The Ten Steps to Successful Breastfeeding

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Final Report

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What are the Ten Steps to Successful Breastfeeding and Why Do We Need Them?

More than one million infants worldwide die every year because they are not breastfed or are given other foods too early. Millions more live in poor health, contract preventable diseases, and battle malnutrition. Although the magnitude of this death and disease is far greater in the developing world, thousands of infants in the United States suffer the ill effects of an infant formula-feeding culture. Babies who are not breastfed, or who are fed other foods too early may have an increased risk of obesity, an increased risk of diarrhea and other GI problems, respiratory and ear infections, and allergic skin disorders.

In the United States, these conditions translate into millions of dollars of costs to our health care system through increased hospitalizations and pediatric clinic visits. For diarrhea alone, approximately 200,000 US children, most of whom are young infants, are hospitalized each year at a cost of more than half a billion dollars. In a study of morbidity in an affluent US population, Dewey and colleagues found that the reduction in morbidity in breastfed babies was of sufficient magnitude to be of public significance. For example, the incidence of prolonged episodes of otitis media (ear infections) was 25% higher in non-breastfed as compared to breastfed infants. The cost savings to the health care system could be enormous if breastfeeding duration increased, given that ear infections alone cost billions of dollars a year.

It is a rare exception when a woman cannot breastfeed her baby for physical or medical reasons. Yet, a woman's ability to feel self confident and secure with her decision to breastfeed is challenged by her family and friends, the media, and health care providers. Much has been done in the past few years to strengthen the sources of support for women to breastfeed.

Although the hospital or birth center is not and should not be the only place a mother receives support for breastfeeding, maternity care facilities provide a unique and critical link between the breastfeeding support provided prior to and after delivery.

The Ten Steps to Successful Breastfeeding for Hospitals and Birth Centers, were outlined by UNICEF/WHO in the 1980's. The steps for the United States are:

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

The Baby-Friendly Hospital Initiative (BFHI) is a global program sponsored by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) to encourage and recognize hospitals and birthing centers when they have implemented the Ten Steps to Successful Breastfeeding. In each country an organization has been designated to assist hospitals and birthing centers with the process and give them special recognition when they have implemented the Ten Steps. *Baby-Friendly USA* is the designated national authority in the United States.

The Ten Steps Worldwide

In many countries around the world, thousands of hospitals and birthing centers have already fully implemented the Ten Steps to Successful Breastfeeding and received Baby-Friendly Hospital designations from their national authority.

The Ten Steps in the United States

The Healthy Mothers, Healthy Babies Coalition received a grant from the US Department of Health and Human Services to convene an Expert Work Group to examine the criteria and assessment process of the Ten Steps to Successful Breastfeeding. Wellstart International, which is located in San Diego, California, developed the evaluation materials to support the assessment process. The U.S. Committee for UNICEF supported these efforts financially and with "in kind" services. In January of 1997, the Healthy Children Project, Inc. accepted responsibility for the initiative and worked to form Baby-Friendly USA as the not-for-profit corporation that is the national authority for the Baby-Friendly Hospital Initiative in the United States.

Why Participate in the US Baby-Friendly Hospital Initiative?

Participation in this initiative provides several possible benefits for maternity care facilities:

Quality improvement: many of the ten steps are easily adaptable as QI projects.
Cost containment: increased breastfeeding rates can have impact on many health care costs from postpartum hemorrhage, to decreased incidence of ear infection.
Public relations/marketing: families who feel adequately supported during the vulnerable postpartum days can speak powerfully for a birth facility.
Prestige: The receipt of this WHO/UNICEF international award is an achievement to celebrate!

What Can US Birth Facilities Do Now?

Birth facilities can make a commitment to improve breastfeeding policy, training and practices. They can create an environment supportive of the Ten Steps to Successful Breastfeeding.

Hospitals and birthing centers across the country are eager to work toward the implementation of the Ten Steps to Successful Breastfeeding and have signified their commitment by applying for and receiving a "Certificate of Intent" from Baby-Friendly USA. The "Certificate of Intent" indicates that a maternity care facility has decided to work on the implementation of the Ten Steps to Successful Breastfeeding, not that they have achieved full implementation of any or all of the steps. Among these institutions are both large and small hospitals, for profit and not-for-profit hospitals, teaching hospitals, and hospitals at various stages of development in their breastfeeding education and support services, as well as birthing centers. The annual deliveries range from less than 100 in a small rural hospital to over 8,000 deliveries annually in an urban hospital.

The Certificates of Intent are given out on an honor system. There is no visit to the hospital or birth-

ing center to verify compliance. Receiving the Certificate of Intent is not equal to being awarded the Baby-Friendly designation, but rather recognizes those US hospitals and birthing centers that are working toward applying the Ten Steps in their facility.

The Baby-Friendly Award process requires an on-site survey, which is conducted after the hospital or birthing center indicates readiness for assessment. Only after the facility has had an on-site assessment and demonstrated that all ten steps of the Ten Steps to Successful Breastfeeding have been fully implemented is the designation of being a Baby-Friendly Hospital awarded.

Implementing The Ten Steps to Successful Breastfeeding

Hospitals and Birth Centers in the United States who have fully implemented the Ten Steps to Successful Breastfeeding and received the Baby-Friendly Hospital Award have described their process in an effort to smooth the path for other facilitates. Implementation of the Ten Steps requires examination, change and evaluation. Examination of ingrained, but outdated practices, policies and beliefs and replacing them with evidence-based practices, policies and beliefs is not easy. But it is worthwhile. Staff members may resist change if the leaders do not provide the education, discussion, integration and evaluation that support the change.

Strategies for Improvement of Breastfeeding Policies and Procedures

- Establish a multidisciplinary task force to review the current state of policy and practice related to breastfeeding.

