# *Step 5*

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

# *Objectives*

1. Assist mother-baby pairs to confidently and effectively breastfeed.

2. Enable mothers to prevent, detect and address any difficulties that may occur to maintain lactation.

# Step 5

## Goals: To assist mother-baby dyads to confidently and effectively breastfeed. Further, to empower mothers to prevent, detect and address any difficulties that may occur so that lactation is maintained.

## Background

Though lactation is a physical process and a normal part of the reproductive cycle, breastfeeding is a learned technique enhanced by practice and support. Unfortunately, many mothers report they did not receive adequate support in the hospital. [1,2] They cite inaccurate or inconsistent advice and support by the hospital staff which can negatively impact breastfeeding outcomes and contribute to early cessation,[3-9] as well as cause dissatisfaction with their medical care. [3] In addition, infant weight loss occurs more in infants of mothers who do not receive individual breastfeeding guidance and support. [44]

The largest drop-off period in breastfeeding occurs in the first several weeks after birth. The two leading reasons given for breastfeeding cessation in the early postpartum period are (1) perceptions that milk production is inadequate and (2) that women experience pain or discomfort while breastfeeding. Each of these problems could potentially be prevented or corrected given an environment that fosters confidence and self-efficacy. [10-11]

When mothers are confident, experience effective attachment and milk transfer and establish an abundant milk supply, they are more likely to continue successful breastfeeding - and to exclusively breastfeed - beyond the early postpartum period. [1,12-14]

Successful breastfeeding can be facilitated through:

- Support and promotion of self-efficacy

  - Breastfeeding instruction that empowers mothers and caregivers through a "hands-off" approach by healthcare staff is associated with longer breastfeeding duration and improved confidence in sufficiency of milk supply. [15-17]

- Printed materials, videos or other visual or auditory media can be useful in reinforcing verbal instructions. [18] However, materials should be closely reviewed to assure that they avoid negative messages or stereotypes and do not contradict verbal education. [19]

- Breastfeeding duration is extended when mothers have a supportive partner and/or family. [20,21]

- Providing emotional support and encouragement, even in the absence of technical advice, has been shown to help breastfeeding outcomes. [22]

- Support and reinforcement of correct positioning and latch
- Encouragement and support for frequent, unlimited feeding
- Assessment of the effectiveness of the infant's suckling.

  - It is recommended by the American Academy of Pediatrics (AAP) that trained personnel formally assess breastfeeding within the first two days after delivery.[23]

    - Assessment provides the opportunity for health professionals to reinforce what has been taught and to reassure nursing mothers as well as to intervene and correct any problems. Assessment tools can help to determine courses of intervention. [23-27]

    - Using a standard set of breastfeeding assessment tools increases the accuracy and consistency of scoring so that the findings are more clinically relevant. [28-30]

- Assessment has specific implications for health benefits of mother and baby.

  - Through support for effective attachment and positioning, nipple soreness can be avoided or corrected so that discomfort does not continue throughout a feeding. [15,31]

  - Persistent pain that cannot be corrected through positioning should be further assessed for possible bacterial or fungal infection. [32]

  - Early detection and correction of suboptimal breast stimulation and ineffective attachment or milk removal supports the establishment of an adequate milk supply and assures that infants are successfully breastfeeding prior to discharge. [1,31,33-34]

- While a single sign may not indicate a problem, careful assessment and monitoring of progress throughout the hospital stay allows for detection of and intervention for factors known to increase risk for early breastfeeding cessation.[35-37]

Women whose babies are admitted to the NICU may be less likely to exclusively breastfeed at hospital discharge. [38] Frequent milk expression is associated with increased milk production in mothers of premature and/or low-birth weight infants. [39] The volume of milk expressed varies greatly from woman to woman, so it is difficult to make a direct correlation between the frequency or expression and the amount of milk produced. [40] However, clinical observation indicates that milk production is improved when milk is expressed eight or more times daily (approximately every three to four hours), especially during the first week postpartum. Milk expression should begin as soon as is feasible in the first day and preferably within the first six hours after birth, if possible. [41-43]

## Implementation Strategy

### Implementation: Best Practices for Success

#### Supporting Breastfeeding

Regardless of prior breastfeeding experience the need for support and education should begin soon after birth and continue throughout the hospital stay and beyond. Such support is demonstrated to have lasting benefits. Most breastfeeding problems are related to latch, positioning and attachment at the breast and can often easily be prevented and corrected if detected early on in the breastfeeding experience. Every new mother needs guidance about normal breastfeeding and infant-feeding cues and also needs to be encouraged and coached through any difficulties so that she can continue to breastfeed confidently.

