

Increasing Service Utilization of an Outpatient Breastfeeding Clinic

Heather Szeles, BSN, RNC-OB

College of Nursing, East Carolina University

Doctor of Nursing Practice Program

Dr. Terri Isaacs

July 10, 2023

Notes from the Author

A very special thank you to my faculty Dr. Terri Isaacs and my site champion, Jessica Schafer, FNP-C. I would also like to thank my family, Anthony, Alexander, and Alyssa, for their complete understanding over the past three years. To all my fellow DNPs and classmates, this is a job well done.

Abstract

Breastfeeding is highly recommended by the World Health Organization, Centers for Disease Control, and the American Association of Pediatrics (CDC, 2020; WHO, 2014; Meek & Noble, 2022). One goal of Healthy People 2030 is to increase breastfeeding rates (Office of Disease Prevention and Health Promotion [ODPHP], 2020). An outpatient breastfeeding clinic was established as a patient resource in this medium-sized community hospital. The purpose of this facilities clinic was to provide a resource to the community to support new parents and their breastfeeding goals. The organization determined that there needed to be more knowledge among staff nurses regarding the existence and role of this clinic. This quality improvement project was developed to educate staff nurses working in inpatient obstetrics and postpartum on the availability and benefits of the outpatient breastfeeding clinic to prepare them to educate their patients better. Implementing this quality improvement in nursing education led to a substantial increase in patient utilization of this clinic from the previous year. From January through April 2022, the utilization rate of this clinic was 8%, whereas, during implementation in January through April 2023, the utilization rate was 37%. Educating nurses on the benefits of the outpatient breastfeeding clinic can help facilitate better outcomes for patients who desire to breastfeed for the first year of their child's life. Access to and knowledge of outpatient resources can improve overall breastfeeding practices in the local community.

Keywords: breastfeeding, outpatient, education, nurses, quality improvement, community hospital, labor and delivery, postpartum

Table of Contents

Notes from the Author	2
Abstract	3
Section I: Introduction	7
Background.....	7
Organizational Needs Statement.....	8
Problem Statement.....	11
Purpose Statement.....	11
Section II: Evidence.....	12
Literature Review.....	12
Evidence-Based Practice Framework.....	14
Ethical Consideration and Protection of Human Subjects.....	15
Section III: Project Design.....	17
Project Site and Population.....	17
Project Team.....	18
Project Goals and Outcomes Measures.....	18
Implementation Plan.....	20
Timeline.....	20
Section IV: Results and Findings.....	22
Results.....	22
Discussion of Major Findings.....	23
Section V: Interpretation and Implications.....	25
Costs and Resource Management.....	25

Implications of the Findings.....	26
Sustainability	27
Dissemination Plan	28
Section VI: Conclusion.....	29
Limitations and Facilitators.....	29
Recommendations for Others.....	29
Recommendations for Further Study.....	30
Final Thoughts.....	31
References.....	35
Appendices	35
Appendix A: Literature Review Spread Sheet.....	35
Appendix B: Levels of Evidence.....	36
Appendix C: Educational Information for Nurses.....	37
Appendix D: Pre-Implementation Flyer for Nurses.....	40
Appendix E: Script for Nurses.....	41
Appendix F: Post-Implementation Flyer for Nurses.....	42
Appendix G: Pre-Implementation Survey.....	43
Appendix H: Post-Implementation Survey.....	44
Appendix I: Timeline for Project Management.....	45
Appendix J: Monthly Patient Utilization of Breastfeeding Clinic.....	46
Appendix K: Quarterly Patient Utilization Rates.....	47
Appendix L: Pre-Implementation Survey Results.....	48
Appendix M: Post-Implementation Survey Results.....	50

Appendix N: Itemized Budget for Supplies.....	52
Appendix O: Driver Diagram.....	53
Appendix P: Project Implementation Worksheet (Form 8274.A).....	54
Appendix Q: Project Management Report (Form 8274.B).....	57
Appendix R: Project Management Report (Form 8274.B).....	59
Appendix S: Project Implementation Report (Form 8274.C).....	61
Appendix T: DNP Essentials Table.....	64
Appendix U: DNP Project Poster.....	65

Section I. Introduction

Background

The value of breastfeeding has multiple impacts on cultures and societies around the world. The leading public health entities such as the World Health Organization (WHO), Centers for Disease Control (CDC), and American Association of Pediatricians (AAP) all endorse exclusive breastfeeding through the first six months of life (CDC, 2020; WHO, 2014; Meek & Noble, 2022). The WHO published its ten steps for successful breastfeeding in 2014 and revised them in 2018 to increase world breastfeeding rates by 50% by 2025 (WHO, 2014; WHO, 2018). This publication explicitly helps countries, communities, and hospitals establish policies and procedures to increase the world rates of breastfeeding and the health of communities.

Breastfeeding is associated with health benefits for mothers and babies. Breastfed infants have reduced acute and chronic illnesses such as otitis media, atopic dermatitis, sudden infant death syndrome (SIDS), inflammatory bowel disease, diabetes mellitus, and respiratory and gastrointestinal illnesses (Meek & Noble, 2022). Additionally, there are health benefits to mothers who breastfeed, such as the reduction of the development of diabetes mellitus, hypertension, and gynecologic cancers (American College of Obstetricians and Gynecologists, 2021).

One goal of Healthy People 2030 is to increase the proportion of exclusively breastfed infants through six months of age (ODPHP, 2020). The position statement of the AAP also advocates for exclusive breastfeeding of infants through six months of age (Meek & Noble, 2022). In 2022, the AAP updated its position to support further breastfeeding through two years of age.

Inpatient support is plentiful with the addition of lactation consultants and baby-friendly hospital designations. Ideally, outpatient support begins in the first trimester and continues through six months of life for the neonate (Meek & Noble, 2022; WHO, 2014). There is outpatient breastfeeding support in pediatric offices; however, breastfeeding support is deficient during the early postpartum period (Knutson & Butler, 2022). Barriers to breastfeeding in the postpartum period have been identified and can be influenced by socioeconomic and cultural factors (American College of Obstetricians and Gynecologists [ACOG], 2021).

The project partner is a large academic medical facility in a small city with 250 beds for inpatient use. It is a non-profit healthcare organization with several local hospitals across North Carolina and Virginia. Its mission is to improve healthcare outcomes for the local population through quality services and community reinvestment of all fiscal earnings. To address the lack of resources in women's health, this organization opened an outpatient breastfeeding clinic in January 2022 to help bridge gaps in care between the inpatient and outpatient settings.

Organizational Needs Statement

This organization collaborates with the patients and community by establishing charitable contributions and foundations to benefit and improve the local area. In 2019, this organization formed a public partnership with the Local Initiatives Support Coalition (LISC) to provide \$100 million of funding to address the public's health needs (Vajda, 2019). It is committed to community health by improving access to care and wellness while decreasing health and income disparities (Vajda, 2019). In 2021, this organization also committed more than \$250 million to the communities it serves in Virginia and North Carolina to increase health equity and access to care, and decrease food insecurity (Bradshaw, 2022). This organization continually reinvests

earnings into the community to promote health among individuals and the entire population of its communities.

Recently, it was noted that lactation services were limited, and gaps in care were identified. The lactation unit coordinator and the postpartum unit manager identified the need for additional lactation support. Evidence supports that prenatal and postnatal lactation support is essential to successful breastfeeding goals (Nilsson et al., 2017). Deficiencies in breastfeeding support have been identified during the early postpartum period (Knutson & Butler, 2022). Follow-up lactation support during the postpartum period is beneficial in helping parents reach their goal of exclusive breastfeeding (Nilsson et al., 2017). It is one of the goals of Healthy People 2030 to increase the proportion of infants that are breastfed through six months of age (ODPHP, 2020). This organization encourages the use of an outpatient breastfeeding clinic to help improve the quality of care for new mothers and infants in the postpartum period.

Nine lactation consultants work in the inpatient unit serving this outpatient clinic. The current process includes lactation consultants visiting every patient on the unit, regardless of their infant feeding choice. They inform every patient of their outpatient breastfeeding clinic, and each patient receives a flyer that advertises this clinic in their new patient folder at the time of admission. If a patient wishes to utilize the clinic, an appointment is made while inpatient or soon after becoming outpatient. Information about this clinic is not currently included in any of the education given by the hospital staff.

The utilization rate for this outpatient clinic was around 200 total patients in the past six months (J. Schafer, personal communication, July 1, 2022). At this facility, the average monthly deliveries per month were 275 (C. Pidgeon, personal communication, June 5, 2022). This clinic's utilization rate was 8% in the months leading up to the DNP project development and

implementation, demonstrating a need for more utilization of this clinic. A deficiency of note is that patients only learn about this clinic from the lactation consultants, which occurs at least once for every patient. Education advocating for patients to use the outpatient breastfeeding clinic is not currently included in the postpartum education or discharge teaching.

Based on the data from Healthy People 2020, there has been little of an increase in the percentage of infants exclusively breastfed through six months of age (Meek & Noble, 2022). It is a goal of Healthy People 2030 to further increase the number of exclusively breastfed infants through six months old (ODPHP, 2020). The most recent nationally recorded rate is 25.6% as of 2018 (CDC, 2018). In this 2018 survey, the rate for exclusively breastfed infants through six months of life in North Carolina was 16.7%, and for Virginia was 16.2% (CDC, 2018).

The quadruple aim focuses on four main concepts: healthcare team well-being, population health, patient experience, and cost reduction (Arnetz et al., 2020). One of this project's Quadruple Aim component goals was to implement an educational intervention to help increase patient utilization of this clinic without placing more stress and constraints on the healthcare team. Two of the Quadruple AIM goals are to increase the population's health and patient experience. These concepts can be fulfilled by implementing additional education topics into postpartum teaching and discharge education which may help sustain and improve the community's health and patient experience.

Lastly, the benefits of breastfeeding may reduce the long-term healthcare costs and financial constraints on families in the community. It has been previously established that breastfeeding reduces multiple acute and chronic illnesses (Meek & Noble, 2022). Additionally, there are health benefits to mothers who breastfeed, such as the reduction of the development of diabetes mellitus, hypertension, and gynecologic cancers (ACOG, 2021). The benefits of

breastfeeding affect neonatal and maternal. Breastfeeding could help decrease long-term healthcare costs (Quesada et al., 2020).

Problem Statement

Limited resources may prevent new mothers from obtaining adequate care and support for exclusively breastfeeding. Community rates of exclusively breastfed infants may improve through increased utilization of outpatient breastfeeding clinic services. Increased community engagement may lead to clinic sustainment and expansion of services.

Lack of parental support is a significant barrier to continuing exclusive breastfeeding (ACOG, 2021). Incorporating inpatient and outpatient support and sustainability may help parents meet their breastfeeding goals (Sriraman, 2017). The establishment of inpatient breastfeeding support aids in increasing the rates of breastfeeding worldwide. However, disparities remain in the methods to support new mothers in outpatient settings (Patterson et al., 2019).

Purpose Statement

The purpose of this DNP project is to improve the utilization of outpatient breastfeeding resources through educational interventions for nursing staff in the acute care setting. Increasing the staff knowledge of the clinic is imperative to ensure patients receive education from nurses. Education is reiterated at the time of discharge to increase the use of this clinic. The implementation of consistent patient teaching and discharge education will increase the utilization of this outpatient breastfeeding clinic and help new mothers meet their breastfeeding needs and goals.

Section II. Evidence

Literature Review

Once the clinical problem was identified, the process began strategizing solutions to increase the utilization of the outpatient breastfeeding clinic. There was an abundance of literature supporting breastfeeding. However, there was a lack of evidence regarding the support of an outpatient clinic specialized in breastfeeding. Implementing a cost-effective solution that directly impacted this hospital and the community was vital.

