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INCREASING  
BREASTFEEDING RATES  
IN US HOSPITALS

Real Strategies for Success





# PART 1: INTRODUCTION



Increasing exclusive breastfeeding initiation and duration rates in the United States has long been a goal of several health-related organizations, including the US Department of Health and Human Services (HHS), the Centers for Disease Control and Prevention (CDC), and the American Academy of Pediatrics (AAP). This goal was included in the Healthy People 2010 initiative and subsequently modified in the Healthy People 2010 midcourse revision. It also recently became one of The Joint Commission's 2010 Perinatal Core Measures for hospitals providing obstetric services. Meeting the ongoing challenge to increase breastfeeding rates in-hospital remains a complex and multifaceted issue.

A multidisciplinary group of experienced health care professionals was convened to dialogue and develop a document designed to support hospitals as they work to increase their exclusive breastfeeding rates. Support for convening the panel was provided by Abbott Nutrition, a division of Abbott. Before the panel meeting, participants familiarized themselves with extensive background information and a literature review that included the most current information about breastfeeding best-practice recommendations and outcomes in the United States. The panel then convened on March 8, 2010, and discussed topics such as clinical and administrative supports and barriers to in-hospital breastfeeding, and best practices and recommendations for increasing in-hospital breastfeeding rates.

This report provides the background literature review and presents the recommendations for increasing in-hospital breastfeeding rates agreed upon by the panel members. It outlines objectives, trends, measures, and approaches to increasing in-hospital breastfeeding and in-hospital exclusive breastfeeding in the United States. It also identifies the need for the continuing evolution of in-hospital feeding practices to better support all mothers and infants both now and in the future.

## PART 2: LITERATURE REVIEW



### Background

As the preferred form of infant feeding, breastfeeding provides infants and mothers with significant health benefits. The AAP has stated that breastfeeding is “the reference or normative model against which all alternative feeding methods must be measured with regard to growth, health, development and all other short term and long term outcomes” (AAP 2005).

The World Health Organization and its Baby Friendly Hospital Initiative and many US organizations have promoted breastfeeding. Some of the US organizations with position statements supporting breastfeeding include the AAP, Academy of Breastfeeding Medicine, American Academy of Family Physicians, American Academy of Nurse Midwives, American College of Obstetricians and Gynecologists, American Dietetic Association, Association of Women’s Health, Obstetric and Neonatal Nurses, and the National Association of Pediatric Nurse Practitioners. Additionally, many organizations have outlined solid strategic goals to protect, promote, and support breastfeeding including the HHS (through its *Blueprint for Action on Breastfeeding 2002*, Healthy People 2010, and proposed 2020 Objectives), the CDC, the US Breastfeeding Committee, and more recently The Joint Commission for hospital accreditation.

While breastfeeding is the recommended form of infant feeding and the United States has consistently set health objectives targeting increased breastfeeding, only in the last few years have both national goals and in-hospital feeding practices focused on increasing *exclusive* breastfeeding, whereby the infant receives no milk feeding other than breast milk for some period postpartum. Numerous organizations including the AAP (2005) have recommended exclusive breastfeeding for the first 6 months of life. Its recommendations also note that the “unique needs or feeding behaviors of individual infants may indicate a need for introduction of complementary foods as early as 4 months of age, whereas other infants may not be ready to accept other foods until approximately 8 months of age.”

### US Healthy People Objectives

National goals for breastfeeding are generally reflected in the HHS Healthy People Objectives, which are set every decade. These objectives have included breastfeeding since the initial *Healthy People, the Surgeon General’s Report on Health Promotion and Disease Prevention* was published in 1979.

In 2006, as a result of the midcourse review of the Healthy People 2010 Breastfeeding Objective 16-19 (“Increase the proportion of mothers who breastfeed their babies”) two subobjectives on exclusive breastfeeding were added—16-19d and 16-19e. The revised Healthy People 2010 breastfeeding subobjectives are as follows:

- 16-19a. In early post partum period – 75%
- 16-19b. At 6 months – 50%
- 16-19c. At 1 year – 25%
- 16-19d. Exclusively through 3 months – 60%
- 16-19e. Exclusively through 6 months – 25%

In 2007, when changes in survey methodology revealed that exclusive breastfeeding rates had been overestimated, the objectives were revised once again with 16-19d set at 40% exclusive breastfeeding through 3 months and 16-19e set at 17% exclusive breastfeeding through 6 months. At the same time, the National Immunization Survey (NIS) was selected as the official Healthy People 2010 data source for measuring breastfeeding rates (American Public Health Association 2008).

