Strategy 1. Maternity Care Practices

Definition

Maternity care practices related to breastfeeding take place during the intrapartum hospital* stay and include practices related to immediate prenatal care, care during labor and birthing, and postpartum care.

Maternity care practices that support breastfeeding include developing a written breastfeeding policy for the facility, providing all staff with education and training on breastfeeding, maintaining skin-to-skin contact between mother and baby after birth, encouraging early breastfeeding initiation, supporting cue-based feeding, supplementing with formula or water only when medically necessary, and ensuring postdischarge follow-up.^{2–6} Maternity care practices that can have a negative effect on breastfeeding include using medications during labor and giving formula, water, or sugar water to breastfeeding infants when not medically necessary.^{2,3,7–11}

Rationale

The maternity care experience can influence both breastfeeding initiation and later infant feeding behavior. In the United States, nearly all infants are born in a hospital, and even though their stay is typically short, ¹² events during this time have a lasting effect. Breastfeeding is an extremely timesensitive activity. Experiences with breastfeeding in the first hours and days of life are significantly associated with an infant's later feeding.³

Because of its relationship with the birth experience, breastfeeding should be supported throughout the entire maternity hospital stay, not postponed until the infant goes home.

Many of the experiences of mothers and newborns in the hospital and the practices in place there affect breastfeeding success. In most cases, these experiences reflect routine practices at the facility level. Routine medications and procedures received by mothers during labor can affect the infant's behavior at the time of birth, which in turn affects the infant's ability to suckle at the breast.^{7–10}

Time Periods for Pregnancy and Childbirth

The *prenatal* period is the time during pregnancy but before childbirth.

The *peripartum* or *perinatal* period is the time surrounding childbirth. It is generally considered to include pregnancy and several weeks after childbirth.

The *intrapartum* period is the time just before, during, and after childbirth. It is generally considered to be the time from the onset of true labor until the birth of the infant and delivery of the placenta.

The *postpartum* period is the time shortly after childbirth. It is generally considered to include the first 6 weeks after childbirth.

Infants whose first breastfeed is delayed because of being weighed, measured, and cleaned do not breastfeed as long as infants who are immediately put skin-to-skin with the mother or put to the breast within the first hour after birth.^{5,13}

^{*} We use the term *hospital* to include hospitals, birthing clinics, and freestanding birth centers.



In addition, mothers who "room in" with their infants, rather than having the infant taken to a nursery at night, will have more chances to learn feeding cues and practice breastfeeding because of the infant's proximity.

Evidence of Effectiveness

A Cochrane review of studies designed to evaluate the effectiveness of interventions to promote the initiation of breastfeeding found that institutional changes in maternity care practices effectively increased breastfeeding initiation and duration rates.¹⁴ In 1991, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) established the Baby-Friendly Hospital Initiative (BFHI), which supports and recognizes hospitals and birthing centers that offer an optimal level of care for infant feeding by following the BFHI's Ten Steps to Successful Breastfeeding. These steps are practices that hospitals can implement that have been shown to improve breastfeeding outcomes. 4,15,16 The American Academy of Pediatrics (AAP) endorsed the BFHI in 2009.¹⁷

Multiple studies have demonstrated improved breastfeeding outcomes when hospitals adopt these steps. Educating hospital staff through an 18-hour UNICEF training program has been shown to enhance compliance with optimal maternity care practices and increase breastfeeding rates. ¹⁸ Immediate skin-to-skin contact between mother and infant has been associated with longer duration of breastfeeding. ^{5,13} In contrast, supplemental feeding of breastfed newborns negatively affects overall infant health and breastfeeding outcomes. ^{1–3,11}

Birth facilities that have achieved the Baby-Friendly designation typically experience an increase in breastfeeding rates. ¹⁶ A relationship has been found between the number of BFHI steps in place at a hospital and a mother's

Baby-Friendly Hospital Initiative: Ten Steps to Successful Breastfeeding¹⁵

- 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 mothers initiate breastfeeding within 1 hour of birth.
- 5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
- 6. Give newborn infants no food or drink other than breast milk, unless medically indicated.
- 7. Practice "rooming in"—allow mothers and infants to remain together 24 hours a day.
- 8. Encourage breastfeeding on demand.
- 9. Give no pacifiers or artificial nipples to breastfeeding infants.
- 10. Foster the establishment of breastfeeding support groups and refer mothers to them upon discharge from the hospital or clinic.

