

**Impact of Quiet Time on Patient Experience**

Diana Sutton

College of Nursing, East Carolina University

Doctor of Nursing Practice Program

Dr. Brad Sherrod

July 21, 2023

### **Abstract**

A lack of rest and dedicated quiet time (QT) during the brief hospitalization can impact the women's experience and lead to adverse health outcomes. QT is a brief period of dedicated rest where the hospital nursing team dims the lights and minimizes interruptions to improve patient experience and promote optimal recovery. The significance of getting enough quality and quantity of sleep for postpartum patients is a public health concern and continues to be part of the Healthy People 2030 goals. This project aimed to explore patients' perceptions of QT and whether it positively affects their overall experience in the postpartum unit. A quantitative approach was used, with data collected through National Research Corporation (NRC) Health surveys from postpartum patients who received care during their hospitalization. The results indicate that implementing QT improved the patient experience. Patients felt more rested and appreciated the dedicated QT, which allowed them to rest and bond with their newborns. The findings provide valuable insights into the importance of incorporating QT in the postpartum unit and highlight the benefits that this initiative can have on patient experience.

*Keywords:* rest, quiet time, postpartum unit, patient experience, hospitalization

**Table of Contents**

Abstract .....	2
Section I: Introduction .....	5
Background .....	5
Organizational Needs Statement .....	6
Problem Statement .....	9
Purpose Statement .....	9
Section II: Evidence .....	9
Literature Review .....	9
Evidence-based Practice Framework .....	16
Ethical Consideration and Protection of Human Subjects .....	16
Section III: Project Design .....	18
Project Site and Population .....	18
Project Team .....	19
Project Goals and Outcomes Measures .....	20
Implementation Plan .....	22
Timeline .....	23
Section IV: Results and Findings .....	23
Results .....	23
Discussion of Major Findings .....	24
Section V: Interpretation and Implications .....	24
Costs and Resource Management .....	24
Implications of the Findings .....	26

IMPACT OF QUIET TIME ON PATIENT EXPERIENCE	4
Sustainability.....	28
Dissemination Plan .....	29
Section VI: Conclusion.....	29
Limitations and Facilitators.....	29
Recommendations for Others.....	30
Recommendations for Further Study .....	31
Final Thoughts .....	32
References.....	33
Appendices.....	35
Appendix A: Literature Matrix .....	35
Appendix B: Site Partner Approval Letter.....	38
Appendix C: IRB QI/Program Evaluation Self-Certification Tool .....	39
Appendix D: Quiet Time Educational Signage.....	40
Appendix E: Patient Education Flyer.....	41
Appendix F: 4P Communication Tool .....	42
Appendix G: Project Timeline .....	43
Appendix H: Trend of Patient Experience Scores .....	44
Appendix I: Itemized Budget.....	45

## **Section I. Introduction**

The lack of rest and quiet time (QT) during a postpartum hospitalization can lead to adverse health outcomes. Multiple competing tasks need to be completed for both mother and newborn in a short time before discharge. During COVID-19, postpartum patients shared that fewer visitors provided fewer interruptions and gave them more time to bond with their newborns. Patients voiced that they found comfort in the quiet environment of their room and were able to rest and focus on breastfeeding more easily. Postpartum patients deserve daily dedicated time to rest and restore from activities during a busy hospitalization. The significance of getting enough quality and quantity of sleep for postpartum patients is a public health concern and continues to be part of the Healthy People 2030 goals (Healthy People, 2022). One intervention to promote dedicated rest time for postpartum patients was implementing daily QT in the postpartum unit.

### **Background**

The project partner is a not-for-profit facility serving as a regional maternity care service facility. The healthcare facility's mission is to improve the health of our communities while delivering a remarkable patient experience. During the pandemic, our healthcare organization followed the Centers for Disease Control and Prevention (CDC) recommendations, which within our Women's center, was to limit contact with visitors and other healthcare disciplines such as photography, medical records, and other services (Centers for Disease Control and Prevention [CDC], 2020). Our patient experience scores improved throughout this time, and patients shared that they appreciated having dedicated time to rest and bond with their newborns due to limited disruptions.

Nurses, visitors, feedings, pain, and phone calls frequently interrupt new mothers during postpartum hospitalization. There was concern that frequent visitor and hospital team member interruptions to women during their early postpartum hours were interfering with establishing breastfeeding and maintaining a restful environment in the 27-bed postpartum unit within a 590-bed, Magnet-recognized hospital in southwestern North Carolina.

### **Organizational Needs Statement**

The project partner's healthcare organization exists to improve the health of the communities while delivering a remarkable patient experience. Several initiatives were in progress at this healthcare organization, all of which focused on providing a compassionate, personalized patient experience. One of the healthcare system's identified best practice patient experience initiatives was to establish quiet hours, which promotes rest and healing while partnering with other disciplines to cluster nonessential procedures and tasks. This can be accomplished by partnering with leaders of other disciplines within the organization, including but not limited to medical records, lactation, and environmental services.

The identified problem of frequent disruptions during postpartum hospitalization impacting patients' experience was identified from the voice of the customer comments received through leader rounding. The subjective comments received from patients are, "I feel like my hospital room is a revolving door" and "I have had so many people coming in, and out of my room, it is difficult to get rest." The goal of leader rounding is to focus on the patient's experience. Patient feedback is also gathered through scores from patient experience surveys. National Research Corporation (NRC) Health is the project site vendor for the healthcare organization's patient experience surveys. NRC Health provides the ability for real-time feedback using email and automated phone calls to gather patient feedback. The NRC Health survey is an

instrument that helps leaders listen to and address patients' needs and measures our patients' voices. NRC Health patient experience scores are evaluated using a Net Promoter Score (NPS), a percentage-based score that measures the patient's experience and helps to predict brand loyalty.

The patient experience scores within our postpartum unit remain low, with the fiscal year 2021 ending with a NPS score of 68.5. QT has been proposed as one way to improve patient experience and support postpartum families during their hospital stays. Patients who receive quality patient care will result in positive patient experiences and lead to improved health outcomes. The healthcare organization's strategic goals are to improve patient experience, quality of care, and safety and promote loyalty. New mothers with a positive birth experience are more likely to seek further healthcare services for themselves and their families. This will promote brand loyalty for Women's services and other healthcare services within the organization.

The subjective comments correlate to the NRC Health questions, "Did you feel your visit was personalized to you?" and "Did the staff work together to meet your needs?". NRC scores affect the likelihood to recommend and overall brand loyalty of the healthcare organization. The healthcare team works together to meet our postpartum patients' personal needs, promoting rest and bonding with their newborns. Staff working together to meet care needs should focus on bundling patient care, when possible, by providing care as a team to limit the number of interruptions. The current NRC scores effective 6/10/22 for the Mother Baby unit were as follows: Visit personalized YTD: 68.9, last 3 months 58.8. Worked together to meet needs 71.3, last 3-months 62.0. These scores affect the likelihood to recommend and overall brand loyalty. The healthcare organization's opportunities for improving patient experience scores focus on personalized care and clustering care.

Along with brand loyalty, all hospitals that accept Medicare or Medicaid funds for reimbursement have their quality data collected by the Centers for Medicare and Medicaid Services (CMS). NRC Health collects and sends the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey to meet CMS requirements. HCAHPS is a regulatory survey used to participate in the Value-Based Purchasing (VBP) program and Leap Frog. Patient experience accounts for 25% of a hospital's VBP Program and is part of the Triple Aim of improving patient care experience. The Triple Aim of the health system focuses on improving the care experience, enhancing population health, and managing expenses to improve system performance (Mattison et al., 2018).

There is a growing need for adequate rest and sleep to improve health and well-being as a population health priority (Hedges et al., 2019). The importance of sleep was first introduced as part of the Healthy People 2020 goals and continues to be a part of the Healthy People 2030 goals (Healthy People, 2022). As part of the Health People 2030 goals, adequate sleep ensures people get enough rest and sleep, leading to improved health, well-being, quality of life, and safety. This can be addressed with QT, which increases rest and healing, improves patient experiences, and allows team members to have dedicated time to chart. Maternal satisfaction and patient experience are related to better maternal and newborn health outcomes (Mattison et al., 2018).

Minimizing distractions during the postpartum period allows for more patient-centered care (Lawrie et al., 2021). One of the healthcare organization's patient experience principles focuses on human-centeredness, which means caring for our postpartum mothers as human beings, not as patients. This can lead to optimal hospital experiences among women by reducing interruptions during their postpartum period.