### Positioning, Attachment and Milk Transfer

In order for a mother to optimize her baby's ability to feed effectively, she must first be provided with information and instruction to understand and identify:

- Her infant's hunger and satiety cues
- Principles of breastfeeding on demand
- Goals of positioning and latch
    - To reduce interference with and increase effectiveness of milk transfer
    - To minimize fatigue or discomfort for herself and her baby during the feeding
- Signs of effective milk transfer (Intake):
    - During a breastfeeding
    - By observing output, behavior, weight and other indicators of the baby's general condition
    - Hearing the baby swallow or a gulping sound
- Basics of building and sustaining a milk supply
    - Frequent and effective breastfeeding or milk removal stimulates milk production
    - Milk stasis (e.g. through restriction of frequency or duration of feedings) slows milk production
    - Regulation of infant's intake and supply - and interference with milk removal as a result of supplementation - negatively affect milk production
- Indications that help might be needed (e.g., absence of effective milk transfer, pain or discomfort).
- How and when to access help if needed.

The role of maternity staff is to provide information and guidance in a "hands-off" way to support the mother in gaining the skills and confidence to effectively position her own baby so that he or she is able to effectively latch and feed. Be sure to provide assessment, support, education and reinforcement until breastfeeding is effective and the mother is confident in her ability to nurse her baby after discharge.

### Teaching Hand Expression

Hand expression is a simple, essential skill that should be taught to all mothers prior to hospital discharge. Hand expression is a tool that is always available and requires no electricity, special equipment or other technologies. There is rarely a need for a breast pump

during the hospital stay. Such a need is usually only indicated when a mother's infant is ill or was born premature.

Hand-expressed breast milk can be used if the mother becomes separated from her infant or if the infant is unable to directly breastfeed. Teaching a mother to hand express has many benefits including:

- Helping mothers understand the mechanisms of breastfeeding.
- Reassuring a mother that her body is competent to produce milk.
- Entice a reluctant baby to the breast.
- Be used to provide colostrum directly into a baby's mouth to avoid supplementation.
- Relieve discomfort from breast fullness.
- Soften a full breast before attachment.
- Help clear a blocked milk duct.
- Help to increase milk flow before, during and/or after use of a breast pump.

An online example of hand expression can be found on the Breast Milk, Every Ounce Counts website - http://bit.ly/2jLsxdU - under Softening and Expressing.

### Assessment

To establish a successful set of protocols for breastfeeding assessment, your facility should:

1. Choose a standardized assessment tool. For consistent and accurate communication of lactation acuity, train and assess staff in the use of the tool.
2. Complete a functional assessment of feeding during every shift. Using the chosen tool, conduct an interview with the mother and employ physical observation.
3. Consider the following components along with physical observation of feeding:

- Medical and social history.
- Verbal and non-verbal communication.
- Social and emotional factors.
- Physical aspects.
- Mother's knowledge of infant feeding and care.
- Maternal responsiveness to and interaction with her infant's hunger and social cues.
- Needs for education, anticipatory guidance and support.
- The dyad's level of pain and comfort.
- Feeding intake and output indicators. Input is assessed during a feeding by watching for signs of milk transfer and satiety, and after a feeding by assessed output and weight status.

### Addressing Difficulties

Any and all concerns should be addressed with preventive or corrective measures by a well trained staff member. Should any difficulties be detected during the maternity stay, staff should address them and communicate a care plan to the mother and health care team as soon as possible, documenting the plan in the patient's records. A referral for a consultation with a lactation specialist should be made if the difficulties are beyond the limits of normal breastfeeding (e.g., nipple pain or other issues uncorrected by repositioning or adjustment of latch). If possible, planning a follow-up care appointment in the community upon discharge should be arranged.

Breastfeeding guidance: Provide practical assistance with accurate technique, feeding pattern information and psychological and emotional support.

### Anticipatory Guidance

During the hospital stay, provide mothers with information about common breastfeeding problems and corrective measures as well as how to seek information, assistance or referrals after discharge (addressed in Step 10). Address their questions and concerns about continued breastfeeding after return to work.

Some specific issues to explore with mothers prior to discharge include:

- Common breastfeeding myths.
- General information about infant care and guidance addressing common issues such as fussiness.
    - How to be responsive to infant crying and understand that not every cry or discomfort is related to hunger.
    - How to comfort the infant with measures other than breastfeeding if hunger cues are not exhibited.
    - Information about normal infant behavioral states.