  Except in small facilities, individuals working alone rarely have all of the assets that are needed to overcome established practices, the status quo and inertia.

  The impetus to establish a multidisciplinary task force to implement the Ten Steps to Successful Breastfeeding has come from a variety of positions in maternity care facilities including

  Hospital CEO
  Clinical Director
  Lactation Specialist
  Nurse Manager
  Coordinator of Childbirth Education and Lactation Program
  Pediatricians
  OB team
  Nurse Executive/Administrator
  Former Patient
  Per Diem Nurse
  Nurse Practitioner
  Unit Manager
  Lactation Committee
  Midwifery Director

- Use the Self-Appraisal Tool to examine how the current practices differ from those expected by the Ten Steps. Although one individual at the facility may be tempted to complete the appraisal tool alone, review by the entire task force provides a team building activity that will be the foundation of future work.

- Apply for a Certificate of Intent from Baby-Friendly USA if technical assistance is desired.

- Establish a working plan for meetings and leadership for the task force. Determine whether other departments and champions within the larger facility should be included on the task force. Share meeting minutes and/or up-beat newsletters/progress reports with the widest reaches of the facility including community physicians, community partners and the Board of Directors.
- Determine strategies to resolve conflicts when and if they arise. A strategy offered by successful task forces is to establish the rules of evidence early in the process.
- Collect base-line data related to breastfeeding initiation rates (first feeding), supplementation rates, transfer rates of infants to special care (if-applicable), and duration rates.
- Identify challenges and barriers to implementation of steps and sub-steps. Members of the task force should discuss which steps will be easiest to tackle, and which will be toughest along with identifying obstacles for overcoming each step and sub-step.
- Prioritize the steps and sub-steps to implement. Tackle the easiest ones first. It is tempting to address the steps in numerical order, however each facility should take them in the order that makes sense for its unique situation.
- Designate task force members to speak individually with each non-task force staff member in order to explain the process and answer their questions and concerns.
- Debunk the myths and common misunderstandings. For example, Step 6 pertains only to mothers who have already elected to breastfeed their newborns. The step does not force anyone to breastfeed. In addition, there are misconceptions about pacifiers for ill infants, premature neonates and babies in pain. The steps focus on healthy, full-term infants for whom there is no medical indication for pacifier use. Hospitals with certificates of intent may contact Baby-Friendly USA for technical assistance in fully understanding the Ten Steps.
- Protect the system from a two-tiered outcome such as one where mothers who are breastfeeding are rooming-in with their babies and babies who are being formula fed are in a nursery. Many of the steps and sub-steps apply to all mothers and full term healthy babies who receive maternity care in the facility, not just those who are breastfeeding.
- Develop quality improvement projects related to each prioritized step and sub-step. In facilities with a department devoted to quality improvement, that department should collaborate with the task force on these projects.
- Implement a communication strategy. For example, posters and displays placed near the cafeteria keep non-involved staff up-to-date on the progress of the Ten Steps.
- Generate short-term “wins” through planning for improvements in performance, and creating the “wins”. Celebrate the steps and sub-steps that are in line with the Ten Steps. Visibly reward the staff members that make the “wins” possible.
- Establish files for documents related to the steps. Include the written breastfeeding policy, curriculum for any training in lactation management given to staff caring for mothers and babies, outline of the content to be covered in prenatal education about breastfeeding. Existence of such written documents provides evidence of on-going institutional commitment to breastfeeding and ensures continued promotion even with changes in staff.
- Consolidate change to produce more change. Use increasing credibility to tackle the steps and sub-steps that the task force determined were the most difficult.

- Anchor the new practices by articulating the connection between the new practices and the success of the organization. Until new behaviors are integrated into social norms and shared values they are subject to degradation.
- Conduct mock assessments and patient interviews to determine whether the Ten Steps and sub-steps have been fully implemented. Review policies and procedures to see whether they reflect the current practices and up-to-date evidence. Contact Baby-Friendly USA to arrange for a "long interview" and an on-site assessment in order to receive the Baby-Friendly designation.

Step by Step

A guide to understanding the purpose, criteria, common barriers to implementing and strategies for overcoming identified barriers.

Step 1: Have a written breastfeeding policy that is routinely communicated to all health care staff.

Purpose:
To assure that policy exists that promotes breastfeeding and delineates standards of care for breastfeeding mothers and babies.

Criteria:
The facility will have a detailed breastfeeding policy that is inclusive of the Ten Steps to Successful Breastfeeding, and is routinely communicated to all health care staff.

Common Barriers to Implementation:
- resistance to new policies and practices
- lack of support from key sectors (e.g., administrative, managerial, medical, nursing, etc.) to create a forum for discussing and revising policy
- concern about the potential costs of policy change
- disagreement about the validity or importance of the Ten Steps
- lack of monitoring to indicate if practice is in keeping with policy

Strategies to Overcome Barriers:
- establish a multidisciplinary team (including representatives of all key sectors) to review current policy, practice, and complete self-appraisal tool
- provide documentation of the benefits of breastfeeding and of the influence of maternity care practices on breastfeeding outcomes
- examine the economic benefits of breastfeeding and the costs of artificial feeding
- review the scientific evidence behind contentious issues and steps review model hospital policies, as possible resources for amending or rewriting existing policies
- proceed slowly, in a “baby steps” manner when resistance to change is triggered
- consider a survey of mothers to examine their experience with breastfeeding practices, then compare results with policy to determine level of synchrony between policy and practice

Resources & References:

Academy of Breastfeeding Medicine. *Clinical Protocol #7: Model Breastfeeding Policy.* Princeton Junction, NJ: Author, 2004. Accessed at http:www.bfmed.org.

American Academy of Family Physicians. *AAFP Policy Statement on Breastfeeding.* Leawood, KS: Author, 2001.

