BABY FRIENDLY HEALTH INITIATIVE SINGAPORE

BFHI SINGAPORE

MATERNITY FACILITY HANDBOOK

abas
Association for Breastfeeding Advocacy (Singapore)

Baby Friendly Health Initiative, Singapore.

Updated 2025 incorporating the revised 2018 World Health Organisation (WHO) & UNICEF Global Standards for BFHI and adapted from BFHI Australia, Maternity Facility Handbook

Contents

Introduction

The initial BFHI Singapore documents are based on the UNICEF/WHO Baby-Friendly Hospital Initiative: Revised, Updated, and Expanded for Integrated Care (2009) guidelines.

BFHI was introduced in Singapore in 2010 by the Health Promotion Board (HPB) through the Association for Breastfeeding Advocacy (Singapore) (ABAS). The documents have been accepted as the BFHI Singapore accreditation criteria, adapted following extensive consultation, to meet our maternity system. In 2013, the first hospital in Singapore was assessed and accredited.

The role of the Baby Friendly Hospital Initiative (BFHI) is to protect, promote, and support breastfeeding. It does this by providing a framework for *Baby Friendly* hospitals to operate within the *Ten Steps to Successful Breastfeeding*. These standards ensure that all mothers and babies receive appropriate support and up-to-date information on infant feeding during both the antenatal and postnatal periods.

In a *Baby-Friendly-accredited* facility, breastfeeding is encouraged, supported, and promoted. Breastfed babies are not given breastmilk substitutes (infant formula) unless medically indicated, or if it is the parents' informed choice. Regardless of feeding choices and circumstances, every woman is supported to care for her baby in the best and safest way possible.

BFHI is a joint World Health Organisation (WHO) and UNICEF project that aims to create a healthcare environment where breastfeeding is the norm and practices that optimise the well-being of all mothers and their babies are promoted. The standards embedded in the Ten Steps to Successful Breastfeeding are the global criteria against which maternity hospitals are assessed and accredited.

Baby Friendly accreditation is a quality assurance measure that demonstrates a facility's commitment to offer the highest standard of maternity care to mothers and babies. Attaining accreditation signifies that the facility is committed to evidence-based, best-practice maternity care and ensuring that every mother is supported with her informed choice of infant feeding during her transition to motherhood.

In a *Baby Friendly* facility, a mother's informed choice of infant feeding is respected and supported. At no time are mothers forced to breastfeed. The *Ten Steps to Successful Breastfeeding* are beneficial for all mothers and babies, promoting bonding, parental responsiveness, empowerment and informed choice - regardless of feeding method.

In a *Baby Friendly facility, breastfeeding mothers receive* consistent, accurate information and support. In many cases, this results in an extended duration of breastfeeding.
Mothers who choose to feed their babies artificially, or who are required to supplement or switch to infant formula, receive individual support and information to help them prepare feeds correctly and ensure they know how to feed their babies safely.

The *Ten Steps to Successful Breastfeeding* work synergistically and are therefore implemented in unison to ensure benefits for mothers and babies.
Maintaining BFHI accreditation, with re-assessment every 3 to 5 years, ensures regular independent review and provides facilities with a framework to improve continuously. It ensures that mothers themselves are heard about their care experience. It highlights areas of excellence and can improve staff morale.

Strengths and Impact of the BFHI

Substantial evidence has accumulated proving that the BFHI has the potential to influence the success of breastfeeding significantly. A systematic review of 58 studies on maternity and newborn care published in 2016 demonstrated that adherence to the Ten Steps clearly affects breastfeeding rates (early initiation immediately after birth, exclusive breastfeeding, and total duration of any breastfeeding) [1]. This review found a close-response relationship between the number of BFHI Steps women are exposed to and the likelihood of improved breastfeeding outcomes. Avoiding supplementation of newborn infants with products other than breast milk (Step 6) was shown to be a crucial factor in determining breastfeeding outcomes, possibly because implementing this Step requires that other Steps be in place as well. Community support (Step 10) proved essential in maintaining the improved breastfeeding rates achieved in facilities providing maternity and newborn services [1].

National or facility-level engagement, ongoing facility-level monitoring, and integrating the BFHI into the continuum of care were also found to be important for BFHI implementation[2].

For facilities designated as Baby-friendly, the process of becoming Baby-friendly was often transformative, changing the entire environment around infant feeding. In many countries, becoming designated has been a key motivating factor for facilities to transform their practices. As a result, care in these facilities became more mother-centred; attitudes toward infant feeding improved; and skill levels increased dramatically. Use of infant formula typically dropped markedly, and the use of nurseries for newborn infants was significantly reduced. The quality of care for breastfeeding clearly improved in facilities that were designated as "Baby-friendly".

[1] Pérez-Escamilla R, Martinez JL, Segura-Pérez S. Impact of the Baby-friendly Hospital Initiative on breastfeeding and child health outcomes: a systematic review. Matern Child Nutr. 2016;12(3):402–17. doi:10.1111/mcn. 12294.

[2] Saadeh RJ. The Baby-Friendly Hospital Initiative (BFHI) 20 years on: facts, progress and the way forward. J Hum Lact. 2012. doi:10.1177/0890334412446690.

Revisions (2018) to the Global Ten Steps to Successful Breastfeeding[1]

The 2018 revised version of the Ten Steps is implemented in this Handbook. The Ten Steps to Successful Breastfeeding are now separated into **Critical Management Procedures**, which provide an enabling environment for sustainable implementation within the facility, and **Key Clinical Practices**, which delineate the care that each mother and baby should receive. The Key Clinical Practices are evidence-based interventions to help mothers successfully establish breastfeeding. The Ten Steps are outlined and described in detail in the following pages.

Step 1 of the facility's breastfeeding policy has been modified to include three components: 1a, 1b, and 1c. Application of the *WHO International Code* has always been a significant component of the BFHI, but was not included in the original Ten Steps. This revision incorporates full compliance with the *Code* as a Step. In addition, the need for ongoing internal monitoring of adherence to the clinical practices has been incorporated into Step 1. Internal tracking should help to ensure that adoption of the Ten Steps is sustained over time.

Some of the Steps have been modified in their application to ensure they are feasible and applicable across all facilities, without compromising evidence-based optimal practices. For example, **Step 2** of the training focuses on competency assessment to ensure that all personnel have the knowledge, competence, and skills to support breastfeeding.

Step 5 now focuses more on providing mothers with practical support on how to breastfeed, including positioning, suckling, and ensuring the mother is prepared for potential breastfeeding difficulties. There is less emphasis on milk expression, with greater flexibility in the method used.

Step 9 on the use of feeding bottles, teats, and pacifiers/dummies now focuses on counselling mothers on their appropriate use, rather than completely prohibiting their use. Personnel must have the skills to advise a breastfeeding mother on the best method for feeding her individual baby when expressed breastmilk (EBM) or a supplement is required.

Step 10 of post-discharge care focuses more on the responsibilities of the facility providing maternity and newborn services, including planning for discharge, making referrals, and coordinating with and enhancing community support for breastfeeding.

[1] Extracted from: Implementation guidance: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services – the revised Baby-friendly Hospital Initiative. Geneva: World Health Organisation; 2018. https://www.who.int/nutrition/publications/infantfeeding/bfhi-implementation-2018.pdf License: CC BY-NC-SA 3.0 IGO.

Implementation of the Revised (2018) Baby Friendly Initiative and the Ten Steps to Successful Breastfeeding[1]

The core purpose of the BFHI is to ensure that mothers and newborn infants receive timely and appropriate care before and during their stay in a facility providing maternity and newborn services, enabling optimal feeding of newborn infants and thereby promoting their lifetime health and development. Given the proven importance of breastfeeding, the BFHI protects, promotes and supports breastfeeding. At the same time, it aims to enable optimal care and feeding for newborn infants who are not yet fully breastfed or not (yet) able to do so.

Families must receive quality and unbiased information about infant feeding. Facilities providing maternity and newborn services have a responsibility to promote breastfeeding. Still, they must also respect the mother's preferences and provide her with the information needed to make an informed decision about the best feeding option for her and her baby, given her circumstances. The facility has an obligation to support mothers in successfully feeding their newborn infants in the manner they choose.

This updated guidance covers only activities specifically pertinent to the protection, promotion, and support of breastfeeding in facilities that provide maternity and newborn services.

This *BFHI Handbook for Maternity Facilities* does not cover criteria for Baby-friendly communities, Baby-friendly neonatal or paediatric units or Baby-friendly physicians' offices. Breastfeeding support is critical in all these settings, but is beyond the scope of this *Handbook*.

[1] Extracted from: Implementation guidance: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services – the revised Baby-friendly Hospital Initiative. Geneva: World Health Organisation; 2018. https://www.who.int/nutrition/publications/infantfeeding/bfhi-implementation-2018.pdf Licence: CC BY-NC-SA 3.0 IGO.

Pathway to Achieving BFHI Accreditation

To achieve BFHI Accreditation, facilities must implement the Ten Steps to Successful Breastfeeding:

Critical Management Procedures

1. a. Have a written infant feeding policy that is routinely communicated to staff and parents

   b. Comply fully with the *International Code of Marketing of Breast-milk Substitutes* and relevant World Health Assembly resolutions.

   c. Establish ongoing monitoring and data-management systems.

2. Ensure that staff have sufficient knowledge, competence and skills to support breastfeeding

Key Clinical Practices

3. Discuss the importance and management of breastfeeding with pregnant women and their families.
4. Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to recognise when their babies are ready to breastfeed, offering help if needed.
5. Support mothers to initiate and maintain breastfeeding and manage common difficulties.
6. Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated.
7. Enable mothers and their infants to remain together and to practise rooming-in 24 hours a day.
8. Support mothers to recognise and respond to their infants' feeding cues.
9. Counsel mothers on the use and risks of feeding bottles, teats and pacifiers.
10. Coordinate discharge so that parents and their infants have timely access to ongoing support and care.

Full Accreditation

While each of the Ten Steps contributes to improving the support for breastfeeding, optimal impact on breastfeeding practices, and thereby on maternal and child well-being, is only achieved when all Ten Steps are implemented as a package.

Once all standards are fully met, accreditation is awarded.

Re-accreditation

Reaccreditation follows 3 years later after the initial accreditation, then every 5 years subsequently to ensure continued compliance quality improvement.

Coordination and Support

Each facility should establish a BFHI Committee to manage the implementation of the Baby-Friendly Ten Steps. **The BFHI Committee** should involve nurses, midwives, lactation consultants, obstetricians, paediatricians, and other key stakeholders.

At the national level, an appointed **BFHI Manager** will oversee the **online Self-Assessment system** for data management and accreditation. This ensures that facilities have the guidance and technical support they need as they complete their self-assessments and prepare for accreditation or reaccreditation.

The **BFHI Manager** will provide the support and guidance regarding the use of the online self-assessment tool, data entry, and follow-up required for all maternity facilities.

Review of Policies and Practices

Each facility should review its breastfeeding/infant feeding policy against Step 1a requirements and ensure that all related clinical guidelines and care pathways reflect up-to-date lactation management practices.

Facilities should also review their compliance with the **International Code of Marketing of Breast-milk Substitutes** and relevant **World Health Assembly resolutions** (Step 1b).

In line with Step 1c, facilities must use the online BFHI Self-Assessment system to track and review the two sentinel indicators, exclusive breastfeeding data early breastfeeding initiation, as well as the eight key clinical practices (Steps 3 to 10), at least every 6 months. These sentinel and key clinical practice indicators are used for internal quality improvement and reporting to the hospital BFHI Committee.

Self-Assessment and Audit

Facilities embarking on the BFHI journey must complete the **BFHI online Self-Assessment** regularly to review the implementation of the Ten Steps, using it as an internal monitoring tool in preparation for accreditation and reaccreditation.

Facilities may conduct additional internal audits in areas that require improvement. The results of these internal reviews remain for hospital monitoring and quality improvement purposes, but may be included in the facility's self-assessment submissions.

Observations

Facilities are encouraged to conduct audits by walking through the facility from the BFHI perspective. Refer to Appendix 6, Table 1, for guidance on implementing the *WHO International Code* in a BFHI facility.

Action Plan

The BFHI Committee at the facility should develop an **action plan** to address areas identified as not

yet meeting Baby-Friendly standards. Action plans should be documented alongside the facility's self-assessment submissions to monitor progress over time.

Personnel Education

All personnel should be allocated to the relevant staff **Group** (see Step 2). Facilities must maintain **records** that track BFHI education completion for each group. These records will support reporting through the online Self-Assessment system and enable monitoring of the staff competency levels.

Further Self-Appraisal

Once gaps are addressed, facilities should update the **online BFHI Self-Assessment system** and, where appropriate, supplement with additional interviews of mothers, pregnant women, and staff to confirm that practices align with Baby-Friendly standards.

Assessment Type

All facilities must participate in the self-assessment process to determine whether they will undergo an on-site assessment toward **BFHI accreditation**. The national BFHI Manager will coordinate this to ensure appropriate scheduling and resource allocation.

The facilities must meet the following criteria:

- Align their BFHI policies and clinical protocols with staff education.
- The hospital BFHI Committee for the facility will work closely together to manage the self-assessment process, maintain BFHI standards, and address any recommendations for improvement.

Accreditation or re-accreditation of facilities will be based primarily on the results of the online self-assessment, with an on-site assessment as a complement**. The on-site assessment** will verify and observe key practices, interview pregnant women, mothers, selected personnel, and review facility-specific written materials.

The facility will receive its **individual assessment outcome** and report. An accreditation certificate will be issued if the facility meets all BFHI requirements.

Applying for Assessment

Once a facility is ready for accreditation or re-accreditation, it must complete and submit the following through the **online BFHI Self-Assessment system** at least **4–6 months before** the proposed assessment date:

- Completed the online BFHI Self-Assessment
- Met all the BFHI standards covering all Ten Steps and the International Code.
- Infant feeding data for the previous 12 months
- Online application form for the request for assessment
- Copy of the facility's breastfeeding/infant feeding policy
- Staff training records and content outline
- Written materials for pregnant women and postnatal mothers.

This submission serves as the basis for both national reporting and preparation for the on-site validation.

Clearance from Hospital Management

The facility must obtain management's clearance to conduct interviews with mothers and staff; this must be secured before the on-site component of the assessment begins.

Confirming the Assessment

The **BFHI Manager** will review the online self-assessment, confirm receipt, and issue a confirmation letter to the facility's BFHI Committee. This confirmation will outline:

- The proposed date and programme for the on-site validation
- The national assessment team member(s) who will conduct the visit
- Preparation required, including access to relevant policies, clinical areas, and interview arrangements

Conflict of Interest

The facility will be informed in advance of the designated assessor(s). Facilities may appeal in writing to the BFHI Manager if there is a potential conflict of interest.

The Assessment Team

The on-site validation team, comprising the Assessor/s, has been appointed.

- The visit will typically last **half to one day**, since the central review is completed through the online self-assessment.
- The focus will be on verifying key practices, interviewing staff and mothers, and reviewing facility-specific records and written materials.

The appointed assessor (s) are required to maintain knowledge of the BFHI standards. They must act professionally, respect facility procedures, and maintain confidentiality at all times.

During Assessment

During the on-site validation, the assessor/s will:

- Conduct interviews with key staff, mothers, and pregnant women
- Observe practices relevant to the Ten Steps and the International Code
- Review facility-specific documents and written materials.

The facility should provide:

- A suitable workspace for the assessor/s.
- Access to relevant wards, units, and documents.
- Assistance in arranging interviewees (staff and mothers).

Interviews

Interviews will focus on validating those practices implemented and reported in the online self-assessment system.

Confidentiality is maintained for the results of the interviews with mothers and staff

- Interviews are conducted in person, and if necessary, virtually/over the phone.
- The emphasis is on assessing facility practices, not individual performance.

Critical Management Procedures

Steps 1 and 2 are designed to ensure that the necessary policies, guidelines, and processes are in place to allow health-care providers to implement the Baby-Friendly standards effectively. They also address the required knowledge and competencies of facility personnel who provide care to pregnant women, mothers, and babies, thereby enabling high-quality, consistent care free of conflicting information.

Step 1a: Have a Written Infant Feeding Policy that is Routinely Communicated to Staff and Parents

Rationale

Evidence-based policy frames clinical practice. Health-care personnel and facilities are required to follow established policies. The clinical practices articulated in the Ten Steps need to be incorporated into facility policies to ensure that appropriate, equitable care is provided to all mothers and babies, regardless of individual preferences. Written policies ensure that women and their families receive consistent, contemporary, evidence-based care and are an essential tool for aligning facilities with BFHI principles. Policies help to sustain practices over time and communicate a standard set of expectations for all personnel.

Implementation

Facilities providing maternity and newborn services should have a clearly written infant feeding policy that is routinely communicated to personnel and parents. All personnel who have contact with mothers and babies should be familiar with the policy and understand their responsibility to adhere to it.

A facility breastfeeding policy may stand alone as a separate document, be included in a broader infant feeding policy, or be incorporated into several other policy documents. The policy should include guidance on implementing each clinical and care practice (Steps 3 to 10) to ensure they are applied consistently to all mothers. The policy should also outline how each of the Ten Steps is implemented.