**Separation of Mother and Baby for Clinical Reasons**

If direct breastfeeding is not possible in the early postpartum period due to a preterm birth or infant illness, assist the mother with breast stimulation and milk expression within the first six hours after giving birth. Delaying initiation of breast stimulation beyond this period may negatively impact milk supply. [66] If the mother and baby are separated and direct breastfeeding continues to be delayed, help the mother to establish a regular milk expression schedule - at least eight to twelve times (approximately every three to four hours) per 24 hours, both day and night - to establish and maintain her milk supply. Milk should be collected, transported, stored and used for her baby's feedings, to the extent possible, for as long as direct breastfeeding is delayed. Provide moms with a hospital-grade pump to aid establishment of milk supply.

As much as possible, keep mothers and babies together. If babies require care in the NICU or if mothers require special medical care, make every effort to minimize mother and baby separation and maximize time that they are in skin-to-skin contact. This contact is important for the health and well-being of both mother and baby and for the establishment of milk production. Facilities should be arranged so that parents can be close to their preterm or ill child both day and night. Accommodation for milk expression in the NICU also minimizes separation and may increase a mother's ability to produce milk.

It is valuable for a mother to know how to maintain her milk supply and to hand express breast milk in the event she is separated later from her baby due to illness or employment. Emphasize hand-expression techniques so that mothers are not dependent on a pump or other equipment, but do not discourage use of a pump. The Affordable Care Act (ACA) requires most health insurance plans to provide breastfeeding equipment and counseling for pregnant and nursing women. Staff should encourage families to contact their insurance providers to ask about the breastfeeding benefits they provide.

### Information for Families Who Formula-Feed

Families who formula-feed should also be provided with evidence-based and necessary skills to effectively feed their infants. This includes information about:

- Responsiveness to hunger and satiety cues.
- Principles of infant-led, or on-demand feeding, including pacing bottle-feeds.
- Physiologic stomach capacity and appropriate feeding volumes.
- Safe, hygienic preparation, handling and storage of infant formula.

> "Formal evaluation of breastfeeding, including observation of position, latch and milk transfer, should be undertaken by trained caregivers at least twice daily and fully documented in the record during each day in the hospital after birth."[23]
>
> AAP Policy Statement, Breastfeeding and the Use of Human Milk (2005)

## Preparation: Getting Ready for Providing Assessment and Support for Breastfeeding Mothers

### Suggested Action steps for implementing Step 5 include:

1. Assessing the facility. Review and assess the following:

- Current methods and consistency of clinical assessment of lactation and breastfeeding.
- Baseline level of lactation support and consistency of information provided during the postpartum stay, as reported in patient interviews.
- Current level of complications that may be related to poor attachment, including nipple trauma, weight loss greater than 7%, dehydration, hypoglycemia, etc.
- Current levels of maternal confidence, comfort or pain and perceptions of milk sufficiency, as reported in patient interviews.

> "Encouraging the mother to record the time and duration of each breastfeeding, as well as urine and stool output during the early days of breastfeeding in the hospital and the first weeks at home, helps to facilitate the evaluation process."[23]
>
> AAP Policy Statement, Breastfeeding and the Use of Human Milk (2005)

- Physical space and accommodations in all patient-care areas - including at bedside in the NICU. Consider whether these adequately accommodate breastfeeding and expression of breast milk.
- Written materials for accuracy, effectiveness and consistency.

2. Review/update breastfeeding assessment tools or select one for your facility's use. See the RESOURCES section of this step for more information on breastfeeding assessment goals. All staff should be trained and assessed for consistence interpretation and use of the tool.

3. Train staff to teach mothers how to breastfeed and to maintain lactation. Include the following in the training curricula:

   - Anatomy and physiology of breastfeeding.
   - Information on normal, effective breastfeeding and how to assess lactation acuity (make referrals for and implement care plans for variations from the norm).
   - Principles and assessment of positioning, latch and milk transfer, and demand-feeding.
   - Hand-expression techniques, use of breast pump, and safe handling and storage of breast milk.
   - Use of assessment tool.
   - Principles of adult learning and a "hands-off" approach to breastfeeding education.

4. Adjust facilities and staffing.

   - Accommodate staff time to allow for individual or group counseling of mothers about breastfeeding management and maintenance of lactation.
   - Allow for lactation support and counseling should mother and baby be separated.

