCEFUL VBAC/INDUCTION”</td>
</tr>
<tr>
<td>“POOR MATERNAL EFFORT”</td>
<td>“NOT FINDING IT EASY…”</td>
</tr>
<tr>
<td>“FAILURE TO PROGRESS”</td>
<td>“SLOW LABOUR”</td>
</tr>
<tr>
<td>“TERMINATE PREGANCY”</td>
<td>“COMPASSIONATE INDUCTION”</td>
</tr>
<tr>
<td>“HIGH RISK”</td>
<td>“MEDICALLY COMPLEX”</td>
</tr>
<tr>
<td>“POOR OBSTETRIC HISTORY”</td>
<td>“STRONG CONTRACTIONS”</td>
</tr>
<tr>
<td>“PAINFUL CONTRACTIONS”</td>
<td></td>
</tr>
</tbody>
</table>
Appendix N

Labor and Delivery Unit Council Meeting Presentation Slides

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: 29% vs. 82.5%
- Situation: 36% vs. 95%
- Baby Progress: 19% vs. 74%
Our Tool

Will be laminated and placed on each PP

L&D TO PP NKE GUIDE

- Communication
- Documenting
- Patient education

SITUATION: Time & Type of Delivery

- Insert patient name / baby name
- Time of birth
- Mode of delivery
- Complications

FOCAL POINTS:

- Baby's weight
- Apgar scores
- Birthmark

COMMUNICATION:

- Address the patient by name
- Use simple, clear language
- Reassure the patient
- Address any concerns

RECOMMENDATION:

- Encourage the patient to stay calm
- Provide emotional support

Suggested Phrases

Reducing exclusive use of medical language with plain language that the can understand:

- "yes"
- "no"
- "may"
- "may not"
- "can"
- "cannot"
- "may not be"
- "cannot be"
- "may be"
- "may not be"

Summarizing encouraging or inactive language:

- "We need your help in making decisions"
- "I understand why you might be feeling that way"
- "I hear what you're saying"

Avoiding phrases that are emotionally charged, accusatory, or offensive:

- "You're not being honest"
- "I don't believe you"
- "You're lying"
- "You're being deceptive"

Respecting women's autonomy:

- "My name for the unborn child"
- "Your partner's name for the unborn child"
- "Your plans for the unborn child"

Respecting individuals who give birth:

- "If you decide to continue"
- "If you choose to have an abortion"
- "If you decide to carry the pregnancy to term"

Respecting the women's autonomy as a decision-maker:

- "You must have the opportunity to discuss your options and make an informed decision"
- "I would recommend/suggest another option"
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
Appendix O

PDSA Cycle

**Plan**
- Questions & Predictions:
  - 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.

**Do**
- Data Collected & Observations:
  - 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**
- 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

**Act**
- Modifications:
  - We adapted to the feedback and revised the tool based on feedback and suggestions we received.
  - We responded to unanticipated challenges by approaching the assistant nurse manager for guidance and substantiating the need for change with literature.
  - The next PDSA cycle will involve piloting the revised tool with the goal of observing 20 transfers.
  - Getting leadership involved early in the next PDSA cycle will set the expectations of the nurses and encourage their participation.
Appendix P

Impromptu Champion Education

**IMPROMPTU CHAMPION EDUCATION**
*Check in with charge nurse about impromptu training for nurses involved in transfers*

**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 Q

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 R

Obstetrics Unit Council Meeting Presentation Slides #2

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;I'm validating&quot;</td>
<td>&quot;I'm helping&quot;</td>
</tr>
<tr>
<td>&quot;Tell me more&quot;</td>
<td>&quot;Help me understand what you need&quot;</td>
</tr>
<tr>
<td>&quot;Labor was&quot;</td>
<td>&quot;Support of medication&quot;</td>
</tr>
<tr>
<td>&quot;Baby is big&quot;</td>
<td>&quot;Healthy baby&quot;</td>
</tr>
<tr>
<td>&quot;Delivered&quot;</td>
<td>&quot;Healthy baby&quot;</td>
</tr>
<tr>
<td>&quot;Laboring&quot;</td>
<td>&quot;Healthy baby&quot;</td>
</tr>
<tr>
<td>&quot;Gestational age&quot;</td>
<td>&quot;Healthy baby&quot;</td>
</tr>
<tr>
<td>&quot;Do your best&quot;</td>
<td>&quot;Healthy baby&quot;</td>
</tr>
<tr>
<td>&quot;Saw your child&quot;</td>
<td>&quot;Healthy baby&quot;</td>
</tr>
</tbody>
</table>

**You May Suggest a Cautious Approach**

- "You might feel a contraction."
- "I'm watching you closely."
- "Take a deep breath."
- "Your baby is in position."
- "I'm keeping an eye on things."
- "I'm ready if you're ready."
- "Let's try to relax."
- "You're doing great!"
- "I'm feeling your baby move."
- "I'm here if you need me."

**Language of Communication**

- "Will you need a little help?"
- "I can help you."
- "What would you like to do?"
- "What do you need?"
- "How is your baby doing?"
- "I'm here if you need me."
- "Let's try to relax."
- "You're doing great!"
- "I'm watching you closely."
- "Take a deep breath."

**Empowering Language**

- "You're doing great!"
- "I'm here if you need me."
- "Let's try to relax."
- "You're doing great!"
- "I'm watching you closely."
- "Take a deep breath."
- "We're doing this together."
- "I'm here if you need me."
- "Let's try to relax."
- "You're doing great!"
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 S

NKE Pilot Study Observation Graphs

NKE Post-Intervention Observation: Overview

NKE Post-Intervention: Categories Averages

Average Percentage of Completion
Appendix T

Post-Survey Results

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

![Pie chart showing 70% very comprehensive and 30% extremely 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?

![Pie chart showing 60% very effective and 40% extremely effective.]

- Very comprehensive
- Extremely comprehensive
- Very effective
- Extremely effective
**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 showing likelihood of giving or receiving NKE](image)

- Neither likely nor unlikely
- Somewhat likely
- 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 showing satisfaction levels](image)

- Neither satisfied nor dissatisfied
- Somewhat satisfied
- Very satisfied