breastfeeding success.^{3,6} One study found that mothers who stayed in hospitals that did not follow any of the steps were eight times as likely to stop breastfeeding before their infants were 6 weeks old as mothers who stayed at hospitals that followed six of the steps.³ In a randomized trial of maternity hospitals and clinics in Belarus, regardless of the type of facility, those that received the Baby-Friendly designation reported improved breastfeeding rates and health outcomes for infants and mothers, as well as greater patient and staff satisfaction.⁴

Other birthing practices not included in the Ten Steps to Successful Breastfeeding may also have an effect on breastfeeding. For example, lower breastfeeding rates have been found among infants whose mothers were given labor analgesics^{8,9} or epidural anesthesia^{7,10} or who had a surgical (cesarean) birth. ^{19–21} Women who experience these procedures may need extra breastfeeding support. ²² In addition to implementing the Ten Steps to Successful Breastfeeding to become designated as Baby-Friendly, hospitals must also abide by WHO's

International Code of Marketing of Breastmilk Substitutes, which prohibits distribution of gift bags with formula or other materials that promote formula.

A 2000 Cochrane review found that distributing samples of infant formula to new mothers negatively affected exclusive breastfeeding.²³ A study in Oregon found that women who breastfed exclusively and who did not receive commercial discharge bags were more likely to exclusively breastfeed for up to 10 weeks than women who received the bags.²⁴

Key Considerations

The Ten Steps to Successful Breastfeeding have been implemented in maternity care facilities worldwide as part of the BFHI. As of May 2013, a total of 166 hospitals and maternity care facilities in the United States carry the BFHI designation. However, this number covers only about 7% of all U.S. births. Hospital officials should consider the following issues when they apply to be designated as Baby-Friendly:

 Designation as a BFHI facility requires that the facility demonstrate adherence to all Ten Steps to Successful Breastfeeding and WHO's International Code of Marketing of Breast-milk Substitutes to outside evaluators.



- Each step has detailed requirements.
- Evaluation requires an on-site visit that includes interviews with multiple staff members and patients, as well as reviews of patient charts.
- Many different types of facilities have achieved BFHI status in the United States, from small facilities that serve primarily low-risk, privately insured patients to large facilities that serve mainly high-risk, publicly insured or uninsured patients. All types of hospitals, including comprehensive hospitals, military facilities, and freestanding birth centers, have achieved BFHI status.

Some maternity care practices may be easier to improve than others. Hospitals may choose to make incremental changes while working to improve overall maternity care. For example,

- Incremental changes in maternity care may be easier to achieve, particularly if hospital leaders are unaware of the role that routine maternity care practices can play in supporting breastfeeding.
- Changes can include adding new practices that support breastfeeding, eliminating practices known to negatively affect



breastfeeding, or using some combination of these strategies.

 Incremental steps are not limited to those identified in the Ten Steps to Successful Breastfeeding, but they should be evidence-based.²⁵

Program Examples

Baby-Friendly USA

Baby-Friendly USA is the organization responsible for designating maternity care facilities as Baby-Friendly in the United States. It works with external evaluators to coordinate all BFHI activities. The BFHI is a global program sponsored by WHO and UNICEF to encourage and recognize hospitals and birthing centers that offer an optimal level of care for infant feeding. The BFHI helps hospitals give mothers the information, confidence, and skills they need to successfully initiate and continue breastfeeding their babies or to feed formula safely, and it gives special recognition to hospitals that have done so.

National Survey of Maternity Practices in Infant Nutrition and Care (mPINC)

In 2007, CDC completed a national survey of maternity care feeding practices and policies at all facilities in the United States and U.S. territories that provide intrapartum care. Subsequent mPINC surveys have been conducted every 2 years since then. For each survey, facilities receive individualized reports, and states receive aggregated reports. Facility and state leaders use these reports to assess current maternity care efforts and look for ways to make improvements.

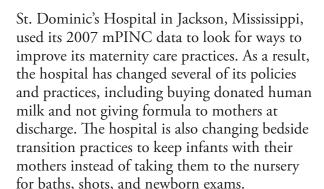
The Carolina Breastfeeding Institute used mPINC data as part of a comprehensive, baseline assessment tool for hospitals involved in a breastfeeding-friendly health care project. The program is designed to support efforts by North Carolina hospitals to implement the Ten Steps to Successful Breastfeeding and make sure these efforts are effective and sustainable.

