

## INTERVENTION

### The North Carolina Maternity Center Breastfeeding-Friendly Designation

North Carolina Division of Public Health: Nutrition Services Branch



## INTENT OF THE INTERVENTION

The North Carolina Maternity Center Breastfeeding-Friendly (NCMCBF) Designation Program encourages hospitals and maternity centers across the state to promote and support breastfeeding by facilitating changes that result in the incremental adoption of the Baby-Friendly Hospital Initiative's *Ten Steps to Successful Breastfeeding*. The NCMCBF Designation Program is designed to change maternity center environment, policies and practices by affecting breastfeeding social norms (short term outcome) and improving breastfeeding initiation, duration and exclusivity (long term outcome). The NCMCBF Designation Program targets the organizational level of the socio-ecologic model.

The North Carolina Maternity Center Breastfeeding-Friendly Designation Program is a practice-tested intervention.

## OVERVIEW

The North Carolina Maternity Center Breastfeeding-Friendly (NCMCBF) Designation Program encourages hospitals and maternity centers across the state to promote and support breastfeeding. The North Carolina Division of Public Health established a five star recognition system based on the *Ten Steps to Successful Breastfeeding* as defined by the World Health Organization (WHO) and Baby-Friendly USA (to see the Ten Steps, go to **Additional Information** section). A hospital or maternity center is awarded one star for every two steps of the *Ten Steps to Successful Breastfeeding* that it achieves. The North Carolina designation program differs from the Baby-Friendly Hospital Initiative (BFHI) in that:

- it awards incremental recognition to support continuous quality improvement
- it does not require site visits
- it requires no fees

The North Carolina Division of Public Health developed the NCMCBF Designation Program based on findings from the breastfeeding work group of the North Carolina Child Fatality Task Force. Co-chairs of the breastfeeding work group met with the North Carolina Hospital Association (NCHA) to discuss workable solutions to improve breastfeeding support in hospitals and maternity centers. Feedback from the NCHA indicated the BFHI certification was difficult to achieve. The NCHA recommended establishing a program that was voluntary and would not single out any hospitals or maternity centers for not complying.

The breastfeeding work group completed a literature review. The evidence in the literature documented that for every two steps of BFHI implemented, there is improvement in outcomes. No research documented that any one step must precede another. Based on this information, the NCMCBF Designation Program was created to recognize hospitals and maternity centers for achieving any two or more steps of the BFHI. Which steps are achieved or in what order is not relevant.

After a facility receives its initial designation, it can reapply at any time to request the awarding of additional stars. Hospitals and maternity centers must re-apply every three years to maintain their designation in the program. The NCMCBF Designation Program is voluntary and endorsed by the NCHA and the North Carolina Pediatric Society. An expedited application is available for facilities that have already achieved BFHI designation.

**Intended population:** The primary audience is hospital administrators and maternity care staff (nurses and lactation consultants); the secondary audience is pregnant and perinatal women at participating hospitals and maternity centers.

**Setting:** Hospitals and maternity centers that serve pregnant and perinatal women.

**Length of time in the field:** Since 2010

## HEALTH EQUITY CONSIDERATIONS

The NCMCBF Designation Program reaches pregnant and perinatal women across North Carolina.

## CORE ELEMENTS

*This section outlines the aspects of an intervention that are central to its theory and logic and that are thought to be responsible for the intervention's effectiveness. Core elements are critical features of the intervention's intent and design and should be kept intact when the intervention is implemented or adapted.*

1. Engage stakeholders, including hospitals and maternity centers, to solicit feedback during the development/adaptation of the program and to create buy-in for the program.
2. Create or adapt standards, designation levels, a program application, and logo for the program, based on state or regional needs.
3. Assemble a review team that is knowledgeable in quality improvement, breastfeeding and the *Ten Steps to Successful Breastfeeding*.
4. Develop and implement a selection process for designation.
5. Distribute and make the program application available to hospitals and maternity centers.
6. Publicize the program through media outlets.
7. Provide a designation packet to all hospitals and maternity centers awarded designation.
8. Provide technical assistance and feedback to hospitals and maternity centers that express interest in the program, apply for the designation and/or are awarded designation.