Implementation Standards

Policies for BFHI
The facility has a written policy or policies that support the implementation of BFHI, including: • Breastfeeding policy and a summary for display • Implementation of the *WHO International Code* • Support for staff to continue to breastfeed when they return to work • Standards of care for the mother who is artificially feeding her baby The policy must be reviewed at least every three years and be clearly dated. A summary of the policy must be displayed in all relevant service areas (antenatal, delivery, postnatal, SCN and NICU) in the four local languages. Most policies should be supported by detailed clinical protocols/guidelines. Protocols/clinical guidelines must be: • consistent with BFHI standards • reflective of contemporary, evidence-based information and practices.

[1] Personnel refers to all persons engaged in relevant activities, not just those whom the facility defines as "staff".

Step 1: The Breastfeeding Policy

The breastfeeding policy must address the principles and practices that enable implementation of the *Ten Steps to Successful Breastfeeding*, including the Critical Management Procedures (Steps 1 & 2) and each of the Key Clinical Practices (Steps 3 to 10).

Breastfeeding Policy Summary

A summary of the Breastfeeding Policy must be displayed in each area of the facility's antenatal, birthing, and maternity services, where it can be seen by pregnant women, mothers, and their families. It may also be displayed in other areas which potentially serve pregnant women, mothers and their families.

The summary must be displayed in the four common local languages used by the mothers who use the facility's maternity services.

Step 1: Personnel Interviews

At least 80% of the Group 1 and 2 Personnel:

- Can explain at least two elements of the breastfeeding policy that influence how they provide care and information in their role in the facility.

Support for Staff to Continue to Breastfeed when they Return to Work

There is a policy that supports staff in continuing to breastfeed after returning to work. This may be a separate policy referenced by the breastfeeding policy, or it may be integrated into the breastfeeding policy.

Standards of Care for the Mother who is Artificially Feeding her Baby

There is a policy which addresses standards of care for the mother who is artificially feeding her baby. This may be a separate policy or integrated into an infant feeding policy which refers to it.

The policy includes each of the following points:

- Relevant personnel have received education to ensure that their knowledge about artificial feeding is current.
- Relevant personnel have the skills to teach mothers correct preparation, storage and handling of powdered infant formula [2]
- Mothers who are considering artificial feeding are supported to make a fully informed choice, appropriate to their circumstances.
- All mothers who will be leaving the facility using infant formula are given:
    - information and instruction on the safe preparation, storage and handling of reconstituted powdered infant formula, based on WHO Guidelines [1]
- Instruction on artificial feeding is given only to parents who require it. The instruction is not provided in a group situation. The instruction is conducted privately, away from breastfeeding mothers.
- Instructional materials on artificial feeding shown or given to parents are free from advertising, do not refer to or contain images of an identifiable product, and comply with the WHO International Code.

[1] Facilities may elect to use "WHO Safe Preparation, storage and handling of powdered infant formula: guidelines. *World Health Organisation* 2007", especially if they are already in use. The WHO Guidelines also meet the standard of care for BFHI purposes.

Step 1b: Comply fully with the International Code of Marketing of Breastmilk Substitutes and Relevant World Health Assembly Resolutions

Rationale

Families are most vulnerable to the marketing of breast-milk substitutes when they are making decisions about infant feeding. The World Health Assembly has called upon health workers and health-care systems to comply with the *International Code of Marketing of Breast milk Substitutes*[1,2] and subsequent relevant WHA resolutions[3], to protect families and health professionals from commercial pressures. Compliance with the Code is vital for facilities providing maternity and newborn services, as the promotion of breast-milk substitutes is one of the most significant undermining factors for breastfeeding.

Implementation

The Code lays out clear responsibilities for health-care systems: not to promote infant formula, feeding bottles, or teats, and not to allow manufacturers and distributors of products under the scope of the Code to have any influence on the service, its employees, or families accessing the service. This includes the provision that all facilities providing maternity and newborn services must acquire any breast-milk substitutes, feeding bottles or teats they require through normal procurement channels and not receive free or subsidised supplies (WHA Resolution 39.28)[5]. In addition, personnel of facilities providing maternity and newborn services should not engage in any form of promotion or permit the display of any advertising for breast-milk substitutes, including the display or distribution of any equipment or materials bearing the brand of manufacturers of breast-milk substitutes or discount coupons. They should not give infant formula samples to mothers for use in the facility or for take-home use.

In line with the WHO Guidance on ending the inappropriate promotion of foods for infants and young children, published in 2016 and endorsed by the WHA[6], health workers and health systems should avoid conflicts of interest with companies that market such foods. Health professional meetings should never be sponsored by industry, and industry should not participate in parenting education.

Implementation Standards

Policy
There is a policy that protects breastfeeding by implementing the *WHO International Code of Marketing of Breast-milk Substitutes*. This may be a separate policy referenced by the breastfeeding policy, or an integrated part of it.

[1] International Code of Marketing of Breast-milk Substitutes. Geneva: World Health Organisation; 1981 (http://www.who.int/nutrition/publications/code_english.pdf, accessed 7 March 2018).

[2] The International Code of Marketing of Breast-Milk Substitutes – 2017 update: frequently asked questions—Geneva: World Health Organisation; 2017 (http://apps.who.int/iris/bitstream/10665/254911/1/WHO-NMHNHD-17.1-eng.pdf?ua=1, accessed 7 March 2018).

[3] World Health Organisation. Code and subsequent resolutions (http://www.who.int/nutrition/netcode/resolutions/en/, accessed 7 March 2018).

[4] Breaking the rules, stretching the rules 2014. Evidence of violations of the International Code of Marketing of Breastmilk Substitutes and subsequent resolutions compiled from January 2011 to December 2013. Penang: International Baby Food Action Network International Code Documentation Centre; 2014 (http://www.ibfan-icdc.org/wp- content/uploads/2017/03/1__Preliminary_pages_5-2-2014.pdf, accessed 7 March 2018 [Executive summary]).

[5] Resolution 39.28. Infant and young child feeding. In: Thirty-ninth World Health Assembly, Geneva, 5–16 May 1986. Resolutions and decisions, annexes. Geneva: World Health Organisation; 1986 (http://www.who.int/nutrition/topics/WHA39.28_iycn_en.pdf?ua=1, accessed 7 March 2018).

[6] Maternal, infant and young child feeding. Guidance on ending the inappropriate promotion of foods for infants and young children. In: Sixty-ninth World Health Assembly, Geneva, 23–28 May 2016. Provisional agenda item 12.1. Geneva: World Health Organisation; 2016 (A69/7 Add 1; http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_7Add1-?ua=1, accessed 7 March 2018).

The Policy on the Code Includes Each of the Following Points:

- Adherence by the facility and its personnel to the relevant provisions of the *WHO International Code* and subsequent World Health Assembly (WHA) resolutions.
- All promotion of artificial feeding and materials which promote the use of infant formula, feeding bottles and teats is prohibited.
- The facility is not permitted to receive or distribute free and subsidised (low-cost) products within the scope of the *WHO International Code*.
- The distribution to parents of take-home samples and supplies of infant formula, bottles and teats is not permitted.
- There are restrictions on access to the facility and personnel by representatives from companies in relation to marketing or distributing infant formula products or equipment used for artificial feeding.
- There is no direct or indirect contact of these representatives with pregnant women or mothers and their families.
- The facility does not accept gifts, non-scientific literature, materials or equipment, money, or support for in-service education or events from these companies if there is any association with artificial feeding or potential promotion of brand/product recognition in relation to infant feeding.
- There is scrutiny at the institutional level of any research which involves mothers and babies for potential implications on infant feeding or interference with the full implementation of the policy.

Implementation of Policy

The facility has no display of products covered under the *WHO International Code, or of items bearing logos of companies that produce breast-milk substitutes, feeding bottles, or teats, or* of products covered under the Code. Nor are these items displayed.

Materials covered under the WHO International Code, or which are unsupportive of breastfeeding or contradict exclusive breastfeeding for around 6 months as the norm, are not used, displayed or distributed to parents, except informational materials given individually to parents who are artificially feeding.

If the facility has retail outlets/kiosks on site, the facility has endeavoured to restrict or minimise the promotion and/or sale of materials that are unsupportive of breastfeeding and/or inconsistent with BFHI. It is recognised that the facility's influence may be limited when the retail outlets are not under its direct control.

Observations

Observations confirm that:

- Infant formula and equipment for artificial feeding are stored discreetly and not openly displayed in the maternity and neonatal areas.
- The facility has the teaching materials to give individual instruction on how to prepare formula away from breastfeeding mothers.
- No materials are being used, distributed or displayed to parents which are unsupportive of breastfeeding, except for informational material given individually to parents who have chosen to feed their baby with infant formula.
- There are no educational materials or literature used, displayed or distributed to parents, produced by a company which markets or distributes infant formula products or equipment used for artificial feeding.
- There are no educational materials or literature used, displayed or distributed to parents, which picture or refer to a proprietary product that is within the scope of the WHO Code.

Review of Materials

All educational materials, including videos/DVDs, handouts, and sample bags/gifts, that are shown to, made available to, and/or distributed to pregnant women, new parents, or their families are available for the Assessors to review.

Review of these materials confirms that they are free of:

- promotion of artificial feeding, bottles, teats and dummies and contains no samples or redeemable vouchers for these products.
- information or articles which normalise artificial feeding.
- advertisements or promotion of infant, follow-on or toddler formula.
- advertisements or promotion of equipment for artificial feeding, including bottles and teats.
- samples or coupons for products within the scope of the WHO International Code.
- samples or coupons for baby foods.
- information which contradicts exclusive breastfeeding for around 6 months as the norm.
- recommendations for scheduled feeds.
- advertisements for dummies.

For guidance on internal auditing for implementation of the *WHO International Code* in a BFHI facility, refer to Appendix 5.

Purchase of Breastmilk Substitutes, Teats, Bottles or Dummies

The facility and its personnel do not accept or distribute to mothers free or subsidised (low-cost) samples or supplies of breastmilk substitutes, teats, bottles or dummies.

Records and receipts indicate that breastmilk substitutes, including special formula and other supplies required for artificial feeding, are purchased through normal procurement channels.

Personnel Interviews on the WHO Code

At least 80% of the Group 1 and 2 personnel can:

- explain at least two elements of the WHO International Code.

Step 1c: Establish Ongoing Monitoring and Data-Management Systems

Rationale

Ongoing monitoring is essential for maintaining standards and for early identification of practices that need escalation and addressing. Data monitoring is an integral component of the quality management cycle. Facilities providing maternity and newborn services need to integrate the recording and monitoring of clinical practices related to breastfeeding and infant feeding into their quality-improvement/monitoring and reporting systems.

Implementation

There is a protocol for ongoing monitoring and a data-management system to comply with the 10 Steps. See Appendix 6: Monitoring and Quality Improvement for suggested indicators for facility-based tracking of the key practices. Two of the indicators, early initiation of breastfeeding and exclusive breastfeeding, are considered "sentinel indicators". All facilities should routinely track these indicators for each mother–baby pair. These sentinel indicators are for internal quality monitoring.

The BFHI facility committee should review progress every 6 months. The purpose of the review is to track trends in these indicators and, where challenges are identified, to plan and implement corrective actions. See Appendix 6 Quality Improvement Process. The review of the sentinel indicators should focus on internal quality improvement and progress towards achieving the BFHI standards, with at least 80% of early initiation of breastfeeding, and at least a 75% exclusive breastfeeding or breastmilk feeding rate at discharge.

Implementation Standards

Sentinel Indicators
The *Maternity Facility* seeking accreditation or reaccreditation must fulfil the requirements for the most recent 12 months, which indicates that: • At least 75% of term infants were breastfed or breastmilk fed exclusively throughout their stay in the facility[1]. • At least 80% of the term infants initiated their breastfeeding soon after birth.

Ongoing Monitoring of the Sentinel Indicators
• Facilities should routinely track exclusive breastfeeding rates at discharge. • Facilities should routinely track the rate of early initiation of breastfeeding. • Data should be entered into the BFHI self-assessment system at least every 6 months and reviewed by the facility BFHI Committee for ongoing quality improvement.

[1] For more specific details on achieving exclusive breastfeeding rates and special consideration for facilities which find this challenging to achieve, see Step 6.

Step 2: Ensure that Staff have sufficient knowledge, competence and Skills to Support Breastfeeding

Rationale

Timely and appropriate care for breastfeeding mothers can only be provided if all personnel have the knowledge, competence, and skills to do so. Education of personnel enables them to develop practical skills, give consistent messages, and implement policy standards. Personnel cannot be expected to implement a practice or educate a woman on a topic for which they have received no training.

Implementation

Health-facility personnel who provide infant feeding services, including breastfeeding support, should have sufficient knowledge, competence, and skills to support women in breastfeeding.

In general, the responsibility for building this capacity resides with the pre-service education system. However, all personnel must be up to date with evidence-based, contemporary information and practices consistent with BFHI standards and the policy. Facilities need to ensure that all personnel who provide infant feeding services, including breastfeeding support, have regular ongoing in-service education and competency reviews. Education for staff assisting breastfeeding mothers needs to be competency-based, focusing on practical skills rather than theoretical knowledge alone.

Facilities must be able to provide proof that all personnel who have contact with pregnant women, mothers and infants in the facility have received orientation to, and education on the 'policies for BFHI' outlined in Step 1 and have the skills necessary to implement these policies.

Core Competencies

All personnel in Group 1, who assist mothers with infant feeding, should be competent in their ability to:

Counselling Skills

1. Use listening skills when counselling a mother.
2. Use skills for building a mother's confidence and giving support.
3. Counsel a pregnant woman about breastfeeding.
4. Counsel a mother to make an informed and appropriate decision about infant feeding, suitable to her circumstances.

Establishing Breastfeeding

5. Help a mother to recognise when her baby is ready to initiate breastfeeding while in skin-to-skin contact after birth.
6. Support a mother to position herself and her baby for breastfeeding.
7. Support a mother to attach her baby to the breast, encouraging baby-led attachment.
8. Assess breastfeeding, including teaching a mother how to monitor milk transfer
9. Explain to a mother about feeding cues and the optimal pattern of breastfeeding.
10. Using hands-off techniques, assist a mother in expressing her breast milk.
11. Explain to a mother how to know if her baby is getting enough milk

Breastfeeding Challenges

12. Counsel a mother who thinks she does not have enough milk.
13. Counsel a mother with an unsettled baby.
14. Counsel a mother on selecting and using an alternative feeding method.
15. Counsel a mother whose baby is refusing to breastfeed.
16. Counsel a mother who has flat or inverted nipples.
17. Counsel a mother with engorged breasts.
18. Counsel a mother with sore or cracked nipples.
19. Counsel a mother with mastitis.
20. Support a mother to breastfeed a low-birthweight, preterm or sick baby.

Implementation Standards

Personnel Groups for Education

All personnel who have contact with pregnant women, mothers, and infants in the facility are divided into three Groups based on their role in the facility, rather than their position title. Allocation to the various Groups can be determined by the facility, but should meet the following criteria:

Group 1: Those who counsel and assist mothers with breastfeeding. For example, lactation consultants, midwives and nurses who frequently assist mothers with breastfeeding or expression of breastmilk.

Group 2: Those who may provide general breastfeeding advice but do not assist mothers with breastfeeding. For example, obstetricians, paediatricians, other medical personnel, nurses who work in clinics or operating theatres, speech pathologists, and dieticians who advise or provide care related to infant feeding or lactation to mothers and/or their babies.

Group 3: Those who have contact with pregnant women and mothers but do not assist mothers with breastfeeding and do not provide infant feeding advice as part of their role—for example, ward clerks, auxiliary volunteers, physiotherapists, pharmacists, perioperative and recovery room personnel.

Group 1 BFHI Education and Competency Requirements

Over the **past 3 years, all Group 1 personnel who have been at the facility for 6 months or more have received at least 8 hours of competency-based in-service education, including updates,** where applicable. It is recommended that the training and updates be spread over the previous 3 years.

The 20 Core Competencies are considered essential skills for all personnel who counsel and assist mothers with breastfeeding. They should be covered in the in-service competency-based education with regular updates.

[1] Personnel refers to all persons engaged in relevant activities, not just those whom the facility defines as "staff".

Ongoing competency assessment is the responsibility of an appropriately qualified supervisor (e.g., Senior Midwife, Nurse Unit Manager, Nurse Clinician, Nurse Educator, or Lactation Consultant) who is experienced and knowledgeable in evidence-based, contemporary breastfeeding practices consistent with BFHI standards. Competency assessment can be acquired in a single session or cumulatively through direct or indirect supervised experience during a typical working day or simulated activities.