American Academy of Pediatrics. Breastfeeding and the use of human milk. *Pediatrics* 100 (6):1035-39, 1997.

American College of Nurse Midwives. Clinical Practice Statement on Breastfeeding. Washington, DC: Author, 1992.

American College of Obstetricians and Gynecologists. *Breastfeeding: Maternal and Infant Aspects*. Washington, DC: Author, 2000.

American Dietetic Association. Breaking the barriers to breastfeeding. *J Am Diet Assoc* 101:123, 2001.

Association of Women's Health, Obstetric and Neonatal Nurses. *Breastfeeding: Clinical Position Statement.* Washington, DC: Author, 1999.

Baby-Friendly USA. *Mom's Survey: Every Step Counts.(*Adapted from WABA survey) Sandwich, MA: Author, 2004. Accessed at: http://www.babyfriendlyusa.org/eng/docs/MomSurvey.pdf

Ball TA, Wright A. Health care costs of formula-feeding in the first year of life. *Pediatrics* 83: 103:870-6.

DiGirolamo AM, Grummer-Strawn LM, Fein S. Maternity care practices: implications for breastfeeding. *Birth* 28:94-100, 2001.

Division of Child Health and Development: *Evidence for the Ten Steps to Successful Breastfeeding.* Geneva: World Health Organization, 1999.

International Lactation Consultant Association. *Evidence-based Guidelines for Breastfeeding Management in the First Fourteen Days.* Raleigh, NC: Author, 1999.

Perez-Escamilla R, Pollitt E, Lonnerdal B, Dewey KG. Infant feeding policies in maternity wards and their effect on breast-feeding success: an analytical overview. *Am J Public Health* 84(1):89-97, 1994.

United States Breastfeeding Committee. *Benefits of breastfeeding* [issue paper]. Raleigh, NC: Author, 2002. Accessible http://www.usbreastfeeding.org/Publications.html

United States Breastfeeding Committee. *Breastfeeding in the United States: A national agenda.* Rockville MD: U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. Accessible http://www.usbreastfeeding.org/Publications.html

United States Breastfeeding Committee. *Economic benefits of breastfeeding* [issue paper]. Raleigh, NC: Author, 2002. Accessible at http://www.usbreastfeeding.org/Publications.html

United States Department of Health and Human Services. *HHS Blueprint for Action on Breastfeeding.* Washington, DC: Author, 2000. Accessible at http://www.4women.gov/Breastfeeding.

Weimer J. *The economic benefits of breastfeeding: A review and analysis.* Economic Research Service, U.S. Department of Agriculture 2001, Report No. 13:1-20.

Wellstart International. *Model Hospital Breastfeeding Policies for Full-term Normal Newborn Infants.* San Diego, CA: Author. Revised 1996.

World Health Organization, Wellstart International. *Promoting breast-feeding in health facilities: A short course for administrators and policy makers.* Geneva: World Health Organization, 1996.

Wright A, Rice S, Wells S: Changing hospital practices to increase the duration of breastfeeding. *Pediatrics* 97:669-75, 1996.

Step 2. Train all health care staff in skills necessary to implement this policy.

Purpose:
To assure that all staff have the knowledge and skill necessary to provide quality breastfeeding care.

Criteria:
All staff with primary responsibility for the care of breastfeeding mothers and babies will have a minimum 18 hours of training inclusive of 3 or more hours of competency verification. Training for other staff members may be tailored to their job description and degree of exposure to breastfeeding.

Common Barriers to Implementation:
- finding time for training
- lack of in-house expertise for training
- financial cost of providing training
- cost of staff coverage for training hours
- high staff turnover creating continuous need for training

Strategies to Overcome Barriers:
- assess prior education offered through in-services, skills labs, conferences, etc. to determine where content needs have already been provided (prior training is acceptable so long as periodic research updates are provided)
- consider low-cost training modalities such as:
  - integrate breastfeeding education into existing staff meetings
  - sending key staff to "train the trainer" type programs and then offer training in-house
  - self-study training modules acquired from outside vendors, or constructed from recent journal articles
  - web-based training

Resources & References:

Best Start Social Marketing. *Health Care Provider Kit.* Tampa, FL: Author, 2001.

Cadwell K, ed: *The Curriculum in Support of the Ten Steps to Successful Breastfeeding: an 18 hour interdisciplinary breastfeeding management course for the United States.* Washington, DC: US Department of Health and Human Services, 1999.

This curriculum and supporting educational media is available from Health Education Associates. The Healthy Children Project offers a *Train the Trainer* course to accompany this curriculum.

Cadwell K & Turner-Maffei C, Eds. *Ten Steps to Successful Breastfeeding.* Sudbury, MA: Jones & Bartlett Publishers.2002. Information may be accessed at http://Tensteps.jbpub.com

Cattaneo A, Buzzetti R. Effect on rates of breast feeding of training for the baby friendly hospital initiative. *BMJ* 323(7325):1358-62, 2001.

Feldman-Winter L, Mulford C, Touger-Decker R. *Lactation for Clinicians* (CDROM and Web components). Newark, NJ: University of Medicine and Dentistry of New Jersey. http://www.umdnj.edu/lactweb/index.htm.

Martens PJ. Does breastfeeding education affect nursing staff beliefs, exclusive breastfeeding rates, and Baby-Friendly Hospital Initiative compliance? The experience of a small, rural Canadian hospital. *J Hum Lact* 16(4):309-318, 2000.

Valdes V, Pugin E, Labbok MH, Perez A, Catalan S, Aravena R, Adler MR. The effects on professional practices of a three-day course on breastfeeding. *J Hum Lact* 11(3):185-90, 1995.

Wellstart International. *Lactation Management Self-Study Modules, Level I.* San Diego, CA: Author, 2004.

Step 3. Inform all pregnant women about the benefits and management of breastfeeding.