Sampling strategies. A general literature search was performed using two popular databases for the most current evidence. One database commonly known as PubMed is maintained by the National Institute of Health, the National Library of Medicine, and the National Center for Biotechnology and Information (NCBI). This free database has more than 34 million articles. Another database used was the Clinical Index for Nursing and Allied Health Literature (CINAHL). All searches with PubMed and CINAHL databases used the following search terms: “lactation support,” “lactation support or breastfeeding,” “outpatient breastfeeding clinic,” “lactation support or breastfeeding and outpatient,” “lactation support and outpatient,” “breastfeeding and outpatient,” “breastfeeding clinic and outpatient,” and “discharge education and lactation.” Each search was restricted to the past five years, 2017-2022. Additional inclusion and exclusion criteria were incorporated.

Evaluation Criteria. The initial literature search yielded 8,892 articles. The addition of the restriction of the English language narrowed this to 8,556 articles. This was further limited by ensuring the article's first author was a nurse, which yielded 120 articles. Search terms were refined to include “breastfeeding clinic,” “discharge education and lactation,” and “outpatient lactation clinic.” This resulted in approximately 42 articles (see Appendix A).

Further elimination of irrelevant topics narrowed this field to 15 prospective articles. Articles utilized were selected based on their information and levels of evidence. Levels of evidence used were VI and above (see Appendix B). Additional information was obtained from The American Academy of Pediatrics, The American College of Obstetricians and Gynecologists, The World Health Organization, and The Centers for Disease Control.

Current State of Knowledge

There are no specific current recommendations for supporting newly postpartum breastfeeding mothers. The AAP recommends exclusive breastfeeding for all infants through 6 months of age unless contraindicated (Meek & Noble, 2022). Ideally, education should begin in the antepartum period with breastfeeding education and continue throughout the postpartum and early infant periods.

Current Approaches to Solving Population Problem

One approach to increasing the utilization of the clinic was to increase the nurses' knowledge about the breastfeeding clinic. In one review, there were deficits regarding postpartum education (McCarter et al., 2022). The organization identified that this was a knowledge deficit affecting the use of the clinic. Most patients would ideally like more time with their nurses and patient-centered support. Another study showed that mothers with lactation consultants in primary care settings successfully achieved their breastfeeding goals (Haase et al., 2019). Only two articles mentioned outpatient lactation clinics. One clinic utilized the centering method of peer support in an outpatient setting with an expert facilitator (McGuinness et al., 2020). The other article mentions a recently started outpatient lactation clinic in a community hospital. Although the clinic was brand new at the time of the study, it concluded that it helps support mothers and their approach and commitment to breastfeeding (Sari et al., 2022).

Evidence to Support the Intervention

Studies show that patients value their nurses in acute care, providing an ideal opportunity for education regarding outpatient breastfeeding resources before discharge (Monroe et al., 2021). Although patients appreciate discharge education, there needs to be a measure to gauge its effectiveness or a specific guideline that addresses outpatient breastfeeding support or resources (McCarter et al., 2022). The use of an outpatient lactation clinic has not been readily established; however, evidence shows that lactation consultants are helpful with breastfeeding support in the postpartum period (McGuinness et al., 2020).

Evidence-Based Practice Framework

This project was developed using the Knowledge to Action (KTA) conceptual framework, which is a model of change for quality improvement. This framework aims to practically apply the evidence to action (Curtis et al., 2016). It takes time to translate the best evidence into clinical practice in healthcare. This framework has guidelines for implementing the best evidence into practice (Graham et al., 2006).

Graham et al. (2006) classifies the steps of the KTA framework as follows:

Identify a problem that needs addressing; identify, review, and select the knowledge or research to the problem; adapt the identified knowledge or research to the local context; assess barriers to using the knowledge; select, tailor, and implement interventions to promote the use of knowledge; monitor knowledge use; evaluate the outcomes of using the knowledge; sustain ongoing knowledge use. (p.20)

This framework is like the nursing process of continual assessment, implementation, and evaluation. It supports the need to incorporate the best evidence into practice to provide the best

care for patients. It also requires the assessment of barriers and facilitators of this knowledge, its use, sustainability, and the evaluation of conclusions of this evidence (Graham et al., 2009). The KTA framework is versatile and can be used in inpatient and outpatient settings. It emphasizes the importance of applying evidence-based practices to address concerns and improve the quality of care. Precisely for this project, evidence suggested that continued breastfeeding support was needed.

The Plan, Do, Study, Act (PDSA) was incorporated to provide rapid cycle change and increase resource utilization. The PDSA model involves identifying a problem, formulating a plan, implementing a plan, and studying the results after the plan has been executed (The W. Edwards Deming Institute, 2021). The problem identified by the organization was the need for more patient utilization of the outpatient breastfeeding clinic. The organization discovered a need for more knowledge among the nursing staff. The plan was to educate all the nurses on the unit about the resource. Implementation of the project consisted of education in person and via email with a short PowerPoint presentation (see Appendix C), a pre-implementation flyer (see Appendix D), a script on how to incorporate education on this resource to their patients (see Appendix E), and a post-implementation flyer (see Appendix F). The results of patients utilizing the resource were analyzed to see if the intervention was effective.

Ethical Consideration & Protection of Human Subjects

There are always ethical considerations for any project, especially projects working with a project population. For this project, the project population was the organization's staff, and the project beneficiaries were the patients of the unit and community. Participation in this quality improvement project was voluntary. The intervention was presented to staff, emailed, and posted in staff areas around the unit. All staff received the same surveys, presentations, scripts, and

handouts regarding education on the intervention. There was minimal potential for the project population to be taken advantage of during project implementation.

This project has met all formal approval processes. An Institutional Review Board (IRB) was not completed for the University as this project qualified for exempt status. The Organization also placed this quality improvement project as exempt from IRB status. All Collaborative Institutional Training Initiative (CITI) Program processes were completed before IRB submission. Modules required for the application of the exempt IRB included training on conflicts of interest and the ability to maintain integrity and ethics when conducting anything involving project participants. Specific ethical considerations must be acknowledged, and a subject's autonomy must be respected. Completing these programs was essential to protect the population of any project.

Section III. Project Design

Project Site and Population

The project site was an urban hospital in a small city bordering another medium-sized Virginia city. This 250-bed hospital was part of a larger group of hospitals in southeast Virginia and North Carolina. The unit used for this project was an inpatient unit limited to women and infant populations. The patient population for this unit ranged from adolescent to middle-aged women and neonatal infants. This population includes ethnicities of many variations but the predominant ethnic groups that utilize this unit are African American and Caucasian.

Facilitators for this project included an organization supporting change, unit managers supporting evidence-based quality improvement, and lactation consultants interested in increased utilization. Time, willingness to change, lack of knowledge, and increased workload were barriers.

Description of the Setting

The setting of this project was an inpatient unit that provides care to women and infants. This unit has 30 beds in total. Fifteen rooms in this unit are used for labor with fetal monitoring capability. Up to four remaining rooms in this unit can be used as temporary labor rooms but are commonly used for recovery after cesarean sections and postpartum stays. Each new mother moves to a postpartum room after delivery and remains here until she and her newborn are discharged home. This inpatient unit is currently in the process of expansion to accommodate more families.

Description of the Population

The population group for this project was Registered Nurses. The staff nurses on this unit range between 22 and 68 years old, with a median age of 45. The amount of nursing experience varied from new graduates to one nurse that had been employed on this unit for nearly 30 years. All the nursing staff was female.

Project Team

The project team included this DNP student as the facilitator, the University Faculty, the Project partner site champion, the Magnet and Project coordinator, the Unit managers, unit coordinators, and lactation consultants. This student implemented the dissemination of pre- and post-implementation surveys. This student facilitated the education sessions.

Project Goals and Outcome Measures

This project aimed to increase community utilization of the outpatient breastfeeding clinic by measuring utilization of this resource pre-and post-implementation of the intervention (see Appendix G). Key ambitions included increasing the staff nurses' knowledge of this resource and increasing patient awareness. Other goals were to identify ways to improve patient utilization, streamline educational processes without increasing nurse workload, and identify barriers and solutions.

Description of the Methods and Measurement

Methods of measurement included the raw values of the number of patients delivered at the organization's inpatient unit from January 2022 through December 2022. The number of patients that used the breastfeeding clinic from January 2022 through December 2022 was also captured. The percentage of patients that used the breastfeeding clinic before the project implementation was calculated.

Methods for data collection included using two surveys with anonymous Quick Response (QR) codes to gather staff knowledge of the outpatient breastfeeding clinic, gauge participant feedback on the education, and evaluate the possibility of increased workload. Procedures included using a pre-implementation survey for all nurses on the unit (see Appendix H). Educational sessions were held during two staff meetings in January and February 2023. sessions. A short 6-slide PowerPoint presentation contained vital information for nurses to educate their patients. An anonymous QR code post-implementation survey was used to evaluate staff perception of the education provided (see Appendix I). Both surveys were limited to 3 questions with a comment box for feedback.

Discussion of the Data Collection Process

The magnet coordinator and the project site champion captured and distributed the data that pertained to the hospital and the inpatient unit. This data was stored on secured computers at the Organization. No patient identifiers or personal health information was needed because only the number of patients delivered and those that utilized the breastfeeding clinic were compared and evaluated. Patient demographic information was helpful but discretionary as the project population was staff nurses, and the project beneficiary was the patients.

Data was collected and calculated on the number of delivered patients and those that used the breastfeeding clinic from January 1 through May 31, 2023. The percentage of patients that used the clinic pre-implementation was compared to the percentage of patients that used the clinic after the education had been implemented. This occurred from January through May 2023. Qualitative data from the participant surveys were analyzed for themes and feedback on future projects.

Data analysis was completed with the measurement of the number of participants that utilized the breastfeeding clinic before the implementation of the education and compared to the number of patients that used the clinic after the education by staff nurses was implemented. Comparative data on the number of patients delivered at this hospital were also analyzed and compared to those who utilized the breastfeeding clinic.

Implementation Plan

The plan included using a pre-and post-implementation survey disseminated to all nursing staff throughout the labor and delivery and mother-baby/nursery units. This student provided a 10-minute in-person education session on the unit, email, and computer-based internet/teleconferencing. The educational PowerPoint was used during the labor and delivery and the mother-baby/nursery staff meetings. Informational flyers were also posted around the department for staff awareness and involvement in this project. These flyers were placed in staff-only areas such as breakrooms, conference rooms, nursing stations, and staff bathrooms. A script was also written and distributed to all nursing staff.

Timeline

This project began in the Summer of 2022. Preliminary Institutional approval was obtained in June 2022 when the site champion was attained. Organizational project approval was granted in July 2022. The Institution and Organization approved exempt IRB status in September 2022. Several meetings with the site champion and magnet-project coordinator were conducted from July through December 2022. Pre-implementation surveys were distributed from December 1, 2022, through January 20, 2023. Project implementation began on January 16, 2023, and continued through February 25, 2023. Data collection and post-implementation surveys were conducted from February 22, 2023, to May 31, 2023. Data analysis was completed in May 2023,

with the final report completed in June 2023 (see Appendix J). Poster creation and presentation of results to the Organization and Institution occurred in May and July 2023, respectively.

Section IV. Results and Findings

Results

Quantitative results

The total number of patients that utilized the outpatient breastfeeding clinic in 2022 was 495, with 3,135 deliveries. The total number of patients that utilized the outpatient breastfeeding clinic from January through April 2023 was 305, with 1,003 deliveries. The total patient utilization for 2022 was 15.7%. The total patient utilization from January through April 2023 was 30.4%. Compared to the previous year's total utilization rate of 15.7%, the total utilization of the outpatient breastfeeding clinic doubled to 30.4% within four months post-implementation. (see Appendix K). Quarterly comparisons of January through April 2022 and 2023 yielded a utilization rate of 8% versus 37%, respectively. (see Appendix L).