## RESOURCES REQUIRED

**Staff:** Currently the North Carolina State Breastfeeding Coordinator spends approximately 5% of her time on NCMCBF Designation Program activities (5% FTE).

**Materials:** Supplies for designation packets: CDs, certificate paper, mailing costs

**Other Costs:** The NCMCBF Designation Program review committee provides their time as an in-kind donation for the formulation and continuation of the intervention.

## IMPLEMENTATION

### **Summary: How the Designation Program works**

Hospitals and maternity centers download an application from the North Carolina Maternity Center Breastfeeding-Friendly (NCMCBF) Designation Program page of the Nutrition Services Branch website ([www.nutritionnc.com](http://www.nutritionnc.com)). The application is submitted with supporting documentation demonstrating compliance with the requirements for each step in the application.

Using assessment criteria in the review tool, the NCMCBF Designation Program committee members review submitted applications. The assessment criteria and review tool is based on the BFHI self-appraisal tool, survey questions from the Centers for Disease Control and Prevention (CDC) Maternity Practices in Infant Nutrition and Care (mPINC) Survey, and on previous pilot work done through the Carolina Global Breastfeeding Institute (CGBI). Review committee members utilize the assessment criteria and review tool to determine the award level for NCMCBF Designation Program applicants.

Hospitals and maternity centers are awarded up to five stars based on the number of the Ten Steps they have achieved. Hospitals and maternity centers that receive a designation are provided a packet including a certificate of designation, logos to use in promotion of the designation, and a sample press release. These hospitals and maternity centers also receive recognition on the North Carolina Division of Public Health, Nutrition Services Branch website.

### **Below is an outline of steps to follow when planning a designation program:**

#### **Planning and Preparing**

- Convene meetings of state-level public health leaders to assess breastfeeding rates and policies in the state and to set priorities for action.
- Engage stakeholders, including hospitals and maternity centers, to solicit feedback about identified barriers and keys to success in implementing breastfeeding-friendly policies at the facility level.
- Consider the hospitals' and maternity centers' needs when designing and implementing the program.
- Create or adapt standards, designation levels, a program application, and logo for the program, based on state or regional needs and the organizational capacity of the implementing group (in this case, the North Carolina Division of Public Health).
- Develop and implement a selection process for designation. The NCMCBF Designation Program assessment tool is based on the BFHI self-appraisal tool, CDC mPINC Survey questions, and previous pilot work from CGBI.
- Create packet of materials to be provided to hospitals and maternity centers that are awarded designation.
- Allocate time for the State Breastfeeding Coordinator or other knowledgeable staff person to oversee the program.

### Soliciting and Reviewing Applications

- Post the application and detailed application instructions on the sponsoring agency's website.
- Publicize the program throughout the state using press releases and direct communication with hospitals and maternity centers.
- Use a standardized review process to award designations based on the hospitals' or maternity centers' applications and supporting evidence.
- Provide a designation packet to all hospitals and maternity centers awarded designation including: a letter stating the designation level awarded by the review team; a certificate of designation; a CD with logos for the level of designation; instructions for use of the logos; and a sample press release.
- Provide public recognition of all hospitals and maternity centers awarded designation on the sponsoring agency's website.

### Training and Technical Assistance

- Provide support and technical assistance for hospitals and maternity centers completing the application process.
- Contact each applicant via phone and/or email after the review. The follow-up contact provides an opportunity to gather additional information the review committee determined is needed to award a designation and to provide guidance on how the hospital or maternity center can improve a subsequent application. The NCMCBF Designation Program developers estimate a minimum of three technical assistance contacts are needed per application.