**Problem Statement**

Frequent disruptions during the postpartum hospitalization impact patient experience were identified as a problem from the voice of the customer comments received through leader rounding and NRC Health patient experience scores. During the brief postpartum hospitalization, many tasks must be accomplished before discharge in a setting with many visitors, unpredictable baby demands, and tired mothers (McCarter & MacLeod, 2019). This can have a detrimental impact on the mother's body to heal and bond with her newborn baby.

**Purpose Statement**

The purpose of this project was to decrease disruptions through the implementation of quiet hours during postpartum hospitalization, which will lead to improved women's experience and positive health outcomes. A calm, quiet environment is necessary for our patients to rest and heal. Opportunities for improving patient experience scores as it relates to quiet hours will focus on personalized care and teamwork through clustering care. This quality improvement initiative aimed to improve the patient experience measured by NRC Health scores through the implementation of QT on a postpartum unit. The goals of this project were achieved through (a) implementing QT on a postpartum unit through the engagement of a multidisciplinary team; (b) designing a best practice patient education tool to share with patients, and (c) facilitating sharing of quiet time best practices across other Women's units within the healthcare organization.

**Section II. Evidence****Literature Review**

A literature review was conducted through the Laupus library search part of East Carolina University (ECU). The search took place using the following advanced search: One Search, CINAHL (EBSCOhost), and PubMed. The literature review focused on a broad search of

QT and patient satisfaction in the postpartum unit. Boolean Operators AND/OR were used to refine the search using keywords. Keywords used in the search were QT, postpartum, interruptions, clustered care, disruptions, maternal–newborn, maternal-infant bonding, breastfeeding, patient satisfaction, patient experience, and maternal satisfaction. The literature review included a quiet environment in various patient care environments, the implementation of QT to increase breastfeeding outcomes in postpartum units, and the implementation of QT to improve rest and bonding with newborns.

The inclusion and exclusion data included articles published within the last 5-years. After the literature review, 11 articles concluded that QT has several positive outcomes on patients during postpartum hospitalization. This project's goal was to successfully implement QT in the postpartum unit to improve patient experience scores and health outcomes, including successful breastfeeding.

Throughout the literature search, the goal was to keep levels of evidence VI and above. The 11 articles used were levels of evidence VI and above and applied to the postpartum setting. The 11 publications included in this evaluation demonstrated that QT has several positive outcomes. This project's goal was to successfully implement QT on the postpartum unit and evaluate the impact on patient experience scores. The literature supports that QT leads to patient satisfaction and improves overall health outcomes (see Appendix A).

### ***Current State of Knowledge***

During the literature search, three articles were found where the project's purpose was to implement QT or quiet hours to reduce noise levels. Goeren et al. (2018) focused on implementing QT in a 16-bed neurosurgical intensive care unit. Noise levels were measured using decibels in four locations over six months. Some limitations identified were due to the

frequency of care activities that need to occur based on the patient's acuity; it was difficult to adhere to two hours of QT. Also, the project could not ascertain patient perceptions of actual QT due to the patient's status. Hedges et al. (2019) focused on reducing noise in two medical units that had consistently low Hospital Consumer Assessment of Health Care Providers and Systems (HCAHPS) "always quiet" scores. The utilization of the HCAHPS survey was a strength of the project because it is a valid and reliable tool. McGough et al. (2018) focused on reducing unit noise levels and creating a quiet patient and nurse experience. An evidence-based practice project was conducted in four progressive care units in a community hospital. The QT bundle was implemented and improved patient satisfaction and patient and nurse perceptions of noise. Limitations of this study used qualitative data of nurses' perceptions; therefore, other research methods, including observational and quantitative measurement, are recommended. The different unit designs and convenience sampling were limitations. The authors of these articles presented evidence that the implementation of QT led to reduced noise levels.

Four articles focused on QT and improved rest and bonding. One project addressed themes around women's priorities for the need to personalize care and safety issues around health outcomes, including sleep and breastfeeding (McCarter & MacLeod, 2019). This project involved focus groups of mothers, support persons, and nurses using interview questions to understand what is essential during postpartum hospitalization. Although the results of this study were only applicable to a small group from one hospital in the Northeast of the United States, this project aligned with the current literature, supporting women and nurses who recognized unmet personal needs during the postpartum period. The other three articles addressed positive health outcomes, including increasing breastfeeding rates.

Waller-Wise and Maddox (2019) researched patients' perceptions of patient satisfaction, breastfeeding success, rest, and bonding before and after the QT intervention, which involved setting a specific time of day and reducing the unit's lights. For their pre- and post-intervention groups, they used a tool they designed and a convenience sample of exclusively English-speaking women, both of which are limitations. A power analysis was performed to ensure they had sufficient samples for their investigation. The only difference between the pre- to post-intervention was the frequency of staff interruptions.

According to Grassley et al. (2018), having dedicated family bonding time can reduce interruptions for moms during a set period for breastfeeding and increase the percentage of women who exclusively breastfeed. This project used family bonding time as the chosen intervention's name rather than QT because the latter would suggest that a mother should put her infant in the nursery so she can get some rest. The findings imply that family bonding time can enhance the percentage of women who exclusively breastfeed and reduce the number of interruptions mothers encounter during a set period from the unit nursing staff. Lawrie et al. (2021) measured the number of interruptions entering and exiting a postpartum patient room door before and after the implementation of QT. The literature supports the use of deliberate techniques to increase the percentage of mothers who exclusively breastfeed, reduce the number of interruptions mothers face during the brief postpartum stay, and provide dedicated time for mothers and their newborns to rest together. Both projects used pre-, and post-intervention groups and these limitations were based upon a small convenience sampling. Lawrie et al. (2021) involved postpartum women from a single hospital whose maternity services are all located in the same maternity unit.

Two articles focused on postpartum experiences during the COVID pandemic and the value of uninterrupted rest leading to bonding time with newborns and positive health outcomes. One article had a qualitative evidence synthesis (QES) of women's and maternity care providers' perceptions and experiences (Flaherty et al., 2022). Flaherty et al. (2022) included 48 studies addressing the impact COVID had on maternity care. Although there were negative perceptions, the positive perceptions attributed to reduced visitors led to a quieter environment and to establish breastfeeding and time to bond with their newborn.

Buek et al. (2022) conducted a qualitative study involving interviews with 20 postpartum nurses across five Texas hospitals. Nurses were asked about the pandemic's impact on hospital policy in postpartum units, their opinions toward those changes, the benefits and challenges they perceive for carrying out their tasks, and the effects they believe the changes have had on patients and their families. The nurses self-reported that the limitation of visitors provided an environment for nurses, patients, and the support person to experience the types of interactions that exemplify quality family-centered care.

The implementation of QT strategy execution was supported by evidence from the literature. According to research, medical/surgical and intensive care unit QTs help patients sleep better, reduce unit noise stress, and improve patient and staff satisfaction (Goeren et al., 2018; Grassley et al., 2018; Hedges et al., 2019; McGough et al., 2018). The literature review focused on the implementation of QT in hospitals. Implementing QT can be adaptable to any setting and is reportedly well supported by the healthcare team (Lawrie et al., 2021). The literature supports QT as successful in the postpartum setting, where multiple interruptions and tasks must be completed during the brief postpartum hospitalization (McCarter & MacLeod, 2019).

***Current Approaches to Solving Population Problem(s)***

The overall environment of hospitals is one of the frequent disruptions and elevated noise levels. Therefore, postpartum units should consider decreasing interruptions to give new families time to rest and bond. Some projects focused on decreasing noise and ensuring the surrounding patient environment was quiet, particularly at night (Goeren et al., 2018; Hedges et al., 2019; McGough et al., 2018). McGough et al. (2018) addressed decreasing interpersonal conversation, noise from equipment and alarms, and offering earplugs to patients. This may be helpful in a medical unit, but this initiative would not address the partner site's voice of the patient comments based on multiple interruptions in the postpartum hospitalization.

In the postpartum setting, the literature recommends that QT is associated with improved satisfaction scores and maternal perceptions of interruptions among postpartum hospitalized women (Church, 2020; Grassley et al., 2018; Lawrie et al., 2021). The literature review supported QT to address rest and maternal-newborn bonding (Church, 2020; Flaherty et al., 2022; Grassley et al., 2018; Lawrie et al., 2021). Providing the ability to rest and bond with their newborn may subsequently result in improved exclusive breastfeeding rates after QT initiatives are hardwired and established. A collaborative relationship between the healthcare team and postpartum hospitalized women allows for personalized care involving a women-centered approach. Educating hospital team members, postpartum patients, and visitors is key to the success of this QT project.