Qualitative results

The pre-implementation survey results yielded some data. Sixteen of the 75 staff nurses completed the pre-implementation survey. This survey was also posted in staff areas on the unit. The central theme identified was that most nurses knew about the outpatient lactation clinic and some patient resources (see Appendix M). Some nurses needed to be made aware of the outpatient breastfeeding clinic.

The post-implementation survey revealed more data and personal opinions on the education received. Twenty nurses responded to the post-implementation survey. This survey was emailed to 85 nurses and posted in employee areas around the unit. The central theme identified was that the nurses felt the outpatient breastfeeding clinic education was helpful (see Appendix N). The optional comment box also responded, such as "Patients love the idea of outpatient lactation" and "Very helpful for both nurses and patients."

PDSA and Process Evaluation

A binder was placed on the mother-baby and the labor units during the initial pre-evaluation. These binders contained log sheets containing the date, patient room number, initials, and staff name. An email was also sent to all staff on both units that explained the logging process. An incentive of a \$10 gift card for the top three members of both units was provided for both day and night shift members and was proposed to staff. Weekly or bi-weekly check-ins with staff and log checks occurred over four weeks.

The secondary evaluation noted that the binders needed to be filled out. As a solution, individual conversations were held with each staff member who worked that day. The staff members were asked about the breastfeeding education they provided the patients, and most confirmed that they had done so. A reminder for incentives was also emailed. These check-ins were held weekly for another four weeks. Snacks with a label thanking staff for logging their entries in the logbook were also provided for two weeks near the end of the cycle. Snacks with the QR code linking staff to the post-implementation survey were also offered for two weeks during the middle of the process. Sixty-eight log entries were logged between both units, with the mother-baby team having the predominant number of log entries.

Discussion of Major Findings

The most prominent finding was that the percentage of patient utilization doubled in the first four months quarter of 2023 versus the year's annual average for 2022. This occurred without a relative increase in the number of deliveries. These findings were interpreted as the implementation of the project helped improve staff education and awareness of outpatient breastfeeding services, which led to increased patient utilization of the clinic.

The PDSA process evaluation also revealed that tracking with a binder and paper did not work. There needs to be a process in the Electronic Medical Record (EMR). Individual discussions with staff members during check-ins were more valuable than relying on a paper binder to track this process. When discussed with staff individually, they reported they were giving education to patients regardless despite needing to fill out binder logs. Staff nurses were informing the patients of the outpatient breastfeeding clinic; however, they needed to log that they completed the task, and there was no documentation process in the EMR.

Section V. Interpretation and Implications

Costs and Resource Management

Personnel involved in this project comprised the student, the site champion, and all the staff nurses at the two nursing units at the facility. This facility already employs nine lactation consultants who visit all patients and staff the outpatient breastfeeding clinic. The site champion was an NP, unit coordinator, and an International Board Certified Lactation Consultant (IBCLC) herself. The core of lactation consultants was instrumental in staffing and supporting this unit. Any facility implementing an outpatient breastfeeding clinic must have a core of dedicated IBCLCs to serve community members.

The student became the chief facilitator of the education regarding the outpatient lactation clinic to bridge the gap between the utilization of the clinic and education by staff nurses. This role required hours spent on the unit collaborating with staff and checking in with the team to evaluate the process. Consistent re-evaluation was needed to determine whether methods were working or failing.

The unit education specialist also played a crucial role in educating the unit staff. This unique role helped identify gaps or weaknesses in education and provided the necessary education to overcome deficits. The successful implementation of new educational processes would require an education specialist to ensure that new practices are taught, implemented, and sustained.

Supplies used for this project included six \$10 gift cards to Starbucks and four \$10 gift cards to Target as the incentive for nurses. Additional supplies were various office supplies such as paper, two binders, and printable labels. Assorted snacks and treats were purchased, distributed to staff, and listed in the itemized budget (see Appendix O).

Completing this project required over 500 hours performed by the student, including time for literature reviews, writing, project design, implementation, and data synthesis. Many hours were spent on the unit working with the site champion and staff to educate staff, evaluate processes, and gather feedback from staff and the site champion. Hours completed on the team fulfilled by the student were unpaid.

Implications of the Findings

Before process implementation, the nursing staff was not educating their patients on this resource. Lactation consultants primarily educated the patients during their hospital stay. After the implementation of the project, staff were consistently educating their patients on the outpatient breastfeeding clinic. This was evidenced by the 15% increase in patient utilization of the clinic in the first quarter of 2023 compared to the entirety of 2022. The expanded knowledge and education of staff helped increase the utilization rates of this resource. It is highly recommended that all new staff members receive education on the outpatient breastfeeding clinic to improve utilization rates and sustainable breastfeeding practices steadily.

Implications for Patients

The coronavirus pandemic helped identify much-needed gaps in care within the community after many hospital systems suspended or canceled their birthing and breastfeeding classes. Patients were left with few community resources. The lack of outpatient breastfeeding resources was one of the areas identified shortly after the pandemic began and was the reason for starting the outpatient breastfeeding clinic. The benefit of this clinic was that it provided a crucial resource to all breastfeeding parents across the community. This resource could help provide a path to increasing breastfeeding rates in the community and people's health. It is the goal of

Healthy People 2030 to increase exclusively breastfed rates across the nation, which can further improve the community's health.

Implications for nursing practice

Utilizing local resources can serve as a model for postpartum and community care improvement. Educating nurses on the benefits of the outpatient breastfeeding clinic can help facilitate better outcomes for patients who desire to breastfeed for the first year of their child's life. Knowledge of outpatient resources can improve overall breastfeeding practices in the local community. This requires a shift in nursing practice towards educating staff to address the current gap in knowledge. The implication for nursing practice is a change in staff education to proactively address the current nursing and community care gaps without increasing the workload on staff.

Impact for Healthcare System

This project and resource could serve as a model for other hospitals in the system if they have similar metrics and need such a resource. It is a distinct method of delivering additional resources to patients and the community. All new staff members should receive education on the outpatient breastfeeding clinic to ensure continued utilization. Long-term healthcare outcomes may include lower readmission rates and healthier patients and communities.

Sustainability

The creation of an outpatient breastfeeding clinic was a challenging endeavor that required specific prerequisites. This clinic has sustained and increased its utilization because of staff support, patient volume, and patient acuity. A clinic like this may be beneficial in a more high-risk tertiary care center and as a resource to parents with neonates in the neonatal intensive care unit. To replicate this resource, a facility must have specific requirements in place, such as a

core of IBCLCs, receptive staff, supportive management, and an organization with an openness to change. Currently, this project is self-sustainable with these prerequisites in place. This quality improvement project has continued with the unit education specialist and Lactation unit coordinator providing education to all newly hired staff.

Dissemination Plan

In fulfillment of the Doctor of Nursing Practice degree, this project was presented to the College of Nursing on July 11, 2023, to faculty, staff, fellow students, and colleagues. This project will be exhibited at the facility at a future date yet to be determined. This paper was also uploaded to East Carolina University's "The ScholarShip" for the dissemination of projects. There is no current plan for publication yet.

Section VI. Conclusion

Limitations and Facilitators

The barriers to this project were significant. This included a lack of staff participation and an increased workload for nurses. Implementing a checkbox in the education section of the EMR or the admission database in the EMR would have been more efficacious. Additionally, using paper logs and a binder could have been better, as it took more time for the nurses to participate in the process.

Additional barriers included high staff turnover and fatigue. The unit's nurse turnover rate was high in December, so they utilized traveling nurses. Although the core of the staff is permanent, many travelers and contract nurses were still filling staffing roles. This made implementation more difficult to track. Fatigue of staff also played into staff giving education to their patients. Nurses are tired and overworked.

Facilitators for this project included an established core of IBCLCs, staff receptive to education, managerial support, and the use of a unit educator. The previously established lactation core of support helped facilitate and reinforce teaching on this resource to all patients. The support of the unit's managers was crucial to the success of this project. Receptive staff members streamlined the process and were open to participation in this project. The unit educator helped establish the education to be presented to the staff.

Recommendations for Others

Implementing a checkbox in the education section of the EMR or the admission database in the EMR would have been more efficacious. This can help decrease the extra steps of logging a patient in a binder with paper. The task may seem small, but anything additional may be too

much with the increased workload on nurses. The addition of the box or button in the EMR can also help track the education being provided to the patients.

Facilitate education with pediatrician office staff in local pediatrician offices. This education provided to the pediatric team may increase the utilization of this clinic. The site champion has started educating local pediatricians about this resource. Further education provided to new parents is beneficial. This not only helps the pediatricians and their management of care but also helps the families attain their breastfeeding goals. Facilitating and involving local obstetrical and women's health medical providers may also increase utilization. Educating the Physicians and staff will increase their knowledge of this resource.

The education of the nurses is vital to the community's sustainability and utilization of this resource. Nursing staff needs specific knowledge about the resources for which they educate their patients. All new hires and staff should be educated on the outpatient breastfeeding clinic during orientation. The nurse educator and the lactation consultants can further enhance this role.

Recommendations Further Study

Further study and research are needed in the arena of outpatient lactation. This was one instance where a gap in the continuity of care was identified and addressed to benefit the patients in the community. More research must be performed on resources such as an outpatient breastfeeding clinic, as the literature has a current gap.

The techniques and steps used in this project could be applied to any outpatient clinic that requires improvement or change. This project focused on staff transitioning from inpatient to outpatient care. The aim was to increase the utilization of this outpatient breastfeeding clinic, which provides better patient care during the transition from inpatient to outpatient care.

Final Thoughts

This project identified the needs of the organization and the needs of the community and aimed to increase the utilization of this outpatient breastfeeding clinic. The need for this clinic in the community was identified during the pandemic's initial stages. It provided evidence of gaps in care during the transition from inpatient to outpatient care. This resource addressed the community's needs but needed to be utilized more. This project was designed to increase the utilization of this clinic by educating staff nurses who educated the patients. Through quality improvement methodologies, there was increased patient utilization of this outpatient breastfeeding clinic that continues to assist and improve the community's health.