An assessment of competency might include

- Peer-reviewed simulated activities in a workshop setting.
- Supervised clinical practice
- Observation and completion of the checklist, for example:
  - helping a mother with positioning and attachment.
  - discussing breastfeeding with a pregnant woman.
  - support provided to a mother who is artificially feeding her baby
  - facilitation of skin-to-skin contact at birth and early initiation of breastfeeding
- Small group discussion of a competency, e.g. "Tell me how you would help a mother who thinks she does not have enough milk…"
- Demonstration of helping a mother with e.g. expression of breastmilk

The delivery of education content is flexible. Group 1 personnel in a *Baby Friendly* facility should have the following knowledge and competencies:

- The facility's policy and key clinical practices (Steps 3-10). The key clinical practices should cover the 20 Core Competencies listed.
- *Guidelines for Supplementary Feeding for the Healthy Term Breastfed Neonate* (Appendix 3)
- Providing optimal support to all mothers who will be leaving the facility using infant formula (Appendix 4).
- The *WHO International Code of Marketing of Breast-milk Substitutes* and subsequent WHA resolutions (Appendix 5).

The facility can report the percentage of Group 1 personnel who have been at the facility for 6 months or more and have completed the in-service education and competency assessment.

Education Requirements for New Personnel,,

Orientation

Orientation should include:

- a review of the 'policies for BFHI'
- being shown where the full policy and protocols can be accessed
- being made aware of their role in implementing it
- being made aware that they are required to work within the facility's policies and protocols

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New Personnel

The appropriate in-service orientation education for all Groups should be completed within 6 months.

Competency assessment for new Group 1 personnel should commence as soon as possible after completion of the orientation.

Group 2 BFHI Education Requirements

Over the previous 3 years, all Group 2 personnel who have been at the facility for 6 months or more have had education in the following areas:

- The facility's policy and key clinical practices (Steps 3-10) with a focus on:
    - Protocols related to Step 4, skin-to-skin
    - Why breastfeeding is important
    - Ways in which a supplementary feed of infant formula can affect the breastfeeding baby and mother.
    - How to assist the mother to make a fully informed and appropriate decision about infant feeding, suitable to her circumstances.
- *Guidelines for Supplementary Feeding for the Healthy Term Breastfed Neonate* (Appendix 3) (Note: not required if making decisions about infant formula supplementation is outside the scope of practice of the person being interviewed.)
- The *WHO International Code of Marketing of Breast-milk Substitutes* and subsequent WHA resolutions.

The delivery of the education is flexible. It may be face-to-face sessions, individually or in groups; online sessions; a series of short handouts; or a combination of these.

The facility can report the percentage of Group 2 personnel who have been at the facility for 6 months or more and have completed the relevant in-service education and/or updates.

Group 3 BFHI Education/ Information Requirements

Group 3 education/information is usually around 1 hour and can be delivered face-to-face, individually, or in a group.

The content of the education is flexible, but should cover:

- Why breastfeeding is important.
- Facility policy/practices supportive of breastfeeding.

The facility can report the percentage of Group 3 personnel who have been at the facility for 6 months or more and have completed the relevant education/information requirement.

Facility Personnel Education Database

Facility Records

The facility maintains electronic or hard-copy central records and can report the percentages of personnel who have completed the in-service education or orientation required for their Group. The assessors will review these records as submitted. The assessment principle in education will be based on personnel's competency and knowledge according to their Group.

Personnel Interviews

At least 80% of the Group 1, 2 and 3 personnel:

- report they have received the required education on breastfeeding (Groups 1, 2 and 3) in the previous 3 years
- report receiving competency assessments in breastfeeding in the previous 3 years (Group 1 only).
- can correctly answer questions on breastfeeding knowledge and competencies (as applicable to their role in Group 1 or 2).
- can correctly answer questions on why breastfeeding is essential and practices which support breastfeeding (Group 3)

Key Clinical Practices

Steps 3-10 outline the clinical practices that have been identified as key to the optimal establishment of breastfeeding in a Baby Friendly facility. Support for mothers who are not breastfeeding is also addressed. Implementation of these clinical practices is supported by the policies, education and competencies outlined in Steps 1 and 2.

Step 3: Discuss the Importance and Management of Breastfeeding with Pregnant Women and their Families

Rationale

All pregnant women must have basic information about breastfeeding, to make informed decisions. A review of 18 qualitative studies indicated that mothers generally feel infant feeding is not discussed enough in the antenatal period and that there is insufficient discussion of what to expect with breastfeeding[1]. Mothers want more practical information about breastfeeding. Pregnancy is a key time to inform women about the importance of breastfeeding, support their decision-making, and help them understand the maternity care practices that facilitate its success. Mothers also need to be informed that birth practices have a significant impact on the establishment of breastfeeding.

Implementation

Where facilities provide antenatal care (including booking-in, antenatal clinics, antenatal classes or antenatal inpatient care), pregnant women and their families should be counselled about the importance of breastfeeding and its early management. If the facility directly provides antenatal care services or offers classes for pregnant women, then the provision of breastfeeding information and counselling is the facility's direct responsibility. If facilities providing maternity and newborn services do not have direct authority over the external providers of antenatal care, they should work with them to ensure that mothers and families are fully informed about the importance of breastfeeding and know what to expect when they deliver at the facility.

Antenatal breastfeeding counselling must be tailored to the individual needs of the woman and her family, addressing any concerns and questions they have. This counselling needs to be delivered sensitively, taking into account each family's social and cultural context.

Conversations about breastfeeding should begin at the first or second antenatal visit, allowing time to discuss any challenges that may arise. This is particularly important in settings where women have few antenatal visits and/or initiate them late in pregnancy. Additionally, women who give birth prematurely may not have adequate opportunities to discuss breastfeeding if the conversations are delayed until late in pregnancy.

Women should be provided with information on breastfeeding by a diverse range of media and sources, so they can choose what best suits their individual needs. Printed or online information at a language and literacy level that mothers understand is one way to ensure that all relevant topics are covered. However, many women will not read this information, and it may not directly address the key questions they have. Interpersonal counselling, either one-on-one or in small groups, allows women to discuss their feelings, doubts and questions about infant feeding.

[1] Pérez-Escamilla R, Martinez JL, Segura-Pérez S. Impact of the Baby-friendly Hospital Initiative on breastfeeding and child health outcomes: a systematic review. Matern Child Nutr. 2016;12(3):402–17. doi:10.1111/mcn. 12294.

The information must be provided free of conflicts of interest, and the antenatal service should not in any way promote artificial feeding or products used for this purpose, as stipulated in the Guidance on ending inappropriate promotion of foods for infants and young children[1].

Women at increased risk for birth of a preterm or sick baby (e.g. pregnant adolescents, high-risk pregnancies, known congenital anomalies) must begin discussions with knowledgeable personnel as soon as feasible concerning the special circumstances of feeding a premature, low-birthweight or sick baby[2].

Implementation Standards

Antenatal Information for Women
There are procedures in place to ensure that all pregnant women receive the required information **by the third trimester (28 weeks).** A written description of the information in the antenatal education/discussion about breastfeeding is made available to the Assessors. The antenatal education/discussion covers at least the following key points: • The facility's breastfeeding policy, including the *Ten Steps to Successful Breastfeeding*. • Why breastfeeding is essential, and the risks associated with not breastfeeding. • The importance of early uninterrupted skin-to-skin contact (the significance of the first hour). • How to recognise when the baby is ready to attach to the breast for the first feed. • Basic breastfeeding and lactation management, including positioning and attachment, feeding cues and frequency of feeding. • Why 24-hour rooming-in (staying close to baby) is essential. • Why bottle teats and dummies are discouraged while breastfeeding is being established. • Exclusive (full) breastfeeding for around six months, and that breastfeeding continues to be important after other foods are introduced, and may be continued for up to two years and beyond, as per WHO guidelines. Antenatal information about breastfeeding is available to pregnant women in a variety of written and electronic formats, including low-literacy and pictorial formats. It should be available in each language used by women who use the facility's maternity services, though it is encouraged to make this information available in other languages as well. All educational materials, handouts, or sample bags available to and/or distributed to antenatal women are made available to the Assessors for review. They are free of promotion of artificial feeding.

[1] Maternal, infant and young child feeding. Guidance on ending the inappropriate promotion of foods for infants and young children. In: Sixty-ninth World Health Assembly, Geneva, 23–28 May 2016. Provisional agenda item 12.1. Geneva: World Health Organisation; 2016 (A69/7 Add 1; http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_7Add1-en.pdf?ua=1, accessed 7 March 2018).

[2] US Department of Health and Human Services National Institutes of Health. What are the risk factors for preterm labour and birth? (https://www.nichd.nih.gov/health/topics/preterm/conditioninfo/Pages/who_risk.aspx, accessed 7 March 2018).

Pregnant Women Interviews

Assessors are required to interview eligible women, even if the facility lacks an antenatal clinic. A pregnant woman is eligible to be interviewed during the assessment if she meets both of the following criteria:

- She is in the third trimester (28+ weeks) - women with earlier gestation may be included if breastfeeding education has been completed; and
- She has attended the facility (or satellite) at least twice - attendances can include booking-in, clinic visits and classes.

At least 80% of the Pregnant Women Interviewed Can:

- confirm that they were asked about their previous knowledge and experience with baby feeding.
- confirm they have been able to discuss breastfeeding with a staff member.
- state at least two reasons why breastfeeding is important.
- answer questions about
    - skin-to-skin contact immediately after birth; and
    - how to recognise when her baby is ready to attach for the first breastfeed
- state why rooming-in day and night is essential.
- state why avoiding early dummy use is essential.
- confirm that they have not received from the facility any group education on artificial feeding

Personnel Interviews

The Staff or Midwife Can:

- Confirm pregnant women are provided with information or education on breastfeeding.
- Confirm that all pregnant women are asked about their breastfeeding knowledge and previous experience with infant feeding.
- Confirm that pregnant women who did not breastfeed a previous child or had problems with breastfeeding are offered antenatal breastfeeding counselling and can describe how this counselling is facilitated.

Step 4: Facilitate Immediate and Uninterrupted Skin-to-Skin Contact and Support Mothers to Recognise when their Babies are Ready to Breastfeed, Offering Help if Needed

Rationale

Optimal benefit is achieved through immediate, uninterrupted skin-to-skin contact, allowing the baby to follow the natural sequence of innate feeding behaviours until breastfeeding is initiated. Immediate and uninterrupted skin-to-skin contact facilitates the newborn infant's natural rooting reflex, which helps imprint the behaviour of looking for the breast, attaching to it, and suckling. Additionally, immediate skin-to-skin contact helps populate the newborn's microbiome and prevent hypothermia. This first feed, soon after birth, will trigger the production of breast milk and accelerate lactogenesis. Many mothers stop breastfeeding early or believe they cannot breastfeed because of insufficient milk, so the establishment of a good milk supply is critically important for success with breastfeeding. In addition, optimal early initiation of breastfeeding has been proven to reduce the risk of infant morbidity and mortality[1].

Implementation

Skin-to-skin contact is when the baby is placed prone on the mother's abdomen or chest with no clothing separating them. It is recommended that skin-to-skin contact be facilitated regardless of the type of birth. It should be uninterrupted until after the first breastfeed, if possible, or for at least an hour if the baby feeds sooner.

Initiation of breastfeeding is typically a direct consequence of uninterrupted skin-to-skin contact, as most babies naturally squirm or crawl toward the breast.

The amount of colostrum a newborn infant receives in the first few feedings is minimal. Still, it is highly nutritious and contains essential antibodies and immune-active substances which prime the gut microbiome. Early suckling is vital for stimulating milk production and establishing the maternal milk supply. The amount of milk ingested is a relatively unimportant factor.

[1] NEOVITA Study Group. Timing of initiation, patterns of breastfeeding, and infant survival: prospective analysis of pooled data from three randomised trials. Lancet Glob Health. 2016;4(4):e266–75. doi:10.1016/ S2214-109X(16)00040-1.

Implementation Standards

Immediate Skin-to-Skin Contact

After a Vaginal Birth
Unless a medically indicated procedure is required, the baby is immediately placed skin-to-skin on the mother's chest and stays there, without interruption or separation.

Although immediate skin-to-skin is optimal, for Step 4, there may be up to 5 minutes of separation before continuous skin-to-skin contact starts. As a guide, the baby should be on the mother's chest in skin-to-skin contact within 5 minutes by the second Apgar.

After a Caesarean Birth
Optimum practice:

- The baby is placed skin-to-skin on the mother's chest while she is on the theatre table immediately after birth or within 5 minutes.

BFHI minimum requirements:

- When the mother has not had a general anaesthetic, her baby is on her chest in skin-to-skin contact no later than 10 minutes after she arrives in recovery, unless evidence can be provided that the mother's or baby's condition prevented this.
- When the mother has had a general anaesthetic, her baby is on her chest in skin-to-skin contact within 10 minutes of being able to respond to her baby, unless evidence can be provided that the mother's or baby's condition prevented this.

A baby held cheek-to-cheek with the mother on the theatre table is **not considered skin-to-skin contact** and cannot be counted as such.

N.B. Skin-to-skin contact with another adult, such as the other parent, is an alternative when skin-to-skin is not possible with the mother or must be interrupted, e.g. for medical reasons. It will help stabilise the baby's temperature and respiration and has other benefits. However, skin-to-skin on the birth mother's chest remains the optimal practice for babies who have had a vaginal or caesarean birth and is vital for the optimal establishment of breastfeeding and helps populate the newborn infant's microbiome from the mother's skin. For these reasons, skin-to-skin contact other than with the birth mother does not meet Step 4 requirements.

When a mother or baby is medically unstable following birth, uninterrupted skin-to-skin contact and the initiation of breastfeeding may need to be delayed. However, the mother should still be supported to provide skin-to-skin contact and to breastfeed as soon as she and/or the baby are well enough[1].

[1] Implications of cesarean delivery for breastfeeding outcomes and strategies to support breastfeeding. Washington (DC): Alive & Thrive; 2014 (A&T Technical Brief Issue 8, February 2014; http://aliveandthrive.org/wp- content/uploads/2014/11/Insight-Issue-8-Cesarean-Delivery-English.pdf, accessed 7 March 2018).

Skin-to-Skin Contact "Continues Uninterrupted"

After a vaginal or caesarean birth, once the baby is skin-to-skin on the mother's abdomen or chest, the baby stays there without interruption or separation.

When the Mother is Intending to Breastfeed
The baby is allowed to follow the typical sequence of innate feeding behaviours, seeks the breast and initiates the first breastfeed when the baby is ready. The baby is allowed to finish the feed when they are ready.

Although this Step specifies that skin-to-skin contact should continue "for at least an hour", it has been shown that most healthy term babies will follow a sequence of pre-feeding behaviours for about an hour before they are ready to self-attach and initiate the first breastfeed. In one study, the median was 62 minutes, with 25% of infants suckling by 43.5 minutes and 75% suckling by 90.3 minutes.

Assistance is provided to keep the mother and baby together and to ensure procedures are in place to ensure appropriate vigilance of the baby, including assessment of the airway, breathing and colour. Care should be hands-off, if possible, encouraging the mother to recognise and respond to her baby's innate feeding behaviours and to allow the baby to self-attach to the breast. The midwife may use hands-on techniques to assist with the baby's attachment if needed and help the mother into a more comfortable position.

If the first breastfeed is initiated and completed quickly, it is best practice to keep the baby in skin-to-skin for at least an hour; this meets the requirements for this Step.

'Without interruption'
measuring, and most required medical procedures can be carried out with the baby on the mother's abdomen. A brief interruption may be necessary, e.g. transfer from a theatre bed to a recovery bed; however, transfer procedures will generally respect the importance of keeping the baby skin-to-skin with the mother.
If skin-to-skin must be interrupted or terminated for maternal medical reasons, skin-to-skin with another adult, such as the other parent, is the next best option.

When the Mother is not Planning to Initiate Breastfeeding
If the mother is not planning to breastfeed, the skin-to-skin contact should continue uninterrupted for at least an hour after birth. If the mother insists on terminating it earlier, this is acceptable. The time and reason should be documented.

Clinical Indicator
The Maternity Facility BFHI Bi-Annual Data recorded in the self-assessment online system indicates that at least 80% of term infants experienced uninterrupted skin-to-skin contact immediately or within 5 minutes after birth, or within 10 minutes of arriving in recovery following a caesarean and that this contact continued uninterrupted until after the first breastfeed or for at least an hour if the baby was fed sooner.

Mother Interviews[1]

At least 80% of Mothers Interviewed, unless a Medically Indicated Procedure was required, can:

- Confirm that the baby was immediately placed skin-to-skin, regardless of whether they intended to breastfeed, as per the standards for this Step.

Of those who intended to breastfeed, at least 80% of Mothers Interviewed, unless a Medically Indicated Procedure was required, can:

- confirm the baby stayed skin-to-skin without interruption for at least an hour (even if the baby breastfed early).

Of those who Did Not Intend to breastfeed, at least 80% of Mothers Interviewed, unless a Medically Indicated Procedure was required, can:

- confirm the baby stayed skin-to-skin without interruption for at least an hour, unless earlier separation was at the mother's request, which was documented.

N.B. Mothers may have difficulty estimating time immediately following birth. If time and duration of skin-to-skin contact, and the time of the first breastfeed, are routinely recorded in the case notes, this can be used to verify.