The draft Healthy People 2020 objectives, released for public comment in 2009, continue to include “Increase the proportion of mothers who breastfeed their babies,” but define the first five category measures slightly differently than the Healthy People 2010 objectives:

- Ever
- At 6 months
- At 1 year
- Exclusively through 3 months
- Exclusively through 6 months

In addition, several new breastfeeding objectives are proposed. Two of them address in-hospital infant feeding practices specifically:

- Decrease the percentage of breast-fed newborns who receive formula supplementation within the first 2 days of life
- Increase the percentage of live births that occur in facilities that provide recommended care for lactating mothers and their babies

One new objective targets better support for working mothers:

- Increase the percentage of employers who have worksite lactation programs

## Tracking US Breastfeeding Trends

Several instruments have been used to track progress toward the Healthy People goals and report trends in US breastfeeding. Further details on these instruments, including differences in methodologies, are described below.

### INFANT FEEDING SURVEY/ROSS LABORATORIES MOTHERS SURVEY

The oldest and longest running survey of US infant feeding trends is the Infant Feeding Survey (IFS, formerly known as the Ross Laboratories Mothers Survey, or RLMS), which has been conducted for over 50 years by the Abbott Nutrition (previously Ross) division of Abbott. This instrument was the historical data source for Healthy People breastfeeding objectives and was chosen initially as the data source for the Healthy People 2010 objectives. The IFS tracks the initiation and duration of breastfeeding (infants receiving any breast milk) and exclusive breastfeeding (no liquids other than breast milk except vitamins or medication drops). The most recent report reveals that although breastfeeding rates initially increased in the last decade, they have trended down slightly in the last few years (Abbott Nutrition, Abbott 2009).

#### US BREASTFEEDING RATES (% OF MOTHERS BREASTFEEDING)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
In-hospital	64.3	67.2	68.4	69.5	70.1	66.0	64.7	66.3	63.6	59.4	59.2	60.2
6 Months	28.6	30.7	31.4	32.5	33.2	32.8	31.9	32.8	30.0	25.8	25.8	26.8
12 Months											16.2	15.7
Exclusive in-hospital						44.0	41.7	41.2	38.4	35.2	35.3	36.6
Exclusive 6 Months						17.9	17.4	18.0	16.5	15.6	14.6	15.3
Exclusive 12 Months						10.4	11.2	11.4	11.6	10.3	9.8	9.6

In 2009, in-hospital (initiation) breastfeeding rates were 60.2% compared to 64.3% in 1998. The highest in-hospital breastfeeding rate over the past 10 years, 70.1%, was achieved in 2002. The 2009 6-month breastfeeding rate was 26.8% and the 12-month rate was 15.7%.



Exclusive breastfeeding rates documented in the IFS also have declined in recent years. The 2003 in-hospital exclusive breastfeeding rate was 44.0% compared to the 2009 rate of 36.3%. The 6-month exclusive breastfeeding rate was 17.9% in 2003 compared to 15.3% in 2009, and the 12-month rate for exclusive breastfeeding declined from 10.4% in 2003 to 9.6% in 2009 (Abbott Nutrition, Abbott 2009).

The IFS survey does not collect inferential data that would document why breastfeeding rates have trended downward. However, Ryan and Zhou (2006) have noted that participants in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) always have had lower breastfeeding rates than non-WIC mothers. In recent years, infant WIC participation has continued to increase and is now over 50% of mothers/infants (Oliveira and Frazao 2009).

Breastfeeding as a health behavior is influenced by a multidimensional, complex relationship between biological, psychological, and sociological factors as well as by various ethnic and cultural variables. Studies have shown that in the United States, women are more likely to exclusively breastfeed if they are older, married, better educated, more affluent, non-smoking, and returning later to paid employment (Semenic 2008). IFS/RMLS breastfeeding trends in various demographic categories echo results reported in other research studies that have focused on demographic categories as predictors of successful breastfeeding (Millar and Maclean 2005; Kruse et al 2005). Sociodemographic predictors provide limited guidance on how to prolong the initiation and duration of exclusive breastfeeding among women who are already motivated to breastfeed exclusively, and to date few studies have explored modifiable predictors of exclusive breastfeeding.

## National Health and Nutrition Examination Survey

The April 2008 National Center for Health Statistics (NCHS) Data Brief No. 5 reported an increasing rate of infants who were ever breastfed, analyzing data from the 1999–2006 National Health and Nutrition Examination Surveys (NHANES) (McDowell et al 2008). In the NHANES survey, a child’s parent or other adult answered the breastfeeding and infant feeding questions for infants and children from birth through 6 years of age. Findings revealed an increase in the number of infants who were ever breastfed from 60% of infants who were born in 1993–1994 to 79% among infants who were born in 2005–2006. The survey also revealed the same sociodemographic breastfeeding trends as described above. Although breastfeeding rates increased in the non-Hispanic black group, the rates were still significantly below the breastfeeding rates for both Hispanic and non-Hispanic white infants.

## NATIONAL IMMUNIZATION SURVEY

In addition to conducting the NHANES survey, the CDC also works with the National Center for Immunizations and Respiratory Diseases to conduct the annual National Immunization Survey (NIS). The NIS is a random-digit dialed telephone survey conducted annually within the time frame of child age 19–35 months. The survey contains questions related to immunizations, and the surveyors speak not only to mothers but also to other caretakers and family members. In 2001, questions about breastfeeding were added to the survey in an effort to monitor progress toward Healthy People 2010 breastfeeding objectives.

