Executive Summary:

Optimizing Breastfeeding in a Family Practice Office: A Quality Improvement Initiative to Promote Breastfeeding Support

Roslyn Padgett, MSN, MPH, DNP Student, RN, FNP-BC, IBCLC

College of Nursing, East Carolina University

Doctor of Nursing Practice

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Summary of Key Findings

- An online program is an effective approach for lactation education among clinicians, enhancing their ability to support breastfeeding and to increase breastfeeding rates.
- Clinicians found that *HUG Your Baby, the Roadmap to Breastfeeding Success* online program, was convenient, easy to use, evidence-based, and recommended for others.
- The program supports efforts to meet and align with the Surgeon General's Call to Action to Support Breastfeeding (U.S. Department of Health and Human Services, 2011), Healthy People 2030 breastfeeding goals (Office of Disease Prevention and Health Promotion, n.d.-a, n.d.-b), the Baby-Friendly USA Ten Steps to Successful Breastfeeding (Baby-Friendly USA, 2025), the Breastfeeding-Friendly Pediatric Office Practice Recommendations (Meek and Hatcher, 2017), all elements of the Quadruple Aim (Bodenheimer and Sinsky, 2014), and the components of the Tri-Core Breastfeeding Conceptual Model (Busch et al., 2014).
- The program successfully restored a breastfeeding education and support pathway in this primary care clinic while emphasizing the need for adaptive strategies to reach families.
- Any program chosen by a primary care office for family education and support, including an online program, must be tailored to meet the family's needs, taking into account parity and breastfeeding experience.

Background

The benefits of breastmilk and breastfeeding for the infant, mother, family, society, and environment drive ongoing efforts to prioritize breastfeeding in primary care. Breastfeeding acts as a societal equalizer (World Alliance for Breastfeeding Action, 2024); ensuring that every mother and child have access to breastfeeding opportunities and the support needed to experience its health benefits is supported by data showing that rates of exclusive and continued breastfeeding in the United States are significantly below the goals set by the World Health Organization (n.d.) and Healthy People 2030. This suggests that a substantial portion of the population is deprived of this benefit. As a public health concern, this issue calls for our strongest promotional efforts. Primary care clinicians are in a powerful position to influence families' infant feeding choices, with significant short- and long-term effects for both infants and their families.

Local Problem and Purpose

A family practice clinic on the campus of a software company in North Carolina has provided primary care and lactation education and support services to families for decades. Clinicians have faced challenges such as low attendance at onsite classes, evolving parental learning preferences, outdated recordings, and limited time to develop new programs. These issues have created gaps in breastfeeding education that clinicians notice daily. As a result, a project was initiated with the purpose of implementing an online breastfeeding education and support program at this office from January to April 2025.

Methodology

The online program selected as the intervention was HUG Your Baby (HYB), the Roadmap to Breastfeeding Success, an award-winning program developed by a family nurse practitioner and lactation consultant (Tedder, 2015, 2024). It features two components:

1. Clinicians are trained through an online course on the fundamentals of breastfeeding and how outcomes are affected by parental and clinician interpretation of normal infant behaviors and developmental processes. Misinterpreting breastfeeding as the cause of these behaviors can result in unnecessary formula supplementation, interruption of breastfeeding, or complete cessation.
2. Direct online support for families through HYB's customized Digital Parent Resource Page (DPRP), which includes videos, newsletters, links to other important websites, a Roadmap graphic, a recorded breastfeeding class, and a live, once-monthly Zoom breastfeeding session with the HYB program creator.

A quality improvement design methodology was employed, guided by the Iowa Model of Evidence-Based Practice as the implementation framework and the Tri-Core Breastfeeding Model as the conceptual framework, to deliver the program to participants: six registered nurses, six family nurse practitioners, and 14 families (Iowa Model Collaborative, 2017).

During the implementation process, clinicians received training, pre- and post-tests, Roadmap posters for their exam rooms, Roadmap postcards for families, and written talking points along with step-by-step instructions to support families. Families received standard care and were encouraged to use the HYB DPRP. They were given Roadmap postcards that included written explanations of the program, QR codes, and URLs to access the DPRP. Clinicians helped families access the site on their phones while in the office. At each visit, families received the same postcards and were gently reminded about the program. Finally, data were collected from families, and surveys were administered. Additional information was gathered through DPRP visit counts and the collection of clinician and parent demographics.

Results

Testing clinicians before and after training revealed improvements in their knowledge, confidence, and intentions to teach families about infant behaviors and developmental processes that could otherwise interfere with breastfeeding.

Among the 14 families, 71% were multiparous and had previous breastfeeding experience. The scores for breastfeeding self-efficacy and intention to breastfeed were high. All families initiated and continued breastfeeding, with 71% exclusively nursing and four partially nursing. This descriptive data was collected for context and was not meant to assess any correlation with the use of HYB. There were 174 DPRP visits recorded; however, only three families reported accessing the site, highlighting a gap between access and actual use among the families.

Strengths and Limitations

A motivated team, a supportive director, a skilled content expert, and a high-quality program drove the implementation of this project. The project re-established clinic-based breastfeeding education to strengthen the support already offered at the site. Additionally, this initiative laid the groundwork for future QI efforts.

Barriers to using the HYB program included parental time constraints, prior breastfeeding experience, and Wi-Fi issues for families in the office; organizational changes such as retirements and role shifts may have diverted attention from the project. Generalizability was limited by the small sample size, brief implementation period, homogeneity among clinicians and family participants, and the baseline services offered by the project site compared to those typically available in a primary care setting.