At least 80% of Mothers with Babies in Special Care[2] can:

- confirm that they have held their babies' skin-to-skin, or if not, the staff could provide justifiable reasons why this did not occur

Personnel Interviews

The staff in charge of the Delivery Suite can:

- outline the procedures used in this facility for keeping mothers and babies together after delivery, for a vaginal birth, and after a caesarean birth, and what personnel do to support the optimal initiation of breastfeeding
- outline how the key indicators of skin-to-skin contact and the first breastfeed are documented to allow monitoring and reporting.

The staff in charge of the Postnatal ward can:

- outline the management of a breastfeeding mother and baby who have been transferred to their care before/after the initiation of the first breastfeeding.
- outline the procedures and resources in place to ensure that mothers of babies who did not initiate breastfeeding, and/or who will be separated, are supported to initiate expressing colostrum as soon as possible, or within 2 hours of birth if possible.

The staff in charge of the Special Care / NICU can:

- explains the procedures and policies in place to support mothers and their babies to have skin-to-skin care.

[1] The relative number of mothers interviewed who have had a vaginal vs a caesarean birth will be determined by the annual percentage of vaginal vs caesarean births at that facility.
[2] For the purpose of interviewing mothers for BFHI assessments, the NICU can be included in the definition of special care.

Step 5: Support Mothers to Initiate and Maintain Breastfeeding and Manage Common Difficulties

Rationale

While breastfeeding is a natural human behaviour, most mothers need practical help in learning how to breastfeed. Even experienced mothers may encounter new challenges when breastfeeding a newborn infant. Postnatal breastfeeding counselling and support have been shown to increase rates of breastfeeding up to 6 months of age[1]. Early adjustments to position and attachment can prevent breastfeeding problems later. Support helps build maternal confidence.

Implementation

Mothers should receive practical support to initiate and maintain breastfeeding and to manage common breastfeeding challenges. Practical support includes providing emotional and motivational support, imparting information and teaching skills to enable mothers to breastfeed successfully. The stay in the facility is a unique opportunity to discuss and address the mother's questions or concerns about breastfeeding and to build her confidence in her ability to breastfeed.

All mothers should receive individualised attention, but first-time mothers and mothers who have not successfully breastfed before will require extra support. Mothers who had multiple births, those who gave birth by caesarean, and/or obese mothers should be given additional support, especially with positioning and attachment.

To establish and maintain the production of breast milk, practical support is particularly critical for mothers of babies who are separated (preterm, late preterm and small for gestational age). Late preterm infants may be able to breastfeed at the breast exclusively, but are at greater risk of jaundice, hypoglycaemia and feeding difficulties than full-term infants, and thus require increased support[2].

Mothers should be taught how to express breast milk as a means of maintaining lactation if the baby is not feeding effectively or if they are temporarily separated from their baby. There is not sufficient evidence that one method of expression (hand expression, manual pump or electric pump) is more effective than another[3]. Thus, any of these methods may be taught, depending on the mother's context. However, hand expression of at least a few drops of milk at the beginning of a feed should also be taught. Hand expression has the added advantage of being available wherever the mother is, allowing her to relieve pressure or express milk when a pump is unavailable. Mothers also need to be informed about the storage and use of expressed milk.

Implementation Standards

Postnatal Information for Mothers
All mothers who plan to breastfeed are taught the necessary skills and provided with appropriate support and information to initiate and maintain lactation and to breastfeed their babies. As a minimum, all breastfeeding mothers are taught: • how to position and attach their babies for breastfeeding, and how to recognise that the baby is well attached to the breast, breastfeeding effectively, and milk transfer is occurring. • the supply and demand principles and how to maintain optimal milk supply.

- How to recognise when their baby is ready to feed.
- How to maintain lactation if the baby is not feeding effectively, or if temporarily separated.
- How to stimulate the milk ejection reflex and express breast milk by hand or pump.
- How to hand express a few drops of milk to entice the baby at the beginning of a feed.
- How to assess whether their baby is getting enough milk.
- Breast and nipple care.

Women who wish to breastfeed but did not breastfeed a previous child, or who had problems with breastfeeding, are provided with additional support, assistance, and advice by the facility's personnel.

If a breastfeeding mother or a breastfed baby/child is admitted to any part of the facility, the support provided is appropriate and facilitates the continuation of breastfeeding.

Mother Interviews (Breastfeeding)

At least 80% of Breastfeeding Mothers who are Interviewed Can:

- Report that they were given further assistance with breastfeeding as required.
- Demonstrate or describe correct positioning and attachment.
- Describe how to recognise that their babies are well attached to the breast and breastfeeding effectively.
- Describe cues, other than crying, that indicate their baby is ready to feed.
- Describe two ways to maintain an optimal milk supply
- Describe two ways to assess whether their baby is getting enough milk
- Confirm that they have been shown how to hand express their breastmilk

At least 80% of Mothers with Babies who are in Special Care (Including NICU) and who are breastfeeding or expressing their Milk can:

- Confirm they have been supported to initiate lactation as soon as possible, at least within 2 hours of birth, unless the mother was severely medically compromised.
- Confirm they have been shown how to express their breastmilk and have been provided with assistance as required.
- Can describe the technique they are using for hand expressing or pumping their milk.
- Confirm they have been informed how to maintain lactation by frequent expression of breastmilk.
- Confirm they have been informed and provided with written information on how to store, transport and use their expressed breastmilk.

[1] McFadden A, Gavine A, Renfrew MJ, Wade A, Buchanan P, Taylor JL et al. Support for healthy breastfeeding mothers with healthy term babies. Cochrane Database Syst Rev. 2017;(2): CD001141. doi:10.1002/14651858. CD001141.pub5.)

[2] Meier PP, Furman LM, Degenhardt M. Increased lactation risk for late preterm infants and mothers: evidence and management strategies to protect breastfeeding. J Midwifery Women's Health. 2007;52(6):579–87.

[3] Becker GE, Smith HA, Cooney F. Methods of milk expression for lactating women. Cochrane Database Syst Rev. 2016;(9): CD006170. doi:10.1002/14651858.CD006170.pub5.

Personnel Interviews:

The staff in charge of the postnatal ward can:

- describe the support, resources and materials available for pregnant women and mothers from culturally and linguistically diverse backgrounds.

The staff in charge of the Special Care / NICU can:

- outlines the procedures in place to ensure that mothers of babies admitted to Special Care / NICU babies who have not yet initiated breastfeeding or expression of colostrum are supported to initiate expressing colostrum as soon as possible, or within 2 hours of birth.
- explains how to maintain optimal lactation when expressing breastmilk for a baby in Special Care / NICU.

At least 80% of the Group 1 Personnel Can:

- Outline what they tell mothers about positioning and attaching their baby for a breastfeed
- Outline what they tell mothers about how to recognise whether their baby is well attached and feeding effectively.
- Demonstrate an acceptable technique for teaching mothers how to hand express and collect colostrum.
- Describe guidelines for the storage and use of expressed breastmilk.

At least 80% of the Group 2 Personnel Can:

- Describe why breastfeeding is important.

Step 6: Do Not Provide Breastfed Newborns Any Food or Fluids Other Than Breastmilk, Unless Medically Indicated

Rationale

Giving newborn infants any foods or fluids other than breast milk in the first few days after birth interferes with the establishment of breast-milk production. Newborn infants who are fed other foods or fluids will suckle less vigorously at the breast, thereby inefficiently stimulating milk production, creating a cycle of insufficient milk and supplementation that may lead to breastfeeding failure. Babies who are supplemented before discharge are twice as likely to stop breastfeeding altogether in the first 6 weeks of life[1]. In addition, foods and liquids may contain harmful bacteria and carry a risk of disease. Supplementation with artificial milk significantly alters the intestinal microflora[2].

Implementation

Mothers should be discouraged from giving any food or fluids other than breast milk, unless medically indicated. Very few conditions of the mother or baby preclude the feeding of breast milk and necessitate the use of breastmilk substitutes[3]. The Academy of Breastfeeding Medicine has developed a clinical protocol for managing situations in which supplementation of the mother's own milk would become necessary[4]. Infants should be assessed for signs of inadequate milk intake and supplemented only when indicated.

Mothers who are considering mixed feeding (see Appendix 1 Definitions) should be counselled on the importance of exclusive breastfeeding in the first few weeks of life, how to establish a milk supply and how to ensure that the baby can suckle and transfer milk from the breast. Supplementation can be introduced later if the mother chooses. Mothers who are feeding their babies with breast-milk substitutes, by necessity or by choice, must be taught about safe preparation and storage of formula[5] and how to respond adequately to their child's feeding cues. The Global documents state that at least 80% of preterm babies and other vulnerable newborn infants who cannot be fed their mother's own milk are fed with pasteurised donor human milk (PDHM). Currently, PDHM is available upon request from the KK Human Bank Milk. Where achievable, this is acknowledged as the optimal practice.

Where donor milk is unavailable, breast milk substitutes are required. In most cases, supplementation is temporary until the mother's own milk is available, at which point it is given priority. Even if direct breastfeeding is not possible for a period, mothers must be supported and encouraged to continue stimulating production by expressing their milk.

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[1] DiGirolamo AM, Grummer-Strawn LM, Fein SB. Effect of maternity-care practices on breastfeeding. Pediatrics. 2008;122(Suppl. 2):S43–9. doi:10.1542/peds.2008-1315e.

[2] Salvatori G, Guaraldi F. Effect of breast and formula feeding on gut microbiota shaping in newborns. Front Cell Infect Microbiol. 2012;2:94. doi:10.3389/fcimb. 2012.00094.

[3] World Health Organisation, United Nations Children's Fund. Acceptable medical reasons for use of breastmilk substitutes. Geneva: World Health Organisation; 2009. (WHO/NMH/NHD?09.1, WHO/FCH/CAH/09.1; http://apps.who.int/iris/bitstream/10665/69938/1/WHO_FCH_CAH_09.01_eng.pdf, accessed 7 March 2018).

[4] Kellams A, Harrel C, Omage S, Gregory C, Rosen-Carole C, Academy of Breastfeeding Medicine. ABM Clinical Protocol #3: Supplementary feedings in the healthy term breastfed neonate, revised 2017. Breastfeed Med. 2017;12)188–98. doi:10.1089/bfm. 2017.29038.ajk. (Appendix 3)

[5] Infant Feeding Guidelines, Section 8. *National Health and Medical Research Council (NHMRC)* 2012. See Appendix 4. The NHMRC Infant Feeding Guidelines outline the standard of care for artificial feeding in Australia and are recommended for use in BFHI facilities. However, facilities may elect to use "WHO Safe Preparation, storage and handling of powdered infant formula: guidelines. *World Health Organisation* 2007", especially if they are already in use. The WHO Guidelines also meet the standard of care for BFHI purposes.

[6] DeMarchis A, Israel-Ballard K, Mansen KA, Engmann C. Establishing an integrated human milk banking approach to strengthen newborn care. J Perinatol. 2017;37(5):469–74. doi:10.1038/jp. 2016.198.

Implementation Standards

Exclusive Breastfeeding and Use of Supplements

Babies are exclusively breastfed or breastmilk-fed from birth. The baby is given no infant formula and no other liquids or solids, except for drops or syrups containing vitamins, mineral supplements, or medicines. Breastmilk-fed includes mother's expressed milk or donor milk (PDHM).
Parents are made aware of the importance of exclusive breastfeeding for around 6 months and the risks associated with giving formula or other supplements to a breastfed baby.

Before a supplement of infant formula is given to a breastfed baby, the mother's/baby's individual circumstances and alternative management strategies are considered. If a mother requests that her baby receive a supplement, the importance of exclusive breastfeeding, the risks of supplementation, and alternative management strategies are discussed with her. Wherever possible, supplements are avoided.

Facilities are encouraged to monitor and audit their use of supplements and associated practices, and to reduce their use to the lowest possible level.

If a supplement is given to a breastfed baby:

- It is for an acceptable medical indication (Appendix 3), which has been documented, or
- It is at the mother's request, after she has made an informed decision, which has been documented.

The volume of the supplement considers the newborn infant's stomach size.

The documentation should include the amount provided, the circumstances, and the reason(s) for supplementation. Mother's request or consent for supplementation must be recorded in the case notes at the time the supplement was given; if a signed consent form is used, it should also be included. Advance consent for supplementary feeds, e.g. on admission, does not meet this requirement and is considered inappropriate.

In accordance with policy, the facility does not provide parents and their families with infant formula, bottles, or teats for take-home use.

Sentinel Indicator Exclusive Breastfeeding Rates

BFHI-accredited facilities are required to achieve and maintain an exclusive breastfeeding or breastmilk-feeding rate of at least 75% for mothers and their babies discharged from the facility[1]. Infant feeding data must be submitted to the BFHI online assessment system every 6 months.

Facilities applying for their first accreditation or reaccreditation are required to submit the most recent 12 months of infant feeding data demonstrating that they have achieved at least a 75% exclusive breastfeeding or breastmilk-feeding rate, including babies who are supplemented for documented, acceptable medical reasons,

[1] The Global Standards call for a minimum of 80% for all outcome indicators, including exclusive breastfeeding, but they recognise that in some contexts this may be difficult to attain. At this time, BFHI Singapore has chosen to continue the requirement of at least 75% exclusive breastfeeding or breastmilk-feeding rate on discharge from inpatient care. Still, facilities should be working towards achieving 80% exclusive breastfeeding.

Care of Mothers who are on Artificial Feeding

Mothers who are considering artificial feeding are supported to make a fully informed and appropriate decision about infant feeding, suitable to their circumstances.

The following standards apply to all mothers who will be leaving the facility using infant formula, including mothers who are artificial-feeding, mixed-feeding, or have been advised or chosen to give their baby infant formula as a supplemental feed.

All mothers who will be leaving the facility using infant formula are given:

- information and instruction on the safe preparation, storage and handling of reconstituted powdered infant formula, based on WHO Guidelines[1].
- information on the risks to the baby if the preparation and handling instructions are not followed carefully.
- instruction on making up a bottle-feed using powdered infant formula[2]
- information on the importance of ensuring the correct concentration by following the instructions on the can exactly, regarding water volume and scoops of powder, and are made aware that these will be different for each brand of formula.
- information on best practice for feeding their babies with a bottle, including paced bottle-feeding.
- information on where to get help with infant feeding after discharge from the facility.

Instruction is given only to parents who need it; there is no group instruction; it is done privately, away from breastfeeding mothers. If the mother's condition prevents this instruction, it can be given to another family member instead.

Parents with low literacy skills or from non-English-speaking backgrounds may need extra support to ensure they have the required skills and understanding of the risks.

Materials on artificial feeding which are shown or given to parents are free from advertising, do not refer to or contain images of an identifiable product, and comply with the *WHO International Code.*

Personnel Interviews

The staff in charge of the postnatal ward:

- Can state at least two of the Indications for Supplementation in Healthy Term Infants and one practice that can help prevent the need for supplementation[3].
- Confirms that mothers who will be leaving the facility using infant formula are given instructions on the reconstitution of powdered infant formula and how to bottle-feed.
- Describe what should be considered when determining where and how instruction on the preparation of infant formula is given on the postnatal ward.

[1] "WHO Safe Preparation, storage and handling of powdered infant formula: guidelines. *World Health Organisation* 2007", especially if they are already in use. The WHO Guidelines also meet the standard of care for BFHI purposes.

[2] If liquid infant formula (ready-to-feed) is used in the facility, arrangements must be made to have instructions on teaching formula reconstitution. The leaflet on infant formula preparation is clear about how to prepare infant formula according to the instructions.

[3] See: Appendix 3.

The staff in charge of the Special Care / NICU:

- confirms that sick/preterm babies and other vulnerable newborn infants who cannot be fed their mother's own milk are fed with donor human milk (PDHM) when available and consented to by the parents.

At least 80% of the Group 1 staff can:

- State at least two of the Indications for Supplementation in Healthy Term Infants and one practice that can help prevent the need for supplementation[1].
- Outline ways in which a supplementary feed of infant formula can affect the breastfeeding baby and mother.
- Outline key safety and hygiene points that should be covered when instructing the reconstitution of powdered infant formula.
- Describe briefly the key issues to be covered when instructing a mother on how to feed her baby with a bottle. (Not applicable to staff in Group 1 who do not teach mothers, such as staff in the Delivery Suite)

At least 80% of Personnel from Group 2 Can:

- State at least two of the Medical Indications for Supplementation in Healthy Term Infants and one practice that can help prevent the need for supplementation[1]. *(Not asked if making decisions about using infant formula is outside the role of the person being interviewed)*
- Outline ways in which a supplementary feed of infant formula can affect the breastfeeding baby and mother.
- Briefly describe what should be discussed with a breastfeeding mother who is considering feeding her baby with infant formula, including the potential risks.

Mother Interviews

Breastfeeding

At least 80% of breastfeeding mothers can:

- confirm their babies have not been fed food or drink other than breastmilk.

If a supplement was given, there is documented evidence in the case notes of an acceptable medical reason (per the Indications for Supplementation in Healthy Term Infants[1]).