The CDC’s analysis of survey results indicated that breastfeeding initiation and duration rates increased among infants born from 1999 to 2007 (CDC 2010).

	1999	2000	2001	2002	2003	2004	2005	2006	2007 (provisional <sup>1</sup> )
Early postpartum	68.3±2.9	70.9±1.9	71.6±1.0	71.4±0.9	72.6±0.9	73.1±0.8	74.1±1.0	74.0±0.9	75.0±1.2
At 6 Months	32.6±2.9	34.2±2.0	36.9±1.2	37.6±1.0	39.1±0.9	42.1±0.9	42.9±1.1	43.5±1.1	43.0±1.3
At 12 Months	15.0±2.1	15.7±1.5	18.2±0.9	19.0±0.8	19.6±0.8	21.4±0.8	21.5±0.9	22.7±0.9	22.4±1.1
Exclusively through 3 months					29.6±1.5	31.5±0.9	32.1±1.0	33.6±1.0	33.0±1.2
Exclusively through 6 months					10.3±1.0	12.1±0.7	12.3±0.7	14.1±0.8	13.3±0.9

<sup>1</sup> Interviews with caregivers of children born in 2007 will continue through November 2010; final estimates for children born in 2007 will be available in August 2011. Visit [http://www.cdc.gov/breastfeeding/data/nis\\_data/survey\\_methods.htm](http://www.cdc.gov/breastfeeding/data/nis_data/survey_methods.htm) for details on study design.

Rates of exclusive breastfeeding through age 3 months were lowest among African-American infants and among infants of mothers who were <20 years of age, had a high school education or less, were unmarried, resided in rural areas, and had an income-to-poverty ratio of <100%.

The results of both the NHANES and the NIS surveys (which currently report data up through the year 2006) differ from those of the IFS/RMLS survey. Differences in populations sampled, sample methods (for example retrospective recall of infant feeding by parents and caregivers of children up to 6 years of age vs. current-month infant feeding practices reported by mothers of infants 12 months of age and younger), and data sources primarily account for these discrepancies. In addition, definitions of breastfeeding vary among surveys, so it is understandable that results differ.

### Tracking Progress Toward the Healthy People 2010 Objectives

As stated previously, the IFS/RLMS survey was the instrument initially selected to measure progress toward the Healthy People 2010 objectives. In a study that compared findings of the IFS/RLMS from 1996 to 2001, the authors (Ryan et al 2002) found that breastfeeding initiation rates were increasing. They predicted that if the increase in rates was sustained (approximately 2% per year at the time), the Healthy People 2010 objective of 75% for the initiation of breastfeeding would be met or even exceeded. The authors also stated that the objective of a 50% rate at 6 months may not be reached. They recommended that educational and promotional strategies for breastfeeding be continued to support mothers who were young, less-educated, and participating in WIC (Ryan et al 2002).



*More recent IFS/RLMS surveys suggest that the Healthy People 2010 breastfeeding objectives will not be met. The 2008 initiation rate of 59.2% was well below the target, as were the rates for breastfeeding at 6 months and 1 year of age. The 2008 rate from the IFS/RLMS for exclusive breastfeeding at 6 months was 14.6%. There were no data available for exclusive breastfeeding at 3 months. However, the exclusive breastfeeding initiation rate for 2008 was 36.3%, still below the Healthy People 3-month target of 40%.*

NIS data show higher rates of breastfeeding than the IFS/RLMS survey, yet the numbers are still below the Healthy People 2010 objectives. NIS survey results often are reported in comparison to the Healthy People 2010 Objectives. As stated previously, the NIS became the official Healthy People 2010 data source for breastfeeding in 2007, as that government data source became available at that point.

## US Breastfeeding Measures

**T**o help link the national Healthy People objectives to actionable, local initiatives, specific breastfeeding measures have been developed to track and show progress at the state and institutional levels.

### State Breastfeeding Measures

CDC's Division of Nutrition, Physical Activity, and Obesity created the annual *Breastfeeding Report Card* to help states assess their progress in achieving the Healthy People objectives and in addressing factors important to increasing breastfeeding (CDC 2009). The Report Card connects process and outcome measures with specific outcome indicators important for breastfeeding support. Currently, process indicators measuring five different types of breastfeeding support are reported:

- Birth facility support
- Professional support
- Mother-to-mother support
- State legislation
- Public infrastructure (public facilities and services)

In addition, data on five outcome indicators are reported:

- Percent of infants ever breastfed
- Percent of infants breastfeeding at 6 months
- Percent of infants breastfeeding at 12 months
- Percent of infants exclusively breastfeeding at 3 months
- Percent of infants exclusively breastfeeding at 6 months

These outcome indicators directly track the Healthy People 2010 breastfeeding objectives and are estimated using data from CDC's annual NIS.