Action Steps

- 1. Review state regulations for maternity care facilities to determine if they reflect evidence-based practices or other practices in this report.
- 2. Sponsor a statewide summit of key decision makers at maternity care facilities to improve maternity care practices across your state.
- 3. Provide opportunities for hospital staff members to participate in training courses in breastfeeding.
- 4. Focus on hospitals that serve large numbers of low-income families and

- those that serve a large portion of your state's population.
- 5. Create links between maternity care facilities and community breastfeeding support networks across your state.
- 6. Integrate maternity care into related quality improvement efforts.
- 7. Encourage hospitals to use The Joint Commission's* Perinatal Care core measure set to collect data on exclusive breastfeeding.

^{*} The Joint Commission is an independent organization that accredits and certifies health care organizations and programs in the United States.



Colorado Can Do 5! Initiative

This initiative provides informational sessions to state hospitals and medical centers on five Baby-Friendly steps that are associated with breastfeeding duration.²⁵ It is a collaborative effort of the Colorado Physical Activity and Nutrition Program, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Colorado Women's Health Unit, and the Colorado Breastfeeding Coalition.

As a result of the initiative, 51 of the state's 55 hospitals have received training. The Colorado Department of Public Health and Environment also manages a Listserv with resources and updates for a network of hospital staff members who provide lactation services.

New York State Department of Health

Officials in New York learned from the results of CDC's National Immunization Survey that the state had the highest proportion of breastfed infants who were receiving supplemental feeding with formula by age 2 days. To address this issue, infant feeding data from the New York Statewide Perinatal Data System were used to rank state hospitals on three breastfeeding indicators: initiation, exclusivity, and formula supplementation of breastfed infants during the birth hospitalization. Each hospital received information about its ranking compared with other hospitals.



The data were also added to the Maternity Information leaflet given to each patient at time of admission and posted on the New York State Department of Health (NYSDOH) Web site.

In addition, the NYSDOH provided every maternity hospital in the state access to the *Ten Steps to Successful Breastfeeding: 18-Hour Interdisciplinary Breastfeeding Management Course in the United States.* They also partnered with the National Initiative for Children's Healthcare Quality to include 12 state hospitals in a quality improvement learning collaborative.

Washington State Department of Health

The Washington State Department of Health's Nutrition and Physical Activity Program funded the Breastfeeding Coalition of Washington to pilot a project to encourage hospitals to



implement evidence-based maternity care practices to improve breastfeeding rates. Yakima Valley Memorial Hospital, which is located in a rural county and serves a population with high rates of health disparities, was chosen for this project. The coalition provided a 1.5-hour training for doctors, hospital administrators, maternity staff, and other staff members.

After the training, the hospital set up the multidisciplinary Promoting Breastfeeding Success Performance Improvement Committee. This committee updated the hospital's breastfeeding policies and procedures, stopped the distribution of commercial discharge bags with formula, and identified three of the Ten Steps to Successful Breastfeeding to focus on.

Resources

Model Breastfeeding Policy

Academy of Breastfeeding Medicine
Provides an example of a breastfeeding policy
for hospitals.

http://www.bfmed.org/Media/Files/Protocols/ English%20Protocol%207%20Model%20 Hospital%20Policy.pdf

Baby-Friendly USA

Information about the Baby-Friendly designation process and requirements and a list of all Baby-Friendly facilities in the United States. http://www.babyfriendlyusa.org

Breastfeeding-Friendly Healthcare Project

Carolina Global Breastfeeding Institute
Example of efforts to improve maternity
care practices.
http://cgbi.sph.unc.edu/healthcare

National Survey of Maternity Practices in Infant Nutrition and Care (mPINC)

Centers for Disease Control and Prevention Contains information about and reports from this national survey of maternity care practices and policies.

http://www.cdc.gov/breastfeeding/data/mpinc/index.htm

Colorado Can Do 5! Initiative

Promotes five steps that have been shown to affect breastfeeding duration. http://www.colorado.gov/cs/Satellite/CDPHE-PSD/CBON/1251639562433

Breastfeeding Promotion Program

New York State Department of Health
Provides breastfeeding resources and information.
http://www.health.ny.gov/community/
pregnancy/breastfeeding

Washington State's Hospital Initiative Project: Breastfeeding Partnership in Yakima

Washington Department of Health, Nutrition and Physical Activity Program

Learn more about efforts in Washington to improve hospital practices.

http://depts.washington.edu/waaction/action/n3/a8.html