If a supplement was given at the mother's request, it is documented as an informed decision.

Artificial Feeding

At least 80% of mothers who are not breastfeeding (including those with documented maternal medical reasons) and have been feeding their babies with infant formula can:

- Report that the various feeding options were discussed with them, and they were helped to decide what was suitable in their situations.
- Confirm they have been given individual education about making up a bottle-feed using powdered infant formula.
- Adequately answer questions about:
  - making up and using powdered infant formula to feed their babies.
  - the risks to the baby if the preparation and handling instructions are not carefully adhered to.
  - how to feed a baby with a bottle.

[1] See: Appendix 3.

Step 7: Enable Mothers and their Infants to Remain Together and to Practise Rooming-in 24 Hours a Day.

Rationale

Rooming-in day and night is necessary to enable mothers to practise responsive feeding, as they cannot learn to recognise and respond to their babies' feeding cues when separated from them. This, along with the mother's close presence to her baby, will facilitate the establishment of breastfeeding.

Minimising disruption to breastfeeding during the stay in the facility enables a mother to breastfeed as frequently and for as long as her baby needs it.

Implementation

Facilities providing maternity and newborn services should enable mothers and their infants to remain together and to practise rooming-in throughout the day and night. Babies are with their mothers 24 hours per day from birth to discharge, except when there is a justifiable reason[1] that necessitates separation, such as a medical reason for the mother or baby, or a mother whose condition means she is unable to respond to and/or be responsible for her baby.

Implementation Standards

Rooming-in and Separations
The time, duration and the reason/circumstances of all separations are documented. Every effort should be made to support the mother in keeping her baby close. Her partner or support person, if available, can assist with this. Mother's request or staff suggestion, without a justifiable reason that necessitates separation, is not acceptable. There are many evidence-based reasons why mothers and their babies should be together; any separations should be uncommon, only when necessary, and documented. Rooming-in may not be possible in circumstances when babies need to be moved for specialised medical care. If sick babies need to be in a separate room to allow for adequate treatment and observation, efforts must be made for the mother to recuperate postpartum and to have no restrictions for visiting her baby.

Personnel Interviews
The staff in charge of the postnatal ward can: • Outline the rooming-in practices in the postnatal ward. **At least 80% of Group 1 Personnel Interviewed Can:** • Indicate the reasons for the mother and baby not rooming-in 24 hours a day. • .

[1] Mother's request or staff suggestion, without a justifiable reason, is not acceptable in the BFHI Global Standards, which have been implemented.

Mother Interviews
At least 80% of Mothers whose Babies are not in Special Care, whether they are breastfeeding or not, can: • report that since birth, their babies have been with them day and night. If any of these mothers report that their babies have been separated from them, the separation was necessary for a justifiable reason, which was adequately documented. • state one reason why rooming-in (staying close to their babies 24 hours a day) is essential. **At least 80% of Mothers whose Babies are in Special Care/ NICU:** • confirm that there are no restrictions on their access and visits to the NICU/SCN unit

Step 8: Support Mothers to Recognise and Respond to their Infants' Cues for Feeding

Rationale

Breastfeeding involves recognising and responding to the baby's display of feeding cues, as part of a nurturing relationship between the mother and baby. Responsive feeding (also called on-demand or baby-led feeding) puts no restrictions on the frequency or length of the baby's feeds, and mothers are advised to breastfeed whenever the baby is hungry or as often as the baby wants. Scheduled feeding, which prescribes a predetermined frequency and schedule of feeds, is not recommended. Mothers must know that crying is a late cue and that it is better to feed the baby earlier, since optimal positioning and attachment are more difficult when a baby is in distress.

Implementation

Mothers should be supported to practise responsive feeding as part of nurturing care. Regardless of whether they breastfeed, mothers should be supported to recognise and respond to their babies' cues for feeding, closeness, and comfort, and encouraged to respond appropriately to these cues. This enables them to build a caring, nurturing relationship with their babies and increases their confidence in themselves and in breastfeeding.

Implementation Standards

Cue-Based Feeding
No restrictions are placed on the frequency or duration of babies' breastfeeds, and mothers of healthy newborns are not advised to feed at set times or for a specific number of minutes. Mothers can recognise early feeding cues before a baby cries. Assuming the baby is breastfeeding *effectively,* mothers are advised to breastfeed: • in response to early feeding cues or as often as the baby wants. • if their breasts become uncomfortable or too full.

Personnel Interviews
The Postnatal Staff and at least 80% of Group 1 Personnel Interviewed Can: • Confirm that they advise mothers to breastfeed their babies in response to early feeding cues, as often and for as long as the baby wants. • Report that no restrictions are placed on breastfeeding unless frequency or timing of feeds is medically indicated.

Mother Interviews
At least 80% of Mothers Interviewed who are breastfeeding and whose Babies are <u>not</u> in Special Care Can: • Report that they have been advised to breastfeed their babies in response to early feeding cues, as often and for as long as the baby wants (assuming the baby is breastfeeding effectively). • Describe two early feeding cues before crying.

Step 9: Counsel Mothers on the Use and Risks of Feeding Bottles, Teats and Pacifiers.

Rationale

Proper guidance and counselling for mothers and other family members enable them to make informed decisions about the use or avoidance of pacifiers/or feeding bottles, and teats until successful breastfeeding is established. While WHO guidelines[1] do not call for the absolute avoidance of feeding bottles, teats, and pacifiers/dummies for term infants, there are several reasons for caution about their use, including recognition of feeding cues, hygiene, sucking physiology, and oral development. For these reasons, the use of artificial teats and dummies is not generally recommended while breastfeeding is being established.

Implementation:

An optimal supplemental feeding device has not yet been identified and may vary from one infant to another. No method is without potential risk or benefit[2,3]. If expressed milk or other feeds are medically indicated for term infants, feeding methods such as cups, spoons, syringes, feeding bottles, and teats may be used during their stay at the facility..

The use of a feeding bottle and teat may sometimes lead to breastfeeding difficulties, particularly if use is prolonged. The physiology of suckling at the breast differs from that of suckling from a feeding bottle and teat[4]. A faster flow from a bottle teat can lead the baby to take an unnecessarily higher volume of milk. Cup feeding is safe for both term and preterm infants, and there is evidence that it may help preserve breastfeeding duration among those who require multiple supplemental feedings (5, 6).

There is concern that the use of teats interferes with learning to suckle at the breast, and evidence suggests that cup-feeding infants may increase breastfeeding rates up to 6 months of age. If expressed breast milk or other feeds are medically indicated, alternative feeding methods are generally preferable to bottle- and teat-fed infants.

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[1] Guideline: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services. Geneva: World Health Organisation; 2017 (http://apps.who.int/iris/bitstream/10665/259386/1/9789241550086-?ua=1, accessed 7 March 2018).

[2] Kellams A, Harrel C, Omage S, Gregory C, Rosen-Carole C, Academy of Breastfeeding Medicine. ABM Clinical Protocol #3: Supplementary feedings in the healthy term breastfed neonate, revised 2017. Breastfeed Med. 2017;12)188–98. doi:10.1089/bfm. 2017.29038.ajk.

[3] Cloherty M, Alexander J, Holloway I, et al. The cup-versus-bottle debate: A theme from an ethnographic study of the supplementation of breastfed infants in hospital in the United Kingdom. J Hum Lact 2005;21:151–162.

[4] Geddes DT, Sakalidis VS Breastfeeding: how do they do it? Infant sucking, swallowing and breathing. Infant 2015; 11(5):146-160 (http://www.infantjournal.co.uk/pdf/inf_065_swa.pdf accessed 19 May 2019).

[5] Howard CR, Howard FM, Lanphear B, et al. Randomised clinical trial of pacifier use and bottle-feeding or cupfeeding and their effect on breastfeeding. Pediatrics 2003;111:511–518.

[6] Howard CR, de Blieck EA, ten Hoopen CB, et al. Physiologic stability of newborns during cup- and bottlefeeding. Paediatrics 1999;104(Pt 2):1204–1207.

[7] Flint A, New K, Davies MW. Cup feeding versus other forms of supplemental enteral feeding for newborn infants unable to fully breastfeed. Cochrane Database Syst Rev 2016; CD005092. DOI: 10.1002/14651858.CD005092.pub3.

For term babies, there is evidence that dummy use in the neonatal period is detrimental to exclusive and any breastfeeding[1]. The use of dummies may interfere with the recognition of feeding cues, thereby delaying feeding until the infant is crying and agitated. Dummies may also replace suckling, thereby reducing the number of times an infant physiologically stimulates the mother's breast, leading to fewer feeds and lower maternal milk production. For these reasons, the use of dummies is not recommended while breastfeeding is being established. Dummies are not provided by the facility, except where there is a documented clinical indication for an individual baby.

There should be no promotion of feeding bottles or teats in any part of the facility or by any personnel. As with breast-milk substitutes, these products fall within the scope of the International Code[2,3,4].

Implementation Standards

Use and Risks of Feeding Bottles, Teats and Pacifiers/ Dummies
Breastfeeding mothers are counselled on the use and risks of feeding bottles, teats and pacifiers/dummies. Personnel have the clinical skills to assist mothers in using alternative feeding methods, such as cups and spoons, when required. Personnel have the skills to counsel a breastfeeding mother on the best method for feeding her baby with EBM or a supplement, taking into account[5]: • volume to be given • whether anticipated use is short or long-term • whether the method enhances the development of breastfeeding skills. • maternal preference • potential stress to the baby The feeding method and volume are documented. Pregnant women and mothers are informed of the following reasons why dummies are not recommended in the early weeks of breastfeeding: • Different types of sucks, so there is the potential for suck confusion. • Harder to recognise feeding cues. • Babies tend to feed less often. • Can reduce the time at the breast and decrease milk supply. The facility does not provide dummies in the postnatal areas.

[1] Howard CR, Howard FM, Lanphear B, et al. Randomised clinical trial of pacifier use and bottle-feeding or cupfeeding and their effect on breastfeeding. Pediatrics 2003;111:511–518.

[2] International Code of Marketing of Breast-milk Substitutes. Geneva: World Health Organisation; 1981 (http://www.who.int/nutrition/publications/code_english.pdf, accessed 7 March 2018).

[3] The International Code of Marketing of Breast-Milk Substitutes – 2017 update: frequently asked questions—Geneva: World Health Organisation; 2017 (http://apps.who.int/iris/bitstream/10665/254911/1/WHO-NMHNHD-17.1-eng.pdf?ua=1, accessed 7 March 2018).

[4] World Health Organisation. Code and subsequent resolutions (http://www.who.int/nutrition/netcode/resolutions/en/, accessed 7 March 2018).

[5] See Appendix 3.

Personnel Interviews

The staff in charge of the postnatal ward can:

- Personnel have the clinical skills to assist mothers to use alternative feeding methods, other than artificial teats and bottles, when they are required.
- Confirm the facility does not provide dummies to mothers in the postnatal unit.

At least 80% of Group 1 Personnel:

- assist mothers to use alternative feeding methods, other than artificial teats and bottles, when they are required.
- describe the factors that need to be considered when counselling a breastfeeding mother on the best method for feeding her baby with EBM or a supplement
- explain why dummy use is not recommended while breastfeeding is being established.

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Mother Interviews

At least 80% of Mothers who are breastfeeding and whose Babies are <u>not</u> in Special Care:

- explain why dummy use is not recommended while breastfeeding is being established.
- report that, if their babies have been fed other than at the breast, they were counselled on the use, risks and benefits of the feeding method used.
- breastfeeding mothers are counselled on the use and risks of feeding bottles, teats and pacifiers/dummies.

Step 10: Coordinate Discharge so that Parents and their Infants Have Timely Access to Ongoing Support and Care

Rationale

Mothers need sustained support to continue breastfeeding. Contemporary maternity care models mean more mothers are discharged early, often before breastfeeding is established. The facility should have processes in place to ensure mothers have the minimum skills to breastfeed before discharge, receive additional feeding support as soon as possible after discharge, and know where to seek assistance in the interim. Breastfeeding support is especially critical in the days and weeks that follow, for early identification and problem-solving of breastfeeding challenges that may arise. The mother will encounter several phases in her breast milk production, her baby's growth, and her own circumstances (e.g., returning to work or school), during which she will need to expand her knowledge and skills, and additional support may be needed. Timely support after discharge is essential to maintaining breastfeeding rates. Maternity facilities must be aware of and refer mothers to the variety of community resources.

Implementation

As part of protecting, promoting and supporting breastfeeding, discharge from inpatient care should be planned for and coordinated, ensuring parents and their babies have access to ongoing support. Facilities need to provide appropriate referrals to lactation-support resources to ensure that mothers and babies are seen soon, within 2 to 4 days after birth, and again in the second week if needed, by a skilled breastfeeding support person who can assess feeding and provide the required support. Mothers who are artificially feeding similarly need to be seen with their babies by an appropriately skilled support person.

Printed and/or online information can help provide contact information for support and care by a skilled professional.

The key to fulfilling Step 10 is to ensure ongoing support for mothers and babies as they transition from inpatient care to community-based services. The facility has procedures that facilitate this transition, ensuring that mothers and babies continue to have access to skilled support for infant feeding concerns and challenges.

The facility should maintain contact with the groups and individuals providing support as much as possible, subject to their availability.

Implementation Standards

After Discharge Care
After discharge, care is discussed with the mother, and written/online information is provided about both health services and mother/peer support. Mothers are referred to services at the facility or in the community for ongoing management after discharge from the facility's care.

Personnel Interviews
The staff in charge of the postnatal ward can: • Describe the infant feeding support groups and follow-up services available in the local area or from the hospital, and explain how mothers are encouraged to access these.

At least 80% of Group 1 Personnel can:

- Describe how women are made aware of the hospital-based and community support at discharge.

Mother Interviews

Mothers are interviewed on this Step if they are to be discharged home with their babies only

At least 80% of Mothers Interviewed Can:

- identify at least two resources, including support groups and/or services, where they could get help with feeding their baby after discharge from the facility.

Observations

The review of the documents and clinical pathways indicates that information is provided to mothers before discharge on where and how they can find help with infant feeding after returning home.

Achieving Accreditation

Initial Accreditation

Facilities receive initial accreditation after completing the required **online BFHI Self-Assessment** and have undergone an **on-site validation** to confirm compliance with the Critical Management Procedures and Key Clinical Practices.

Accreditation Period

- Initial accreditation is valid for **three years**.
- Reaccreditation follows at **3 years**, and then every **five years thereafter**, to ensure continued compliance and ongoing quality improvement.

Following the validation, the assessor will submit a report of findings to the **BFHI Manager**. The report will summarise achievements, identify any gaps, and provide recommendations for ongoing quality improvement. The National BFHI Committee will make the final accreditation decision after reviewing the onsite and online assessment reports.

Assessment Outcomes
Accreditation

Once a facility demonstrates compliance with all Ten Steps and the Code, it will be awarded the **Baby-Friendly Accreditation**, recognising excellence in the care of mothers, babies, and families.

Accredited facilities will receive:

- An official **Accreditation Certificate** issued by the National BFHI Committee, Singapore.
- Recognition in the National BFHI records and website.

Unsuccessful Accreditation:

If a facility does not yet meet all required standards, the BFHI Manager will provide a written report with recommendations and a timeframe for follow-up after the National BFHI Committee in Singapore reviews it.

- The facility may be required to **resubmit documentation through the online system** and/or undergo a return visit focusing only on the criteria not previously met.
- Accreditation will be awarded once the outstanding requirements have been addressed.

Appeals Process
Facilities may appeal the accreditation decisions in writing to the BFHI Manager within 14 days of receiving the outcome. The National BFHI Committee in Singapore will review appeals.

Facility Feedback
After each accreditation cycle, facilities will be invited to provide feedback through an **online survey**. This feedback will be used to refine and improve the online self-assessment system and the on-site validation process.

Maintaining Accreditation

Once accredited, the facility is responsible for ensuring BFHI standards are maintained throughout the accreditation period.

Facilities are required to:

- Submit **bi-annual updates** through the **online BFHI Self-Assessment system**, including infant feeding data (exclusive breastfeeding at discharge, early breastfeeding initiation rates and the eight key clinical practices).
- Report on the quality improvement activities and progress on the action plans.
- Conduct **internal audits at least twice a year** to track compliance with the Code.

These submissions ensure that standards are maintained and enable national monitoring and feedback.

Re-Accreditation Process

Reaccreditation occurs **3 years after initial accreditation**, and every **5 years thereafter**.

Preparations for reaccreditation follow the same process as for initial accreditation:

- Complete the BFHI **online self-assessment** and submit the required data.
- Ensure that the **action plan** for BFHI requirements is developed and updated.

The reaccreditation review will consist of:

- Review of the required online self-assessment data, quality improvement and action plans.
- An **on-site validation visit** to verify compliance, conduct interviews with mothers and staff, including the review of records and written materials.

This approach ensures that facilities not only maintain compliance but also build on their achievements and strengthen practices over time.

Appendix 1: Definitions

Artificial Feeding
Baby is being fed fully or predominantly with breastmilk substitutes, including infant formula.