In response to annual Report Card data, a number of states have developed their own programs to promote support for increased breastfeeding rates. These programs include initiatives that specifically target increasing in-hospital breastfeeding rates, such as California's program that monitors and publicly reports individual in-hospital infant feeding practices using data collected by the Newborn Screening Program (California Department of Health 2010).

### The Joint Commission Exclusive Breastfeeding Measure

As a hospital accreditation organization, The Joint Commission also is working to support progress toward the Healthy People breastfeeding objectives. In 2009, The Joint Commission added a new breastfeeding measure to its recently released Perinatal Care Core Measure Set (The Joint Commission 2010). The Perinatal Set is part of ORYX, The Joint Commission's performance measurement and improvement initiative.



Hospitals are required to collect and transmit data to The Joint Commission for a minimum of four voluntarily selected Core Measure Sets or a combination of applicable Core Measure Sets and non-core measures. Data collection for the Perinatal Care Core Measure Set began with April 1, 2010, discharged infants.

The Perinatal Care Core Measures are as follows:

- Elective delivery
- Cesarean section
- Use of antenatal steroids
- Health-care associated bloodstream infections in newborns
- Exclusive breast milk feeding

As outlined in The Joint Commission Specifications manual (The Joint Commission 2010), the measure to improve exclusive breast milk feeding is defined as an increase in the rate of infants exclusively breastfed. Details of this measure are as follows:

NUMERATOR: “Newborns that were fed breast milk only since birth”

DENOMINATOR: “Newborns discharged from the hospital”

INCLUDED POPULATION: “All live-born newborns”

EXCLUDED POPULATIONS:

- Discharged from the hospital while in the NICU
- ICD-9 codes for galactosemia
- ICD-9 codes for parenteral infusion
- Death
- Length of stay >120 days
- Enrolled in clinical trials
- Documented reason for *not exclusively feeding breast milk*
- Length of stay >120 days
- Enrolled in clinical trials
- Documented reason for *not exclusively feeding breast milk*



Definition: “Reasons for not exclusively feeding breast milk during the entire hospitalization are clearly documented in the medical record. These reasons are due to a maternal medical condition for which feeding breast milk should be avoided. Exclusive breast milk feeding is defined as a newborn receiving only breast milk and no other liquids or solids except for drops or syrups consisting of vitamins, minerals, or medicines.”

SUGGESTED DATA SOURCES: “Physician/Advanced Practice Nurse/Certified Nurse Midwife documentation only”

- History and physical
- Physician progress notes
- Physician orders

NOTES FOR ABSTRACTION: “The mother’s refusal to feed the newborn breast milk **does not** constitute a reason for not exclusively feeding breast milk.”



MATERNAL MEDICAL CONDITIONS FOR WHICH BREAST MILK FEEDING SHOULD BE AVOIDED:

- HIV infection
- Human t-lymphotrophic virus type I or II
- Substance abuse and/or alcohol abuse
- Active, untreated tuberculosis
- Taking certain medications—eg, prescribed cancer chemotherapy, radioactive isotopes, antimetabolites, antiretroviral medications, and other medications where the risk of morbidity outweighs the benefits of breast milk feeding
- Undergoing radiation therapy
- Active, untreated varicella
- Active herpes simplex virus with breast lesions

Core Measure Sets must be selected in their entirety, so hospitals that wish to include the Perinatal Care Core Measures as part of their ORYX reporting need to include the breastfeeding measure. The most current reports of exclusive breastfeeding rates indicate that many hospitals likely will face a substantial challenge in showing improvement in this measure.

### Approaches to Increase In-Hospital Exclusive Breastfeeding Rates

As stated previously, few studies have explored the more modifiable predictors of exclusive breastfeeding. Brown et al in 2003 and more recently Bonuck in 2007 documented that over the last 2 decades there has been a paucity of evidence-based research on achieving national breastfeeding goals.

#### Baby Friendly Hospital Initiative

On a world-wide scale, the Baby Friendly Hospital Initiative (BFHI) (World Health Organization, UNICEF, 2009) has provided specific recommendations for improving exclusive in-hospital breastfeeding rates. The BFHI’s ten steps 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 mothers initiate breastfeeding within half an 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 newborn infants no food or drink other than breast milk, unless medically indicated.
7. Practice rooming-in—that is, allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Baby Friendly USA (2004) notes that their recommended US ten steps are the same as the global Baby Friendly ten steps, except for the following:

- Step 4 for the United States is written “All healthy, full term babies should be placed in their mothers arms, skin-to-skin, within the first half-hour after birth, and held there for at least an hour. Staff should offer assistance during this period to help the parents learn and respond to infant’s feeding cues. In the event of cesarean birth, babies should be placed, skin-to-skin, in their mother’s arms within a half-hour of mother’s ability to respond to her baby. Staff should offer assistance with learning feeding cues during this time.”
- In the United States, Step 6 “Give newborn infants no food or drink other than breast milk, unless medically indicated,” is interpreted according to the following criteria: All breastfed infants will be exclusively breastfed except when a) acceptable medical indications exist for supplementation;

or b) parents request supplementation after receiving education regarding the possible consequences of non-indicated supplementation. Parents of breastfed infants will receive no free samples, items bearing formula company names or logos, coupons for formula, etc. This step also requires that the facility purchase infant formula and feeding devices in the same manner as is used to procure other food and supplies.”