Purpose:
To assure the integration of messages about breastfeeding in all prenatal education interchanges.

Criteria:
All women delivering in the facility will have received consistent, positive messages about breastfeeding through prenatal education. Topics to be covered include the benefits of breastfeeding, the importance of exclusive breastfeeding, and basics of breastfeeding management; as well as the possible effect of analgesia/anesthesia on infant behavior, and the rationale for care practices such as early skin-to-skin contact, rooming-in, feeding on cue. All prenatal educational media should be free of messages that promote artificial feeding.

Common Barriers to Implementation:
- fragmentation of prenatal care creating diffusion of messages about breastfeeding
- limited attendance at prenatal education programs

Strategies to Overcome Barriers:
- work as a group to revise or write a prenatal booklet about breastfeeding that can be duplicated and distributed through all affiliated prenatal care practitioners
- develop a teaching checklist for obstetric care that provides talking points about breastfeeding at each prenatal visit
- position education resources such as posters, videos, peer counselors, educators, etc. to present concise messages about infant feeding in obstetric care waiting rooms, ultrasonography, laboratories, and other locations where pregnant women may have downtime
- weave infant feeding education into regular childbirth classes, rather than providing an optional class at the end of the series
- invite other community breastfeeding resource people (e.g. La Leche League, WIC programs, lactation consultants, etc.) to provide education on-site

Resources & References:
American College of Obstetricians and Gynecologists. *Breastfeeding: Maternal and Infant Aspects.* Queenan JT, editor. 258, 1-15. 2000. Washington, DC: Author, 2000.

Howard CR, Howard FM, Lawrence RA, et al. The effect on breastfeeding of physicians' office-based prenatal formula advertising. *Obstetrics & Gynecology* 95(2):296-303, 2002.

Taveras EM, Li R, Grummer-Strawn L, et al. Mothers' and clinicians' perspectives on breastfeeding counseling during routine preventive visits. *Pediatrics.* 113(5):e405-11, 2004.

Step 4. Help all mothers initiate breastfeeding within one hour of birth.

Purpose:
To assure the early initiation of skin-to-skin contact and breastfeeding.

Criteria:
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.

Common Barriers:
- routine practice of mother-baby separation in the first hour for examination and cleaning of baby
- perception that routine procedures (e.g., bathing, warming, observation) have priority over breast-feeding in the first hour of life

Strategies to Overcome Barriers:
- review recent research on the importance of early feeding on breastfeeding outcomes
- examine guidance from the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists on the importance of avoiding routine mother-baby separation in the first hour of life
- undertake a small scale observational study to trial changing immediate postpartum mother-baby contact and track breastfeeding rates of those mother/baby pairs

Resources & References:
American Academy of Pediatrics. Breastfeeding and the use of human milk. *Pediatrics* 100(6):1035-39, 1997.

American College of Obstetricians and Gynecologists*. Breastfeeding: Maternal and Infant Aspects.* Queenan JT, editor. 258, 1-15. 2000. Washington, DC: Author, 2000.

Anderson GC, Moore E, Hepworth J, Bergman N. Early skin-to-skin contact for mothers and their healthy newborn infants. *Cochrane Database Syst Rev.* 2003;(2):CD003519.

Ransjo-Arvidson AB, Matthiesen AS, Lilja G, et al. Maternal analgesia during labor disturbs newborn behavior: effects on breastfeeding, temperature, and crying. *Birth* 28(1):5-12, 2001.

Righard L, Alade MO. Effect of delivery room routines on success of first breast-feed. *Lancet* 336(8723):1105-7, 1990.

Step 5. Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants.

Purpose:
To assure ongoing breastfeeding assessment, evaluation and support during the stay.

Criteria:
All mothers should receive additional assistance with breastfeeding in the first six hours after birth and throughout her stay. Staff should routinely assess mother/baby comfort and effectiveness of feeding and suggest changes as needed. Education should be offered regarding feeding in response to infant cues and methods of expressing breast milk. Mothers of preterm or ill babies should be educated about collecting their milk.

Common Barriers:
- Inconsistent advice and teaching among staff
- Limited staff competence in assessing and educating mothers
- Limited staff time

Strategies to Overcome Barriers:
- Establish a working group to standardize methods of breastfeeding assessment and teaching
- Create a team of staff members who are competent and comfortable with breastfeeding assessment and teaching
- Assign less confident staff to shadow members of the "expert team," eventually swap roles so that learners are observed by "experts"
- Consider creating a "feeding room" in a solarium or other open room where mothers can come together for feeding. This methodology can allow one or two staff members to assess and educate multiple mothers at the same time. (It also helps build mother-to-mother connection and learning.)
- Train peer counselors (other women who have been successful with breastfeeding) to make rounds and spend time assessing and educating breastfeeding mothers

Resources & References

Gill SL. The little things: perceptions of breastfeeding support. *J Obstet Gynecol Neonatal Nurs* 30 (4):401-9, 2001.

La Leche League International. The La Leche League Peer Counseling Program. Schaumburg, IL: Author, 2002. Accesssed at http://www.lalecheleague.org/ed/PeerAbout.html

Merewood A, Philipp BL. Peer counselors for breastfeeding mothers in the hospital setting: trials, training, tributes, and tribulations. *J Hum Lact.* 19(1):72-6, 2003.

Step 6. Give newborn infants no food or drink others than breastmilk, unless medically indicated.

Purpose:
To assure that healthy breastfeeding babies are not routinely supplemented with any food or drink other than human milk (unless medical indications exist for supplementation). Furthermore, to protect parents from formula marketing.

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.