Assessors
Assessors and Lead Assessors are individuals who have completed a training program specific to the role and have met the requirements to conduct BFHI assessments on behalf of the Association of Breastfeeding Advocacy, Singapore, BFHI Committee, Singapore. The Lead Assessor takes a leadership role in assessments and has additional responsibilities beyond the Assessor role. Trainee Assessors are individuals who have completed a training program specific to the assessor role and are required to undertake a mentored practicum to meet the requirements to conduct BFHI assessment. Trainee Assessors can be used as additional members of the assessment team after appropriate mentoring and supervision.

Bottle Feeding
Baby is receiving any food or drink, including breastmilk, from a bottle.

Breastfeeding at Discharge from Facility:
Baby was fully or partially breastfeeding or breastmilk-fed (including expressed or donor milk) at the time of discharge. Includes breastfed babies having supplementary feeds.

Breastfeeding Initiated
Baby received at least one feed of colostrum or breastmilk.

Breastfeeding Mothers
Mothers who are breastfeeding their babies or expressing milk for breastfeeding.

Breastfeeding Support and Services
Mother support includes groups such as mother-to-mother/peer groups, whose members are trained to provide breastfeeding support. Services include all services that have staff/members appropriately educated to provide support. This could consist of lactation consultants, breastfeeding clinics, telephone support lines, staff at the maternity facility, the community, and maternal and child health services.

Breastmilk Substitute
Any food being marketed or otherwise represented as a partial or total replacement for breastmilk, whether it is suitable for that purpose.

Complementary Feeding
This term is widely used in the WHO Global Strategy for Infant and Young Child Feeding and other international documents to indicate the feeding of solid foods. Therefore, for BFHI purposes, including data collection, fluid feeds given to breastfed babies are called supplementary feeds. See also the definition of supplementary feeding.

Discharged from the Facility
For hospital assessment purposes, including interviews with mothers, women are deemed to be “discharged from the facility” when they leave inpatient care.

Exclusive Breastfeeding from Birth to Discharge
Baby received only breast milk, including expressed or pasteurised donor human milk (PDHM). Prescribed vitamins/minerals, medicines permitted—no other liquids or foods.

Facility
For BFHI purposes, "facility" means the entity which is preparing for accreditation or being assessed. It is usually a hospital, but may be another type of facility which provides maternity services. The assessment of a facility includes all areas accessible to pregnant women or mothers who are breastfeeding, as well as those that provide care for infants or children who are breastfeeding. A facility may have more than one site.

Hands-off Techniques
Techniques used to empower mothers by teaching them to correctly position and attach their babies for breastfeeding, without the staff member touching the mother or baby, or doing it for them. It is recognised that individual care takes priority, and these techniques do not apply to every situation.

Mixed Feeding
A combination of both breastfeeding and feeding with breastmilk substitutes.

Nursery (Well Baby Nursery)
For BFHI purposes, this includes any area where well newborn babies are cared for when separated from their mothers.

Rooming-In
Babies are with their mothers 24 hours per day from birth to discharge from inpatient care, except when there is a justifiable reason that necessitates separation. The time and the reason/circumstances of all separations are documented.

Samples/Supplies
For BFHI purposes, samples/supplies refer to free or subsidised (low-cost) products within the scope of the WHO International Code. BFHI facilities may not accept or distribute such samples or supplies. Samples are single or small quantities of a product provided at no cost, excluding products purchased by the facility and provided to mothers for immediate use within the facility. Supplies are quantities of a product provided for use over an extended period.

Skin-to-Skin Contact
The baby is naked or wears only a nappy and is lying on the mother's naked chest/ abdomen with the baby's head between her breasts. Mother and baby may then be appropriately covered, without restricting their interaction or the baby's innate feeding behaviours.

Special Care
When interviewing mothers for BFHI assessments, the Neonatal Intensive Care Unit (NICU) is included in the definition of Special Care.

Supervised Clinical Experience
Supervision should be undertaken by someone experienced and knowledgeable in evidence-based, contemporary breastfeeding practices consistent with BFHI standards. The supervised clinical experience can be acquired in a single session or cumulatively through direct or indirect supervision during a typical working day or through simulated activities. It may include observation and/or a particular practice, e.g., breast expression, helping with breastfeeding, discussing breastfeeding with pregnant women (antenatal clinic or booking-in), assisting with facilitating skin-to-skin contact at birth, early initiation of breastfeeding, and support for a non-breastfeeding mother.

Supplementary Feeding
A breastfed baby has been given one or more fluid feeds, including infant formula. For BFHI data collection and for calculating exclusive breastfeeding rates, feedings of expressed breastmilk are not considered supplementary feedings. See also the definition of complementary feeding.

Supplement Rate
The percentage of babies who have been given infant formula or other fluids by mouth at least once between birth and discharge from the facility's inpatient care.

WHO International Code
In BFHI materials, "WHO International Code" means the WHO International Code of Marketing of Breast-milk Substitutes and the subsequent relevant WHA resolutions. Available at: http://ibfan.org/the-full-code.

WHO Global Criteria
The BFHI Singapore standards for hospital assessment are closely based on and incorporate the revised WHO/UNICEF global BFHI standards. Hospitals accredited by BFHI Singapore are certified to the Global Criteria.

Appendix 2:

Ten Steps to Successful Breastfeeding in Lay Terms

	Hospitals Support Mothers to Breastfeed by…	Because…
1. Hospital Policies	• Making breastfeeding care standard practice • Not promoting infant formula, bottles or teats • Keeping track of support for breastfeeding	Hospital policies help make sure that all mothers and babies receive the best care.
2. Staff Competency	• Educating staff on supporting mothers to breastfeed • Assessing staff knowledge and skills	Well-educated staff provide the best breastfeeding support.
3. Antenatal Care	• Discussing the importance of breastfeeding for babies and mothers • Preparing women on how to feed their baby	Most women can breastfeed with the proper support.
4. Care Right After Birth	• Encouraging skin-to-skin contact between mother and baby • Allowing babies to find the breast and breastfeed soon after birth	Mother-baby skin-to-skin helps breastfeeding get off to a good start.
5. Support Mothers with Breastfeeding	• Checking positioning, attachment and suckling • Giving practical breastfeeding support • Helping mothers with common breastfeeding problems	Breastfeeding is natural, but most mothers need help at first.
6. Not Supplementing	• Giving only breastmilk unless there are medical reasons • When a supplement is needed, donor human milk from a milk bank is the first choice; infant formula is the second choice • Helping mothers who want to formula feed do so safely	Giving babies infant formula in the hospital makes it hard to get breastfeeding going.
7. Rooming-In	• Letting mothers and babies stay together day and night • Making sure that mothers of sick babies can have access to/visit	Mothers need to be near their babies to notice and respond to feeding cues.
8. Responsive Feeding	• Helping mothers know when their baby is ready for a feed • No limit on how often the baby breastfeeds	Breastfeeding babies whenever they are ready helps everybody.
9. Bottles, Teats, and Pacifiers	• Counselling mothers about the use and risks of feeding bottles and pacifiers/dummies	Bottles and dummies make it harder to get breastfeeding going.
10. Discharge	• Referring mothers to community resources for breastfeeding support • Working with communities to improve breastfeeding support • Support Services within the hospital	Learning to breastfeed takes time, and support is needed.

Appendix 3:

Guidelines for Supplementary Feeding for the Healthy Term Breastfed Neonate[1,2]

This appendix is synthesised and summarised, as applicable, based on the resources footnoted below. For further information and references, please access these documents.

Personnel who make decisions or counsel mothers on supplementing breastfed infants in a BFHI facility must be familiar with and implement these guidelines.

Preventing the Need for Supplementation

Many practices will prevent or reduce the need for supplementation, including:

- knowledgeable, competent and skilled staff.
- early initiation of breastfeeding or expression.
- postnatal counselling and support for mothers.
- early skilled evaluation and adjustments to positioning and attachment.
- rooming-in and careful attention to an infant's early feeding cues.
- increased skin-on-skin time to encourage more frequent feeding.
- responsive or baby-led feeding.
- gently rousing the sleepy infant to attempt frequent breastfeeds.
- teaching the mother's hand expression of drops of colostrum.
- understanding that cluster feeding is normal newborn behaviour, but it warrants a feeding evaluation to ensure that the infant is attached deeply and effectively.
- using ten per cent weight loss as an indicator for infant evaluation, not necessarily an indicator for supplementation.

Possible Medical Indications for Supplementation in Healthy Term Infants (37–42 weeks)

In each case, a decision must be made as to whether the clinical benefits outweigh the potential negative consequences of such feedings.

1. Infant indications
    a. Hypoglycaemia, documented by laboratory blood glucose measurement or similar reliable measurement that is unresponsive to appropriate frequent breastfeeding or measures such as the application of a glucose gel inside the infant's cheek. (It is acknowledged that this protocol is for healthy term infants. Protocols, e.g. babies of women with diabetes, may be different.)
    b. Clinical or laboratory evidence of significant dehydration (e.g., high sodium, poor feeding, lethargy, etc.)
    c. Significant weight loss may be an indication of inadequate milk transfer or low milk production, but a thorough evaluation of infant feeding is required before automatically ordering supplementation. It should also be noted that excessive newborn weight loss is associated with a positive maternal intrapartum fluid balance (via intravenous fluids) and may not directly indicate breastfeeding success or failure.
    d. Delayed or inadequate bowel movements or continued meconium stools on day 5 may be an indication of inadequacy of breastfeeding. Newborns with more bowel movements

[1] Kellams A, Harrel C, Omage S, Gregory C, Rosen-Carole C, Academy of Breastfeeding Medicine. ABM Clinical Protocol #3: Supplementary feedings in the healthy term breastfed neonate, revised 2017. Breastfeed Med. 2017;12)188–98. doi:10.1089/bfm. 2017.29038.ajk.

[2] UNICEF/WHO. Baby Friendly Hospital Initiative, revised, updated and expanded for integrated care, Section 4, Hospital Self-Appraisal and Monitoring. 2006. Available at www.who.int/nutrition/topics/BFHI_Revised_Section_4.pdf (accessed November 21, 2016).

During the first 5 days following birth, they experience less initial weight loss, an earlier transition to yellow stools, and an earlier return to birth weight.

e. Hyperbilirubinemia associated with poor breast milk intake despite appropriate intervention and marked by ongoing weight loss and limited stooling.
f. Macronutrient supplementation is indicated, such as for the rare infant with inborn errors of metabolism.

2. Maternal indications
   a. Delayed secretory activation [72–120 hours] with signs of inadequate intake by the infant.
   b. Primary glandular insufficiency as evidenced by abnormal breast shape, poor breast growth during pregnancy, and minimal indications of secretory activation.
   c. Breast pathology or prior breast surgery resulting in poor milk production.
   d. Certain maternal medications (e.g., chemotherapy, psychotherapeutic drugs, anti-epileptic drugs, long-lasting radioactive compounds).
   e. Intolerable pain during feedings unrelieved by interventions.
   f. Severe illness that prevents a mother from caring for her infant, e.g. sepsis.

Recommendations

Address early indicators of the possible need for supplementation

All infants should be formally evaluated for position, latch, and milk transfer before supplemental feedings are provided. This evaluation should be undertaken by a healthcare provider with expertise in breastfeeding management, when available.

Determine whether supplementation is required and supplement with care.

1. Decisions should be made on a case-by-case basis
2. Parents should be fully informed of the benefits and risks of supplementation, parental decisions documented, and they should be supported after they have made an informed decision.
3. All supplemental feedings should be documented, including the content, volume, method of delivery, and medical indication or reason.
4. When supplementary feeding is medically necessary, the primary goals are to feed the infant and to optimise the maternal milk supply while determining the cause.
5. Supplementation should be performed in ways that help preserve breastfeeding, such as:
   - limiting the volume to what is necessary for the normal newborn physiology
   - stimulating the mother's breasts with hand expression or pumping
   - allowing the infant continued access to the breast.
6. Optimally, mothers need to express milk frequently, usually once for each time the infant receives a supplement, or at least 8 times in 24 hours if the infant is not feeding at the breast.
7. Underlying factors should be addressed, and mothers should be assisted with increasing their milk supply, latch, and confidence in assessing the signs that their infant is adequately fed.
8. A plan and criteria for stopping supplementation should be considered from the time the decision is made to supplement and should be discussed with the parents.
9. It is essential to follow up with the mother and infant closely.

Choice of Supplement

1. Expressed breast milk from the infant's mother is the first choice for extra feeding for the breastfed infant.
2. If the volume of the mother's own colostrum/milk does not meet her infant's feeding requirements and supplementation is required, donor human milk is preferable to other supplements.
3. When donor human milk is not available or appropriate, supplementation should be with infant formula
4. Supplementation with glucose water is not appropriate because it does not provide sufficient nutrition, does not reduce serum bilirubin, and might cause hyponatremia.

Volume of Supplemental Feeding

1. Unrestricted breastfeeding is the biological norm. Formula-fed infants usually take in larger volumes than breastfed infants; therefore, they may be overfed. The volume of supplementary feeds for breastfed infants should not be based on the intakes of formula-fed infants.
2. The amount of supplement given should reflect the normal amounts of colostrum available, the size of the infant's stomach (which changes over time), and the age and size of the infant.
3. Based on the limited research available, suggested intakes for healthy, term infants are given in the table below, although feedings should be based on infant cues.

Average Reported Intakes of Colostrum
by Healthy Term Breastfed Infants

Time (hours)	**Intake (mL/feed)**
First 24	2 - 10
24 - 48	5 - 15
48 - 72	15 - 30
72 - 96	30 - 60

Methods of Providing Supplementary Feedings

1. When supplementary feedings are needed, there are several delivery methods from which to choose: a supplemental nursing device at the breast, cup feeding, spoon feeding, finger-feeding, syringe feeding, or bottle feeding.
2. An optimal supplemental feeding device has not yet been identified and may vary from one infant to another. No method is without potential risk or benefit.
3. When selecting an alternative feeding method, clinicians should consider several criteria:
    a. cost and availability
    b. ease of use and cleaning
    c. stress to the infant
    d. whether adequate milk volume can be fed in 20–30 minutes
    e. whether anticipated use is short- or long-term
    f. maternal preference
    g. expertise of healthcare staff
    h. whether the method enhances the development of breastfeeding skills.
4. There is no evidence that any of these methods is unsafe or that one is necessarily better than the other. There is some evidence that avoiding teats/artificial nipples for supplementation may help the infant return to exclusive breastfeeding.

Resources

1. Kellams A, Harrel C, Omage S, Gregory C, Rosen-Carole C, Academy of Breastfeeding Medicine. ABM Clinical Protocol #3: Supplementary feedings in the healthy term breastfed neonate, revised 2017. Breastfeed Med. 2017;12)188–98. doi:10.1089/bfm. 2017.29038.ajk.
2. UNICEF/WHO. Baby Friendly Hospital Initiative, revised, updated and expanded for integrated care, Section 4, Hospital Self-Appraisal and Monitoring. 2006. Available at www.who.int/nutrition/topics/BFHI_Revised_Section_4.pdf (accessed November 21, 2016).

Appendix 4: Summary of the Care of the mother who is Artificially Feeding her Baby

This appendix is an excerpt from Steps 1 to 10 that apply to the care of the mother who is artificially feeding her baby. These extracts are grouped by theme for convenience.

Support for mothers who are using breastmilk substitutes
The revised version of the *WHO Global Criteria* for BFHI now includes more specific criteria for the care of mothers who are artificially feeding their babies. The inclusion of these criteria does not mean that BFHI is promoting artificial feeding, but rather that BFHI aims to help ensure that all mothers, regardless of feeding method, receive the support they need.
The criteria are integrated into the relevant Steps in the *Standards for Implementation of the Ten Steps to Successful Breastfeeding*, and, for convenience, are also copied in this Appendix for review.
Facilities may use the WHO Guidelines[1] to meet the standard of care for BFHI purposes.
It should be noted that many of the requirements for the care of the mother who is artificially feeding her baby apply to all mothers ***leaving the facility using infant formula***. Babies who are not breastfed or not fully breastfed are at increased risk, and it is just as important that their mothers are fully informed.

Step 1a
Policies for BFHI
The facility has a written policy or policies that support the implementation of BFHI, including:

- Breastfeeding policy and a summary for display
- Implementation of the *WHO International Code*
- Support for staff to continue to breastfeed when they return to work
- Standards of care for the mother who is artificially feeding her baby

Standards of care for the mother who is artificially feeding her baby
There is a policy which addresses standards of care for the mother who is artificially feeding her baby. This may be a separate policy or integrated into an infant feeding policy which refers to it.

The policy includes each of the following points:

- Relevant personnel[2] have received education to ensure that their knowledge about artificial feeding is current.
- Relevant personnel have the skills to teach mothers correct preparation, storage and handling of powdered infant formula[1].
- Mothers who are considering artificial feeding are supported to make a fully informed choice, appropriate to their circumstances.

[1] WHO Safe Preparation, storage and handling of powdered infant formula: guidelines. *World Health Organisation 2007*; How to Prepare Formula for Bottle-Feeding at Home. *World Health Organisation* 2007.