Compared to the number of Baby Friendly hospitals worldwide, the number of US hospitals that have chosen to become BFHI-certified is small. Also, a limited amount of research has been conducted on the impact of US BFHI implementation on breastfeeding. Much of the initial published research was based on experiences from Boston Medical Center, an inner-city teaching hospital that achieved Baby Friendly status in 1999.

More recently, researchers have investigated BFHI maternity care practices and the implications for breastfeeding using data from CDC’s Infant Feeding Practice Study 2. Specifically, DiGirolamo et al (2008) found that 8% of mothers experienced all six of the Baby Friendly hospital practices measured and that those who experienced a greater number of these practices were more likely to be breastfeeding at 6 weeks than those who experienced fewer practices. Initiating breastfeeding within the first hour of life, providing only breast milk, and not using a pacifier were the three Baby Friendly practices found to be associated with a longer duration of breastfeeding. In their study, the authors found that other hospital practices, such as not providing an infant formula sample/coupon in a hospital gift pack were not associated with increased breastfeeding duration.

## CDC Recommendations

The CDC’s *Guide to Breastfeeding Interventions* (Shealy et al 2005) recommends incremental change to increase breastfeeding rates in hospital settings. Key recommendations include educating staff through a 3-day training program, eliminating the use of pacifiers among breastfed infants, eliminating supplemental feedings to breastfed newborns, and not distributing formula samples to new mothers. It is important to note that while some research documents that infant formula samples provided in the hospital are associated with a decrease in breastfeeding duration, other studies—such as the study as cited above—show no association. The guide also recommends immediate skin-to-skin contact between mother and infant whenever possible and initiating the first feeding within an hour of birth.

The CDC suggests that hospitals may most successfully promote breastfeeding by implementing these recommendations one at a time. Additional potential action steps recommended by the CDC include the following:

- Pay for hospital staff to attend an 18-hour training course on breastfeeding.
- Establish links between maternity facilities and community-based breastfeeding support networks.
- Sponsor a summit of key decision-making staff at facilities providing maternity care to highlight the importance of evidence-based practices for breastfeeding.
- Implement a program within the hospital using the philosophy of incremental change—choosing one practice that seems widespread and adjusting it to be evidence-based and supportive of breastfeeding (Shealy et al 2005).



## Other Considerations

Addressing different mothers' life circumstances also is important when developing approaches to increase in-hospital exclusive breastfeeding rates. Returning to work is one of the biggest barriers to breastfeeding in the United States (Greenberg et al 2009). Today, more than half of all mothers of infants work (Boushey and O'Leary 2009). Fifty-eight percent of first-time mothers return to work less than 3 months after delivery (US Census Bureau 2008), yet only 25% of employers provide on-site workplace lactation rooms (Society for Human Resource Management 2009). For many mothers working in hourly and lower-wage jobs, the lack of paid maternity leave compounded by the lack of employer support for breastfeeding may mean they choose to not breastfeed at all. Providing new mothers with practical education and tools to approach their employer and advocate for better workplace lactation support may help overcome this barrier.

Another factor in breastfeeding decisions is the individual mother's perspectives and experiences. In a study of primiparous Canadian mothers who prenatally expressed an intention to breastfeed, Semenic et al (2008) found that personal and perinatal factors were more strongly associated with the duration of exclusive breastfeeding than socio-demographic or contextual factors. This result may be partly due to the homogeneity of their sample, which included only mothers who expressed a desire to breastfeed exclusively.

However, the authors noted that other studies on predictive behavior have consistently indicated breastfeeding intentions account for a relatively small proportion of variance in actual breastfeeding duration, as factors such as unanticipated breastfeeding problems and being overwhelmed by the physical challenges of early breastfeeding can alter the intention-behavior relationship.

Semenic et al also found four independent factors associated with the duration of breastfeeding among their sample:

- Breastfeeding self-efficacy (effort required to master new behaviors)
- In-hospital formula supplementation
- Prenatal class attendance
- Type of delivery (vaginal vs cesarean section)

The authors found that supplemental feedings were often associated with perceived breastfeeding problems as well as lower breastfeeding self-efficacy both at baseline and at 6 weeks. Mothers with lower initial breastfeeding self-efficacy may have been more likely to perceive common breastfeeding challenges as problems and supplement with infant formula. Mothers who had unexpected problems in the hospital and who needed (or were persuaded by others) to use infant formula may have lost confidence in their ability to breastfeed exclusively.