***Evidence to Support the Intervention***

Identification and promotion of designated QT is an evidence-based practice change that the literature review supports to improve the patient experience among hospitalized postpartum women (Church, 2020; Lawrie et al., 2021; Waller-Wise & Maddox, 2019). The literature review

focused on the target population in the postpartum setting. When interventions are planned, and care is personalized to the individual woman by a multidisciplinary team, clustering care can result in periods of uninterrupted time for sleep or rest (Church, 2020; Lawrie et al., 2021).

Buek et al. (2022) also found that during the COVID pandemic, women and support persons in the postpartum setting felt certain benefits to restricted visitation, including more time to rest and bond with their baby. As a result of COVID, there was a greater focus on empowering patients to care for themselves and was seen as a beneficial way to provide maternity care in the postpartum setting (Flaherty et al., 2022). QT initiatives during postpartum hospitalization have shown positive results in promoting rest, bonding, and breastfeeding and increasing patient satisfaction scores (Church, 2020; Grassley et al., 2018; Lawrie et al., 2021; Waller-Wise & Maddox, 2019).

The implementation of QT is supported by the partnering organization's leadership and is critical in the postpartum setting. Improvement of patient experience scores within the women's center significantly impacts the overall patient experience goal for the partnering healthcare organization due to the large volume of surveys received. The women's center patient experience scores are primarily based upon surveys from our postpartum patients discharged from this 27-bed postpartum unit. The success of QT requires partnering with leaders within the healthcare organization to establish quiet hours in this postpartum unit. Partnerships with nursing and professional support services require clustering nonessential procedures during non-QT hours (Lawrie et al., 2021). By providing women-centered postpartum care, the focus should be on the needs of women rather than the convenience of the healthcare team. Implementing QT offers a chance to empower women as they regain control over breastfeeding, resting, and other postpartum activities (Lawrie et al., 2021). Healthcare organizations use the best evidence to

obtain positive patient outcomes as healthcare adapts to changing environments, including fiscal demands, outcome benchmarks, and shorter lengths of stay.

### **Evidence-Based Practice Framework**

The theoretical framework used in this project's implementation was the Plan-Do-Study-Act (PDSA) model. The PDSA model is a quality improvement model used to implement change based on four steps in a cyclical manner (The W. Edwards Deming Institute, 2022). The first step, "Plan", describes the test plan to evaluate the change. This is a prediction of what will happen when the test is carried out and measures to determine the success of the prediction. The second step, "Do", describes what occurred when the test was executed. The third step, "Study", is to observe, assess, and describe the measured results from the test. The last step, "Act", describes what changes or modifications to the plan will be made for the following cycle. The PDSA model's cyclical structure enables continuous quality improvement and leads to a culture of testing change ideas and adopting those that work based on data.

### **Ethical Consideration & Protection of Human Subjects**

The intervention to address the lack of uninterrupted QT was the implementation of daily QT from 2p-4p on a 27-bed postpartum unit at a local hospital. QT was provided to all postpartum patients that were admitted to the postpartum unit despite acuity and length of stay. There was no potential harm to implementing QT in a postpartum unit within the Women's Center as there is no direct contact with human subjects. QT is an intentional, therapeutic rest time for mothers with their newborns. Mothers in the postpartum units deserve dedicated time each day to rest and restore from the activities of a busy hospitalization.

In preparation for this project, there was a formal review process consisting of Collaborative Institutional Training Initiative (CITI) training and the Institutional Review Board

(IRB) process. Individuals planning to conduct an evidence-based or research project are expected to complete the CITI Program, which provides a background in research ethics education. The CITI training course completed was the Social and Behavioral Responsible Conduct of Research Course 1 consisted of 14 modules and was designed for investigators, staff, and students interested in social and behavioral research.

As part of the approval process, the IRB is a committee formally designated to approve, monitor, and review biomedical and behavioral research involving humans to protect the rights and welfare of the research subjects. This project did not need to go through the IRB approval process as human subjects were not involved in the research.

The project site did require approval through the Nursing Research Council for the healthcare system. The process involved the submission of a proposal for the clinical project form. The elements of this form included involved team members, the clinical concern addressed, literature review, workflow innovation, evaluation, nursing professional practice model informing the study, and project impact on the site partner. The nurse scientist then reviewed the form for the healthcare organization's center for professional practice and development. After initial approval, the project was presented to the project partner's Nursing Research Council for formal approval. The proposed project was approved to move forward by the Nursing Research Council (see Appendix B).

As part of the ECU IRB submission process, the Doctor of Nursing Practice (DNP) project human research must be submitted for review and approval by the University and Medical Center Institutional Assessment Board (UMCIRB). The UMCIRB's primary duty is to protect the welfare and rights of human subjects used in ECU research. Form 8269.B – DNP project pre-approval assessment tool and IRB QI/Program Evaluation Self-Certification tool

guidance form were completed and submitted for approval. Another part of the UMCIRB process involves CITI training and ePIRATE training, which are required before DNP project implementation. Approval was received from ECU (see Appendix C).

### **Section III. Project Design**

#### **Project Site and Population**

The project site was a non-profit, 590-bed tertiary medical center in southwestern North Carolina. The facility serves the residents of this region with nationally recognized, quality care and is recognized as a Magnet-designated hospital by the American Nurses Credentialing Center. The facility is designated as a Baby-Friendly hospital and a center of excellence for providing maternity care and women's health services. The facility has seven affiliated prenatal clinics. The inpatient Women's Center consists of 20 labor beds, 16 high-risk antepartum beds, 27 postpartum beds, and 20 women's surgery beds.

#### ***Description of the Setting***

The setting for this project is a 27-bed inpatient postpartum unit within the Women's Center. The average number of births per year is 6300, with 33% being via cesarean section. The average length of stay is 2.5 days, despite the mode of delivery (vaginal or cesarean delivery). The department supports a rooming-in model of care that allows all the care of the mother-baby dyad in the mother's private room, with the newborn always remaining with the mother to enhance family connections and promote newborn safety.

#### ***Description of the Population***

The population of the 27-bed postpartum unit consists of a mother-baby dyad of predominantly newborns, adolescents (12-18 years), and adults in their childbearing years. Most patients speak English; however, about 10% speak Spanish, and less than 1% other languages.

Interpretation services are available on the unit to assist with communication with non-English speaking patients. It is estimated that approximately 50% of patients are covered by Medicaid and the other 50% by private insurance or another source. There were no exclusion criteria, and the project was implemented unit wide.

### **Project Team**

The project was originally discussed with a team of assistant nurse managers (ANMs), a department nurse manager, a patient experience advisor, a clinical nurse specialist, and an ECU faculty advisor. The initiative focuses on acquiring buy-in from the front-line healthcare team and leadership support. Participation in this project involved a multidisciplinary team including, but not limited to, the healthcare team made up of providers, nurses, certified nurse assistants (CNAs), and lactation consultants, along with Professional Support Services (PSS), which included medical record personnel, environmental services, guest services, and public safety. These healthcare partners have contact and interact with the postpartum patient during their stay within the Women's Center; therefore, they were key stakeholders in the implementation of this QT project.

There are two providers per mother-baby dyad, the obstetrician (OB) cares for the mother, and the pediatric nurse practitioner hospitalist oversees the care of the baby. The primary care nurse and CNA also provide care to the mother-baby dyad. Lactation consultants consult on all postpartum patients to assist with lactation needs, whether the mother plans breastfeeding or bottle feeding. Medical record personnel are responsible for obtaining information for the birth certificate of the baby. Environmental services are responsible for cleaning the patient's room daily and must ensure all occupied patient rooms are serviced during the morning before QT. Environmental services must prioritize their work within the Women's Center to maintain the

designated QT while ensuring the rest of the facility's needs are also being met. Guest services and public safety are the first line of contact to screen visitors, educate them on QT and visitation guidelines, and direct visitors to the designated waiting area during QT.

### **Project Goals and Outcome Measures**

This quality improvement initiative aimed to improve the patient experience measured by NRC Health scores through implementing QT on a postpartum unit. The outcome measure was the patient's perception of staff working together to ensure care was personalized by allowing for dedicated time to rest during the postpartum period. The process measure included adherence to the small change test and will be determined by leader rounding and patient survey results. The goals of this project were: (a) implementing QT on a postpartum unit through the engagement of a multidisciplinary team; (b) designing a best practice patient education tool to share with patients; and (c) facilitating sharing of QT best practices across other Women's units within the healthcare organization.

### ***Description of the Methods and Measurement***

The project involved educating patients, visitors, and team members, including PSS, about the importance of QT and guidelines for practice. Educational signage for both team members and patients were developed and approved by the marketing department of the hospital to be at the entrance of the mother-baby unit and in every patient room (see Appendix D). A patient education flyer was designed and shared with patients and visitors upon admission (see Appendix E). The educational flyer was placed in the welcome packet and given to the patient upon admission to the unit.