References

- American College of Obstetricians and Gynecologists. (2021). Barriers to breastfeeding: Supporting initiation and continuation of breastfeeding. *Obstetrics & Gynecology*, *137*(2), e54–e62. <https://doi.org/10.1097/aog.0000000000004249>
- Arnetz, B. B., Goetz, C. M., Arnetz, J. E., Sudan, S., van Schagen, J., Piersma, K., & Reyelts, F. (2020). Enhancing healthcare efficiency to achieve the Quadruple Aim: An exploratory study. *BMC Research Notes*, *13*(1). <https://doi.org/10.1186/s13104-020-05199-8>
- Bradshaw, R. (2022, May 10). *Sentara Healthcare invested \$254 million in Virginia and North Carolina communities in 2021*. About Sentara. [https://www.sentara.com/aboutus/news/news-articles/sentara-healthcare-invested-\\$254-million-in-virginia-and-north-carolina-communities-in-2021.aspx](https://www.sentara.com/aboutus/news/news-articles/sentara-healthcare-invested-$254-million-in-virginia-and-north-carolina-communities-in-2021.aspx)
- Centers for Disease Control. (2018, August 20). *Breastfeeding report card* [Table 1]. Centers for Disease Control and Prevention. <https://www.cdc.gov/breastfeeding/data/reportcard.htm>
- Centers for Disease Control. (2020, August 13). *Five great benefits of breastfeeding*. Centers for Disease Control and Prevention. <https://www.cdc.gov/nccdphp/dnpao/features/breastfeeding-benefits/index.html>
- Curtis, K., Fry, M., Shaban, R., & Considine, J. Translating research findings to clinical nursing practice. *Journal of Clinical Nursing*, *26*, 862-872. <https://doi.10.1111/jocn.13586>
- Graham, I.D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W., & Robinson, N. (2006, March). Lost in knowledge translation: time for a map? *Journal of Continuing Education in the Health Professions*, *26*(1), 13-24. <https://doi.org/10.1002/chp.47>

- Knutson, J., & Butler, J. (2022). Providing equitable postpartum breastfeeding support at an urban academic hospital. *Nursing for Women's Health, 26*(3).
<https://doi.org/10.1016/j.nwh.2022.03.002>
- McCarter, D., Law, A., Cabullo, H., & Pinto, K. (2022). Scoping review of postpartum discharge education provided by nurses. *Journal of Obstetric, Gynecologic & Neonatal Nursing, 51*(4), 377-387. <https://doi.org/10.1016/j.jogn.2022.03.002>
- McGuinness, D., Paul, G., Murtagh, R., & O'Hagan, L. (2020). A service evaluation of a hospital-based specialist postnatal breastfeeding clinic. *British Journal of Midwifery, 28*(11), 762–767. <https://doi.org/10.12968/bjom.2020.28.11.762>
- Meek, J. Y., & Noble, L. (2022). Policy Statement: Breastfeeding and the use of human milk. *Pediatrics, 150*(1). <https://doi.org/10.1542/peds.2022-057988>
- Monroe, M., Linares, A., & Ashford, K. (2021). Women's perceptions of hospital based breastfeeding care and the association with exclusive breastfeeding. *Nursing for Women's Health, 25*(4). <https://doi.org/10.1016/j.nwh.2021.05.008>
- Nilsson, I. M. S, Strandberg-Larsen, K., Knight, C. H., Vinkel Hansen, A., & Kronborg, H. (2017). Focused breastfeeding counseling improves short- and long-term success in an early-discharge setting: A cluster-randomized study. *Maternal Child Nursing, 13*(4).
<https://doi.org/10.1111/mcn.12432>
- Office of Disease Prevention and Health Promotion [ODPHP]. (2020). *Increase the proportion of infants who are breastfed exclusively through age 6 months — MICH-15*. Healthy People 2030. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/infants/increase-proportion-infants-who-are-breastfed-exclusively-through-age-6-months-mich-15>

- Patterson, J. A., Keuler, N. S., Eglash, A. R., & Olson, B. H. (2019). Outpatient breastfeeding champion program: Breastfeeding support in primary care. *Breastfeeding Medicine*, 15(1). <https://doi.org/10.1089/bfm.2019.0108>
- Quesada, J. A., Méndez, I., & Martín-Gil, R. (2020). The economic benefits of increasing breastfeeding rates in Spain. *International Breastfeeding Journal*, 15(34). <https://doi.org/10.1186/s13006-020-00277-w>
- Sari, E., Akcaboy, M., Ozlurk, S., Coban, G., & Senel, S. (2022). Breastfeeding education in a newly organized lactation consultation clinic: An evaluation of its effects on the improvement of maternal attitudes to breastfeeding. *Turkish Pediatrics Archive* 57(3). <http://dx.doi.org/10.5152/TurkArchPediater.2022.21250>
- Sriraman, N. K. (2017). Promote breastfeeding in the outpatient setting: It's easy! *Current Problems in Pediatric and Adolescent Health Care*, 47(12), 311–317. <https://doi.org/10.1016/j.cppeds.2017.10.002>
- The W. Edwards Deming Institute. (2021). *PDSA Cycle - The W. Edwards Deming Institute*. <https://Deming.org/>. <https://deming.org/explore/pdsa/>
- Vajda, B. (2019, October 3). *Sentara partners with LISC to announce \$100 million community investment*. About Sentara. [https://www.sentara.com/aboutus/news/news-articles/sentara-partners-with-lisc-to-announce-\\$100-million-community-investment.aspx](https://www.sentara.com/aboutus/news/news-articles/sentara-partners-with-lisc-to-announce-$100-million-community-investment.aspx)
- World Health Organization. (2014, December 30). *Global nutrition targets 2025: Breastfeeding policy brief*. <https://www.who.int/publications/i/item/WHO-NMH-NHD-14.7>

Appendix A

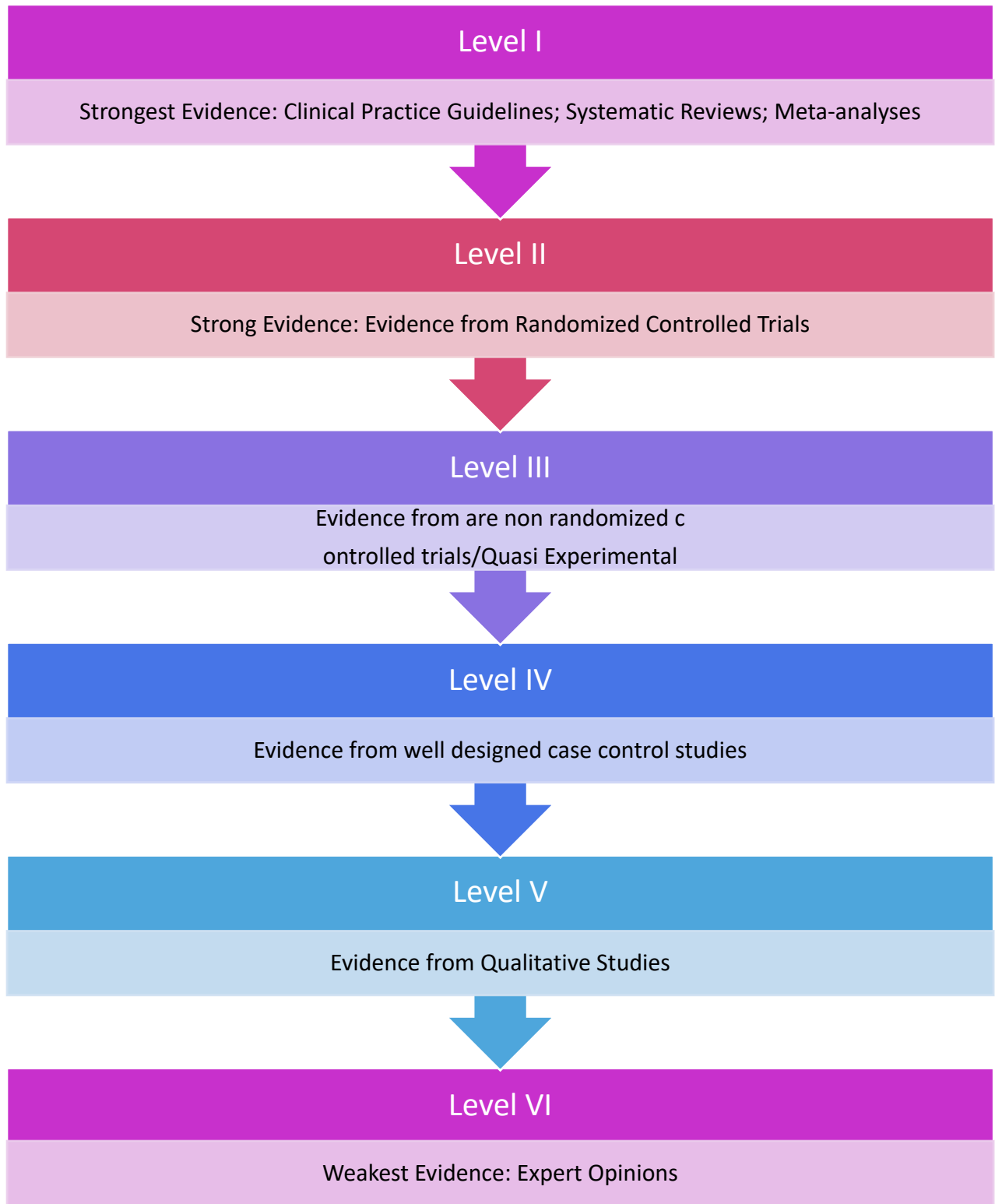
Literature Review Spread Sheet

DNP Project
Literature Search Log

Student: Heather Szeles				Date of Subm	
9/23/22					
Increasing Service Utilization of an Outpatient Breastfeeding Clinic					
Date of Search	Database	Key Word Searches	Limits	# of Citations Found / Kept	Rationale for Inclusion / Exclusion (include rationale for excluding articles as well as for inclusion)
11/2/2019	CINAHL (EBSCOhost)	Emergency department AND delays AND admissions	5-10 year period, English language, etc.	25 found 3 kept	1 redundant; kept articles directly related to clinical question
11-Jul-22					
13-Jul-22	CINAHL	outpatient AND lactation AND support	6 year period, English language, academic journals	252 found 9 kept	many not be related to breastfeeding
13-Jul-22	Pubmed and CINAHL	outpatient lactation support	6 year period, English language, academic journals	4 found 3 kept	1 redundant
13-Jul-22	CINAHL	outpatient breastfeeding	22 year period, english language, academic journals, full text	1999 found	too many to sift through
13-Jul-22	CINAHL and Pubmed	outpatient IBCLC	22 year period, english language, academic journals, full text	89 found, 7 kept	some were duplicates, some were irrelevant
13-Jul-22	PUBMED	outpatient IBCLC	10 year period, english language, academic journal, full text	1 found, 1 kept	1 kept
15-Sep-22	CINAHL	Breastfeeding Clinic and outpatient	5 years	0 found	
15-Sep-22	CINAHL, Pubmed	Breastfeeding Clinic	5 years, english language,	13 found, 8 kept	some were irrelevant, duplicates
20-Sep-22	CINAHL	Lactation support or breastfeeding		21368	too many
20-Sep-22	CINAHL	Lactation support or breastfeeding	5 years	8892	too many
20-Sep-22	CINAHL	Lactation support or breastfeeding	5yrs, english	8556	too broad
20-Sep-22	CINAHL	Lactation support or breastfeeding	5 years, english language, first author nurse	120	too many
21-Sep-22	CINAHL	lactation support and outpatient		0	
21-Sep-22	cinahl	breastfeeding and outpatient		0	
22-Sep-22	CINAHL & Pubmed	discharge Education and lactation	5 years, english	11 found, 10 kept	Excluded for irrelevance and redundancy
22-Sep-22	Cinahl & pubmed	outpatient breastfeeding clinic		0	
22-Sep-22	Pubmed	outpatient breastfeeding clinic	5 years, english, review	18 found, 2 kept	Included for relevance