In terms of type of delivery, the authors noted that other studies on breastfeeding duration that included multiparous women have not shown an effect. The authors commented that it may be the effects of having a cesarean section (such as separation of mother and infant at birth, delayed breastfeeding, post-operative pain, and longer recovery time) are greater obstacles to initiation of exclusive breastfeeding for first-time mothers.

The authors recommended the following in-hospital practices to support the initiation of exclusive breastfeeding:

- Enhance labor and delivery support to promote vaginal birth
- Supervise and reinforce early breastfeeding attempts to help build breastfeeding self-efficacy and identify early breastfeeding challenges
- Discourage unnecessary use of infant formula supplementation
- Refer at-risk mothers to specialized post-discharge breastfeeding resources

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## Supporting Mothers and Infants as Hospital Practices Evolve

A final consideration is how to better support all mothers in their infant feeding decisions while hospitals work to shape protocols and policies to better meet national and institutional breastfeeding goals. Mothers should be offered education and support that is culturally appropriate and in their native language. Today in the United States, one in four births is to an immigrant mother (Camaroto 2005), and in some regions of the country this rate is likely even higher. Health care professionals will be more successful in delivering care if they have the cultural competency to relate to and not alienate those seeking health care services. Breastfeeding, as an intimate and learned skill, is an area in which cultural competence plays a central role.

Federal standards have already been set for culturally and linguistically appropriate services as a means to correct inequities that currently exist in the provision of health services and to make these services more responsive to the individual needs of all patients/consumers (HHS Office of Minority Health 2001). Further, it is anticipated that in the next year, The Joint Commission will begin to introduce cultural competence measures for health care providers. Clearly, exclusive breastfeeding goals cannot be met with a “one size fits all” approach. Hospitals will need to develop infant feeding policies and practices that are both culturally sensitive and supportive of the increasingly diverse population of new mothers.

Even as hospitals work to build an environment that promotes exclusive breastfeeding, the needs of another group of mothers—those who choose not to or are unable to exclusively breastfeed, or who choose to or must use infant formula—should not be ignored. A recent systematic literature review of mothers’ experiences with bottle-feeding found that while mothers recognize the benefits of breastfeeding, those who bottle-feed with infant



formula did not receive adequate information and support from their health care providers; thus, their baby’s health was ultimately at risk (Lakshman et al 2009). Without appropriate education, mothers often turned to family and friends for guidance, a trend that the authors noted can perpetuate errors in infant formula preparation and handling. The authors concluded that “such errors and other variations in formula-feeding may have both short- and long-term health consequences.”

Even with the best lactation education and support, including a multilingual and multicultural approach, there are certain practices that are common in the US culture that may inhibit success in meeting exclusive in-hospital breastfeeding targets. These practices include some mothers’ desire to have their babies in the nursery at night, and their decision to combine breastfeeding and formula feeding right from birth, often in preparation for returning to work. Hospital practices that include routine water or formula feedings and supplemental formula feedings to babies in the nursery at night may also interfere with progress toward increasing exclusive in-hospital breastfeeding rates. An important challenge for hospitals is to balance respect and support for the right of individual mothers to make infant feeding choices with the institution’s need to work toward establishing practices to help meet breastfeeding goals.

# PART 3: BREASTFEEDING PANEL RECOMMENDATIONS



*Health care professionals should take steps throughout mothers' continuum of care to ensure success in achieving and sustaining exclusive breastfeeding. These measures should encourage mothers to commit to breastfeeding prenatally and reinforce the commitment to sustain breastfeeding after their discharge from the hospital. The Perinatal Core Measures of The Joint Commission were established to measure quality initiatives for hospitals; however, they also are being aligned with initiatives to support the practice of exclusive breastfeeding throughout the first year of life. Part III provides hospitals with recommendations that may help to improve a mother's readiness to breastfeed and support her in the initiation and continuation of breastfeeding while in the hospital.*

Specific recommendations follow:

## **I. Recognize the uniqueness of every hospital and of the community it serves.**

- Each mother-baby couplet and family are unique as well.
- Respect and support a mother's infant feeding choice.

## **II. Adopt a philosophy of patient- and family-centered care.**

- Keep the family unit together as much as possible, including during the first hour after birth. This practice increases the likelihood that the mother will breastfeed successfully.
- Facilitate rooming-in by having the same nurse care for mother and baby, ensuring continuity of care for the couplet.
- Assess the organization's philosophy of care to determine whether family-centered care is part of the hospital's culture and guides policy and practice. The Institute for Family Centered Care (2010) offers tools to help determine the extent to which family-centered care directs care practices in an organization.
- If the assessment indicates that additional work is needed to ensure that care processes incorporate the principles of family-centered care, take steps to integrate those principles into the culture.
  - If the mother-baby care delivery model is already in place, the organization should ensure that the principles of family-centered care guide all care practices and policies.