Before implementing QT, the lights on the unit were dimmed to signal the start of QT. The nursing team ensured patient care would be clustered before 2 pm. The nursing team was

responsible for ensuring the educational signage was visible at the entrance to the mother-baby unit. Visitors were highly discouraged during the designated QT from 2-4 pm. Public safety and guest services were educated on their roles as gatekeepers for visitors using a 4P communication tool that explained the purpose, picture, plan, and part of the process change (see Appendix F).

Outcome measures were determined using the percentage of patients providing positive responses to three questions on the patient experience survey. The questions selected involved the themes of overall likelihood to recommend, personalized family-centered care, and teamwork through clustering care. NRC scores were collected over 6-months (December 2022-May 2023) for a 27-bed postpartum unit at the partner site. A line chart was used for trending changes in patient experience scores over time.

#### ***Discussion of the Data Collection Process***

Timely patient data was collected from the healthcare organization's current patient experience database of NRC Health survey results and patient comments from daily leader rounding. NRC scores were trended month over month from December 2022-May 2023 for the following NRC questions: 1) Overall Net Promoter Score (Promoter minus Detractor [Goal 62.2]); 2) Did you feel your visit was personalized to you? (Family Centered Care [Goal 71.6]); and 3) Did the staff work together to meet your needs? (Clustering Care [Goal 67.8]). The target was to increase the Net Promoter score above the facility goal of 62.2.

Leader rounding was used to capture subjective patient comments by evaluating the number of patient complaints regarding disruptions during the designated QT period. Leader rounding took place on weekdays from 9:30a-11a on the postpartum unit. Nursing and PSS leadership were responsible for rounding on every patient in the postpartum unit. Feedback was collected from these rounds and sent in an email daily to the unit's nurse manager.

### **Implementation Plan**

The intervention to address the lack of uninterrupted QT was the implementation of daily QT from 2p-4p on a 27-bed postpartum unit at a local hospital. The implementation plan started in November 2022 to educate team members and patients in prenatal clinics. The intervention involved advertisement in childbirth education classes, unit tours, prenatal affiliate clinics, and upon admission to the postpartum unit.

One month later, in December 2022, QT was initiated on the postpartum unit for 2-hours in the afternoon from 2p-4p. Educational signage was posted in each patient room (see Appendix D). The preparation plan was 30 minutes before QT, the nursing team would ensure routine care, and the last rounds were completed before QT. The nurse and/or CNA assessed patient needs such as water, pain meds, towels, and food while providing a reminder for visitors to leave. The mother was encouraged to settle for rest and turn the phone to vibrate while the newborn remained in the room.

To begin QT, lights were turned down in the nursing unit. Healthcare team members and PSS stayed out of the room unless called upon for services. Visitors who presented during QT were asked by public safety and guest services to leave or wait in the lobby area until QT was over to allow mothers to rest. When a mother requested special visitors during QT, the nurse discussed with the mother the value of QT and attempted to rearrange the visit time. If the mother requested a visitor exception, public safety and guest services were notified of any approved visitors during QT. Disruptive visitors would be asked to leave. To end QT, usual rounds begin, lights go back up, and visitors are allowed in.

**Timeline**

The estimated timeline for implementing the QT performance improvement project was over 7 months from November 2022 to June 2023 (see Appendix G). The first month involved an education rollout to the team and patients in the prenatal clinics in November 2022. The next step was initiated in December 2022 with the implementation of QT in the postpartum unit over the next six months. At this time, the nursing team provided education to postpartum patients upon admission to the mother-baby unit. From December 2022 to May 2023, data was collected from the monthly NRC scores. An overall review of the results and trending of the data findings took place during the month of June 2023.

**Section IV. Results and Findings****Results**

The aim of the project was to improve the patient experience measured by NRC Health scores through the implementation of QT on a postpartum unit. The patient experience scores measured by NRC Health were collected based on three focused areas: NPS (Overall likelihood to recommend; Staff worked together to meet your needs (clustering care); and Visit personalized (family-centered care). These scores were trended monthly for the fiscal year 2022 through May 2023. The data showed an upward month-to-month trend line for all three focus areas in NRC Health scores for the postpartum unit (see Appendix H).

NRC Health scores for November 2022, prior to implementation were the same for NPS and “Staff worked together to your needs” at 74.2 and “Visit personalized” was 58.1. QT was rolled out in December 2022, NRC Health scores for NPS and “Staff worked together to meet your needs” were the same at 82.9, and “Visit personalized” was 66.7. NRC Health scores survey results are available in real-time and therefore showed an immediate trend upward in the

patient experience scores. NRC Health scores through May 2023 YTD were as follows: NPS 76.3; Staff worked together to meet your needs 89.5; and Visit personalized 78.9.

### **Discussion of Major Findings**

Quiet time has been advocated as one strategy to help postpartum families while they are in the hospital. Daily QT was implemented on a postpartum unit with the goal of impacting patient experience during the brief hospitalization. The purpose of intentional afternoon QT is to reduce unnecessary interruptions. The hours between 2p and 4p are widely recognized as the best times to change unit practice (Church, 2020). This supports the decision to implement dedicated daily QT. According to Lawrie et al. (2021), a significant positive difference was noted in patient satisfaction scores on a postpartum unit. This correlates with the goal of this project that implementation of evidence-based practices will improve the postpartum women's experience as evidenced by the upward trend in NPS score which is likelihood to recommend. The findings through leader rounding patient feedback aligned with the research that shows mothers value dedicated time to rest without visitors to allow them time to rest and family bonding time (Buek et al., 2022). The findings for this project did not suggest that limiting visitation gives nurses time to provide higher quality, family-centered care as evidenced by the scores for personalized care.

## **Section V. Interpretation and Implications**

### **Costs and Resource Management**

There was a minimal cost to the organization primarily related to the purchasing of marketing materials, including flyers, patient room clings, and signage upon entrance to each unit. The total costs for the project were \$939.10. Please see the itemized budget in Appendix I. Other key stakeholders involved in implementation included the Doctor of Nursing Practice

(DNP) student, site champion, and additional team members whose work on the project was included in their daily duties.

If this project was duplicated, the quantity of signage including poster, clings, and flyers may need to be increased or decreased which would affect the overall supply costs. Additionally, marketing materials would need to be produced with general messaging versus the Women's postpartum specialized messaging. When implementing QT on a larger scale, it would be cost savings to develop marketing materials with general messaging that could be utilized for any hospital nursing unit.

The indirect financial burden regarding human resources of this project involved the salary of the nurse leaders. As a nurse leader at the organization, there were hours spent in meetings, and overseeing the implementation of the project. The hours spent overseeing the project were part of a salary position and therefore did not incur additional labor costs. Other job responsibilities were accomplished and worked hours were extended during the day for the nurse leaders to accomplish additional job responsibilities.

The benefit to the organization for implementing this project helped to improve the patient experience and promote brand loyalty. Most mothers are the decision makers for healthcare in their family, therefore, leading to an increase in market share, and attracting new patients. This will lead to increased revenue for the healthcare organization. The implementation and marketing of QT promoted increased awareness and improved the experience of our patients during their postpartum hospitalization. The project can be supported as the reimbursement and achievement of the strategic goals of the healthcare organization outweigh the financial costs. This project would be profitable based upon the minimal costs of this project, in comparison to

the reimbursement for patient experience, positive health outcomes, and brand loyalty that positively impact the healthcare organization's strategic goals.

### **Implications of the Findings**

Daily QT was successfully implemented on a 27-bed postpartum unit at a local hospital. There was a correlation between the implementation of QT and a positive trend in the NPS score, likelihood to recommend. On the other hand, there did not seem to be a positive correlation of QT impact on staff worked together to meet your needs (clustering care) and visit personalized (family-centered care). The positive NPS score supported the anticipated outcomes based on the literature review that was performed and discussed earlier. While some of the articles in the literature review explored noise levels, breastfeeding results, and the number of patient room disruptions, this project only investigated the impact on patient experience. Also, despite there being the need to reeducate the nursing team on the expectations regarding the dimming of lights and guest services and public safety, to ensure compliance with the screening of visitors during QT hours, daily QT was successfully implemented. This project further supports the literature that daily QT can be successfully implemented and can impact the postpartum patient's experience.

### ***Implications for Patients***

The success of a daily QT on the postpartum unit depended on setting realistic expectations and providing education to patients before admission to the hospital setting. Our patients expect personalized care which is the hospital's focus to provide family-centered care. During leader rounds on the postpartum unit, our patients voiced positive feedback regarding dedicated QT during their brief hospitalization. The literature encourages the implementation of

measures to reduce interruptions during the brief postpartum stay, give mothers and their newborns time to rest, and dedicate time for family bonding. (Grassley et al., 2018).