[2] Personnel refers to all persons engaged in relevant activities, not just those whom the facility defines as "staff".

- All mothers who will be leaving the facility using infant formula are given:
    - information and instruction on the safe preparation, storage and handling of reconstituted powdered infant formula, using WHO Guidelines[1],
    - information on the risks to the baby if the preparation and handling instructions are not followed carefully.
    - an instruction on how to make a bottle-feed using powdered infant formula.
    - information on where to get help with infant feeding after discharge from the facility.
- Instruction on artificial feeding is given only to parents who require it. The instruction is conducted privately, away from breastfeeding mothers, and is not performed in a group.
- Instructional materials on artificial feeding shown or given to parents are free from advertising, do not refer to or contain images of an identifiable product, and comply with the *WHO International Code*.

Step 2

Group 1 BFHI Education and Competency Requirements

Over the past 3 years, all Group 1 personnel who have been at the facility for 6 months or more have received at least 8 hours of competency-based in-service education, including updates and revisions, where applicable. It is recommended that the updates and revisions be spread over the previous 3 years. The delivery of education content is flexible. Group 1 personnel in a *Baby Friendly* facility should have the following knowledge and competencies:

- The facility's policy and key clinical practices (Steps 3-10). The key clinical practices should cover the 20 Core Competencies listed in this Step.
- *Guidelines for Supplementary Feeding for the Healthy Term Breastfed Neonate* (Appendix 3)
- Providing optimal support to all mothers who will be leaving the facility using infant formula (Appendix 4).
- The facility and personnel's responsibilities under the *WHO International Code of Marketing of Breast-milk Substitutes* and subsequent WHA resolutions.

Group 2 BFHI Education Requirements and Curriculum

Over the previous 3 years, Group 2 personnel have had education in the following knowledge and competencies:

- The facility's policy and key clinical practices (Steps 3-10) with a focus on:
    - Protocols related to step 4, skin to skin
    - Why breastfeeding is important
    - Ways in which a supplementary feed of infant formula can affect the breastfeeding baby and mother.
    - How to assist the mother to make a fully informed and appropriate decision about infant feeding, suitable to her circumstances (for personnel involved in infant feeding)
- *Guidelines for Supplementary Feeding for the Healthy Term Breastfed Neonate* (Appendix 3) (Note: not required if making decisions about infant formula supplementation is outside the scope of practice of the person being interviewed.)
- The facility and health workers' responsibilities under the *WHO International Code of Marketing of Breast-milk Substitutes* and subsequent WHA resolutions.

Step 4

When the mother is not planning to initiate breastfeeding

If the mother is not planning to breastfeed, the skin-to-skin contact should continue uninterrupted for at least an hour after birth. If the mother insists on terminating it earlier, e.g. because the baby shows an unwelcomed interest in breastfeeding, this is acceptable. The time and reason should be documented.

[1] "WHO Safe Preparation, storage and handling of powdered infant formula: guidelines. *World Health Organisation* 2007", WHO Guidelines

Mother interviews

Unless a medically indicated procedure was required:

- At least 80% of the mothers who are interviewed, whether they intended to breastfeed, confirm that the baby was immediately placed skin-to-skin as per the standards for this step.

Of those who did not intend to breastfeed, at least 80% of mothers, unless a medically indicated procedure was required, can:

- confirm the baby stayed skin-to-skin without interruption for at least an hour, unless earlier separation was at the mother's request, which was documented.

Step 6

Care of mothers who are on artificial feeding

Mothers who are considering artificial feeding are supported to make a fully informed and appropriate decision about infant feeding, suitable to their circumstances.

The following standards apply to all mothers who will be leaving the facility using infant formula, including mothers who are artificial-feeding, mixed-feeding, or have been advised or chosen to give their baby infant formula as a supplement.

All mothers who will be leaving the facility using infant formula are given:

- information and instruction on the safe preparation, storage and handling of reconstituted powdered infant formula, using WHO Guidelines[1].
- information on the risks to the baby if the preparation and handling instructions are not followed carefully.
- a teaching session on making up a bottle-feed using powdered infant formula[2].
- information on the importance of ensuring the correct concentration by following the instructions on the can exactly, regarding water volume and scoops of powder, and are made aware that these will be different for each brand of formula.
- information on best practice for feeding their babies with a bottle
- information on where to get help with infant feeding after discharge from the facility.

Instruction is given only to parents who need it; there is no group instruction; it is done privately, away from breastfeeding mothers. If the mother's condition prevents this instruction, it can be given to another family member instead.

Parents with low literacy skills or from non-English-speaking backgrounds may need extra support to ensure they have the required skills and understanding of the risks.

Materials on artificial feeding which are shown or given to parents are free from advertising, do not refer to or contain images of an identifiable product, and comply with the *WHO International Code*.

<u>Mother interviews (artificial feeding)</u>

At least 80% of mothers who have been feeding their babies with infant formula, or for whom there is a documented maternal medical reason, can:

- Report that the various feeding options were discussed with them, and they were helped to decide what was suitable in their situations.
- Confirm they have been given individual education about making up a bottle-feed using powdered infant formula.

[1] "WHO Safe Preparation, storage and handling of powdered infant formula: guidelines. *World Health Organisation* 2007", WHO Guidelines.

[2] If liquid infant formula (ready-to-feed) is used in the facility, arrangements must be made to have a teaching session on powdered formula.

- Confirm they have a teaching session on a bottle-feed using infant formula under supervision.
- adequately answer questions about:
  - preparation of infant formula to feed their babies.
  - the risks to the baby if the preparation and handling instructions are not carefully adhered to.
  - how to feed a baby with a bottle.

Personnel interviews

The Postnatal Staff:

- Can state at least two of the Indications for Supplementation in Healthy Term Infants and one practice that can help prevent the need for supplementation[1].
- Confirms that mothers who will be leaving the facility using infant formula are given instructions on infant formula preparation and how to bottle-feed.
- Describe what should be considered when determining where and how instruction on the preparation of infant formula is given on the postnatal ward.

The Special Care / NICU Staff:

- confirms that eligible babies and other vulnerable newborn infants who cannot be fed their mother's own milk are offered to be fed with donor human milk from a milk bank.

At least 80% of personnel from group 1 can:

- State at least two of the Indications for Supplementation in Healthy Term Infants and one practice that can help prevent the need for supplementation[2].
- Outline ways in which a supplementary feed of infant formula can affect the breastfeeding baby and mother.
- Outline key safety and hygiene points that should be covered when instructing infant formula preparation.
- Describe briefly the key issues to be covered when instructing a mother on how to feed her baby with a bottle.

At least 80% of personnel from group 2 can:

- State at least two of the Indications for Supplementation in Healthy Term Infants and one practice that can help prevent the need for supplementation. *(Not asked if making decisions about using infant formula is outside the role of the person being interviewed)*
- Outline ways in which a supplementary feed of infant formula can affect the breastfeeding baby and mother.
- Briefly describe what should be discussed with a breastfeeding mother who is considering feeding her baby with infant formula, including the potential risks.

[2] See: Kellams A, Harrel C, Omage S, Gregory C, Rosen-Carole C, Academy of Breastfeeding Medicine. ABM Clinical Protocol #3: Supplementary feedings in the healthy term breastfed neonate, revised 2017. Breastfeed Med. 2017;12)188–98. doi:10.1089/bfm. 2017.29038.ajk.

8.2 Health workers and infant formula

Health workers have a responsibility to promote breastfeeding first, but, where it is needed, to educate and support parents about formula feeding. Some mothers may experience feelings of grief or loss if they decide not to breastfeed. A mother's informed decision not to breastfeed should be respected, and support from a health worker and/or other members of the multidisciplinary team should be provided.

This responsibility is outlined in the *WHO International.*

Under the *WHO International Code*:

- Feeding with infant formula should only be demonstrated by health workers, or other community workers if necessary, and only to the mothers or family members who need to use it
- The information given should include a clear explanation of the hazards of improper use.

The public sees health workers as the primary source of advice on infant feeding and are well placed to advise mothers and carers, regardless of the feeding option they have chosen for their infant.

For mothers who do not breastfeed, or do so only partially, advice should include:

- that a suitable infant formula should be used until the infant is 12 months of age
- the cost of formula feeding
- the hazards of improper formula preparation and storage.

8.3 Preparing infant formula

Safe bottle-feeding depends on a safe water supply, sufficient family income to meet the costs of continued purchase of adequate amounts of formula, clean surroundings and satisfactory arrangements for sterilising and storing equipment. Tap water is preferred for preparing infant formula. All tap water used to prepare infant formulas should be boiled and cooled according to the instructions on the formula package label. Bottled water (but not sparkling mineral water or soda water) can be used to prepare the formula if unopened, but it is not necessary.

As health workers are the only group authorised to demonstrate infant formula feeding, it is essential that they present the correct methods and regularly monitor the infant's feeding. Parents without literacy skills or from non-English-speaking backgrounds may need extra help to ensure bottle-feeding is done safely.

Table 8.1: Preparation of infant formula

- Always wash hands before preparing formula and ensure that formula is prepared in a clean area.
- Wash bottles, teats, and caps – careful attention to washing is essential – and sterilise by boiling for 5 minutes or using an approved sterilising agent (see Section 8.3.3).
- Boil fresh water and allow it to cool until lukewarm. To cool to a safe temperature, will enable the water to sit for at least 30 minutes. In areas with a clean water supply, hot water urns such as hydroboils are safe to use for formula reconstitution, as long as very hot water has not been depleted.
- Ideally, prepare only one bottle of formula at a time, just before feeding.
- Always read the instructions to check the correct amount of water and powder as shown on the feeding table on the back of the pack. This may vary between different formulas
- Add water to the bottle first and then powder.
- Pour the correct amount of previously boiled (now cooled) water into a sterilised bottle.
- Always measure the amount of powder using the scoop provided in the can, as scoop sizes vary between different formulas.
- Fill the measuring scoop with formula powder.
- Take care to add the correct number of scoops to the water in the bottle. Do not add more scoops than stated in the instructions.
- Keep the scoop in the can when not in use. Do not wash the scoop, as this can introduce moisture into the tin if it is not dried thoroughly.
- Place the teat and cap on the bottle and shake it until the powder dissolves.
- Test the temperature of the milk with a few drops on the inside of your wrist. It should feel just warm, but cool is better than too hot.
- Feed the infant. Any formula left at the end of the feed must be discarded.
- A feed should take no longer than 1 hour. Any formula that has been at room temperature for longer than 1 hour should be discarded.
- When a container of formula is finished, throw away the scoop with the container to ensure that the correct scoop is used next time.

Appendix 5: Summary of WHO International Code Compliance Standards

This appendix includes the Aim and the Scope of the *WHO International Code of Marketing of Breast-milk Substitutes. It brings* together, for convenience, all aspects of Code compliance included in the standards for implementing the *Ten Steps to Successful Breastfeeding*.

Aim: The WHO International Code aims to contribute to the provision of safe and adequate nutrition for infants by protecting and promoting breastfeeding and by ensuring the proper use of breastmilk substitutes, including infant formula, when necessary, based on adequate information and through appropriate marketing and distribution.

Scope: the *WHO International Code* applies to the marketing, and practices related thereto, of the following products: breastmilk substitutes, including infant formula; other milk products, foods and beverages, including bottle-fed complementary foods, when marketed or otherwise represented to be suitable, with or without modification, for use as a partial or total replacement of breastmilk; feeding bottles and teats. It also applies to their quality and availability, as well as to information concerning their use.

Step 1a
Policies for BFHI
The facility has a written policy or policies that support the implementation of BFHI, including:

- Breastfeeding policy and a summary for display
- Implementation of the *WHO International Code*
- Support for staff to continue to breastfeed when they return to work
- Standards of care for the mother who is artificially feeding her baby

Policy
There is a policy that protects breastfeeding by implementing the *WHO International Code of Marketing of Breast-milk Substitutes*. This may be a separate policy referenced by the breastfeeding policy, or it may be integrated into it. The policy includes each of the following points:

- Adherence by the facility and its personnel to the relevant provisions of the *WHO International Code* and subsequent World Health Assembly (WHA) resolutions.
- All promotion of artificial feeding and materials which promote the use of infant formula, feeding bottles and teats is prohibited.
- The facility is not permitted to receive or distribute free and subsidised (low-cost) products within the scope of the *WHO International Code*.
- The distribution to parents of take-home samples and supplies of infant formula, bottles and teats is not permitted.
- There are restrictions on access to the facility and personnel by representatives from companies in relation to marketing or distributing infant formula products or equipment used for artificial feeding.
- There is no direct or indirect contact of these representatives with pregnant women or mothers and their families.
- The facility does not accept free gifts, non-scientific literature, materials or equipment, money, or support for in-service education or events from these companies if there is any association with artificial feeding or potential promotion of brand/product recognition in relation to infant feeding.
- There is scrutiny at the institutional level of any research which involves mothers and babies for potential implications on infant feeding or interference with the full implementation of the policy.

Implementation of Policy
The facility has no display of products covered under the *WHO International Code, or of items bearing logos of companies that produce breast-milk substitutes, feeding bottles, or teats, or* of products covered under the Code. Nor are these items displayed.
Materials covered under the WHO International Code, or which are unsupportive of breastfeeding or contradict exclusive breastfeeding for around 6 months as the norm, are not used, displayed or distributed to parents, except informational materials given individually to parents who are artificially feeding.
If the facility has retail outlets/kiosks on site, the facility has endeavoured to restrict or minimise the promotion and/or sale of materials that are unsupportive of breastfeeding and/or inconsistent with BFHI. It is recognised that the facility's influence may be limited when the retail outlets are not under its direct control.

Observations confirm that:
- Infant formula and equipment for artificial feeding are stored discreetly and not openly displayed in the maternity and neonatal areas.
- The facility has adequate space and necessary materials to give individual instruction on how to prepare formula away from breastfeeding mothers.
- No materials are being used, distributed or displayed to parents which are unsupportive of breastfeeding, except for informational material given individually to parents who have chosen to feed their baby artificially.
- There are no educational materials or literature used, displayed or distributed to parents, produced by a company which markets or distributes infant formula products or equipment used for artificial feeding.
- There are no educational materials or literature used, displayed or distributed to parents, which picture or refer to a proprietary product that is within the scope of the WHO International Code.

All educational materials, including videos/DVDs, handouts, and sample bags/gifts that are shown to, made available to, and/or distributed to pregnant women, new parents, or their families, are available for the Assessors to review.

Review of these materials confirms that they are free of:
- promotion of artificial feeding, bottles, teats and dummies and contains no samples or redeemable vouchers for these products.
- information or articles which normalise artificial feeding.
- advertisements or promotion of infant, follow-on or toddler formula.
- advertisements or promotion of equipment for artificial feeding, including bottles and teats.
- samples or coupons for products within the scope of the WHO International Code.
- samples or coupons for baby foods.
- information which contradicts exclusive breastfeeding for around 6 months as the norm.
- recommendations for scheduled feeds.
- advertisements for dummies.

Purchase of breastmilk substitutes, teats, bottles or dummies
The facility and its personnel do not accept or distribute to mothers free or subsidised (low-cost) samples or supplies of breastmilk substitutes, teats, bottles or dummies. Records and receipts indicate that breastmilk substitutes, including special formula and other supplies required for artificial feeding, are purchased through normal procurement channels.

Personnel Interviews
At least 80% of the group 1 and 2 personnel can:
- explain at least two elements of the WHO International Code.

Step 2

Group 1 BFHI Education and Competency Requirements

Over the past 3 years, all Group 1 personnel who have been at the facility for 6 months or more have received at least 8 hours of competency-based in-service education, including updates and revisions, where applicable. It is recommended that the updates and revisions be spread over the previous **3 years**.

The delivery of education content is flexible. Group 1 personnel in a *Baby Friendly* facility should have the following knowledge and competencies:

- The facility's policy and key clinical practices (Steps 3-10). The key clinical practices should cover the 20 Core Competencies listed in this Step.
- *Guidelines for Supplementary Feeding for the Healthy Term Breastfed Neonate* (Appendix 3)
- Providing optimal support to all mothers who will be leaving the facility using infant formula (Appendix 4).
- The facility and personnel's responsibilities under the *WHO International Code of Marketing of Breast-milk Substitutes* and subsequent WHA resolutions.

Group 2 BFHI Education Requirements and Curriculum

Over the previous 3 years, Group 2 personnel have had education in the following knowledge and competencies:

- The facility's policy and key clinical practices (Steps 3-10) with a focus on:
    - Protocols related to step 4, skin to skin (only if birthing within the scope of practice)
    - Why breastfeeding is important
    - Ways in which a supplementary feed of infant formula can affect the breastfeeding baby and mother.
    - How to assist the mother to make a fully informed and appropriate decision about infant feeding, suitable to her circumstances.
- The facility's and health workers' responsibilities under the *WHO International Code of Marketing of Breast-milk Substitutes* and subsequent WHA resolutions.

Step 3

The antenatal service complies with the relevant provisions of the *WHO International Code* and does not promote artificial feeding or products used for this purpose.