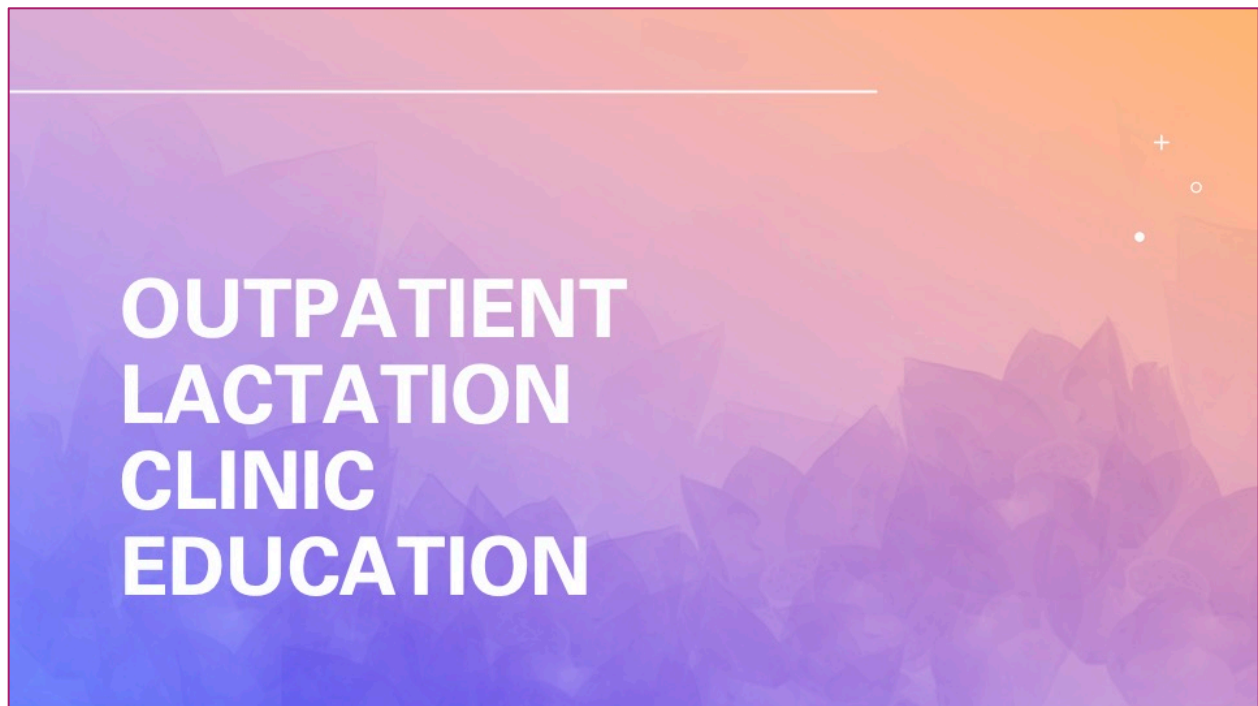
Appendix B

Levels of Evidence



Appendix C

Educational Information for Nurses



Background

- What is an outpatient lactation clinic?
 - Started January 2022
 - Resource for the entire community
- What does this clinic do?
 - Increase prevalence and length of breastfeeding
 - Provides another level of support to new parents

QI Project Goals

- Increase the education of all staff RNs
- Increase patient education of lactation clinic by staff RNs
- Increase awareness of clinic and utilization by patients
 - Surveys for staff
 - Script to all staff
 - Posters in staff locations

Purpose

- Provides a resource to the community
- Available to all patients, regardless if they delivered here
- Flyer given by Lactation with breastfeeding booklet




Key Points



No cost to the patient



Available 7 days a week here at  FMC



Provide weighted feeds by IBCLCs

Questions

- IBCLCs available
- UC: Jessica Schafer, MSN, FNP-C, IBCLC
- Email me: hmszeles@fmc.com
- Lactation Clinic appt phone number: 261-6068



HOSPITAL

OUTPATIENT LACTATION CONSULTS

Whether lactation comes easily for you or not, we know a strong support system will help you meet your feeding goals. Outpatient lactation consults provide you:

- Access to International Board Certified Lactation Consultants (IBCLC)
- Confidence to breastfeed successfully
- Support to address all aspects of feeding such as latching, milk supply, and more

EXPERT LACTATION SUPPORT IS A CALL OR CLICK AWAY

Open scheduling available. To request an appointment, call 757-261-6068 or visit [fmc.com/lactation](#)

Your insurance will be billed for the consult. Please verify that you have outpatient lactation coverage.

Appendix D

Pre-Implementation Flyer for Nurses

Nip Tip: Outpatient Lactation
Clinic Education

Educate patients about Outpatient
Lactation Clinic

Key Points:

- No cost to patient
- Appts available 7 days a week
- Weighted feeds and evaluation
- Remind pt about handout from IBCLCs

Every patient, every time



Appendix E

Script for Nurses

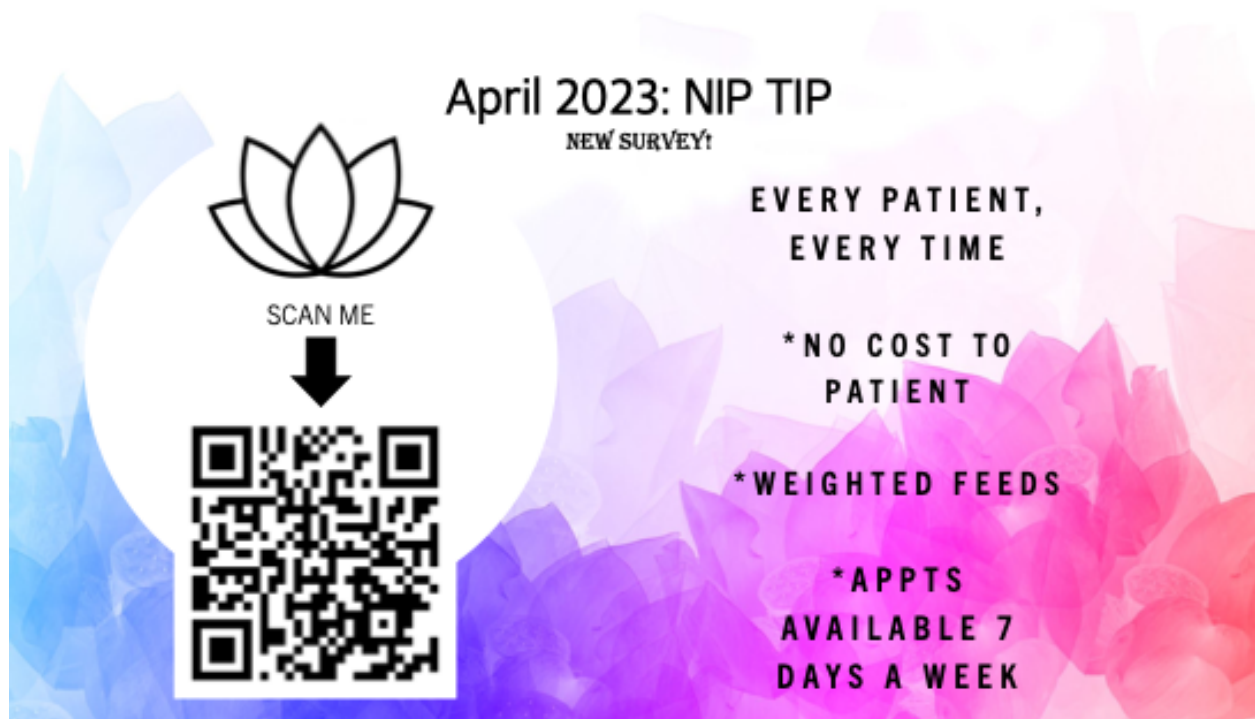
I want to take a moment to mention the lactation clinic service we have here at [named hospital]. It is an outpatient clinic that is available at no cost to you. It is available 7 days a week. These visits are completed by certified lactation consultants here in the hospital and include weighted feeds for evaluation. It is a great option for breastfeeding parents available for our entire community.

*Weighted feeds are an evaluation of the neonates' weight pre- and post-feeding.

**Can be personalized by RN, but the key points should be included

Appendix F

Post-Implementation Flyer for Nurses



Appendix G

Pre-Implementation Survey

1. Do you have any knowledge about the lactation resources available at this hospital?

- I know about all of the available resources
- I know about some of the available resources
- I know about a small amount of available resources
- I do not know of any of the available resources

2. Are you aware that there is a postpartum lactation clinic available to all patients?

- Yes
- No

3. Do you educate your patients about the postpartum lactation clinic?

- I educate all of my patients about the lactation clinic
- I educate some of my patients about the lactation clinic
- I do not educate my patients about the lactation clinic
- I was not aware that the lactation clinic existed

4. How many years of nursing experience do you have?

- Less than 1 year
- 1-5 years
- 5-10 years
- 10+ years

Appendix H

Post Implementation Survey

1. Did you find the education on the postpartum lactation clinic to be helpful?
 - Very helpful
 - Somewhat helpful
 - Indifferent
 - Not at all helpful

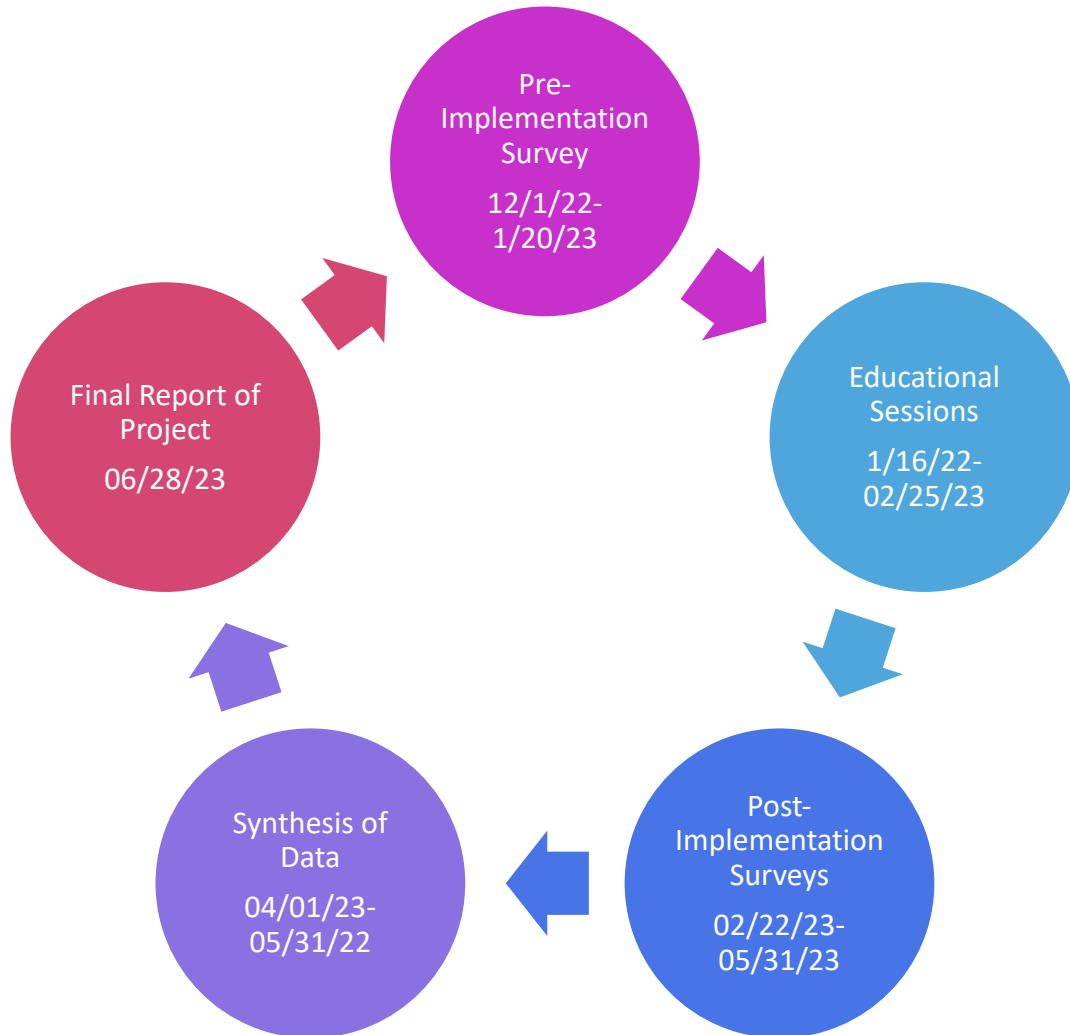
2. Did you find the amount of education provided on the postpartum lactation clinic to be:
 - Too much
 - Too little
 - Adequate
 - Pointless

3. Do you now feel prepared to educate your patients on the postpartum lactation clinic?
 - I feel absolutely confident in educating my patients
 - I feel somewhat confident in educating my patients
 - I feel I need more education to educate my patients successfully