### STAFF ASSISTANCE & MATERNAL EDUCATION

Within six hours of delivery, nursing staff should offer each mother further assistance with breastfeeding her newborn. The mother should be guided so that she can help the newborn latch onto the breast properly. During the course of her hospitalization, she should receive instruction on and be evaluated for:

- Nutritional guidelines and expectations.
  - Normalcy of weight loss (average of 7 percent, not to exceed 10 percent in term newborns).
  - Normal timing to regain birth weight (by day ten).
  - Expected feeding volumes in first two days (1–2 tsp. or 5–10 mL/feed; 1–10 oz/day for a term newborn).
  - Indicators of adequate hydration and nutrition (bright yellow bowel movements by day four or five).
- Positioning and latch-on.
- Hand expression and use of breast pump, when indicated.

- Ensure that space is provided in patient rooms, in the NICU and other appropriate parts of the facility for breastfeeding, milk expression and milk storage.
- Purchase supplies for storage, labeling, preparation and administration of expressed breast milk.
- Plan space and policies so that mothers and babies may remain together if either should require hospitalization that extends past the time the other is discharged from care.

5. Revising and developing educational materials and documentation.

- Select or develop effective and accurate educational materials.
- Investigate, develop and/or adopt charting tools to document:
  - Condition of breasts and nipples
  - Position of mother and infant
  - Correct latch-on
  - Signs of milk transfer
  - Mother and infant interaction
  - Frequency of feedings
  - Number of wet diapers
  - Number and character of bowel movements
  - Weight gain or loss pattern
  - Anticipatory guidance provided
  - Plans for care for infant feeding after discharge

## Overcoming Barriers

The most common concerns related to implementing Step 5 are detailed below, along with strategies for overcoming them.

1. **Time is limited due to staffing limitation or short hospital stays.**

   - Emphasize counseling and instruction during the prenatal period. Maintaining close communication with prenatal providers and offering prenatal classes through your facility ensures consistency of all breastfeeding information that families receive prenatally and during the mother's postpartum stay.
   - As time is freed by implementing rooming-in and other time-saving policies, reallocate staff time to focus on infant-feeding assessment and support. Arrange for group opportunities where mothers can come together to breastfeed. Group instruction and multiple assessments can then occur at once, and mothers will have the added benefit of mother-to-mother support.
   - Consider using peer counselors to extend your services. Partner with your local WIC agency to see if their peer counselors are available to serve an additional resource to increase the support that WIC recipients receive during their hospital stays at your facility.
   - Reinforce verbal instruction with a few well-written handouts. (some example materials are suggested in the RESOURCES section of this Step.)
   - During the hospital stay, provide videos through closed circuit television or other means.

2. **Staff does not currently possess the skills or confidence to provide effective assessment and support.**

   - Implement Step 2 so that all staff are trained and current in providing breastfeeding support.
   - Develop and distribute pocket guides, short information sheets, decision trees and/or scripts to provide guidance on addressing common breastfeeding problems.
   - On each shift, develop a core group of mentors composed of staff who are current and competent in their lactation and patient-counseling skills. Arrange for other staff to shadow these mentors, and have the mentors observe the other staff members with assessment and support.

- Designate time for a resource person or team on each shift to support other staff with assessment and support.
- Be sure that training focuses on clinical experience when working with breastfeeding mothers and that it includes experiential training both with normal, effective breastfeeding and with other problems.

3. **Staff do not believe in the value of establishing breastfeeding in the early postpartum period or in the value of clear, consistent messaging.**

    - Promote patient-cenetered care, emphasizing that breastfeeding education is a critical component.
    - Assess what staff have been taught and are currently doing, then tailor education around addressing any identified areas of confusion or inconsistencies.
    - Designate a team to identify best practices and establish standards for breastfeeding education.

"Problems identified in the hospital should be addressed at that time, and a documented plan for management should be clearly communicated to both the parents and to the medical home."[23]

AAP Policy Statement, Breastfeeding and the Use of Human Milk

### INDICATORS FOR BREASTFEEDING PROBLEMS

Mother–baby dyads at risk for breastfeeding problems benefit from early identification and assistance. Consultation with an expert in lactation management may be helpful in situations, including but not limited to the following:[67]

Maternal indicators

- Request for assistance and/or anxiety.
- Previous negative breastfeeding experience.
- Flat or inverted nipples.
- History of breast surgery.
- Multiple births (twins, triplets, higher-order pregnancies).

Infant indicators

- Documentation after the first few feedings that there is difficulty in establishing breastfeeding (e.g., poor latch, sleepy baby).
- Prematurity (37 weeks of gestation or less).
- Congenital anomaly, neurological impairment or another medical condition that affects the infant's ability to breastfeed.
- Hyperbilirubinemia.
- Any maternal or infant medical condition for which breastfeeding must be temporarily postponed or for which milk expression is required.