### ***Implications for Nursing Practice***

Patients, staff, and families all agreed that QT on a postpartum unit was beneficial. Although not formally measured as an outcome, the project led to an increase in staff satisfaction. It also led to other positive health outcomes for the postpartum patient including rest and bonding. Developing the dedicated QT structure involved good communication and oversight during implementation to hardwire this into the culture of the nursing unit. When interventions are planned, and care is focused on the postpartum mother, clustering care can provide periods of uninterrupted rest and bonding. Education of all stakeholders was a critical step toward the project's success. Increasing patient experience scores will help lead postpartum nurses toward implementing evidence-based practices that will also improve the postpartum nurses' experience and lead to long-term positive outcomes. Future projects may be initiated to determine the impact interruptions have on the postpartum patient in relation to breastfeeding rates.

### ***Impact for Healthcare System(s)***

The impact on the healthcare system is focused on strategy and marketing to experience and outcomes. The positive impact on the health system is increased patient experience. New mothers with a positive birth experience are more likely to seek further healthcare services for themselves and their families. Since women make most of the healthcare decisions for their families, having a positive patient experience may lead to increasing the healthcare system's market share and essentially brand loyalty. The areas of focus for the health system that QT impacted was improving the overall NPS scores (likelihood to recommend), to align with the

health system's long-term goals. Secondly, QT will impact safety and quality through positive maternal and newborn outcomes including but not limited to increasing exclusive breastfeeding rates (Grassley et al., 2018). Given that maternal satisfaction and patient experience are related to better maternal and newborn health outcomes.

### **Sustainability**

For this project to be considered successful, it would need to be sustained past the implementation period. To ensure sustainability, the project leader maintained regular communication with the postpartum nursing leaders and the postpartum staff and feedback about improving or continuing daily QT in the postpartum unit. The front-line team members were the ones who provided nursing leadership feedback from interactions with their patients and families that there were too many disruptions. The voice of the patient was heard through nurse leader rounds. Based on team member feedback for improvement to patient satisfaction on the postpartum unit, nurse leaders proposed this evidence-based practice change to the Women's best practice executive team (BPET).

Recommendations for sustainability in other Women's units during the planning process are to increase advertising with flyers to be used in patient rooms in the OB/GYN clinic setting. Providing QT education to patients in the outpatient setting, prior to arrival at the hospital to give birth, allows patients to incorporate QT into their birthing plan. This knowledge provides anticipatory guidance to expectant families prior to birth related to the postpartum stay (Waller-Wise & Maddox, 2019). Addressing patients' concerns around QT prior to project implementation can help ensure sustainability. According to Hedges et al. (2019), implementing and sustaining a QT initiative involves a comprehensive improvement strategy.

**Dissemination Plan**

The project results were presented to the health system's research council on July 25, 2023. The project site did require approval through the Nursing Research Council for the healthcare system. The research council is the forum that originally approved the implementation of the project and advised that IRB approval was not necessary. This project was shared at the next scheduled system-level Women's BPET, and the healthcare facility project site Director's Council, and at the unit level at the postpartum department staff meeting, both of those meeting dates to be determined. This was also presented to the College of Nursing at East Carolina University on July 11, 2023, and subsequently uploaded to "The ScholarShip" site.

**Section VI. Conclusion****Limitations and Facilitators**

There were limitations and facilitators identified during the project process. At the beginning of implementation, a limitation was the inconsistency of the nursing team dimming the lights on the unit at the start of QT. The task of dimming the lights promoted a sense of calm and worked as a visual cue to the healthcare team that QT was occurring (Goeren et al., 2018). A second limitation was an inconsistency of guest services and public safety with the screening of visitors during QT hours. A third limitation was an inconsistency with quiet time information being provided in the OB/GYN clinics outpatient setting. At each OB/GYN clinic, clinic administration ensured that patients receive education during prenatal appointments before hospital admission. Continuous oversight throughout the implementation of QT helped to encourage engagement among team members.

There were several facilitators during the project process. One of the facilitators was the availability of the nurse leaders to be able to be present on the units during the weekdays during

the implementation of the project. Another facilitator was the ability to have the availability to frequently round on the postpartum patients and team members on the postpartum unit to obtain comments from patients and seek feedback from the team members during implementation. The third facilitator was to educate and market the practice change to nursing leaders, nursing staff, professional support services team members, and outpatient OB/GYN clinic office team members. Another facilitator was frequent PDSA cycles. The frequent cycles allowed continual analysis of the compliance of the OB/GYN clinic to provide prenatal education and ensure screening of visitors by professional support services led to overall improvements in the project. Small changes in practice led to the overall success of QT. Also, visitors benefitted from the provided educational materials.

### **Recommendations for Others**

This QT improvement project may have some impact on patient experience scores; however, it is important to acknowledge that there are multiple factors that lead to patient experience during postpartum hospitalization. According to Buek et al. (2022), restricted visitation in postpartum units may give nurses the space and time to provide higher quality, family-centered care. Implementation of evidence-based practices that will improve the postpartum women's experience and lead to long-term positive outcomes (Lawrie et al., 2021). Educating hospital team members, postpartum patients, and visitors was key to the successful implementation of this project. Visitors will benefit from the value of QT for new mothers and their newborns from educational materials (Grassley et al., 2018). Minimal cost and ease of ordering marketing supplies including flyers, and signage, make this a feasible project that can be replicated in other nursing departments within the healthcare system.

**Recommendations Further Study**

This project has shown the potential to increase patient satisfaction scores by providing dedicated uninterrupted bonding time for the postpartum mother and her newborn. QT has been shown to lead to long-term positive health outcomes for mothers and infants. Recommendations for other Women's units during the planning process are to increase advertising with flyers to be used in the OB/GYN clinic patient rooms while also incorporating advertising on the health system's website home page.

There is also an opportunity to share at one of the newly acquired hospitals this evidence-based organizational practice change. The minimal costs associated with the financial and marketing impact make duplication of this project feasible and impact the healthcare system's strategic goals. This project is also being shared as a practice change for a Magnet story to improve workflow and space design. This focuses on nursing involved in designing and implementing workflow improvements and space design to enhance nursing practice that resulted in operational improvement. Developing and designing the structure may take some effort, and the education of all stakeholders is a critical step toward success (Lawrie et al., 2021). This project can also be implemented in other units across the healthcare facility. Future possibilities will be to present this project at a nursing conference.

This project could be used to launch a similar project around QT with measuring the quality outcome of exclusive breastfeeding rates. According to Grassley et al. (2018), dedicated QT can increase rates of exclusive breastfeeding. The healthcare organization is committed to improving its exclusive breastfeeding rates as evidenced by it being a strategic goal for this fiscal year. Additionally, the system-wide Women's Operation Council made exclusive breastfeeding a priority focus for this year. The benefits of restricted visitation for patients include more rest,

more breastfeeding, and skin-to-skin care (Buek et al., 2022). This supported maintaining our healthcare system's Baby Friendly initiatives and designation.

### **Final Thoughts**

Postpartum patients need time to get rest and bond during their postpartum hospitalization. Frequent disruptions during their brief postpartum hospitalization impact patient experience were identified as a problem through the voice of our patients. The impact of QT on patient experience on postpartum patients is a process improvement initiative that involved a comprehensive improvement strategy. Implementing and sustaining a nurse-led QT initiative involved engagement from multiple stakeholders, including but not limited to nursing, providers, and professional support services in outpatient and acute care settings. QT initiatives involved providing dedicated time for our postpartum patients to rest and bond with their newborns. This allowed the healthcare team to provide personalized care while working to cluster care. This had an overall impact on postpartum patients' likelihood to recommend the hospital as evidenced by an upward trend in patient experience scores. Process improvement initiatives, like QT, have been shown to have a positive impact on patient experience and health outcomes for our postpartum patients.

The healthcare organization's strategic goals are to improve patient experience, quality of care, and safety and promote loyalty. New mothers with a positive birth experience are more likely to seek further healthcare services for themselves and their families. The goals of this project were achieved through (a) implementing QT on a postpartum unit through the engagement of a multidisciplinary team; (b) designing a best practice patient education tool to share with patients, and (c) facilitating sharing of QT best practices across other Women's units within the healthcare organization.