Optional Comment Box

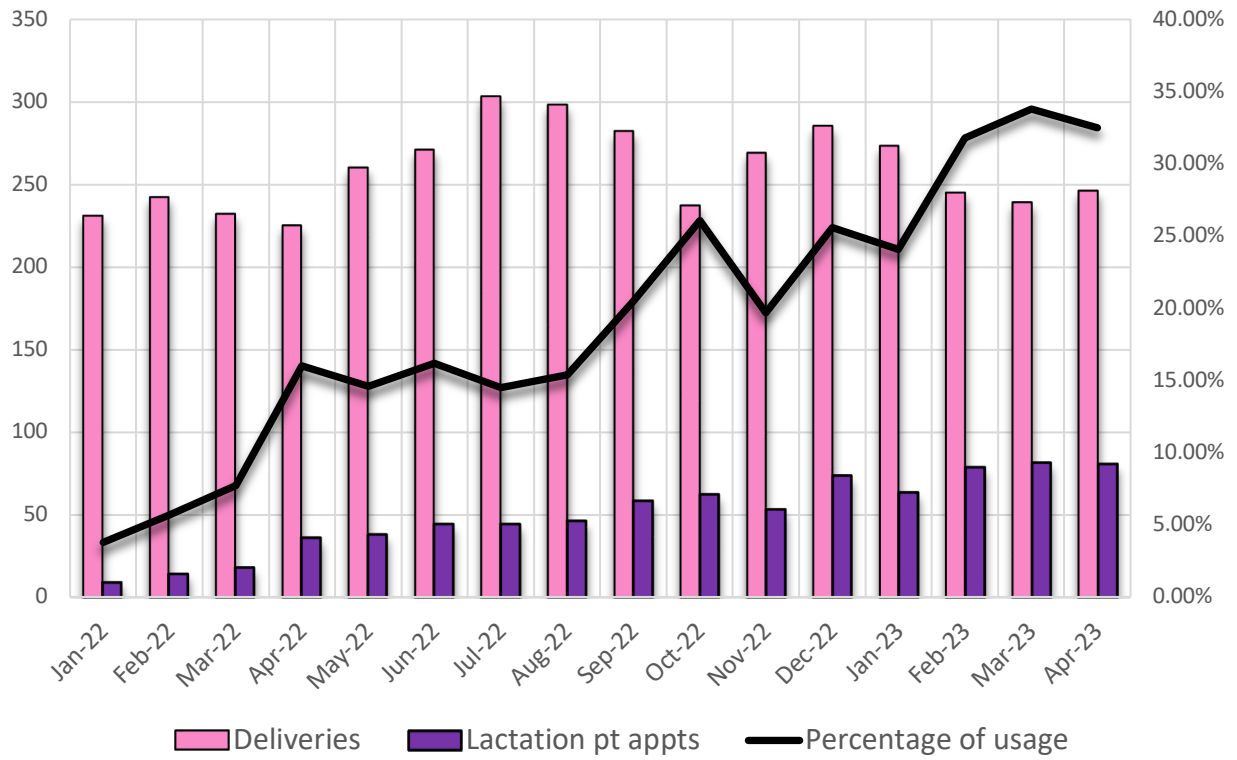
Appendix I

Timeline for Project Management



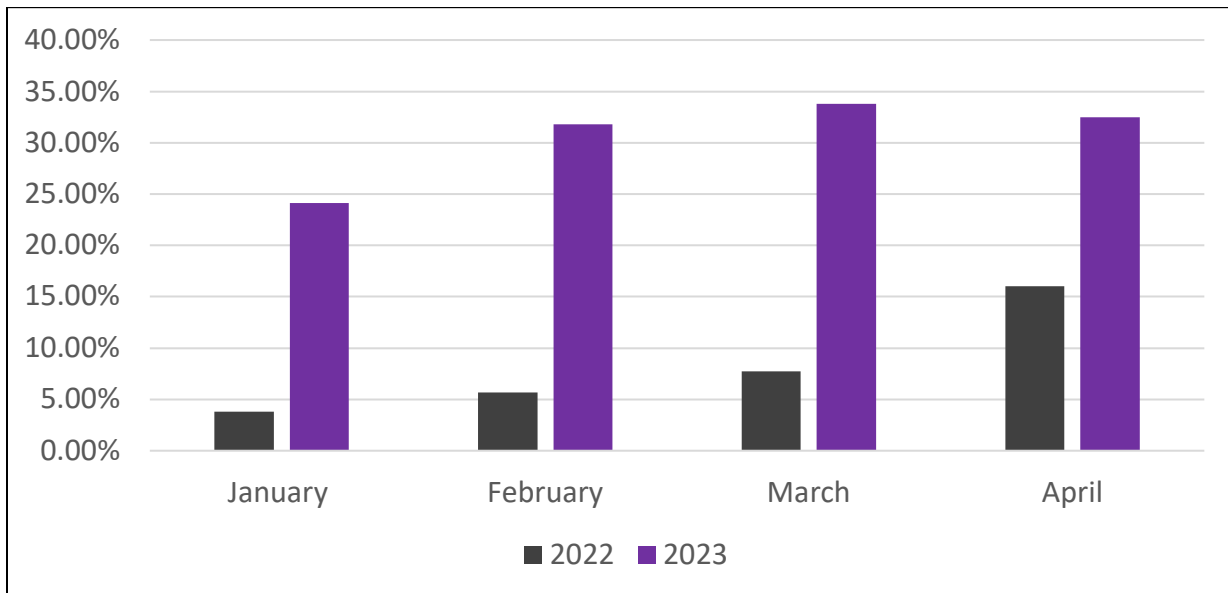
Appendix J

Monthly Patient Utilization of Breastfeeding Clinic



Appendix K

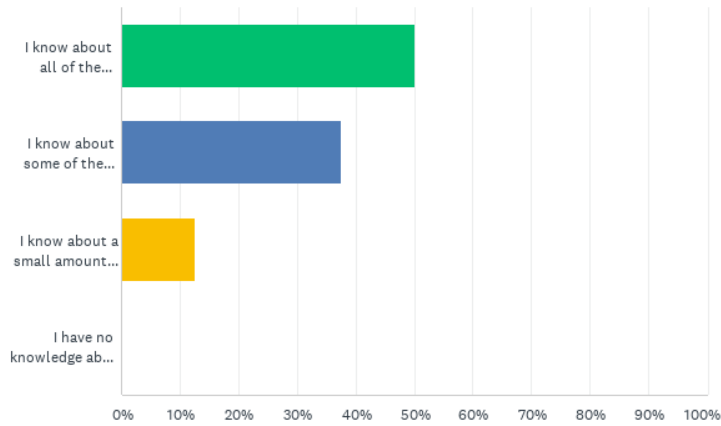
Quarterly Patient Utilization Rates



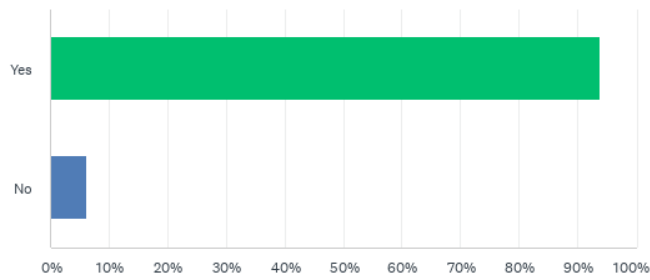
Appendix L

Pre-Implementation Survey Results

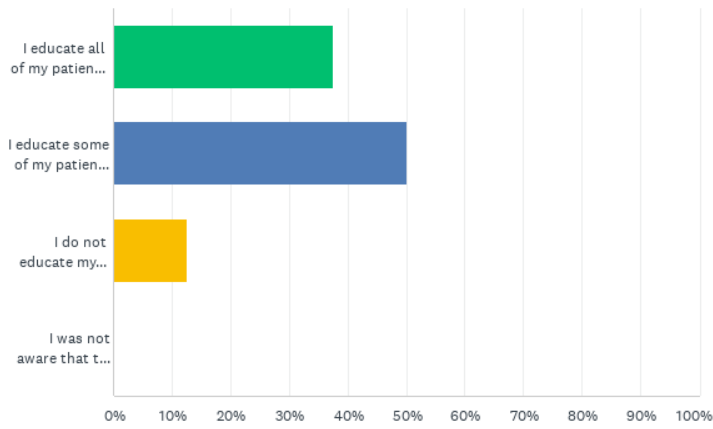
Q1 Do you have any knowledge about the lactation resources available at this hospital?



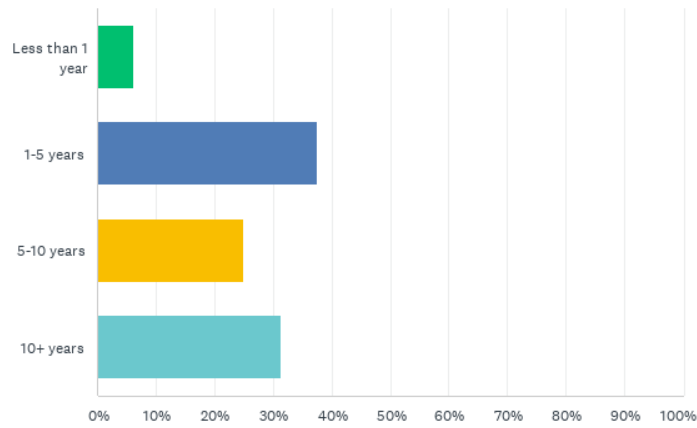
Q2 Are you aware there is a postpartum lactation clinic available to all patients?



Q3 Do you educate your patients about the postpartum lactation clinic?