All educational materials, handouts, or sample bags available to and/or distributed to antenatal women are made available to the assessors for review. They are free of promotion of artificial feeding.

Step 6

Instruction is given only to parents who need it; there is no group instruction; it is done privately, away from breastfeeding mothers. If the mother's condition prevents this instruction, it can be given to another family member instead.

Materials on artificial feeding which are shown or given to parents are free from advertising, do not refer to or contain images of an identifiable product, and comply with the *WHO International Code*.

[1] "WHO Safe Preparation, storage and handling of powdered infant formula: guidelines. *World Health Organisation* 2007", The WHO Guidelines.

8.2 Health workers and infant formula

Health workers have a responsibility to promote breastfeeding first, but, where it is needed, to educate and support parents about formula feeding. Some mothers may experience feelings of grief or loss if they decide not to breastfeed. A mother's informed decision not to breastfeed should be respected, and support from a health worker and/or other members of the multidisciplinary team should be provided.

This responsibility is outlined in the *WHO International Code.*

Under the *WHO International Code*:

- Feeding with infant formula should only be demonstrated by health workers, if necessary, and only to the mothers or family members who need to use it
- The information given should include a clear explanation of the hazards of improper use.

The public sees health workers as the primary source of advice on infant feeding and are well placed to advise mothers and carers, regardless of the feeding option they have chosen for their infant.

For mothers who do not breastfeed, or do so only partially, advice should include:

- that a suitable infant formula should be used until the infant is 12 months of age
- the cost of formula feeding
- the hazards of improper formula preparation and storage.

Guidance on internal auditing for the implementation of the WHO International Code in a BFHI facility

When reviewing activities, materials, handouts, and sample bags, facilities should be guided by the intent of the WHO International Code and its implementation in BFHI facilities, rather than by a strict interpretation of its wording. The purpose is to protect pregnant women, mothers and their families from materials and practices that may adversely impact the establishment and continuation of exclusive breastfeeding. Code compliance also serves to protect the reputation and image of the facility, its Baby Friendly accreditation and indirectly BFHI itself.

Facilities are advised to exercise caution when permitting products, posters, or literature from companies that produce items within the scope of the *WHO International Code*. Companies that market infant formula and equipment for artificial feeding can gain a commercial advantage by associating with a maternity facility; parents may perceive this as an endorsement. They also have a commercial interest in gaining brand/product recognition among parents, for example, through 'free' products such as baby care items or printed literature/posters featuring the brand's logo.

If the facility distributes sample bags, they should be checked regularly, and the completion of this audit should be documented. Try to review the content through the eyes of new parents and ask how their infant-feeding decisions and practices might be influenced. For example:

- A sample of baby food labelled 4-6 months, given to parents of a newborn infant in a hospital sample bag, may undermine exclusive breastfeeding to 6 months. It may also serve to advertise the company that also produces infant formula.

- A poster on baby massage featuring the logo of a company that manufactures products within the scope of the Code. The poster features many photos of beautiful, healthy mothers and babies. It may associate the company or brand with 'good health' and benevolence, creating a subconscious positive association.
- Breastfeeding information which focuses only on the negatives may affect the confidence of a pregnant woman or new mother.
- Advertisements for 'breastfeeding equipment' (such as breast pumps) that over-emphasise the need for various products are inappropriate.
- Direct advertising of artificial feeding equipment assists in portraying bottle-feeding as a regular activity.

If such logos, products, posters, or literature are observed during a BFHI assessment, the assessors would consider the risks vs benefits to parents and babies.

Appendix 6: Monitoring and Quality Improvement

This Appendix has been extracted and put together from two related documents:

Implementation guidance: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services – the revised Baby-friendly Hospital Initiative. Geneva: World Health Organisation; 2018. https://www.who.int/nutrition/publications/infantfeeding/bfhi-implementation-2018.pdf.

Appendix: Indicators for monitoring. Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services – the revised Baby-friendly Hospital Initiative. Geneva: World Health Organisation; 2018. https://www.who.int/nutrition/publications/infantfeeding/bfhi-implementation-2018-appendix.pdf

Monitoring

Suggested indicators for facility-based monitoring of the key practices are listed in Tables 1 and 2 at the end of this Appendix. Two of the indicators, early initiation of breastfeeding and exclusive breastfeeding, are considered "sentinel indicators". All facilities should routinely track these two sentinel indicators for each mother–infant pair. Recording of information on these sentinel indicators should be incorporated into the medical records and collated.

The committee that coordinates BFHI-related activities within a facility should review progress at least every 6 months. During concentrated periods of quality improvement, a monthly review is needed. The purpose of the evaluation is to continually track the values of these indicators, to determine whether established targets are met, and, if not, plan and implement corrective actions. In addition, if the facility has an ongoing system of maternal discharge surveys for other quality-improvement/quality-assurance assessments, and it is possible to add question(s), one or both indicators could be added for additional verification or periodic checks. Additional process indicators to monitor adherence to key clinical practices are also recommended. These indicators are critical during an active quality improvement process and should be assessed monthly. Once acceptable levels of compliance have been achieved, the frequency of data collection for these additional indicators can be reduced, for example, to once a year. However, if the level of the sentinel indicators falls below the national standard, it will be essential to assess both clinical practices and all management procedures to identify bottlenecks and determine what needs to be done to achieve the required standards.

The suggested indicators do not cover all the standards outlined in the Ten Steps because the monitoring system needs to remain as simple as possible. Individual facilities could include additional indicators where feasible.

The frequency of data collection will depend on the method used. Recommended. The data could be reviewed every 6 months. The monitoring needs to be streamlined and manageable within the facilities' existing resources.

For the key clinical practice indicators (Steps 3–10), monitoring is best when based on maternal report. Data collection for some indicators could be conducted through electronic medical records or paper reports for each mother–infant pair. Still, this approach risks personnel over-reporting these records, as they have been taught they are supposed to do.

Options for maternal data collection include:

- exit interviews with mothers (preferably by a person not directly in charge of their care).
- short paper questionnaires to mothers for confidential completion upon discharge.
- sending questions to the mother via SMS.

It is recommended that 15-20 mother–infant pairs be included for each indicator each time the data are reviewed. However, small facilities may need to settle for fewer pairs if 20 are not available.

The global standards call for a minimum of 80% compliance for all process and outcome indicators, including early initiation of breastfeeding and exclusive breastfeeding. Each facility should aim to regularly achieve at least 80% adherence (preferably higher) for each indicator, and facilities that do not meet this target should focus on increasing the percentage over time.

Quality improvement

The process of changing health-care practices takes time. There are well-documented methods for implementing changes and for building systems to sustain them once a specific goal has been reached. Quality improvement is a management approach that health professionals can use to reorganise care to ensure that patients receive good-quality health care[1]. Quality improvement can be defined as "systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups"[2].

Quality-improvement processes are cyclical and comprise the following steps: (i) planning a change in the quality of care; (ii) implementing the changes; (iii) measuring the changes in care practices and/or outcomes; and (iv) analysing the changed situation and taking further action to either further improve or maintain the practices. In the IHI model, these steps are called plan, do, study and act (PDSA) and are visualised in Fig. 3.

In the context of the BFHI, a PDSA cycle can be used to improve implementation of each of the Ten Steps. Application of the quality-improvement methodology is significant for the steps the facility has found particularly difficult, for which global standards have not been met. Once the desired level is completed, the implementing team can focus on monitoring the performance of the sentinel indicators. The quality-improvement approach is highly relevant to the BFHI, and countries are strongly encouraged to adopt it. It helps to improve sustainability, since standard processes require fewer external resources or additional personnel. The BFHI-related aspects can be combined with other ongoing quality-improvement initiatives in newborn health or maternal and child health at the facility.

Regardless of what model of quality improvement is used, some key principles of quality improvement are central:

[1] Improving the quality of hospital care for mothers and newborns: coaching manual. POCQI: point-of-care quality improvement. New Delhi: World Health Organisation Regional Office for South-East Asia; 2017 (http://apps.who.int/iris/bitstream/10665/255876/1/9789290225485-eng.pdf, accessed 7 March 2018).

[2] Improving the quality of hospital care for mothers and newborns: coaching manual. POCQI: point-of-care quality improvement. New Delhi: World Health Organisation Regional Office for South-East Asia; 2017 (http://apps.who.int/iris/bitstream/10665/255876/1/9789290225485-eng.pdf, accessed 7 March 2018).

- the triad of planning, improvement and control is central to the approach: implementing teams need guidance on how to move through these steps; active participation of the leading service providers or front-line implementers: a team of personnel in the facility should review their own practices and systems and decide on the processes or actions that need to be changed; the day-to-day service providers like nurses, and possibly one or more physicians, know best what works and which obstacles they face;

- engagement of leadership personnel: facility administrators, heads of medical departments and thought leaders need to be convinced of the importance of the protection, promotion and support of breastfeeding and achieving high rates for early initiation of and exclusive breastfeeding; they need to encourage the front-line implementers to adapt their practices where needed, and facilitate and actively support necessary changes; facility managers also play a pivotal role in implementing the critical management procedures;

- measurement and analysis of progress over time: using data to identify where problems are occurring allows a more focused approach to solving them (see the list of possible indicators in Tables 1 and 2 at the end of this Appendix); the team needs to decide on the key indicators to measure in addition to the two sentinel indicators.

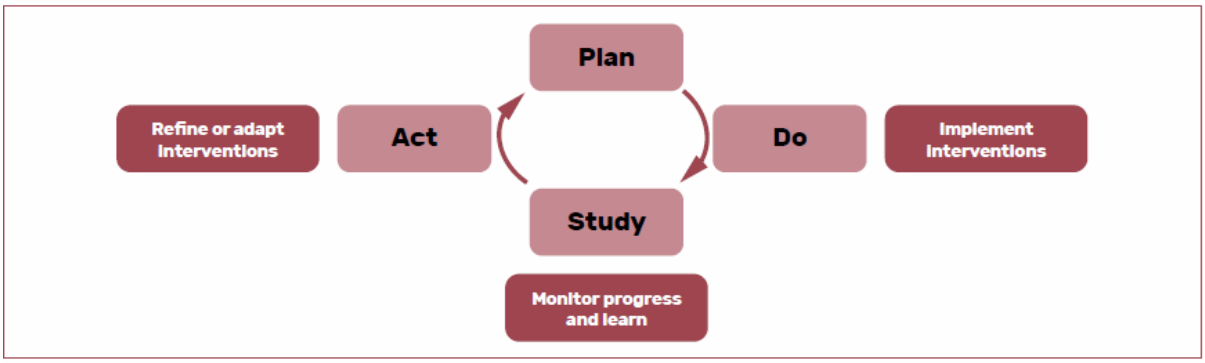

Fig. 3. Visualization of the four steps of quality improvement

Table 1. Suggested options that can be used as indicators for facility-based assessment of critical management procedures for the protection, promotion and support of breastfeeding. Please note that these indicators do not cover all global standards or every aspect of an external assessment, as we aim to keep the internal monitoring system as simple as possible.

Management Procedures	Suggested Options for Indicators	Target	Means of Verification
Step 1a: Have a written infant feeding policy that is routinely communicated to staff and parents.	Existence of a written policy or policies that address the implementation of BFHI, including: • Breastfeeding policy which addresses the Ten Steps • Implementation of the *WHO International Code* • Support for breastfeeding staff returning to work • Standards of care for the mother who is artificially feeding her baby	Exists	Review of BFHI policies
	Display of a summary of the policy for pregnant women, mothers and their families	Displayed	Observation of posted policy
	Alignment of clinical protocols or standards related to breastfeeding and infant feeding with BFHI standards and current evidence-based guidelines.	In alignment	Review of clinical protocols and standards
	The percentage of Group 1 and 2 personnel who can explain at least two elements of the infant feeding policy that influence their role in the facility	≥80%	Interviews with Group 1 and 2 personnel

Step 1b: Comply fully with the International Code of Marketing of Breast-milk Substitutes and relevant World Health Assembly resolutions (the Code).	Evidence that all breast-milk substitutes, feeding bottles and teats used in the facility have been purchased through normal procurement channels and not received through free or subsidised supplies	Demonstrated	Review of facility purchasing records
	No open display of products covered under the Code or items with names or logos of companies that produce breast-milk substitutes, feeding bottles and teats, or names of products covered under the Code.	Not displayed	Observations in the facility
	Educational materials, including DVDs, handouts and sample bags/gifts, which are accessed by pregnant women, new parents or their families	No promotion of products within the scope of the Code or inappropriate information	Review of materials
	Existence of a policy that describes how the facility abides by the Code and addresses the required points in Step 1b	Exists	Review of infant feeding policy
	The percentage of Group 1 and 2 personnel who can explain at least two elements of the WHO International Code	≥80%	Interviews with Group 1 and 2 personnel
Step 1c: Establish ongoing monitoring and data-management systems.	Existence of a protocol of continuing monitoring to comply with the eight key clinical practices	Exists	Documentation of protocol
	The frequency with which clinical staff at the facility meet to review the implementation of the system	At least every 6 months	Documentation meeting schedule

Step 2: Ensure that staff have sufficient knowledge, competence and skills to support	The percentage of Group 1 personnel who report they have received at least 8 hours of in-service education on breastfeeding during the previous 3 years	≥80%	Interviews with Group 1 personnel

breastfeeding.	The percentage of Group 1 personnel who report receiving competency assessments in breastfeeding in the previous 3 years	≥80%	Interviews with Group 1 personnel
	The percentage of Group 2 personnel who report they have received education in the required knowledge for their role during the previous 3 years	≥80%	Interviews with Group 2 personnel
	The percentage of Group 3 personnel who report they have received the relevant education/information during the previous 3 years	≥80%	Interviews with Group 3 personnel
	The percentage of personnel who can correctly answer questions on breastfeeding knowledge appropriate to their group	≥80%	Interviews with Group 1, 2 and 3 personnel

Table 2. Suggested options that can be used as indicators for facility-based monitoring of the key clinical practices for the protection, promotion and support of breastfeeding. Please note that these indicators do not cover all global standards or every aspect of an external assessment, as we aim to keep the internal monitoring system as simple as possible.

Key Clinical Practice	Suggested Options for Indicators	Target	Primary Source	Additional Sources
Step 3: Discuss the importance and management of breastfeeding with pregnant women and their families.	The percentage of antenatal women who received prenatal care at the facility who received prenatal counselling on breastfeeding	≥80%	Interviews with last-trimester antenatal and postnatal women	Clinical records
Step 4: Facilitate immediate, uninterrupted skin-to-skin contact and support mothers to recognise when their babies are ready to breastfeed, offering help as needed.	Sentinel Indicator: The percentage of term infants who experienced uninterrupted skin-to-skin contact immediately or within 5 minutes after birth, or within 10 minutes of arriving in recovery following a caesarean and that this contact continued uninterrupted until after the first breastfeed or for at	≥80%	Clinical records	Interviews with mothers of term infants

	least an hour if the baby was fed sooner			
Step 5: Support mothers in initiating and maintaining breastfeeding and in managing common difficulties.	The percentage of breastfeeding mothers of term infants who can: • demonstrate or describe correct positioning and attachment. • describe how to recognise their babies are well attached to the breast and breastfeeding effectively. • describe two ways to maintain an optimal milk supply • describe two ways to assess whether their baby is getting enough milk	≥80%	Interviews with mothers of term infants	
	The percentage of breastfeeding mothers with babies who are in Special Care who can: • confirm they have been supported to initiate lactation within 2 hours of birth • confirm they have been informed how to maintain lactation by frequent expression of breastmilk.	≥80%	Interviews with mothers with babies who are in Special Care	
	The percentage of mothers of breastfed term infants who can correctly demonstrate or describe how to express breast milk	≥80%	Interviews with mothers of term infants and babies in Special Care	
Step 6: Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated.	Sentinel Indicator: The percentage of term infants who received only breast milk (either from their own mother or from a human milk bank) throughout their	≥75%	Clinical records	Interviews with mothers of term infants

	stay at the facility			
	The percentage of mothers who are artificially feeding who can adequately answer questions about making up powdered infant formula	≥80%	Interviews with mothers who are artificially feeding their infants	
Step 7: Enable mothers and their infants to remain together and to practise rooming-in 24 hours a day.	The percentage of mothers of term infants whose babies stayed with them since birth, without separation	≥80%	Interviews with mothers of term infants	Clinical records
Step 8: Support mothers to recognise and respond to their infants' cues for feeding.	The percentage of breastfeeding mothers of term infants who can describe at least two early feeding cues	≥80%	Interviews with mothers of term infants	
Step 9: Counsel mothers on the use and risks of feeding bottles, teats and pacifiers.	The percentage of breastfeeding mothers of term infants counselled on the use and risks of using feeding bottles, teats, and pacifiers/dummies	≥80%	Interviews with mothers of term infants	
Step 10: Coordinate discharge so that parents and their infants have timely access to ongoing support and care.	The percentage of mothers of term infants who can report at least two available resources on support groups and/or services they could access in their community.	≥80%	Interviews with mothers of term infants	