- Support and provide education to the family to achieve success with breastfeeding.
- If the mother-baby care delivery model is not in place, the next step would be to start the process to implement that model.
  - Implementation of a new care delivery model includes a culture adjustment and requires careful planning, training, and an active approach to change management processes.
  - These initiatives take time and support from all levels of the organization to succeed. Resources are available to help leadership teams plan and implement the mother-baby care delivery model using effective change-management approaches (Association of Women's Health, Obstetric and Neonatal Nurses 2007).
- In practicing patient- and family-centered care, health care providers should acknowledge that mothers are the decision makers regarding how to feed their babies.
  - The role of health care providers is to ensure that each mother makes an informed decision. All mothers should be provided with clear, consistent information about the benefits of breastfeeding both prenatally and during their hospital stays.
  - Upon admission to the hospital, assess the mother's knowledge related to the maternal and infant benefits of breastfeeding and providing breast milk to her infant.

- If a mother chooses formula feeding, her choice should be respected and staff must ensure that she knows how to prepare formula correctly and safely. Regardless of the mother’s feeding choice, good practices such as skin-to-skin contact after the delivery and limiting visitors will help to ensure the best possible outcomes for all mother-baby couplets.

### III. Form an Infant Feeding Committee.

- The committee should include a broad spectrum of representatives.
- Members might include the following:
  - Physician champion
  - Other physicians representing both maternal and infant care
  - Women’s services nursing leadership (Director and/or Manager)
  - Lactation consultant
  - Staff nurses (representing all perinatal areas, eg, Labor and Delivery, Mother-Baby, Special Care Nursery, and NICU)
  - Neonatal nurse practitioner
  - Registered dietitian
  - Pharmacist
  - Educator (prenatal patient and family education)
  - Community member (past obstetric patient)
  - Human resources (ad hoc) to address support of the hospital’s breastfeeding employees
- The work of the Infant Feeding Committee might include the following:
  - Evaluate the environment, culture, and care practices related to the support of exclusive breastfeeding.
    - Evaluate both the philosophy and the care delivery model.
    - If a clear philosophy of care is not in place, develop a philosophy and establish targets for breastfeeding rates.

- Establish a method of measuring breastfeeding rates.
  - The Joint Commission defines its measurement approach within the Perinatal Core Measure section, clearly identifying the definition of “exclusive breastfeeding” as well as providing information about exceptions to the measurement.
  - While the focus of The Joint Commission Core Measure is on exclusive breastfeeding, a broad approach might help hospitals determine more effectively where their rates fall compared to other organizations.
  - Three types of feeding methods can be recorded: exclusive breastfeeding, any breastfeeding, and formula feeding. The definition of exclusive breastfeeding implies that an infant may receive either its own mother’s breast milk or donor milk via a bottle and nipple or other method and be considered as having had only breast milk.
- Consider collecting these data elements.
  - Mother’s feeding intent on admission
  - Actual feeding method at discharge
  - If infant formula is used, reason for decision (eg, mother’s choice to feed only formula, or to feed breast milk and formula, or specific medical indication)
  - Baseline measurement in all three categories to measure progress; frequency of the measurement, eg, monthly
  - Coding or other search methods that are integrated into an electronic medical record (use electronic methods when possible)



- Determine the most efficient way to extract data manually if electronic retrieval is not possible.
- Develop a strategic plan to address the improvement of exclusive breastfeeding rates.
  - Evaluate the various approaches that can be taken, such as the Baby Friendly 10 steps or evidence-based recommendations that have been shown to improve the initiation and continuation of exclusive breastfeeding.
  - Keep in mind that incremental steps will be the most effective and implementing just one practice change can often make a difference. Several of these steps are discussed in the next section (IV).
  - Garner support for the practices that the committee chooses to implement, making the case to hospital administration that increasing exclusive breastfeeding can contribute to the improvement of neonatal outcomes, thus decreasing the cost of health care for that population and for the community. Strong support of breastfeeding that results in good, measureable outcomes can be used as an excellent marketing tool for the hospital’s women’s and children’s services.

**IV. Adopt guidelines that have been shown to be successful for increasing initiation of breastfeeding.**

- BFHI guidelines have been shown through research to be an effective approach for increasing breastfeeding rates; other guidelines and approaches as identified earlier in the paper have also been shown to help increase breastfeeding.

- The Colorado Department of Health evaluated breastfeeding rates and hospital practices to determine which were most effective. They found that five of the BFHI ten steps were the most effective in improving breastfeeding rates in Colorado (Colorado Department of Health and Environment 2007). These steps are as follows:
  - Initiate breastfeeding within the first hour.
  - Avoid giving infants fluids or solids other than breast milk unless medically necessary.
  - Promote 24-hour rooming-in.
  - Do not use a pacifier or artificial nipple with infants during the hospital stay.
  - Give mothers a telephone number to call for help with breastfeeding.
- Researchers found that successful initiation of breastfeeding required implementation of all five practices and ensurance of appropriate staff training enforced by a written breastfeeding policy.
- Employing an incremental approach to implementation might be most successful in sustaining these practice changes, depending on the amount of support from nurses and physicians.
- Helping patients make an informed decision about infant feeding before they are admitted to the hospital for delivery supports breastfeeding.
- Most mothers make their infant feeding decisions before they arrive at the hospital. Therefore, there is a prenatal opportunity to help patients make an informed decision about infant feeding before admission.
- A mother’s decision not to breastfeed may be related to lack of education or other personal past experience.
- Support for breastfeeding must begin long before the mother arrives at the hospital and needs to continue after she goes home with her new baby.