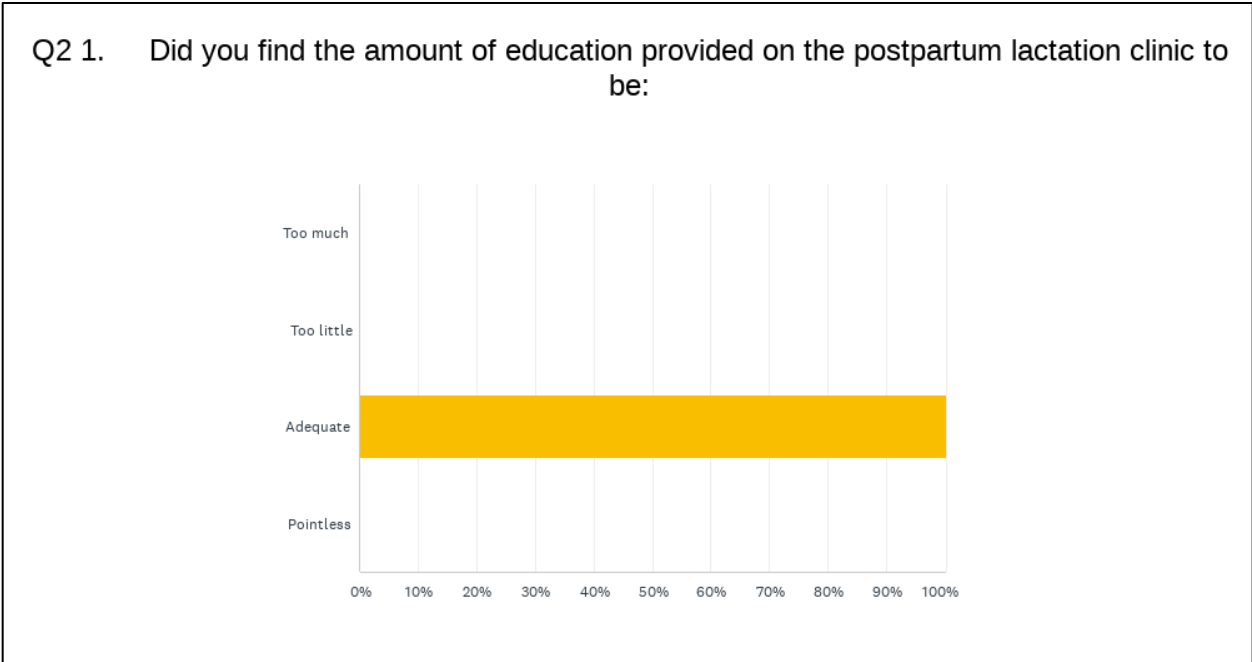
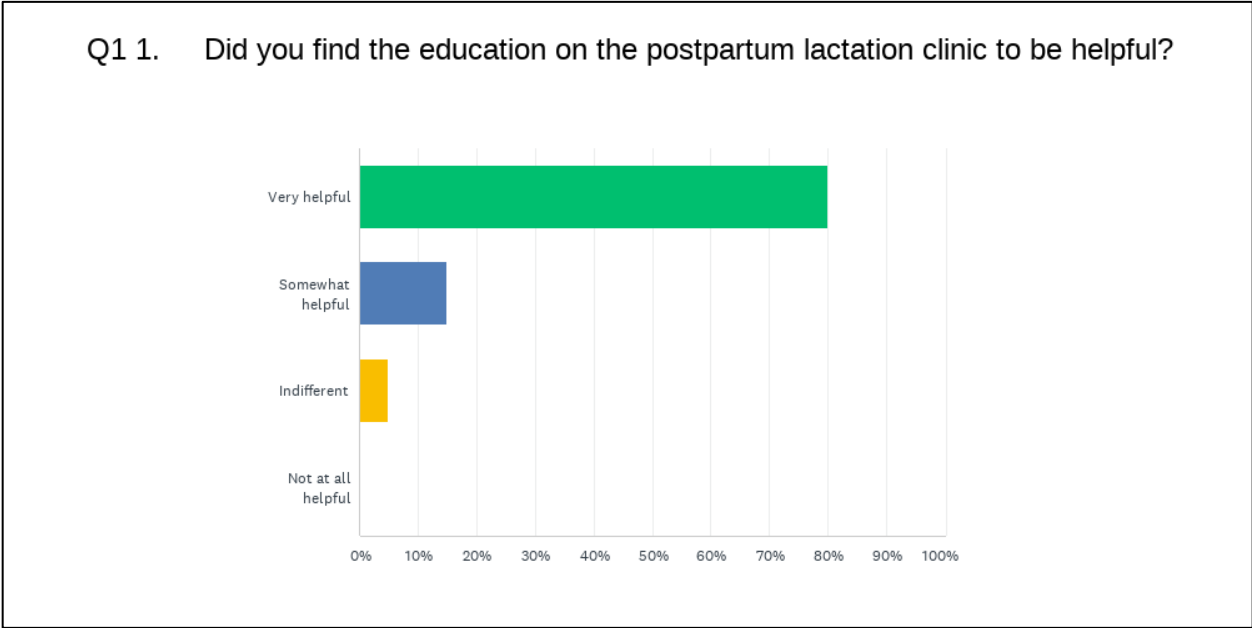


Q4 How many years of nursing experience do you have?

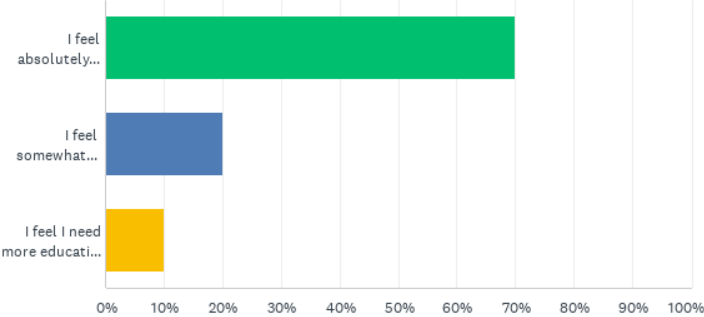


Appendix M

Post-Implementation Survey Results



Q3 1. Do you now feel prepared to educate your patients on the postpartum lactation clinic?



Appendix N**Itemized Budget for Supplies**

Chips	\$19.89 (2)
Fruit Snacks	\$10.69
Milano Cookies	\$11.69
Assorted cookies	\$12.99
Mini muffins	\$10.49 (2)
Rice crispy treats	\$9.99
Giardelli chocolates	\$4.97
Reese's PB eggs	\$19.99
BeVita bars	\$13.78
Mini Muffins	\$10.78 (2)
Munchies chips	\$14.54
Cookie variety pack	\$13.98
Avery square labels	\$9.92
Avery round labels	\$8.24 (2)
Three-ring binder	\$3.92
Three-ring binder	\$4.59
Starbucks gift cards	\$60.00
Target gift cards	\$40.00
Total	\$329.85

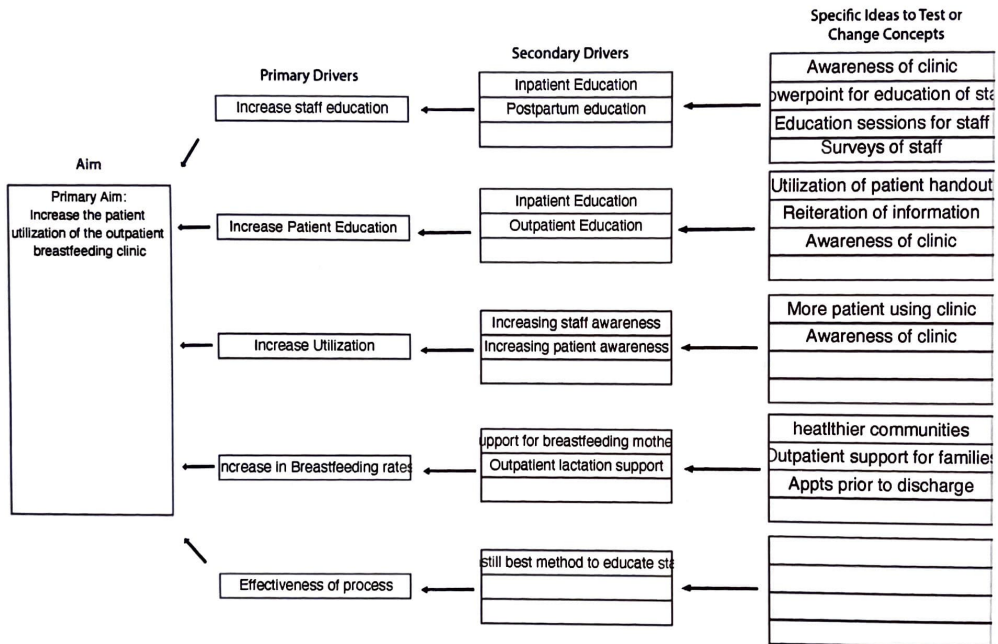
Appendix O

Driver Diagram

QI ESSENTIALS TOOLKIT: Driver Diagram

Before filling out the template, first save the file on your computer. Then open and use that version of the tool. Otherwise, your changes will not be saved.

Template: Driver Diagram



Appendix P

Project Management Worksheet (Form 8274.A)

FORM 8274.11

Project Management Strategy

(this form should be completed while meeting with your site champion(s) & should contain specific detailed information)

Student's Name Heather Szeles, BSN, RNC-OB

Project Site Champion Jessica Schaefer, MSN, FNP-C

Project Name Increasing Service Utilization of An Outpatient Breastfeeding Clinic

What data will you be collecting? Patient demographics such as age, ethnicity, breastfeeding plan; number of live births recorded by the hospital; number of patients utilizing the breastfeeding clinic; number of patients with appointments in the clinic before leaving the hospital

Where will you get the data? Site Champion can pull data; the facility tracks this data

How often will you be at the project site? Weekly during implementation then every 2 weeks

How often will you meet with your site champion? Weekly during implementation; then every 2 weeks

What is the implementation methodology, theory, framework, etc. that you are using to guide you through the implementation phase of the project?

The knowledge to action theory was used as a framework. This organization also employs a transformational concept for leadership.

Why did you select this tracking tool/method? Succinctly and thoroughly tell faculty why this seemed like the optimal tool/method.

This method was chosen because the organization is a transformational organization that employs transformational leadership and supports a framework of knowledge to action supporting the best evidence translated into clinical practice. This organization emulates collective change with a mission and vision that dictate its priorities, an organizational culture that reproduces its values and customs, operates with a structure that encompasses patient care, and has an infrastructure that supports evidence-based practice and information technology that fuels the delivery of care to patients.

ProjectManagementStrategy.tillman.8/01/2021 1

What tools will you use to track implementation and data (SBAR, PDSA, Excel tracking form, etc)?

Run Chart, Excel Tracking Form, Histogram

Why did you select this tool or method? Succinctly and thoroughly tell faculty why this seemed like the optimal tool/method.

An excel tracking form was chosen to easily categorize, streamline, and organize data along with time frames.

A Run Chart was chosen due to its simplicity in comparing different trends in the pre-implementation and post-implementation phases.

A Histogram was chosen because the time periods can be compared to each other, or the number of patients giving birth vs those that utilize the outpatient breastfeeding clinic.

How will you communicate changes and project status to each member of your project team – academic and team members with the project site?

I will communicate the status of this project with my academic team with regular faculty meetings with my advisor. These meetings occur usually once a month each semester. I will also notify my faculty advisor if I need additional meetings via email or if I have specific questions.

My project site champion is available by phone, email, text, or workplace encounter. I have and will continue to be in constant contact with her. I convey any changes to her with email or text rapidly.

Complete the following dates and map these on a timeline (Google "timeline" and construct your **IMPLEMENTATION** timeline using Word, PowerPoint, or Excel)

Date Implementation began or will begin 1/16/23, 1/23/23.

*Labor & delivery manager will provide education to Labor staff on 1/23 due to Immersion schedule. I will follow up and present at the next staff meeting in February.

Date for meeting with site champion to discuss your chosen tools and timeline.

11/20/22, 1/10/23, 1/16/23

Discuss your plan(s) for meeting with the site champion (frequency, specific dates, phone vs face-to-face, etc). **Be as specific as possible.**

My project site champion is available by phone, email, text, or workplace encounter. I plan to meet with her face-to-face at least every 2 weeks. During the implementation phase, I will be on-site weekly for this project. I have scheduled myself for project days on Mondays throughout the semester. This makes implementation streamlined as staff meetings occur on Mondays. I plan on working with her at least every two weeks to collect and synthesize data at the facility. I will most likely be on the unit every Monday or every other Monday to check in with staff and my site champion and staff.

I have met with and discussed my tools and implementation plan with my site champion. We are in agreement with the implementation plan.

Student Signature _____ Date 1/14/23

Site _____

Site Champion Signature _____ Date 1/16/23

Appendix Q

Project Management (Form 8274.B)

FORM 8274.12

Project Management Report

Name Heather SzelesWere you able to collect the data you thought you'd collect? Yes No If no, why not? Yes, with the initial survey. Implementation just started 1/16/23 and 1/23/23Did you meet with your site champion on the date(s) you had planned to meet? Yes No If not, why not? I was out of town 1/22-1/25 for Immersion. There have been extenuating circumstances as Jessica will be out of the unit for about another week to week and a half. Prior to 1/22 all planned meetings took place as scheduled.

Succinctly identify & discuss barriers to your implementation.

1. Immersion for NURS 8424. DRT testing occurred when I planned to educate the labor unit staff for this project. The manager and site champion had to give the education. I am following up and checking in at the next staff meeting in February.
2. Balancing weekly check-ins with staff and getting staff to buy into this project.
3. Arranging the educational sessions was a feat, there are so many changes occurring in the units currently.
4. Ensuring ways to have a process to evaluate the intervention.

Did you update/revise your tools (PDSA, data collection tools, etc.)? Yes No

If No, why not? _____

Yes. Evaluation has been a work in progress along with a schedule for PDSA cycles

What date(s) were you at your project site during this implementation interval (face-to-face or virtually)?

Jan 16, 2023; Jan 23, 2023 (site champion and mgr on this date); Next date 2/13/23 and 2/27

Succinctly identify 1-3 things you've learned during this implementation interval.