### Keys to Success:

- Obtain buy-in from stakeholders. The breastfeeding workgroup sought buy-in from the North Carolina Hospital Association, North Carolina Pediatric Society, and the North Carolina Child Fatality Task Force.
- Create the program to be voluntary versus mandatory.
- Provide post-review technical assistance calls to designated hospitals and maternity centers to build momentum for future submissions.
- Limit site visits or onsite technical assistance to reduce staffing costs. This measure allows the program to be administered by an existing staff position with a very small % FTE (full time equivalent) allocated to the NCMCBF Designation Program.
- Designate dedicated staff hours for technical assistance calls and follow-up.

## EVIDENCE REVIEW SUMMARY

### Strategies Used:

- **Maternity Care Practices in the Hospital Setting:** The North Carolina Maternity Center Breastfeeding-Friendly (NCMCBF) Designation Program encourages hospitals and maternity centers across the state to promote and support breastfeeding by facilitating changes that result in the incremental adoption of the Baby-Friendly Hospital Initiative's *Ten Steps to Successful Breastfeeding*.
- **Media Campaigns and Social Marketing Promoting Breastfeeding:** The NCMCBF Designation Program provides public recognition of hospitals' and maternity centers' efforts towards becoming breastfeeding-friendly, and provides free marketing to the public about these efforts. When a facility is awarded a star-level designation, the

North Carolina Division of Public Health sends the facility a designation packet that includes a certificate, a sample press release, and the NCMCBF Designation Program logo for marketing use. The logo is to be used to create brand awareness in hospitals and maternity centers and among health care providers, community partners, and the general public. In addition, the North Carolina Division of Public Health issues annual program press releases.

This intervention is also supported by the Guide to Clinical Preventive Services recommendation: “Interventions to promote and support breastfeeding have been found to increase the rates of initiation, duration, and exclusivity of breastfeeding.”

### **Formative work**

The North Carolina Division of Public Health completed extensive formative work to develop an approach for encouraging, supporting and promoting the steps outlined in the research-tested Baby-Friendly Hospital Initiative (BFHI) in North Carolina hospitals and maternity centers. In 2006, a working group of stakeholders convened to assess statewide prevalence of breastfeeding and effective options for improving those rates, publishing their findings in the 2006 Blueprint for Action. Building on this work, a breastfeeding subcommittee of the North Carolina Child Fatality Task Force began working on what would become the NCMCBF Designation Program. The subcommittee’s formative work included meeting with directors of the North Carolina Hospital Association to gain their perspective on barriers to implementing the BFHI in their facilities as well as brainstorming workable solutions to overcoming the barriers. In addition, a pilot study was conducted in six North Carolina hospitals to assess feasibility, effects, barriers, and facilitators related to implementation of each of the 10 steps of the BFHI. This pilot - Carolina Global Breastfeeding Institute’s Breastfeeding-Friendly Healthcare project - was designed to support North Carolina hospitals serving low-income populations. The pilot study resulted in 3 publications (see “Additional Information”). The study found that certain steps of the BFHI (step #s 1, 2, 4, 6, and 9) were associated with greater breastfeeding rates across settings. The pilot study also identified barriers and facilitators to success, which North Carolina Division of Public Health used to inform the development of the NCMCBF Designation Program. The NCMCBF Designation Program was launched in August 2010.

Unlike BFHI, NCMCBF Designation Program does not require a hospital or maternity center to complete all 10 steps to get recognized. Instead, this program uses a 5 star system that recognizes hospitals and maternity centers with a star for every two steps of BFHI they complete. The NCMCBF Designation Program does not require hospitals and maternity centers to participate in BFHI, which makes the program more affordable for hospitals and maternity centers but also eliminates the requirement that hospitals and maternity centers pass a site visit to receive accreditation.

### **Outcome Evaluation**

Evaluation of the impact of the NCMCBF Designation Program has focused on documenting the number of hospitals and maternity centers that apply for and receive stars (facilities are awarded one star for every two steps they achieve of the BFHI), and on reviewing statewide data that the CDC collects to track women’s and hospitals’ reports of breastfeeding practices.