### References

- Buek, K. W., O'Neil, M., & Mandell, D. J. (2022). Opportunities and challenges for family-centered postpartum care during the COVID-19 pandemic: A qualitative study of nurse perspectives. *BMC nursing*, *21*(1), 99. <https://doi.org/10.1186/s12912-022-00875-5>
- Centers for Disease Control and Prevention. (2020). *Management of visitors to healthcare facilities in the context of COVID-19: Non-US healthcare settings*. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/non-us-settings/hcf-visitors.html>
- Church, L. (2020). Quiet time during postpartum hospitalization can improve rest, bonding, and breastfeeding. *Nursing for Women's Health*, *24*(3), 197–201. <https://doi.org/10.1016/j.nwh.2020.03.002>
- Flaherty, S. J., Delaney, H., Matvienko-Sikar, K., & Smith, V. (2022). Maternity care during COVID-19: A qualitative evidence synthesis of women's and maternity care providers' views and experiences. *BMC pregnancy and childbirth*, *22*(1), 438. <https://doi.org/10.1186/s12884-022-04724-w>
- Goeren, D., John, S., Meskill, K., Iacono, L., Wahl, S., & Scanlon, K. (2018). Quiet time: A noise reduction initiative in a neurosurgical intensive care unit. *Critical Care Nurse*, *38*(4), 38–44. <https://doi.org/10.4037/ccn2018219>
- Grassley, J. S., Tivis, R., Finney, J., Chapman, S., & Bennett, S. (2018). Evaluation of a designated family bonding time to decrease interruptions and increase exclusive breastfeeding. *Nursing for Women's Health*, *22*(3), 219–227. <https://doi.org/10.1016/j.nwh.2018.03.004>
- Healthy People 2030. (2022). *Sleep*. <https://health.gov/healthypeople>

- Hedges, C., Hunt, C., & Ball, P. (2019). Quiet time improves the patient experience. *Journal of Nursing Care Quality, 34*(3), 197–202. <https://doi.org/10.1097/NCQ.0000000000000363>
- Lawrie, C., Highfield, M., & Mendelson, S. (2021). Quiet time to increase breastfeeding rates and enhance women's hospital experiences in the postpartum period. *Nursing for Women's Health, 25*(3), 170–178. <https://doi.org/10.1016/j.nwh.2021.04.002>
- Mattison, C. A., Dion, M. L., Lavis, J. N., Hutton, E. K., & Wilson, M. G. (2018). Midwifery and obstetrics: Factors influencing mothers' satisfaction with the birth experience. *Birth, 45*(3), 322-327. <https://doi.org/10.1111/birt.12352>
- McCarter, D., & MacLeod, C. E. (2019). What do women want? Looking beyond patient satisfaction. *Nursing for Women's Health, 23*(6), 478–484. <https://doi.org/10.1016/j.nwh.2019.09.002>
- McGough, N., Keane, T., Uppal, A., Dumlao, M., Rutherford, W., Kellogg, K., Ward, E., Kendal, C., & Fields, W. (2018). Noise reduction in progressive care units. *Journal of Nursing Care Quality, 33*(2), 166–172. <https://doi.org/10.1097/NCQ.0000000000000275>
- Phadermrod, B., Crowder, R. M., & Wills, G. B. (2019). Importance-Performance Analysis based SWOT analysis. *International Journal of Information Management, 44*, 194-203. <https://doi.org/10.1016/j.ijinfomgt.2016.03.009>
- The W. Edwards Deming Institute. (2022). *PDSA cycle*. <https://deming.org/explore/pdsa/>
- Waller-Wise, R., & Maddox, B. (2019). Implementing a quiet time intervention in a labor-delivery-recovery-postpartum unit. *International Journal of Childbirth Education, 34*(1), 27–31. <http://eds.b.ebscohost.com.proxyhs.researchport.umd.edu/eds/pdfviewer/pdfviewer?vid=10&sid=fab02917-799b-400fa6f4-6a2667c2969a%40sessionmgr4006>.

Appendix A

Literature Review Spreadsheet

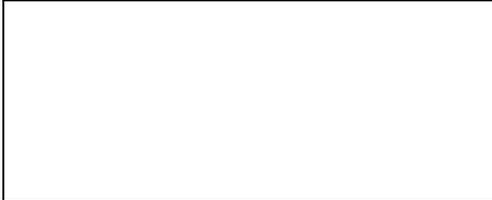
Author(s)	Year Pub	Article Title	Theory	Journal	Purpose and/or take home message	Design/Analysis/Level of Evidence	IV DV or Themes/ concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/method/ GAPS
Beck, K. W., O'Neil, M., & Mandell, D. J.	2022	Opportunities and challenges for family-centered care during the COVID-19 pandemic: A qualitative study of nurse perspectives.		<i>BMC Nursing</i>	Limitations on postpartum hospital visitation may achieve important, family-centered goals. Protected time for family-feeding, maternal rest, breastfeeding, father involvement and individualized education are critical to quality FCC. Research must examine which interventions we can implement on postpartum units to achieve positive outcomes.	Data were analyzed using a qualitative descriptive approach. Level IV	DV: Post partum visitation IV: maternal rest, breastfeeding rates, skin-to-skin care, and family bonding	Interviews purposeful sampling approach	20	Interviewed postpartum nurses	Nurses across five Texas hospitals	Observational and/or quantitative measurement are needed to assess actual differences in quality and effectiveness of nurse-patient communication
Church, L.	2020	Quiet time during hospitalization can improve rest, bonding, and breastfeeding.		<i>Nursing for Women's Health</i>	Research must examine which interventions we can implement on postpartum units to achieve positive outcomes.	Systematic reviews of descriptive and qualitative studies. Level V	DV: Quiet time IV: rest, bonding, and breastfeeding rates	Systematic review	15 articles reviewed	Evaluation of quality improvement projects	Postpartum patients	More research is needed on the efficacy of quiet time.
Gooren, D., John, S., Meskill, K., Luomo, L., Wahl, S., & Santora, K.	2018	Quiet time: A noise reduction initiative in a Neurosurgical Intensive Care Unit		<i>Critical Care Nurse</i>	During quiet time, limiting conversations, eliminating environmental noise, and dimming the lights as a reminder to be quiet are 3 simple strategies that can be implemented to lessen noise.	Before and after descriptive study. Level V	Goal to decrease noise levels by 10 decibels in 6 months.	Using a decibel meter, noise data were collected in 4 locations every 30 minutes during the chosen times for 8 days	16 bed neurosurgical intensive care unit	Measure noise levels	Neurosurgical intensive care unit staff, other disciplines	Not able to assess patients' perceptions of noise level due to patient population
Hedges, C., Hunt, C., & Ball, P.	2019	Quiet Time improves the patient experience		<i>Journal of Nursing Quality</i>	Purpose is to improve patient experience as measured by HC-AHPS questions in hospital through implementation of QI. Noise in hospitals is often beyond the scope of nurse-driven improvement; however a QI protocol led by nurses, developed by multiple stakeholders, and focused on changing expectations for quiet can lead to measurable improvements in patient perception of quiet.	PDSA cycle Qualitative study Level V	Develop, implement, and test QI on 2 medicine units with multi-disciplinary stakeholder engagement; (b) create a QI protocol to share best practices; and (c) facilitate spread of QI across a diverse health care	The HC-AHPS survey is a 32-item standardized instrument developed by the Centers for Medicare & Medicaid Services; summary results from which are publicly reported on the Medicare.gov Hospital Compare Website	50 patients completed questionnaire pre-implementation, 102 patients completed post-implementation questionnaire	Pre and post implementation questionnaire	Two medical units: 41 bed private rooms and 16 beds in shared (sem-private) room	Hospital, lighting, noise prevention and control, nursing staff, patient satisfaction, quiet time.
Lawrie, C., Highfield, M., & Mendelson, S.	2021	Quiet time to increase breastfeeding rates and enhance women's hospital experiences in the postpartum period		<i>Nursing for Women's Health</i>	Determine if quiet time on a postpartum unit would increase HC-AHPS via Press Ganey score of satisfaction with unit quietness, patient breastfeeding, and the implementation of nursing evidence-based practices.	Quasi-experimental pre- and post-design was used	DV: Implementation of quiet time IV: unit quietness, patient breastfeeding	Pre-intervention prospective HC-AHPS scores	377 bed community hospital with 400 births per month	Convenience sample	Postpartum women with uncomplicated vaginal or cesarean births	Significant positive difference in patient satisfaction scores. Clinically significant in breastfeeding rates had postpartum nurses toward implementation of evidence-based practice