Common Barriers:
- Routine, non-indicated supplementation of breastfed infants
- Misconception regarding contraindications to breastfeeding
- Concern that parents will choose another facility if they don't receive a discharge gift
- Budgetary constraints regarding purchase of formula

Strategies to Overcome the Barriers:
- Establish a medical review team to examine recent policy statements on supplementation of breastfed babies
- Educate staff regarding the limited number of medical contraindications to breastfeeding; as well as the importance of unrestricted mother/baby contact and feeding in building an abundant milk supply
- Work with marketing to develop the facility's own discharge gift pack for mothers
- Determine the actual amount of formula needed (versus what is stocked). Lock up the formula supplies and require staff to sign it out, indicating their name, the patient's name, and medical indication for use. This will help to restrict formula usage, as well as providing information about what additional education and skill areas need to be advanced among staff. After collecting usage data for a period of time, put a bid out to vendors, including large chain pharmacies or food wholesalers to determine the fair market price of formula.

Resources & References:
Academy of Breastfeeding Medicine: *Clinical Protocol #1: Guidelines for Glucose Monitoring and Treatment of Hypoglycemia in Term Breastfeeding Neonates*. Lenexa, KS: Author, 1999.

Academy of Breastfeeding Medicine: *Clinical Protocol #3: ABM Clinical Protocol Number 3 -- Hospital Guidelines for the Use of Supplementary Feedings in the Healthy Term Breastfed Neonate.* Lenexa, KS: Author, 2002.

American Academy of Pediatrics. Breastfeeding and the use of human milk. *Pediatrics* 100(6):1035-39, 1997.

American Academy of Pediatrics: Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation. *Pediatrics* 114 (1) : 297-316, 2004.

Donnelly A, Snowden HM, Renfrew MJ, Woolridge MW. Commercial hospital discharge packs for breastfeeding women. *Cochrane Database Syst Rev.* 2000;(2):CD002075.

Merewood A, Philipp BL: Becoming Baby-Friendly: Overcoming the issue of accepting free formula. *J Hum Lact* 16:272-282, 2000.

Walker M. *Selling Out Mothers and Babies: Marketing of breast milk substitutes in the USA.* Weston, MA: National Alliance for Breastfeeding Advocacy, Research, Education and Legal Branch, 2001.

World Health Organization. *Hypoglycemia of the Newborn: Review of the Literature.* Geneva: Author WHO/CHD 97.1,1997.

Step 7. Practice rooming-in allow mothers and infants to remain together – 24 hours a day.

Purpose:
To assure that healthy mothers and babies have ample opportunities for skin-to-skin contact and early learning of baby's feeding cues.

Criteria:
Rooming-in should be practiced throughout the facility. There should be no routine delays between birth and the initiation of continuous mother/baby contact. Mothers who request separation from their babies should receive information about the rationale for rooming-in. Healthy mothers and babies should not be routinely separated during their stay, with the exception of up to one hour daily for any medically necessary procedures.

Barriers:
- Perception of staff and/or mothers that sleep quality is improved when mothers and babies are separated
- Perception that routine separation is necessary for bathing, examinations, observation and other medical procedures

Strategies to Overcome Barriers:
- Review evidence regarding the sleep and mother/baby contact
- Examine the routine procedures that "require" infant to be taken to the nursery. Determine which procedures could be done in mother's room, offering opportunities for more education during assessment. Many facilities have purchased portable scales, bath equipment, etc. in order to be conduct these procedures at the mother's bedside.
- Offer staff the opportunity to role play how to respond when mothers request that their baby be taken from their room

Resources & References:
Keefe MR. The impact of infant rooming-in on maternal sleep at night. *J Obstet Gynecol Neonatal Nurs*. 17(2):122-6, 1988.

McGrath SK, Kennell JH. Extended mother—infant skin-to-skin contact and prospect of breastfeeding. *Acta Paediatr* 91:1288-9, 2002.

Mikiel-Kostyra K, Mazur J, Boltruszko I. Effect of early skin-to-skin contact after delivery on duration of breastfeeding: a prospective cohort study. *Acta Paediatr.* 91(12):1301-6, 2002.

Step 8. Encourage breastfeeding on demand.

Purpose:
To assure that mothers are encouraged to feed their babies in response to the baby's signs of feeding readiness.

Criteria:
All mothers should be educated about the baby's ability to indicate feeding readiness and self-regulate feedings when given unlimited learning opportunities. Staff should assist families in the process of learning about feeding cues and responding to them. Mothers should not be told to feed on any particular schedule or interval, but rather to expect a minimum of10-12 feedings in 24 hours of no particular pattern of frequency. Additionally, feedings should not be limited in length.

Common Barriers to Implementation:
- Expectations on the part of mothers and staff that feeding should occur on a regular, predictable schedule
- Lack of knowledge of common feeding cues
- Lack of adequate mother/baby contact

Strategies to Overcome Barriers:
- Educate mothers during both the prenatal and postpartum regarding typical infant feeding cues
- Educate staff about typical infant feeding cues
- Offer role play opportunities for staff to respond to parent's questions such as "How often should I feed my baby?"
- Encourage unrestricted skin-to-skin contact to optimize baby's learning opportunities

Resources & References:
American Academy of Pediatrics. Breastfeeding and the use of human milk. *Pediatrics* 100(6):1035-39, 1997.

Cadwell K. Bilirubin status as an outcome measure in monitoring adherence to baby-friendly breastfeeding policies in hospitals and birthing centers in the United States. *J Hum Lact*. 14(3):187-9, 1998.

Marasco L, Barger J. Cue Feeding: Wisdom and Science. *Breastfeeding Abstracts*, 18(4): 28-29, 1999.

Step 9. Give no artificial teats or pacifiers.

Purpose:

To assure that breastfed babies are not deterred from learning how to suckle at the breast, and thereby from maximizing mothers' milk supply.

Criteria:

Health care staff should not offer healthy breastfed babies pacifiers or artificial nipples. (There may be a role for pacifier use in the preterm or ill baby who is not able to suckle at the breast.) When breastfed infants require supplementation, efforts should be made to limit supplementation device to cup, tube or syringe to avoid introducing artificial nipple shapes.