The Academy of Breastfeeding Medicine Protocol Committee

4. **Facility does not have adequate space to store milk and breastfeeding equipment for mothers who are separated from their infants.**

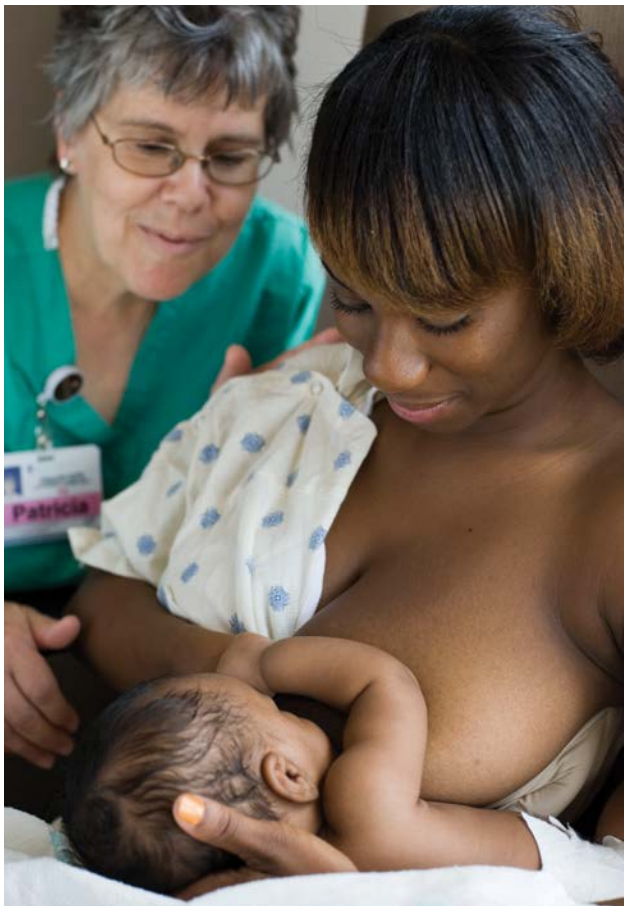
   - Milk storage can be handled efficiently with little space. The only equipment needed is a refrigerator and sanitary collection containers for milk storage. Instructions for safe handling and storage must be available.
   - If mothers room-in with their babies and feed on-demand, the need for breast milk storage is reduced.

## Evaluating Success

Use the information in this section and the additional tools provided in the IMPLEMENTATION RESOURCES section at the end of this step as checkpoints to verify that you are successfully implementing Step 5. Assign one or two staff members with the best perspective on day-to-day operations to complete these checkpoints. This section is for your information only. UCATS does not require submission of these tools for certification.

**Process changes.** When evaluating your facility's success in implementing Step 5, consider the following:

- Is a standardized assessment tool consistently being used?
- Does a maternal and infant lactation evaluation occur within the first six hours of birth?
- Are anticipatory breastfeeding guidance and a feeding plan consistently documented in the charts?
- If mothers are separated from their infants:
  - When is breastfeeding initiated?
  - How frequently are mothers expressing milk?
  - Has a hospital-grade pump been offered?
  - How often are infants fed in the presence of the mother.



Facility management should use the included Step 5 Action Plan to assess progress on this Step.

**Impact on patient experience.** Your facility should track data related to breastfeeding support. Data to track my include:

- Prevalence of nipple trauma
- Prevalence of weight loss > 7%
- Prevalence of hypoglycemia
- Prevalence of jaundice requiring treatment
- Report of consistent information received
- Maternal confidence
- Perceived milk sufficiency

A chart for tracking this data is provided in the IMPLEMENTATION RESOURCES section.

**Assessing value to the facility.** Use the section of facility impact included in the Step 5 Action Plan to asses how the measures recommended have affected your facility and to assess cost savings that may be attributed to the changes made.

**Please see IMPLEMENTATION RESOURCES for UCATS certification application.**

## Resources

- Breast milk. Every Ounce Counts. Website for Moms - www.breastmilkcounts.com
- Review of Breastfeeding Assessment Tools. Emergency Nutrition Network. Management of Acute Malnutrition in Infants (MAMI) Project. Technical Review: Current evidence, policies, practices and program outcomes. (Chapter 7) Jan 2010. - http://bit.ly/2jOCDIj

UNICEF UK Breastfeeding Assessment Tools

- http://bit.ly/2jOAWLg

Links to Breastfeeding Assessment Forms, Sample Breastfeeding Support Policies and More

- California Department of Public Health Model Hospital Policy Recommendations Online Toolkit:
  - Policy #3: http://bit.ly/2jOwYSM
  - Policy #6: http://bit.ly/2jOx5ha