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analysis/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac	Comments/critique of the article/method GAPS
Mattson, C.A., Don, M., L. Lewis, J.N., Hinton, E. K., & Wilson, M.G.	2018	Multitask and obnoxious factors influencing mothers' satisfaction with the birth experience		<i>Birth</i>	Maternal satisfaction based upon type of healthcare provider	A random cross-sectional study, logistic regression analysis	IV: Satisfaction DV: Maternal age, parity, partner, education, employment, income, size of community, travel to another location to give birth, and depression symptoms	Uter scale	1900 women	Computer assisted interviews	Women 15-19 years old, recent immigrants <5 years of less in Canada, and off-reserve	Satisfaction with care is part of Triple Aim. Maternal satisfaction and patient experience lead to better maternal-neonatal health outcomes.
McCartel, D., & Mitchell, C.E.	2019	What do women want? Looking beyond patient satisfaction		<i>Nursing for Women's Health</i>	Women and nurses identified unmet needs in the postpartum period, consistent with the current literature. Providing standardized education during the transitional period around discharge from the hospital to home may not be optimal and may even detract from meeting the needs for rest and connection with family and the health care team. Nursing care that extends beyond the maternity hospitalization may be needed to individualize care and meet previously unmet needs	Qualitative thematic analysis, Level V analysis	Thematic analysis produced the following themes for women's priorities: Need for individualized attention to maternal physical and emotional care; fear of providing inadequate care for the newborn, including establishing infant feeding and transitioning to parenting as a new mother versus as an experienced mother. Themes for nurses' priorities included safety issues around sleep and breastfeeding, transitioning to parenting with an emphasis on maternal self-care, and addressing barriers to effective discharge education.	Convenience sample	A total of 24 parents, representing the prenatal and postpartum periods.	Focus groups using semistructured interview questions 12-bed labor-delivery-recovery postpartum unit at a small urban hospital in the U.S. Northeast	There is a disconnect between women's and nurses' priorities and expectations for care during the postpartum period	
McGough, N., Keane, E., Uppal, A., Dunbar, M., Barber-Kud W., Kellogg, K., Ward, E., Kendall, C., &	2018	Noise reduction in progressive care units		<i>Journal of Nursing Care Quality</i>	To reduce noise levels on progressive care units by implementing a quiet time bundle using evidence-based practices. The bundle included set times of the day, dimming the unit lights, clustering patient care, and providing comfort measures to patients (eye masks and ear plugs)	A pre-post-intervention design	Quiet time bundle specifications, patient comfort measures, and communicating quietly	Decibel meters were used to measure the noise levels on the four progressive care units. HC/AIDS question "buys quiet" about the noise level at night. Informal interviews of patients and nurses	15 nurses were interviewed pre-intervention and 22 nurses were interviewed post-intervention	Convenience sample Four progressive care units in a 516-bed magnet designated acute care hospital in California	Noise levels were decreased by 3 decibels (P = 0.01) after the implementation of the quiet time bundle. Pre-intervention HC/AIDS scores were 36.0% - 40.0% quiet at night and post-intervention HC/AIDS scores were 51.4% - 61.9% quiet at time (P = 0.08). No difference in patients' perspective of noise levels pre-/post-intervention. Nurses pre-intervention stated that the unit was noisy at least some of the time. Post-intervention, 18 nurses stated that the unit was noisy at least some of the time and 4 nurses stated that the unit was not noisy.	

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analysis/Level of Evidence	IV/DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/method GAPS
Grassley, J.S., Trivette, R., Hiney, J., Chapman, S., & Bennett, S.	2018	Evaluation of a designated family bonding time to decrease interruptions and increase exclusive breastfeeding		<i>Nursing for Women's Health</i>	The purpose of this quality improvement project was to plan and implement a daily family bonding time on our mother/baby care unit and evaluate its effect on interruptions, mothers' perceptions of interruptions, and exclusive breastfeeding rates	A separate sample pre/post-intervention design conducted in three phases. Level V	Interruptions including number, duration, and by whom; women's perceptions of interruptions, and exclusive breastfeeding rates.	Outcome data were analyzed using descriptive statistics, a repeated-measures analysis of variance, t test, and chi-square test	60	A convenience sample	Postpartum women	New mothers experience many interruptions during their hospital stay, particularly when large groups of visitors stay more than 40 minutes.
Haley, S.J., Delaney, H., Muresko, S., & Smith, V.	2022	Maternity care during COVID-19: A qualitative evidence synthesis of women's and maternity care providers' views and experiences.		<i>BMC Pregnancy and Childbirth</i>	Visiting restrictions in hospital beyond partner visiting, and when women returned home, were a positive experience for some women. Women attributed reduced visiting in the postnatal ward as providing extra space and time to bond with their babies. Quicker postnatal visits facilitated a private space for women to establish breastfeeding more comfortably and women drew comfort from the 'peace and quietness' offered by less crowded postnatal ward. "It is a lot quieter, more time to adjust and try to get a hang of breastfeeding without an audience"	Qualitative evidence synthesis (QES)	5 women's experiences themes: Altered maternity care, COVID-related restrictions, infection prevention and risk, 'the lived reality' - navigating support systems, and interactions with maternity services. 3 maternity care provider themes: Altered maternity care, Professional and personal impact, broader structure impact.	Quality assessment tool based on 12 criteria, designed by Evidence for Policy, and Practice Information coordinating centre.	50 records, 48 studies	Quality evidence synthesis	9,148 women and 2,538 maternity care providers	The positives identified was maternity care during COVID pandemic enabled some women to enjoy quiet precious time as a family unit. QES is needed to explore the views and experiences of partners and support persons.
Walker, Wise, R. & Maddox, H.	2019	Implementing a Quiet Time Intervention in a Labor-Delivery-Recovery-Postpartum Unit	The theoretical framework for this study is built on the seminal work of Florence Nightingale	<i>International Journal of Childbirth Education</i>	To implement a quiet time intervention to investigate its relationship to patient satisfaction, breastfeeding success, rest, and bonding. Quiet time occurred between 1400-1600 and lights were dimmed on the unit.	nonexperimental, descriptive, comparative design used to measure pre-intervention and post-intervention participants	DV: Quiet time IV: patient satisfaction, breastfeeding rates, rest, and bonding	For all hypotheses, an independent t-test was used to test the hypotheses, and a Levine's test of variance was included	67 patients were in the pre-intervention group. The post-intervention group was a convenience sample of 64 patients.	Convenience sampling	401-bed regional hospital in the community hospital in the southeastern United States. The family birth center is composed of a 27-bed labor-delivery recovery-postpartum unit with a 5-bed in-lage unit, where approximately 1,500 births occur each year	Keywords: quiet time, maternal-infant bonding, breastfeeding. These results corresponded to the results of Grassley, Trivette, Hiney, Chapman, and Bennett (2018) in a similar study. There were no differences in patient perspectives pre- and post-quiet time intervention in regard to satisfaction with breastfeeding. There was a difference in patient perspective pre- and post-intervention in regard to the staff interruptions

**Appendix B**

Site Partner Approval Letter



Name: Diana Sutton, MSN, RN, CPN

September 30, 2022

Dear Diana,

Thank you for submitting your evidence-based practice proposal, "Impact of Quiet Time on Patient Experience" to the Nursing Research Council for approval.

Your project was approved as a sound project with the potential to improve care at Novant Health. The Nursing Research Council recommended the following changes to strengthen your study:

- None

Your completed project will be eligible for inclusion in career ladder portfolios for eligible nurses. The final report must be submitted back to the Nursing Research Council prior to Career Ladder submission.

We look forward to hearing back from you within the year.

Best wishes!



**Appendix C**

## IRB QI/Program Evaluation Self-Certification Tool

Based on your responses, the project appears to constitute QI and/or Program Evaluation and IRB review is not required because, in accordance with federal regulations, your project does not constitute research as defined under 45 CFR 46.102(d). If the project results are disseminated, they should be characterized as QI and/or Program Evaluation findings. Finally, if the project changes in any way that might affect the intent or design, please complete this self-certification again to ensure that IRB review is still not required. Click the button below to view a printable version of this form to save with your files, as it serves as documentation that IRB review is not required for this project. 11/16/2022

**Appendix D**

## Quiet Time Educational Signage

A photograph of a woman in a white hospital gown with a small floral pattern, holding a newborn baby wrapped in a white blanket with blue and pink stripes. The woman is looking down at the baby with a gentle expression. The background is softly lit, suggesting a hospital room.

Quiet Time Is  
Every Day From  
2 to 4 p.m.

**Remarkable moms  
deserve a break.**

---

Having a baby is an exciting time for families, but this journey can also be exhausting. Sleep is essential to physical healing and emotional well-being for our moms, so let's give them some time to rest. Visitors are discouraged during quiet time and are welcome to wait in our lobby.