Common Barriers:

- Cultural expectation that pacifiers are needed to calm babies
- Staff familiarity with bottles as supplemental feeding devices and discomfort with alternative feeding methods
- Concern about the safety of cup feeding

Strategies to Overcome Barriers:

- Examine recent research regarding the impact of bottle, cup and other alternative feeding methods on breastfeeding success rates
- Examine recent research regarding the association of pacifiers and reduced breastfeeding exclusivity and duration
- Implement skin-to-skin and rooming-in protocols
- Teach staff, and help staff to teach parents soothing techniques such as skin-to-skin, walking, and rocking babies
- Offer staff hands-on training regarding alternative supplementation methods

Resources & References

Blomquist HK, Jonsbo F, Serenius F, Persson LA. Supplementary feeding in the maternity ward shortens the duration of breast feeding. *Acta Paediatr.* 83(11):1122-6, 1994.

Howard CR, de Blieck EA, ten Hoopen CB, et al. Physiologic stability of newborns during cup- and bottle-feeding. *Pediatrics.* 1999 Nov;104(5 Pt 2):1204-7.

Howard CR, Howard FM, Lanphear B, et al. Randomized clinical trial of pacifier use and bottle-feeding or cupfeeding and their effect on breastfeeding. *Pediatrics*. 111(3):511-8, 2003.

Step 10. Foster the establishment of breast-feeding support groups and refer mothers to them on discharge from the hospital or clinic.

Purpose:
To assure that mothers are linked to ongoing breastfeeding support resources.

Criteria:

Facilities should assess the available community breastfeeding support resources and foster the development of breastfeeding support networks. All mothers should receive referral to appropriate resources prior to their discharge. Staff should develop individual care plans for the follow-up of mothers and babies who have identified breastfeeding risk factors.

Common Barriers to Implementation:

- Lack of awareness of existing resources (including availability and limitation of identified resources)
- Lack of proactive resources

Strategies for Overcoming Barriers:

- Partner with community breastfeeding resources to create or strengthen regional breastfeeding coalitions.
- Develop current breastfeeding resource lists and distribute them religiously to mothers
- Encourage coalitions to conduct needs assessments to identify un-served and under-served breastfeeding support needs.
- Strategize how to meet these needs through collaboration with community partners. (For example, invite La Leche League leaders or WIC breastfeeding counselors to hold support groups in facility meeting rooms; utilize marketing follow-up calls to identify if mothers are connected with postpartum resources; establish breastfeeding resources where mothers are likely to be found – in the mall, at the pediatric clinic, etc.)

Resources & References

Cadwell K. *Growing a Breastfeeding-Friendly Community. Sandwich*, MA: Health Education Associates, nd.

Dennis CL, Hodnett E, Gallop R, Chalmers B. The effect of peer support on breast-feeding duration among primiparous women: a randomized controlled trial*. Can Med Asso J* 116(1):21-28, 2002.

McKeever P, Stevens B, Miller KL, et al. Home versus hospital breastfeeding support for newborns: a randomized controlled trial. *Birth* 29(4):258-65, 2002.

Sikorski J, Renfrew MJ, Pindoria S, Wade A. Support for breastfeeding mothers (Cochrane Review). *The Cochrane Library.* UK: John Wiley & Sons, 1:2004.

General Research about the Implementation of the Ten Steps to Successful Breastfeeding

Binns CW, Scott JA. Can we make hospitals and the community baby friendly? *Acta Paediatr* 92:646-7, 2003.

Braun MG, Giugliani ERJ, Soares ME, et al. Evaluation of the impact of the Baby-Friendly Hospital Initiative on rates of breastfeeding. *Am J Public Health* 93(8):1277-1279, 2003.

Cadwell K. Bilirubin status as an outcome measure in monitoring adherence to baby-friendly breastfeeding practices in hospitals and birthing centers in the United States. *J Hum Lact* 14(3):187-9, 1998.

Cadwell K, ed. *Reclaiming Breastfeeding for the United States* Sudbury, MA: Jones & Bartlett Publishers, Inc., 2002.

Cattaneo A, Buzzetti R. Effect on rates of breast feeding of training for the baby friendly hospital initiative. *BMJ* 323(7325):1358-62, 2001.

Chen A., Rogan WJ. Breastfeeding and the risk of postneonatal death in the United States. *Pediatrics* 113 (5):e435-9, 2004.

Clarke LL, Deutsch MJ: Becoming Baby-Friendly: one hospital's journey to total quality care. *AWHONN Lifelines* 12/97: 30-37, 1997.

Declerq ER, Sakala C, Corry MP, Applebaum S, Risher P. *Listening to Mothers: Report of the First National U.S. Survey of Women's Childbearing Experiences Executive Summary and Recommendations Issued by the Maternity Center Association.* New York: Maternity Center Association, 2002.

DiGirolamo AM, Grummer-Strawn LM, Fein S. Maternity care practices: implications for breastfeeding. *Birth* 28:94-100, 2001.

Division of Child Health and Development: *Evidence for the Ten Steps to Successful Breastfeeding.* Geneva: World Health Organization, 1999.

Dodgson JE, Allard-Hale CJ, Bramscher A, et al. Adherence to the ten steps of the Baby-Friendly Hospital Initiative in Minnesota hospitals. *Birth* 26(4):239-247, 1999.

Dunlon M, Kersting M, Bender R. Breastfeeding promotion in non-UNICEF-certified hospitals and long-term breastfeeding success in Germany. *Acta Paediatr* 92:653-8, 2003.

Ellis DJ: Supporting breastfeeding: how to implement agency change. *Clin Issu Perinat Womens Health Nurs* 3(4): 560-4, 1992.