Curricula and Modules

- World Health Organization (2009). Infant and young child feeding: Model Chapter for textbooks for medical students and allied health professionals. The Model Chapter on Infant and Young Child Feeding is intended for use in basic training of health professionals. It describes essential knowledge and basic skills that every health professional who works with mothers and young children should master. The model chapter can be used by teachers and students as a complement to textbooks or as a concise reference manual. http://bit.ly/2jLlLVn
- The Revised 4th Edition of Wellstart's Lactation Management Self-Study Modules, Level 1: www.wellstart.org
- Walker M. (2011). Breastfeeding Management for the Clinician: Using the Evidence. Jones and Bartlett Publishers: Sudbury, MA
- Norms in the First 3 Days of Life, Jones & Green, 2004, from Online Breastfeeding Course: A clinical introduction. C & W. Learning and Development. Adapted from R. Hewat, University of British Columbia School of nursing: http://bit.ly/2jOL1b2

Journal Articles about a Hands-Off Approach to Breastfeeding Support

- Inch S, Law S, Wallace L. Hands off! The Breastfeeding Best Start Project (2). Pract Midwife. 2003;6(10):17–9.
- Inch S, Law S, Wallace L. Hands off! The Breastfeeding Best Start project (1). Pract Midwife. 2003;6(11):24–5.
- Weimers L, Svensson K, Dumas L, et al. Hands-on approach during breastfeeding support in a neonatal intensive care unit: A qualitative study of Swedish mothers' experiences. Int Breastfeed J.2006;1:20: http://bit.ly/2jOLgCY
- Law SM, Dunn OM, Wallace LM, et al. Breastfeeding best start study: Training midwives in a 'hands off' positioning and attachment intervention. Matern Child Nutr.2007;3(3):194–205: http://bit.ly/2jOKXb3

Resources for Breastfeeding after Nipple and Breast Surgeries

- The BFAR website provides information and support to mothers who wish to breastfeed after breast-reduction surgery and is a resource for healthcare providers for information about the feasibility and protocols of breastfeeding after breast-reduction surgery: www.bfar.org
- The New Hampshire Breastfeeding Taskforce (2007), A Breastfeeding-Friendly Approach to Depression in New Mothers. Curriculum and Resource Guide for Health Care Providers. Published online: http://bit.ly/2jODM2z
- Gromada K K. Mothering Multiples: Breastfeeding and Caring for Twins or More! La Leche League International; 3rd edition (2007).

Additional Resources

- Family-centered Care-Rooming In [NICU] (Paper): Kolburg KJS.: http://bit.ly/2jODVDr
- International Lactation Consultant Association (ILCA). Clinical guideline for the establishment of exclusive breastfeeding. Raleigh, NC: International Lactation Consultant Association (ILCA); 2005 Jun: http://bit.ly/2jODWXJ
- Book: Watson GC. (2008). Supporting Sucking Skills in Breastfeeding Infants. Jones & Bartlett Publishers: Sudbury, MA.
- Resources from Dr. Jane Morton, Stanford School of Medicine http://stan.md/2jOQzlV

Includes resources for staff and patients, including among others:

- Babies at Risk (Preventive Management Guidelines, including description of risks, suggested measures and suggested scripts to guide patient education)
- Online Videos (a perfect latch, hand-expressing breast milk and maximizing milk production)
- Engle WA, Tomashek KM, Wallman C and the Committee on Fetus and Newborn (2007). "Late-preterm" infants: A population at risk. Pediatrics; 120(6):390–1401: http://bit.ly/2jP10Ws
- Academy of Breastfeeding Medicine Protocols: http://bit.ly/2jOLZnA See the following:
    - Hypoglycemia
    - Breastfeeding the Near-term Infant
    - Neonatal Ankyloglossia (tongue tie)
    - NICU Graduate Going Home
    - Analgesia and Anesthesia for the Breastfeeding Mother
    - Breastfeeding the Hypotonic Infant
    - Guidelines for Breastfeeding Infants with Cleft Lip, Cleft Palate, or Cleft Lip and Palate
    - Use of Antidepressants in Nursing Mothers
    - Engorgement Breastfeeding and the Drug-Dependant Woman
    - Jaundice

Kangaroo Mother Care

- Kangaroo Mother Care: A Practical Guide. World Health Organization, Dept. of Reproductive Health and Research. (2003) http://bit.ly/2jOzDvM

Resources Developed by Interdisciplinary Committees that Include Tools and Protocols for the Nutritional Support of Infants at Risk for Feeding Difficulties