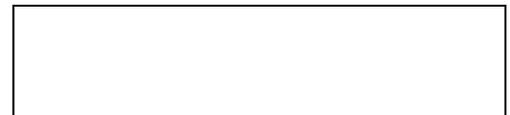
Appendix F

4P Communication Tool

**4P** Quiet Time – Information for Public Safety and Guest Services

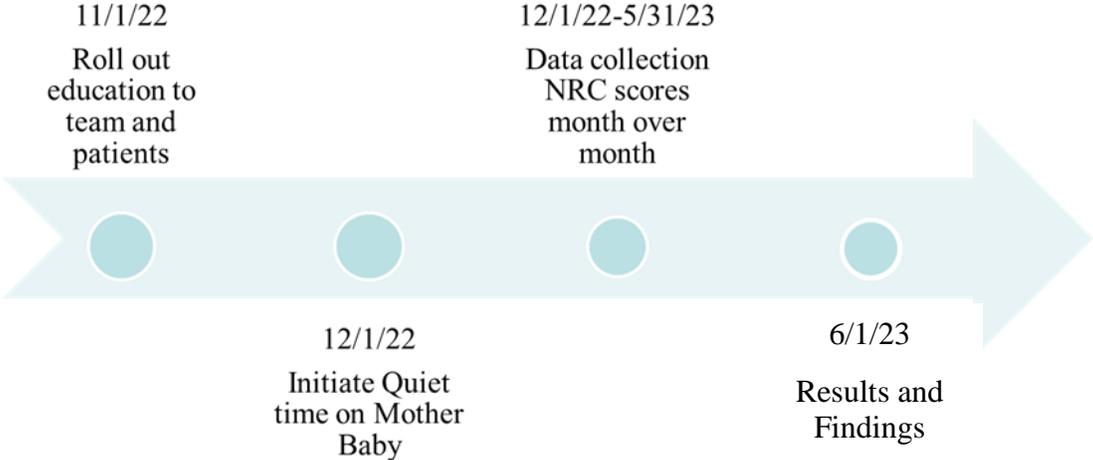
The 4P communication tool	
<p><b>Purpose:</b> <i>Why are we doing this?</i></p>	<ul style="list-style-type: none"> <li>✓ Quiet Time is an intentional, therapeutic rest time for mothers with their newborns. Mothers, on our postpartum / mother baby units, deserve dedicated time each day to rest and restore from the activities of a busy hospitalization. Quiet Time is designated for each afternoon from 2-4pm. Visitors are highly discouraged.</li> </ul>
<p><b>Picture:</b> <i>What will it look like when we get there?</i></p>	<ul style="list-style-type: none"> <li>✓ Each afternoon, from 2pm-4pm, the postpartum unit will close to visitors to allow mothers to rest and to spend quiet time with their newborns. As gatekeepers to our mother/baby units, we depend on Public Safety and Guest Services to discourage visitation during this time and help to give our patients a break. Please keep the nursing manager of the unit informed of any successes or difficulties when implementing this program.</li> </ul>
<p><b>Plan:</b> <i>What is our plan to change?</i></p>	<ul style="list-style-type: none"> <li>✓ Patients, Team Members, <u>Visitors</u> and others will be educated about the importance of Quiet Time and the guidelines for practice. Signage is available at each facility, along with patient and family education materials.</li> </ul>
<p><b>Part:</b> <i>What is my role going to be in the plan?</i></p>	<ul style="list-style-type: none"> <li>✓ Just prior to Quiet Time, Public Safety / Guest Services will place appropriate signage at the entrance / access to each mother baby unit</li> <li>✓ If Visitors present during Quiet Time, they should be asked to come back after Quiet Time is over, to allow mothers to rest</li> <li>✓ If a mother requests visitors during Quiet Time, the RN will discuss with the mother to attempt to rearrange the visit time. Public Safety / Guest Services will be notified of any approved visitors during Quiet Time</li> <li>✓ Complaints about visitation restrictions should be routed to the nursing manager or the nursing unit, not to the patient.</li> <li>✓ Patients in Labor may have visitors at any time. Visitors should be reminded to support the restful environment during Quiet Time</li> <li>✓ Family members wearing a newborn <u>identification armband</u> may visit at any time.</li> <li>✓ When Quiet Time is over, the signage is removed from the entrance and visitation resumes as per usual.</li> </ul>

For Questions, please contact the Nursing Manager of the Mother/Baby unit or Meg Hunter PhD, RN, Clinical Practice Specialist



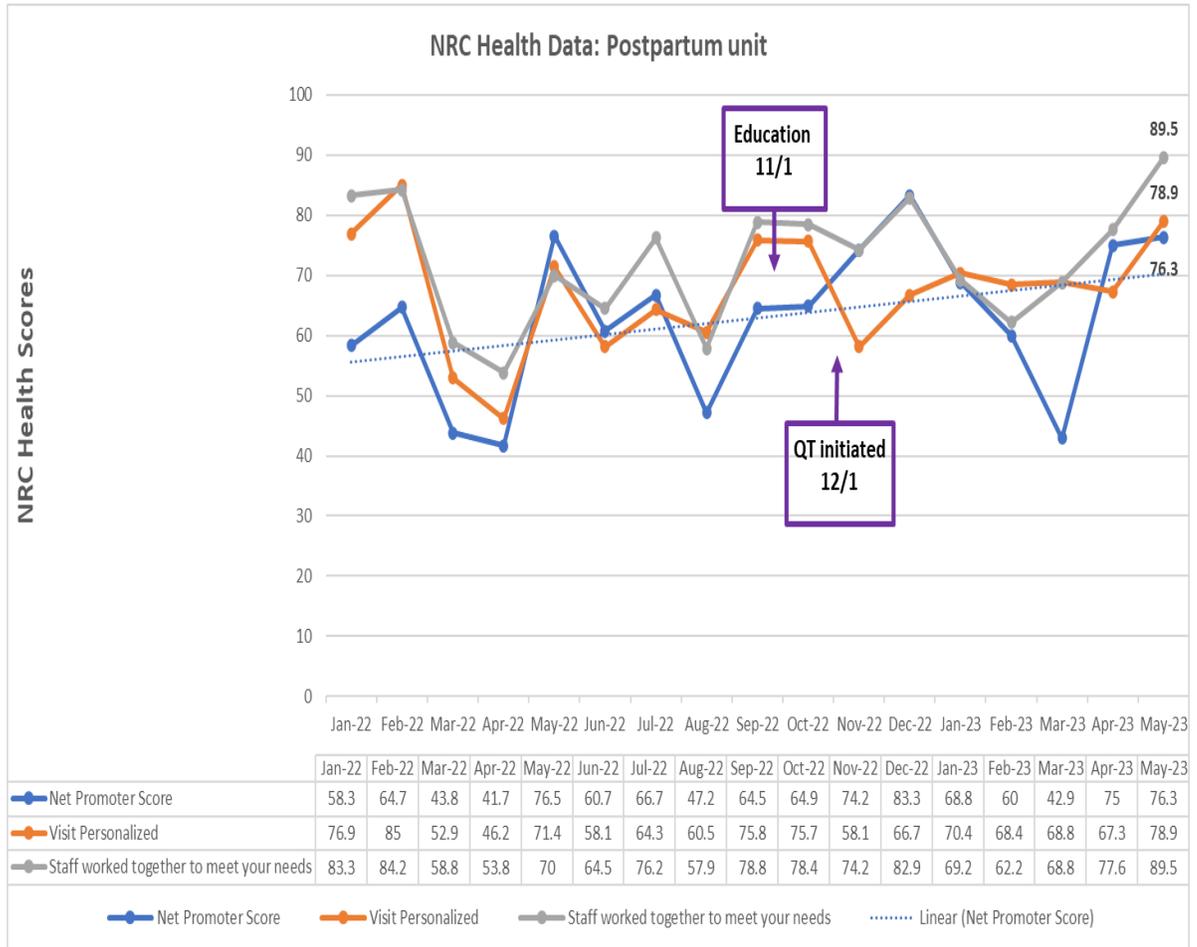
**Appendix G**

Project Timeline



**Appendix H**

Trend of Patient Experience Scores



**Appendix I**

## Itemized Budget

<b>Budget</b>			
<b>Item</b>	<b>Quantity</b>	<b>Cost</b>	<b>Total</b>
Copy Paper (500 Sheets/Ream, 10 Reams/Carton)	1	\$43.20	\$43.20
Quite Time Poster (24x36)	5	\$16.28	\$81.40
Quite Time Cling (8.5x11")	100	\$2.72	\$272
Quite Time Flyer (8.5x11")	500	\$0.34	\$170
ULINE INC. Poster Stands	5	\$69.00	\$345
Cardstock Paper (85x11")	4	\$6.88	\$27.50
<b>Total</b>			<b>\$939.10</b>

*Note.* This table demonstrates the material costs associated with implementing Quiet Time in the postpartum unit.