To apply for stars, hospitals and maternity centers have to complete a detailed application form and provide documentation of their current policy and environmental supports for breastfeeding that match the requirements for specific steps in the BFHI. The number of facilities applying for and receiving stars in the NCMCBF Designation Program has increased

steadily since the project's inception in 2010. As of March 2014, of the 88 maternity center facilities in North Carolina, 30 received some level of star recognition in the NCMCBF Designation Program, including 10 facilities that reapplied for and received a higher star level from their initial designation. As of March 2014, there were two 1-star, seven 2-star, ten 3-star, seven 4-star, and four 5-star facilities in North Carolina.

The CDC collects facility-level breastfeeding data via the Maternity Practices in Infant Nutrition and Care (mPINC) survey, a national survey of maternity care practices and policies conducted every two years. Facilities' responses are scored using an algorithm developed and reviewed by experts in the field denoting the evidence and best practices to promote breastfeeding within the health care setting. These scores are then compiled into a summary rating, for which possible scores range from 0 to 100, with higher scores denoting better maternity care practices and policies. In North Carolina, the summary rating increased modestly from 61 to 67 between 2009 and 2011.

The CDC also publishes an annual Breastfeeding Report Card, which compiles information from several data sources on breastfeeding rates and hospital practices. Data from the CDC's Breastfeeding Report Card provide limited evidence of an increase in women's initiation of breastfeeding in North Carolina since the inception of the NCMCBF Designation Program. However, CDC data are for North Carolina as a whole and not just from those hospitals and maternity centers participating in the NCMCBF Designation Program, and therefore may not fully capture changes in women giving birth in those hospitals and maternity centers.

The North Carolina Division of Public Health has collected minimal data on the technical assistance it provides to hospitals and maternity centers when they apply for star designation.

## POTENTIAL PUBLIC HEALTH IMPACT

**Reach:** The intervention has potential for broad reach. In 2012, approximately 50.8% of babies born in North Carolina were born in a facility participating in the North Carolina Maternity Center Breastfeeding-Friendly (NCMCBF) Designation Program. However, rural residents have less access to 5-star facilities than urban residents.

**Effectiveness:** The number of facilities applying for and receiving stars has increased steadily since the project's inception in 2010. As of March 2014, of the 88 maternity center facilities in North Carolina, 30 received some level of star recognition in the NCMCBF Designation Program, including 10 facilities that reapplied for and received a higher star level from their initial designation.

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**Adoption:** As of March 2014, there were two 1-star, seven 2-star, ten 3-star, seven 4-star, and four 5-star facilities in North Carolina. Of 88 maternity facilities in the state, 30 have participated in the intervention. The facilities are dispersed relatively evenly throughout the state, with rural northeastern North Carolina having fewer facilities pursuing the designation than other parts of the state. Multiple other states have inquired about the program, and two are proceeding with implementation.

**Implementation:** The intervention involves an in-depth application process that could be readily replicated in other states. A state-level coordinator follows up each application with at least one technical assistance call to provide feedback to hospitals and maternity centers. The NCMCBF Designation Program may be attractive and feasible because it allows hospitals and maternity centers to achieve the BFHI steps incrementally, rather than all at once as required by BFHI. Facilities applying to the NCMCBF Designation Program incur no costs for participating in the program.

**Maintenance:** The North Carolina State Breastfeeding Coordinator spends 5% FTE (full time equivalent) to administer the program, which demonstrates strong potential for maintenance by state-level public health departments. Hospitals and maternity centers have to re-apply every three years to maintain their designation (i.e., stars) in the program.