- California Perinatal Quality Care Collaborative Quality Improvement Toolkits
    - Care and Management of the Late Preterm Infant Toolkit: http://bit.ly/2jOISvX
    - Nutritional Support of the VLBW Infant: http://bit.ly/2jOPVEM
    - Severe Hyperbilirubinemia Prevention: http://bit.ly/2jOIvkS

- Alberta Health Services/Calgary Health Region Regional Neonatal Oral Feeding Guideline: a guideline for family, staff, and physicians for the introduction and management of oral feeding for high-risk neonates and infants. This work is based on a combination of literature review (research and practice) and clinical expertise. http://bit.ly/2jMiu88

Resources to Support the Formula-Feeding Family

- USDA. 2008. Infant Nutrition and Feeding: A Guide for Use in the WIC and CSF Programs. Ch 4, Infant Formula Feeding. Available: http://bit.ly/2jMrPNp
- Infant Formula Preparation Checklist: WIC Learning Online. WIC Works Resource System. http://bit.ly/2jP1xHY
- Infant Formula: Mixing it Up & Keeping it Safe: A Nutrition In-Service for Staff-Washington State WIC Nutrition Program: http://bit.ly/2jP4fNJ
- World Health Organization. Guidelines for the safe preparation, storage and handling of powdered infant formula. 2007. http://bit.ly/2jP17Be Also,
    - How to Prepare Powdered Infant Formula in Care Settings: http://bit.ly/2jP5Hzu
    - How to Prepare Formula for Bottle-Feeding at Home: http://bit.ly/2jP1z2o
    - How to Prepare Formula for Cup-Feeding at Home: http://bit.ly/2jOUyPr

## Implementation Resources

- Action Plan
- Facility Impact
- UCATS Application Form

# Notes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# *Step 5* Action Plan

**Step 5 Implementation Owner:** _____

**Start date:** _____ **Target completion date:** _____

**Primary Goals of *Step 5*:**

- ☐ Assist mother-baby pairs in confidently and effectively breastfeeding.
- ☐ Enable mothers to prevent, detect and address any difficulties that may occur; to maintain lactation.

## Resources for implementation:

| Resource area and description | Planned actions | Budgeted amount |
|---|---|---|
| Staff training.<br>• Anatomy and physiology of breastfeeding<br>• Normal, effective breastfeeding, how to assess lactation acuity and how to make referrals for and implement care plans for variations from the norm<br>• Principles and assessment of positioning, latch and milk transfer and demand feeding<br>• Hand expression techniques, use of breast pumps and safe handling and storage of breast milk<br>• Use of chosen assessment tool<br>• Principles of adult learning and "hands-off" education | | $ |
| Materials development: Select or develop effective and accurate educational materials.<br>• Chart tools to document:<br>- Condition of breasts and nipples<br>- Position of mother and infant<br>- Correct latch-on<br>- Signs of milk transfer<br>- Mother/infant interaction<br>- Frequency of feedings<br>- Number of wet diapers<br>- Number and character of bowel movements<br>- Weight gain/loss pattern<br>- Anticipatory guidance provided<br>- Plans of care | | $ |

| Resource area and description | Planned actions | Budgeted amount |
|---|---|---|
| Equipment and facility:<br>• Provide space in patient rooms, the NICU and other appropriate parts of the facility for breastfeeding, milk expression and milk storage.<br>• Purchase supplies for storage, labeling, preparation and administration of expressed breast milk.<br>• Plan space and policies so that mothers and babies may remain together if either requires hospitalization that extends past the time that the other is discharged from your care. | | $ |
| Other costs related to implementation of *Step 5*. | | $ |
| **Total expected costs** | | $ |

Notes

## Implementation

**Do facility policies:**

☐ Help mothers learn to breastfeed and maintain lactation? Include:

- Infant hunger and satiety cues
- Principles of breastfeeding on demand (see *Step 8*)
- Principles of positioning and latch
- Signs of effective milk transfer
- Basics of building and sustaining a milk supply
- Signs that indicate you may need help (pain, difficulty with supply, etc.)
- How and when to access help if needed

☐ Teach milk expression techniques, emphasizing hand expression?

☐ Bolster mother's confidence and emotional well-being with regard to breastfeeding, using a hands-off approach?

☐ Carry out regular breastfeeding assessments with a standardized tool, beginning within six hours of an infant's birth?

☐ Provide anticipatory guidance to mothers in preparation for discharge?

☐ Address problems related to scenarios in which mother and baby must be separated and adjust space, timing and treatments to maximize opportunities for mothers to nurse their infants, to feed them expressed breast milk or to build a milk supply if the infant cannot yet nurse?