Implications For Practice and Conclusion

For those replicating this project, consider reducing the number of surveys or limiting them to collecting demographics during the pilot phase. Starting with a smaller pilot team could make implementation and tracking easier. Use of HYB Roadmap posters in exam rooms and Roadmap postcards has been helpful and should be maintained. Enhance program visibility by utilizing waiting room and pharmacy TVs, creating company-wide videos for the internal web, and displaying brief HYB videos during family waits in exam rooms. Using auto-texts and built-in reminders could boost DPRP visits.

Online training effectively improves clinicians' ability to support breastfeeding, normalize the practice, and increase breastfeeding rates. This project was the first to implement HYB in a primary care clinic, providing valuable insights for broader adoption in various practice settings, including family medicine, pediatrics, obstetrics and gynecology offices, and underserved communities.

The literature emphasizes the critical role of primary care providers in supporting breastfeeding (Bibbins-Domingo et al., 2016; Kehinde et al., 2023; Meek and Hatcher, 2017; Spatz, 2020; Vanguri et al., 2021). Although greater involvement was expected, family use of resources was lower than anticipated. Future research should focus on strategies to enhance prenatal engagement, encourage families to utilize available resources, integrate breastfeeding education into routine care, and identify best practices for sustaining program participation. Additionally, examining the educational and support needs of multiparous versus primiparous families is necessary to customize marketing and make program adjustments to address their specific needs. Experimental studies could more effectively evaluate the program’s impact on feeding intentions, breastfeeding self-efficacy, and breastfeeding rates.

References

Baby-Friendly USA. (2025). *10 steps & international code.* Retrieved July 10, 2025, from https://www.babyfriendlyusa.org/for-facilities/practice-guidelines/10-steps-and-international-code/

Bibbins-Domingo, K., Grossman, D. C., Curry, S. J., Davidson, K. W., Epling, J. W., Garcia, F. A. R., Kemper, A. R., Krist, A. H., Kurth, A. E., Landefeld, C. S., Mangione, C. M., Phillips, W. R., Phipps, M. G., & Pignone, M. P. (2016, October 25). Primary care interventions to support breastfeeding, US Preventive Services Task Force Recommendation Statement. *JAMA, 316*(16), 1688-1693. https://doi.org/10.1001/jama.2016.14697

Bodenheimer, T., & Sinsky, C. (2014). From triple to quadruple aim: Care of the patient requires care of the provider. *Annals of Family Medicine, 12*(6), 573-576. https://doi.org/10.1370/afm.1713

Busch, D. W., Logan, K., & Wilkinson, A. (2014, December). Clinical practice breastfeeding recommendations for primary care: Applying a Tri-Core Breastfeeding Conceptual Model. *Journal of Pediatric Health Care, 28*(6), 486-496. http://doi.org/10.1016/j.pedhc.2014.02.007

Iowa Model Collaborative. (2017). Iowa model of evidence-based practice: Revisions and validation. *Worldviews on Evidence-Based Nursing, 14*(3), 175-182. https://doi.org/10.1111/wvn.12223

Kehinde, J., O'Donnell, C., & Grealish, A. (2023). The effectiveness of prenatal breastfeeding education on breastfeeding uptake postpartum: A systematic review. *Midwifery, 118*(2023), 1-37. https://doi.org/10.1016/j.midw.2022.103579-0266-6138/

Meek, J. Y., & Hatcher, A. J. (2017, May). The breastfeeding-friendly pediatric office. *Pediatrics, 139*(5). https://doi.org/10.1542/peds.2017-0647

Office of Disease Prevention and Health Promotion. (n.d.-a). U.S. Department of Health and Human Services. Healthy People 2030. *Increase the proportion of infants who are breastfed exclusively through age 6 months—MICH-15.* Retrieved July 10, 2025, from https://odphp.health.gov/healthypeople/objectives-and-data/browse-objectives/infants/increase-proportion-infants-who-are-breastfed-exclusively-through-age-6-months-mich-15

Office of Disease Prevention and Health Promotion. (n.d.-b). U.S. Department of Health and Human Services. Healthy People 2030. *Increase the proportion of infants who are breastfed at 1 year—MICH-16.* Retrieved July 10, 2025, from https://odphp.health.gov/healthypeople/objectives-and-data/browse-objectives/infants/increase-proportion-infants-who-are-breastfed-1-year-mich-16

Spatz, D. L. (2020, May/June). Changing the prenatal care paradigm to improve breastfeeding outcomes. *Maternal Child Nursing, 45*(3). https://doi.org/10.1097/NMC.0000000000000619

Tedder, J. (2015). The roadmap to breastfeeding success: Teaching child development to extend breastfeeding duration. *The Journal of Perinatal Education, 24*(4), 238-248. https://doi.org/10.1891/1058-1243.24.4.239

Tedder, J. (2024). *Help, understanding, guidance for young families, evidence-based, family-friendly program for today's parents and the professionals who serve them!* H.U.G. Your Baby. https://www.hugyourbaby.org/hug-history

U.S. Department of Health and Human Services. (2011, January 20). *Executive summary: The surgeon general's call to action to support breastfeeding.* https://www.hhs.gov/sites/default/files/breastfeeding-call-to-action-executive-summary.pdf

Vanguri, S., Rogers-McQuade, H., Sriraman, N. K., & the members of the Academy of Breastfeeding Medicine. (2021). ABM clinical protocol #14: Breastfeeding-friendly physician's office—optimizing care for infants and children. *Breastfeeding Medicine, 16*(3), 1-10. https://doi.org/10.1089/bfm.2021.29175.sjv

World Alliance for Breastfeeding Action. (2024). *World breastfeeding week 2024, closing the gap, breastfeeding support for all*. https://worldbreastfeedingweek.org/2024/

World Health Organization. (n.d.). *Breastfeeding.* Retrieved July 10, 2025, from https://www.who.int/health-topics/breastfeeding#tab=tab_2