1. Implementation is hard and can be very challenging, especially with multiple parties at stake.
2. The process needs a systematic way of evaluation to evaluate the effectiveness of the intervention.
3. Intervals of intervention re-evaluation are needed.

Statement of Collaboration

We have collaborated on the project process, needed revisions, and implementation strategies and agree that this project is on target with the timeline. As needed, provide additional comments on the following page.

Student Signature _____ Date 1/27/23

Site Champion Signature _____ Date 1/27/23

Appendix R

Project Management Report (Form 8274.B)

FORM 8274.12

Project Management Report

Name Heather SzelesWere you able to collect the data you thought you'd collect? Yes No

If no, why not?

Did you meet with your site champion on the date(s) you had planned to meet? Yes No

If not, why not? _

Succinctly identify & discuss barriers to your implementation.

1. Ensuring ways to have a process to evaluate the intervention.
2. Time management. This is always a struggle but has improved in the last 2 weeks.
3. Staff reception is always a barrier to any implementation process.

Did you update/revise your tools (PDSA, data collection tools, etc.)? Yes No

If No, why not? _____

Yes, Evaluation has been a work in progress along with a schedule for PDSA cycles.

New plan: Email staff to let them know about binder with check offs at Charge RN desk. Audit book 1-2 times a week. Also let staff know about incentives like starbucks gift cards, target gift cards, or hospital coffee shop gift cards for those that sign off that they have given their education the most. Top 3 from nights and top 3 from days

Plan B: after 2-4 weeks if adherence to check offs in book is not a popular choice, I will individually meet with RNs throughout the shifts to check them off for process evaluation.

Plan C: smart note with chart audits but this may not even be feasible. I need to email the magnet coordinator to see if data can be pulled and assembled.

What date(s) were you at your project site during this implementation interval (face-to-face or virtually)?

Jan 16, 2023; Jan 23, 2023 (site champion and mgr on this date); Next date 2/13/23 and 2/27

Succinctly identify 1-3 things you've learned during this implementation interval.

1. Originally, I did not think the nurses would fill out the log books but they are recording their education.
2. Staff is filling out the logbooks for tracking.
3. Implementation seemed to go more smoothly each time the education was given.

this project is on target with the timeline. As needed, provide additional comments on the following page.

Student Signature

[Redacted Signature]

Date 3/2/2023

Site Champion Signature

[Redacted Signature]

Date 3/2/2023

Comments

Please share addition thoughts/notes on progress, barriers, concerns, etc.

My thoughts are –

Appendix S

Project Implementation Report Form 8274.C

FORM 8274.13

1

FORM 8274.13

DNP Project Implementation Summary Report

Increasing Service Utilization of an Outpatient Breastfeeding Clinic

Heather Szeles

College of Nursing, East Carolina University

Doctor of Nursing Practice Program

Dr. Terri Isaacs

April 14, 2023

FORM 8274.13

2

Project: Increasing the Utilization of an Outpatient Breastfeeding Clinic**Problem Statement**

Limited resources may prevent new mothers from obtaining adequate care and support for exclusively breastfeeding. Community rates of exclusively breastfed infants may improve through increased utilization of outpatient breastfeeding clinic services. Increased community engagement may lead to clinic sustainment and expansion of services.

Aims

This project mainly proceeded as intended. This project aimed to increase the utilization of an outpatient breastfeeding clinic. The process of increasing patient utilization was to educate the staff so they could educate their patients on the breastfeeding clinic.

Facilitators

Several beneficial factors helped implement this project. One positive factor was that almost every staff member was incredibly receptive and open to educating their patients. They were willing and eager to help provide this to their patients. Another facilitator was that there was a very well-established core group of lactation consultants that also supported this project. The organization and unit management was also highly encouraging and supportive throughout this project.

Problems

Implementation did not proceed as initially planned. Based on the original timeline, implementation should have occurred in December 2022; however, it was moved to January and February 2023. This was due to staff meetings, holiday schedules, and a new division of units. The implementation of the education was to take place at the staff meetings of the labor and delivery and the mother-baby units. The labor and delivery and mother-baby units recently split into two units in early January. This created extra steps in educating the staff members, along with the project goals and procedures. Additionally, one of the staff meetings occurred during a mandatory testing time for this student; therefore, the site champion and manager provided an initial introduction to the education for the labor unit.

Barriers

Barriers to implementation were increased workload for staff, along with the coordination of schedules with multiple managers due to the newly divided units. In December 2022, the labor and delivery and mother-baby units were managed with one staff meeting; however, in January, they began having separate staff meetings. Implementation had to occur for both units. The project's aims, goals, and expectations were introduced, and education was provided at two staff meetings for each unit. Staff was then asked to log and record the de-identified patients to whom they provided education. This process evaluation step was added after the first staff meeting. If this process were to be repeated, it would have been introduced at the initial staff meeting and continued through the next staff meeting.

Logging patients in a hard copy binder, as opposed to the electronic medical record (EMR), proved to be a barrier for staff. After two weeks of this process, staff decreased their logging of

FORM 8274.13

3

patients. Individual staff members were met with on an informal basis during their shifts to discuss their education with their patients. Most of the staff were educating their patients on the outpatient breastfeeding clinic; however, they needed to log these patients. Incentives were offered and delivered, which provided a slight increase in the staff logging of patients at week four.

Due to the lack of set schedules and floor nursing, another barrier was the lack of consistency in meetings with staff. One option to streamline the process would be to incorporate a button or click box into the EMR for ease of use and adherence.

Meetings

The total number of meetings with the site champion was 12. There were numerous virtual or impromptu meetings. Twelve meetings were formal throughout the project. Random individual staff members were met with on a weekly or bi-weekly basis in the later stages of the process evaluation to assess adherence to the education goals. Staff members were the population of focus for the project. They also provided education to the patients on the outpatient breastfeeding clinic.

Continuation of this project

The organization has no plans to discontinue the outpatient lactation clinic. They do plan to continue to have their nursing staff educate their patients on the outpatient breastfeeding clinic. They plan to continue this community resource.

Organizational changes that need to occur for this project to continue past this semester would be to continue to educate new hires and nursing staff on providing this education to their patients. Other options would be incorporating staff education from the partnering pediatric offices. This project is sustainable as there is already a unit coordinator, several lactation consultants, a provider, educated staff members, and an established presence in the community.

The patients and local community were the biggest beneficiaries of this project. Ultimately, they experience a greater community resource and increased quality of care if supported in their lactation goals. This may result in a healthier community overall.

Final thoughts and recommendations

One suggestion would be to add a checkbox in the education section or the patient intake database section of the EMR. This would streamline and make the process trackable and measurable. Additionally, this may help ensure that all patients receive this education as the standard for this facility.

Appendix T

East Carolina University

DNP Program Outcomes

Clinical is defined by the East Carolina University College of Nursing as:
Those experiences that DNP students engage in as they develop expertise and transition to achieve DNP student learning outcomes.

All clinical activities must relate to the DNP Program Outcomes.

The graduate of the DNP Program should be able to meet the Program Outcomes regarding ability to:

- 1) Integrate nursing science with knowledge from ethics, the biophysical, psychosocial, analytical, and organizational sciences as the basis for the highest level of nursing practice.
- 2) Demonstrate organizational and systems leadership for quality improvement in health care systems.
- 3) Apply clinical scholarship and analytical methods to evidence-based practice.
- 4) Use information systems technology and patient care technology to improve and transform health care.
- 5) Demonstrate leadership in health care policy for advocacy in health care.
- 6) Collaborate with interprofessional and intraprofessional teams to improve patient and population health outcomes through the application of evidence based health resources.

Appendix U

DNP Project Poster

Increasing Service Utilization of an Outpatient Breastfeeding Clinic

Heather Szeles, BSN, DNP Student, FNP-C, RNC-OB

PROBLEM	MAJOR FINDINGS	RESULTS																					
<ul style="list-style-type: none"> Lack of support for mothers in postpartum period Scarcity of evidence on outpatient breastfeeding support and services Deficit of support after discharge from hospital Deficiency of knowledge among staff 	<div style="text-align: center;"> <p>Quarter 1 2022 vs Quarter 1 2023</p> <table border="1" style="margin: 0 auto;"> <tr> <th>Quarter</th> <th>Patients</th> </tr> <tr> <td>JAN-APR 2022</td> <td>77</td> </tr> <tr> <td>JAN-APR 2023</td> <td>376</td> </tr> </table> </div> <div style="text-align: center; margin-top: 10px;"> <p>Patient Utilization Rates</p> <table border="1" style="margin: 0 auto;"> <tr> <th>Month</th> <th>2022 (%)</th> <th>2023 (%)</th> </tr> <tr> <td>January</td> <td>~4.00%</td> <td>~24.00%</td> </tr> <tr> <td>February</td> <td>~6.00%</td> <td>~32.00%</td> </tr> <tr> <td>March</td> <td>~8.00%</td> <td>~34.00%</td> </tr> <tr> <td>April</td> <td>~16.00%</td> <td>~32.00%</td> </tr> </table> </div>	Quarter	Patients	JAN-APR 2022	77	JAN-APR 2023	376	Month	2022 (%)	2023 (%)	January	~4.00%	~24.00%	February	~6.00%	~32.00%	March	~8.00%	~34.00%	April	~16.00%	~32.00%	<ul style="list-style-type: none"> Use of the outpatient breastfeeding clinic significantly improved in Quarter 1 (Q1) 2023 compared to Q1 2022 In Q1 2022, 77 out of 930 patients used clinic, whereas 376 out of 1003 used clinic in Q1 2023 The utilization rate for Jan-Apr 2022 was 8% compared to the utilization rate during the implementation period of Jan-Apr 2023 of 37%
Quarter	Patients																						
JAN-APR 2022	77																						
JAN-APR 2023	376																						
Month	2022 (%)	2023 (%)																					
January	~4.00%	~24.00%																					
February	~6.00%	~32.00%																					
March	~8.00%	~34.00%																					
April	~16.00%	~32.00%																					
<div style="text-align: center; background-color: #4B0082; color: white; padding: 2px 5px;">PURPOSE</div> <ul style="list-style-type: none"> Improve utilization of outpatient breastfeeding resources through educational interventions for staff Goal was to increase utilization of outpatient clinic in order to help mothers meet their goals of breastfeeding, Healthy People 2030 	<div style="text-align: center; background-color: #4B0082; color: white; padding: 2px 5px;">BARRIERS</div> <ul style="list-style-type: none"> Increase in workload and tasks for nurses Physical log book versus check box in electronic medical record (EMR) Inpatient unit restructuring at the start of the implementation phase Staffing, turnover, and temporary staff 	<div style="text-align: center; background-color: #4B0082; color: white; padding: 2px 5px;">IMPLICATIONS</div> <ul style="list-style-type: none"> For nurses: Incorporate standardized teaching for every patient; reinforce education to patients given by lactation staff For patients: Increase in community breastfeeding rates, maternal support, and resources For organizations: Sustainable resource and increased health of the community 																					
<div style="text-align: center; background-color: #4B0082; color: white; padding: 2px 5px;">METHODOLOGY</div> <ul style="list-style-type: none"> Knowledge to Action (KTA) framework and Plan-Do-Study-Act (PDSA) model for rapid cycle change Pre-implementation staff survey with Quick Response (QR) code Staff Education to increase knowledge of clinic Process evaluation with log-books, weekly staff check-ins Incentives: snacks for all nurses, \$10 gift cards for top 3 day/night shift nurses Post-implementation staff survey with QR code 	<div style="text-align: center; background-color: #4B0082; color: white; padding: 5px;"> <p style="font-size: small; margin: 0;">Special Acknowledgements to Dr. Terri Isaacs, DNP Faculty Advisor Jessica Schafer, MSN, FNP-C, Site Champion</p> </div>																						

COLLEGE OF NURSING

heatherszelesrn@gmail.com