☐ Provide support to families that will formula feed?

Notes

## Step 5 Implementation Tracking

Use the table below as a checkpoint for your unit and facility planning and for assessing your progress on Step 5.
Set unit goals in terms of the month at which you plan to achieve each goal below, and assign each goal to be monitored a specific person on staff.

Each goal below should be documented and archived so that your facility can verify progress and assess future goals.

| At month | | Person Responsible | Initials | Date Completed |
|---|---|---|---|---|
| | The facility has been assessed to determine areas for improvement, such as the need for better accommodation for milk expression and storage or the need for a standardized tool of assessment. | | | |
| | Data are being collected and assessed for:<br>• Prevalence of nipple trauma<br>• Prevalence of weight loss >7%<br>• Prevalence of hypoglycemia<br>• Prevalence of jaundice requiring treatment<br>• Report of consistent information received<br>• Maternal confidence<br>• Perceived milk sufficiency | | | |
| | A standard breastfeeding assessment tool has been selected for the facility. | | | |
| | Staff have been trained to teach mothers to breastfeed and maintain lactation. | | | |
| | Staff schedules have been revised to allow for more time to counsel mothers on breastfeeding techniques and problem solving. | | | |
| | The facility has been updated to support the principles of *Step 5*, including accommodation for milk expression and storage. | | | |
| | Educational materials for staff and patients have been updated to clearly outline how to safely and successfully breastfeed, maintain lactation and address breastfeeding problems. | | | |

# Step 5
## Facility Impact

| | Details | Person Responsible | Initials | Date Completed |
|---|---|---|---|---|
| Staff time spent on assessment and support of breastfeeding<br><br>Staff time saved by avoiding complications that previously arose from undetected difficulties | Have you reallocated staff schedules to allow for more time to counsel mothers on breastfeeding? | | | |
| | Have other efficiencies resulting from increased breastfeeding support (e.g., fewer problems with breastfeeding, less time managing infant feeding) freed up staff time? | | | |
| Electric breast pumps and milk storage | How great is the demand for electric pumps and breast milk storage? | | | |
| | Have you adjusted facility space and equipment to accommodate these? | | | |
| | Has the facility been emphasizing feeding on demand and hand expression? If so, what impact has this had on the need for pumps and milk storage? | | | |
| Use of volunteer or low-cost peer counselors | Have these been utilized to support the facility's breastfeeding goals? | | | |
| | What successes and challenges have you noticed with these adjunct staff? | | | |
| Use of expressed breast milk rather than infant formula whenever possible | Have staff been successful in teaching mothers to express breast milk, particularly for those infants who are unable to nurse at the breast? | | | |
| | What challenges have arisen in encouraging breast milk feedings in lieu of the use of infant formula? | | | |
| What can be improved upon next year? | | | | |

*Step 5*

# UCATS Stepping Up For Utah Babies

## Application

Maternity care nurses in inquiring health facility are expected to offer breastfeeding assistance to 100% of mother-baby dyads, through direct observation, during every shift. Maternity care nurses are expected to support mothers to identify effective position and latch for breastfeeding. Mothers who have never breastfed or who are previously encountered problems with breastfeeding should receive special attention and support at facility within 6 hours of birth.

Additionally, maternity care nursing staff is expected to teach 100% of formula feeding families how to safely prepare and feed breast milk substitutes.

Finally, maternity care nursing staff is expected to teach 100% of mothers how to hand express their milk and how to use a pump when appropriate.

1. What percentage of breastfeeding mothers received directly observed breastfeeding assessments during every shift? _____%

   Numerator: # of breastfeeding mothers with documentation of breastfeeding assessment during every shift
   Denominator: # of breastfeeding mothers

2. What percentage of mothers who had never breastfed or who have previously encountered problems with breastfeeding were offered further assistance within six (6) hours of delivery? _____%

   Numerator: # of breastfeeding mothers who had never breastfed or who have previously encountered problems with breastfeeding were offered further assistance within 6 hour of delivery
   Denominator: # of breastfeeding mothers who had never breastfed or who have previously encountered problems with breastfeeding

3. What percentage of partially or fully formula-feeding families receive information on how to safely prepare and feed breast milk substitutes? _____%

   Numerator: # of partially or fully formula-feeding families who received information on how to safely prepare and feed breast milk substitutes
   Denominator: # of partially or fully formula-feeding families

4. What percentage of breastfeeding mothers receive instruction on how to hand express their milk or are given information on pumping? _____%

   Numerator: # of breastfeeding mothers with documentation of instruction of hand expression in or pumping
   Denominator: # of breastfeeding mothers