Gray L, Watt L, Blass EM. Skin-to-skin contact is analgesic in healthy newborns. *Pediatrics* 105(1):e14, 2002.

Hannon PR, Ehlert-Abler P, Aberman S, Williams R, Carlos M. A multidisciplinary approach to promoting a Baby Friendly environment at an urban university medical center. *J Hum Lact* 15(4):289-96, 1999.

Helsing E, Chalmers BE, Dinekina TJ, Kondakova NI. Breastfeeding, baby friendliness and birth in transition in North Western Russia: a study of women's perceptions of the care they receive when giving birth in six maternity homes in the cities of Archangelsk and Murmansk, 1999.*Acta Paediatr*. 91(5):578-83, 2002.

Jones G, Steketee RW, Black BE, et al. How many child deaths can we prevent this year? *Lancet.* 362 (9377):65-71, 2003.

Karra MV, Auerbach KG, Olson L, Binghay EP. Hospital infant feeding practices in metropolitan Chicago: an evaluation of five of the "Ten Steps to Successful Breast-feeding." *J Am Diet Assoc* 93(12):1437-9, 1993.

Kovach AC. An assessment tool for evaluating hospital breastfeeding policies and practices. *J Hum Lact* 12:41-45, 1996.

Kovach AC: Hospital breastfeeding policies in the Philadelphia area: a comparison with the ten steps to successful breastfeeding. *Birth* 24:41-8, 1997.

Kramer MS et al. Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus. *JAMA* 285(4):413-420, 2001.

Lazarov M, Feldman A, Silveus S*: The Baby-Friendly Hospital Initiative: US activities*. J Hum Lact 9:74-75,

1993.

Lhotska L, Armstrong H. Future directions. *Ann N Y Acad Sci.* 918:145-55, 2000.

Lvoff NM, Lvoff V, Klaus MH. Effect of the baby-friendly initiative on infant abandonment in a Russian hospital. *Arch Pediatr Adolesc Med.* 154(5):474-7, 2000.

Kramer MS, Chalmers B, Hodnett ED, et al. Promotion of breastfeeding intervention trial (PROBIT): a cluster-randomized trial in the Republic of Belarus. Design, follow-up, and data validation. *Adv Exp Med Biol*. 478:327-45, 2000.

Kramer MS, Chalmers B, Hodnett ED, et al. Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus. *JAMA* 24-31;285(4):413-20, 2001.

Labbok MH. The Baby-Friendly Hospital Initiative: Today and tomorrow. *Breastfeeding Abstracts* 23(2):11-12, 2004.

Martens PJ. Does breastfeeding education affect nursing staff beliefs, exclusive breastfeeding rates, and Baby-Friendly Hospital Initiative compliance? The experience of a small, rural Canadian hospital. *J Hum Lact* 16(4):309-318, 2000.

Martens PJ, Phillips SJ, Cheang MS, Rosolowich V. How Baby-Friendly are Manitoba Hospitals? The Provincial Infant Feeding Study. *Can J Pub Hlth*. 91(1):51-57, 2000.

McCreath WA, Wilcox S, Laing VV, Crump D, Gilles J. Improving the number of mothers breastfeeding in the postpartum period. *Prim Care Update Ob Gyns* 3(1):40-43, 2001.

Merewood A, Philipp BL, Chawla N, Cimo S. The baby-friendly hospital initiative increases breastfeeding rates in a US neonatal intensive care unit. *J Hum Lact.* 19(2):166-71, 2003.

Merewood A, Philipp BL. Becoming Baby-Friendly: overcoming the issue of accepting free formula. *J Hum Lact.*16(4):279-82, 2000.

Merewood A, Philipp BL. Implementing change: becoming baby-friendly in an inner city hospital. *Birth.* 2001 Mar;28(1):36-40, 2001.

Merewood A, Philipp BL. Peer counselors for breastfeeding mothers in the hospital setting: trials, training, tributes and tribulations. *J Hum Lact* 19(1): 72-6, 2003.

Naylor AJ. Baby-Friendly Hospital Initiative. Protecting, promoting, and supporting breastfeeding in the twenty-first century. *Pediatr Clin North Am.* 48(2):475-83, 2001.

Owoaje ET, Oyemade A, Kolude OO. Previous BFHI training and nurses' knowledge, attitudes and practices regarding exclusive breastfeeding. *Afr J Med Med Sci.* 31(2):137-40, 2002.

Philipp BL, Malone KL, Cimo S, Merewood A. Sustained breastfeeding rates at a US baby-friendly hospital. *Pediatrics* 112(3 Pt 1):e234-6, 2003.

Philipp BL, Merewood A, Miler LW, et al. Baby-friendly hospital initiative improves breastfeeding initiation rates in a US hospital setting. *Pediatrics*. 108(3):677-81, 2001.

Prasad B, Costello AM. Impact and sustainability of a "baby friendly" health education intervention at a district hospital in Bihar, India. *BMJ* 310(6980):621-3, 1995.

Rapley G. Keeping mothers and babies together--breastfeeding and bonding.
Midwives (Lond). 5(10):332-4, 2002.

Rowe-Murray HJ, Fisher JRW. Baby Friendly Hospital practices: Caesarean section is a persistent barrier to early initiation of breastfeeding. *Breastfeeding Review* 11(1):21-27, 2003.

Saadeh R, Akre J: Ten steps to successful breastfeeding: a summary of the rationale and scientific evidence. *Birth* 23:154-60, 1996.

Schubiger G, Schwarz U, Tonz O. UNICEF/WHO baby-friendly hospital initiative: does the use of bottles and pacifiers in the neonatal nursery prevent successful breastfeeding? Neonatal Study Group. *Eur J Pediatr.* 156(11):874-7, 1997.