## INTERVENTION MATERIALS

### Implementation and Intervention Materials: Links Available

- [NCMCBF Designation Program Application for hospitals and maternity centers](#)
- NCMCBF Designation Program Media
  - [North Carolina Hospital Association website link to NCMCBF Designation Program](#)
  - Official Press Releases from North Carolina Division of Public Health
    - [2010 NC Division of Public Health – NC Maternity Center Breastfeeding-Friendly Designation Press Release](#)
    - 2011 NC Department of Health and Human Services – NC Maternity Center Breastfeeding-Friendly Designation Press Release ([1](#) and [2](#))
    - [2012 NC Department of Health and Human Services NC Maternity Center Breastfeeding-Friendly Designation Press Release on the UNC School of Medicine website](#)

### PDFs available to download on Center TRT website:

- Application Review/assessment forms used by NCMCBF Designation Program review committee
- NCMCBF Designation Program Packet
  - Sample designation letter

- Sample designation letter, for expedited application
- Sample certificate
- Sample press release
- Logo usage style guide

## EVALUATION MATERIALS

*For new adopters wishing to implement the posted intervention/policy, Center TRT has developed an evaluation logic model and an evaluation plan.*

## TRAINING AND TECHNICAL ASSISTANCE

For training information and technical assistance, please visit  
<http://www.nutritionnc.com/breastfeeding/breastfeeding-friendly.htm>

## ADDITIONAL INFORMATION

**The *Ten Steps to Successful Breastfeeding*** (from Baby-Friendly USA) are as follows:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff;
2. Train all health care staff in skills necessary to implement this policy;
3. Inform all pregnant women about the benefits and management of breastfeeding;
4. Help all mothers initiate breastfeeding within one hour of birth;
5. Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants;
6. Give newborns no food or drink other than breast milk, unless medically indicated;
7. Practice rooming-in allow mothers and infants to remain together-24 hours per day;
8. Encourage breastfeeding on demand;
9. Give no artificial teats or pacifiers; and
10. Foster the establishment of breast-feeding support groups and refer mothers to them on discharge from the hospital or clinic.

*Baby-Friendly USA (2012). Ten Steps to Successful Breastfeeding.*

<http://www.babyfriendlyusa.org/about-us/baby-friendly-hospital-initiative/the-ten-steps>.

**Web links:** <http://nutritionnc.com/breastfeeding/breastfeeding-friendly.htm>

### **Program Contact(s):**

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### **Related Resources:**

**North Carolina Breastfeeding-Friendly Child Care Designation Program** - This program was launched by the North Carolina Division of Public Health in January 2014. The North Carolina Breastfeeding-Friendly Child Care (NCBFCC) Designation Program was made possible through a grant from Kids Eat Smart Move More. The program recognizes child care facilities that have taken steps to promote, protect, and support breastfeeding. Child care facilities are awarded up to five gold-starred building blocks based on the number of steps

achieved in the Ten Steps to Breastfeeding-Friendly Child Care. The Ten Steps to Breastfeeding-Friendly Child Care were adopted from the [Carolina Global Breastfeeding Institute at UNC-Chapel Hill](#). The program was modeled after the [North Carolina Maternity Center Breastfeeding-Friendly Designation](#). More information is on the program website at <http://nutritionnc.com/breastfeeding/childcare.htm>.

**Publications in support of formative work:**

Taylor EC, Nickel NC, Labbok MH. Implementing the Ten Steps for Successful Breastfeeding in hospitals serving low-wealth patients. *Am J Public Health*. 2012 Dec;102(12):2262-8. doi: 10.2105/AJPH.2012.300769. Epub 2012 Oct 18.

Labbok MH, Taylor EC, Nickel NC. Implementing the ten steps to successful breastfeeding in multiple hospitals serving low-wealth patients in the US: innovative research design and baseline findings. *Int Breastfeed J*. 2013 May 20;8(1):5. doi: 10.1186/1746-4358-8-5.

Nickel NC, Taylor EC, Labbok MH, Weiner BJ, Williamson NE. Applying organization theory to understand barriers and facilitators to the implementation of baby-friendly: A multisite qualitative study. *Midwifery*. 2013 Aug;29(8):956-64. doi: 10.1016/j.midw.2012.12.001. Epub 2013 Feb 20.