- 
- A continuum-of-care approach is the most effective way to support initiation and continuation of exclusive breastfeeding. Hospitals can be the primary source of breastfeeding education, and they can also partner with community members, such as those below, to increase the distribution of information about breastfeeding.
  - The Joint Commission’s Perinatal Core Measure of exclusive breastfeeding is a hospital measurement. The ultimate goal of the Measure is to support the continuation of breastfeeding over the long term as recommended by the AAP.
  - Potential ways to achieve these goals are as follows:
    - Provide breastfeeding education in the main content of prenatal classes. A separate class may be held for breastfeeding, but those who do not take classes do not receive information that could help them make an informed decision.
    - Develop a method to reach out to mothers who do not attend prenatal classes or who live where classes are not available to ensure that they learn about breastfeeding before they are admitted to the hospital.
    - Develop written materials and resources and distribute them to physicians’ offices, where patients can receive them during prenatal visits.
    - Work with a specific person in physician offices such as a nurse practitioner or office nurse who is willing to provide one-on-one breastfeeding education to patient during the prenatal period.
    - Consider alternative methods to provide breastfeeding information by making information available online and through social media: Both venues are popular with women of childbearing age. Use resources such as hospital newsletters and information screens to share breastfeeding information.



- Consider integrating education on the benefits of breastfeeding into health education in schools so that students understand that it is the best choice for infant feeding.
- Assessing the unique characteristics of the community and patient population will help guide a hospital’s choice of the best approach to take to encourage breastfeeding. If attendance at prenatal classes is low, for instance, consider an alternative method of providing breastfeeding information to mothers-to-be.
- Following up with breastfeeding mothers after discharge has been shown to be effective in supporting continuation of breastfeeding.
- Send mothers home with easy-to-read information about breastfeeding, the challenges that they may encounter in the breastfeeding process, signs and symptoms of problems, and where to go or whom to call with questions or issues.
- Ensure that hospital support groups and postpartum visits acknowledge the obstacles that breastfeeding mothers face, such as the need to return to work, and reinforce the value of breastfeeding for as long as possible.
- Conduct a community-wide assessment of existing breastfeeding resources (eg, community centers, clinics, churches, and schools) and create a list for new mothers.



- Encourage local businesses to develop workplace policies that support breastfeeding, such as providing a space for mothers to pump and store breast milk. Leverage current business relationships and form new partnerships by providing businesses with information on the benefits that business receive when mothers who work there breastfeed.
- Support breastfeeding internally for hospital employees by providing an easily accessible pumping room and supporting a policy that allows break time for mothers to pump.
- Require that physicians who care for mothers and babies have continuing education on infant nutrition. Multidisciplinary educational offerings are effective in promoting a team approach to supporting exclusive breastfeeding.
- Educate physicians and other providers on the use of the correct growth chart, based on the infant’s feeding method.

**VI. Adopt other measures to support the implementation of practice changes and create a culture of support for breastfeeding.**

- Educate nurses and other staff in the hospital to support the culture of breastfeeding. Communicate the message that exclusive breastfeeding is an important health care priority for the hospital and the community. Ensure that new employees understand and support this priority.
- Educate direct-care staff and others who may encounter a patient who is breastfeeding so that correct, consistent information is provided to all patients.
- Promote regular continuing education opportunities on current breastfeeding practices and standards.
- Ensure that physicians know and reinforce the hospital breastfeeding policy.
- Partner with physicians to provide information on breastfeeding to patients prenatally.

## PART 4: CONCLUSION



Hospitals need assistance in formulating strategies, policies, and practices that move them toward what will soon be established as the Healthy People 2020 Breastfeeding Objectives. If hospitals choose to implement The Joint Commission's Perinatal Core Measure Set, they will need to show improvement in exclusive breastfeeding rates. No target percentage is currently required; however, the targets set in the Healthy People 2010 and 2020 objectives could serve as benchmarks.

For many hospitals, incremental steps toward improving breastfeeding support will be the most realistic approach to changing beliefs, practices, and behaviors in perinatal units. Some hospitals' policies may start by routinely measuring breastfeeding and exclusive breastfeeding rates. Following best practices from hospitals that are currently meeting or exceeding exclusive breastfeeding goals, such as those hospitals with the Baby Friendly designation or others that have chosen not to become BFHI-certified but have effectively developed their own policies to provide comprehensive breastfeeding education and support, is another good way to introduce practice changes that are evidence-based and can support the choices of all mothers and babies.

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