Southall DP, Burr S, Smith RD, Bull DN, Radford A, Williams A, Nicholson S. The Child-Friendly Healthcare Initiative (CFHI): Healthcare provision in accordance with the UN Convention on the Rights of the Child. *Pedi-*

atrics. 106(5):1054-64, 2000.

Turner-Maffei C. *Strategies for Implementing the Baby-Friendly Hospital Initiative in the United States.* Chicago, IL: La Leche League, Int., 2002.

United Nations Children's Fund*: Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding*, Florence, Italy, 1 August, 1990. New York: UNICEF, 1990.

United Nations Children's Fund: *Baby-Friendly Hospital Initiative: Case studies and progress report*. New York: UNICEF Programme Division, 1999.

Valdes V, Pugin E, Labbok MH, Perez A, Catalan S, Aravena R, Adler MR. The effects on professional practices of a three-day course on breastfeeding. *J Hum Lact* 11(3):185-90, 1995.

Weimer J*. The economic benefits of breastfeeding: A review and analysis.* Economic Research Service, U.S. Department of Agriculture 2001, Report No. 13:1-20.

Weng DR, Hsu CS, Gau ML, Chen CH, Li CY. Analysis of the outcomes at baby-friendly hospitals: appraisal in Taiwan. *Kaohsiung J Med Sci.* 19(1):19-28, 2003.

Woodard ML, O'Neill RT. Bringing baby friendly to Rhode Island. *Med Health RI* 84(3):79-80, 2001.

World Health Organization: *International Code of Marketing of Breast-milk Substitutes*. Geneva: WHO, 1981.

World Health Organization: *International Code of Marketing of Breast-milk Substitutes*. Geneva: WHO, 1981.

World Health Organization & United Nations Children's Fund: *Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services*. Geneva: WHO, 1989.

Wright A, Rice S, Wells S: Changing hospital practices to increase the duration of breastfeeding. *Pediatrics* 97:669-75, 1996.

Yawman D. Reflections on the Baby-Friendly Hospital Initiative. *Ped Annals* 32(5):360-1, 2003.

Organizational Resources

Academy of Breastfeeding Medicine
Executive Office - 191 Clarksville Road
Princeton Junction, NJ 08550
Telephone: (877) 836-9947 X 25
Email: abm@bfmed.org
Web site: www.bfmed.org

American Academy of Family Physicians
11400 Tomahawk Creek Parkway
Leawood, KS 66211-2672
Telephone: 800-274-2237
Web site: www.aafp.org

American Academy of Pediatrics
141 NW Point Blvd
Elk Grove, IL 60009-0927.
Telephone: 847-434-4000
Web site: www.aap.org

American College of Nurse-Midwives
8403 Colesville Rd, Suite 1550
Silver Spring MD 20910
Telephone: 240-485-1800 Web:
Web site: www.midwife.org

American College of Obstetricians & Gynecologists
409 12th Street SW, PO Box 96920
Washington, DC 20090
Telephone: (202) 638-5577
Web site: www.acog.org

American Dietetic Association
120 South Riverside Plaza, Suite 2000
Chicago, IL 60606-6995
Telephone: 800/877-1600
Web site: www.eatright.org

Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN)
2000 L Street, N.W. Suite 740
Washington, D.C. 20036
Telephone: 202-261-2400
Web site: www.awhonn.org

Baby-Friendly USA
327 Quaker Meeting House Road
E. Sandwich, MA 02537
Telephone: 508-888-8092 *
Web site: www.babyfriendlyusa.org
Beststart Social Marketing, Inc.
4809 E. Busch Boulevard, Suite 104

Tampa, FL 33617
Telephone: 800-277-4975
http://www.beststartinc.org/
email: beststart@beststartinc.org

Centers for Disease Control & Prevention
1600 Clifton Rd, Atlanta, GA 30333, U.S.A
Telephone: (800) 311-3435
Web site: www.cdc.gov/breastfeeding

Healthy Children Project, Inc.
327 Quaker Meeting House Road
East Sandwich, MA 02537
Telephone: 508-888-8044
Email: info@healthychildren.cc
Web site: www.healthychildren.cc

Health Education Associates
327 Quaker Meeting House Road
East Sandwich, MA 02537
Telephone: 508-888-8045
Email: info@healthed.cc
Web site: www.healthed.cc

International Baby Food Action Network
Web site: www.ibfan.org

International Lactation Consultant Association
1500 Sunday Drive, Suite 102
Raleigh, NC 27607
(919) 861-5577
Email: info@ilca.org
Web site: www.ilca.org

La Leche League International
1400 North Meacham Road, P. O. Box 4079
Schaumburg, IL 60168-4079
Telephone: 847-519-7730
Web site: www.lalecheleague.org

Lamaze International
2025 M Street, Suite 800
Washington DC 20036-3309
Telephone: (202) 367-1128
Web site: www.lamaze.org

National Alliance for Breastfeeding Advocacy
254 Conant Road
Weston, MA 02193-1756
Telephone: 781-893-3553

Web site: www.naba-breastfeeding.org

UNICEF
3 UN Plaza
New York, NY 10017
www.unicef.org

The United States Breastfeeding Committee
1500 Sunday Drive, Suite 102
Raleigh, NC 27607
Telephone: (919)787-5181
Web site: www.usbreastfeeding.org

U. S. Department of Health and Human Services - Maternal & Child Health Bureau
Health Resources Services Administration
Department of Health and Human Services
5600 Fishers Lane, Room 18A-39
Rockville, MD 20857
Telephone: 301-443-6600
Web site: www.mchb.hrsa.gov

U. S. Department of Health and Human Services - Office of Women's Health, DHHS
200 Independence Avenue SW
Washington, DC 20201
Web site: www.4women.org

U.S. Department of Agriculture
1400 Independence Ave., S.W.
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Appendix A

Facility Self-Appraisal Tool